



## SPRING 2017 RESEARCH SOCIAL: THE INSTITUTES PARTY

The [Office of the Executive Vice President for Research](#) cordially invites Columbia University's research community to attend the **Spring 2017 Research Social**, featuring eight institutes that initiate research across the scientific, engineering, and biomedical disciplines.

This event will be held on **Monday, April 3<sup>rd</sup>** from **5:00 p.m. – 7:00 p.m.** in the **Low Memorial Library Rotunda (535 West 116<sup>th</sup> Street)**. We very much hope that you can join us for this special occasion by registering at <https://events.columbia.edu/go/2017ResearchSocial>.

With any questions, please email [evpr@columbia.edu](mailto:evpr@columbia.edu).

## EIGHT PARTICIPATING INSTITUTES

[Data Science Institute](#)

[The Earth Institute](#)

[Institute for Genomic Medicine](#)

[Institute of Human Nutrition](#)

[Institute for Social and Economic Policy and Research](#)

[Irving Institute for Clinical and Translational Research](#)

[Mortimer B. Zuckerman Mind Brain Behavior Institute](#)

[Taub Institute for Research on Alzheimer's Disease and the Aging Brain](#)

## INSTITUTE DESCRIPTIONS

### *Data Science Institute*

The [Data Science Institute](#) at Columbia University is training the next generation of data scientists and developing innovative technology to serve society. With nearly 200-affiliated faculty working in a wide range of disciplines, the Institute seeks to foster collaboration in advancing techniques to gather and interpret data, and to address the urgent problems facing society. The Institute works closely with industry to bring promising ideas to market.

### *The Earth Institute*

The [Earth Institute](#) is animated by two central ideas: to promote basic understanding of earth system science and to apply that knowledge to decisions made by governments and businesses around the world. We work to expand our understanding of the Earth as one integrated system – studying the Earth and its environment, human society, and the interaction between the two – and training a new generation of interdisciplinary practitioners equipped with the tools to address this challenge. We blend research, education, and practical solutions to help guide the world onto a path toward sustainability. The Institute comprises more than two dozen research units and nearly 800 faculty, scientists, and staff collaborating across many disciplines and schools at the University. At our largest research unit, the renowned [Lamont-Doherty Earth Observatory](#), some of the world's leading scientists study geology, oceans, freshwater systems, climate, and atmosphere to better understand the Earth's

systems. By bringing those physical scientists together with experts in economics, engineering, law, management, public health, and public policy, the Institute creates collaborations that help us learn how to best address issues of global sustainability. We use that knowledge to develop policy and engineer practical solutions to our many challenges: climate change and environmental degradation, rapid urbanization, infectious diseases, natural hazards, the need for clean and accessible energy, water and sanitation, and the sustainable use of resources.

#### *Institute for Genomic Medicine*

The [Institute for Genomic Medicine](#) is driving innovation in genomic medicine through cutting-edge research, clinical applications, and outreach efforts. Our multi-tiered approach to genomic medicine utilizes large-scale genomic sequencing and analysis, paired with functional biology to advance the diagnosis, characterization, and treatment of genetic diseases. As part of Columbia University's overall [Precision Medicine Initiative](#), we are fully integrated into the research and clinical communities at the University and NewYork-Presbyterian, and will utilize our expertise in genome sequencing, disease biology, and electronic medical records to develop and advance patient-centered precision medicine.

#### *Institute of Human Nutrition*

The mission of the [Institute of Human Nutrition](#), now in its 60<sup>th</sup> year, is to provide outstanding academic, professional education, and training programs in human nutrition, and conduct basic science and translational research on the role of nutrition in human health. The scope of the Institute's programs includes projects, symposia, and other initiatives for health practitioners, scientists, policy-makers, educators, and individuals that advance understanding of the importance of nutrition for individuals and populations worldwide. In keeping with its mission, the Institute of Human Nutrition conducts, coordinates, and leads nutrition research and education activities throughout Columbia University and its affiliated institutions. These activities include basic research, clinical research, public health-preventive medicine programs, and education and training at many levels. A long-standing mission of the Institute is to train individuals for scholarly activities and for positions in universities and research centers that are in the forefront of the movement to advance nutrition as a health science. In addition, the Institute seeks to augment the training of physicians and other health specialists who are interested in emphasizing nutrition in their professions. The Institute provides a key infrastructure to academic nutrition activities carried out within many faculties, departments, and centers at the University. Members of the Institute of Human Nutrition hold appointments in over 18 academic departments within the College of Physicians and Surgeons, the Joseph L. Mailman School of Public Health, and the various divisions of the Graduate School of Arts and Sciences. These faculty members, in addition to expertise in their own disciplines, have research and teaching interests relevant to the mission of the Institute of Human Nutrition.

*Institute for Social and Economic Research and Policy*

The [Institute for Social and Economic Research and Policy](#) (ISERP) is Columbia University's research institute dedicated to the social sciences. ISERP pioneers research and integrates knowledge and methods across the social sciences. The institute supports researchers, faculty, students, and social science research through research development, education and training programs, centers, seed grants, workshops, and conference funding, in addition to an all-inclusive pre- and post-award administrative support. ISERP works within the intellectual community of Columbia University to generate, find external support for, and publicize innovative basic and applied social science research. Participation in ISERP's core activities spans the departments of Anthropology, Economics, History, Political Science, Sociology, and Statistics, as well as the School for International and Public Affairs, Business School, Mailman School of Public Health, and School of Social Work.

*Irving Institute for Clinical and Translational Research*

The [Irving Institute for Clinical and Translational Research](#) is home to Columbia University's Clinical and Translational Science Award from the National Center for Advancing Translational Sciences at the National Institutes of Health. A multidisciplinary effort that aims to speed the discovery and development of new medical therapies, the Irving Institute provides a range of services and programs to facilitate research and support junior scientists. Through 11 key areas or "Resources," the Irving Institute supports research study design and execution, provides training and career development, and funds projects to collect pilot data. Specific services and programs include fellowships and training in precision medicine, mentored career development, facilities dedicated to clinical research, bionutrition and community engagement, biomedical informatics and clinical data warehouse navigation, research study design, biostatistics and data management, consultations on ethics and regulatory issues, and pilot funding opportunities for multidisciplinary team science, imaging, health practice research, special populations, precision medicine, community-based participatory research, and translational therapeutics.

*Mortimer B. Zuckerman Mind Brain Behavior Institute*

Columbia University's [Mortimer B. Zuckerman Mind Brain Behavior Institute](#) brings together a group of world-class scientists and scholars to pursue the most urgent and exciting challenge of our time: understanding the brain and mind. A deeper understanding of the brain promises to transform human health and society. From effective treatments for disorders like Alzheimer's, Parkinson's, depression, and autism to advances in fields as fundamental as computer science, economics, law, the arts, and social policy, the potential for humanity is staggering.



*Taub Institute for Research on Alzheimer's Disease and the Aging Brain*

The [Taub Institute for Research on Alzheimer's Disease and the Aging Brain](#) at Columbia University Medical Center and NewYork-Presbyterian Hospital brings together researchers and clinicians across disciplines to uncover the causes of Alzheimer's, Parkinson's, and other age-related brain diseases, and to discover ways to treat, prevent, and ultimately cure these diseases. In collaboration with the Departments of Pathology & Cell Biology and Neurology, research in the Taub Institute integrates genetic analysis, molecular and cellular studies, and clinical investigation to better understand complex neurodegenerative disorders. Funding for the Taub Institute's Alzheimer's Disease Research Center is provided by the NIH National Institute on Aging. In 2016, the Taub Institute was designated as a Center of Excellence for Alzheimer's Disease by the New York State Department of Health.