



hms | hsdm

office for postdoctoral fellows

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Teaching & Pedagogy Training for HMS Postdoctoral Fellows

Elements of Teaching: Preparing for a Teaching Career in STEM (1.5h)

Speaker: Jennifer Herman, PhD, Director, Center for Excellence in Teaching, Simmons College

Workshop Description: In this session, participants will reflect on and discuss previous teaching experiences and career goals related to teaching, brainstorm and analyze knowledge, skills, and attitudes needed to secure a position and thrive as a faculty member in a teaching-centered institution, and identify areas in which they would most benefit from further professional development. Participants will create an action plan in the session for their own continued professional development around postsecondary teaching, and they will experience and reflect on several active learning techniques that will be modeled throughout the session.

Simmons/HMS Teaching Institute (4d)

Facilitator: Jennifer Herman, PhD, Director, Center for Excellence in Teaching, Simmons College

Course Description: This Institute on college teaching is designed to equip postdoctoral fellows in the STEM professions with the knowledge and skills needed to prepare them to teach and design undergraduate courses in a PUI or teaching-focused institution. The curriculum integrates a discussion of theory and current research related to teaching in higher education with actual practice. Participants will be actively engaged in designing and delivering multiple lessons using best pedagogical practices, including theory and application in their particular discipline. Participants will work collaboratively throughout the Institute to discuss readings, provide peer feedback, reflect on their experiences and course content, and build a teaching toolkit through hands-on experiences.

The participants will hear from leaders in the field and build a tool kit that will help trainees successfully navigate an academic appointment in STEM Higher Education. This institute will provide the knowledge and skill set needed to succeed and advance in a tenure-track position. Individual participants will gain confidence and leadership that will allow them to transform the culture as they advance through academia.

Participant Learning Outcomes: After completing this course, participants will be able to:

- Analyze, share, and reflect on theories of student learning;
- Discuss and reflect on a variety of college teaching methodologies;
- Apply the backward course design model to lesson development;
- Apply a variety of teaching techniques to enhance student learning;
- Reflect and discuss the influence of the STEM professions on teaching theory and practice;
- Design and deliver a lesson in their discipline based on best pedagogical practices;
- Incorporate reflective practice into their work;
- Explain common challenges in navigating STEM academia;
- Develop peer and professional networks in STEM academia.



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Scientists Teaching Science Online Course (9wks)

Course Director: Barbara Houtz, *STEM Education Solutions, LLC*

Description: Are you interested in teaching, but your students doze off during your lectures? Do they have a hard time answering the questions you ask? Do you find yourself wondering if there's a different way of teaching science than just talking to them and showing them slides and illustrations? How can you tell if your students really understand the information or have memorized vocabulary terms? Take the online course "Scientists Teaching Science" and learn about active learning, creating course objectives and test items, and finding ways to improve your teaching and assessment techniques for students of all ages. Learn the latest research-based techniques used by model instructors around the world. The asynchronous course is available 24/7 on any web-enabled device. Unlike other online courses, one-on-one engagement, personal review of written assignments, and personalized advice on teaching is guaranteed! There are also scheduled discussions where you can meet with the instructor in a webinar. The time needed to complete all readings and activities is estimated to be about 3 hours a week. All participants who complete the course requirements will be eligible for a personal letter of recommendation from the instructor about teaching preparation for future employment.

Academic Teaching Careers Panel (2h)

Panelists: Various faculty from primarily undergraduate institutions (PUI) across New England

Description: In this facilitated discussion, panelists whose work balances research, teaching and administrative responsibilities will share insights from their work at various academic institutions. The expertise on this panel will also attendees to learn more about transitional post-docs that support teaching skills development. Our confirmed panelists come from Bunker Hill Community College, Harvard Medical School, Simmons College and Wellesley College.

Crafting Effective Teaching & Diversity Statements (2h)

Speakers: Mitch McVey, PhD Associate Professor of Molecular Biology, Tufts University | Kathy Takayama, PhD formerly of the Center for Advancing Teaching and Learning Through Research, Northeastern University

Description: Attendees for these back-to-back seminars will have the opportunity to interact with experts from Tufts University and Northeastern University who have extensive experience delivering workshops on writing teaching and diversity statements.