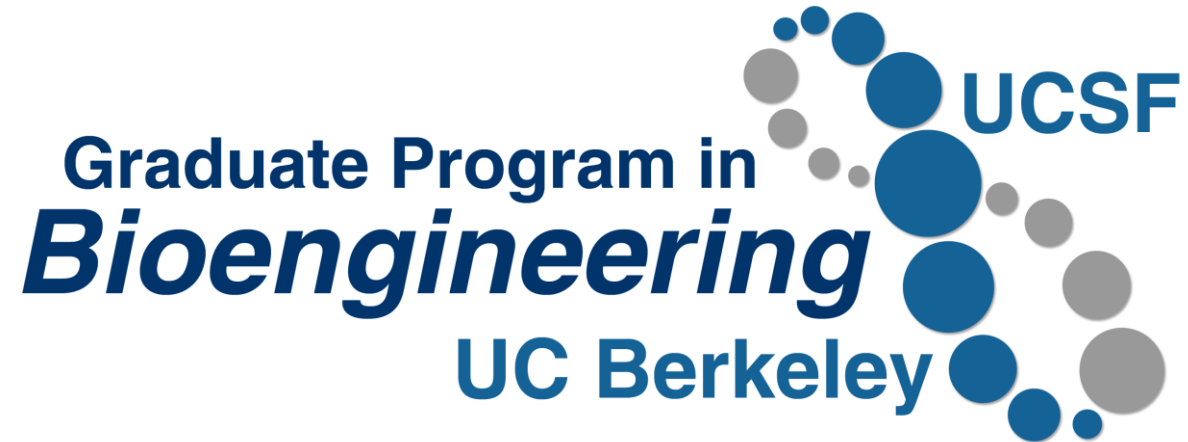


# Program Requirements



Jon Muncie and Dominic Tong

BEAST Co-Presidents

BioE Orientation 2018

# Overview

- Courses
- Rotations
- Retreat
- Teaching
- Qualifying Exam
- Dissertation Work
- What should you do right now?



# Courses – Area Requirements

Area	Semester Units	Quarter Units
Anatomy, Physiology and Biology	9	13.5
Biochemistry, and Chemistry beyond General Chemistry	3	4.5
Engineering in a traditional discipline and Computer Science	7	10.5
Mathematics (beyond linear algebra and differential equations) and Statistics	2	3.0

- Designed for *breadth*
- Undergraduate and Master's courses count!
- Major/Minor courses count
- **1 Semester Unit (Berkeley) = 1.5 Quarter Units (UCSF)**

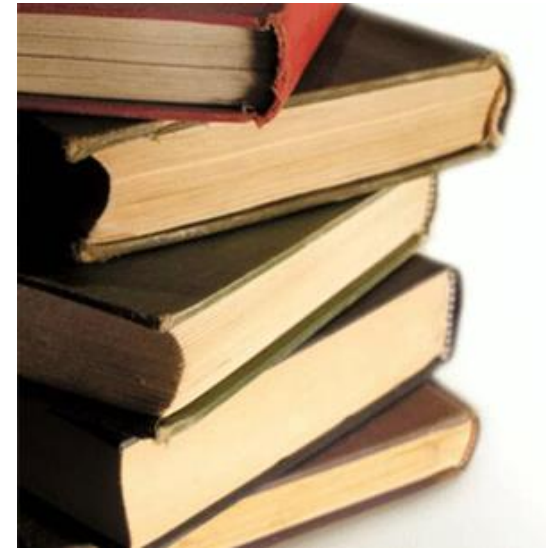
# Courses - Major/Minor

- Designed for *depth*
- Major: 16 Semester Units (UCB) / 24 Semester Units (UCSF)
- Minor: 8S / 12Q
- Resources:
  - UCSF Course Catalog ([coursecatalog.ucsf.edu](http://coursecatalog.ucsf.edu))
  - UCB Classes Guide ([classes.berkeley.edu](http://classes.berkeley.edu))
  - Academic advisors
  - Rotation professors
  - Peer advisors and older students!
  - **BEAST Wiki ([ucbeast.berkeley.edu](http://ucbeast.berkeley.edu))**



# Courses – First Year

- First Year Seminars: lab overviews and rotation opportunities
  - BioE 200 (UCB)
  - BioE 281 (UCSF)
- BioE 301 (UCB): Teaching Techniques for Bioengineering
  - Teaching
  - Fellowships
- BioE 201 (UCB): Responsible Conduct in Bioengineering
  - Ethics



# Rotations - Basics

- **THREE** rotations with **CORE** faculty are **REQUIRED**
- 1<sup>st</sup> Rotation: September 24 – November 19, 2018
- 2<sup>nd</sup> Rotation: January 3 – February 28, 2019
- 3<sup>rd</sup> Rotation: March 8 – April 26, 2019
- Dissertation lab selection: May 3, 2019
- Find core faculty at:
  - [bioegrad.berkeley.edu/faculty](http://bioegrad.berkeley.edu/faculty)



# Rotations - Philosophy

- “Academic dating”
  - Lab environment
  - Other lab members
  - Interesting research?
  - Advisor style
  - ***Is there a FUNDED spot available for me?***
- Opportunity to try different labs/fields





# Selecting a Lab

- Relationship with PI
- Available projects
- Engineering vs. Basic Science vs. Clinical Science
- **Available funding – it's not rude to ask!**
- Lab culture/lab members
- Goals, timeline, location, etc.





# Funding

- First year is fully funded by BioE or fellowship
- Minimum stipend level:  
    **\$37000** (2017-2018)
- After first year: P.I. or fellowships



# Teaching

- GSI = Graduate Student Instructor
- Must GSI at least 1 class
- Most do this 2<sup>nd</sup> or 3<sup>rd</sup> year
- Announcements from SarahJane and Kristin – watch your emails!



# Qualifying Exam

- Milestone event!
- Propose and defend immediate 1-2 year research project
  - Written proposal
  - Oral presentation
- Completed by Fall of 3<sup>rd</sup> year
- 4 committee members
- BESTs – BioEngineering Student Talks to help you practice



# Dissertation

- Do your research!
- Dissertation – write the manuscript of your PhD
- Exit Seminar – talk about your work and your experience!



# What should you do right now?

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- Get your UCB ID and UCB bus pass
- Register for classes
- Start planning your rotations
- Residency
- Register for retreat
- Prepare for fellowship applications

# Get your UCB ID and Bus Pass

- UCB ID: Cal1 Card Office on Lower Sproul Plaza
  - Bring a valid government-issued ID and your student ID number
- AC Transit Bus Pass: [pt.berkeley.edu/transportation-options/public-transportation-passes-and-info/ac-transit-student-classpass](http://pt.berkeley.edu/transportation-options/public-transportation-passes-and-info/ac-transit-student-classpass)
  - Also functions as a Clipper card
  - Register for classes first





# Register for classes

- For classes at UCB (Fall and Spring **semesters**):
  - [calcentral.berkeley.edu](http://calcentral.berkeley.edu)
- For classes at UCSF (Fall, Winter, and Spring **quarters**):
  - [saa.ucsf.edu/studentportal](http://saa.ucsf.edu/studentportal)

Unit requirements	UCB Units	UCSF Units
UCB home campus	≥ 12 units every semester	Only when you take UCSF courses
UCSF home campus	≥ 1 unit every semester	≥ 8 units every quarter

# Start planning rotations

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- Get information for rotation 1
  - Talk to other students, your peer advisor, your graduate advisor, administrators, faculty, everyone!
  - Meet with potential rotation mentors
  - Now is your chance to meet faculty
- Rotations 2 and 3: having an idea of what you want to do is great
  - If you don't yet, that's fine too. You will meet many students and faculty in the months to come

# Start planning rotations

- Mark your calendars: Gladstone Orientation
  - Wednesday, September 26
  - 10:30am-11:00am = Lab Tours/Core Tours (optional)
  - 11:00am-12:00pm = Brunch served, meet Gladstone faculty & grad students
  - 12:00pm-12:30pm = Lab Tours/Core Tours (optional)



# Get residency done

- Must become a California resident by establishing continuous presence in California for at least 1 year before Fall 2019
- File a Statement of Legal Residence (SLR) now
  - UCB: [bearfacts.berkeley.edu](http://bearfacts.berkeley.edu) -> “SLR”
  - UCSF: [registrar.ucsf.edu/new-students/registration](http://registrar.ucsf.edu/new-students/registration) for instructions
- Collect documents
  - Evidence of arrival (airline tickets, gas receipts)
  - CA driver’s license, vehicle registration, voter registration card
    - Anticipate LONG lines at the DMV
  - CA bank statements, rental agreement
  - Prior year tax forms (federal and state)
- UCSF Grad Division sends email reminders throughout fall – should have received first one
  - Includes checklist of steps to take



# Annual Retreat



# Register for retreat

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- October 26-28, 2018
- Asilomar Conference Grounds, Pacific Grove, CA
- Research talks, networking, find rotations, make friends
- First year attendance is free for you, required, and awesome.
- Register here: <https://goo.gl/forms/ywmguyJiesOzoluc2>





# Getting funding

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- BioE 301
- Terry Johnson: <http://www.terrydjohnson.com/fellowships>
  
- NDSEG
- NSF GRFP – only if you did not apply in your first year
- Hertz Fellowship – in cases of "exceptional leverage"
  
- Field-specific fellowships and grants – ask your PI and around your lab
- UCSF Grad Division Fellowships – if UCSF-based, easy application
  
- Email digests from [Berkeley](#) Engineering and [UCSF Grad Division](#)

# Resources

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- These slides are at <http://ucbeast.berkeley.edu/academic-resources/first-year-information/>
- Advice for students, by students: [ucbeast.berkeley.edu](http://ucbeast.berkeley.edu)
- Official program information: [bioegrad.berkeley.edu/handbook](http://bioegrad.berkeley.edu/handbook)

# More questions?

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- For an older student perspective, ask your peer advisors
  - Or, just ask other BEAST students!
- BEAST Wiki contains useful slides and collected information from all BEAST students
- Graduate and faculty advisors
- SarahJane or Kristin

Peer Advisor	PI	Lab Members	Rotation Insights	Peer Advisor	PI	Lab Members	Faculty Advisor
Faculty Advisor	Course Progress			Faculty Advisor			
1 <sup>st</sup> Year Kristin!	Beyond 1 <sup>st</sup> Year PI or Lab Admin	Salary Payment		1 <sup>st</sup> Year SarahJane!	Beyond 1 <sup>st</sup> Year PI or Lab Admin		
1 <sup>st</sup> Year Kristin!	Beyond 1 <sup>st</sup> Year PI or Lab Admin	UCB Grad Division	Fee Issues	1 <sup>st</sup> Year SarahJane!	Beyond 1 <sup>st</sup> Year PI or Lab Admin	UCSF Grad Div	
SarahJane!	Training Grant Hiring/Tracking			SarahJane!			
For yourself Spread-sheet	All Years Kristin!	Coursework Tracking/Recording		For yourself Spread-sheet	All Years SarahJane!	Advising Faculty Advisor	