

Funding Announcement for Political Scientists to Attend: THE 2015 INTERNATIONAL WORKSHOP ON STATISTICAL GENETIC METHODS FOR HUMAN COMPLEX TRAITS

What- The introduction of genetic methods into political science necessitates training the political science community in these methods. The *National Science Foundation* (SES-1258678) will subvent tuition for 10 political scientists (faculty and graduate students) to attend the 2015 International Workshop on Statistical Genetic Methods for Human Complex Traits. The course will focus on statistical methods for analyzing genome-wide association studies (GWAS) and genome sequence data. Hands-on analysis will be an integral part of the course and will employ networked notebook computers. Attendees will develop new tools to train students, include molecular genetics in their coursework and research, write grants, supervise theses, and review articles and grants related to this new area of research. Every participant will have a laptop provided to share with one other participant, take part in conducting analyses using various statistical packages, among many other exercises.

The Institute for Behavioral Genetics hosts this annual workshop aimed at training junior and advanced faculty in behavioral genetics. A detailed description of the course can be found at <https://ibg.colorado.edu/dokuwiki/doku.php?id=workshop:2015:start>.

Topics for the course will include:

- Historical context and current challenges in behavioral genetics;
- Biometrical models and introduction to genetic analyses;
- Introduction to genetic analyses software;
- GWAS: data management, association tests and stratification, family-based association methods, haplotype analysis and imputation, power and meta-analysis, GCTA, pathways and polygenic risks scores, Mendelian randomization, and fine-mapping;
- Sequencing: study design and data generation, variant and individual annotation coding/noncoding, rare variant testing approaches, de novo mutation and constraint.

Attendees will leave the workshop ready to conduct genetic analyses, and gain access to scripts, statistical packages, and training materials to take home for future use. Space is limited; in order to ensure space for 10 political scientists, the NSF will pay for the full rate of tuition for selected participants. Grant funds will cover tuition for attendees, and lunch is provided by the course. However, participants must arrange and cover their travel, lodging, and other meals.

When and Where - Boulder, Colorado, March 2-6, 2015.

Prerequisites- This advanced course is intended for those *who are already familiar with the statistical and genetic principles for studying human complex traits*. Women and members of historically underrepresented groups are encouraged to apply.

Application Process (Process closes December 15, 2014).

1. Complete and email the completed form below, along with a one-page vita, to Prof. Pete Hatemi, phatemi@gmail.com by 12/15/2014.
2. IMPORTANT- please place "2015 NSF-Politics and Genetics Course" in the header
3. Individuals selected for attendance will be notified before 1/30/2015.

Application for the 2015 Behavior Genetics Methods Workshop

Personal Information

Name: _____ Email address: _____

Institutional affiliation: _____

Year PhD granted/planned _____ Academic Title: _____

Research subfield(s): _____

Have you previously attended a genetics method workshop Yes / No (circle one)

Why are you interested in attending this workshop and how do you plan to use the training provided?

Please affirm the following (If you are a graduate student please have your advisor affirm the following in a separate email).

- 1. Do you affirm that you or your department will be able to pay for the costs of travel and lodging in order to attend the course?** (Note: The NSF covers tuition; we highly recommend attendees work with their department for internal funding to cover the costs of travel and lodging. The methods training offered by this course will place individuals in a unique position in the discipline. Previous attendees have received numerous benefits from the course, including publications, access to data, grant opportunities, and post-doctoral positions. If your department chair or advisor would like more information please contact Pete Hatemi, phatemi@gmail.com or Christopher Zorn, zorn@psu.edu).

For NSF reporting purposes (not required, but please self-identify if you choose)

Sex (F/M) _____ Race-Ethnicity _____