Session 2: Entrepreneurial Pathways to a Successful Career
Broadening Experiences in Scientific Training (BEST) Program:

Rethinking training for Cornell STEM graduate students and postdoctoral scholars... *why*?

Because a majority will end up working beyond academia. It’s time to rethink, retrain, and be ready for tomorrow’s careers.
BEST Mission

Enhance training opportunities for STEM Ph.D.s & postdoctoral scholars to prepare you for the careers that could take you beyond conventional academic research.
Cornell BEST Program

- Mentoring
- Communication
- Science Policy
- Industry, Entrepreneurship & Management
- Governance, Risk & Compliance
BEST participants

By college

- CALS: 37%
- ENG: 22%
- CVM: 15%
- CHE: 8%
- A&S: 13%

By field/dept

- MBG: 26
- BBS: 23
- BME: 20
- DNS: 16
- PLSCI: 11
- CCB: 9
- CBE: 6
- CBE: 6
- EEB: 5
- EEB: 5
- M&I: 4
- NBB: 4
- BEE: 3
- CCB: 3
- M&I: 1
- CBE: 1

Grad student: 83%
Postdoc: 17%
Two levels of participation

• The ‘Sampler’
  – Learn more about different career possibilities with your PhD degree
  – Acquire knowledge about the skills required in each career pathway
  – Decide whether the pros and cons mesh with your own career objectives
Career Panel Discussions

Broadening Experiences in Scientific Training

Careers in Industry, Entrepreneurship, and Management

Wednesday, November 19
10:00 - 11:30 AM • 700 Clark Hall

Panel Discussion Featuring

BJ Bormann
CEO & Director, Harbour Antibodies BV,
Previously Senior VP, Boehringer Ingelheim & VP, Pfizer

David Putnam
Professor of BME and CBE, Cornell

Stephen P. Smith
General Manager & VP of Business Development, CYC Tech Valley

Chris Thomas
CTO, Widertronix

Careers for PhDs in Governance, Risk and Compliance

Wednesday, February 25
2:00 PM
700 Clark Hall

Panel Discussion Featuring

Tony Eisenhut
President of Rheonix, co-Founder of KensaGroup

Alexis Brubaker
Biosafety Officer at Cornell University

Amit Lal
Associate Professor in ECE at Cornell, previously Program Manager at DARPA

Denise Archer
Quality Assurance Manager, Animal Health Diagnostic Center, Cornell University

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www.BEST.cornell.edu

Contact: Susi Varvayanis sv27@cornell.edu
• Individual Development Plan: ScienceCareers myIDP
• Take advantage of existing workshops @ Graduate Career Services, CIRTL & Office of Postdoctoral Studies
• Attend events: CTL: IP&Pizza, E@C: Celebration, REV, MedTech see www.BEST.cornell.edu/events
• Join a club: ASAP, CGCC, TEC
• Take courses: SciPol Bootcamp (BME 4440); COMM 5660; BME5950: BSL Business as a 2\textsuperscript{nd} Language (overview of key business topics & management life skills)
Two levels of participation

• The ‘Sampler’
  – Learn more about different career possibilities with your PhD degree
  – Acquire skills in each career pathway

• The ‘Lingo’
  -- In depth exposure and practice of the skills
  -- Longer term or more intensive hands-on talent development
GET EXPERIENCE and CREDIBILITY

• Over 70 courses across Cornell in Entrepreneurship → credit
• Online offerings in Six Sigma, Lean, QA/QC, Biopharmaceutical, Regulatory affairs, Medical devices → certificate
• Enter a business plan or case competition
• Apply for a seed grant (CAT, NEXUS, SBIR...)
• Start a company!
• Internship → experience
Pre-Seed Workshop

[Diagram with nodes and connections representing different roles and concepts such as Business acumen, Idea-Champion, Technical acumen, Venture/Start-up coach, Patent/technology + Basic application concept, Commercialization, etc.]

Value Add
- Community economic development
- Tech Transfer member
- “Start-up” lawyer, etc.

http://www.preseedworkshop.com
• leadership & management courses, or in entrepreneurship across campus
• invite and interact with industry speakers
• spend a rotation in a lab that has created a startup
• participate in a Pre-Seed Workshop (PSW) to learn how inventions are commercialized
• conduct prior art searches and develop claims for a patent deposition with an intellectual property lawyer
• attend career fairs, seminars and other events on & off campus
• participate in case or business competitions
• develop your industry resumé
• internship with a life sciences startup, CTL or venture investment firm

Susi Varvayanis
Hallmarks of the Cornell BEST Program

• Flexible
  – No requirements
  – As much time as you have to devote
  – Ready when you are
  – Suggest your own ideas for career preparation

• Experiential
  – Apply what you learn
  – Customize it to fit your needs
  – Write it on your resume
How to get involved in BEST:

How do I get started in the BEST Program?

1. Fill in the survey/application to help guide us on your needs and interests. (See “About us” tab)
2. Join our BEST LinkedIn Group
3. Ask to be added to our BEST Listservs based on the tracks you are most interested in. This is done automatically if you have filled in a survey/application.
4. Visit the www.BEST.cornell.edu webpage frequently
5. Start or refine your individual development plan
6. Take advantage of CTL, E@C, & REV events!
When you are ready:

• Attend events, enroll in courses
• Schedule an individual consultation
• Customize your BEST experience for your needs
E@C Internships

- Gain essential paid experience in small to mid-sized businesses located throughout the US and abroad: begin in late May or first week in June--10 weeks
- Go to http://eship.cornell.edu/internships/
- Begin by reading the Student FAQ and the Internship Handbook
- Contact Internship Director Debra Moesch at 607-254-2802 or dlm8@cornell.edu 375 Warren
- Submit Application
BEST by the numbers...

• New courses developed: 3, each held 1-4 times a year
• Clubs started and supported: 5
• Workshops, Seminars and Career Panel Discussions: 28
• Number of events initiated by BEST Trainees: 18
Thank you to sponsors

- National Institutes of Health (NIH) DP7 OD18425
  $1.8 million 5 year grant
- Cornell’s Graduate School
  Senior Vice Provost & Dean Barbara Knuth
- College of Veterinary Medicine
  Dean Michael Kotlikoff
- College of Agriculture and Life Sciences (CALS)
  Dean Kathryn Boor
- College of Engineering
  Dean Lance Collins
- College of Art & Sciences
  Dean Gretchen Ritter
- College of Human Ecology
  Dean Alan Mathios
Cornell BEST Program

Contact information

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www.BEST.cornell.edu
Additional slides about Cornell BEST

To get your creative juices flowing and inspire you to sculpt your own career trajectory...
Science Communication

Scientific writing, editing, and media skills

- weekend science communication workshop
- coursework in journalism; media training workshop
- write a press release, develop a podcast or blog
- externship with a science museum, botanical garden, or advocacy organization
- internship with Cornell Chronicle, Lab of Ornithology
- write a press release or op ed
- give oral presentations of your research to lay audiences
- submit an article to a trade magazine; write a review of the literature in your field
- AtlantaBEST magazine article, WIRED magazine, NPR, SciFri…
Learn how to assess bioterrorism risk

- externship with the Food and Drug Administration or Centers for Disease Control
- visit biocontainment facilities and learn how they’re run
- workshops on quality assurance, good lab practices
- risk assessment project
- write an SOP, understand GLP certification and compliance
- coursework in governance, risk and compliance
- connect with Homeland Security to investigate pathogens considered bioterrorism risks
- internship in a Quality Control department in a company (food, brewing, chemical, biomedical device or other industry)
- explore employment options in federal and state government agencies
- BESTernship with Cornell’s Environmental Health & Safety
Learn how policy is created

- Externship in Albany over spring break
- Take a course in science policy
- Prepare and pitch a bill for congressional consideration
- Participate in answering the questions that the Department of Health or the Department of Environmental Conservation answer to guide elected officials
- Translate for politicians Cornell research in public health, the environment, or energy
- Ultimately get placed in a state or federal agency as a Fellow

Chris Schaffer