**COMPUTATIONAL AND SYSTEMS BIOLOGY (CSB)**

**CSB.100[J] Topics in Computational and Systems Biology**  
Same subject as 7.89[J]  
Prereq: Permission of instructor  
G (Fall)  
2-0-10 units  

Seminar based on research literature. Papers covered are selected to illustrate important problems and varied approaches in the field of computational and systems biology, and to provide students a framework from which to evaluate new developments. Preference to first-year CSB PhD students.  
*C. Burge*

**CSB.110 Research Rotations in Computational and Systems Biology**  
Prereq: Permission of instructor  
G (Fall, Spring)  
0-12-0 units  
Can be repeated for credit.  

Students carry out research rotations with MIT faculty members or principal investigators working in the field of computational and systems biology. Generally three one-month long rotations are pursued that together span theoretical and experimental approaches. Open only to CSB PhD students.  
*Staff*

**CSB.190 Research Problems in Computational and Systems Biology**  
Prereq: Permission of instructor  
G (Fall, Spring, Summer)  
Units arranged [P/D/F]  
Can be repeated for credit.  

Directed research in the field of computational and systems biology. Open only to CSB PhD students.  
*Staff*

**CSB.195 Professional Development in Computational and Systems Biology**  
Prereq: None  
G (IAP, Spring, Summer)  
Units arranged [P/D/F]  
Can be repeated for credit.  

Required for CSB students in the doctoral program to fulfill their professional development requirement through self-directed professional activities. Professional development activities include: internships (with industry, government, or academia); attendance at scientific meetings, MIT IAP events, or career fairs; participation in networking events or an entrepreneurship competition; training in teaching through the MIT Teaching and Learning lab; or the CAPD Path of Professorship. For an internship experience, prior authorization is required prior to enrollment; a report is required within two weeks of completion. Proposals subject to departmental approval.  
*E. Fraenkel, C. Burge*

**CSB.199 Teaching Experience in Computational Systems Biology**  
Prereq: Permission of instructor  
G (Fall, IAP, Spring)  
Units arranged [P/D/F]  
Can be repeated for credit.  

For qualified graduate students in the CSB graduate program interested in teaching. Classroom or laboratory teaching under the supervision of a faculty member.  
*Staff*

**CSB.THG Graduate Thesis**  
Prereq: Permission of instructor  
G (Fall, IAP, Spring, Summer)  
Units arranged  
Can be repeated for credit.  

Program of research leading to the writing of PhD thesis; to be arranged by the student and the MIT faculty advisor.  
*Information: Faculty Advisor*