Syllabus BIMM194: "The Gambling Cell"
Wednesdays, 10-11:30 am, York 3010
Associate Professor: Gurol Suel, Pacific Hall Room 2225
Office Hours: email gsuel@ucsd.edu to set up a time

Lect 1	Introduction to randomness in biology
Lect 2	Randomness at the single molecule level - enzymes
Lect 3	Randomness at the single molecule level – ion channels
Lect 4	Randomness at the single cell level
Lect 5	Case studies: Role of randomness in microbial differentiation
Lect 6	Case studies: Role of randomness in chemotaxis
Lect 7	Case studies: Role of randomness in microbial populations
Lect 8	Role of randomness in eukaryotic multicellular development
Lect 9	Role of randomness in mammalian cells
Lect 10	Role of randomness in evolution

Note: Specific research papers for case studies will be assigned prior to lecture.

Questions we will pursue:
-What is randomness in biology?
-How does randomness arise?
-What is the biological role of randomness?

Grading:
20%: attendance
50%: participation (includes asking questions if you do not understand the material)
30%: final: prepare one presentation as a small group (3-4 students per group)

Final: TBA