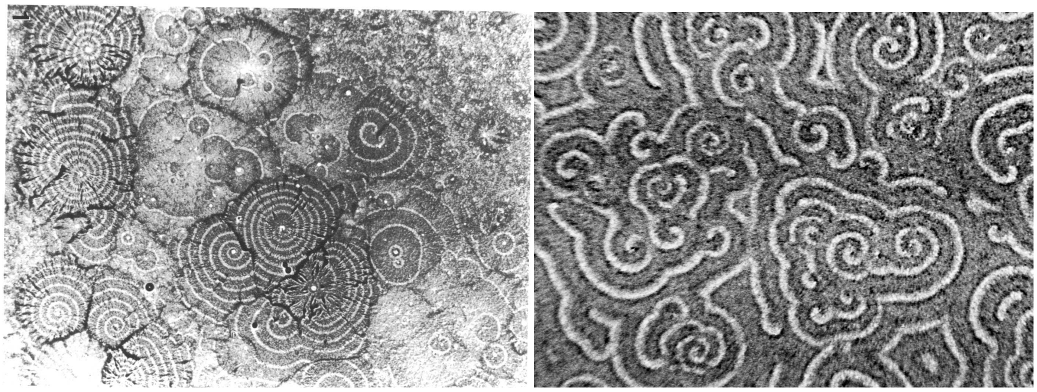

Fig. 1. Patterns seen during *Dictyostelium* aggregation. The bright bands correspond to moving cells. Left field of view 60×40 mm^2. Taken from (Newell, 1983). Right field of view 24×18 mm^2, density 2×10^6 cells per cm^2. Courtesy Kyoung Lee.

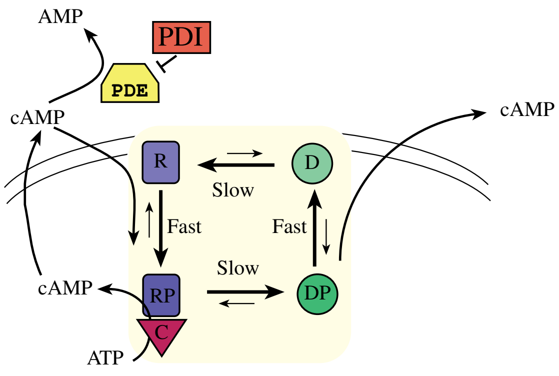

Fig. 2. The Receptor Box. R = Active and unphosphorylated cAMP receptor. D = Inactive and phosphorylated cAMP receptor. RP and DP indicate receptor bound to cAMP. P = external cAMP.

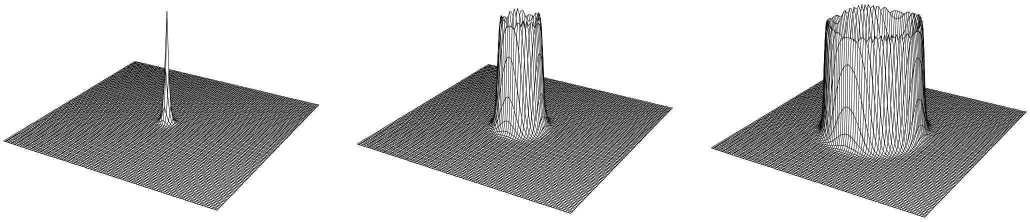

Fig. 3. The initiation of a circular wave. Parameters are as given in (Martiel & Goldbeter, 1987) and we include spatial variations so cAMP diffuses. Diffusion constant, D=4×10^{-6}cm^{2}sec^{-1}. A cAMP pulse is initiated in the center. The time between each frame is 10 min. dx = 0.1mm, dt = 0.04 min. Each grid unit is $dx \times dx$ and the grid is 100×100.

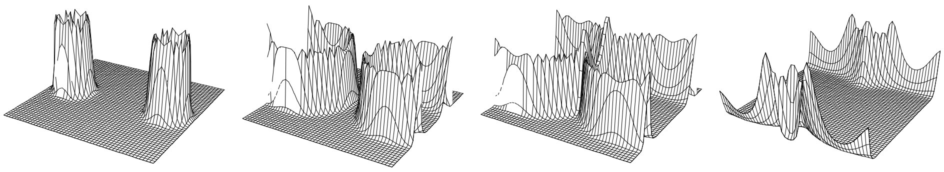

Fig. 4. Two colliding circular waves. Parameters as before. The time between each frame is 13 min. dx = 0.1mm, dt = 0.04 min, 100×100 grid.

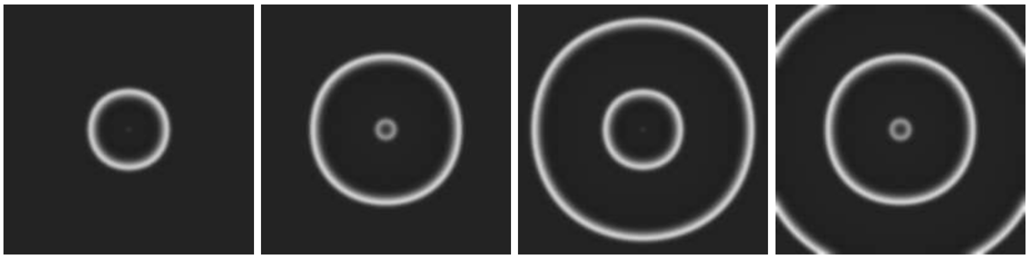

Fig. 5. Formation of a target pattern. Parameters as in Fig. 3. but here $\epsilon = 1.48$ in a region $4dx \times 4dx$ in the center. The time between each frame is 20 min. dx = 0.1mm, dt = 0.04 min, 200×200 grid.