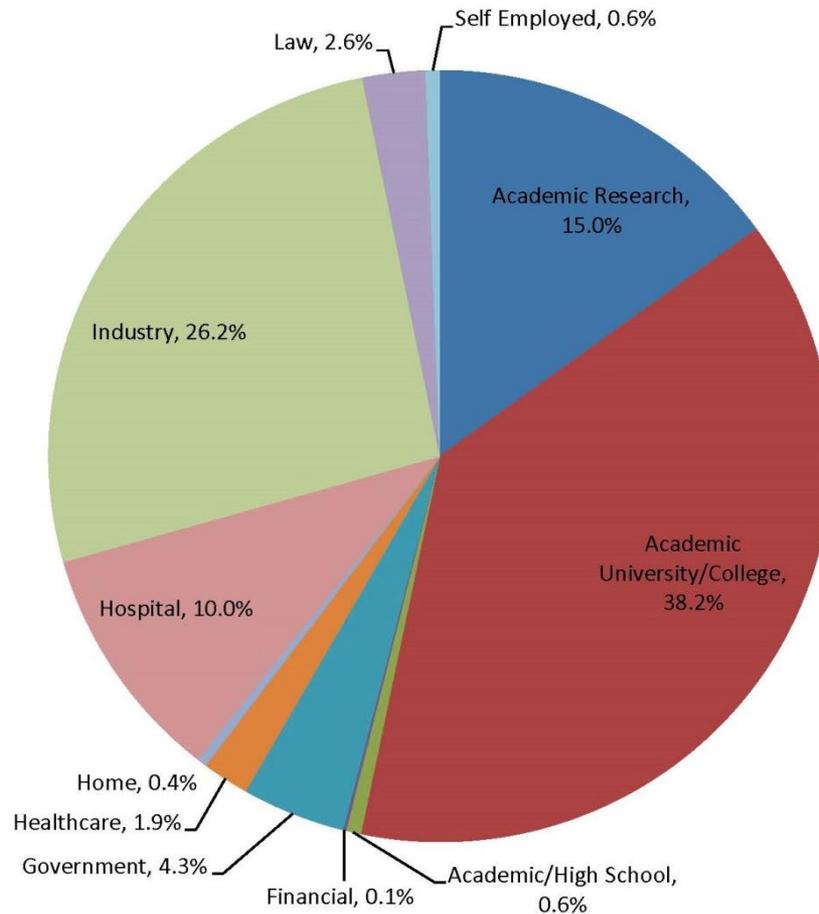




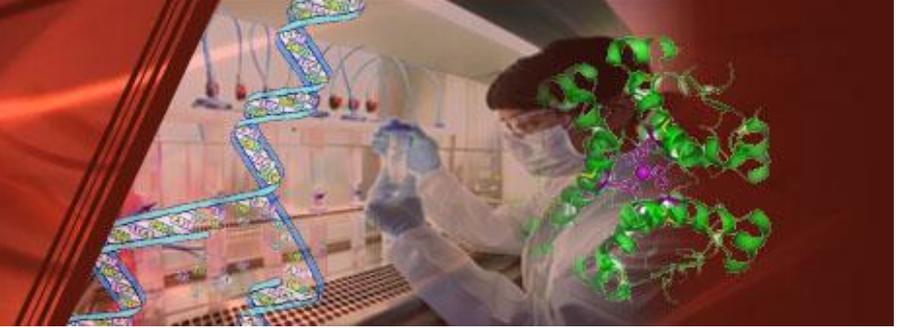
Changing Landscape





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Student Directions:

- Biotechnology
- Consulting
- Education & Public Outreach
- Law
- Policy
- Science Writing/Publishing



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Challenges:

- Institutional validation.
- Educating students concerning opportunities.
- Preparing students for a career path.
- Mentoring and networking for non-academic careers.



Approach

- Faculty & institutional buy-in.
- Establishment of a Path program for each career track.
- Associated Courses to prepare & develop CV.
- Networking & mentoring events.
- Alumni/associates assisting in job identification.
- Monitoring student progress (IDPs).



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Framework for each PATH

1. Student directed. (Important!)
2. Career Course(s).
3. Path-specific activities.
4. Certification/legitimation.
5. Networking & mentoring opportunities with alumni.



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(2) Biotech Path Course:

DMS presents a new quarter course:

Drug Development: From Concept to Commercialization

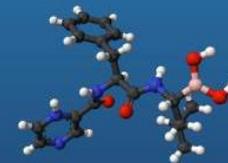


Spring 2013, April-June

This course is intended to provide exposure to the diverse aspects of the drug development process. The proteasomal inhibitor Velcade will be used as an exemplar, though the themes of discovery, development, manufacturing, business development, commercialization, and growth are relevant across most therapeutics. Lectures will be by industry leaders directly involved in the development of Velcade. Each session will be a 1 hour lecture followed by a 1 hour group discussion.

Outline of Sessions:

1. Overview of Velcade (4/23; 4-6pm)
2. Proteasome Research (4/29; 4-6pm)
3. Drug Discovery: Timelines, organization, assays, screens, chemistry, and pharmacology (5/9; 5-7pm)
4. Development: Clinical trials and regulatory approval (5/14; 5-7pm)
5. Manufacturing: Scaling, cGMP, and outsourcing (5/21; 4-6pm)
6. Commercial Launch (TBD)
7. Business Development (6/3; 4-6pm)
8. Longterm Growth (6/10; 4-6pm)
9. Patient Perspective (TBD)
10. Overall Review (6/25; 3-5pm)



***HBTM 304qc.** (Enrollment: Limited to 50)

Catalog Number: 83871

Course director: Michael Goldberg

[Michael_Goldberg1@dfci.harvard.edu]

This course will meet once a week, for 10 consecutive weeks at the times and dates above. Open to all HILS students.



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(3) Paths activities Science Writing:



**Journal of
Emerging Investigators**
...where students become scientists.

Home About Articles Guidelines Submit Resources Support Contact

Dive into Science.

JEI is a scientific journal for middle and high school scientists.

Now accepting submissions!

Check out our [submissions guide](#) for info.

Featured Scientist


3A- Control


1A- Glad


1B- Biodegradable

Appearance of apples at Day 4:







The Author's Take: Catherine Zhang

Learn about one student author's take on the JEI experience

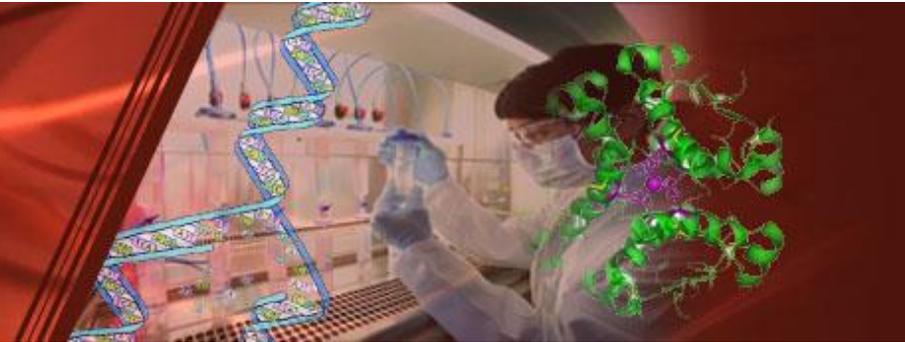
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[Science News & Events](#)

[Latest JEI Research Papers](#)



(4) Education certification: SEAL

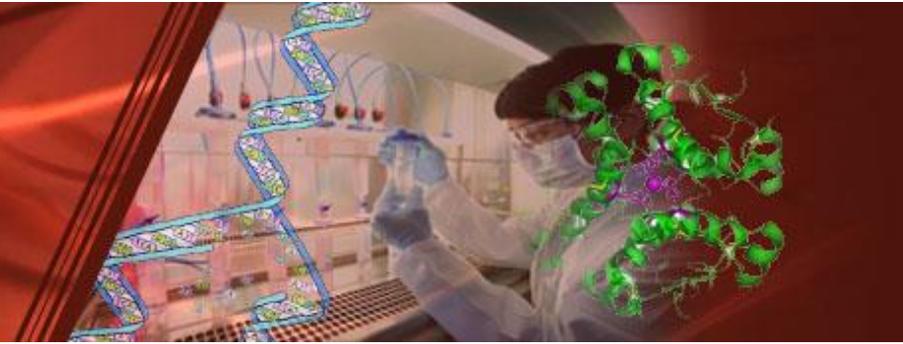
Science Education & Lecture Program

- Provides graduate students with the opportunity to develop curriculum, teach, and obtain feedback on their teaching.
- Students paired with local university faculty members teaching undergraduate-level science (or science-related) courses.
- Certificate awarded upon completion



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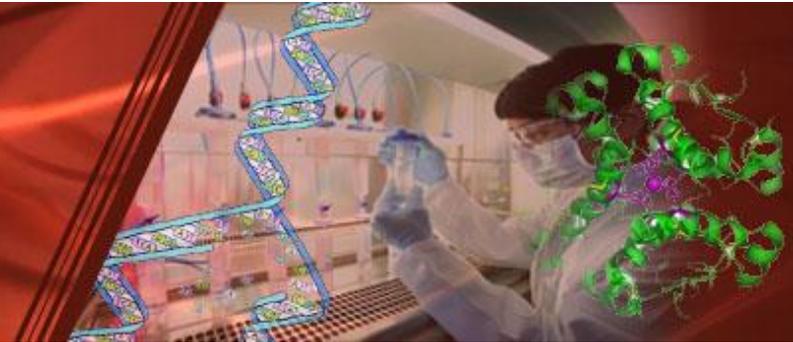
(5) Path Activities: science policy

- Visits Executive branches of government & non-profit organizations
- 9 Agencies: EPA, White House Office of Science & Technology Policy, Department of Defense
- Networking event with alumni in government



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Enriching graduate education.



Policy Path in front of the White House