# FACULTY POSITIONS AVAILABLE

The Virginia Bioinformatics Institute performs world-class informatics research in life sciences, social sciences, and human health by integrating theory, modeling and simulation with computational and experimental science in a transdisciplinary, team science research environment. The Institute's mission is to solve some of society's most important problems affecting life sciences, social sciences and human health through transdisciplinary informatics research and education.

**ABOUT VBI.** Established in 2000 by the Commonwealth of Virginia, the Institute is a part of Virginia Tech and is located on its Blacksburg, Virginia campus. It has a 154,000 sq. ft. research facility with state-of-the-art core laboratory and high performance computing facilities as well as research offices in the National Capital Region, in Ballston, VA. VBI has developed distinctive informatics research capabilities and has achieved a solid foundation for further growth. The Institute is pursuing its vision to become a world leader in transdisciplinary informatics research which will involve developing an increased capacity for the analysis of interacting complex systems. In practice, this means making transformative discoveries, solving important problems, and developing the next generation of transdisciplinary researchers. The Institute influences public policy and transitions scientific research into use. (www.vbi.vt.edu)

**ABOUT TEAM SCIENCE.** VBI strongly emphasizes team science and organizes research outside of boundaries of academic disciplines. Research programs represented at VBI assemble to meet the specific needs of those programs; it is a flexible environment that rewards the notion of a problem-solving capability on the move. Extensive national and international collaborations complement the expertise of the research groups, including significant interactions with academic medical research centers.

VBI seeks to complement its existing programs in two main areas:

**ADVANCED COMPUTING AND INFORMATION LABORATORIES.** ACIL is focused on advancing informatics methods in massively interacting systems. The programmatic theme connecting the topical foci is employment of high-performance, pervasive and data-intensive approaches to complex biological and socially coupled systems. Affiliated laboratories of ACIL include the Nutritional Immunology and Molecular Medicine Laboratory (NIMML), Network Dynamics and Simulation Science Laboratory (NDSSL) and the Social and Decision Informatics Laboratory (SDIL). Domain research topics range over, and often integrate, systems biology to detailed regional population behavior and economic modeling. In addition, ACIL labs engage in related basic research in mathematics, theoretical computer science, network science, and network-centric high-performance computing systems.

**CYBERINFRASTRUCTURE.** The CI research program is an integrative research team that develops, evolves, deploys and uses large-scale information systems applying the principles of cyberinfrastructure to aggregate and curate data, computational infrastructure, and people in support of health sciences research. Through its research and development activities, CI currently is responsible for many public resources for curated, diverse biological, genome-scale data from various infectious disease systems, and implemented the processes, systems, interfaces and databases in support of such activities, as well as conducting cutting-edge research in the areas of new discoveries.

**ABOUT THE POSITIONS.** To support the growth of its transdisciplinary research portfolio, VBI is seeking team oriented, visionary researchers, to provide leadership and strategic focus. The successful candidates will hold the rank of associate or full professor based solidly on exceptional research accomplishments including an active, extramurally-funded research program that will augment VBI's current strengths. The successful candidates will be fully engaged in leading transdisciplinary research aimed at solving complex informatics based problems in the life sciences, social sciences and human health.

Successful candidates will be placed in either the ACIL or CI research programs noted above based on research interests, credentials and programmatic need. Accomplished faculty with either computational or experiential laboratory research programs are encouraged to apply. A competitive allowance for laboratory start up and operational support will be provided. The transfer of intact research teams is encouraged.

Based on the successful candidate's experience and credentials, tenured appointments with relevant academic departments at Virginia Tech will be considered; such appointments require approval by the relevant department faculty committees and university officials. Alternatively, appointments may be made as non-tenure track Special Research Faculty, with the rank appropriate to the individual's qualifications and experiences, such as associate or full research professor. For more information on the University faculty ranks, please consult the Faculty Handbook located at http://www.provost.vt.edu/faculty_handbook/faculty_handbook.html.

**QUALIFICATIONS.**

- Ph.D. in life sciences, microbiology, genetics, computer science, engineering, biotechnology, mathematics, statistics or related appropriate field(s), with a biological, social science or human health focus.
- Demonstrated interest or experience at the interface of the informatics or computational aspects of the life sciences.
- Reputation as an accomplished leader in the development of important research programs complementing VBI's research mission.
- Experience leading and mentoring in a diverse, team science environment as a project investigator or co-project investigator.

**PREFERENCES.**

- Evidence of exceptional performance on extramurally funded collaborative research efforts, preferably in life sciences, social sciences, or human health with a shared informatics perspective.
- Experience with high-performance computing, high-volume data generation, visualization and analysis.

**TO APPLY.**

Visit www.jobs.vt.edu and see SR0130027 OR Contact: Lynn Byrd, Director of Talent Management byrd@vbi.vt.edu or 540-231-1904
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VirginiaTech
Virginia Bioinformatics Institute