

IAP 2015

For Credit

Introduction to Molecular Biology Techniques

7.396: Independent Study in Experimental Biology

For Credit:

Level: U

6 units (0-4-2)

Graded P/D/F

Can be repeated for credit. Fee: \$100.00

See "[The Art of Microbiology](#)" from the MIT News office (IAP 2012).

Instructors: Dr. Mandana Sassanfar, Dr. Jana Hersch,

Non-Credit

Plasticity in Development, Disease & Evolution

Histone Methylation Dynamics, Recognition, and Link to Human Disease

Yang Shi, Professor, Boston Children's Hospital, Cell Biology Department, Harvard Medical School,
American Cancer Society Research Professor

Wednesday January 7th, 1pm-2pm, McGovern Auditorium, Whitehead Institute

Immune and Neural Epigenomics of Alzheimer's Disease

Li-Huei Tsai, Professor and Director, Picower Institute for Learning and Memory, Department of Brain and
Cognitive Sciences, Massachusetts Institute of Technology

Monday, January 12th, 1pm-2pm, McGovern Auditorium, Whitehead Institute

Dynamics of Protein and RNA Expression in Developmental Systems

Marc Kirschner, Professor and Chair, Department of Systems Biology, Harvard Medical School

Monday, January 26th, 1pm-2pm, McGovern Auditorium, Whitehead Institute

Adaptation of Meiosis to Whole Genome Duplication

Kirsten Bomblies, Associate Professor of Organismic and Evolutionary Biology, Harvard University

Wednesday, January 28th, 1pm-2pm, McGovern Auditorium, Whitehead Institute

Sampling of Careers in Biology

Marketing Yourself Effectively for Non-Research Career Opportunities

Dora Farkas, PhD, Founder of www.Finishyourthesis.com
Robert Dolan, Career Counselor, Career Advisor, MIT Postdoctoral Scholars

Pursuing a non-research based career can seem like such a gargantuan task for many PhD holders, especially in today's highly competitive workplace. The aim of this workshop is to teach PhD holders how to best leverage their academic research experience and talents. We will be discussing topics such as "how to maximize your networking success at an event and by using social media", "how to stand out in your interview", and "how to concoct that perfect hard-to-miss resume/cover letter".

Tuesday, January 6th, 1pm to 3pm, 76-156

[Slides and handouts from this talk can be downloaded here](#)

Education and Outreach

Megan Rokop, PhD Associate Director Honors College Faculty Member, Honors College at University of Massachusetts Boston

Mary Ellen Wiltrout, PhD, MITx Technical Instructor/MITx Curriculum Development Specialist for Biology

Mareshia Donald, PhD, Education/Diversity Program Manager MIT Center for Emergent Behaviors of Integrated Cellular Systems

Benjamin Kotrc, Ph.D., Education/Public Outreach Lead (MIT NASA Astrobiology Team) and Postdoctoral Associate (Summons Lab at MIT)

Do you enjoy teaching and helping people learn? Come hear about careers that are focused on science education and science outreach and learn how you can share your love of science with the public.

Thursday, January 8th, 1pm to 3pm, McGovern Auditorium, Whitehead Institute

Science Policy

Michael A. Simon, PhD, Principal Data Scientist, Arcadia Healthcare Solutions

John Randell, PhD, Program Officer for Science Policy, American Academy of Arts and Sciences

Laura Maliszewski, PhD, Executive Director, Harvard Program in Therapeutic Science and the Laboratory of Systems Pharmacology

Bina Venkataraman, Director of Global Policy Initiatives, The Broad Institute of MIT & Harvard

A scientist's skills need not be applied only to the lab and classroom. Come find out how scientists can employ their expertise in government and policy agencies, playing a role in shaping research infrastructure and public perception and understanding of science!

Wednesday, January 14th, 10am to 11:30am, 76-156

A Career in the Biotechnology Industry

Brenda Minesinger, Research Scientist, Biogen Idec

Reshma Shetty, Co-founder, Ginkgo Bioworks, Inc.

Jason Merkin, Research Investigator, Novartis

Peter Demuth, Senior Scientist, Vedantra Pharmaceuticals

Are you considering a job in the biotechnology industry or wondering about the differences between academic and industry labs? Join us for an exciting Q&A session with a panel of scientists representing different areas of industry, and find out whether industry is right for you.

Wednesday, January 21st, 1pm to 3pm, McGovern Auditorium, Whitehead

Science Communication

Heidi Ledford, Science Writer, Nature
Seth Mnookin, Assistant Professor, MIT Graduate Program in Science Writing
Heather Goldstone, Science Editor, WCAI and WGBH News
Cynthia Barber, Medical Writer, Vertex Pharmaceuticals

Science is communicated to entertain, inform, and persuade audiences through many media types. Come learn about the careers and experiences of four accomplished and diverse professionals that communicate science on a daily basis.

Thursday, January 22nd, 1pm-3pm, 68-181

A Career in Venture Capital/Entrepreneurship

Ezequiel (Zeke) Alvarez-Saavedra, Co-founder of Amplyus
Kate Moreau, Senior Associate at RA Capital Management
Geoffrey von Maltzahn, VentureLabs Partner at Flagship Ventures
Ali Williams, Business Development Manager, Pronutria

The business of biology is booming! This seminar features entrepreneurs and venture capitalists who suggest the best way to merge Biology with business. Come listen and speak with PhDs who have made the transition from bench work to the business world.

Tuesday, January 27th, 1-3pm, 68-181

Careers in Patent Law

Nishla Keiser, PhD, Attorney at Law, Finnegan, Henderson, Farabow, Garrett & Dunner, LLP
Grace I. Wang, PhD, Patent Agent, Ropes & Gray LLP
Crystal Lee Kellas, PhD, Technology Specialist, Patent Agent, Lando & Anastasi Law, LLP
Kristin Konzak, JD, PhD, Senior IP Counsel, The Broad Institute

The field of intellectual property is growing quickly and opening new career paths for scientists. Our panelists are all PhD holders who have successfully leveraged their scientific background to understand cutting-edge technologies and communicate scientific facts in a legal framework. We will be discussing career options available within general & boutique law firms, pharmaceutical companies, as well as universities and research institutes.

Thursday, January 29th, 1-3pm, Whitehead Auditorium

Opportunities in Consulting

Seth Berman, Senior Engagement Manager, ClearView Healthcare Partners
Brenda Goguen, Consultant, Clarion Healthcare
Jennifer Hou, Life Sciences Consultant, L.E.K. Consulting

Join us to learn more about exciting career opportunities in consulting! Our amazing panelists are former PhDs who have successfully made the transition from the benches of biological sciences to the world of

business.

Friday, January 30th, 1-3pm, 68-181

Taking the Next Step in Academic Science

The Path to Faculty: Careers at Primarily Undergraduate Institutions

Melanie Berkmen, Associate Professor of Chemistry and Biochemistry, Suffolk University, Boston
Geoff Findlay, Assistant Professor of Biology, Holy Cross, Worcester
Danna Zeiger, Assistant Professor of Biology, Fisher College, Boston
Craig Story, Professor of Biology, Gordon College, Wenham

Are you planning to apply for an academic job? Are you considering a more teaching oriented career? Find out about career options at primarily undergraduate institutions, where professors dedicate much of their time to teaching yet also manage their own research programs and mentor students. Learn about this rewarding career path from a panel of faculty members at teaching colleges.

Tuesday, January 13th, 1pm to 3pm, 68-181

Postdoctoral Positions in Academia and Beyond

Iain Cheeseman, Associate Professor of Biology, MIT, Member, Whitehead Institute
Sebastian Lourido, Fellow, Whitehead Institute
Mohini Jangi, Postdoctoral Scientist, Biogen
Joya Mukerji, Curriculum Fellow, Harvard University

Join us to learn more about the wide variety of postdoc positions available to Biology PhDs! The panel will feature experiences about life as an academic postdoc, research fellow, industry postdoc, and teaching fellow.

Thursday, January 15th, 1pm to 3pm, 68-181

Work-Life Balance

Dennis Kim, Associate Professor, Department of Biology at MIT
Celeste Peterson, Assistant Professor, Department of Biology at Suffolk University
Justin Slawson, Postdoctoral Fellow, Biogen Idec
Natalie Kuldell, Instructor, Department of Biological Engineering at MIT and President at The BioBuilder Educational Foundation

Ever wonder how you can have a fulfilling career without having to sacrifice your interests outside the lab? Our panelists will discuss the impact of decisions they have made in their home and professional lives. The discussion will be all the richer with participant questions, so please join us!

Friday, January 16th, 1pm to 3pm, McGovern Auditorium, Whitehead Institute

The Path to Faculty: Careers at Research Institutions

Laurie Boyer, Associate Professor of Biology, MIT
Win Chai, Assistant Professor of Microbiology, Northeastern University
Jeff Guasto, Assistant Professor of Mechanical Engineering, Tufts University
Terry Orr-Weaver, Professor of Biology, MIT, Whitehead Institute

The panelists will discuss their experience in applying and starting as faculty members in research universities. Junior and senior faculty members will discuss the selection process from the perspective of being a candidate for faculty themselves and selecting other applicants for a faculty position.

Tuesday, January 20th, 1pm to 3pm, 68-181

Postdoctoral Fellowships

Mitch McVey, PhD, Associate Professor, Tufts University Department of Biology

Kirk Burkhardt, PhD, Postdoctoral Fellow, MIT Department of Biology (Horvitz lab)

Mohammed Shabab, PhD, Postdoctoral Fellow, MIT Department of Biology (Walker lab)

David Bartel, PhD, Professor, MIT Department of Biology

This panel discussion will address the pursuit of postdoctoral fellowships. Panelists include past and present recipients of fellowships and reviewers of fellowship applications, providing a broad perspective on best practices for acquiring postdoc funding.

Friday, January 23rd, 1pm to 3pm, 76-156