

# A Complete Bibliography of Publications in the *Bulletin of Mathematical Biology*: 2020–2029

Nelson H. F. Beebe  
University of Utah  
Department of Mathematics, 110 LCB  
155 S 1400 E RM 233  
Salt Lake City, UT 84112-0090  
USA

Tel: +1 801 581 5254  
FAX: +1 801 581 4148

E-mail: [beebe@math.utah.edu](mailto:beebe@math.utah.edu), [beebe@acm.org](mailto:beebe@acm.org),  
[beebe@computer.org](mailto:beebe@computer.org) (Internet)  
WWW URL: <http://www.math.utah.edu/~beebe/>

11 March 2024  
Version 1.11

## Title word cross-reference

+ [118]. 3 [38]. = [118]. 2 [94, 64]. 3 [5].  $\beta$  [334].  $f$  [169].  $G$  [1, 81].  $G\alpha_i$  [1, 81].  $G\beta\gamma$  [1, 81].  $IC_{50}$  [70].  $k$  [107].  $\kappa$  [551].  $N$  [144].  $\theta$  [171].

-Circularity [107]. -diffusion [171]. -Hydroxypropionic [38]. -Statistics [169]. -Strain [144].

/Discrete [411].

**1** [194]. **19** [282, 351, 454, 156, 326, 370, 367, 323, 422, 519, 392, 234, 311, 120, 476, 116, 382, 398, 384, 375, 366, 448, 428, 435, 307, 309]. **1BB** [551].

**2** [331].

**3D** [327, 295].

**5/6** [184].

**6** [184].

**Ablation** [456]. **Aboveground** [109]. **Abundance** [452, 541]. **Abuse** [467, 236]. **Accelerated** [280]. **Account** [180]. **Accounting** [44]. **Accumulation** [136]. **Achieve** [337]. **Acid** [38]. **Acidity** [238]. **Acinar** [186]. **Across** [513, 490, 233]. **Activated** [185]. **Activation** [227, 193, 219, 34, 551]. **Activator** [416]. **Active** [146, 301]. **Actomyosin** [192]. **Acute** [577, 37]. **Acyclic** [305]. **Adaptation** [83, 214]. **Adapted** [323]. **Adaptive** [355, 531, 124, 52, 126]. **Additional** [24, 352]. **adherence** [487]. **Adhesion** [510]. **Adhesion-independent** [510]. **Adjuvant** [332]. **Administration** [465]. **Adult** [66]. **Adults** [263]. **Advances** [62]. **Advancing** [344]. **Advective** [264]. **Affect** [523, 16]. **Affected** [300]. **African** [311]. **Against** [302, 14]. **Agar** [483]. **Age** [464, 450, 245, 14, 364, 349, 516, 137, 384, 463, 263, 337]. **Age-Dependent** [14]. **Age-Related** [364, 137]. **Age-Specific** [384, 349]. **Age-Structured** [450, 245, 463, 337]. **Agent** [557, 103, 491, 258, 514, 348, 522]. **Agent-Based** [557, 103, 491, 258, 514, 348, 522]. **Aggregate** [484]. **Aggregation** [574, 389]. **Agnostic** [244]. **Aided** [347]. **AIDS** [226, 210, 463, 408]. **Airborne** [339]. **al** [54]. **Alcohol** [427]. **Algae** [53]. **Algal** [485]. **Algebra** [413]. **Algebraic** [117, 4]. **Algebras** [153]. **Algorithms** [443]. **Allee** [76, 336, 508, 543, 84]. **Allopolyploidy** [462]. **Allow** [224]. **Along** [157, 164]. **Alopecia** [36]. **Alpha** [577]. **Altered** [15]. **Alternative** [35, 297, 255, 244]. **Amyloid** [521]. **Anaerobic** [277]. **Analysing** [381]. **Analysis** [151, 2, 412, 176, 68, 232, 558, 38, 36, 97, 313, 293, 148, 328, 306, 370, 363, 49, 523, 422, 358, 405, 5, 327, 295, 479, 281, 437, 400, 32, 189, 343, 551, 48, 433, 487, 101, 110, 435, 239]. **Analytical** [547, 24, 393]. **Ancestral** [369, 516, 23]. **Anchoring** [525]. **Andalusia** [476]. **Androgen** [545]. **Angiogenesis** [449, 25, 466]. **Anti** [459, 417, 214]. **Anti-inflammatory** [459]. **Anti-predation** [214]. **Anti-tumour** [417]. **Antibiotic** [335, 8, 330]. **Antibiotics** [407]. **Antibody** [240, 161, 15, 278]. **Antibody-Dependent** [240, 15]. **Antigen** [195]. **Antigen-Competitive** [195]. **Antimicrobial** [547, 191]. **Antiretroviral** [527]. **Antiviral** [31]. **Anything** [89]. **Apocalypse** [177]. **Apparent** [206]. **Application** [489, 127, 14, 304, 427, 548]. **Applications** [228, 516, 202, 174]. **Approach** [282, 417, 557, 312, 538, 561, 11, 147, 77, 482, 208, 311, 124, 247, 150, 91, 384, 393, 380, 373]. **Approach-Avoidance** [538]. **Approaches** [111, 176]. **Approximate** [115, 517]. **Approximating** [283]. **Approximation** [346, 286]. **Approximations** [504, 21]. **Arabidopsis** [225, 172]. **Arcs** [462, 305, 352]. **Areas** [577]. **Areata** [36]. **Arise** [550]. **Array** [246]. **Array-RQMC** [246]. **Arrest** [356, 496]. **Arteriole** [472]. **Asbestos** [209]. **Asia** [368]. **Aspects** [550]. **Assay** [576]. **Assess** [160, 37]. **Assessing** [162, 359, 536, 384, 294]. **Assessment** [427, 478]. **Assimilation** [156]. **Association** [188]. **Assortment** [402]. **Astrobiological** [228].

**Asymmetric** [184]. **Asymptomatic** [44, 474, 317]. **Asymptotes** [5].  
**Asymptotic** [38, 363, 523, 437, 574]. **Asynchronous** [546]. **Atherosclerosis** [251]. **Atherosclerotic** [459, 507]. **ATM** [193]. **ATR** [193, 258].  
**ATR-Inhibiting** [258]. **Atrial** [456]. **Attention** [71]. **Atto** [259].  
**Atto-Foxes** [259]. **Attractor** [250]. **Attractors** [84]. **aureus** [373]. **Auto** [48]. **Auto-Regulated** [48]. **Automata** [105]. **Autophosphorylation** [219].  
**Autopolyplody** [462]. **Autoregulation** [479]. **Autotroph** [284]. **Auxin** [19]. **Averaging** [489]. **Avoidance** [538]. **Ayala** [396].

**B** [82, 551]. **Babesiosis** [66]. **Back** [323]. **Background** [383]. **Bacteria** [165, 284, 407]. **Bacterial** [506, 203, 29, 457, 288, 485]. **Bactericidal** [285].  
**Bacterium** [213]. **Balance** [313, 118]. **Balancing** [355]. **Barrier** [527].  
**Based**  
[111, 98, 227, 557, 103, 490, 403, 450, 72, 533, 491, 258, 483, 213, 395, 440, 499, 320, 477, 134, 446, 514, 554, 283, 80, 493, 348, 522, 389, 396, 368, 326].  
**Basic** [317, 244, 113, 372]. **Basin** [255]. **Basis** [304, 136]. **Bat** [562].  
**Bayesian** [489, 178, 281, 248]. **Bayesian-Weighted** [248]. **be** [562, 497].  
**Bed** [254]. **Bee** [222, 534]. **Beetle** [530, 220, 409]. **Behavior**  
[513, 420, 403, 304, 427, 301, 3]. **Behaviour** [459, 423, 283, 382, 275].  
**Behavioural** [16]. **Belowground** [109]. **Benefits** [455, 69]. **Berry** [5].  
**Bespoke** [196]. **Best** [302]. **Bet** [52]. **Bet-Hedging** [52]. **Better** [517].  
**Between**  
[162, 359, 240, 20, 206, 193, 107, 315, 574, 350, 439, 48, 204, 448, 428].  
**Between-Host** [428]. **Bias** [505]. **Bifurcation** [390, 97, 293, 416, 377].  
**Bilayer** [559]. **Binary** [336]. **Binding** [432]. **Biochemical** [470]. **Biofilm** [203, 42, 215, 165, 29, 324]. **Biofilms** [260, 485]. **Biogenesis** [137].  
**Biogeochemistry** [228]. **Biological**  
[512, 533, 345, 499, 121, 574, 246, 174, 235, 424]. **Biology**  
[62, 111, 103, 322, 61, 119, 122, 117, 292, 65, 129, 100]. **Biomarker** [223].  
**Biomolecular** [155]. **Biomolecules** [110]. **Biophysical** [383, 319].  
**Bioreduction** [260]. **Biosorption** [485]. **Bipolarity** [308]. **Birth** [516].  
**Births** [571]. **Bistable** [300]. **Biting** [491, 14, 301]. **Black** [256]. **Blockades** [261]. **Blood** [527, 361, 205]. **Bluetongue** [491]. **Bone** [136, 434]. **Boolean** [276, 451, 511]. **Borne** [96, 452, 400, 301, 310]. **Borrelia** [221]. **Boundaries** [313, 533, 140]. **Boundary** [183, 79, 313, 363, 150, 377]. **Bovine** [276, 66].  
**BRAF** [10]. **Brain** [527, 558, 194]. **Branches** [560]. **Branching** [564, 294].  
**Brazil** [14]. **Breaks** [13]. **Breast** [566, 388, 429, 553, 434]. **Bridging** [333].  
**Brief** [539]. **Brugada** [444]. **Buffers** [432]. **Building** [111, 262, 372]. **Bulb** [383]. **Bulk** [32].

**C** [5]. **C.** [319]. **CA1** [531]. **Caemmerer** [5]. **Calcium** [432, 185, 186].  
**Calcium-Activated** [185]. **Calculate** [11]. **Calibrated** [258]. **cAMP**  
[81, 1]. **Campus** [435]. **Can** [28, 406, 181, 325, 5, 423, 562]. **Cancer**  
[566, 388, 105, 429, 553, 406, 93, 238, 22, 258, 147, 494, 358, 430, 281, 545],

270, 480, 67, 415, 434, 17, 334, 564, 578, 469]. **Capillaries** [472]. **Capillary** [130]. **Capsular** [553]. **Capturing** [20]. **CAR** [566, 197, 334, 551]. **CAR-4-1BB-Mediated** [551]. **CAR-T** [334]. **Carcinoma** [223]. **Cardiac** [456]. **Cardiomyocytes** [243]. **Care** [8, 127]. **Carnivores** [526]. **Carrier** [278]. **Carriers** [44]. **Cartilage** [20]. **Cascades** [208, 267]. **Case** [102, 467, 486, 117, 74, 379, 442, 368]. **Cases** [75]. **Cassava** [242]. **Catalyzed** [286]. **Catheter** [456]. **Cattle** [66]. **Cause** [377]. **Caused** [370, 478]. **CD200** [358]. **CD200R** [358]. **Celebrating** [292]. **Cell** [417, 447, 83, 520, 30, 390, 217, 501, 321, 42, 421, 510, 22, 492, 199, 523, 181, 482, 51, 515, 13, 37, 132, 430, 197, 379, 184, 67, 415, 192, 564, 223]. **Cell-Driven** [415]. **Cell-Scale** [67]. **Cells** [566, 390, 544, 383, 97, 362, 149, 1, 152, 230, 186, 360, 334, 86, 81]. **Cellular** [20, 105, 287, 258, 188, 528]. **Center** [149, 93]. **Centre** [134]. **Centre-Based** [134]. **centrosomal** [308]. **Cephalosporin** [373]. **Cephalosporin-Resistant** [373]. **Chagas** [43]. **Chain** [456]. **Chains** [118]. **Challenges** [62, 119, 212]. **Change** [63, 530, 427, 382]. **Changed** [89]. **Changes** [119, 364]. **Changing** [62, 129]. **Channel** [548]. **Channels** [185, 27]. **Characterization** [524]. **Characterizing** [378, 106]. **Characters** [12]. **Checkpoint** [261]. **Chemical** [461, 470, 498, 231, 246]. **Chemostat** [78, 159]. **Chemostats** [386]. **Chemotactic** [520, 419, 389]. **Chemotaxis** [321, 550, 347, 41, 288]. **Chemotherapies** [429]. **Chemotherapy** [106, 545]. **Chemotherapy-Induced** [106]. **Child** [556, 401]. **China** [82, 370, 75, 463, 337, 408]. **Chinese** [309]. **Chinese-Spring-Festival** [309]. **Chlamydia** [179]. **Cholera** [477, 74]. **Cholesterol** [137]. **Chromosomes** [385]. **Chronic** [139, 166, 330]. **CI** [371]. **Circadian** [167]. **Circuit** [189]. **Circular** [50, 446, 529]. **Circularity** [107]. **Circulating** [162, 359, 221]. **Circulation** [449, 338, 522]. **City** [522]. **Class** [113]. **Clean** [201]. **Clearance** [34]. **Climate** [530, 28, 280]. **Climate-Induced** [28]. **Clinical** [565]. **Clonal** [430]. **Close** [22]. **Closed** [143]. **Closures** [448, 428]. **Clot** [85]. **Cluster** [401, 319, 380]. **Clustering** [308, 379, 32]. **Co** [221, 144, 554]. **Co-circulating** [221]. **Co-colonization** [144]. **Co-Culture** [554]. **CoA** [38]. **Coagulation** [205]. **Coastal** [569]. **Cocktails** [77]. **Cocoa** [256]. **Code** [50, 446]. **Codes** [50, 107]. **Coding** [502]. **Codon** [446]. **Coevolutionary** [450]. **Coexistence** [455, 268, 144, 17]. **Coexisting** [155]. **Coinfection** [271, 15, 442]. **coli** [451, 483, 373]. **Collection** [292]. **Collective** [217, 127, 327, 295, 69, 92, 473]. **College** [63, 435, 89]. **Colonies** [222, 534]. **colonization** [144]. **Colony** [483]. **Coloured** [46]. **Combination** [31, 429]. **Combinatorial** [500]. **Combinatorics** [443]. **Combined** [160, 216]. **Combining** [356]. **Commentary** [54]. **Communities** [221, 119]. **Community** [111]. **Community-Based** [111]. **Commuters** [425]. **Compact** [232]. **Comparing** [431, 243, 8]. **Comparison** [70, 461, 233, 499, 55, 320, 391, 281, 427, 254]. **Comparisons** [540]. **Compartment** [554, 487]. **Compartment-Based** [554]. **Compartmental** [329, 234, 393]. **Compartments** [509, 523]. **Compatible** [12]. **Compete**

[127]. **Competition** [206, 330, 560, 207, 177, 132, 484, 316]. **Competitive** [195, 168, 204, 159]. **Complement** [35, 297]. **Complex** [426, 95, 41, 118, 253, 247]. **Complexity** [391]. **Composition** [221, 77]. **Computational** [566, 1, 81, 69, 410, 399, 294, 473]. **computationally** [23]. **Compute** [24]. **Computer** [92]. **Concentration** [436]. **Concentration-Dependent** [436]. **Condensates** [155]. **Condition** [472]. **Conditionally** [27]. **Conditioning** [236]. **Conditions** [79, 470, 377]. **conducting** [149]. **Confined** [510]. **Confinement** [180]. **Conflict** [412, 538]. **Congo** [412]. **Connecting** [557, 100]. **Connections** [119]. **Consider** [301]. **Considerations** [52]. **Consistent** [125, 23]. **Constant** [280]. **Constant-Speed** [280]. **Constitutive** [235]. **Constraints** [57]. **Constrictions** [143]. **Consumer** [378, 90]. **Contact** [22, 272]. **Contagion** [445, 403]. **Context** [60]. **Continuation** [512, 8]. **Continuous** [411]. **Continuous-** [411]. **Continuous-/Discrete-Time** [411]. **Continuum** [417, 514]. **Contraction** [410, 399]. **Contracture** [553]. **Contribution** [266]. **Contributions** [292]. **Control** [112, 47, 7, 326, 201, 213, 453, 218, 272, 77, 289, 517, 37, 120, 270, 511, 541, 373, 525, 398, 4, 384, 521, 575, 163, 307]. **Control-Theoretic** [77]. **Controlling** [187, 382, 424]. **Conversion** [515]. **Cooperation** [402]. **Coordinated** [69]. **Coordination** [92]. **Coral** [325, 481]. **Corals** [69, 92]. **Coronavirus** [577]. **Correction** [359, 297, 239, 274, 225, 324, 166, 257, 94, 81, 226, 327, 439, 410, 448]. **Corrections** [183]. **Cortical** [525, 319]. **Cottontail** [206]. **Could** [497]. **Countable** [564]. **Countable-Type** [564]. **Counter** [332]. **Counting** [249]. **Countries** [453, 311]. **Coupled** [217, 271]. **Coupled-Cell** [217]. **Coupling** [530, 229, 550, 267, 545, 410, 399, 60, 428, 448]. **Course** [16]. **CoV** [331]. **Covert** [222]. **COVID** [54, 282, 454, 156, 326, 370, 367, 422, 519, 392, 234, 311, 120, 476, 116, 382, 398, 116, 382, 398, 384, 375, 366, 448, 428, 307, 309, 351, 323, 435]. **COVID-19** [54, 282, 454, 156, 326, 370, 367, 422, 519, 392, 234, 311, 120, 476, 116, 382, 398, 384, 375, 366, 448, 428, 307, 309, 351, 323, 435]. **Crampin** [314]. **Crisis** [467].  **criterial** [488]. **Critical** [448, 428]. **Cross** [221, 559, 546, 503, 115, 114]. **Cross-Diffusion** [559, 115, 114]. **Cross-Immunity** [546, 503]. **Cross-Reaction** [221]. **Crosstalk** [193]. **Crowd** [445]. **CSF** [79]. **Cue** [321]. **Culture** [554]. **Cultures** [520, 70]. **Cumulants** [21]. **Curbing** [307]. **Current** [25]. **Cycle** [276, 199, 13, 118]. **Cycles** [329, 498, 546]. **Cyclic** [341, 207]. **Cytoplasmic** [184]. **Czech** [351].

**D** [181, 292]. **Dairy** [191]. **Damage** [193, 258, 136]. **Darn** [517]. **Data** [557, 565, 490, 403, 176, 486, 156, 475, 345, 552, 121, 484, 252, 129, 427, 174, 278, 463]. **Data-Driven** [252]. **Data-Validated** [475]. **Datasets** [80]. **DDE** [371]. **De-escalation** [8]. **Death** [354, 516, 469]. **Death-Rate** [469]. **Deaths** [571]. **Decision** [225, 172]. **Decisions** [315]. **Decompositions** [231]. **Decoys** [43]. **Deep** [174]. **Defense** [378]. **Deformations** [51]. **Degenerating** [575]. **Degeneration** [137]. **Degradation** [576, 67]. **Dehydration** [483]. **Delay** [276, 544, 536, 493, 236]. **Delayed** [48, 261]. **Delays** [351, 31, 374, 216].

**Delineating** [251]. **Delivery** [278]. **Delta** [577]. **Demand** [454, 54].  
**Democratic** [412]. **Demographic** [154]. **Dendritic** [185]. **Dengue**  
[26, 240, 546, 414, 14, 15, 163]. **dense** [23]. **Density** [526, 2, 239, 370, 263, 3].  
**Density-Dependent** [2, 239, 263]. **Dependent**  
[526, 2, 239, 240, 508, 436, 14, 15, 91, 507, 263]. **Depletion** [37]. **Derivation**  
[131, 502, 343]. **Derivatives** [414]. **Dermal** [518, 139, 166]. **Describe** [482].  
**Described** [562]. **Description** [418, 288]. **Descriptions** [247]. **Design** [379].  
**Designing** [490, 299]. **Designs** [548]. **Detailed** [118]. **Determination** [91].  
**Determine** [41, 69, 473]. **Deterministic** [320, 391]. **Development**  
[459, 449, 335, 251, 273, 528]. **Developmental** [216]. **Diabetes** [139, 166].  
**Diel** [471]. **Differences** [290, 370]. **Different** [249, 344, 233, 377].  
**Differential** [36, 535, 469]. **Diffusion** [46, 157, 128, 559, 7, 550, 483, 457,  
115, 237, 436, 198, 543, 471, 484, 374, 53, 114, 204, 60, 200, 113, 396, 18, 171].  
**Diffusive** [123, 192]. **Dilemma** [68]. **Dilution** [43]. **Dimension** [250].  
**Dimensional** [557, 232, 215, 324, 260, 380]. **Dimensionally** [42].  
**Dimensions** [449]. **Dimorphism** [563]. **Direct** [532]. **Directionality** [150].  
**Discrepancy** [548]. **Discrete** [417, 378, 403, 323, 343]. **Discrete-Time**  
[411]. **Discretization** [568]. **Disease**  
[445, 242, 431, 222, 464, 240, 256, 201, 573, 571, 182, 453, 296, 272, 104, 320,  
577, 349, 154, 244, 301, 88, 310, 382, 333, 60, 43]. **Disease-Induced**  
[296, 272]. **Diseases** [298, 96, 339, 400]. **Disorder** [427]. **Dispersal**  
[387, 175, 133, 264, 569, 348, 416]. **Dispersing** [28]. **Dispersion** [444].  
**Disruption** [480]. **Dissection** [83]. **Dissipation** [27]. **Dissipative** [85].  
**Distal** [145]. **Distance** [125, 99]. **Distancing** [355]. **Distinct** [401].  
**Distinct-Cluster** [401]. **Distinguishing** [574]. **Distributed** [354, 374, 394].  
**Distribution** [483, 152, 300, 516]. **Distributions** [516, 484]. **Disturbance**  
[268]. **Disturbances** [398]. **Divergence** [516]. **Diverse** [76].  
**Diversification** [344, 24]. **Diversity** [175, 500]. **Division** [184]. **DNA**  
[23, 193, 258, 13, 86]. **Does** [249]. **Domain** [436]. **Domains** [138].  
**Dormancy** [225, 172]. **Dormancy-Germination** [172]. **Dose** [37]. **Double**  
[13]. **Double-Strand** [13]. **Drift** [264]. **Drive** [430]. **Driven**  
[145, 73, 27, 143, 252, 415, 192, 216]. **Driver** [546, 129]. **Drug**  
[465, 70, 299, 10, 278, 487]. **Drugs** [258, 194, 236]. **Drusen** [137]. **Dual**  
[189, 478]. **Duct** [360]. **Due** [548, 45]. **Dues** [61]. **During**  
[563, 227, 420, 287, 141, 194]. **Dynamic** [160, 188, 71, 48]. **Dynamical**  
[290, 91]. **Dynamics**  
[489, 131, 445, 282, 96, 242, 151, 520, 555, 526, 532, 222, 530, 20, 412, 287, 68,  
36, 79, 450, 486, 539, 179, 156, 76, 97, 362, 502, 229, 238, 421, 322, 491, 336,  
345, 11, 572, 571, 367, 182, 115, 219, 456, 226, 210, 198, 560, 577, 9, 161, 514,  
349, 124, 283, 143, 195, 168, 476, 80, 69, 400, 254, 316, 186, 88, 371, 310, 382,  
114, 398, 236, 85, 333, 375, 366, 564, 279, 204, 284, 458, 101, 309].  
**Dysfunction** [410, 399].  
  
**E.** [483]. **Early** [404, 319]. **Eastern** [206]. **Ebola** [412, 104]. **Eco** [328].

**Eco-evo** [328]. **Ecological** [262, 427, 481]. **Ecology** [303, 144]. **Economic** [325]. **Ecosystem** [151, 140, 90, 522]. **Ecosystems** [262]. **Edge** [98]. **Edge-Based** [98]. **Edmund** [314]. **Educate** [122]. **Education** [62, 111, 103, 61, 119, 117, 129]. **Effect** [96, 404, 180, 420, 222, 206, 412, 501, 317, 518, 339, 95, 475, 508, 296, 432, 226, 210, 543, 104, 410, 399, 338, 84, 126, 263, 408, 389, 3, 381, 473, 368, 309, 275]. **Effects** [242, 472, 447, 455, 70, 183, 383, 76, 466, 336, 331, 75, 494, 325, 194, 116, 310, 578, 60, 200, 481]. **Efficacy** [342]. **efficient** [23]. **Efflux** [332]. **Efflux-Mediated** [332]. **Effort** [495]. **EGFR** [223]. **EGFR-Mutated** [223]. **Egg** [555]. **Elastic** [51]. **Elasticity** [447, 501]. **Elderly** [351]. **Electrical** [130]. **Electro** [149]. **Electro-physiology** [149]. **Electrodiffusion** [185]. **elegans** [319]. **Elimination** [393]. **Elongation** [158]. **Embedding** [493]. **Embryo** [181]. **Embryogenesis** [319]. **Emergence** [503, 154]. **Emergent** [506, 327, 295, 114]. **Empirical** [548]. **Encompassing** [508]. **Encounters** [22]. **Endemic** [220, 266]. **Endosymbiotic** [213]. **Engineered** [38, 363]. **Engineering** [447]. **Engineers** [151, 140]. **England** [467]. **Enhanced** [45]. **Enhancement** [240, 15]. **Enough** [567]. **Ensemble** [548]. **Ensure** [567]. **Entrainment** [167]. **Environment** [214, 348]. **Environmental** [392, 481]. **Environments** [510, 264, 27, 391, 171]. **Enzyme** [286]. **Epicardial** [444]. **Epidemic** [187, 404, 426, 180, 420, 474, 540, 232, 317, 339, 450, 156, 342, 354, 344, 355, 367, 218, 440, 552, 272, 422, 519, 289, 154, 124, 488, 39, 252, 476, 253, 382, 478, 398, 16, 433, 279, 408, 113, 458, 381]. **Epidemics** [98, 157, 346, 201, 493, 463]. **Epidemiological** [44, 229, 306, 173, 271, 80]. **Epidemiology** [513, 403, 144, 452]. **Epigenetic** [293]. **Epilimnion** [284]. **Epistatic** [350, 439]. **Epithelial** [132]. **Equation** [36, 543, 144, 208, 124, 389]. **Equations** [276, 9, 5, 121, 484, 235, 535, 469]. **Equilibria** [369]. **Erdos** [346]. **ERK** [413]. **Erythrocytic** [298]. **escalation** [8]. **Escaping** [503]. **Escherichia** [451, 373]. **Estimate** [250, 178]. **Estimates** [249, 116]. **Estimation** [532, 123, 125, 256, 73, 211, 477, 484, 74, 244, 407]. **Estimators** [512]. **Estrous** [276]. **European** [206]. **Evacuation** [445]. **Evaluating** [337]. **Evaluation** [441, 307]. **Evaporation** [73]. **Evaporation-Driven** [73]. **Events** [529]. **evo** [328]. **Evolution** [420, 464, 385, 50, 466, 61, 133, 264, 436, 214, 430, 316, 263]. **Evolutionarily** [302]. **Evolutionary** [238, 33]. **Ex** [537]. **Exacerbate** [364]. **Exact** [115]. **Examine** [60]. **Example** [203]. **Excitability** [243]. **Excitation** [410, 399]. **Exclusion** [159]. **Exercise** [563]. **Exhaustion** [528]. **Exhibits** [12]. **Exosomal** [434]. **Expand** [313, 122]. **Expected** [477]. **Experience** [93, 322]. **Experimental** [379, 548, 278]. **Experiments** [209, 199, 537, 554]. **Explains** [136]. **Explore** [417, 367]. **Expose** [122]. **Exposed** [407]. **exposure** [87]. **Expression** [374]. **Extended** [362, 421]. **Extinction** [249, 503, 300, 320, 477, 394]. **Extracellular** [51, 67]. **Facilitate** [434]. **Facilitator** [17]. **Factors** [75]. **Family** [76]. **Far** [41].

**Far-Field** [41]. **Farm** [191]. **Farms** [191]. **Farquhar** [5]. **Fast** [157, 274, 265, 340]. **fastidiosa** [489]. **Fear** [391, 408]. **Features** [361]. **Feedback** [502]. **Feeding** [571]. **Fentanyl** [252]. **Ferguson** [54]. **Fertility** [112, 310]. **Festival** [309]. **Fever** [26]. **Fiber** [321]. **Fibre** [67]. **Fibrillation** [456, 521]. **Fibrin** [202]. **Field** [346, 466, 272, 41, 471]. **Filamentous** [176]. **Film** [73, 211]. **Final** [474, 317]. **Finite** [568]. **Fire** [268, 531]. **First** [351, 63]. **Fish** [2, 239]. **Fisher** [313]. **Fitness** [387, 304]. **Fitting** [400]. **FitzHugh** [421, 243]. **Five** [93]. **Five-Year** [93]. **Fixed** [374]. **Flow** [361, 42, 418, 347, 85, 319]. **flowered** [148]. **Flowering** [148]. **Flu** [141, 315]. **Fluctuating** [83]. **Fluctuations** [158, 430]. **Fluid** [347, 178, 69, 348]. **Fluorescence** [505]. **Flux** [19, 506]. **Flux-Regulation** [506]. **Focussed** [250]. **Forager** [534]. **Force** [134]. **Forced** [543]. **Forecast** [408]. **Forecasting** [489, 431, 493, 366]. **Forest** [530, 395]. **Forest-Based** [395]. **Form** [532, 155, 235]. **Formation** [131, 274, 265, 559, 362, 550, 6, 146, 567, 207, 554, 549, 434, 58, 85, 416]. **Formulations** [134]. **Four** [577]. **Fourth** [79]. **Foxes** [259]. **Fractional** [414, 572, 469]. **Frame** [446]. **Framework** [538, 56, 178, 169, 80, 137, 348]. **Free** [313, 533, 333]. **Freshwater** [245]. **Frogging** [562]. **Front** [426]. **Fronted** [190]. **Fronts** [344]. **Frozen** [95]. **Fully** [28]. **Function** [134]. **Functions** [403]. **Fundamental** [547]. **Future** [262].

**Game** [82, 141, 494]. **Game-Theoretic** [141]. **Game-Theoretical** [82]. **Games** [33, 471]. **Gansu** [75]. **Gaussian** [345]. **Gelatin** [576]. **Gene** [365, 374, 568, 511, 294]. **General** [68, 159]. **Generalist** [424]. **Generalized** [534, 572, 228, 531]. **Generation** [556, 11, 373]. **Generic** [377]. **Genes** [446, 48]. **Genetic** [50, 175, 48, 332, 430]. **Genetically** [38]. **Genetics** [33]. **Genomes** [529]. **Geographic** [370]. **Geometric** [500, 304]. **Geometrical** [169]. **Geometries** [41]. **Geometry** [559, 149, 413]. **Germination** [225, 172]. **Getting** [108, 519]. **Giffen** [275]. **Gilpin** [396]. **Give** [76]. **Given** [443]. **Gland** [360, 40]. **Glioblastoma** [145, 45]. **Global** [198, 435]. **Glossina** [249]. **Glucose** [480]. **Glycolytic** [376]. **Go** [28]. **Goals** [337]. **Gonorrhea** [87]. **Good** [175, 517]. **Goods** [127]. **Granular** [485]. **Granulation** [277]. **Graph** [118]. **Graph-Theoretic** [118]. **Grass** [268]. **Grassland** [90]. **Grazer** [57]. **Grip** [108]. **Gromov** [499]. **Group** [378, 561]. **Growing** [58]. **Growth** [19, 506, 356, 496, 45, 406, 203, 42, 215, 324, 22, 483, 363, 29, 523, 41, 554, 380, 396]. **Growth-Migration** [380]. **GTPase** [30, 189]. **Guide** [379]. **Guinea** [104].

**H1N1** [364]. **Habitat** [387, 313, 175, 543, 391]. **Hajj** [162, 359]. **Hard** [282]. **Hare** [206]. **Harnessing** [212]. **Harvesting** [526, 263, 396, 481]. **Healing** [518, 25, 202]. **Health** [325]. **Healthcare** [454, 54]. **Heat** [293]. **Heat-Sensitive** [293]. **Hedging** [52]. **Hematocrit** [472]. **Hemorrhagic** [26]. **Hepatitis** [82]. **Herbaceous** [148, 109]. **Herbivore** [59]. **Herbivores** [526, 255, 109]. **Herbivores-Induced** [255]. **Herd** [272, 392]. **Heroin** [252].

**Heterogeneity** [423, 520, 387, 572, 494, 419, 473]. **Heterogeneous** [490, 132, 311, 171, 433, 216]. **Heterosexual** [160]. **Hierarchical** [502]. **High** [557, 250, 104, 93]. **High-** [104]. **High-Dimensional** [557]. **Highlights** [332]. **Highs** [336]. **Hill** [393]. **HIP** [93]. **Hippocampal** [531]. **HIV** [226, 527, 173, 210, 194, 478, 236, 442, 463, 408]. **HIV-1** [194]. **HIV/AIDS** [226, 210, 463, 408]. **Hive** [534]. **Hodge** [110]. **Homeostasis** [480]. **Homogeneous** [269, 317]. **Honey** [222]. **Honey-Bee** [222]. **Horizon** [52]. **Horizontal** [462, 245, 352]. **Hormone** [147, 523, 281]. **Host** [221, 450, 306, 344, 503, 452, 438, 236, 448, 428, 216, 424]. **Hosts** [43]. **Household** [326]. **Human** [167, 420, 339, 209, 160, 87]. **Humans** [298, 406]. **Hybrid** [417, 20, 367, 29, 327, 295, 542]. **Hydra** [296]. **Hydroxypropionic** [38]. **Hyperbola** [5]. **Hyperpredation** [206]. **Hypothesis** [333]. **Hypothesis-Free** [333]. **Hypoxia** [45, 238]. **Hypoxia-Induced** [45].

**Identifiability** [558, 440, 318]. **Identifiable** [329]. **if** [69]. **II** [115, 69]. **Imaging** [223, 199]. **Immersed** [348]. **Immigrating** [398]. **Immune** [221, 417, 524, 450, 1, 81, 537, 234, 364, 515, 37, 273, 195, 528, 126, 473, 261]. **Immunity** [26, 546, 503, 272, 392]. **Immuno** [306, 173, 271]. **Immuno-Epidemiological** [306, 173, 271]. **Immunodeficiency** [142, 87]. **Immunology** [74]. **IMO** [93]. **Impact** [162, 359, 417, 249, 112, 520, 527, 262, 54, 326, 22, 191, 272, 419, 51, 134, 65, 452, 87, 373, 279, 43]. **Impacts** [577, 391]. **Imperfect** [488, 371, 366]. **Implant** [553]. **Implant-Induced** [553]. **Implications** [194]. **Importance** [234, 318]. **Impossibility** [125]. **Improves** [569]. **Impulsive** [268, 519, 545]. **Inactive** [301]. **Incentivize** [335]. **Income** [453]. **Incompatibility** [233]. **Incompetent** [43]. **Incomplete** [371]. **Incorporating** [309]. **Increase** [530]. **Increased** [254]. **Incubation** [96]. **Independent** [231, 510]. **Indices** [500]. **Indirect** [339]. **Individual** [533, 315]. **Individual-Based** [533]. **Individuals** [317, 104, 427]. **Induce** [336]. **Induced** [106, 387, 28, 45, 553, 250, 25, 421, 296, 272, 208, 255, 57]. **Infants** [26]. **Infected** [397, 310]. **Infection** [240, 226, 210, 234, 364, 514, 452, 194, 368]. **Infections** [222, 37]. **Infectious** [445, 431, 464, 573, 453, 88]. **Infectivity** [15]. **Inference** [152, 248, 441, 23]. **Inferring** [552, 99]. **Infiltration** [417]. **Inflammation** [227, 47]. **Inflammation-Based** [227]. **Inflammatory** [364, 459]. **Inflows** [46]. **Influence** [423, 224, 496, 238, 510]. **Influenza** [162, 359, 123, 75, 537]. **Information** [92, 551]. **Information-Theoretic** [551]. **Inheritance** [86]. **Inhibited** [330]. **Inhibiting** [258]. **Inhibition** [78, 165, 22, 334]. **Inhibitor** [10, 421, 416]. **Inhibitor-Induced** [421]. **Inhibitors** [223]. **Inhibitory** [70, 48]. **Inhomogeneous** [164]. **Initial** [300]. **Initiation** [158]. **Injured** [85]. **Innate** [537, 234]. **Inoculum** [37]. **Insect** [112, 255]. **Insight** [382]. **Insights** [566, 342]. **Instabilities** [376, 567]. **instantaneous** [389]. **Insulin** [405]. **Integrate** [531]. **Integrate-and-Fire** [531]. **Integrated** [93, 373]. **Integrating** [88]. **Integrodifference** [55, 9]. **Intensity** [250]. **Intensive** [8]. **Interacting** [509]. **Interaction** [109].

**Interactions** [20, 287, 508, 144, 255, 350, 439, 279, 284, 473]. **Interactive** [535]. **Interconnected** [386]. **Interface** [192]. **Interfacial** [533]. **Interference** [278]. **Intermittent** [183, 508, 147, 281, 545]. **Interneurons** [531]. **Internship** [93]. **Interplay** [566, 15, 315]. **Interruption** [465]. **Intertaxon** [99]. **Intervention** [414, 398, 463]. **Interventions** [540, 54, 120]. **Intracellular** [31, 128, 504, 236, 4]. **Intrinsic** [183]. **introduction** [372]. **Introductory** [89]. **intuition** [372]. **intuition-building** [372]. **Invading** [190]. **Invadopodia** [576]. **Invasion** [181, 392, 67, 415, 17, 150]. **Invasions** [424]. **Invasive** [206, 168]. **Invasiveness** [380]. **Investigate** [191]. **Investigating** [496]. **Investigation** [47, 356, 145]. **Ion** [548]. **Ischemia** [145]. **Ischemia-Driven** [145]. **Ischemic** [227]. **Isolating** [237]. **Isolation** [342, 218].

**J.** [181, 292]. **Jab** [519]. **John** [314]. **Joint** [307]. **Journals** [102]. **Juvenile** [66, 263].

**Karma** [243]. **Keloids** [539]. **Kenya** [226, 210]. **Kermack** [323]. **Key** [17, 497]. **Kidney** [287]. **Kill** [194]. **Killer** [230]. **Kinase** [223]. **Kind** [22]. **Kinesin** [561]. **Kinetic** [445, 321, 572, 568, 389, 458]. **Kinetics** [95, 94, 64, 413, 202, 548, 507]. **KPP** [313]. **Kuznetsov** [406].

**Labellable** [468]. **Lag** [506]. **Lake** [245]. **Landscape** [62]. **Landscapes** [3]. **Large** [131, 95]. **Large-Scale** [131]. **Larvae** [555, 569]. **Latency** [194, 116]. **Latent** [96]. **Later** [177]. **Law** [21]. **Lck** [219]. **Leaders** [224]. **Leadership** [224]. **Leads** [438]. **Leaf** [5]. **Leaky** [531]. **Leap** [562]. **Leaping** [246]. **Learning** [538, 345, 121, 174]. **Length** [2, 239, 152]. **Length-Structured** [2, 239]. **Lengths** [125, 152]. **Leone** [104]. **Lessons** [36]. **Lessons** [282]. **Levels** [83, 407]. **Liberia** [104]. **Life** [249, 89]. **Lifestyles** [56]. **Light** [225, 172, 537]. **Likelihood** [512, 24, 12]. **Likely** [530]. **Limit** [498]. **Limited** [331, 121, 101]. **Lineages** [490, 369, 516]. **Linear** [329, 128]. **Lines** [157]. **Linking** [382]. **Lipid** [507]. **Lipid-Structured** [507]. **Lipolysis** [504]. **Living** [95]. **Local** [142, 321, 558, 325, 279, 115, 114, 416]. **Locomotion** [183]. **Logistic** [21]. **Long** [378, 209, 574, 84, 408]. **Long-Term** [209, 408]. **Long-Transient** [574]. **Longitudinal** [427]. **Losses** [254]. **Lotka** [486, 560]. **Low** [232, 453, 104]. **Low-Dimensional** [232]. **Low-Income** [453]. **Low-risk** [104]. **Lows** [336]. **LSD1** [170]. **LSD1-Mediated** [170]. **Luck** [569]. **Lung** [223]. **Lungs** [209]. **Lusaka** [477]. **Lyme** [571]. **Lymph** [209, 418].

**Macaques** [234]. **Macdonald** [49]. **Macrophage** [459]. **Macrophages** [150, 507]. **Macroscale** [247, 60]. **Macular** [137]. **Maintenance** [152]. **Making** [569]. **Malaria** [44, 465, 34, 161]. **Males** [397, 127, 310]. **MalFGK** [94, 64]. **Malonyl** [38]. **Maltose** [94, 64]. **Management** [262, 141, 453, 488]. **Manipulation** [332]. **Mapping** [486]. **Marine** [11, 569]. **Markov** [336, 561, 456, 118]. **Markovian** [536, 27]. **Mask** [180]. **Masks** [351]. **Mass**

[465]. **Master** [208]. **Match** [17]. **Material** [178]. **Maternal** [26, 371]. **Mathematical** [111, 162, 359, 19, 357, 83, 520, 35, 47, 388, 524, 565, 106, 206, 356, 429, 539, 93, 502, 238, 139, 418, 61, 414, 153, 94, 64, 49, 199, 119, 188, 56, 353, 122, 358, 292, 161, 554, 288, 252, 379, 168, 485, 480, 137, 230, 100, 427, 434, 360, 334, 373, 86, 433, 380, 332, 396, 261, 297, 166]. **Mathematics** [103, 63, 89, 497]. **Matrix** [518, 51, 67]. **Maturation** [242]. **Mature** [158]. **Maximal** [495]. **Maximum** [512]. **May** [508, 344]. **McKendrick** [323]. **MDR** [332]. **Mean** [346, 272, 471, 304]. **Mean-Field** [346, 272]. **Measures** [355, 272]. **Mechanical** [30, 308, 132, 235]. **Mechanics** [510, 482, 525]. **Mechanism** [211, 307]. **Mechanisms** [47, 224, 356, 496, 402, 155]. **Mechanistic** [145]. **Media** [260, 88, 212, 247]. **Mediated** [170, 551, 332]. **Medical** [326, 331, 101]. **Meeting** [62]. **Meets** [19, 144]. **Membrane** [576, 32]. **Memory** [273, 126]. **Memoryful** [27]. **Men** [160]. **Mendelian** [33]. **Mentoring** [353]. **Merging** [305]. **Mesic** [549]. **Meta** [317]. **Meta-Population** [317]. **Metabolic** [544, 405]. **Metabolism** [563, 451, 275]. **Metaecoepidemic** [90]. **Metal** [485]. **Metalloproteinases** [518]. **Metapopulations** [175, 11]. **Metastatic** [434]. **Meteorological** [75]. **Methicillin** [373]. **Methicillin-Resistant** [373]. **Method** [24, 441, 85]. **Methods** [490, 248, 4]. **Methylation** [86]. **Metric** [99]. **Metropolitan** [577]. **MEX** [184]. **MEX-5** [184]. **MEX-5/6** [184]. **Micro** [178]. **Micro-swimmer** [178]. **Microbes** [38]. **Microeconomics** [275]. **Microenvironment** [515, 270]. **Microglia** [227]. **microRNAs** [434]. **Microscale** [247, 60]. **Microtubule** [525]. **Microtubules** [164]. **Microvascular** [361, 572]. **Midge** [491]. **Migration** [321, 45, 510, 331, 51, 471, 90, 380]. **Mimulus** [542]. **Minimal** [123, 558, 460]. **Minutiae** [259]. **Mismatch** [162, 359]. **Mitigate** [527, 299, 435]. **Mitigation** [463, 163]. **Mitochondrial** [410, 399]. **Mitotic** [308]. **Mitral** [383]. **Mix** [17]. **Mixed** [455, 302, 211]. **Mixed-Mechanism** [211]. **Mixing** [317, 272]. **Mixotroph** [284]. **Mixture** [135]. **Mobility** [339, 476, 216]. **Model** [489, 131, 445, 44, 459, 98, 167, 357, 180, 555, 31, 2, 239, 20, 206, 105, 123, 82, 544, 576, 223, 321, 402, 385, 232, 340, 383, 317, 558, 429, 339, 79, 450, 346, 250, 406, 156, 125, 97, 362, 313, 326, 158, 256, 148, 42, 215, 324, 139, 166, 421, 160, 475, 342, 354, 491, 306, 173, 258, 492, 94, 64, 572, 268, 331, 367, 182, 363, 29, 49, 199, 218, 245, 146, 115, 323, 191, 272, 198, 422, 397, 519, 289, 477, 207, 531, 177, 34, 161, 5, 234, 13, 391, 90, 327, 295, 21, 74, 244, 281]. **Model** [545, 252, 574, 425, 480, 230, 410, 399, 53, 548, 434, 542, 32, 343, 360, 382, 114, 525, 398, 551, 86, 568, 40, 66, 192, 416, 375, 411, 564, 409, 507, 463, 159, 337, 57, 266, 396, 381, 424, 261, 368, 23, 522]. **Model-Agnostic** [244]. **Model-Based** [477, 368]. **Model-Strengthened** [223]. **Modeling** [282, 162, 359, 227, 566, 527, 557, 103, 285, 467, 240, 203, 365, 260, 155, 483, 147, 8, 75, 188, 353, 210, 271, 358, 104, 170, 515, 311, 197, 315, 202, 270, 379, 80, 194, 109, 136, 100, 427, 528, 348, 334, 278, 373, 236, 91, 58, 85, 171, 384, 442, 126, 473, 101, 110, 435, 307, 309, 226]. **Modelling** [96, 19, 417, 520, 35, 297, 276, 565, 106, 501, 287, 518, 262, 539, 510, 414, 181,

251, 273, 168, 205, 137, 212, 277, 469, 332]. **Models** [431, 474, 506, 557, 269, 329, 532, 512, 403, 128, 451, 553, 229, 466, 78, 533, 536, 22, 241, 243, 571, 149, 133, 264, 440, 178, 24, 272, 456, 560, 140, 320, 134, 177, 517, 514, 554, 154, 71, 39, 281, 253, 254, 301, 247, 174, 235, 460, 433, 578, 393, 487, 113, 458, 319, 294, 257]. **Modulation** [1, 81]. **Modules** [133]. **Moffitt** [93]. **Molecular** [27, 143, 4]. **Momentary** [427]. **Monocarpic** [148]. **Monocytopenia** [106]. **Monolayer** [70, 258]. **Morphoelastic** [460]. **Morphogenesis** [287, 312]. **Mortality** [386, 54, 438, 263]. **Mosaic** [242]. **Mosquito** [555, 213, 397, 310]. **Mosquito-Borne** [310]. **Mosquitoes** [371, 310]. **Most** [12]. **Motif** [443]. **Motility** [492]. **Motion** [562, 327, 295]. **Motor** [164]. **Motors** [561, 143]. **Mountain** [530, 220, 409]. **Mouse** [571]. **Movement** [423, 404, 370, 253, 348, 150, 3]. **Moving** [131, 369, 363, 150]. **Moving-Boundary** [150]. **Multi** [321, 538, 148, 115, 289, 267, 308, 255, 154, 488, 382, 159]. **Multi-centrosomal** [308]. **Multi-criterial** [488]. **Multi-Cue** [321]. **Multi-flowered** [148]. **Multi-objective** [538]. **Multi-Patch** [154, 267]. **Multi-scale** [382]. **Multi-species** [115, 255, 159]. **Multi-strain** [289]. **Multicellular** [533, 40]. **Multidimensional** [557, 568]. **Multigenerational** [542]. **Multilayer** [6]. **Multilevel** [68, 402, 385]. **Multiphase** [459, 363]. **Multiple** [123, 268, 432, 12, 382, 84, 497, 266]. **Multiresolution** [282]. **Multiscale** [357, 260, 523, 150, 277, 375]. **Multistationarity** [341]. **Multivariate** [431]. **Murine** [209]. **Murray** [181, 292]. **Muscle** [97, 362, 410, 399]. **Mussel** [53, 254]. **Mutant** [503]. **Mutated** [223]. **Mutation** [369, 578, 294]. **Mutations** [9, 407]. **Mutually** [48]. **Myeloproliferative** [578]. **Mysteries** [497].

**Nagumo** [421, 243]. **Narrow** [335]. **Narrow-Spectrum** [335]. **Nascent** [158]. **Native** [206]. **Natural** [470, 230]. **Nature** [129, 16]. **Needs** [62]. **Negative** [566, 429]. **Neoplasm** [578]. **Nerve** [421]. **Network** [321, 232, 346, 293, 173, 133, 264, 440, 552, 405, 283, 80, 67, 48]. **Network-Based** [283, 80]. **Networks** [98, 509, 426, 361, 461, 556, 176, 341, 470, 502, 72, 365, 468, 6, 231, 355, 395, 462, 130, 118, 246, 253, 568, 4, 433, 401, 305, 352, 511]. **Neural** [502]. **Neurobiology** [513]. **Neurons** [531]. **Neuroprotectant** [227]. **Neutral** [142, 175, 407]. **Neutropenia** [106]. **Next** [11]. **Next-Generation** [11]. **NF** [551]. **Niche** [434]. **NK** [566]. **Node** [418]. **Nodes** [209]. **Noise** [46, 383, 336, 208, 267, 57]. **Noise-Induced** [208, 57]. **Noises** [481]. **Non** [223, 321, 317, 54, 33, 149, 115, 430, 120, 114, 416, 333, 487, 389, 407]. **Non-adherence** [487]. **Non-conducting** [149]. **Non-genetic** [430]. **Non-homogeneous** [317]. **Non-instantaneous** [389]. **Non-Local** [321, 115, 114, 416]. **Non-neutral** [407]. **Non-pharmaceutical** [54, 120, 333]. **Non-small-cell** [223]. **Nonadherence** [299]. **Nonequilibrium** [27]. **Nonlinear** [112, 532, 544, 95, 457]. **Nonlocal** [313, 466]. **Nonparametric** [148]. **Nonreflecting** [79]. **Nonsmooth** [57].

**Normal** [305]. **Note** [39]. **Novel** [550]. **Novo** [277]. **NPIs** [54]. **Nucleus** [510, 536]. **Number** [530, 317, 516, 244, 116, 350, 439, 372]. **Numbers** [233, 113]. **Numerical** [97, 115, 134, 444, 389]. **Nutrient** [483].

**Obesity** [139, 166]. **objective** [538]. **Oblique** [5]. **Observation** [39]. **Observations** [519]. **Obstacles** [131]. **Oceanic** [481]. **ODE** [532, 174]. **Off** [438]. **Olfactory** [383]. **Oncology** [93]. **Oncolytic** [105, 340, 514, 230]. **One** [260, 393]. **One-Compartmental** [393]. **One-Dimensional** [260]. **Only** [90]. **Onset** [464, 176, 444]. **Open** [286, 237]. **Opinion** [458]. **Opioid** [467]. **Opportunities** [63, 212]. **Optima** [12]. **Optimal** [465, 141, 179, 201, 453, 14, 437, 120, 398, 521, 575, 163, 18]. **Optimality** [495]. **Optimization** [340, 95, 545]. **Optimizing** [547, 77]. **Optimum** [369]. **Orchard** [556, 352]. **Order** [572, 578]. **Order-of-Mutation** [578]. **Ordinary** [469]. **Organisation** [419]. **Organism** [348]. **Organs** [209]. **Orientation** [501]. **Origin** [385]. **Oscillations** [361, 59, 217, 265, 544, 192, 216, 274]. **Oscillatory** [276, 215, 324]. **Other** [259]. **Our** [61]. **Outbreak** [431, 412, 141, 320]. **Outbreaks** [530, 491, 75, 220, 104]. **Outcomes** [565, 315]. **Outperform** [28]. **Overcoming** [10]. **Overcompensatory** [296]. **Overfishing** [325]. **Overloading** [136]. **Overt** [222]. **Oviparous** [91]. **Oviposition** [409]. **Own** [569]. **Oxygen** [472, 83]. **Oxygenation** [472].

**P.** [465]. **Pacemaker** [97, 362]. **Pairs** [516]. **Pairwise** [232]. **Pancreatic** [105, 270]. **Pandemic** [364, 120]. **Pandemics** [212]. **Papillomavirus** [160]. **Paradox** [415]. **Parameter** [557, 558, 486, 470, 256, 508, 440, 73, 211, 446, 484, 74, 202, 400, 318]. **Parameters** [532, 178]. **Parametric** [152]. **Parasite** [450]. **Parasitoid** [424]. **Parotid** [40]. **ParS** [557]. **Parsimonious** [12]. **Part** [69, 92]. **Partial** [36, 535]. **Partially** [28]. **Particle** [85]. **Particles** [131]. **Partitioning** [338]. **Passive** [26, 146]. **Pasture** [526]. **Patch** [151, 133, 560, 154, 264, 267]. **Patches** [331, 425, 204, 200]. **Patchy** [214, 3]. **Pathogen** [489, 37]. **Pathogens** [56]. **Paths** [329]. **Pathway** [35, 297]. **Pathways** [193]. **Patient** [565, 197, 205]. **Patient-Specific** [205]. **Patients** [223, 456, 480]. **Pattern** [131, 274, 265, 559, 362, 550, 503, 6, 146, 567, 207, 549, 53, 235, 416]. **Patterning** [138]. **Patterns** [276, 148, 508, 188, 237, 325, 253, 114, 86]. **Pausing** [158]. **Paying** [61]. **PBPK** [558, 278]. **PCR** [505]. **PDE** [385, 256]. **Peaks** [350, 439]. **PEGylated** [278]. **Perceptions** [141]. **Percolation** [380]. **Performance** [386, 441]. **Period** [167]. **Periodic** [298, 423, 31]. **Periods** [96]. **Peritumoural** [67]. **Permanently** [425]. **Persistence** [59, 411]. **Perspective** [128, 141, 25, 494, 272, 488, 318]. **Perspectives** [539]. **Perturbation** [286, 328]. **Perturbations** [390, 470, 159]. **Pest** [112]. **Pest/Vector** [112]. **Pesticides** [213]. **Petal** [542]. **Phage** [330, 77]. **Phagocytosis** [251]. **pharmaceutical** [54, 120, 333]. **Pharmacokinetic** [393, 487]. **Pharmacology** [318]. **Phase** [167, 404, 506, 466, 394]. **Phase-Field** [466]. **Phase-Type** [394]. **Phenomenon** [457]. **Phenotype**

[511]. **Phenotypes** [542]. **Phenotypic** [303, 419, 17, 473]. **Philippines** [478]. **Photoreceptors** [575]. **Photosynthesis** [5]. **Phylogenetic** [72, 468, 462, 500, 441, 401, 305]. **Phylogenetics** [153]. **Phylogenies** [394]. **Phylosymmetric** [153]. **Physiologically** [257, 241]. **physiology** [149]. **PIDE** [568]. **Pine** [530, 220, 409]. **Placing** [538]. **Planktos** [348]. **Plant** [96, 19, 59, 201, 320, 255, 109]. **Plant-Vector-Virus** [320]. **Plaque** [459, 251, 507]. **Plasmodium** [161, 357, 34]. **Plasticity** [303]. **Platelets** [85]. **Plausible** [546]. **Player** [302]. **Plus** [336]. **Pod** [256]. **Point** [208]. **Points** [47, 5]. **Polar** [390]. **Polarity** [184]. **Polarization** [458]. **Policies** [437, 384, 333]. **Policy** [373, 398, 366]. **Poliovirus** [338]. **Pollinator** [59]. **Polymerization** [202]. **Polymorphic** [33]. **Polypliody** [401]. **Population** [530, 317, 76, 160, 336, 257, 241, 370, 115, 397, 438, 114, 338, 411, 409, 3, 216]. **Populations** [83, 28, 220, 115, 300, 430, 425, 84]. **Pore** [447]. **Porosity** [20]. **Porous** [260]. **Positioning** [262]. **Possible** [401]. **Post** [553, 384]. **Post-vaccination** [384]. **Potassium** [215, 324, 185]. **Potency** [285]. **Potential** [504, 392, 332]. **Power** [21]. **Practical** [304]. **Practice** [191]. **Pre** [87, 434]. **Pre-exposure** [87]. **Pre-Metastatic** [434]. **Precipitation** [508]. **Precipitation-Dependent** [508]. **Preconditioning** [197]. **predation** [214]. **Predator** [423, 274, 265, 55, 391, 343, 200, 481]. **Predators** [387]. **Predict** [406]. **Predicting** [513, 565, 209, 36, 6, 56, 144]. **Prediction** [223, 27, 366]. **Predictive** [502, 548]. **Predicts** [530]. **Preferential** [251]. **PrEP** [463]. **Presence** [458]. **Preservice** [65]. **Pretty** [517]. **Prevalence** [209, 87, 43]. **Prevention** [307]. **Prey** [423, 387, 274, 265, 214, 55, 391, 343, 200]. **Prey-Induced** [387]. **Primary** [40]. **Priming** [475]. **Principle** [55]. **Private** [524]. **Probabilistic** [540, 218]. **Probabilities** [249]. **Probability** [403, 320, 516, 338]. **Problem** [135]. **Problems** [95, 453]. **Process** [516, 564, 448, 428, 294]. **Processes** [376, 345, 39]. **Produce** [305]. **Produced** [505, 327, 295]. **Producer** [57]. **Production** [254]. **Professional** [61]. **Program** [93]. **Progression** [349, 578]. **Progressive** [136]. **Projection** [368]. **Prokaryotes** [541]. **Proliferation** [447, 430]. **Promote** [175, 325]. **Promotes** [308, 444]. **Promotion** [402]. **Proof** [118]. **Propagation** [426, 157, 502, 130]. **propelled** [131]. **Properties** [269, 183, 486, 502, 153, 552, 500]. **Prophylaxis** [87]. **Prostate** [147, 281, 545]. **Protective** [180]. **Protein** [1, 81, 164, 32, 155]. **Protocell** [385]. **Provides** [525]. **Province** [75]. **Prune** [570]. **Public** [524, 141]. **Pulses** [378]. **Pulsing** [69, 92]. **Pushing** [140]. **Pyramidal** [531]. **Qssa** [504]. **Qualitative** [486, 479]. **Quality** [175]. **Quantification** [548]. **Quantify** [278]. **Quantifying** [505, 573]. **Quantitative** [167, 65, 129, 318, 478]. **Quarantine** [326, 355, 49, 218, 398, 309]. **Quartet** [490, 248]. **Quartet-Based** [490]. **Quartets** [99]. **Quasi** [286, 283]. **Quasi-Stationary** [283]. **Quasi-Steady-State** [286]. **Rabies** [171]. **Radiation** [469]. **Radiotherapy** [565, 496]. **Radius** [372].

**Random** [98, 347, 247]. **Range** [28, 508, 316, 280]. **Ranked** [570]. **Rapid** [535]. **Rare** [298]. **Rate** [45, 14, 469]. **Rates** [354, 407]. **Rather** [127]. **RdCVFL** [575]. **Reaction** [46, 221, 509, 461, 559, 470, 7, 550, 483, 231, 237, 436, 198, 543, 405, 118, 484, 246, 374, 53, 32, 113]. **Reactions** [286]. **Reactor** [165]. **Reading** [446]. **Real** [565, 403, 199]. **Real-Time** [565, 199]. **Rearrangement** [529]. **Receding** [190]. **Receptor** [524]. **Reciprocal** [350, 439]. **Reciprocity** [402]. **Reconstructing** [183, 135]. **Recovery** [354, 325]. **Recruitment** [296, 230]. **Recurrence** [145]. **Red** [172, 225]. **Reduce** [54]. **Reduced** [42, 243, 254]. **Reducing** [505]. **Reduction** [246]. **Reefs** [481]. **Reentry** [444]. **Reform** [111]. **Reframing** [453]. **Refunding** [335]. **Regeneration** [20]. **Regimens** [299]. **Regional** [7, 156, 325]. **Regraft** [570]. **Regular** [519]. **Regulated** [48]. **Regulating** [195]. **Regulation** [506, 365, 137]. **Regulatory** [293, 365, 525, 568, 48, 511]. **Reinforcement** [538]. **Related** [504, 364, 137]. **Relation** [107, 350, 439]. **Relationship** [240]. **Relative** [441]. **Release** [180]. **Releasing** [397]. **Remodeling** [136]. **Remote** [209]. **Renewal** [128, 124]. **Rényi** [346]. **Reopening** [384]. **Reorientation** [482]. **Repair** [13]. **Replicate** [406]. **Replication** [116]. **Replicator** [68, 144]. **Reply** [302]. **Repolarization** [390, 444]. **Reproduces** [542]. **Reproduction** [317, 244, 263, 113, 372]. **Reproductive** [378]. **Republic** [412, 351]. **Rescorla** [71]. **Research** [102, 353, 271, 117]. **Resembling** [336]. **Resident** [425]. **Residual** [112]. **Resilience** [268]. **Resistance** [464, 10, 191]. **Resistant** [373]. **Resonance** [31, 241, 257]. **Resorption** [136]. **Resource** [378, 396]. **Resource-Based** [396]. **Resources** [326, 331, 101]. **Respiratory** [290, 577, 522]. **Response** [417, 28, 429, 193, 1, 81, 214, 537, 234, 364, 37, 288, 195, 126]. **Responses** [496, 258, 16, 261]. **Results** [547]. **Retinal** [449]. **Retrieval** [446]. **Retroactive** [82]. **Reveals** [523]. **Reversing** [194]. **Review** [539, 181]. **Revisited** [52]. **Reward** [128]. **Rham** [110]. **Rhesus** [234]. **Rhythm** [456]. **Ribosome** [541]. **Rigorous** [486]. **Ring** [176]. **Rise** [76]. **Risk** [304, 52, 368, 104]. **Risk-Spreading** [304]. **River** [95, 133]. **rna** [135, 443, 158, 155, 536]. **Role** [388, 142, 61, 208, 392, 515, 255, 195, 425, 476, 253, 184, 67, 235]. **Roles** [504, 37]. **Roots** [323]. **Ross** [49]. **Rotating** [376]. **Route** [38]. **Routes** [266]. **RQMC** [246]. **Rush** [309]. **Saliva** [40]. **Salivary** [186, 360]. **Salmonella** [332]. **Sampled** [513]. **Samples** [121]. **sampling** [23]. **SARS** [331]. **SARS-CoV-2** [331]. **SAS** [79]. **Savanna** [268]. **Savannas** [549]. **Scaffold** [447]. **Scalable** [499]. **Scale** [131, 523, 400, 67, 382]. **Scales** [328, 147]. **Schedules** [547]. **Scheme** [335]. **School** [93, 448, 428]. **Schools** [351]. **Science** [129]. **Sciences** [89]. **Sclerosis** [497]. **Search** [347, 270, 92]. **Seasonal** [571, 75, 154, 315, 337]. **Seasonality** [555, 182, 198, 422]. **Secondary** [240, 443]. **Secretion** [40]. **Sedentary** [28]. **Seed** [201]. **Seeds** [172, 225]. **SEIR** [98, 180, 156, 384]. **Selection** [402, 385, 558, 369, 328, 202]. **Self** [131, 355, 419]. **Self-Distancing** [355].

**Self-Organisation** [419]. **Self-propelled** [131]. **Semi** [561]. **Semi-Markov** [561]. **Seminiferous** [188]. **Senegal** [74]. **Sensing** [321]. **Sensitive** [293]. **Sensitivity** [306, 435]. **Sensors** [27]. **Separation** [286, 328]. **Sequence** [125]. **Sequences** [524, 23]. **Sequencing** [536]. **Sequential** [156]. **Sequestration** [341]. **Sequestration-Transmutation** [341]. **Serial** [386]. **Series** [431, 499]. **Serotypes** [546]. **Severe** [577]. **Severity** [240, 311]. **Sex** [160, 91]. **Sexual** [563]. **Shape** [300, 394, 525]. **Sharp** [190]. **Sharp-Fronted** [190]. **Shear** [85]. **Shear-Injured** [85]. **Shed** [537]. **Shifting** [282, 543]. **Shifts** [28, 280]. **Shock** [194]. **Shoots** [148]. **Short** [431, 209]. **Short-Term** [431, 209]. **Should** [28]. **Shrink** [313]. **Sierra** [104]. **Sigmoidal** [526, 393]. **Sign** [350, 439]. **Signaling** [30, 215, 324, 1, 81, 405, 189]. **Signalling** [19]. **Signals** [130]. **Signature** [220]. **Silent** [338]. **Simple** [342, 516, 301]. **Simulating** [258]. **Simulation** [449, 103, 134, 246, 444]. **Simulations** [535, 309]. **Single** [30, 536, 115]. **Single-** [115]. **Single-Nucleus** [536]. **Singular** [286, 470]. **Sink** [11, 204]. **SIR** [269, 346, 7, 425, 381]. **SIS** [232, 283]. **Sites** [432]. **SIV** [194]. **Size** [474, 30, 317]. **Skeletal** [410, 399]. **Slow** [274, 265, 340]. **Small** [348, 223]. **Smooth** [97, 362]. **SMoRe** [557]. **Social** [68, 229, 88, 212]. **Societies** [61]. **Solid** [356, 41, 415, 460]. **Solutions** [517]. **Solve** [95]. **Somatic** [86]. **Some** [547]. **Source** [11, 204]. **Southeast** [368]. **Southern** [409]. **sp.** [203]. **Space** [72, 572]. **Spaces** [557, 500]. **SPADE4** [493]. **Sparse** [71]. **Sparsely** [513]. **Sparsity** [493]. **Spatial** [445, 187, 151, 387, 339, 256, 300, 140, 267, 514, 400, 114, 411, 60]. **Spatially** [362, 84, 171, 216]. **Spatio** [520, 390, 36, 345]. **Spatio-Temporal** [390, 345, 520]. **Spatiotemporal** [484, 114, 60]. **Special** [292, 291]. **Specialisation** [221]. **Speciation** [394]. **Specie** [316]. **Species** [207, 248, 189, 91, 115, 255, 159]. **Specific** [205, 384, 349]. **Specification** [443]. **Spectral** [372]. **Spectrum** [335]. **Speed** [123, 45, 55, 280]. **Speeds** [344]. **Spherical** [418, 149]. **Spheroid** [70, 258, 199]. **Spheroids** [554, 460]. **Spinal** [79]. **Spindle** [308]. **Spine** [185]. **Spiral** [376, 421]. **Split** [344, 233]. **Spot** [542]. **spp** [249]. **Spread** [187, 151, 47, 339, 179, 256, 344, 220, 140, 411]. **Spreading** [426, 269, 55, 304]. **Spring** [309]. **Stability** [423, 41, 32, 189]. **Stable** [302, 268]. **Stage** [455, 411]. **Stage-Structured** [411]. **Stages** [249]. **Stagnation** [170]. **Stalemate** [528]. **Staphylococcus** [373]. **State** [426, 286, 5, 74]. **States** [268, 255, 574, 577]. **Static** [98]. **Stationary** [152, 283, 53]. **Statistical** [183, 482, 427, 487]. **Statistically** [23]. **Statistics** [158, 169]. **Stay** [28]. **Steady** [286, 5]. **Steady-State** [5]. **Steer** [224]. **Stem** [415, 334]. **Step** [167]. **Sterile** [112, 310]. **Sterility** [438]. **Stewardship** [373]. **Stigma** [226, 210]. **Stimuli** [288]. **Stochastic** [46, 509, 285, 461, 286, 179, 156, 158, 492, 503, 146, 320, 13, 391, 21, 154, 430, 246, 525, 66, 159, 380, 424]. **Stochasticity** [367, 208]. **Stoichiometric** [475, 109, 284, 57]. **Stoichiometry** [228]. **Strain** [144, 235, 289]. **Strains** [221, 162, 359, 420, 123]. **Strand** [13]. **Strategies** [227, 160, 414, 8, 289, 244, 384, 163, 337, 408, 435]. **Strategy** [68, 302, 124, 194, 381]. **Stratified** [138]. **Streams** [560]. **Strengthened**

[223]. **Streptococcus** [203]. **Stress** [235]. **Stressors** [534]. **Stretch** [501, 482]. **Stripe** [58]. **Stroke** [227]. **Strong** [543]. **Structural** [361]. **Structure** [455, 176, 272]. **Structured** [2, 239, 450, 510, 257, 241, 245, 84, 411, 507, 463, 337, 435]. **Structures** [443, 135, 348, 377]. **Study** [162, 359, 167, 520, 388, 467, 390, 386, 486, 238, 561, 1, 81, 391, 74, 244, 379, 485, 444, 442, 401, 337, 389, 396, 368]. **Subcellular** [523]. **Subflattenings** [441]. **Subinhibitory** [407]. **Subset** [558, 202]. **Substrate** [563, 501]. **Subtree** [570]. **Success** [569]. **Successive** [344]. **Sufficient** [133]. **Suggests** [234, 448, 428]. **Super** [232]. **Supplying** [127]. **Support** [24]. **Supporting** [206]. **Suppression** [397, 545]. **Surface** [32]. **Surfing** [5]. **Surgery** [553]. **Surrogate** [557]. **Survival** [223]. **Susceptible** [104]. **Suspended** [165]. **Sustainable** [262]. **Swarm** [224]. **swimmer** [178]. **Swimming** [569]. **Switch** [45]. **Switches** [189]. **Switching** [128]. **Symbiotic** [203]. **Synchronized** [216]. **Syncytial** [290]. **Syndrome** [577, 444]. **Synergy** [330]. **Synthesis** [451]. **Synthetic** [80]. **Syphilis** [442]. **System** [35, 265, 486, 7, 203, 268, 271, 55, 267, 364, 371, 380, 297, 274]. **Systematic** [295, 327]. **Systemic** [111]. **Systems** [46, 513, 378, 59, 217, 128, 559, 498, 95, 233, 237, 436, 374, 318, 91, 196, 377, 204, 200, 533].

**T** [417, 197, 379, 334]. **T-Cell** [417, 197]. **Tackling** [303]. **Tailfins** [58]. **Taking** [180]. **Target** [37]. **Targeting** [258]. **Targets** [270]. **Tau** [246]. **Tau-Leaping** [246]. **Taxa** [233, 516]. **taxon** [23]. **tBreggs** [388]. **Teach** [181]. **Teachers** [65, 100]. **Teaching** [322]. **Tear** [73, 211]. **Technique** [112, 512]. **techniques** [511]. **Tell** [5]. **Telomere** [152]. **Temperate** [330]. **Temperature** [91, 368]. **Temperature-Dependent** [91]. **Temporal** [540, 390, 36, 345, 503, 520]. **Temporary** [546]. **Tennessee** [252]. **Tension** [30]. **Tenth** [412]. **Term** [431, 209, 469, 408]. **Termination** [158]. **Tessera** [50]. **Test** [519, 381]. **Test-and-Trace** [381]. **Testing** [342, 488]. **TGF** [334]. **TGF-** [334]. **Their** [5, 300]. **Theorems** [461]. **Theoretic** [141, 77, 118, 551]. **Theoretical** [82, 5]. **Theory** [494, 446, 92]. **Therapeutic** [77]. **Therapy** [303, 31, 340, 147, 197, 281, 545, 334, 294]. **There** [69]. **Thermodynamic** [78, 165, 136]. **Thermotherapy** [250]. **Thinning** [73, 211]. **Third** [373]. **Third-Generation** [373]. **Three** [449, 264, 207]. **Three-patch** [264]. **Three-Species** [207]. **Threshold** [180, 76, 182, 74]. **Throughout** [13]. **Tick** [571, 452, 216]. **Tick-Borne** [452]. **Tilapia** [245]. **Time** [242, 431, 565, 328, 354, 147, 572, 199, 499, 477, 121, 374, 400, 52, 48, 411]. **Time-Delayed** [48]. **Time-Distributed** [354]. **Time-Scale** [400]. **Time-Series** [431]. **Times** [516, 394]. **Timescale** [286]. **Timescales** [251]. **Timing** [176, 77, 16]. **Tipping** [208, 267]. **Tissue** [472, 447, 363, 523, 67]. **Tissue-Engineering** [447]. **Tissue-Scale** [523, 67]. **Tissues** [19, 132, 247, 235]. **TKF91** [125, 23]. **Tolerance** [438]. **Tool** [153]. **tools** [294]. **Topological** [176]. **Topology** [133, 264, 413]. **Torque** [308]. **Trace** [381]. **Trade** [438]. **Trade-Off** [438]. **Tradeoffs** [18]. **Training** [548]. **Trait** [316]. **Transacylation** [504]. **Transcription** [479]. **Transcriptional** [158].

**Transgressive** [542]. **Transient** [530, 574]. **Transients** [378, 84]. **Transit** [572]. **Transition** [303, 5, 255]. **Transitional** [508]. **Transitions** [325, 57]. **Translation** [479]. **Transmission** [357, 465, 474, 412, 339, 414, 573, 370, 331, 245, 198, 577, 392, 349, 371, 382, 171, 60, 163, 448, 428, 266, 101, 435, 309]. **Transmutation** [341]. **Transport** [19, 128, 451, 365, 572, 146, 523, 164, 186, 247, 389, 319]. **Transporter** [64, 94]. **Travel** [309]. **Traveling** [123, 457, 115, 543]. **Travelling** [423, 190, 363]. **Travelling-Wave** [363]. **Treated** [223, 334]. **Treatment** [527, 340, 258, 547, 358, 433, 469]. **Tree** [556, 72, 268, 516, 248, 401]. **Tree-Based** [72]. **Tree-Child** [401]. **Trees** [269, 99, 352]. **Trending** [88]. **Trends** [282]. **Tributes** [291]. **Trigger** [361]. **Triple** [566, 429]. **Triple-Negative** [566, 429]. **Triplet** [248]. **Tryptophan** [451]. **Tsetse** [249]. **Tuberculosis** [349, 80, 478, 337]. **Tubules** [188]. **Tug** [564]. **Tug-of-War** [564]. **Tumbling** [389]. **Tumor** [303, 466, 41, 170, 515, 415, 528, 334, 473]. **Tumor-Immune** [515, 528, 473]. **Tumors** [340, 415, 473]. **Tumour** [496, 25, 22, 199, 554, 150, 460, 417]. **Tumour-Induced** [25]. **Tumours** [356]. **Turing** [376, 559, 550, 146, 138, 567, 542, 196, 377]. **Tutorial** [460]. **Two** [167, 151, 63, 68, 386, 486, 215, 324, 344, 331, 133, 214, 560, 288, 425, 109, 48, 200, 487, 380]. **Two-Compartment** [487]. **Two-Dimensional** [215, 324, 380]. **Two-Patch** [133]. **Two-Patches** [425]. **Two-Patchy** [214]. **Two-Step** [167]. **Two-Strategy** [68]. **Two-Variable** [486]. **Type** [466, 394, 564]. **Tyrosine** [223].

**UCLA** [322]. **UK** [191]. **Ultrasound** [250]. **Ultrasound-Induced** [250]. **Uncertainty** [505, 573, 548]. **Uncovering** [176]. **Undergoing** [456]. **Undergraduate** [62, 102, 353, 65]. **Undergraduates** [322]. **Understand** [491]. **Understanding** [566, 392]. **Uniform** [250]. **United** [577]. **Units** [8]. **Univariate** [431]. **Unlocking** [497]. **Unreported** [75]. **Unstable** [426]. **Uranium** [260]. **USA** [442]. **Usage** [201, 446]. **Use** [8, 427]. **User** [302]. **Uses** [401]. **Using** [465, 557, 532, 565, 576, 36, 414, 80, 69, 92, 91, 4, 384, 328, 484, 373].

**Vaccination** [454, 82, 160, 14, 577, 124, 315, 437, 495, 384, 366, 448, 428, 309]. **Vaccine** [162, 359]. **Validated** [475, 463]. **Validity** [286]. **Values** [486]. **Variability** [108, 154]. **Variable** [486]. **Variance** [246, 316]. **Variants** [577]. **Variation** [571, 438]. **Variational** [312]. **Varying** [264, 37]. **Vasodilatory** [130]. **Vector** [96, 242, 112, 306, 320, 15, 400, 301]. **Vector-Borne** [96, 400, 301]. **Vector-Host** [306]. **Vectors** [301]. **Vegetation** [508]. **Veillonella** [203]. **Ventricle** [79]. **Verification** [558]. **Vertical** [245, 471, 569]. **Vesicles** [143]. **Via** [263, 112, 385, 488, 171, 463, 99]. **Viral** [96, 420, 56, 37]. **Virotherapy** [105, 230]. **Virulence** [450, 18]. **Virus** [31, 503, 290, 182, 245, 330, 198, 537, 104, 320, 87, 163]. **Viruses** [142, 514, 522]. **Vision** [92]. **VisualPDE** [535]. **Vitro** [285, 258]. **Vitro-Calibrated** [258]. **vivax** [161, 357, 465, 34]. **Vivo** [537]. **Volatile**

- [255]. **Volcano** [389]. **Volterra** [486, 560]. **Volume** [568].  
**Wagner** [71]. **Walk** [247]. **War** [412, 564]. **Warburg** [275]. **Warming** [280].  
**Wasserstein** [499]. **Water** [186]. **Wave** [351, 123, 502, 363, 457]. **Waves**  
[423, 123, 376, 190, 421, 492, 432, 115, 543, 382]. **Wavetrains** [421]. **Way**  
[301]. **Weak** [532, 328, 569]. **Weak-Form** [532]. **Weed** [168]. **Weighted**  
[313, 248, 99]. **Weights** [490]. **WENDy** [532]. **Which** [155]. **Who**  
[160, 373, 337]. **Within** [509, 538, 42, 503, 67, 438, 236, 448, 428].  
**Within-Host** [236, 428]. **Within-Population** [438]. **without** [55].  
**Wolbachia** [213, 397, 371]. **Wolbachia-Infected** [397]. **Workplace** [573].  
**Wound** [518, 25, 202]. **Wounds** [139, 166]. **Wuhan** [326, 307].  
**Xeniid** [69, 92]. **Xylella** [489, 187].  
**Year** [93]. **Years** [63]. **Yeast** [544]. **Yield** [508]. **Yule** [516].  
**Zambia** [477]. **Zebrafish** [58]. **Zika** [182, 198, 15, 266, 101, 368]. **Zombie**  
[177]. **Zonal** [327, 295].

## References

**Leander:2014:MCR**

- [1] R. Leander and A. Friedman. Modulation of the cAMP response by  $G\alpha_i$  and  $G\beta\gamma$ : a computational study of  $G$  protein signaling in immune cells. *Bulletin of Mathematical Biology*, 76(6):1352–1375, June 2014. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-014-9964-4>; <http://link.springer.com/content/pdf/10.1007/s11538-014-9964-4.pdf>. See correction [81].

**Callahan:2019:ALS**

- [2] Jason Callahan, Eric Eager, Richard Rebarber, Eva Strawbridge, and Shenglan Yuan. Analysis of a length-structured density-dependent model for fish. *Bulletin of Mathematical Biology*, 81(10):3732–3753, October 2019. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-019-00648-3>; <http://link.springer.com/content/pdf/10.1007/s11538-019-00648-3.pdf>. See correction [239].

**Zaker:2020:EMB**

- [3] Nazanin Zaker, Laurence Ketchemen, and Frithjof Lutscher. The effect of movement behavior on population density in patchy landscapes.

*Bulletin of Mathematical Biology*, 82(1):??, January 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-019-00680-3>; <http://link.springer.com/content/pdf/10.1007/s11538-019-00680-3.pdf>.

Vieira:2020:CIM

- [4] Luis Sordo Vieira, Reinhard C. Laubenbacher, and David Murugarra. Control of intracellular molecular networks using algebraic methods. *Bulletin of Mathematical Biology*, 82(1):??, January 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-019-00679-w>; <http://link.springer.com/content/pdf/10.1007/s11538-019-00679-w.pdf>.

Miranda-Apodaca:2020:SHE

- [5] Jon Miranda-Apodaca, Emilio L. Marcos-Barbero, Rosa Morcuende, and Juan B. Arellano. Surfing the hyperbola equations of the steady-state Farquhar-von Caemmerer-Berry C<sub>3</sub> leaf photosynthesis model: What can a theoretical analysis of their oblique asymptotes and transition points tell us? *Bulletin of Mathematical Biology*, 82(1):??, January 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-019-00676-z>; <http://link.springer.com/content/pdf/10.1007/s11538-019-00676-z.pdf>.

Hayes:2020:PPF

- [6] Sean M. Hayes and Kurt E. Anderson. Predicting pattern formation in multilayer networks. *Bulletin of Mathematical Biology*, 82(1):??, January 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-019-00682-1>; <http://link.springer.com/content/pdf/10.1007/s11538-019-00682-1.pdf>.

ElAlamiLaaroussi:2020:RCR

- [7] Adil El Alami Laaroussi and Mostafa Rachik. On the regional control of a reaction-diffusion system SIR. *Bulletin of Mathematical Biology*, 82(1):??, January 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-019-00673-2>; <http://link.springer.com/content/pdf/10.1007/s11538-019-00673-2.pdf>.

**Huo:2020:MAU**

- [8] Xi Huo. Modeling antibiotic use strategies in intensive care units: Comparing de-escalation and continuation. *Bulletin of Mathematical Biology*, 82(1):??, January 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-019-00686-x>; <http://link.springer.com/content/pdf/10.1007/s11538-019-00686-x.pdf>.

**Marculis:2020:IDI**

- [9] Nathan G. Marculis and Mark A. Lewis. Inside dynamics of integrodifference equations with mutations. *Bulletin of Mathematical Biology*, 82(1):??, January 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-019-00683-0>; <http://link.springer.com/content/pdf/10.1007/s11538-019-00683-0.pdf>.

**Friedman:2020:ODR**

- [10] Avner Friedman and Nourridine Siewe. Overcoming drug resistance to BRAF inhibitor. *Bulletin of Mathematical Biology*, 82(1):??, January 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-019-00691-0>; <http://link.springer.com/content/pdf/10.1007/s11538-019-00691-0.pdf>.

**Harrington:2020:NGA**

- [11] Peter D. Harrington and Mark A. Lewis. A next-generation approach to calculate source–sink dynamics in marine metapopulations. *Bulletin of Mathematical Biology*, 82(1):??, January 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-019-00674-1>; <http://link.springer.com/content/pdf/10.1007/s11538-019-00674-1.pdf>.

**Matsieva:2020:MPL**

- [12] Julia Matsieva and Katherine St.John. Most parsimonious likelihood exhibits multiple optima for compatible characters. *Bulletin of Mathematical Biology*, 82(1):??, January 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-019-00689-8>; <http://link.springer.com/content/pdf/10.1007/s11538-019-00689-8.pdf>.

**Mohseni-Salehi:2020:SMD**

- [13] Fazeleh S. Mohseni-Salehi, Fatemeh Zare-Mirakabad, Mehdi Sadeghi, and Soudeh Ghafouri-Fard. A stochastic model of DNA double-strand breaks repair throughout the cell cycle. *Bulletin of Mathematical Biology*, 82(1):??, January 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-019-00692-z>; <http://link.springer.com/content/pdf/10.1007/s11538-019-00692-z.pdf>.

**Maier:2020:OAV**

- [14] Sandra B. Maier, Eduardo Massad, Marcos Amaku, Marcelo N. Burattini, and David Greenhalgh. The optimal age of vaccination against dengue with an age-dependent biting rate with application to Brazil. *Bulletin of Mathematical Biology*, 82(1):??, January 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-019-00690-1>; <http://link.springer.com/content/pdf/10.1007/s11538-019-00690-1.pdf>.

**Olawoyin:2020:CAV**

- [15] Omomayowa Olawoyin and Christopher Kribs. Coinfection, altered vector infectivity, and antibody-dependent enhancement: The dengue-Zika interplay. *Bulletin of Mathematical Biology*, 82(1):??, January 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-019-00681-2>; <http://link.springer.com/content/pdf/10.1007/s11538-019-00681-2.pdf>.

**Tyson:2020:TNB**

- [16] Rebecca C. Tyson, Stephanie D. Hamilton, Aboubakr S. Lo, Bert O. Baumgaertner, and Stephen M. Krone. The timing and nature of behavioural responses affect the course of an epidemic. *Bulletin of Mathematical Biology*, 82(1):??, January 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-019-00684-z>; <http://link.springer.com/content/pdf/10.1007/s11538-019-00684-z.pdf>.

**Strobl:2020:MMP**

- [17] Maximilian A. R. Strobl, Andrew L. Krause, Mehdi Damaghi, Robert Gillies, Alexander R. A. Anderson, and Philip K. Maini. Mix and match: Phenotypic coexistence as a key facilitator of cancer invasion. *Bulletin of Mathematical Biology*, 82(1):??, January

2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-019-00675-0>; <http://link.springer.com/content/pdf/10.1007/s11538-019-00675-0.pdf>.

daSilva:2020:OVD

- [18] Esdras Jafet Aristides da Silva and César Castilho. Optimal virulence, diffusion and tradeoffs. *Bulletin of Mathematical Biology*, 82(2):??, February 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-019-00688-9>; <http://link.springer.com/content/pdf/10.1007/s11538-019-00688-9.pdf>.

Allen:2020:MMA

- [19] Henry R. Allen and Mariya Ptashnyk. Mathematical modelling of auxin transport in plant tissues: Flux meets signalling and growth. *Bulletin of Mathematical Biology*, 82(2):??, February 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-019-00685-y>; <http://link.springer.com/content/pdf/10.1007/s11538-019-00685-y.pdf>.

Cassani:2020:HMC

- [20] Simone Cassani and Sarah D. Olson. A hybrid model of cartilage regeneration capturing the interactions between cellular dynamics and porosity. *Bulletin of Mathematical Biology*, 82(2):??, February 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00695-1>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00695-1.pdf>.

Naasell:2020:ACS

- [21] Ingemar Nåsell. Approximations of cumulants of the stochastic power law logistic model. *Bulletin of Mathematical Biology*, 82(2):??, February 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-019-00687-w>; <http://link.springer.com/content/pdf/10.1007/s11538-019-00687-w.pdf>.

Grimes:2020:CEC

- [22] David Robert Grimes and Alexander G. Fletcher. Close encounters of the cell kind: The impact of contact inhibition on tumour growth and cancer models. *Bulletin of Mathematical Biology*, 82(2):??, February

2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-019-00677-y>; <http://link.springer.com/content/pdf/10.1007/s11538-019-00677-y.pdf>.

Fan:2020:SCC

- [23] Wai-Tong Fan and Sebastien Roch. Statistically consistent and computationally efficient inference of ancestral DNA sequences in the TKF91 model under dense taxon sampling. *Bulletin of Mathematical Biology*, 82(2):??, February 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00693-3>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00693-3.pdf>.

Laudanno:2020:AAS

- [24] Giovanni Laudanno, Bart Haegeman, and Rampal S. Etienne. Additional analytical support for a new method to compute the likelihood of diversification models. *Bulletin of Mathematical Biology*, 82(2):??, February 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00698-y>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00698-y.pdf>.

Flegg:2020:CPW

- [25] Jennifer A. Flegg, Shakti N. Menon, Helen M. Byrne, and D. L. Sean McElwain. A current perspective on wound healing and tumour-induced angiogenesis. *Bulletin of Mathematical Biology*, 82(2):??, February 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00696-0>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00696-0.pdf>.

Adimy:2020:MPI

- [26] Mostafa Adimy, Paulo F. A. Mancera, Diego S. Rodrigues, Fernando L. P. Santos, and Cláudia P. Ferreira. Maternal passive immunity and dengue hemorrhagic fever in infants. *Bulletin of Mathematical Biology*, 82(2):??, February 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00699-x>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00699-x.pdf>.

**Marzen:2020:PDN**

- [27] Sarah E. Marzen and James P. Crutchfield. Prediction and dissipation in nonequilibrium molecular sensors: Conditionally Markovian channels driven by memoryful environments. *Bulletin of Mathematical Biology*, 82(2):??, February 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00694-2>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00694-2.pdf>.

**Cobbold:2020:SSS**

- [28] Christina A. Cobbold and Remus Stana. Should I stay or should I go: Partially sedentary populations can outperform fully dispersing populations in response to climate-induced range shifts. *Bulletin of Mathematical Biology*, 82(2):??, February 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00700-7>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00700-7.pdf>.

**Jin:2020:HMB**

- [29] Xing Jin, Jeffrey S. Marshall, and Matthew J. Wargo. Hybrid model of bacterial biofilm growth. *Bulletin of Mathematical Biology*, 82(2):??, February 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00701-6>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00701-6.pdf>.

**Buttenschon:2020:CSM**

- [30] Andreas Buttenschön, Yue Liu, and Leah Edelstein-Keshet. Cell size, mechanical tension, and GTPase signaling in the single cell. *Bulletin of Mathematical Biology*, 82(2):??, February 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00702-5>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00702-5.pdf>.

**Browne:2020:RPC**

- [31] Cameron J. Browne, Xuejun Pan, Hongying Shu, and Xiang-Sheng Wang. Resonance of periodic combination antiviral therapy and intracellular delays in virus model. *Bulletin of Mathematical Biology*, 82(2):??, February 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00704-3>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00704-3.pdf>.

- Stolerman:2020:SAB**
- [32] Lucas M. Stolerman, Michael Getz, Stefan G. Llewellyn Smith, Michael Holst, and Padmini Rangamani. Stability analysis of a bulk–surface reaction model for membrane protein clustering. *Bulletin of Mathematical Biology*, 82(2):??, February 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00703-4>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00703-4.pdf>.
- Fishman:2020:PEG**
- [33] Michael A. Fishman. Polymorphic evolutionary games and non-Mendelian genetics. *Bulletin of Mathematical Biology*, 82(2):??, February 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00705-2>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00705-2.pdf>.
- Mehra:2020:ACM**
- [34] Somya Mehra, James M. McCaw, Mark B. Flegg, Peter G. Taylor, and Jennifer A. Flegg. An activation–clearance model for *Plasmodium vivax* malaria. *Bulletin of Mathematical Biology*, 82(2):??, February 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00706-1>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00706-1.pdf>.
- Bakshi:2020:MMA**
- [35] Suruchi Bakshi, Fraser Cunningham, and Piet H. van der Graaf. Mathematical modelling of alternative pathway of complement system. *Bulletin of Mathematical Biology*, 82(2):??, February 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-020-00708-z>. See correction [297].
- Dobreva:2020:TPS**
- [36] Atanaska Dobreva, Ralf Paus, and N. G. Cogan. Toward predicting the spatio–temporal dynamics of *Alopecia Areata* lesions using partial differential equation analysis. *Bulletin of Mathematical Biology*, 82(3):??, March 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00707-0>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00707-0.pdf>.

**Moore:2020:VID**

- [37] James R. Moore, Hasan Ahmed, Balaji Manicassamy, Adolfo Garcia-Sastre, Andreas Handel, and Rustom Antia. Varying inoculum dose to assess the roles of the immune response and target cell depletion by the pathogen in control of acute viral infections. *Bulletin of Mathematical Biology*, 82(3):??, March 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00711-4>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00711-4.pdf>.

**Dalwadi:2020:AAM**

- [38] Mohit P. Dalwadi and John R. King. An asymptotic analysis of the Malonyl-CoA route to 3-hydroxypropionic acid in genetically engineered microbes. *Bulletin of Mathematical Biology*, 82(3):??, March 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00714-1>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00714-1.pdf>.

**Park:2020:NOP**

- [39] Sang Woo Park and Benjamin M. Bolker. A note on observation processes in epidemic models. *Bulletin of Mathematical Biology*, 82(3):??, March 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00713-2>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00713-2.pdf>.

**Vera-Siguenza:2020:MMP**

- [40] Elías Vera-Siguenza, Nathan Pages, John Rugis, David I. Yule, and James Sneyd. A multicellular model of primary saliva secretion in the parotid gland. *Bulletin of Mathematical Biology*, 82(3):??, March 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00712-3>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00712-3.pdf>.

**Lu:2020:CFF**

- [41] Min-Jhe Lu, Chun Liu, John Lowengrub, and Shuwang Li. Complex far-field geometries determine the stability of solid tumor growth with chemotaxis. *Bulletin of Mathematical Biology*, 82(3):??, March 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00711-4>.

020-00716-z; <http://link.springer.com/content/pdf/10.1007/s11538-020-00716-z.pdf>.

**Ford:2020:DRM**

- [42] Noah Ford and David Chopp. A dimensionally reduced model of biofilm growth within a flow cell. *Bulletin of Mathematical Biology*, 82(3):??, March 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00715-0>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00715-0.pdf>.

**Zahid:2020:DDI**

- [43] Mondal Hasan Zahid and Christopher M. Kribs. Decoys and dilution: The impact of incompetent hosts on prevalence of Chagas disease. *Bulletin of Mathematical Biology*, 82(3):??, March 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00710-5>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00710-5.pdf>.

**Aguilar:2020:EMM**

- [44] Jacob B. Aguilar and Juan B. Gutierrez. An epidemiological model of malaria accounting for asymptomatic carriers. *Bulletin of Mathematical Biology*, 82(3):??, March 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00717-y>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00717-y.pdf>.

**Curtin:2020:SSG**

- [45] Lee Curtin, Andrea Hawkins-Daarud, Kristoffer G. van der Zee, Kristin R. Swanson, and Markus R. Owen. Speed switch in glioblastoma growth rate due to enhanced hypoxia-induced migration. *Bulletin of Mathematical Biology*, 82(3):??, March 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00718-x>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00718-x.pdf>.

**Adamer:2020:CNS**

- [46] Michael F. Adamer, Heather A. Harrington, Eamonn A. Gaffney, and Thomas E. Woolley. Coloured noise from stochastic inflows in reaction-diffusion systems. *Bulletin of Mathematical Biology*, 82(4):??, April 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00719-w>.

020-00719-w; <http://link.springer.com/content/pdf/10.1007/s11538-020-00719-w.pdf>.

**Bayani:2020:MPC**

- [47] A. Bayani, J. L. Dunster, J. J. Crofts, and M. R. Nelson. Mechanisms and points of control in the spread of inflammation: A mathematical investigation. *Bulletin of Mathematical Biology*, 82(4):??, April 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00709-y>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00709-y.pdf>.

**Wang:2020:DAT**

- [48] Guiyuan Wang, Zhuoqin Yang, and Marc Turcotte. Dynamic analysis of the time-delayed genetic regulatory network between two auto-regulated and mutually inhibitory genes. *Bulletin of Mathematical Biology*, 82(4):??, April 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00722-1>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00722-1.pdf>.

**Jin:2020:MAR**

- [49] Xiulei Jin, Shuwan Jin, and Daozhou Gao. Mathematical analysis of the Ross–Macdonald model with quarantine. *Bulletin of Mathematical Biology*, 82(4):??, April 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00723-0>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00723-0.pdf>.

**Fimmel:2020:CTC**

- [50] Elena Fimmel, Martin Starman, and Lutz Strüngmann. Circular tessera codes in the evolution of the genetic code. *Bulletin of Mathematical Biology*, 82(4):??, April 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00724-z>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00724-z.pdf>.

**Malik:2020:IED**

- [51] A. A. Malik, B. Wennberg, and P. Gerlee. The impact of elastic deformations of the extracellular matrix on cell migration. *Bulletin of Mathematical Biology*, 82(4):??, April 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/>

article/10.1007/s11538-020-00721-2; <http://link.springer.com/content/pdf/10.1007/s11538-020-00721-2.pdf>.

**Tal:2020:ABH**

- [52] Omri Tal and Tat Dat Tran. Adaptive bet-hedging revisited: Considerations of risk and time horizon. *Bulletin of Mathematical Biology*, 82(4):??, April 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00729-8>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00729-8.pdf>.

**Shen:2020:SPR**

- [53] Zuolin Shen and Junjie Wei. Stationary pattern of a reaction-diffusion mussel-algae model. *Bulletin of Mathematical Biology*, 82(4):??, April 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00727-w>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00727-w.pdf>.

**Eubank:2020:CFA**

- [54] S. Eubank, I. Eckstrand, B. Lewis, S. Venkatramanan, M. Marathe, and C. L. Barrett. Commentary on Ferguson, et al., “Impact of Non-pharmaceutical Interventions (NPIs) to Reduce COVID-19 Mortality and Healthcare Demand”. *Bulletin of Mathematical Biology*, 82(4):??, April 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00726-x>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00726-x.pdf>.

**Lin:2020:SSI**

- [55] Guo Lin, Yibin Niu, Shuxia Pan, and Shigui Ruan. Spreading speed in an integrodifference predator-prey system without comparison principle. *Bulletin of Mathematical Biology*, 82(5):??, May 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00725-y>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00725-y.pdf>.

**Lange:2020:MFP**

- [56] Alexander Lange. A mathematical framework for predicting lifestyles of viral pathogens. *Bulletin of Mathematical Biology*, 82(5):??, May 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00724-z>.

020-00730-1; <http://link.springer.com/content/pdf/10.1007/s11538-020-00730-1.pdf>.

**Yuan:2020:NIT**

- [57] Sanling Yuan, Dongmei Wu, Guijie Lan, and Hao Wang. Noise-induced transitions in a nonsmooth producer-grazer model with stoichiometric constraints. *Bulletin of Mathematical Biology*, 82(5):??, May 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00733-y>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00733-y.pdf>.

**Volkening:2020:MSF**

- [58] A. Volkening, M. R. Abbott, N. Chandra, B. Dubois, F. Lim, D. Sexton, and B. Sandstede. Modeling stripe formation on growing zebrafish tailfins. *Bulletin of Mathematical Biology*, 82(5):??, May 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00731-0>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00731-0.pdf>.

**Chen:2020:POP**

- [59] Mingshu Chen, Hong Wu, and Yuanshi Wang. Persistence and oscillations of plant-pollinator-herbivore systems. *Bulletin of Mathematical Biology*, 82(5):??, May 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00735-w>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00735-w.pdf>.

**Xiao:2020:CMM**

- [60] Yanni Xiao, Changcheng Xiang, Robert A. Cheke, and Sanyi Tang. Coupling the macroscale to the microscale in a spatiotemporal context to examine effects of spatial diffusion on disease transmission. *Bulletin of Mathematical Biology*, 82(5):??, May 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00736-9>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00736-9.pdf>.

**Greer:2020:POD**

- [61] Meredith L. Greer, Olcay Akman, Timothy D. Comar, Daniel Hrozencik, and Jonathan E. Rubin. Paying our dues: The role of professional societies in the evolution of mathematical biology educa-

tion. *Bulletin of Mathematical Biology*, 82(5):??, May 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00728-9>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00728-9.pdf>.

Aikens:2020:MNC

- [62] Melissa L. Aikens. Meeting the needs of a changing landscape: Advances and challenges in undergraduate biology education. *Bulletin of Mathematical Biology*, 82(5):??, May 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00739-6>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00739-6.pdf>.

Bressoud:2020:OCF

- [63] David M. Bressoud. Opportunities for change in the first two years of college mathematics. *Bulletin of Mathematical Biology*, 82(5):??, May 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00738-7>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00738-7.pdf>.

Hiller:2020:MMK

- [64] Rebecca M. Hiller, Julius von Kügelgen, Huan Bao, Franck Duong Van Hoa, and Eric N. Cytrynbaum. A mathematical model for the kinetics of the MalFGK<sub>2</sub> maltose transporter. *Bulletin of Mathematical Biology*, 82(5):??, May 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00737-8>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00737-8.pdf>. See correction [94].

Mayes:2020:UQB

- [65] Robert Mayes, Tammy Long, Lacey Huffling, Aaron Reedy, and Brad Williamson. Undergraduate quantitative biology impact on biology preservice teachers. *Bulletin of Mathematical Biology*, 82(6):??, June 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00740-z>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00740-z.pdf>.

Wang:2020:SMB

- [66] Xueying Wang, Chadi M. Saad-Roy, and P. van den Driessche. Stochastic model of Bovine Babesiosis with juvenile and adult cat-

tle. *Bulletin of Mathematical Biology*, 82(6):??, June 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00734-x>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00734-x.pdf>.

**Shuttleworth:2020:CSD**

- [67] Robyn Shuttleworth and Dumitru Trucu. Cell-scale degradation of peritumoural extracellular matrix fibre network and its role within tissue-scale cancer invasion. *Bulletin of Mathematical Biology*, 82(6):??, June 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00732-z>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00732-z.pdf>.

**Cooney:2020:AMR**

- [68] Daniel B. Cooney. Analysis of multilevel replicator dynamics for general two-strategy social dilemma. *Bulletin of Mathematical Biology*, 82(6):??, June 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00742-x>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00742-x.pdf>.

**Samson:2020:CPXa**

- [69] Julia E. Samson and Laura A. Miller. Collective pulsing in Xeniid corals: Part II — using computational fluid dynamics to determine if there are benefits to coordinated pulsing. *Bulletin of Mathematical Biology*, 82(6):??, June 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00741-y>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00741-y.pdf>.

**Berrouet:2020:CDI**

- [70] Catherine Berrouet, Naika Dorilas, and Necibe Tuncer. Comparison of drug inhibitory effects ( $IC_{50}$ ) in monolayer and spheroid cultures. *Bulletin of Mathematical Biology*, 82(6):??, June 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-020-00746-7>.

**Nishimura:2020:RWM**

- [71] Joel Nishimura and Amy L. Cochran. Rescorla–Wagner models with sparse dynamic attention. *Bulletin of Mathematical Biology*, 82(6):??,

June 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-020-00743-w>.

**Fischer:2020:STB**

- [72] Mareike Fischer and Andrew Francis. The space of tree-based phylogenetic networks. *Bulletin of Mathematical Biology*, 82(6):??, June 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-020-00744-9>.

**Luke:2020:PEE**

- [73] Rayanne A. Luke, Richard J. Braun, and Deborah Awisi-Gyau. Parameter estimation for evaporation-driven tear film thinning. *Bulletin of Mathematical Biology*, 82(6):??, June 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-020-00745-8>.

**Ogola:2020:PSE**

- [74] Beda O. Ogola, Woldegebriel A. Woldegerima, and E. O. Omondi. Parameter and state estimation in a cholera model with threshold immunology: a case study of Senegal. *Bulletin of Mathematical Biology*, 82(6):??, June 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-020-00755-6>.

**Jing:2020:MEM**

- [75] Shuang-Lin Jing, Hai-Feng Huo, and Hong Xiang. Modeling the effects of meteorological factors and unreported cases on seasonal influenza outbreaks in Gansu Province, China. *Bulletin of Mathematical Biology*, 82(6):??, June 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-020-00747-6>.

**Fadai:2020:PDT**

- [76] Nabil T. Fadai and Matthew J. Simpson. Population dynamics with threshold effects give rise to a diverse family of Allee effects. *Bulletin of Mathematical Biology*, 82(6):??, June 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-020-00756-5>.

**Li:2020:OTC**

- [77] Guanlin Li, Chung Yin Leung, and Joshua S. Weitz. Optimizing the timing and composition of therapeutic phage cocktails: A control-theoretic

approach. *Bulletin of Mathematical Biology*, 82(6):??, June 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-020-00751-w>.

Gaebler:2020:TIC

- [78] Harry J. Gaebler and Hermann J. Eberl. Thermodynamic inhibition in chemostat models. *Bulletin of Mathematical Biology*, 82(6):??, June 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-020-00758-3>.

Donatelli:2020:NBC

- [79] Donatella Donatelli and Licia Romagnoli. Nonreflecting boundary conditions for a CSF model of fourth ventricle: Spinal SAS dynamics. *Bulletin of Mathematical Biology*, 82(6):??, June 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-020-00749-4>.

Renardy:2020:FNB

- [80] Marissa Renardy and Denise E. Kirschner. A framework for network-based epidemiological modeling of tuberculosis dynamics using synthetic datasets. *Bulletin of Mathematical Biology*, 82(6):??, June 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-020-00752-9>.

Leander:2020:CMC

- [81] R. Leander and A. Friedman. Correction to: Modulation of the cAMP Response by  $G\alpha_i$  and  $G\beta\gamma$ : a Computational Study of  $G$  Protein Signalling in Immune Cells. *Bulletin of Mathematical Biology*, 82(6):??, June 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-020-00753-8>. See [1].

Chouhan:2020:GTM

- [82] Ali Chouhan, Sohail Maiwand, and Dewey Taylor. Game-theoretical model of retroactive hepatitis B vaccination in China. *Bulletin of Mathematical Biology*, 82(6):??, June 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-020-00748-5>.

Ardaseva:2020:MDA

- [83] Aleksandra Ardaševa, Robert A. Gatenby, and Tommaso Lorenzi. A mathematical dissection of the adaptation of cell populations to fluctuating oxygen levels. *Bulletin of Mathematical Biology*, 82(6):??, June 2020. CODEN

BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-020-00754-7>.

**Vortkamp:2020:MAL**

- [84] Irina Vortkamp, Sebastian J. Schreiber, and Frank M. Hilker. Multiple attractors and long transients in spatially structured populations with an Allee effect. *Bulletin of Mathematical Biology*, 82(6):??, June 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-020-00750-x>.

**Wang:2020:MCF**

- [85] Liwei Wang, Zengsheng Chen, Jiafeng Zhang, Xiwen Zhang, and Zhongjun J. Wu. Modeling clot formation of shear-injured platelets in flow by a dissipative particle dynamics method. *Bulletin of Mathematical Biology*, 82(7):??, July 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00760-9>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00760-9.pdf>.

**Utsey:2020:MMI**

- [86] Kiersten Utsey and James P. Keener. A mathematical model for inheritance of DNA methylation patterns in somatic cells. *Bulletin of Mathematical Biology*, 82(7):??, July 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00765-4>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00765-4.pdf>.

**Pharaon:2020:IPE**

- [87] Joe Pharaon and Chris T. Bauch. The impact of pre-exposure prophylaxis for human immunodeficiency virus on gonorrhea prevalence. *Bulletin of Mathematical Biology*, 82(7):??, July 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00762-7>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00762-7.pdf>.

**Sooknanan:2020:TSM**

- [88] J. Sooknanan and D. M. G. Comissiong. Trending on social media: Integrating social media into infectious disease dynamics. *Bulletin of Mathematical Biology*, 82(7):??, July 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00757-4>;

<http://link.springer.com/content/pdf/10.1007/s11538-020-00757-4.pdf>.

**Cozzens:2020:ICM**

- [89] Margaret Cozzens and Fred S. Roberts. Introductory College mathematics for the life sciences: Has anything changed? *Bulletin of Mathematical Biology*, 82(7):??, July 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00761-8>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00761-8.pdf>.

**Moulin:2020:MMG**

- [90] Thibault Moulin, Antoine Perasso, and Ezio Venturino. A metaepidemic model of grassland ecosystem with only consumers' migration. *Bulletin of Mathematical Biology*, 82(7):??, July 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00764-5>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00764-5.pdf>.

**Verma:2020:MTD**

- [91] Nitu Verma, Babita K. Verma, and S. Pushpavanam. Modeling temperature-dependent sex determination in oviparous species using a dynamical systems approach. *Bulletin of Mathematical Biology*, 82(7):??, July 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00763-6>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00763-6.pdf>.

**Samson:2020:CPXb**

- [92] Julia E. Samson, Dylan D. Ray, Maurizio Porfiri, Laura A. Miller, and Simon Garnier. Collective pulsing in *Xeniid* corals: Part I — using computer vision and information theory to search for coordination. *Bulletin of Mathematical Biology*, 82(7):??, July 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00759-2>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00759-2.pdf>.

**Enderling:2020:HSI**

- [93] Heiko Enderling, Philipp M. Altrock, Noemi Andor, David Basanta, Joel S. Brown, Robert A. Gatenby, Andriy Marusyk, Katarzyna A. Rejniak, Ariosto Silva, and Alexander R. A. Anderson. High School Intern-

ship Program in Integrated Mathematical Oncology (HIP IMO): Five-year experience at Moffitt Cancer Center. *Bulletin of Mathematical Biology*, 82(7):??, July 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00768-1>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00768-1.pdf>.

Hiller:2020:CMM

- [94] Rebecca M. Hiller, Julius von Kügelgen, Huan Bao, Franck Duong Van Hoa, and Eric N. Cytrynbaum. Correction to: A Mathematical Model for the Kinetics of the MalFGK<sub>2</sub> Maltose Transporter. *Bulletin of Mathematical Biology*, 82(7):??, July 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00772-5>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00772-5.pdf>. See [64].

Filippov:2020:LRE

- [95] Alexander Filippov, Alexander Kovalev, and Stanislav Gorb. Large river effect or frozen kinetics: How complex nonlinear living systems solve optimization problems. *Bulletin of Mathematical Biology*, 82(7):??, July 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00766-3>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00766-3.pdf>.

AlBasir:2020:MEI

- [96] Fahad Al Basir, Sagar Adhurya, Malay Banerjee, Ezio Venturino, and Santanu Ray. Modelling the effect of incubation and latent periods on the dynamics of vector-borne plant viral diseases. *Bulletin of Mathematical Biology*, 82(7):??, July 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00767-2>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00767-2.pdf>.

Fatooyinbo:2020:NBA

- [97] H. O. Fatooyinbo, R. G. Brown, D. J. W. Simpson, and B. van Brunt. Numerical bifurcation analysis of pacemaker dynamics in a model of smooth muscle cells. *Bulletin of Mathematical Biology*, 82(7):??, July 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00771-6>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00771-6.pdf>.

**Alota:2020:EBM**

- [98] Cherrylyn P. Alota, Carlene P. C. Pilar-Arceo, and Aurelio A. de los Reyes V. An edge-based model of SEIR epidemics on static random networks. *Bulletin of Mathematical Biology*, 82(7):??, July 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00769-0>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00769-0.pdf>.

**Yourdkhani:2020:IMT**

- [99] Samaneh Yourdkhani and John A. Rhodes. Inferring metric trees from weighted quartets via an intertaxon distance. *Bulletin of Mathematical Biology*, 82(7):??, July 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00773-4>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00773-4.pdf>.

**Seshaiyer:2020:CTT**

- [100] Padmanabhan Seshaiyer and Suzanne Lenhart. Connecting with teachers through modeling in mathematical biology. *Bulletin of Mathematical Biology*, 82(8):??, August 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00774-3>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00774-3.pdf>.

**Zhao:2020:MDA**

- [101] Hongyong Zhao, Liping Wang, Sergio Muniz Oliva, and Huaiping Zhu. Modeling and dynamics analysis of Zika transmission with limited medical resources. *Bulletin of Mathematical Biology*, 82(8):??, August 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00776-1>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00776-1.pdf>.

**Bendinskas:2020:CUR**

- [102] Kestutis G. Bendinskas, Lester Caudill, and Luis A. Melara, Jr. The case for undergraduate research journals. *Bulletin of Mathematical Biology*, 82(8):??, August 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-020-00775-2>.

**Bodine:2020:ABM**

- [103] Erin N. Bodine, Robert M. Panoff, and Anton E. Weisstein. Agent-based modeling and simulation in mathematics and biology education. *Bulletin of Mathematical Biology*, 82(8):??, August 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-020-00778-z>.

**Lin:2020:MEV**

- [104] Qianying Lin, Salihu S. Musa, and Daihai He. Modeling the 2014–2015 Ebola virus disease outbreaks in Sierra Leone, Guinea, and Liberia with effect of high- and low-risk susceptible individuals. *Bulletin of Mathematical Biology*, 82(8):??, August 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-020-00779-y>.

**Chen:2020:CAM**

- [105] J. Chen, D. Weihs, and F. J. Vermolen. A cellular automata model of oncolytic virotherapy in pancreatic cancer. *Bulletin of Mathematical Biology*, 82(8):??, August 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-020-00780-5>.

**Cassidy:2020:CCI**

- [106] Tyler Cassidy, Antony R. Humphries, and Michael C. Mackey. Characterizing chemotherapy-induced neutropenia and monocytopenia through mathematical modelling. *Bulletin of Mathematical Biology*, 82(8):??, August 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-020-00777-0>.

**Fimmel:2020:RBC**

- [107] Elena Fimmel, Christian J. Michel, and Lutz Strüngmann. The relation between  $k$ -circularity and circularity of codes. *Bulletin of Mathematical Biology*, 82(8):??, August 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-020-00770-7>.

**Lehrer:2020:GGV**

- [108] Richard Lehrer, Leona Schauble, and Panchompoo Wisittanawat. Getting a grip on variability. *Bulletin of Mathematical Biology*, 82(8):??, August 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-020-00782-3>.

**Rong:2020:SMA**

- [109] Xinmiao Rong, Yazhou Sun, and Hao Wang. Stoichiometric modeling of aboveground–belowground interaction of herbaceous plant and two herbivores. *Bulletin of Mathematical Biology*, 82(8):??, August 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-020-00784-1>.

**Zhao:2020:RHA**

- [110] Rundong Zhao, Menglun Wang, and Guo-Wei Wei. The de Rham–Hodge analysis and modeling of biomolecules. *Bulletin of Mathematical Biology*, 82(8):??, August 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-020-00783-2>.

**Akman:2020:BCB**

- [111] Olcay Akman, Carrie Diaz Eaton, and Katerina V. Thompson. Building community-based approaches to systemic reform in mathematical biology education. *Bulletin of Mathematical Biology*, 82(8):??, August 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-020-00781-4>.

**Aronna:2020:NPV**

- [112] M. Soledad Aronna and Yves Dumont. On nonlinear pest/vector control via the sterile insect technique: Impact of residual fertility. *Bulletin of Mathematical Biology*, 82(8):??, August 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-020-00790-3>.

**Yang:2020:BRN**

- [113] Chayu Yang and Jin Wang. Basic reproduction numbers for a class of reaction–diffusion epidemic models. *Bulletin of Mathematical Biology*, 82(8):??, August 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-020-00788-x>.

**Taylor:2020:NLC**

- [114] Nick P. Taylor, Hyunyeon Kim, and Robert A. Van Gorder. A non-local cross-diffusion model of population dynamics I: Emergent spatial and spatiotemporal patterns. *Bulletin of Mathematical Biology*, 82(8):??, August 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-020-00786-z>.

**Krause:2020:NLC**

- [115] Andrew L. Krause and Robert A. Van Gorder. A non-local cross-diffusion model of population dynamics II: Exact, approximate, and numerical traveling waves in single- and multi-species populations. *Bulletin of Mathematical Biology*, 82(8):??, August 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-020-00787-y>.

**Sadun:2020:ELE**

- [116] Lorenzo Sadun. Effects of latency on estimates of the COVID-19 replication number. *Bulletin of Mathematical Biology*, 82(9):??, September 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00791-2>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00791-2.pdf>.

**Macauley:2020:CAB**

- [117] Matthew Macauley and Nora Youngs. The case for algebraic biology: from research to education. *Bulletin of Mathematical Biology*, 82(9):??, September 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00789-w>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00789-w.pdf>.

**Muller:2020:DBC**

- [118] Stefan Müller and Badal Joshi. Detailed balance = complex balance + cycle balance: a graph-theoretic proof for reaction networks and Markov chains. *Bulletin of Mathematical Biology*, 82(9):??, September 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00792-1>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00792-1.pdf>.

**Jungck:2020:MBE**

- [119] John R. Jungck, Raina Robeva, and Louis J. Gross. Mathematical biology education: Changes, communities, connections, and challenges. *Bulletin of Mathematical Biology*, 82(9):??, September 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00793-0>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00793-0.pdf>.

**Perkins:2020:OCC**

- [120] T. Alex Perkins and Guido España. Optimal control of the COVID-19 pandemic with non-pharmaceutical interventions. *Bulletin of Mathematical Biology*, 82(9):??, September 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00795-y>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00795-y.pdf>.

**Nardini:2020:LEB**

- [121] John T. Nardini, John H. Lagergren, Andrea Hawkins-Daarud, Lee Curtin, Bethan Morris, Erica M. Rutter, Kristin R. Swanson, and Kevin B. Flores. Learning equations from biological data with limited time samples. *Bulletin of Mathematical Biology*, 82(9):??, September 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00794-z>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00794-z.pdf>.

**Lee:2020:MBE**

- [122] Shernita Lee and LaShania Clinewell. Mathematical biology: Expand, expose, and educate! *Bulletin of Mathematical Biology*, 82(9):??, September 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00796-x>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00796-x.pdf>.

**Chen:2020:TWE**

- [123] Guotong Chen, Xinchu Fu, and Mengfeng Sun. Traveling waves and estimation of minimal wave speed for a diffusive influenza model with multiple strains. *Bulletin of Mathematical Biology*, 82(9):??, September 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00799-8>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00799-8.pdf>.

**Nzokem:2020:EDA**

- [124] Aubain Nzokem and Neal Madras. Epidemic dynamics and adaptive vaccination strategy: Renewal equation approach. *Bulletin of Mathematical Biology*, 82(9):??, September 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00802-2>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00802-2.pdf>.

**Fan:2020:ICD**

- [125] Wai-Tong Louis Fan, Brandon Legried, and Sebastien Roch. Impossibility of consistent distance estimation from sequence lengths under the TKF91 model. *Bulletin of Mathematical Biology*, 82(9):??, September 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00801-3>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00801-3.pdf>.

**Wyatt:2020:MEM**

- [126] Asia Wyatt and Doron Levy. Modeling the effect of memory in the adaptive immune response. *Bulletin of Mathematical Biology*, 82(9):??, September 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00798-9>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00798-9.pdf>.

**Loo:2020:WMC**

- [127] Sara L. Loo, Danya Rose, Michael Weight, Kristen Hawkes, and Peter S. Kim. Why males compete rather than care, with an application to supplying collective goods. *Bulletin of Mathematical Biology*, 82(10):??, October 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00800-4>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00800-4.pdf>.

**Ciocanel:2020:RRP**

- [128] Maria-Veronica Ciocanel, John Fricks, Peter R. Kramer, and Scott A. McKinley. Renewal reward perspective on linear switching diffusion systems in models of intracellular transport. *Bulletin of Mathematical Biology*, 82(10):??, October 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00797-w>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00797-w.pdf>.

**Robeva:2020:CNQ**

- [129] Raina S. Robeva, John R. Jungck, and Louis J. Gross. Changing the nature of quantitative biology education: Data science as a driver. *Bulletin of Mathematical Biology*, 82(10):??, October 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00785-0>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00785-0.pdf>.

**Lee:2020:EPV**

- [130] Pilhwa Lee. Electrical propagation of vasodilatory signals in capillary networks. *Bulletin of Mathematical Biology*, 82(10):??, October 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00806-y>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00806-y.pdf>.

**Aceves-Sanchez:2020:LSD**

- [131] P. Aceves-Sanchez, P. Degond, E. E. Keaveny, A. Manhart, S. Merino-Aceituno, and D. Peurichard. Large-scale dynamics of self-propelled particles moving through obstacles: Model derivation and pattern formation. *Bulletin of Mathematical Biology*, 82(10):??, October 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00805-z>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00805-z.pdf>.

**Murphy:2020:MCC**

- [132] Ryan J. Murphy, Pascal R. Buenzli, Ruth E. Baker, and Matthew J. Simpson. Mechanical cell competition in heterogeneous epithelial tissues. *Bulletin of Mathematical Biology*, 82(10):??, October 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00807-x>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00807-x.pdf>.

**Jiang:2020:TPM**

- [133] Hongyan Jiang, King-Yeung Lam, and Yuan Lou. Are two-patch models sufficient? The evolution of dispersal and topology of river network modules. *Bulletin of Mathematical Biology*, 82(10):??, October 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00803-1>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00803-1.pdf>.

**Mathias:2020:IFF**

- [134] Sonja Mathias, Adrien Coulier, Anass Bouchnita, and Andreas Hellander. Impact of force function formulations on the numerical simulation of centre-based models. *Bulletin of Mathematical Biology*, 82(10):??, October 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538>

020-00810-2; <http://link.springer.com/content/pdf/10.1007/s11538-020-00810-2.pdf>.

**Greenwood:2020:PRM**

- [135] Torin Greenwood and Christine E. Heitsch. On the problem of reconstructing a mixture of rna structures. *Bulletin of Mathematical Biology*, 82(10):??, October 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00804-0>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00804-0.pdf>.

**Sego:2020:MPD**

- [136] T. J. Sego, Yung-Ting Hsu, Tien-Min Chu, and Andres Tovar. Modeling progressive damage accumulation in bone remodeling explains the thermodynamic basis of bone resorption by overloading. *Bulletin of Mathematical Biology*, 82(10):??, October 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00808-w>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00808-w.pdf>.

**Scheepers:2020:CRA**

- [137] Ronél Scheepers, Graeme J. Pettet, Peter van Heijster, and Robyn P. Araujo. Cholesterol regulation in age-related macular degeneration: a framework for mathematical modelling of Drusen biogenesis. *Bulletin of Mathematical Biology*, 82(10):??, October 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00812-0>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00812-0.pdf>.

**Krause:2020:TPS**

- [138] Andrew L. Krause, Václav Klika, Jacob Halatek, Paul K. Grant, Thomas E. Woolley, Neil Dalchau, and Eamonn A. Gaffney. Turing patterning in stratified domains. *Bulletin of Mathematical Biology*, 82(10):??, October 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00809-9>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00809-9.pdf>.

**Friedman:2020:MMC**

- [139] Avner Friedman and Nourridine Siewe. Mathematical model of chronic dermal wounds in diabetes and obesity. *Bulletin of Mathematical Biology*,

- 82(10):??, October 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00815-x>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00815-x.pdf>. See correction [166].
- Lutscher:2020:PBM**
- [140] Frithjof Lutscher, Justus Fink, and Yingjie Zhu. Pushing the boundaries: Models for the spatial spread of ecosystem engineers. *Bulletin of Mathematical Biology*, 82(10):??, October 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00818-8>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00818-8.pdf>.
- Deka:2020:OMP**
- [141] Aniruddha Deka, Buddhi Pantha, and Samit Bhattacharyya. Optimal management of public perceptions during a flu outbreak: a game-theoretic perspective. *Bulletin of Mathematical Biology*, 82(11):??, November 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00817-9>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00817-9.pdf>.
- Bunimovich:2020:LIR**
- [142] Leonid Bunimovich and Longmei Shu. Local immunodeficiency: Role of neutral viruses. *Bulletin of Mathematical Biology*, 82(11):??, November 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00813-z>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00813-z.pdf>.
- Park:2020:DVD**
- [143] Youngmin Park and Thomas G. Fai. Dynamics of vesicles driven into closed constrictions by molecular motors. *Bulletin of Mathematical Biology*, 82(11):??, November 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00820-0>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00820-0.pdf>.
- Madec:2020:PSC**
- [144] Sten Madec and Erida Gjini. Predicting  $N$ -strain coexistence from co-colonization interactions: Epidemiology meets ecology and the replicator equation. *Bulletin of Mathematical Biology*, 82(11):??, November

2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00816-w>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00816-w.pdf>.

Curtin:2020:MII

- [145] Lee Curtin, Andrea Hawkins-Daarud, Alyx B. Porter, Kristoffer G. van der Zee, Markus R. Owen, and Kristin R. Swanson. A mechanistic investigation into ischemia-driven distal recurrence of glioblastoma. *Bulletin of Mathematical Biology*, 82(11):??, November 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00814-y>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00814-y.pdf>.

Kim:2020:STP

- [146] Hyunjoong Kim and Paul C. Bressloff. Stochastic Turing pattern formation in a model with active and passive transport. *Bulletin of Mathematical Biology*, 82(11):??, November 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00822-y>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00822-y.pdf>.

Higgins:2020:TSA

- [147] Raegan Higgins, Casey J. Mills, and Angela Peace. A time scales approach for modeling intermittent hormone therapy for prostate cancer. *Bulletin of Mathematical Biology*, 82(11):??, November 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00821-z>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00821-z.pdf>.

Fomin:2020:NMA

- [148] Eduard Fomin and Tatyana Fomina. A nonparametric model for analysis of flowering patterns of herbaceous multi-flowered monocarpic shoots. *Bulletin of Mathematical Biology*, 82(12):??, December 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00824-w>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00824-w.pdf>.

**Jiang:2020:EPM**

- [149] Jiamu Jiang, Paul Smith, and Mark C. W. van Rossum. Electro-physiology models of cells with spherical geometry with non-conducting center. *Bulletin of Mathematical Biology*, 82(12):??, December 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00828-6>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00828-6.pdf>.

**Suveges:2020:DMM**

- [150] Szabolcs Suveges, Raluca Eftimie, and Dumitru Trucu. Directionality of macrophages movement in tumour invasion: a multiscale moving-boundary approach. *Bulletin of Mathematical Biology*, 82(12):??, December 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00819-7>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00819-7.pdf>.

**Arroyo-Esquivel:2020:SDS**

- [151] Jorge Arroyo-Esquivel and Alan Hastings. Spatial dynamics and spread of ecosystem engineers: Two patch analysis. *Bulletin of Mathematical Biology*, 82(12):??, December 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00833-9>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00833-9.pdf>.

**Lee:2020:SDT**

- [152] Kyung Hyun Lee and Marek Kimmel. Stationary distribution of telomere lengths in cells with telomere length maintenance and its parametric inference. *Bulletin of Mathematical Biology*, 82(12):??, December 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00811-1>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00811-1.pdf>.

**Hendriksen:2020:PAM**

- [153] Michael Hendriksen and Julia A. Shore. Phylosymmetric algebras: Mathematical properties of a new tool in phylogenetics. *Bulletin of Mathematical Biology*, 82(12):??, December 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00832-w>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00832-w.pdf>.

**Nipa:2020:DEM**

- [154] Kaniz Fatema Nipa and Linda J. S. Allen. Disease emergence in multi-patch stochastic epidemic models with demographic and seasonal variability. *Bulletin of Mathematical Biology*, 82(12):??, December 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00831-x>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00831-x.pdf>.

**Gasior:2020:MMW**

- [155] K. Gasior, M. G. Forest, A. S. Gladfelter, and J. M. Newby. Modeling the mechanisms by which coexisting biomolecular RNA–Protein condensates form. *Bulletin of Mathematical Biology*, 82(12):??, December 2020. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00823-x>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00823-x.pdf>.

**Engbert:2021:SDA**

- [156] Ralf Engbert, Maximilian M. Rabe, Reinhold Kliegl, and Sebastian Reich. Sequential data assimilation of the stochastic SEIR epidemic model for regional COVID-19 dynamics. *Bulletin of Mathematical Biology*, 83(1):??, January 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00834-8>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00834-8.pdf>.

**Berestycki:2021:PEA**

- [157] Henri Berestycki, Jean-Michel Roquejoffre, and Luca Rossi. Propagation of epidemics along lines with fast diffusion. *Bulletin of Mathematical Biology*, 83(1):??, January 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00826-8>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00826-8.pdf>.

**Filatova:2021:SNM**

- [158] Tatiana Filatova, Nikola Popovic, and Ramon Grima. Statistics of nascent and mature RNA fluctuations in a stochastic model of transcriptional initiation, elongation, pausing, and termination. *Bulletin of Mathematical Biology*, 83(1):??, January 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00827-7>;

<http://link.springer.com/content/pdf/10.1007/s11538-020-00827-7.pdf>.

**Xu:2021:CEG**

- [159] Chaoqun Xu, Sanling Yuan, and Tonghua Zhang. Competitive exclusion in a general multi-species chemostat model with stochastic perturbations. *Bulletin of Mathematical Biology*, 83(1):??, January 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00843-7>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00843-7.pdf>.

**Gao:2021:DMA**

- [160] Shasha Gao, Maia Martcheva, Hongyu Miao, and Libin Rong. A dynamic model to assess human papillomavirus vaccination strategies in a heterosexual population combined with men who have sex with men. *Bulletin of Mathematical Biology*, 83(1):??, January 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00830-y>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00830-y.pdf>.

**Mehra:2021:ADP**

- [161] Somya Mehra, James M. McCaw, Mark B. Flegg, Peter G. Taylor, and Jennifer A. Flegg. Antibody dynamics for plasmodium vivax malaria: a mathematical model. *Bulletin of Mathematical Biology*, 83(1):??, January 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00837-5>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00837-5.pdf>.

**Alharbi:2021:MMS**

- [162] Mohammed H. Alharbi and Christopher M. Kribs. A mathematical modeling study: Assessing impact of mismatch between influenza vaccine strains and circulating strains in Hajj. *Bulletin of Mathematical Biology*, 83(1):??, January 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00836-6>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00836-6.pdf>. See correction [359].

**Xue:2021:OCM**

- [163] Ling Xue, Xue Ren, Felicia Magpantay, Wei Sun, and Huaiiping Zhu. Optimal control of mitigation strategies for dengue virus

transmission. *Bulletin of Mathematical Biology*, 83(2):??, February 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00839-3>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00839-3.pdf>.

Ryan:2021:MPT

- [164] S. D. Ryan, Z. McCarthy, and M. Potomkin. Motor protein transport along inhomogeneous microtubules. *Bulletin of Mathematical Biology*, 83(2):??, February 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00838-4>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00838-4.pdf>.

Gaebler:2021:TIB

- [165] Harry J. Gaebler, Jack M. Hughes, and Hermann J. Eberl. Thermodynamic inhibition in a biofilm reactor with suspended bacteria. *Bulletin of Mathematical Biology*, 83(2):??, February 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00840-w>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00840-w.pdf>.

Friedman:2021:CMM

- [166] Avner Friedman and Nourridine Siewe. Correction to: Mathematical Model of Chronic Dermal Wounds in Diabetes and Obesity. *Bulletin of Mathematical Biology*, 83(2):??, February 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00835-7>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00835-7.pdf>. See [139].

An:2021:TSM

- [167] Zheming An, Nathaniel J. Merrill, Kwangwon Lee, Rémi Robin, Amaury Hayat, Olivia Zapfe, and Benedetto Piccoli. A two-step model of human entrainment: a quantitative study of circadian period and phase of entrainment. *Bulletin of Mathematical Biology*, 83(2):??, February 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00829-5>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00829-5.pdf>.

**Ramaj:2021:MMC**

- [168] Tedi Ramaj. On the mathematical modelling of competitive invasive weed dynamics. *Bulletin of Mathematical Biology*, 83(2):??, February 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00825-9>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00825-9.pdf>.

**Oteo-Garcia:2021:GFS**

- [169] Gonzalo Oteo-García and José-Angel Oteo. A geometrical framework for  $f$ -statistics. *Bulletin of Mathematical Biology*, 83(2):??, February 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00850-8>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00850-8.pdf>.

**Milzman:2021:MLM**

- [170] Jesse Milzman, Wanqiang Sheng, and Doron Levy. Modeling LSD1-mediated tumor stagnation. *Bulletin of Mathematical Biology*, 83(2):??, February 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00842-8>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00842-8.pdf>.

**Wang:2021:MRT**

- [171] Xiunan Wang, Hao Wang, and Michael Y. Li. Modeling rabies transmission in spatially heterogeneous environments via  $\theta$ -diffusion. *Bulletin of Mathematical Biology*, 83(2):??, February 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00857-1>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00857-1.pdf>.

**FitzGerald:2021:RLD**

- [172] Cody FitzGerald and James Keener. Red light and the dormancy-germination decision in *Arabidopsis* seeds. *Bulletin of Mathematical Biology*, 83(3):??, March 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00849-1>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00849-1.pdf>. See correction [225].

**Gupta:2021:NIE**

- [173] Churni Gupta, Necibe Tuncer, and Maia Martcheva. A network immunological HIV model. *Bulletin of Mathematical Biology*, 83(3):??, March 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00855-3>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00855-3.pdf>.

**Su:2021:DLB**

- [174] Wei-Hung Su, Ching-Shan Chou, and Dongbin Xiu. Deep learning of biological models from data: Applications to ODE models. *Bulletin of Mathematical Biology*, 83(3):??, March 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00851-7>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00851-7.pdf>.

**Garnier:2021:DGH**

- [175] Jimmy Garnier and Pierre Lafontaine. Dispersal and good habitat quality promote neutral genetic diversity in metapopulations. *Bulletin of Mathematical Biology*, 83(3):??, March 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00853-5>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00853-5.pdf>.

**Ciocanel:2021:TDA**

- [176] Maria-Veronica Ciocanel, Riley Juenemann, Adriana T. Dawes, and Scott A. McKinley. Topological data analysis approaches to uncovering the timing of ring structure onset in filamentous networks. *Bulletin of Mathematical Biology*, 83(3):??, March 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00847-3>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00847-3.pdf>.

**McGahan:2021:MLM**

- [177] Ian McGahan, James Powell, and Elizabeth Spencer. 28 models later: Model competition and the Zombie Apocalypse. *Bulletin of Mathematical Biology*, 83(3):??, March 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00845-5>;

<http://link.springer.com/content/pdf/10.1007/s11538-020-00845-5.pdf>.

**Larson:2021:BFE**

- [178] Karen Larson, Sarah D. Olson, and Anastasios Matzavinos. A Bayesian framework to estimate fluid and material parameters in micro-swimmer models. *Bulletin of Mathematical Biology*, 83(3):??, March 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00852-6>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00852-6.pdf>.

**Enciso:2021:SCD**

- [179] German Enciso, Christine Sütterlin, Ming Tan, and Frederic Y. M. Wan. Stochastic *Chlamydia* dynamics and optimal spread. *Bulletin of Mathematical Biology*, 83(4):??, April 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00846-4>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00846-4.pdf>.

**Auger:2021:TRC**

- [180] Pierre Auger and Ali Moussaoui. On the threshold of release of confinement in an epidemic SEIR model taking into account the protective effect of mask. *Bulletin of Mathematical Biology*, 83(4):??, April 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-021-00858-8>; <http://link.springer.com/content/pdf/10.1007/s11538-021-00858-8.pdf>.

**Kulesa:2021:MCI**

- [181] Paul M. Kulesa, Jennifer C. Kasemeier-Kulesa, Jason A. Morrison, Rebecca McLennan, Mary Cathleen McKinney, and Caleb Bailey. Modelling cell invasion: a review of what J. D. Murray and the embryo can teach us. *Bulletin of Mathematical Biology*, 83(4):??, April 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-021-00859-7>; <http://link.springer.com/content/pdf/10.1007/s11538-021-00859-7.pdf>.

**Ibrahim:2021:TDM**

- [182] Mahmoud A. Ibrahim and Attila Dénes. Threshold dynamics in a model for Zika virus disease with seasonality. *Bulletin of Mathematical Biology*, 83(4):??, April 2021. CODEN BMTBAP. ISSN 0092-8240 (print),

1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00844-6>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00844-6.pdf>.

**Cocconi:2021:RIS**

- [183] Luca Cocconi, Alexander Kuhn-Régnier, Malte Neuss, Ana B. Sendova-Franks, and Kim Christensen. Reconstructing the intrinsic statistical properties of intermittent locomotion through corrections for boundary effects. *Bulletin of Mathematical Biology*, 83(4):??, April 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00848-2>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00848-2.pdf>.

**Seirin-Lee:2021:RCM**

- [184] Sungrim Seirin-Lee. The role of cytoplasmic MEX-5/6 polarity in asymmetric cell division. *Bulletin of Mathematical Biology*, 83(4):??, April 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-021-00860-0>; <http://link.springer.com/content/pdf/10.1007/s11538-021-00860-0.pdf>.

**Lee:2021:ECA**

- [185] Pilhwa Lee. Electrodiffusion with calcium-activated potassium channels in dendritic spine. *Bulletin of Mathematical Biology*, 83(4):??, April 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00854-4>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00854-4.pdf>.

**Sneyd:2021:CDW**

- [186] James Sneyd, Elias Vera-Sigüenza, John Rugis, Nathan Pages, and David I. Yule. Calcium dynamics and water transport in salivary acinar cells. *Bulletin of Mathematical Biology*, 83(4):??, April 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-020-00841-9>; <http://link.springer.com/content/pdf/10.1007/s11538-020-00841-9.pdf>.

**Anita:2021:CSS**

- [187] Sebastian Anița, Vincenzo Capasso, and Simone Scacchi. Controlling the spatial spread of a *Xylella* epidemic. *Bulletin of Mathematical Biology*, 83(4):??, April 2021. CODEN BMTBAP. ISSN 0092-8240 (print),

- 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-021-00861-z>; <http://link.springer.com/content/pdf/10.1007/s11538-021-00861-z.pdf>.
- Kawamura:2021:MMD**
- [188] Mari Kawamura, Kei Sugihara, Hisako Takigawa-Imamura, Toshiyuki Ogawa, and Takashi Miura. Mathematical modeling of dynamic cellular association patterns in seminiferous tubules. *Bulletin of Mathematical Biology*, 83(4):??, April 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-021-00863-x>; <http://link.springer.com/content/pdf/10.1007/s11538-021-00863-x.pdf>.
- Stolerman:2021:SAS**
- [189] Lucas M. Stolerman, Pradipta Ghosh, and Padmini Rangamani. Stability analysis of a signaling circuit with dual species of GTPase switches. *Bulletin of Mathematical Biology*, 83(4):??, April 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-021-00864-w>; <http://link.springer.com/content/pdf/10.1007/s11538-021-00864-w.pdf>.
- El-Hachem:2021:IRS**
- [190] Maud El-Hachem, Scott W. McCue, and Matthew J. Simpson. Invading and receding sharp-fronted travelling waves. *Bulletin of Mathematical Biology*, 83(4):??, April 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-021-00862-y>; <http://link.springer.com/content/pdf/10.1007/s11538-021-00862-y.pdf>.
- Lanyon:2021:MII**
- [191] Christopher W. Lanyon, John R. King, Dov J. Stekel, and Rachel L. Gomes. A model to investigate the impact of farm practice on antimicrobial resistance in UK dairy farms. *Bulletin of Mathematical Biology*, 83(4):??, April 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-021-00865-9>; <http://link.springer.com/content/pdf/10.1007/s11538-021-00865-9.pdf>.
- Wang:2021:DIM**
- [192] Xiaoqiang Wang and Liyong Zhu. Diffusive interface model for actomyosin driven cell oscillations. *Bulletin of Mathematical Biology*, 83(4):??,

April 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-021-00866-8>; <http://link.springer.com/content/pdf/10.1007/s11538-021-00866-8.pdf>.

**Fedak:2021:AAA**

- [193] Elizabeth A. Fedak, Frederick R. Adler, Lisa M. Abegglen, and Joshua D. Schiffman. ATM and ATR activation through crosstalk between DNA damage response pathways. *Bulletin of Mathematical Biology*, 83(4):??, April 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-021-00868-6>; <http://link.springer.com/content/pdf/10.1007/s11538-021-00868-6.pdf>.

**Roda:2021:MEL**

- [194] Weston C. Roda, Suli Liu, Christopher Power, and Michael Y. Li. Modeling the effects of latency reversing drugs during HIV-1 and SIV brain infection with implications for the “shock and kill” strategy. *Bulletin of Mathematical Biology*, 83(4):??, April 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-021-00875-7>; <http://link.springer.com/content/pdf/10.1007/s11538-021-00875-7.pdf>.

**Pooladvand:2021:RAC**

- [195] Pantea Pooladvand, Peter S. Kim, and Barbara Fazekas de St Groth. The role of antigen-competitive dynamics in regulating the immune response. *Bulletin of Mathematical Biology*, 83(5):??, May 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-021-00867-7>; <http://link.springer.com/content/pdf/10.1007/s11538-021-00867-7.pdf>.

**Woolley:2021:BTS**

- [196] Thomas E. Woolley, Andrew L. Krause, and Eamonn A. Gaffney. Bespoke Turing systems. *Bulletin of Mathematical Biology*, 83(5):??, May 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-021-00870-y>; <http://link.springer.com/content/pdf/10.1007/s11538-021-00870-y.pdf>.

**Owens:2021:MCC**

- [197] Katherine Owens and Ivana Bozic. Modeling CAR T-cell therapy with patient preconditioning. *Bulletin of Mathematical Biology*, 83(5):??, May 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-021-00869-5>; <http://link.springer.com/content/pdf/10.1007/s11538-021-00869-5.pdf>.

**Li:2021:GDR**

- [198] Fuxiang Li and Xiao-Qiang Zhao. Global dynamics of a reaction–diffusion model of Zika virus transmission with seasonality. *Bulletin of Mathematical Biology*, 83(5):??, May 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-021-00879-3>; <http://link.springer.com/content/pdf/10.1007/s11538-021-00879-3.pdf>.

**Jin:2021:MMT**

- [199] Wang Jin, Loredana Spoerri, Nikolas K. Haass, and Matthew J. Simpson. Mathematical model of tumour spheroid experiments with real-time cell cycle imaging. *Bulletin of Mathematical Biology*, 83(5):??, May 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-021-00878-4>; <http://link.springer.com/content/pdf/10.1007/s11538-021-00878-4.pdf>.

**Xiao:2021:EPD**

- [200] Siheng Xiao, Yuanshi Wang, and Shikun Wang. Effects of prey’s diffusion on predator–prey systems with two patches. *Bulletin of Mathematical Biology*, 83(5):??, May 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-021-00884-6>; <http://link.springer.com/content/pdf/10.1007/s11538-021-00884-6.pdf>.

**Hamelin:2021:OCP**

- [201] F. M. Hamelin, B. Bowen, P. Bernhard, and V. A. Bokil. Optimal control of plant disease epidemics with clean seed usage. *Bulletin of Mathematical Biology*, 83(5):??, May 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-021-00872-w>; <http://link.springer.com/content/pdf/10.1007/s11538-021-00872-w.pdf>.

**Pearce:2021:MPS**

- [202] Katherine J. Pearce, Kimberly Nellenbach, Ralph C. Smith, Ashley C. Brown, and Mansoor A. Haider. Modeling and parameter subset selection for fibrin polymerization kinetics with applications to wound healing. *Bulletin of Mathematical Biology*, 83(5):??, May 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-021-00876-6>; <http://link.springer.com/content/pdf/10.1007/s11538-021-00876-6.pdf>.

**Feng:2021:MSB**

- [203] Dianlei Feng, Insa Neuweiler, Regina Nogueira, and Udo Nackenhorst. Modeling of symbiotic bacterial biofilm growth with an example of the *Streptococcus–Veillonella* sp. system. *Bulletin of Mathematical Biology*, 83(5):??, May 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-021-00888-2>; <http://link.springer.com/content/pdf/10.1007/s11538-021-00888-2.pdf>.

**Wu:2021:DCS**

- [204] Hong Wu and Yuanshi Wang. Dynamics of competitive systems with diffusion between source–sink patches. *Bulletin of Mathematical Biology*, 83(5):??, May 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-021-00885-5>; <http://link.springer.com/content/pdf/10.1007/s11538-021-00885-5.pdf>.

**Ratto:2021:PSM**

- [205] N. Ratto, A. Bouchnita, P. Chelle, M. Marion, M. Panteleev, D. Nechipurenko, B. Tardy-Poncet, and V. Volpert. Patient-specific modelling of blood coagulation. *Bulletin of Mathematical Biology*, 83(5):??, May 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-021-00890-8>; <http://link.springer.com/content/pdf/10.1007/s11538-021-00890-8.pdf>.

**Caudera:2021:MMS**

- [206] Elisa Caudera, Simona Viale, Sandro Bertolino, Jacopo Cerri, and Ezio Venturino. A mathematical model supporting a hyperpredation effect in the apparent competition between invasive eastern cottontail and native European hare. *Bulletin of Mathematical Biology*, 83(5):??, May

2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-021-00873-9>; <http://link.springer.com/content/pdf/10.1007/s11538-021-00873-9.pdf>.

**Manna:2021:PFT**

- [207] Kalyan Manna, Vitaly Volpert, and Malay Banerjee. Pattern formation in a three-species cyclic competition model. *Bulletin of Mathematical Biology*, 83(5):??, May 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-021-00886-4>; <http://link.springer.com/content/pdf/10.1007/s11538-021-00886-4.pdf>.

**Mallela:2021:RSN**

- [208] Abhishek Mallela and Alan Hastings. The role of stochasticity in noise-induced tipping point cascades: a master equation approach. *Bulletin of Mathematical Biology*, 83(5):??, May 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <http://link.springer.com/article/10.1007/s11538-021-00889-1>; <http://link.springer.com/content/pdf/10.1007/s11538-021-00889-1.pdf>.

**DeStefano:2021:PLT**

- [209] Alisa DeStefano, Clyde Martin, and Dorothy Wallace. Predicting long-term asbestos prevalence in human lungs, lymph nodes, and remote organs from short-term murine experiments. *Bulletin of Mathematical Biology*, 83(5):??, May 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00882-8>.

**Levy:2021:MEH**

- [210] Ben Levy, Hannah E. Correia, and K. A. Jane White. Modeling the effect of HIV/AIDS stigma on HIV infection dynamics in Kenya. *Bulletin of Mathematical Biology*, 83(5):??, May 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00891-7>. See [226].

**Luke:2021:PEM**

- [211] Rayanne A. Luke, Richard J. Braun, and Carolyn G. Begley. Parameter estimation for mixed-mechanism tear film thinning. *Bulletin of Mathematical Biology*, 83(5):??, May 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00871-x>.

**Sooknanan:2021:HSM**

- [212] Joanna Sooknanan and Nicholas Mays. Harnessing social media in the modelling of pandemics — challenges and opportunities. *Bulletin of Mathematical Biology*, 83(5):??, May 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00895-3>.

**Hu:2021:MCB**

- [213] Linchao Hu, Cui Yang, and Jianshe Yu. Mosquito control based on pesticides and endosymbiotic bacterium *Wolbachia*. *Bulletin of Mathematical Biology*, 83(5):??, May 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00881-9>.

**Li:2021:EAA**

- [214] Ao Li and Xingfu Zou. Evolution and adaptation of anti-predation response of prey in a two-patchy environment. *Bulletin of Mathematical Biology*, 83(5):??, May 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00893-5>.

**Ford:2021:TDM**

- [215] Noah Ford, Garth Fisher, and David Chopp. A two-dimensional model of potassium signaling and oscillatory growth in a biofilm. *Bulletin of Mathematical Biology*, 83(5):??, May 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00887-3>. See correction [324].

**Zhang:2021:STP**

- [216] Xue Zhang and Jianhong Wu. Synchronized tick population oscillations driven by host mobility and spatially heterogeneous developmental delays combined. *Bulletin of Mathematical Biology*, 83(6):??, June 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00874-8>.

**Chen:2021:COC**

- [217] Kuan-Wei Chen and Chih-Wen Shih. Collective oscillations in coupled-cell systems. *Bulletin of Mathematical Biology*, 83(6):??, June 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00883-7>.

- Kalbaugh:2021:PMC**
- [218] David V. Kalbaugh. Probabilistic model for control of an epidemic by isolation and quarantine. *Bulletin of Mathematical Biology*, 83(6):??, June 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00897-1>.
- Kreusser:2021:ADA**
- [219] Lisa Maria Kreusser and Alan D. Rendall. Autophosphorylation and the dynamics of the activation of Lck. *Bulletin of Mathematical Biology*, 83(6):??, June 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00900-9>.
- Koch:2021:SEP**
- [220] Dean Koch, Mark A. Lewis, and Subhash Lele. The signature of endemic populations in the spread of mountain pine beetle outbreaks. *Bulletin of Mathematical Biology*, 83(6):??, June 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00899-z>.
- Adams:2021:HSI**
- [221] Ben Adams, Katharine S. Walter, and Maria A. Diuk-Wasser. Host specialisation, immune cross-reaction and the composition of communities of co-circulating *Borrelia* strains. *Bulletin of Mathematical Biology*, 83(6):??, June 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00896-2>.
- Britton:2021:ECO**
- [222] Nicholas F. Britton and K. A. Jane White. The effect of covert and overt infections on disease dynamics in honey-bee colonies. *Bulletin of Mathematical Biology*, 83(6):??, June 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00892-6>.
- Collin:2021:MSI**
- [223] Annabelle Collin, Vladimir Groza, and Olivier Saut. A model-strengthened imaging biomarker for survival prediction in EGFR-mutated non-small-cell lung carcinoma patients treated with tyrosine kinase inhibitors. *Bulletin of Mathematical Biology*, 83(6):??, June 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00902-7>.

**Bernardi:2021:LTI**

- [224] Sara Bernardi, Raluca Eftimie, and Kevin J. Painter. Leadership through influence: What mechanisms allow leaders to steer a swarm? *Bulletin of Mathematical Biology*, 83(6):??, June 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00901-8>.

**FitzGerald:2021:CRL**

- [225] Cody FitzGerald and James Keener. Correction to: Red Light and the Dormancy–Germination Decision in *Arabidopsis* Seeds. *Bulletin of Mathematical Biology*, 83(6):??, June 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00894-4>. See [172].

**Levy:2021:CME**

- [226] Ben Levy, Hannah E. Correia, and K. A. Jane White. Correction to: Modeling the Effect of HIV/AIDS Stigma on HIV Infection Dynamics in Kenya. *Bulletin of Mathematical Biology*, 83(6):??, June 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00904-5>. See [210].

**Amato:2021:MMA**

- [227] Sara Amato and Andrea Arnold. Modeling microglia activation and inflammation-based neuroprotectant strategies during ischemic stroke. *Bulletin of Mathematical Biology*, 83(6):??, June 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00905-4>.

**Kempes:2021:GSB**

- [228] Christopher P. Kempes, Michael J. Follows, and Simon A. Levin. Generalized stoichiometry and biogeochemistry for astrobiological applications. *Bulletin of Mathematical Biology*, 83(7):??, July 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00877-5>.

**Ferrari:2021:CEM**

- [229] Carlo Giambiagi Ferrari, Juan Pablo Pinasco, and Nicolas Saintier. Coupling epidemiological models with social dynamics. *Bulletin of Mathematical Biology*, 83(7):??, July 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00910-7>.

**Senekal:2021:NKC**

- [230] Noma Susan Senekal, Khaphetsi Joseph Mahasa, and Rachid Ouifki. Natural killer cells recruitment in oncolytic virotherapy: a mathematical model. *Bulletin of Mathematical Biology*, 83(7):??, July 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00903-6>.

**Hernandez:2021:IDC**

- [231] Bryan S. Hernandez and Ralph John L. De la Cruz. Independent decompositions of chemical reaction networks. *Bulletin of Mathematical Biology*, 83(7):??, July 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00906-3>.

**Corcoran:2021:LDN**

- [232] Carl Corcoran and Alan Hastings. A low-dimensional network model for an SIS epidemic: Analysis of the super compact pairwise model. *Bulletin of Mathematical Biology*, 83(7):??, July 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00907-2>.

**Hendriksen:2021:CIS**

- [233] Michael Hendriksen and Nils Kapust. On the comparison of incompatibility of split systems across different numbers of taxa. *Bulletin of Mathematical Biology*, 83(7):??, July 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00911-6>.

**Mochan:2021:CMS**

- [234] Ericka Mochan, T. J. Sego, and G. Bard Ermentrout. Compartmental model suggests importance of innate immune response to COVID-19 infection in Rhesus macaques. *Bulletin of Mathematical Biology*, 83(7):??, July 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00909-0>.

**Villa:2021:MMP**

- [235] Chiara Villa, Mark A. J. Chaplain, and Tommaso Lorenzi. Mechanical models of pattern and form in biological tissues: The role of stress-strain constitutive equations. *Bulletin of Mathematical Biology*, 83(7):??, July 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00912-5>.

**Vaidya:2021:MID**

- [236] Naveen K. Vaidya and Michael Peter. Modeling intracellular delay in within-host HIV dynamics under conditioning of drugs of abuse. *Bulletin of Mathematical Biology*, 83(7):??, July 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00908-1>.

**Krause:2021:IPO**

- [237] Andrew L. Krause, Václav Klika, and Eamonn A. Gaffney. Isolating patterns in open reaction-diffusion systems. *Bulletin of Mathematical Biology*, 83(7):??, July 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00913-4>.

**Fiandaca:2021:MSI**

- [238] Giada Fiandaca, Marcello Delitala, and Tommaso Lorenzi. A mathematical study of the influence of hypoxia and acidity on the evolutionary dynamics of cancer. *Bulletin of Mathematical Biology*, 83(7):??, July 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00914-3>.

**Callahan:2021:CAL**

- [239] Jason Callahan, Eric Eager, and Shenglan Yuan. Correction to: Analysis of a Length-Structured Density-Dependent Model for Fish. *Bulletin of Mathematical Biology*, 83(8):??, August 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00916-1>. See [2].

**Camargo:2021:MRB**

- [240] Felipe de A. Camargo, Mostafa Adimy, and Cláudia P. Ferreira. Modeling the relationship between antibody-dependent enhancement and disease severity in secondary dengue infection. *Bulletin of Mathematical Biology*, 83(8):??, August 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00919-y>.

**Gross:2021:RPS**

- [241] Kevin Gross and André M. de Roos. Resonance in physiologically structured population models. *Bulletin of Mathematical Biology*, 83(8):??, August 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00915-2>. See correction [257].

**AlBasir:2021:EVM**

- [242] F. Al Basir, Y. N. Kyrychko, and S. Ray. Effects of vector maturation time on the dynamics of cassava mosaic disease. *Bulletin of Mathematical Biology*, 83(8):??, August 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00921-4>.

**Herrero:2021:RMC**

- [243] Maria Elena Gonzalez Herrero, Christian Kuehn, and Krasimira Tsaneva-Atanasova. Reduced models of cardiomyocytes excitability: Comparing Karma and FitzHugh–Nagumo. *Bulletin of Mathematical Biology*, 83(8):??, August 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00898-0>.

**Paez:2021:ASE**

- [244] Gustavo Nicolás Páez, Juan Felipe Cerón, and Carlos Castañeda. Alternative strategies for the estimation of a disease’s basic reproduction number: a model-agnostic study. *Bulletin of Mathematical Biology*, 83(8):??, August 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00922-3>.

**Kenne:2021:ASM**

- [245] Cyrille Kenne, René Dorville, and Pascal Zongo. An age-structured model for tilapia lake virus transmission in freshwater with vertical and horizontal transmission. *Bulletin of Mathematical Biology*, 83(8):??, August 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00923-2>.

**Puchhammer:2021:VRA**

- [246] Florian Puchhammer, Amal Ben Abdellah, and Pierre L’Ecuyer. Variance reduction with array-RQMC for tau-leaping simulation of stochastic biological and chemical reaction networks. *Bulletin of Mathematical Biology*, 83(8):??, August 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00920-5>.

**Stotsky:2021:RWA**

- [247] Jay A. Stotsky, Jia Gou, and Hans G. Othmer. A random walk approach to transport in tissues and complex media: From microscale descriptions

to macroscale models. *Bulletin of Mathematical Biology*, 83(9):??, September 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00917-0>.

**Richards:2021:BWT**

- [248] Andrew Richards and Laura Kubatko. Bayesian-weighted triplet and quartet methods for species tree inference. *Bulletin of Mathematical Biology*, 83(9):??, September 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00918-z>.

**Are:2021:DCD**

- [249] Elisha B. Are, John W. Hargrove, and Jonathan Dushoff. Does counting different life stages impact estimates for extinction probabilities for tsetse (*Glossina* spp)? *Bulletin of Mathematical Biology*, 83(9):??, September 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00924-1>.

**Efendiev:2021:DEU**

- [250] M. A. Efendiev, J. Murley, and S. Sivaloganathan. Dimension estimate of uniform attractor for a model of high intensity focussed ultrasound-induced thermotherapy. *Bulletin of Mathematical Biology*, 83 (9):??, September 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00928-x>.

**Lui:2021:MPP**

- [251] Gigi Lui and Mary R. Myerscough. Modelling preferential phagocytosis in atherosclerosis: Delineating timescales in plaque development. *Bulletin of Mathematical Biology*, 83(9):??, September 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00926-z>.

**Phillips:2021:DDM**

- [252] Tricia Phillips, Suzanne Lenhart, and W. Christopher Strickland. A data-driven mathematical model of the heroin and fentanyl epidemic in Tennessee. *Bulletin of Mathematical Biology*, 83(10):??, October 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00925-0>.

**Ruiz-Herrera:2021:RMP**

- [253] Alfonso Ruiz-Herrera and Pedro J. Torres. The role of movement patterns in epidemic models on complex networks. *Bulletin of Mathematical Biology*, 83(10):??, October 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00929-w>.

**Sherratt:2021:CRL**

- [254] Jonathan A. Sherratt, Quan-Xing Liu, and Johan van de Koppel. A comparison of the “Reduced Losses” and “Increased Production” models for mussel bed dynamics. *Bulletin of Mathematical Biology*, 83(10):??, October 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00932-1>.

**Mondal:2021:BTA**

- [255] Ritwika Mondal, Suman Saha, and Debasis Mukherjee. Basin transition and alternative states: Role of multi-species herbivores-induced volatile in plant-insect interactions. *Bulletin of Mathematical Biology*, 83(10):??, October 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00930-3>.

**Fomba:2021:PEP**

- [256] C. G. Nembot Fomba, G. M. ten Hoopen, and P. Takam Soh. Parameter estimation in a PDE model for the spatial spread of cocoa black pod disease. *Bulletin of Mathematical Biology*, 83(10):??, October 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00934-z>.

**Gross:2021:CRP**

- [257] Kevin Gross and André M. de Roos. Correction to: Resonance in Physiologically Structured Population Models. *Bulletin of Mathematical Biology*, 83(10):??, October 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00931-2>. See [241].

**Hamis:2021:TCD**

- [258] Sara Hamis, James Yates, and Gibin G. Powathil. Targeting cellular DNA damage responses in cancer: an in vitro-calibrated agent-based model simulating monolayer and spheroid treatment responses to ATR-inhibiting

- drugs. *Bulletin of Mathematical Biology*, 83(10):??, October 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00935-y>.
- Fowler:2021:AFO**
- [259] A. C. Fowler. Atto-foxes and other minutiae. *Bulletin of Mathematical Biology*, 83(10):??, October 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00936-x>.
- Gaebler:2021:MMU**
- [260] Harry J. Gaebler and Hermann J. Eberl. Multiscale modeling of uranium bioreduction in porous media by one-dimensional biofilms. *Bulletin of Mathematical Biology*, 83(10):??, October 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00938-9>.
- Zheng:2021:MMD**
- [261] Collin Y. Zheng and Peter S. Kim. Mathematical model for delayed responses in immune checkpoint blockades. *Bulletin of Mathematical Biology*, 83(10):??, October 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00933-0>.
- DeAngelis:2021:TBS**
- [262] Donald L. DeAngelis, Daniel Franco, and Rebecca C. Tyson. Towards building a sustainable future: Positioning ecological modelling for impact in ecosystems management. *Bulletin of Mathematical Biology*, 83(10):??, October 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00927-y>.
- Xue:2021:EHA**
- [263] Shuyang Xue, Meili Li, and Jia Li. The effect of harvesting adults on the evolution of reproduction age via density-dependent juvenile mortality. *Bulletin of Mathematical Biology*, 83(10):??, October 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00940-1>.
- Jiang:2021:TPM**
- [264] Hongyan Jiang, King-Yeung Lam, and Yuan Lou. Three-patch models for the evolution of dispersal in advective environments: Varying drift

and network topology. *Bulletin of Mathematical Biology*, 83(10):??, October 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00939-8>.

**Chowdhury:2021:OPF**

- [265] Pranali Roy Chowdhury, Sergei Petrovskii, and Malay Banerjee. Oscillations and pattern formation in a slow–fast prey–predator system. *Bulletin of Mathematical Biology*, 83(11):??, November 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00941-0>. See correction [274].

**Yuan:2021:ZEM**

- [266] Xiaoyan Yuan, Yijun Lou, and Daozhou Gao. A Zika endemic model for the contribution of multiple transmission routes. *Bulletin of Mathematical Biology*, 83(11):??, November 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00945-w>.

**Mallela:2021:TCM**

- [267] Abhishek Mallela and Alan Hastings. Tipping cascades in a multi-patch system with noise and spatial coupling. *Bulletin of Mathematical Biology*, 83(11):??, November 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00943-y>.

**Hoyer-Leitzel:2021:IFD**

- [268] Alanna Hoyer-Leitzel and Sarah Iams. Impulsive fire disturbance in a savanna model: Tree–grass coexistence states, multiple stable system states, and resilience. *Bulletin of Mathematical Biology*, 83(11):??, November 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00944-x>.

**Besse:2021:SPS**

- [269] Christophe Besse and Grégory Faye. Spreading properties for SIR models on homogeneous trees. *Bulletin of Mathematical Biology*, 83(11):??, November 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00948-7>.

**Plaugher:2021:MPC**

- [270] Daniel Plaugher and David Murrugarra. Modeling the pancreatic cancer microenvironment in search of control targets. *Bulletin of Mathematical Biology*, 83(11):??, November 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00937-w>.

**Li:2021:MRI**

- [271] Xue-Zhi Li, Shasha Gao, and Maia Martcheva. Modeling and research on an immuno-epidemiological coupled system with coinfection. *Bulletin of Mathematical Biology*, 83(11):??, November 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00946-9>.

**Lauro:2021:ICS**

- [272] Francesco Di Lauro, Luc Berthouze, and István Z. Kiss. The impact of contact structure and mixing on control measures and disease-induced herd immunity in epidemic models: a mean-field model perspective. *Bulletin of Mathematical Biology*, 83(11):??, November 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00947-8>.

**Pascucci:2021:MIM**

- [273] Eleonora Pascucci and Andrea Pugliese. Modelling immune memory development. *Bulletin of Mathematical Biology*, 83(12):??, December 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00949-6>.

**Chowdhury:2021:COP**

- [274] Pranali Roy Chowdhury, Sergei Petrovskii, and Malay Banerjee. Correction to: Oscillations and Pattern Formation in a Slow–Fast Prey–Predator System. *Bulletin of Mathematical Biology*, 83(12):??, December 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00954-9>. See [265].

**Yamagishi:2021:MMW**

- [275] Jumpei F. Yamagishi and Tetsuhiro S. Hatakeyama. Microeconomics of metabolism: The Warburg Effect as Giffen behaviour. *Bulletin of Mathematical Biology*, 83(12):??, December 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00952-x>.

**Berg:2021:MOP**

- [276] Mascha Berg, Julia Plöntzke, and Susanna Röblitz. Modelling oscillatory patterns in the bovine estrous cycle with Boolean delay equations. *Bulletin of Mathematical Biology*, 83(12):??, December 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00942-z>.

**Tenore:2021:MMN**

- [277] A. Tenore, F. Russo, and L. Frunzo. Multiscale modelling of De Novo anaerobic granulation. *Bulletin of Mathematical Biology*, 83(12):??, December 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00951-y>.

**Talkington:2021:EDP**

- [278] Anne M. Talkington, Timothy Wessler, and M. Gregory Forest. Experimental data and PBPK modeling quantify antibody interference in PEGylated drug carrier delivery. *Bulletin of Mathematical Biology*, 83(12):??, December 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00950-z>.

**Wren:2021:HLI**

- [279] Lydia Wren and Alex Best. How local interactions impact the dynamics of an epidemic. *Bulletin of Mathematical Biology*, 83(12):??, December 2021. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00961-w>.

**Zhou:2022:RSU**

- [280] Ying Zhou. Range shifts under constant-speed and accelerated climate warming. *Bulletin of Mathematical Biology*, 84(1):??, January 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00963-8>.

**Pasetto:2022:IHT**

- [281] S. Pasetto, H. Enderling, and R. Brady-Nicholls. Intermittent hormone therapy models analysis and Bayesian model comparison for prostate cancer. *Bulletin of Mathematical Biology*, 84(1):??, January 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00953-w>.

**Akman:2022:HLS**

- [282] Olcay Akman, Sudipa Chauhan, and Jai Prakash Tripathi. The hard lessons and shifting modeling trends of COVID-19 dynamics: Multiresolution modeling approach. *Bulletin of Mathematical Biology*, 84(1):??, January 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00959-4>.

**Overton:2022:AQS**

- [283] Christopher E. Overton, Robert R. Wilkinson, and Kieran J. Sharkey. Approximating quasi-stationary behaviour in network-based SIS dynamics. *Bulletin of Mathematical Biology*, 84(1):??, January 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00964-7>.

**Yan:2022:DSA**

- [284] Yawen Yan, Jimin Zhang, and Hao Wang. Dynamics of stoichiometric autotroph–mixotroph–bacteria interactions in the epilimnion. *Bulletin of Mathematical Biology*, 84(1):??, January 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00962-9>.

**Bogdanov:2022:SMV**

- [285] Anita Bogdanov, Péter Kevei, and Dezső Virok. Stochastic modeling of in vitro bactericidal potency. *Bulletin of Mathematical Biology*, 84(1):??, January 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00967-4>.

**Eilertsen:2022:VSQ**

- [286] Justin Eilertsen and Santiago Schnell. On the validity of the stochastic quasi-steady-state approximation in open enzyme catalyzed reactions: *Timescale Separation or Singular Perturbation?* *Bulletin of Mathematical Biology*, 84(1):??, January 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00966-5>.

**Cook:2022:MCI**

- [287] Blake Cook, Alex Combes, and James M. Osborne. Modelling cellular interactions and dynamics during kidney morphogenesis. *Bulletin of Mathematical Biology*, 84(1):??, January 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00968-3>.

**Park:2022:MDB**

- [288] Jeungeun Park and Zahra Aminzare. A mathematical description of bacterial chemotaxis in response to two stimuli. *Bulletin of Mathematical Biology*, 84(1):??, January 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00965-6>.

**Lou:2022:CSM**

- [289] Yuan Lou and Rachidi B. Salako. Control strategies for a multi-strain epidemic model. *Bulletin of Mathematical Biology*, 84(1):??, January 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00957-6>.

**Heumann:2022:DDR**

- [290] Ryan Heumann, Carly Duncan, and Scott Kaschner. Dynamical differences in respiratory syncytial virus. *Bulletin of Mathematical Biology*, 84(1):??, January 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00971-8>.

**Murray:2022:ST**

- [291] James D. Murray. Special tributes. *Bulletin of Mathematical Biology*, 84(1):??, January 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00956-7>.

**Maini:2022:SCC**

- [292] Philip K. Maini, Mark A. J. Chaplain, and Jonathan A. Sherratt. Special collection: Celebrating J. D. Murray's contributions to mathematical biology. *Bulletin of Mathematical Biology*, 84(1):??, January 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00955-8>.

**FitzGerald:2022:BAH**

- [293] Cody FitzGerald and James P. Keener. Bifurcation analysis of a heat-sensitive epigenetic regulatory network. *Bulletin of Mathematical Biology*, 84(1):??, January 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00960-x>.

**Stutz:2022:CTA**

- [294] Timothy C. Stutz, Janet S. Sinsheimer, and Jason Xu. Computational tools for assessing gene therapy under branching process models of muta-

- tion. *Bulletin of Mathematical Biology*, 84(1):??, January 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00969-2>.
- Mudaliar:2022:SAE**
- [295] Rajnesh K. Mudaliar, Andrei V. Zvezdin, and Timothy M. Schaerf. Systematic analysis of emergent collective motion produced by a 3D hybrid zonal model. *Bulletin of Mathematical Biology*, 84(1):??, January 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00977-2>. See correction [327].
- Jaramillo:2022:DIH**
- [296] J. M. Jaramillo, Junling Ma, and Abdul-Aziz Yakubu. Disease-induced hydra effect with overcompensatory recruitment. *Bulletin of Mathematical Biology*, 84(1):??, January 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00975-4>.
- Bakshi:2022:CMM**
- [297] Suruchi Bakshi, Fraser Cunningham, and Piet H. van der Graaf. Correction to: Mathematical Modelling of Alternative Pathway of Complement System. *Bulletin of Mathematical Biology*, 84(1):??, January 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00981-6>. See [35].
- Adimy:2022:WPE**
- [298] Mostafa Adimy, Louis Babin, and Laurent Pujo-Menjouet. Why are periodic erythrocytic diseases so rare in humans? *Bulletin of Mathematical Biology*, 84(1):??, January 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00973-6>.
- Counterman:2022:DDR**
- [299] Elijah D. Counterman and Sean D. Lawley. Designing drug regimens that mitigate nonadherence. *Bulletin of Mathematical Biology*, 84(1):??, January 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00976-3>.
- Li:2022:EBP**
- [300] Yifei Li, Stuart T. Johnston, and Matthew J. Simpson. Extinction of bistable populations is affected by the shape of their initial spatial distri-

bution. *Bulletin of Mathematical Biology*, 84(1):??, January 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00974-5>.

**Simoy:2022:VBD**

- [301] Mario Ignacio Simoy and Juan Pablo Aparicio. Vector-borne disease models with active and inactive vectors: a simple way to consider biting behavior. *Bulletin of Mathematical Biology*, 84(1):??, January 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00972-7>.

**Garay:2022:BRP**

- [302] József Garay and Tamás F. Móri. Best reply player against mixed evolutionarily stable strategy user. *Bulletin of Mathematical Biology*, 84(1):??, January 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00980-7>.

**Aguade-Gorgorio:2022:TTT**

- [303] Guim Aguadé-Gorgorió, Stuart Kauffman, and Ricard Solé. Transition therapy: Tackling the ecology of tumor phenotypic plasticity. *Bulletin of Mathematical Biology*, 84(1):??, January 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00970-9>.

**Okabe:2022:PBG**

- [304] Takuya Okabe and Jin Yoshimura. Practical basis of the geometric mean fitness and its application to risk-spreading behavior. *Bulletin of Mathematical Biology*, 84(2):??, February 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00984-3>.

**Willson:2022:MAP**

- [305] Stephen J. Willson. Merging arcs to produce acyclic phylogenetic networks and normal networks. *Bulletin of Mathematical Biology*, 84(2):??, February 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00986-1>.

**Gulbudak:2022:SAI**

- [306] Hayriye Gulbudak, Zhuolin Qu, and Necibe Tuncer. Sensitivity analysis in an immuno-epidemiological vector-host model. *Bulletin of Mathematical Biology*, 84(2):??, February 2022. CODEN BMTBAP. ISSN 0092-

- 8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00979-0>.
- Zhou:2022:MEJ**
- [307] Linhua Zhou, Xinmiao Rong, and Huaiping Zhu. Modeling and evaluation of the joint prevention and control mechanism for curbing COVID-19 in Wuhan. *Bulletin of Mathematical Biology*, 84(2):??, February 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00983-4>.
- Miles:2022:MTP**
- [308] Christopher E. Miles, Jie Zhu, and Alex Mogilner. Mechanical torque promotes bipolarity of the mitotic spindle through multi-centrosomal clustering. *Bulletin of Mathematical Biology*, 84(2):??, February 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00985-2>.
- Zou:2022:VQE**
- [309] Yukun Zou, Wei Yang, and Wei Lin. Vaccination and quarantine effect on COVID-19 transmission dynamics incorporating Chinese-spring-festival travel rush: Modeling and simulations. *Bulletin of Mathematical Biology*, 84(2):??, February 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00958-5>.
- Sun:2022:ESM**
- [310] Xiaoli Sun, Shengqiang Liu, and Yongzhen Pei. Effects of sterile males and fertility of infected mosquitoes on mosquito-borne disease dynamics. *Bulletin of Mathematical Biology*, 84(2):??, February 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-00991-y>.
- Musa:2022:HSC**
- [311] Salihu Sabiu Musa, Xueying Wang, and Daihai He. The heterogeneous severity of COVID-19 in African countries: a modeling approach. *Bulletin of Mathematical Biology*, 84(3):??, March 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-00992-x>.
- Cortes-Poza:2022:VAM**
- [312] Yuriria Cortés-Poza and Pablo Padilla-Longoria. A variational approach to morphogenesis. *Bulletin of Mathematical Biology*, 84(3):??, March 2022.

- CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-00993-w>.
- Feng:2022:FKM**
- [313] Chunxi Feng, Mark A. Lewis, and Hao Wang. A Fisher–KPP model with a nonlocal weighted free boundary: Analysis of how habitat boundaries expand, balance or shrink. *Bulletin of Mathematical Biology*, 84(3):??, March 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-00995-8>.
- Maini:2022:EJC**
- [314] Philip K. Maini, Peter J. Hunter, and Nic P. Smith. Edmund John Crampin 1973–2021. *Bulletin of Mathematical Biology*, 84(3):??, March 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00987-0>.
- Papst:2022:MIB**
- [315] Irena Papst, Kevin P. O’Keeffe, and Steven H. Strogatz. Modeling the interplay between seasonal flu outcomes and individual vaccination decisions. *Bulletin of Mathematical Biology*, 84(3):??, March 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00988-z>.
- Shirani:2022:CTV**
- [316] Farshad Shirani and Judith R. Miller. Competition, trait variance dynamics, and the evolution of a species’ range. *Bulletin of Mathematical Biology*, 84(3):??, March 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-00990-z>.
- Cui:2022:ENH**
- [317] Jingan Cui, Yucui Wu, and Songbai Guo. Effect of non-homogeneous mixing and asymptomatic individuals on final epidemic size and basic reproduction number in a meta-population model. *Bulletin of Mathematical Biology*, 84(3):??, March 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-00996-7>.
- Sher:2022:QSP**
- [318] Anna Sher, Steven A. Niederer, and Denis Noble. A quantitative systems pharmacology perspective on the importance of parameter identifiability. *Bulletin of Mathematical Biology*, 84(3):??, March 2022. CODEN

- BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00982-5>.
- Zmurchok:2022:BMP**
- [319] Cole Zmurchok and William R. Holmes. Biophysical models of PAR cluster transport by cortical flow in *C. elegans* early embryogenesis. *Bulletin of Mathematical Biology*, 84(3):??, March 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-00997-6>.
- Maity:2022:CDS**
- [320] Sunil Maity and Partha Sarathi Mandal. A comparison of deterministic and stochastic plant-vector-virus models based on probability of disease extinction and outbreak. *Bulletin of Mathematical Biology*, 84(3):??, March 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01001-x>.
- Conte:2022:MCK**
- [321] Martina Conte and Nadia Loy. Multi-cue kinetic model with non-local sensing for cell migration on a fiber network with chemotaxis. *Bulletin of Mathematical Biology*, 84(3):??, March 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00978-1>.
- Garfinkel:2022:TDB**
- [322] Alan Garfinkel, Steve Bennoun, and Blaire Van Valkenburgh. Teaching dynamics to biology undergraduates: the UCLA experience. *Bulletin of Mathematical Biology*, 84(3):??, March 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-00999-4>.
- Kreck:2022:BRD**
- [323] Matthias Kreck and Erhard Scholz. Back to the roots: a discrete Kermack–McKendrick model adapted to Covid-19. *Bulletin of Mathematical Biology*, 84(4):??, April 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-00994-9>.
- Ford:2022:CTD**
- [324] Noah Ford, Garth Fisher, and David Chopp. Correction to: A Two-Dimensional Model of Potassium Signaling and Oscillatory Growth in a Biofilm. *Bulletin of Mathematical Biology*, 84(4):??, April 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL

- <https://link.springer.com/article/10.1007/s11538-022-01003-9>.  
See [215].
- Milne:2022:LOP**
- [325] Russell Milne, Chris T. Bauch, and Madhur Anand. Local overfishing patterns have regional effects on health of coral, and economic transitions can promote its recovery. *Bulletin of Mathematical Biology*, 84(4):??, April 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01000-y>.
- Feng:2022:IQM**
- [326] Shanshan Feng, Juping Zhang, and Zhen Jin. The impact of quarantine and medical resources on the control of COVID-19 in Wuhan based on a household model. *Bulletin of Mathematical Biology*, 84(4):??, April 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-021-00989-y>.
- Mudaliar:2022:CSA**
- [327] Rajnesh K. Mudaliar, Andrei V. Zvezdin, and Timothy M. Schaerf. Correction to: Systematic analysis of emergent collective motion produced by a 3D hybrid zonal model. *Bulletin of Mathematical Biology*, 84(5):??, May 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01008-4>. See [295].
- Gerlee:2022:WSS**
- [328] Philip Gerlee. Weak selection and the separation of eco-evo time scales using perturbation analysis. *Bulletin of Mathematical Biology*, 84(5):??, May 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01009-3>.
- Bortner:2022:IPC**
- [329] Cashous Bortner and Nicolette Meshkat. Identifiable paths and cycles in linear compartmental models. *Bulletin of Mathematical Biology*, 84(5):??, May 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01007-5>.
- Landa:2022:PAS**
- [330] Kylie J. Landa, Lauren M. Mossman, and Sara M. Clifton. Phage–antibiotic synergy inhibited by temperate and chronic virus competition.

*Bulletin of Mathematical Biology*, 84(5):??, May 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01006-6>.

**Hu:2022:EML**

- [331] Lin Hu, Shengfu Wang, and Zhidong Teng. The effects of migration and limited medical resources of the transmission of SARS-CoV-2 model with two patches. *Bulletin of Mathematical Biology*, 84(5):??, May 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01010-w>.

**Youlden:2022:MMH**

- [332] George Youlden, Helen E. McNeil, and John R. King. Mathematical modelling highlights the potential for genetic manipulation as an adjuvant to counter efflux-mediated MDR in *Salmonella*. *Bulletin of Mathematical Biology*, 84(5):??, May 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01011-9>.

**Wang:2022:HFB**

- [333] Xiunan Wang, Hao Wang, and Mark Lewis. A hypothesis-free bridging of disease dynamics and non-pharmaceutical policies. *Bulletin of Mathematical Biology*, 84(5):??, May 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01012-8>.

**Swanson:2022:MMT**

- [334] Ellen R. Swanson, Emek Köse, and Samantha L. Elliott. Mathematical modeling of tumor and cancer stem cells treated with CAR-T therapy and inhibition of TGF- $\beta$ . *Bulletin of Mathematical Biology*, 84(6):??, June 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01015-5>.

**Böttcher:2022:RSI**

- [335] Lucas Böttcher and Hans Gersbach. A refunding scheme to incentivize narrow-spectrum antibiotic development. *Bulletin of Mathematical Biology*, 84(6):??, June 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01013-7>.

**Gordillo:2022:AEP**

- [336] Luis F. Gordillo and Priscilla E. Greenwood. Allee effects plus noise induce population dynamics resembling binary Markov highs and lows. *Bulletin*

*of Mathematical Biology*, 84(6):??, June 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01017-3>.

Xue:2022:EST

- [337] Ling Xue, Shuanglin Jing, and Hao Wang. Evaluating strategies for tuberculosis to achieve the goals of WHO in China: A seasonal age-structured model study. *Bulletin of Mathematical Biology*, 84(6):??, June 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01019-1>.

Vallejo:2022:EPP

- [338] Celeste Vallejo, Carl A. B. Pearson, and Thomas J. Hladish. Effect of population partitioning on the probability of silent circulation of poliovirus. *Bulletin of Mathematical Biology*, 84(6):??, June 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01014-6>.

David:2022:EHM

- [339] Jummy F. David and Sarafa A. Iyaniwura. Effect of human mobility on the spatial spread of airborne diseases: An epidemic model with indirect transmission. *Bulletin of Mathematical Biology*, 84(6):??, June 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01020-8>.

Cordelier:2022:SFM

- [340] Pierre Cordelier, Manon Costa, and Jérôme Fehrenbach. Slow–fast model and therapy optimization for oncolytic treatment of tumors. *Bulletin of Mathematical Biology*, 84(6):??, June 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01025-3>.

Craciun:2022:MCS

- [341] Gheorghe Craciun, Badal Joshi, and Ike Tan. Multistationarity in cyclic sequestration-transmutation networks. *Bulletin of Mathematical Biology*, 84(6):??, June 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01021-7>.

Gharouni:2022:TIE

- [342] Ali Gharouni, Fred M. Abdelmalek, and Benjamin M. Bolker. Testing and isolation efficacy: Insights from a simple epidemic model. *Bulletin of Mathematical Biology*, 84(6):??, June 2022. CODEN BMTBAP. ISSN

0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01018-2>.

**Streipert:2022:DAD**

- [343] Sabrina H. Streipert, Gail S. K. Wolkowicz, and Martin Bohner. Derivation and analysis of a discrete predator-prey model. *Bulletin of Mathematical Biology*, 84(7):??, July 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01016-4>.

**Hamelin:2022:HDM**

- [344] F. M. Hamelin, Y. Mammeri, and M. A. Lewis. Host diversification may split epidemic spread into two successive fronts advancing at different speeds. *Bulletin of Mathematical Biology*, 84(7):??, July 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01023-5>.

**Han:2022:LBD**

- [345] Lifeng Han, Changhan He, and Yang Kuang. Learning biological dynamics from spatio-temporal data by Gaussian processes. *Bulletin of Mathematical Biology*, 84(7):??, July 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01022-6>.

**Duron:2022:MFA**

- [346] Christina Durón and Alex Farrell. A mean-field approximation of SIR epidemics on an Erdős-Rényi network model. *Bulletin of Mathematical Biology*, 84(7):??, July 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01026-2>.

**Gong:2022:RSF**

- [347] Yishu Gong, Siming He, and Alexander Kiselev. Random search in fluid flow aided by chemotaxis. *Bulletin of Mathematical Biology*, 84(7):??, July 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01024-4>.

**Strickland:2022:EPA**

- [348] W. C. Strickland, N. A. Battista, and L. A. Miller. Planktos: an agent-based modeling framework for small organism movement and dispersal in a fluid environment with immersed structures. *Bulletin of Mathematical Biology*, 84(7):??, July 2022. CODEN BMTBAP. ISSN 0092-8240 (print),

1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01027-1>.

**Mu:2022:TDT**

- [349] Yu Mu, Tsz-Lik Chan, and Wing-Cheong Lo. Transmission dynamics of tuberculosis with age-specific disease progression. *Bulletin of Mathematical Biology*, 84(7):??, July 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01032-4>.

**Saona:2022:RBN**

- [350] Raimundo Saona, Fyodor A. Kondrashov, and Ksenia A. Khudiakova. Relation between the number of peaks and the number of reciprocal sign epistatic interactions. *Bulletin of Mathematical Biology*, 84(8):??, August 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01029-z>. See correction [439].

**Berec:2022:DME**

- [351] Luděk Berec, Jan Smyčka, and Petra Vidnerová. Delays, masks, the elderly, and schools: First Covid-19 wave in the Czech Republic. *Bulletin of Mathematical Biology*, 84(8):??, August 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01031-5>.

**vanIersel:2022:ONT**

- [352] Leo van Iersel, Remie Janssen, and Yukihiro Murakami. Orchard networks are trees with additional horizontal arcs. *Bulletin of Mathematical Biology*, 84(8):??, August 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01037-z>.

**Ledder:2022:MUR**

- [353] Glenn Ledder. Mentoring undergraduate research in mathematical modeling. *Bulletin of Mathematical Biology*, 84(8):??, August 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01040-4>.

**Ghosh:2022:EMT**

- [354] Samiran Ghosh, Vitaly Volpert, and Malay Banerjee. An epidemic model with time-distributed recovery and death rates. *Bulletin of Mathematical Biology*, 84(8):??, August 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01028-0>.

**Horstmeyer:2022:BQS**

- [355] Leonhard Horstmeyer, Christian Kuehn, and Stefan Thurner. Balancing quarantine and self-distancing measures in adaptive epidemic networks. *Bulletin of Mathematical Biology*, 84(8):??, August 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01033-3>.

**Colson:2022:CMG**

- [356] Chloé Colson, Helen M. Byrne, and Philip K. Maini. Combining mechanisms of growth arrest in solid tumours: a mathematical investigation. *Bulletin of Mathematical Biology*, 84(8):??, August 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01034-2>.

**Anwar:2022:MMM**

- [357] Md Nurul Anwar, Roslyn I. Hickson, and Jennifer A. Flegg. A multi-scale mathematical model of *Plasmodium Vivax* transmission. *Bulletin of Mathematical Biology*, 84(8):??, August 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01036-0>.

**Liao:2022:MMA**

- [358] Kang-Ling Liao and Kenton D. Watt. Mathematical modeling and analysis of CD200-CD200R in cancer treatment. *Bulletin of Mathematical Biology*, 84(8):??, August 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01039-x>.

**Alharbi:2022:CMM**

- [359] Mohammed H. Alharbi and Christopher M. Kribs. Correction to: A mathematical modeling study: Assessing impact of mismatch between influenza vaccine strains and circulating strains in Hajj. *Bulletin of Mathematical Biology*, 84(8):??, August 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01038-y>. See [162].

**Su:2022:MMS**

- [360] Shan Su, John Rugis, and James Sneyd. A mathematical model of salivary gland duct cells. *Bulletin of Mathematical Biology*, 84(8):??, August 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01041-3>.

**Ben-Ami:2022:SFM**

- [361] Y. Ben-Ami, G. W. Atkinson, and H. M. Byrne. Structural features of microvascular networks trigger blood flow oscillations. *Bulletin of Mathematical Biology*, 84(8):??, August 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01046-y>.

**Fatoyinbo:2022:PFS**

- [362] H. O. Fatoyinbo, R. G. Brown, and B. van Brunt. Pattern formation in a spatially extended model of pacemaker dynamics in smooth muscle cells. *Bulletin of Mathematical Biology*, 84(8):??, August 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01043-1>.

**Jepson:2022:TWA**

- [363] Jacob M. Jepson, Nabil T. Fadai, and Reuben D. O’Dea. Travelling-wave and asymptotic analysis of a multiphase moving boundary model for engineered tissue growth. *Bulletin of Mathematical Biology*, 84(8):??, August 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01044-0>.

**Mochan:2022:ARC**

- [364] Ericka Mochan, T. J. Sego, and Bard Ermentrout. Age-related changes to the immune system exacerbate the inflammatory response to pandemic H1N1 infection. *Bulletin of Mathematical Biology*, 84(8):??, August 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01045-z>.

**Fox:2022:MTR**

- [365] Erika Fox, Bree Cummins, and Tomáš Gedeon. Modeling transport regulation in gene regulatory networks. *Bulletin of Mathematical Biology*, 84(8):??, August 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01035-1>.

**Wang:2022:PPF**

- [366] Xiunan Wang, Hao Wang, and Mark Lewis. From policy to prediction: Forecasting COVID-19 dynamics under imperfect vaccination. *Bulletin of Mathematical Biology*, 84(9):??, September 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01047-x>.

**Hwang:2022:HEM**

- [367] Karen K. L. Hwang, Christina J. Edholm, and Nika Shakiba. A hybrid epidemic model to explore stochasticity in COVID-19 dynamics. *Bulletin of Mathematical Biology*, 84(9):??, September 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01030-6>.

**Zhu:2022:MBP**

- [368] Guanghu Zhu, Yuanyuan Shi, and Qihuai Liu. Model-based projection of Zika infection risk with temperature effect: a case study in Southeast Asia. *Bulletin of Mathematical Biology*, 84(9):??, September 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01049-9>.

**Forien:2022:ALM**

- [369] Raphaël Forien, Jimmy Garnier, and Florian Patout. Ancestral lineages in mutation selection equilibria with moving optimum. *Bulletin of Mathematical Biology*, 84(9):??, September 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01048-w>.

**Hu:2022:AGT**

- [370] Yi Hu, Kaifa Wang, and Wendi Wang. Analysis of the geographic transmission differences of COVID-19 in China caused by population movement and population density. *Bulletin of Mathematical Biology*, 84(9):??, September 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01050-2>.

**Su:2022:EWD**

- [371] Ying Su, Bo Zheng, and Xingfu Zou. *Wolbachia* dynamics in mosquitoes with incomplete CI and imperfect maternal transmission by a DDE system. *Bulletin of Mathematical Biology*, 84(9):??, September 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01042-2>.

**Brouwer:2022:WSR**

- [372] Andrew F. Brouwer. Why the Spectral Radius? An intuition-building introduction to the basic reproduction number. *Bulletin of Mathematical Biology*, 84(9):??, September 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01057-9>.

**Terefe:2022:IWI**

- [373] Y. A. Terefe, S. M. Kassa, and J. B. H. Njagarah. Impact of the WHO integrated stewardship policy on the control of methicillin-resistant *Staphylococcus aureus* and third-generation cephalosporin-resistant *Escherichia coli*: Using a Mathematical Modeling Approach. *Bulletin of Mathematical Biology*, 84(9):??, September 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01051-1>.

**Sargood:2022:FDG**

- [374] Alec Sargood, Eamonn A. Gaffney, and Andrew L. Krause. Fixed and distributed gene expression time delays in reaction-diffusion systems. *Bulletin of Mathematical Biology*, 84(9):??, September 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01052-0>.

**Wang:2022:MMC**

- [375] Xueying Wang, Sunpeng Wang, and Libin Rong. A multiscale model of COVID-19 dynamics. *Bulletin of Mathematical Biology*, 84(9):??, September 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01058-8>.

**Cisneros-Ake:2022:TIR**

- [376] Luis A. Cisneros-Ake, Juan C. Gonzalez-Rodriguez, and Laura R. González-Ramírez. Turing instabilities and rotating spiral waves in glycolytic processes. *Bulletin of Mathematical Biology*, 84(9):??, September 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01060-0>.

**Woolley:2022:BCC**

- [377] Thomas E. Woolley. Boundary conditions cause different generic bifurcation structures in Turing systems. *Bulletin of Mathematical Biology*, 84(9):??, September 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01055-x>.

**Arroyo-Esquivel:2022:CLT**

- [378] Jorge Arroyo-Esquivel, Alan Hastings, and Marissa L. Baskett. Characterizing long transients in consumer-resource systems with group defense and discrete reproductive pulses. *Bulletin of Mathematical Biology*, 84(9):??, September 2022. CODEN BMTBAP. ISSN 0092-8240 (print),

- 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01059-7>.
- Rajakaruna:2022:MMG**
- [379] Harshana Rajakaruna and Vitaly V. Ganusov. Mathematical modeling to guide experimental design: T cell clustering as a case study. *Bulletin of Mathematical Biology*, 84(10):??, October 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01063-x>.
- Yang:2022:IGM**
- [380] Renlong Yang, Chongming Jiang, and Yuanzhi Shao. Invasiveness of a growth-migration system in a two-dimensional percolation cluster: a stochastic mathematical approach. *Bulletin of Mathematical Biology*, 84(10):??, October 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01056-w>.
- Zhang:2022:AET**
- [381] Dongni Zhang and Tom Britton. Analysing the effect of test-and-trace strategy in an SIR epidemic model. *Bulletin of Mathematical Biology*, 84(10):??, October 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01065-9>.
- Tang:2022:CMC**
- [382] Biao Tang, Weike Zhou, and Yanni Xiao. Controlling multiple COVID-19 epidemic waves: an insight from a multi-scale model linking the behaviour change dynamics to the disease transmission dynamics. *Bulletin of Mathematical Biology*, 84(10):??, October 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01061-z>.
- Craft:2022:EBN**
- [383] Michelle Craft and Cheng Ly. The effects of background noise on a biophysical model of olfactory bulb mitral cells. *Bulletin of Mathematical Biology*, 84(10):??, October 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01066-8>.
- Wang:2022:AAS**
- [384] Xia Wang, Hulin Wu, and Sanyi Tang. Assessing age-specific vaccination strategies and post-vaccination reopening policies for COVID-19 control using SEIR modeling approach. *Bulletin of Mathematical Biology*,

84(10):??, October 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01064-w>.

**Cooney:2022:PMP**

- [385] Daniel B. Cooney, Fernando W. Rossine, and Simon A. Levin. A PDE model for protocell evolution and the origin of chromosomes via multi-level selection. *Bulletin of Mathematical Biology*, 84(10):??, October 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01062-y>.

**Dali-Youcef:2022:PST**

- [386] Manel Dali-Youcef, Alain Rapaport, and Tewfik Sari. Performance study of two serial interconnected chemostats with mortality. *Bulletin of Mathematical Biology*, 84(10):??, October 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01068-6>.

**Chang:2022:FPP**

- [387] Youngseok Chang, Wonhyung Choi, and Inkyung Ahn. On the fitness of predators with prey-induced dispersal in a habitat with spatial heterogeneity. *Bulletin of Mathematical Biology*, 84(10):??, October 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01069-5>.

**Bitsouni:2022:MSR**

- [388] Vasiliki Bitsouni, Nikolaos Giialelis, and Vasilis Tsilidis. A mathematical study of the role of tBregs in breast cancer. *Bulletin of Mathematical Biology*, 84(10):??, October 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01054-y>.

**Yasuda:2022:NSV**

- [389] Shugo Yasuda. Numerical study of the volcano effect in chemotactic aggregation based on a kinetic transport equation with non-instantaneous tumbling. *Bulletin of Mathematical Biology*, 84(10):??, October 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01071-x>.

**Buttenschon:2022:CRB**

- [390] Andreas Buttenschön and Leah Edelstein-Keshet. Cell repolarization: a bifurcation study of spatio-temporal perturbations of polar cells. *Bulletin of Mathematical Biology*, 84(10):??, October 2022. CODEN BMT-

- BAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01053-z>.
- Mondal:2022:CSP**
- [391] Sudeshna Mondal, Guruprasad Samanta, and Manuel De la Sen. A comparison study of predator-prey model in deterministic and stochastic environments with the impacts of fear and habitat complexity. *Bulletin of Mathematical Biology*, 84(10):??, October 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01067-7>.
- Masud:2022:URE**
- [392] M. A. Masud, Md. Hamidul Islam, and Byul Nim Kim. Understanding the role of environmental transmission on COVID-19 herd immunity and invasion potential. *Bulletin of Mathematical Biology*, 84(10):??, October 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01070-y>.
- Wu:2022:AAO**
- [393] Xiaotian Wu, Hao Zhang, and Jun Li. An analytical approach of one-compartmental pharmacokinetic models with sigmoidal hill elimination. *Bulletin of Mathematical Biology*, 84(10):??, October 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01078-4>.
- Soewongsono:2022:SPU**
- [394] Albert Ch. Soewongsono, Barbara R. Holland, and Małgorzata M. O'Reilly. The shape of phylogenies under phase-type distributed times to speciation and extinction. *Bulletin of Mathematical Biology*, 84(10):??, October 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01072-w>.
- Huber:2022:FBN**
- [395] K. T. Huber, V. Moulton, and G. E. Scholz. Forest-based networks. *Bulletin of Mathematical Biology*, 84(10):??, October 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01081-9>.
- Zahan:2022:MSR**
- [396] Ishrat Zahan, Md. Kamrujjaman, and Saleh Tanveer. Mathematical study of a resource-based diffusion model with Gilpin-Ayala growth and harvesting. *Bulletin of Mathematical Biology*, 84(10):??, October 2022. CODEN

- BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01074-8>.
- Liu:2022:MPS**
- [397] Yunfeng Liu, Jianshe Yu, and Jia Li. A mosquito population suppression model by releasing *Wolbachia*-infected males. *Bulletin of Mathematical Biology*, 84(11):??, November 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01073-9>.
- Treesatayapun:2022:MDO**
- [398] Chidentree Treesatayapun. Model dynamics and optimal control for intervention policy of COVID-19 epidemic with quarantine and immigrating disturbances. *Bulletin of Mathematical Biology*, 84(11):??, November 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01080-w>.
- Senneff:2022:CME**
- [399] Sageanne Senneff and Madeleine M. Lowery. Computational model of the effect of mitochondrial dysfunction on excitation–contraction coupling in skeletal muscle. *Bulletin of Mathematical Biology*, 84(11):??, November 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01079-3>. See correction [410].
- Sartori:2022:TSA**
- [400] Larissa Sartori, Marcone Pereira, and Sergio Oliva. Time-scale analysis and parameter fitting for vector-borne diseases with spatial dynamics. *Bulletin of Mathematical Biology*, 84(11):??, November 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01083-7>.
- Willson:2022:DCT**
- [401] Stephen J. Willson. Distinct-cluster tree-child phylogenetic networks and possible uses to study polyploidy. *Bulletin of Mathematical Biology*, 84(11):??, November 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01084-6>.
- Cooney:2022:ARM**
- [402] Daniel B. Cooney. Assortment and reciprocity mechanisms for promotion of cooperation in a model of multilevel selection. *Bulletin of Mathematical Biology*, 84(11):??, November 2022. CODEN BMTBAP. ISSN

- 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01082-8>.
- Catano-Lopez:2022:DME**
- [403] Alexandra Catano-Lopez, Daniel Rojas-Diaz, and María Eugenia Puerta Yepes. Discrete models in epidemiology: New contagion probability functions based on real data behavior. *Bulletin of Mathematical Biology*, 84(11):??, November 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01076-6>.
- Arino:2022:EME**
- [404] Julien Arino and Evan Milliken. Effect of movement on the early phase of an epidemic. *Bulletin of Mathematical Biology*, 84(11):??, November 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01077-5>.
- Lubenia:2022:RNA**
- [405] Patrick Vincent N. Lubenia, Eduardo R. Mendoza, and Angelyn R. Lao. Reaction network analysis of metabolic insulin signaling. *Bulletin of Mathematical Biology*, 84(11):??, November 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01087-3>.
- ElWajeh:2022:CKM**
- [406] Mohammad El Wajeh, Falco Jung, and Jakob Nikolas Kather. Can the Kuznetsov model replicate and predict cancer growth in humans? *Bulletin of Mathematical Biology*, 84(11):??, November 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01075-7>.
- Zheng:2022:ERN**
- [407] Qi Zheng. Estimation of rates of non-neutral mutations when bacteria are exposed to subinhibitory levels of antibiotics. *Bulletin of Mathematical Biology*, 84(11):??, November 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01085-5>.
- Xue:2022:LTF**
- [408] Ling Xue, Kai Zhang, and Hao Wang. Long-term forecast of HIV/AIDS epidemic in China with fear effect and 90–90–90 strategies. *Bulletin of Mathematical Biology*, 84(11):??, November 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01091-7>.

Wangen:2022:OMS

- [409] Catherine E. Wangen, James A. Powell, and Barbara J. Bentz. Oviposition model for a southern population of mountain pine beetle. *Bulletin of Mathematical Biology*, 84(11):??, November 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01089-1>.

Senneff:2022:CCM

- [410] Sageanne Senneff and Madeleine M. Lowery. Correction to: Computational model of the effect of mitochondrial dysfunction on excitation-contraction coupling in skeletal muscle. *Bulletin of Mathematical Biology*, 84(11):??, November 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01093-5>. See [399].

Wang:2022:SSC

- [411] Minglong Wang, Yuxiang Zhang, and Qihua Huang. A stage-structured continuous-/discrete-time population model: Persistence and spatial spread. *Bulletin of Mathematical Biology*, 84(11):??, November 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01090-8>.

Chapwanya:2022:AWC

- [412] Michael Chapwanya, Jean Lubuma, Yibeltal Terefe, and Berge Tsanou. Analysis of war and conflict effect on the transmission dynamics of the tenth Ebola outbreak in the Democratic Republic of Congo. *Bulletin of Mathematical Biology*, 84(12):??, December 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01094-4>.

Marsh:2022:AGT

- [413] Lewis Marsh, Emilie Dufresne, Helen M. Byrne, and Heather A. Harrington. Algebra, geometry and topology of ERK kinetics. *Bulletin of Mathematical Biology*, 84(12):??, December 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01088-2>.

Hamdan:2022:MMD

- [414] Nur 'Izzati Hamdan and Adem Kilicman. Mathematical modelling of dengue transmission with intervention strategies using fractional derivatives. *Bulletin of Mathematical Biology*, 84(12):??, December 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01096-2>.

**Shyntar:2022:TIP**

- [415] Alexandra Shyntar, Ashna Patel, Meghan Rhodes, Heiko Enderling, and Thomas Hillen. The tumor invasion paradox in cancer stem cell-driven solid tumors. *Bulletin of Mathematical Biology*, 84(12):??, December 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01086-4>.

**Wang:2022:BPF**

- [416] Xiaoli Wang, Junping Shi, and Guohong Zhang. Bifurcation and pattern formation in an activator-inhibitor model with non-local dispersal. *Bulletin of Mathematical Biology*, 84(12):??, December 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01098-0>.

**Almeida:2022:HDC**

- [417] Luis Almeida, Chloe Audebert, Emma Leschiera, and Tommaso Lorenzi. A hybrid discrete-continuum modelling approach to explore the impact of T-cell infiltration on anti-tumour immune response. *Bulletin of Mathematical Biology*, 84(12):??, December 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01095-3>.

**Giantesio:2022:MDF**

- [418] Giulia Giantesio, Alberto Girelli, and Alessandro Musesti. A mathematical description of the flow in a spherical lymph node. *Bulletin of Mathematical Biology*, 84(12):??, December 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01103-6>.

**Macfarlane:2022:IPH**

- [419] Fiona R. Macfarlane, Tommaso Lorenzi, and Kevin J. Painter. The impact of phenotypic heterogeneity on chemotactic self-organisation. *Bulletin of Mathematical Biology*, 84(12):??, December 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01099-z>.

**Azizi:2022:EHB**

- [420] Asma Azizi, Caner Kazanci, Natalia L. Komarova, and Dominik Wodarz. Effect of human behavior on the evolution of viral strains during an epidemic. *Bulletin of Mathematical Biology*, 84(12):??, December 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01102-7>.

**Gani:2022:IIW**

- [421] M. Osman Gani, M. Humayun Kabir, and Toshiyuki Ogawa. Inhibitor-induced wavetrains and spiral waves in an extended FitzHugh–Nagumo model of nerve cell dynamics. *Bulletin of Mathematical Biology*, 84(12):??, December 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01100-9>.

**Li:2022:ACE**

- [422] Zhimin Li and Tailei Zhang. Analysis of a COVID-19 epidemic model with seasonality. *Bulletin of Mathematical Biology*, 84(12):??, December 2022. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01105-4>.

**Andrade:2023:HBM**

- [423] Renato Andrade and Christina A. Cobbold. Heterogeneity in behaviour and movement can influence the stability of predator–prey periodic travelling waves. *Bulletin of Mathematical Biology*, 85(1):??, January 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01101-8>.

**Zhang:2023:CBI**

- [424] Shengqiang Zhang, Xichao Duan, Tonghua Zhang, and Sanling Yuan. Controlling biological invasions: a stochastic host–generalist parasitoid model. *Bulletin of Mathematical Biology*, 85(1):??, January 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01106-3>.

**Rapaport:2023:RPR**

- [425] Alain Rapaport and Ismail Mimouni. The role of permanently resident populations in the two-patches SIR model with commuters. *Bulletin of Mathematical Biology*, 85(1):??, January 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01111-6>.

**Armbruster:2023:ESC**

- [426] Ashley Armbruster, Matt Holzer, Noah Roselli, and Lena Underwood. Epidemic spreading on complex networks as front propagation into an unstable state. *Bulletin of Mathematical Biology*, 85(1):??, January 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01110-7>.

**Shao:2023:CMS**

- [427] Sijing Shao, Judith E. Canner, Rebecca A. Everett, Kidist Bekele-Maxwell, Alexis Kuerbis, Lyric Stephenson, Jennifer Menda, Jon Morganstern, and H. T. Banks. A comparison of mathematical and statistical modeling with longitudinal data: an application to ecological momentary assessment of behavior change in individuals with alcohol use disorder. *Bulletin of Mathematical Biology*, 85(1):??, January 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01097-1>.

**Xue:2023:CWH**

- [428] Yuyi Xue, Daipeng Chen, Stacey R. Smith, Xiaoe Ruan, and Sanyi Tang. Coupling the within-host process and between-host transmission of COVID-19 suggests vaccination and school closures are critical. *Bulletin of Mathematical Biology*, 85(1):??, January 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01104-5>. See correction [448].

**Davenport:2023:MMT**

- [429] Angelica A. Davenport, Yun Lu, Carlos A. Gallegos, Adriana V. F. Masscano, Katherine A. Heinzman, Patrick N. Song, Anna G. Sorace, and N. G. Cogan. Mathematical model of triple-negative breast cancer in response to combination chemotherapies. *Bulletin of Mathematical Biology*, 85(1):??, January 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01108-1>.

**Ortega-Sabater:2023:SFD**

- [430] Carmen Ortega-Sabater, Gabriel F. Calvo, Jelena Dinić, Ana Podolski, Milica Pesic, and Víctor Pérez-García. Stochastic fluctuations drive non-genetic evolution of proliferation in clonal cancer cell populations. *Bulletin of Mathematical Biology*, 85(1):??, January 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01113-4>.

**Assad:2023:CST**

- [431] Daniel Bouzon Nagem Assad, Javier Cara, and Miguel Ortega-Mier. Comparing short-term univariate and multivariate time-series forecasting models in infectious disease outbreak. *Bulletin of Mathematical Biology*, 85(1):??, January 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01112-5>.

**Kazmierczak:2023:EBM**

- [432] Bogdan Kazmierczak, James Sneyd, and Je-Chiang Tsai. Effect of buffers with multiple binding sites on calcium waves. *Bulletin of Mathematical Biology*, 85(1):??, January 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01109-0>.

**Wang:2023:MAE**

- [433] Yi Wang, Jinde Cao, Changfeng Xue, and Li Li. Mathematical analysis of epidemic models with treatment in heterogeneous networks. *Bulletin of Mathematical Biology*, 85(2):??, February 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01116-1>.

**Siewe:2023:BCE**

- [434] Nourridine Siewe and Avner Friedman. Breast cancer exosomal microRNAs facilitate pre-metastatic niche formation in the bone: a mathematical model. *Bulletin of Mathematical Biology*, 85(2):??, February 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01117-0>.

**Zhao:2023:MGS**

- [435] Lihong Zhao, Fabian Santiago, Erica M. Rutter, Shilpa Khatri, and Suzanne S. Sindi. Modeling and global sensitivity analysis of strategies to mitigate Covid-19 transmission on a structured college campus. *Bulletin of Mathematical Biology*, 85(2):??, February 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01107-2>.

**Krause:2023:CDD**

- [436] Andrew L. Krause, Eamonn A. Gaffney, and Benjamin J. Walker. Concentration-dependent domain evolution in reaction-diffusion systems. *Bulletin of Mathematical Biology*, 85(2):??, February 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01115-2>.

**Penn:2023:AAO**

- [437] Matthew J. Penn and Christl A. Donnelly. Asymptotic analysis of optimal vaccination policies. *Bulletin of Mathematical Biology*, 85(3):??, March 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01114-3>.

**Singh:2023:SMT**

- [438] Prerna Singh and Alex Best. A sterility–mortality tolerance trade-off leads to within-population variation in host tolerance. *Bulletin of Mathematical Biology*, 85(3):??, March 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01119-6>.

**Saona:2023:CRB**

- [439] Raimundo Saona, Fyodor A. Kondrashov, and Ksenia A. Khudiakova. Correction to: Relation between the number of peaks and the number of reciprocal sign epistatic interactions. *Bulletin of Mathematical Biology*, 85(3):??, March 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-022-01118-z>. See [350].

**Kiss:2023:PIN**

- [440] István Z. Kiss and Péter L. Simon. On parameter identifiability in network–based epidemic models. *Bulletin of Mathematical Biology*, 85(3):??, March 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01121-y>.

**Stevenson:2023:ERP**

- [441] Joshua Stevenson, Barbara Holland, Michael Charleston, and Jeremy Sumner. Evaluation of the relative performance of the subflattenings method for phylogenetic inference. *Bulletin of Mathematical Biology*, 85(3):??, March 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01120-z>.

**Wang:2023:MSH**

- [442] Cheng-Long Wang, Shasha Gao, Xue-Zhi Li, and Maia Martcheva. Modeling syphilis and HIV coinfection: a case study in the USA. *Bulletin of Mathematical Biology*, 85(3):??, March 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01123-w>.

**Chen:2023:RSS**

- [443] Ricky X. F. Chen, Christian M. Reidys, and Michael S. Waterman. RNA secondary structures with given motif specification: Combinatorics and algorithms. *Bulletin of Mathematical Biology*, 85(3):??, March 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01128-5>.

**Scacchi:2023:EDR**

- [444] Simone Scacchi, Piero Colli Franzone, Luca F. Pavarino, Vincenzo Gionti, and Cesare Storti. Epicardial dispersion of repolarization promotes the onset of reentry in Brugada Syndrome: a numerical simulation study. *Bulletin of Mathematical Biology*, 85(3):??, March 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01124-9>.

**Agnelli:2023:SKM**

- [445] Juan Pablo Agnelli, Bruno Buffa, Damián Knopoff, and Germán Torres. A spatial kinetic model of crowd evacuation dynamics with infectious disease contagion. *Bulletin of Mathematical Biology*, 85(4):??, April 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01127-6>.

**Michel:2023:RFR**

- [446] Christian J. Michel and Jean-Sébastien Sereni. Reading frame retrieval of genes: a new parameter of codon usage based on the circular code theory. *Bulletin of Mathematical Biology*, 85(4):??, April 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01129-4>.

**Annunziata:2023:EEC**

- [447] Carlyn Annunziata, Haniyeh Fattahpour, Daniel Fong, Michael Hadjiliargyrou, and Pejman Sanaei. Effects of elasticity on cell proliferation in a tissue-engineering scaffold pore. *Bulletin of Mathematical Biology*, 85(4):??, April 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01134-7>.

**Xue:2023:CCW**

- [448] Yuyi Xue, Daipeng Chen, Stacey R. Smith, Xiaoe Ruan, and Sanyi Tang. Correction to: Coupling the within-host process and between-host transmission of COVID-19 suggests vaccination and school closures are critical. *Bulletin of Mathematical Biology*, 85(4):??, April 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01132-9>. See [428].

**Alberding:2023:SAT**

- [449] Jonathan P. Alberding and Timothy W. Secomb. Simulation of angiogenesis in three dimensions: Development of the retinal circulation. *Bulletin of Mathematical Biology*, 85(4):??, April 2023. CODEN BMTBAP. ISSN

- 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01126-7>.
- Duan:2023:CDH**
- [450] Xi-Chao Duan, Jiangyue Zhao, and Maia Martcheva. Coevolutionary dynamics of host immune and parasite virulence based on an age-structured epidemic model. *Bulletin of Mathematical Biology*, 85(4):??, April 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01131-w>.
- Deal:2023:BMT**
- [451] Isadora Deal, Matthew Macauley, and Robin Davies. Boolean models of the transport, synthesis, and metabolism of tryptophan in *Escherichia coli*. *Bulletin of Mathematical Biology*, 85(4):??, April 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01122-x>.
- ONeill:2023:IHA**
- [452] Xander O'Neill, Andy White, Christian Gortázar, and Francisco Ruiz-Fons. The impact of host abundance on the epidemiology of tick-borne infection. *Bulletin of Mathematical Biology*, 85(4):??, April 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01133-8>.
- Igoe:2023:ROC**
- [453] Morganne Igoe, Renato Casagrandi, Marino Gatto, Christopher M. Hoover, Lorenzo Mari, Calistus N. Ngonghala, Justin V. Remais, James N. Sanchirico, Susanne H. Sokolow, Suzanne Lenhart, and Giulio de Leo. Reframing optimal control problems for infectious disease management in low-income countries. *Bulletin of Mathematical Biology*, 85(4):??, April 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01137-4>.
- Betti:2023:CVH**
- [454] Matthew I. Betti, Amira Hassan Abouleish, Victoria Spofford, Cory Peddigrew, Alan Diener, and Jane M. Heffernan. COVID-19 vaccination and healthcare demand. *Bulletin of Mathematical Biology*, 85(5):??, May 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01130-x>.
- Bardon:2023:ESS**
- [455] Gaël Bardon and Frédéric Barraquand. Effects of stage structure on co-existence: Mixed benefits. *Bulletin of Mathematical Biology*, 85(5):??,

- May 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01135-6>.
- Lee:2023:MCM**
- [456] Tae Jin Lee, Adam E. Berman, and Arni S. R. Srinivasa Rao. Markov chain models for cardiac rhythm dynamics in patients undergoing catheter ablation of atrial fibrillation. *Bulletin of Mathematical Biology*, 85(5):??, May 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01125-8>.
- Kim:2023:NDB**
- [457] Yong-Jung Kim, Masayasu Mimura, and Changwook Yoon. Nonlinear diffusion for bacterial traveling wave phenomenon. *Bulletin of Mathematical Biology*, 85(5):??, May 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01138-3>.
- Zanella:2023:KME**
- [458] Mattia Zanella. Kinetic models for epidemic dynamics in the presence of opinion polarization. *Bulletin of Mathematical Biology*, 85(5):??, May 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01147-2>.
- Ahmed:2023:MAI**
- [459] Ishraq U. Ahmed, Helen M. Byrne, and Mary R. Myerscough. Macrophage anti-inflammatory behaviour in a multiphase model of atherosclerotic plaque development. *Bulletin of Mathematical Biology*, 85(5):??, May 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01142-7>.
- Walker:2023:MMM**
- [460] Benjamin J. Walker, Giulia L. Celora, Alain Goriely, Derek E. Moulton, and Helen M. Byrne. Minimal morphoelastic models of solid tumour spheroids: a tutorial. *Bulletin of Mathematical Biology*, 85(5):??, May 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01141-8>.
- Campos:2023:CTS**
- [461] Felipe A. Campos, Simone Bruno, Yi Fu, Domitilla Del Vecchio, and Ruth J. Williams. Comparison theorems for stochastic chemical reaction

- networks. *Bulletin of Mathematical Biology*, 85(5):??, May 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01136-5>.
- Huber:2023:AAP**
- [462] K. T. Huber and L. J. Maher. Autopolyplody, allopolyploidy, and phylogenetic networks with horizontal arcs. *Bulletin of Mathematical Biology*, 85(5):??, May 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01140-9>.
- Wu:2023:PIM**
- [463] Peng Wu, Shohel Ahmed, Xiunan Wang, and Hao Wang. PrEP intervention in the mitigation of HIV/AIDS epidemics in China via a data-validated age-structured model. *Bulletin of Mathematical Biology*, 85(5):??, May 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01145-4>.
- Buckingham:2023:EAO**
- [464] Lydia J. Buckingham and Ben Ashby. The evolution of the age of onset of resistance to infectious disease. *Bulletin of Mathematical Biology*, 85(5):??, May 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01144-5>.
- Anwar:2023:OIE**
- [465] Md Nurul Anwar, Roslyn I. Hickson, Somya Mehra, David J. Price, James M. McCaw, Mark B. Flegg, and Jennifer A. Flegg. Optimal interruption of *P. vivax* malaria transmission using mass drug administration. *Bulletin of Mathematical Biology*, 85(6):??, June 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01153-4>.
- Fritz:2023:TEM**
- [466] Marvin Fritz. Tumor evolution models of phase-field type with nonlocal effects and angiogenesis. *Bulletin of Mathematical Biology*, 85(6):??, June 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01151-6>.
- Butler:2023:MOA**
- [467] Cole Butler and Peter Stechlinski. Modeling opioid abuse: a case study of the opioid crisis in New England. *Bulletin of Mathematical Biol-*

*ogy*, 85(6):??, June 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01148-1>.

**Francis:2023:LPN**

- [468] Andrew Francis and Mike Steel. Labellable phylogenetic networks. *Bulletin of Mathematical Biology*, 85(6):??, June 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01157-0>.

**Wilson:2023:MRC**

- [469] Nicole Wilson, Corina S. Drapaca, Heiko Enderling, Jimmy J. Caudell, and Kathleen P. Wilkie. Modelling radiation cancer treatment with a death-rate term in ordinary and fractional differential equations. *Bulletin of Mathematical Biology*, 85(6):??, June 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01139-2>.

**Eilertsen:2023:NPC**

- [470] Justin Eilertsen, Santiago Schnell, and Sebastian Walcher. Natural parameter conditions for singular perturbations of chemical and biochemical reaction networks. *Bulletin of Mathematical Biology*, 85(6):??, June 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01150-7>.

**Mazuryn:2023:MFG**

- [471] Maksim Mazuryn and Uffe Høgsbro Thygesen. Mean field games for diel vertical migration with diffusion. *Bulletin of Mathematical Biology*, 85(6):??, June 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01154-3>.

**Amiri:2023:TOA**

- [472] Farhad A. Amiri and Junfeng Zhang. Tissue oxygenation around capillaries: Effects of hematocrit and arteriole oxygen condition. *Bulletin of Mathematical Biology*, 85(6):??, June 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01155-2>.

**Zhang:2023:CMD**

- [473] Yuyuan Zhang, Kaiqun Wang, Yaoyao Du, Huiyuan Yang, Guanjie Jia, Di Huang, Weiyi Chen, and Yanhu Shan. Computational modeling to determine the effect of phenotypic heterogeneity in tumors on the collective

- tumor-immune interactions. *Bulletin of Mathematical Biology*, 85(6):??, June 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01158-z>.
- Barril:2023:FSE**
- [474] Carles Barril, Pierre-Alexandre Bliman, and Sílvia Cuadrado. Final size for epidemic models with asymptomatic transmission. *Bulletin of Mathematical Biology*, 85(6):??, June 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01159-y>.
- Garcia:2023:DVS**
- [475] Pablo Venegas Garcia and Hao Wang. A data-validated stoichiometric model for the priming effect. *Bulletin of Mathematical Biology*, 85(6):??, June 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01160-5>.
- Rapti:2023:RMD**
- [476] Z. Rapti, J. Cuevas-Maraver, E. Kontou, S. Liu, Y. Drossinos, P. G. Kevrekidis, M. Barman, Q.-Y. Chen, and G. A. Kevrekidis. The role of mobility in the dynamics of the COVID-19 epidemic in Andalusia. *Bulletin of Mathematical Biology*, 85(6):??, June 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01152-5>.
- Maity:2023:MBE**
- [477] Biplab Maity, Bapi Saha, Indrajit Ghosh, and Joydev Chattopadhyay. Model-based estimation of expected time to cholera extinction in Lusaka, Zambia. *Bulletin of Mathematical Biology*, 85(7):??, July 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01149-0>.
- Torres:2023:QAD**
- [478] Monica Torres, Jerrold Tubay, and Aurelio de los Reyes V. Quantitative assessment of a dual epidemic caused by tuberculosis and HIV in the Philippines. *Bulletin of Mathematical Biology*, 85(7):??, July 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01156-1>.
- Murray:2023:ATT**
- [479] Philip J. Murray. Autoregulation of transcription and translation: a qualitative analysis. *Bulletin of Mathematical Biology*, 85(7):??, July 2023.

- CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01143-6>.
- Salentine:2023:MMD**
- [480] Noah Salentine, Jonathan Doria, Chinh Nguyen, Gabriella Pinter, Shizhen Emily Wang, and Peter Hinow. A mathematical model of the disruption of glucose homeostasis in cancer patients. *Bulletin of Mathematical Biology*, 85(7):??, July 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01146-3>.
- Zhao:2023:EEP**
- [481] Xin Zhao, Lidan Liu, Hao Wang, and Meng Fan. Ecological effects of predator harvesting and environmental noises on oceanic coral reefs. *Bulletin of Mathematical Biology*, 85(7):??, July 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01166-z>.
- Loy:2023:SMA**
- [482] N. Loy and L. Preziosi. A statistical mechanics approach to describe cell reorientation under stretch. *Bulletin of Mathematical Biology*, 85(7):??, July 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01161-4>.
- He:2023:RDM**
- [483] Changhan He, Lifeng Han, Duane C. Harris, Samat Bayakhmetov, Xiao Wang, and Yang Kuang. Reaction–diffusion modeling of *E. coli* colony growth based on nutrient distribution and agar dehydration. *Bulletin of Mathematical Biology*, 85(7):??, July 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01163-2>.
- Nguyen:2023:EPD**
- [484] Kyle Nguyen, Erica M. Rutter, and Kevin B. Flores. Estimation of parameter distributions for reaction–diffusion equations with competition using aggregate spatiotemporal data. *Bulletin of Mathematical Biology*, 85(7):??, July 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01162-3>.
- Russo:2023:MSM**
- [485] Fabiana Russo, Alberto Tenore, Maria Rosaria Mattei, and Luigi Frunzo. A mathematical study of metal biosorption on algal–bacterial granular

biofilms. *Bulletin of Mathematical Biology*, 85(7):??, July 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01168-x>.

Duan:2023:RMD

- [486] Xiaoyu Duan, Jonathan E. Rubin, and David Swigon. Rigorous mapping of data to qualitative properties of parameter values and dynamics: a case study on a two-variable Lotka–Volterra system. *Bulletin of Mathematical Biology*, 85(7):??, July 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01165-0>.

Yan:2023:SAT

- [487] Dingding Yan, Xiaotian Wu, Jun Li, and Sanyi Tang. Statistical analysis of two-compartment pharmacokinetic models with drug non-adherence. *Bulletin of Mathematical Biology*, 85(7):??, July 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01173-0>.

Palma:2023:EMI

- [488] Giuseppe Palma, Damiano Caprioli, and Lorenzo Mari. Epidemic management via imperfect testing: a multi-criterial perspective. *Bulletin of Mathematical Biology*, 85(7):??, July 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01172-1>.

Abboud:2023:FPD

- [489] Candy Abboud, Eric Parent, Olivier Bonnefon, and Samuel Soubeyrand. Forecasting pathogen dynamics with Bayesian model–averaging: Application to *Xylella fastidiosa*. *Bulletin of Mathematical Biology*, 85(7):??, July 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01169-w>.

Casanellas:2023:DWQ

- [490] Marta Casanellas, Jesús Fernández-Sánchez, Marina Garrote-López, and Marc Sabaté-Vidales. Designing weights for quartet-based methods when data are heterogeneous across lineages. *Bulletin of Mathematical Biology*, 85(7):??, July 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01167-y>.

**Gladson:2023:ABM**

- [491] Shane L. Gladson and Tracy L. Stepien. An agent-based model of biting midge dynamics to understand bluetongue outbreaks. *Bulletin of Mathematical Biology*, 85(7):??, July 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01177-w>.

**Hamster:2023:WSC**

- [492] Christian Hamster and Peter van Heijster. Waves in a stochastic cell motility model. *Bulletin of Mathematical Biology*, 85(8):??, August 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01164-1>.

**Saha:2023:SSD**

- [493] Esha Saha, Lam Si Tung Ho, and Giang Tran. SPADE4: Sparsity and delay embedding based forecasting of epidemics. *Bulletin of Mathematical Biology*, 85(8):??, August 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01174-z>.

**Laruelle:2023:EHC**

- [494] Annick Laruelle, André Rocha, Claudia Manini, José I. López, and Elena Inarra. Effects of heterogeneity on cancer: A game theory perspective. *Bulletin of Mathematical Biology*, 85(8):??, August 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01178-9>.

**Penn:2023:OME**

- [495] Matthew J. Penn and Christl A. Donnelly. Optimality of maximal-effort vaccination. *Bulletin of Mathematical Biology*, 85(8):??, August 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01179-8>.

**Colson:2023:IIG**

- [496] Chloé Colson, Philip K. Maini, and Helen M. Byrne. Investigating the influence of growth arrest mechanisms on tumour responses to radiotherapy. *Bulletin of Mathematical Biology*, 85(8):??, August 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01171-2>.

**Weatherley:2023:CMK**

- [497] Georgia Weatherley, Robyn P. Araujo, Samantha J. Dando, and Adrienne L. Jenner. Could mathematics be the key to unlocking the mysteries

of multiple sclerosis? *Bulletin of Mathematical Biology*, 85(8):??, August 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01181-0>.

**Erban:2023:CSL**

- [498] Radek Erban and Hye-Won Kang. Chemical systems with limit cycles. *Bulletin of Mathematical Biology*, 85(8):??, August 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01170-3>.

**Kravtsova:2023:SGW**

- [499] Natalia Kravtsova, Reginald L. McGee II, and Adriana T. Dawes. Scalable Gromov–Wasserstein based comparison of biological time series. *Bulletin of Mathematical Biology*, 85(8):??, August 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01175-y>.

**Manson:2023:SPD**

- [500] Kerry Manson and Mike Steel. Spaces of phylogenetic diversity indices: Combinatorial and geometric properties. *Bulletin of Mathematical Biology*, 85(8):??, August 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01183-y>.

**Colombi:2023:MCO**

- [501] Annachiara Colombi, Luigi Preziosi, and Marco Scianna. Modelling cell orientation under stretch: The effect of substrate elasticity. *Bulletin of Mathematical Biology*, 85(9):??, September 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01180-1>.

**Faye:2023:MDW**

- [502] Grégory Faye, Guilhem Fouilhé, and Rufin VanRullen. Mathematical derivation of wave propagation properties in hierarchical neural networks with predictive coding feedback dynamics. *Bulletin of Mathematical Biology*, 85(9):??, September 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01186-9>.

**Hayashi:2023:TPE**

- [503] Rena Hayashi and Yoh Iwasa. Temporal pattern of the emergence of a mutant virus escaping cross-immunity and stochastic extinction within a

host. *Bulletin of Mathematical Biology*, 85(9):??, September 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01184-x>.

Elias:2023:PRT

- [504] Ján Eliaš, Klemens Fellner, Peter Hofer, Monika Oberer, Renate Schreiber, and Rudolf Zechnner. The potential roles of transacylation in intracellular lipolysis and related qssa approximations. *Bulletin of Mathematical Biology*, 85(9):??, September 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01188-7>.

DeJaco:2023:RBQ

- [505] Robert F. DeJaco, Matthew J. Roberts, Erica L. Romsos, Peter M. Valpone, and Anthony J. Kearsley. Reducing bias and quantifying uncertainty in fluorescence produced by PCR. *Bulletin of Mathematical Biology*, 85(9):??, September 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01182-z>.

Bate:2023:ELP

- [506] Fiona Bate, Yumechris Amekan, Dmitri O. Pushkin, James P. J. Chong, and Martin Bees. Emergent lag phase in flux-regulation models of bacterial growth. *Bulletin of Mathematical Biology*, 85(9):??, September 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01189-6>.

Watson:2023:LSM

- [507] Michael G. Watson, Keith L. Chambers, and Mary R. Myerscough. A lipid-structured model of atherosclerotic plaque macrophages with lipid-dependent kinetics. *Bulletin of Mathematical Biology*, 85(9):??, September 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01193-w>.

Gordillo:2023:IPD

- [508] Luis F. Gordillo and Priscilla E. Greenwood. Intermittent precipitation-dependent interactions, encompassing Allee effect, may yield vegetation patterns in a transitional parameter range. *Bulletin of Mathematical Biology*, 85(10):??, October 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01191-y>.

**Anderson:2023:SRN**

- [509] David F. Anderson and Aidan S. Howells. Stochastic reaction networks within interacting compartments. *Bulletin of Mathematical Biology*, 85(10):??, October 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01185-w>.

**Giverso:2023:INM**

- [510] Chiara Giverso, Gaspard Jankowiak, Luigi Preziosi, and Christian Schmeiser. The influence of nucleus mechanics in modelling adhesion-independent cell migration in structured and confined environments. *Bulletin of Mathematical Biology*, 85(10):??, October 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01187-8>.

**Plaugher:2023:PCT**

- [511] Daniel Plaugher and David Murrugarra. Phenotype control techniques for Boolean gene regulatory networks. *Bulletin of Mathematical Biology*, 85(10):??, October 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01197-6>.

**Cassidy:2023:CTM**

- [512] Tyler Cassidy. A continuation technique for maximum likelihood estimators in biological models. *Bulletin of Mathematical Biology*, 85(10):??, October 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01200-0>.

**Armstrong:2023:PBS**

- [513] Eve Armstrong. Predicting the behavior of sparsely-sampled systems across neurobiology and epidemiology. *Bulletin of Mathematical Biology*, 85(10):??, October 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01176-x>.

**Morselli:2023:ABC**

- [514] David Morselli, Marcello Edoardo Delitala, and Federico Frascoli. Agent-based and continuum models for spatial dynamics of infection by oncolytic viruses. *Bulletin of Mathematical Biology*, 85(10):??, October 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01192-x>.

**Moffett:2023:MRI**

- [515] Alexander S. Moffett, Youyuan Deng, and Herbert Levine. Modeling the role of immune cell conversion in the tumor-immune microenvironment. *Bulletin of Mathematical Biology*, 85(10):??, October 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01201-z>.

**Mulder:2023:PDT**

- [516] Willem H. Mulder. Probability distribution of tree age for the simple birth-death process, with applications to distributions of number of ancestral lineages and divergence times for pairs of taxa in a Yule tree. *Bulletin of Mathematical Biology*, 85(10):??, October 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01196-7>.

**Montealegre-Mora:2023:PDG**

- [517] Felipe Montealegre-Mora, Marcus Lapeyrolerie, Melissa Chapman, Abigail G. Keller, and Carl Boettiger. Pretty darn good control: When are approximate solutions better than approximate models. *Bulletin of Mathematical Biology*, 85(10):??, October 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01198-5>.

**Dari:2023:MEM**

- [518] Sonia Dari, Nabil T. Fadai, and Reuben D. O'Dea. Modelling the effect of matrix metalloproteinases in dermal wound healing. *Bulletin of Mathematical Biology*, 85(10):??, October 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01195-8>.

**Liu:2023:GJR**

- [519] Kaihui Liu, Zhenguo Bai, Daihai He, and Yijun Lou. Getting jab or regular test: Observations from an impulsive epidemic COVID-19 model. *Bulletin of Mathematical Biology*, 85(10):??, October 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01202-y>.

**Ayensa-Jimenez:2023:MMS**

- [520] Jacobo Ayensa-Jiménez, Mohamed H. Doweidar, Manuel Doblaré, and Eamonn A. Gaffney. A mathematical modelling study of chemotactic dynamics in cell cultures: The impact of spatio-temporal heterogeneity. *Bulletin of Mathematical Biology*, 85(10):??, October 2023. CODEN BMTBAP.

BAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01194-9>.

**Wang:2023:TOC**

- [521] Mengshou Wang, Gao Li, Liangrong Peng, and Liu Hong. Towards optimal control of amyloid fibrillation. *Bulletin of Mathematical Biology*, 85(10):??, October 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01205-9>.

**Vlad:2023:CRV**

- [522] A. I. Vlad, A. A. Romanyukha, and T. E. Sannikova. Circulation of respiratory viruses in the city: Towards an agent-based ecosystem model. *Bulletin of Mathematical Biology*, 85(10):??, October 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01203-x>.

**Kiradjiev:2023:MAA**

- [523] K. B. Kiradjiev and L. R. Band. Multiscale asymptotic analysis reveals how cell growth and subcellular compartments affect tissue-scale hormone transport. *Bulletin of Mathematical Biology*, 85(10):??, October 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01199-4>.

**Bottcher:2023:MCP**

- [524] Lucas Böttcher, Sascha Wald, and Tom Chou. Mathematical characterization of private and public immune receptor sequences. *Bulletin of Mathematical Biology*, 85(10):??, October 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01190-z>.

**Tian:2023:SMC**

- [525] Tim Y. Y. Tian, Colin B. Macdonald, and Eric N. Cytrynbaum. A stochastic model of cortical microtubule anchoring and mechanics provides regulatory control of microtubule shape. *Bulletin of Mathematical Biology*, 85(11):??, November 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01211-x>.

**Bergland:2023:DPH**

- [526] Harald Bergland, Evgenii Burlakov, and John Wyller. The dynamics of pasture–herbivores–carnivores with sigmoidal density dependent harvesting. *Bulletin of Mathematical Biology*, 85(11):??, November 2023. CO-

DEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01210-y>.

**Barker:2023:MAT**

- [527] Colin T. Barker, Feng-Bin Wang, and Naveen K. Vaidya. Modeling antiretroviral treatment to mitigate HIV in the brain: Impact of the blood-brain barrier. *Bulletin of Mathematical Biology*, 85(11):??, November 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01204-w>.

**Simmons:2023:MDC**

- [528] Tyler Simmons and Doron Levy. Modeling the development of cellular exhaustion and tumor-immune stalemate. *Bulletin of Mathematical Biology*, 85(11):??, November 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01207-7>.

**Stevenson:2023:REC**

- [529] Joshua Stevenson, Venta Terauds, and Jeremy Sumner. Rearrangement events on circular genomes. *Bulletin of Mathematical Biology*, 85(11):??, November 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01209-5>.

**Brush:2023:CMP**

- [530] Micah Brush and Mark A. Lewis. Coupling mountain pine beetle and forest population dynamics predicts transient outbreaks that are likely to increase in number with climate change. *Bulletin of Mathematical Biology*, 85(11):??, November 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01215-7>.

**Marasco:2023:AGL**

- [531] Addolorata Marasco, Emiliano Spera, Vittorio De Falco, Annalisa Iuorio, Carmen Alina Lupascu, Sergio Solinas, and Michele Migliore. An adaptive generalized leaky integrate-and-fire model for hippocampal CA1 pyramidal neurons and interneurons. *Bulletin of Mathematical Biology*, 85(11):??, November 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01206-8>.

**Bortz:2023:DEP**

- [532] David M. Bortz, Daniel A. Messenger, and Vanja Dukic. Direct estimation of parameters in ODE models using WENDy: Weak-form estimation of nonlinear dynamics. *Bulletin of Mathematical Biology*, 85(11):??, November 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01208-6>.

**Germano:2023:FIB**

- [533] Domenic P. J. Germano, Adriana Zanca, Stuart T. Johnston, Jennifer A. Flegg, and James M. Osborne. Free and interfacial boundaries in individual-based models of multicellular biological systems. *Bulletin of Mathematical Biology*, 85(11):??, November 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01214-8>.

**Elzinga:2023:GSH**

- [534] David C. Elzinga and W. Christopher Strickland. Generalized stressors on hive and forager bee colonies. *Bulletin of Mathematical Biology*, 85(11):??, November 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01219-3>.

**Walker:2023:VRI**

- [535] Benjamin J. Walker, Adam K. Townsend, Alexander K. Chudasama, and Andrew L. Krause. VisualPDE: Rapid interactive simulations of partial differential equations. *Bulletin of Mathematical Biology*, 85(11):??, November 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01218-4>.

**Gorin:2023:AMD**

- [536] Gennady Gorin, Shawn Yoshida, and Lior Pachter. Assessing Markovian and delay models for single-nucleus RNA sequencing. *Bulletin of Mathematical Biology*, 85(11):??, November 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01213-9>.

**Liceaga:2023:EVE**

- [537] Daniel Olmos Liceaga, Sandro Filipe Nunes, and Roberto A. Saenz. Ex vivo experiments shed light on the innate immune response from influenza

virus. *Bulletin of Mathematical Biology*, 85(11):??, November 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01217-5>.

**Enkhtaivan:2023:PAA**

- [538] Enkhzaya Enkhtaivan, Joel Nishimura, and Amy Cochran. Placing approach-avoidance conflict within the framework of multi-objective reinforcement learning. *Bulletin of Mathematical Biology*, 85(11):??, November 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01216-6>.

**Eftimie:2023:MKD**

- [539] R. Eftimie, G. Rolin, O. E. Adebayo, S. Urcun, F. Chouly, and S. P. A. Bordas. Modelling keloids dynamics: a brief review and new mathematical perspectives. *Bulletin of Mathematical Biology*, 85(12):??, December 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01222-8>.

**Boudreau:2023:TPC**

- [540] Mariah C. Boudreau, Andrea J. Allen, Nicholas J. Roberts, Antoine Allard, and Laurent Hébert-Dufresne. Temporal and probabilistic comparisons of epidemic interventions. *Bulletin of Mathematical Biology*, 85(12):??, December 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01220-w>.

**Shea:2023:RAC**

- [541] Jacob Shea, Lisa Davis, Bright Quaye, and Tomas Gedeon. Ribosome abundance control in prokaryotes. *Bulletin of Mathematical Biology*, 85(12):??, December 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01212-w>.

**Simmons:2023:MTM**

- [542] Emily S. G. Simmons, Arielle M. Cooley, Joshua R. Puzey, and Gregory D. ConradiSmith. A multigenerational Turing model reproduces transgressive petal spot phenotypes in hybrid *Mimulus*. *Bulletin of Mathematical Biology*, 85(12):??, December 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01223-7>.

**Li:2023:FTW**

- [543] Bingtuan Li and Garrett Otto. Forced traveling waves in a reaction-diffusion equation with strong Allee effect and shifting habitat. *Bulletin of Mathematical Biology*, 85(12):??, December 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01221-9>.

**Chumley:2023:NDM**

- [544] Max M. Chumley, Firas A. Khasawneh, Andreas Otto, and Tomas Gedeon. A nonlinear delay model for metabolic oscillations in yeast cells. *Bulletin of Mathematical Biology*, 85(12):??, December 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01227-3>.

**Pei:2023:OTC**

- [545] Yongzhen Pei, Yunfei Lv, Changguo Li, and Dandan Fang. Optimization therapy by coupling intermittent androgen suppression with impulsive chemotherapy for a prostate cancer model. *Bulletin of Mathematical Biology*, 85(12):??, December 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01228-2>.

**Fung:2023:TCI**

- [546] Tak Fung, Hannah E. Clapham, and Ryan A. Chisholm. Temporary cross-immunity as a plausible driver of asynchronous cycles of dengue serotypes. *Bulletin of Mathematical Biology*, 85(12):??, December 2023. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01226-4>.

**Katriel:2024:OAT**

- [547] Guy Katriel. Optimizing antimicrobial treatment schedules: Some fundamental analytical results. *Bulletin of Mathematical Biology*, 86(1):??, January 2024. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01230-8>.

**Shuttleworth:2024:EQP**

- [548] Joseph G. Shuttleworth, Chon Lok Lei, Dominic G. Whittaker, Monique J. Windley, Adam P. Hill, Simon P. Preston, and Gary R. Mirams. Empirical quantification of predictive uncertainty due to model discrepancy by training with an ensemble of experimental designs: an application to ion channel kinetics. *Bulletin of Mathematical Biology*, 86(1):??, January 2024.

- CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01224-6>.
- Patterson:2024:PFM**
- [549] Denis Patterson, Simon Levin, Ann Carla Staver, and Jonathan Touboul. Pattern formation in mesic savannas. *Bulletin of Mathematical Biology*, 86(1):??, January 2024. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01231-7>.
- FragaDelfinoKunz:2024:NAP**
- [550] Camile Fraga Delfino Kunz, Alf Gerisch, James Glover, Denis Headon, Kevin John Painter, and Franziska Matthäus. Novel aspects in pattern formation arise from coupling Turing reaction–diffusion and chemotaxis. *Bulletin of Mathematical Biology*, 86(1):??, January 2024. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01225-5>.
- Tserunyan:2024:ITA**
- [551] Vardges Tserunyan and Stacey Finley. Information-theoretic analysis of a model of CAR-4-1BB-mediated NF $\kappa$ B activation. *Bulletin of Mathematical Biology*, 86(1):??, January 2024. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01232-6>.
- Kiss:2024:TIN**
- [552] Istvan Z. Kiss, Luc Berthouze, and Wasiur R. KhudaBukhsh. Towards inferring network properties from epidemic data. *Bulletin of Mathematical Biology*, 86(1):??, January 2024. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01235-3>.
- Dyck:2024:MII**
- [553] Cheryl Dyck, Kathryn V. Isaac, and Leah Edelstein-Keshet. Models for implant-induced capsular contracture post breast cancer surgery. *Bulletin of Mathematical Biology*, 86(1):??, January 2024. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01236-2>.
- Murphy:2024:FGC**
- [554] Ryan J. Murphy, Gency Gunasingh, Nikolas K. Haass, and Matthew J. Simpson. Formation and growth of co-culture tumour spheroids: New compartment-based mathematical models and experiments. *Bulletin of*

*Mathematical Biology*, 86(1):??, January 2024. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01229-1>.

**Bellver-Arnau:2024:DME**

- [555] Jesús Bellver-Arnau, Alessandro Margheri, and Carlota Rebelo. Dynamics of a mosquito egg–larvae model with seasonality. *Bulletin of Mathematical Biology*, 86(1):??, January 2024. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01238-0>.

**Cardona:2024:GOT**

- [556] Gabriel Cardona, Gerard Ribas, and Joan Carles Pons. Generation of orchard and tree–child networks. *Bulletin of Mathematical Biology*, 86(1):??, January 2024. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01239-z>.

**Bergman:2024:CAB**

- [557] Daniel R. Bergman, Kerri-Ann Norton, Harsh Vardhan Jain, and Trachette Jackson. Connecting agent-based models with high-dimensional parameter spaces to multidimensional data using SMoRe ParS: a surrogate modeling approach. *Bulletin of Mathematical Biology*, 86(1):??, January 2024. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01240-6>.

**Dadashova:2024:LIA**

- [558] Kamala Dadashova, Ralph C. Smith, and Mansoor A. Haider. Local identifiability analysis, parameter subset selection and verification for a minimal brain PBPK model. *Bulletin of Mathematical Biology*, 86(2):??, February 2024. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01234-4>.

**Diez:2024:TPF**

- [559] Antoine Diez, Andrew L. Krause, Philip K. Maini, Eamonn A. Gaffney, and Sungrim Seirin-Lee. Turing pattern formation in reaction–cross-diffusion systems with a bilayer geometry. *Bulletin of Mathematical Biology*, 86(2):??, February 2024. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01237-1>.

**Liu:2024:DLV**

- [560] Weiwei Liu, Jie Liu, and Shanshan Chen. Dynamics of Lotka–Volterra competition patch models in streams with two branches. *Bulletin of Mathematical Biology*, 86(2):??, February 2024. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01243-3>.

**Han:2024:SMA**

- [561] Lifeng Han and John Fricks. A semi-Markov approach to study a group of kinesin motors. *Bulletin of Mathematical Biology*, 86(2):??, February 2024. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01241-5>.

**Henley:2024:BMC**

- [562] Lucy Henley, Owen Jones, Fiona Mathews, and Thomas E. Woolley. Bat motion can be described by leapfrogging. *Bulletin of Mathematical Biology*, 86(2):??, February 2024. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01233-5>.

**Abo:2024:SDS**

- [563] Stéphanie M. C. Abo, Elisa Casella, and Anita T. Layton. Sexual dimorphism in substrate metabolism during exercise. *Bulletin of Mathematical Biology*, 86(2):??, February 2024. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01242-4>.

**Wang:2024:CTB**

- [564] Ren-Yi Wang and Marek Kimmel. A countable-type branching process model for the tug-of-war cancer cell dynamics. *Bulletin of Mathematical Biology*, 86(2):??, February 2024. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01245-1>.

**Browning:2024:PRP**

- [565] Alexander P. Browning, Thomas D. Lewin, Ruth E. Baker, Philip K. Maini, Eduardo G. Moros, Jimmy Chaudell, Helen M. Byrne, and Heiko Enderling. Predicting radiotherapy patient outcomes with real-time clinical data using mathematical modelling. *Bulletin of Mathematical Biology*, 86(2):??, February 2024. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01246-0>.

**Arabameri:2024:UIC**

- [566] Abazar Arabameri and Samaneh Arab. Understanding the interplay of CAR–NK cells and triple-negative breast cancer: Insights from computational modeling. *Bulletin of Mathematical Biology*, 86(2):??, February 2024. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01247-z>.

**Krause:2024:TIE**

- [567] Andrew L. Krause, Eamonn A. Gaffney, Thomas Jun Jewell, Václav Klika, and Benjamin J. Walker. Turing instabilities are not enough to ensure pattern formation. *Bulletin of Mathematical Biology*, 86(2):??, February 2024. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01250-4>.

**Vaghy:2024:KFW**

- [568] Mihály A. Vághy, Irene Otero-Muras, Manuel Pájaro, and Gábor Szederkényi. A kinetic finite volume discretization of the multidimensional PIDE model for gene regulatory networks. *Bulletin of Mathematical Biology*, 86(2):??, February 2024. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01251-3>.

**Meyer:2024:MYO**

- [569] Alexander D. Meyer, Alan Hastings, and John L. Largier. Making your own luck: Weak vertical swimming improves dispersal success for coastal marine larvae. *Bulletin of Mathematical Biology*, 86(3):??, March 2024. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01252-2>.

**Collienne:2024:RSP**

- [570] Lena Collienne, Chris Whidden, and Alex Gavryushkin. Ranked subtree prune and regraft. *Bulletin of Mathematical Biology*, 86(3):??, March 2024. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01244-2>.

**Husar:2024:LDM**

- [571] Kateryna Husar, Dana C. Pittman, Johnny Rajala, Fahad Mostafa, and Linda J. S. Allen. Lyme disease models of tick–mouse dynamics with seasonal variation in births, deaths, and tick feeding. *Bulletin of Mathematical Biology*, 86(3):??, March 2024. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01248-y>.

**Hindel:2024:GKM**

- [572] Stefan Hindel. A generalized kinetic model of fractional order transport dynamics with transit time heterogeneity in microvascular space. *Bulletin of Mathematical Biology*, 86(3):??, March 2024. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01255-z>.

**Hamley:2024:IDW**

- [573] Jonathan I. D. Hamley, Guido Beldi, and Daniel Sánchez-Taltavull. Infectious disease in the workplace: Quantifying uncertainty in transmission. *Bulletin of Mathematical Biology*, 86(3):??, March 2024. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01249-x>.

**Potts:2024:DBL**

- [574] Jonathan R. Potts and Kevin J. Painter. Distinguishing between long-transient and asymptotic states in a biological aggregation model. *Bulletin of Mathematical Biology*, 86(3):??, March 2024. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-023-01254-0>.

**Wifvat:2024:OCR**

- [575] Kathryn Wifvat, Erika T. Camacho, Matthias Kawski, Thierry Léveillard, and Stephen Wirkus. Optimal control with RdCVFL for degenerating photoreceptors. *Bulletin of Mathematical Biology*, 86(3):??, March 2024. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-024-01256-6>.

**Ciavolella:2024:MMD**

- [576] Giorgia Ciavolella, Nathalie Ferrand, Michèle Sabbah, Benoît Perthame, and Roberto Natalini. A model for membrane degradation using a gelatin invadopodia assay. *Bulletin of Mathematical Biology*, 86(3):??, March 2024. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-024-01260-w>.

**Mallela:2024:IVS**

- [577] Abhishek Mallela, Ye Chen, Yen Ting Lin, Ely F. Miller, Jacob Neumann, Zhili He, Kathryn E. Nelson, Richard G. Posner, and William S. Hlavacek. Impacts of vaccination and severe acute respiratory syndrome coronavirus 2 variants alpha and delta on coronavirus disease 2019 transmission dynamics in four metropolitan areas of the United States. *Bulletin of Mathematical Biology*, 86(3):??, March 2024. CODEN BMTBAP. ISSN

0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-024-01258-4>.

**Wang:2024:OME**

- [578] Yue Wang, Blerta Shtylla, and Tom Chou. Order-of-mutation effects on cancer progression: Models for myeloproliferative neoplasm. *Bulletin of Mathematical Biology*, 86(3):??, March 2024. CODEN BMTBAP. ISSN 0092-8240 (print), 1522-9602 (electronic). URL <https://link.springer.com/article/10.1007/s11538-024-01257-5>.