



Dr. Elizabeth Shane ([es54@cumc.columbia.edu](mailto:es54@cumc.columbia.edu))  
Mondays, 1pm - 1:50pm



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### Research at P&S Seminar Series (RSRH 7202) – Spring 2020

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**Course objectives:** This 1.5 year-long, 2 credits, “open campus” course exposes medical students to cutting edge research and ideas generated by researchers throughout Columbia University. It is also designed to provide students with an opportunity to 1) hone their research interests and understanding, 2) envision trajectories where they can integrate their research and clinical aspirations, 3) identify a network of potential mentors and colleagues who may play important roles in their thesis and career development, and 4) refine their understanding of the features of high quality presentations.

**Student audience:** Matriculated P&S students interested in research

**Requirements for Credit Toward the MD/MS in Biomedical Science Degree:**

1. Attendance at 10 or more **Research at P&S Lecture Series (“RAPS”)**. This 3-semester series is designed to expose P&S students in the Fundamentals phase of the curriculum to some of the most exciting research being performed on the Columbia campuses. It is open to all P&S students and is scheduled over lunch to avoid other conflicts in the curriculum.
2. Attendance at 40 additional seminars/grand rounds/talks on any academic campus over the course of the Fundamentals phase of the curriculum.
3. Each seminar must be recorded in one notebook (provided by the MD/MS director) with date, title, name of speaker, and include notes (1 page) about the talk. Students should score each lecture according to a rubric such as the CARIE scale shown below; however, students may adapt this or develop their own rubric.
4. Students should submit their notebooks with their 50 (or more) seminar notes by the end of their Fundamentals phase (December of second year).

***The CARIE scale***

- C: Clarity, content, and providing context (significance)
- A: Approach applied to answering question
- R: Research goals
- I: Insight
- E: Engagement of audience

**Monday, January 6, 2020**

**Hiroo Takayama, M.D., Ph.D.**, Director of Cardiovascular Institute, Co-Director, Aortic Program, Co-Director, Marfan Clinic, and Co-Director, HCM program, Division of Cardiac, Vascular & Thoracic Surgery.

**Title: Outcome Research in Cardiac Surgery: Challenging the Limit of Student's Centered Research**

Faculty Profile: <http://columbiasurgery.org/node/1363/researcher>

**Monday, January 27, 2020**

**Andrew Marks, M.D.**, Professor of Physiology and Cellular Biophysics, Founding Director of the Wu Center for Molecular Cardiology and the Chair of the Department of Physiology

**Title: Treating Complex Diseases with a Reductionist Approach**

Faculty Profile: <http://www.markslab.columbia.edu/index.php.html>

**Monday, February 3, 2020**

**Megan Sykes, M.D.**, Michael J. Friedlander Professor of Medicine and Professor of Microbiology & Immunology and Surgical Sciences (in Surgery) and Director, Columbia Center for Translational Immunology

**Title: Translational research in transplantation tolerance.**

Faculty Profile: <http://www.microbiology.columbia.edu/faculty/sykes.html>

**Monday, February 24, 2020**

**Gordana Vunjak-Novakovic, Ph.D.**, University Professor and Mikati Foundation Professor of Biomedical Engineering and Medical Sciences

**Title: Engineering Human Tissues for Medical Impact**

Faculty Profile: <http://vesta.cumc.columbia.edu/stemcell/facdb/profile/profile.php?id=g2131>

**Monday, March 2, 2020**

**Richard P. Mayeux, M.D, MSc**, Gertrude H. Sergievsky Professor of Neurology, Psychiatry and Epidemiology (in the Gertrude H. Sergievsky Center and in the Taub Institute for Research on Alzheimer's Disease and the Aging Brain); Chair, Department of Neurology; Director, Gertrude H. Sergievsky Center; Co-Director, Taub Institute for Research on Alzheimer's Disease and the Aging Brain; Director, Human Genetic Resources Core

**Title: From Hope to Cures: Treating Neurological Diseases**

Faculty Profile: <http://www.cumc.columbia.edu/adrc/profile/rpmayeux>

**Monday, March 16, 2020**

**Leibel Rudolph, M.D.**, Professor of Pediatrics and Medicine and Chief of the Division of Pediatric Molecular Genetics

**Title: For some of us are out of breath, and all of us are fat: Why we get obese .... and tend to stay that way**

Faculty Profile: <https://www.pediatrics.columbia.edu/profile/rudolph-l-leibel-md>

**Monday, March 23, 2020**

**Donald E. Edmondson, Ph.D.**, Assistant Professor of Behavioral Medicine.

**Title: Psychological and environmental influences on risk and recovery after acute cardiovascular events**

Faculty Profile: <https://www.columbiacardiology.org/profile/donald-edmondson-phd>

**Monday, March 30, 2020**

**Ali G. Gharavi, M.D.,** Jay Meltzer, M.D. Professor of Nephrology and Hypertension at VP&S (in Medicine)

**Title: Using Genetics to Understand Disease Pathogenesis and Deliver Personalized Care**

Faculty Profile: <http://www.igm.columbia.edu/profile/agharavi>

**Monday, April 6, 2020**

**David Fidock, Ph.D,** Professor of Microbiology and Immunology, Professor of Medical Sciences (in Medicine) and Director of CU graduate Program in Microbiology, Immunology and Infection

**Title: Malaria- Tackling the Tsunami of Drug Resistance**

Faculty Profile: <https://www.ps.columbia.edu/profile/david-fidock-phd>

**Monday, April 13, 2020**

**George Hripcsak, M.D., M.S.,** Chair and Vivian Beaumont Allen Professor of Biomedical Informatics; Director, Medical Informatics Services, NYP

**Title: Big Data in Health: Observational Research on One Tenth of the World Population**

Faculty Profile: <https://www.dbmi.columbia.edu/people/george-hripcsak/>

**Monday, April 20, 2020**

**Charles Drake, M.D., Ph.D,** Professor of Medicine, Director for Clinical Research at CUIMC Cancer Center and Co-Director of Columbia's Cancer Immunotherapy Programs

**Title: Immunotherapy For Cancer – A Laboratory and Clinical Journey**

Faculty Profile: <https://cancer.columbia.edu/charles-g-drake-md-phd>