

Virginia Commonwealth University, Virginia Institute for Psychiatric and Behavioral Genetics: **Postdoctoral Training in Psychiatric and Statistical Genetics**



The Virginia Institute for Psychiatric and Behavioral Genetics (VIPBG; vipbg.vcu.edu) residing within the Department of Psychiatry, in the School of Medicine at Virginia Commonwealth University (VCU) in Richmond, Virginia, invites applications for a full-time postdoctoral researcher position, available immediately. VIPBG is an interdisciplinary institute that brings together researchers with backgrounds from statistical and molecular genetics to epidemiology, psychology, psychiatry, and neuroscience, all with a shared focus on understanding how genetic and environmental factors impact the development of psychiatric and substance use disorders and behavioral phenotypes/complex traits. Currently funded research at VIPBG includes genetic studies of schizophrenia, major depression, anxiety and panic disorders, PTSD, substance use disorders and development of statistical methods. VCU's pioneering twin studies of complex traits have given rise to exceptional resources for data analysis. Our collaborative studies include the NIH funded ABCD study (abcdstudy.org); the Psychiatric Genetics Consortium subgroups and UK Biobank, among others. Faculty are at the forefront of developing methods and software for statistical genetic analyses of complex traits. These include extensions of structural equation models to use data collected from twins and relatives to resolve competing models about causation and individual variation. New methods for analyzing the contributions of measured genetic and environmental factors to individual differences in behavioral and psychiatric outcomes are continuously being developed, tested and applied to many genomic data types.

The postdoctoral research education program is tailored to the experience and needs of the research fellow, with an emphasis on tutorials and collaborative research. Future employment prospects for fellows are exceptionally good; high demand in the fields of genetics, psychology, biostatistics and data science in addition to industry positions in statistical geneticists. The development of research skills is the primary focus of post-doctoral training, with emphasis on broad exposure to psychiatric and behavior genetic methods together with detailed study in one or more areas that would lead to publications and grant proposals. The core of post-doctoral training is supervised research under the mentorship of experienced scientists. As trainees may have a variety of degrees (PhD in mathematics, statistics, psychology, psychiatry, biology, genetics or related fields, or MD), their research training may be supplemented by formal courses, workshops or directed reading. In consultation with their advisors, trainees will develop an individualized training program. The exceptionally rich academic environment allows the trainees to pick a research project of interest. Trainees are encouraged to write first-author scientific papers on their research and develop grant proposals.

Further information on the Institute, its faculty and research may be found at <u>vipbg.vcu.edu</u>. Training positions are funded by an NIMH training grant in psychiatric and behavioral genetics, and restricted to US citizens or Permanent Residents. Inquiries should be addressed to Prof. Michael C. Neale, Director NIMH Training Program, Virginia Institute for Psychiatric and Behavioral Genetics, Box 980126, Richmond VA 23298-0126 USA. <u>michael.neale@vcuhealth.org</u>. To apply, see the <u>VCU jobs website</u>.