Brandeis University’s Graduate Professional Studies (GPS) is looking for an industry leader to develop and teach in our Bioinformatics Master’s program. Brandeis University is consistently ranked among the nation’s top universities, and our online courses are developed using best practices in online learning. Information about Brandeis University and Graduate Professional Studies can be found online at www.Brandeis.edu/GPS.

About the position and course:
We are currently looking to hire an adjunct instructor for RBIF 110: Cheminformatics. The instructor for RBIF 110 will teach the course designing a syllabus and creating content that aligns with course outcomes.

RBIF 110 is an elective course and covers modeling at the molecular level, with a focus on topics relevant to protein-ligand binding and cheminformatics. The course covers topics in basic macromolecular structure and thermodynamics relevant to prediction and analysis of macromolecular interactions, and includes crystallography, energetics of hydrogen-bonding and hydrophobic interactions, and structure-based docking. Additional course topics include the basics of cheminformatics, chemical structures, chemical descriptors, and methods for clustering and similarity-searching for compounds.

Qualified candidates will have Subject Matter Qualifications in the following areas:
Required:
- Current active employment in the Bioinformatics field, or related industry.
- Minimum of 5 years of experience in using cheminformatics approaches to process large amounts of chemical structures and chemical data, and developing links between chemical structures and activity.
- Knowledge of thermodynamics and kinetics of ligand binding, and experience with structure-based docking methods and exposure to quantum chemical methods. Broad experience with cheminformatics analysis and algorithms, including compound clustering, searching of compound database, and building of QSAR models. Structural bioinformatics experience is desirable.
- Requires Knime (or Pipeline Pilot) experience, as well as strong understanding of statistics and scripting/programming experience.

Preferred:
- Previous experience teaching a college level course or conducting professional training.

General responsibilities include:
- For new courses requiring development:
  - Design a syllabus following program chair guidance and the syllabus template.
  - Create content that aligns with course outcomes and offers the author’s experiences and perspectives on key points.
- For all courses - develop and deliver the course according to our teaching standards, which include actively facilitating online discussions, providing relevant and timely feedback on student work, reporting grades, and discussing student issues with staff.
Create or refine and facilitate the course site in the Moodle learning management system

General skill requirements include:

- Strong interpersonal skills when relating to students.
- The ability to communicate effectively in writing, including conveying complex information and promoting in-depth engagement on course topics.
- The ability to devote adequate time to courses, including responding to students and providing meaningful feedback in a timely manner.

About the Masters in Bioinformatics:
As bioinformatics becomes as an integral part of the research processes, biomedical industries seek to make use of vast amounts of genomic data to produce more complex and accurate biological models. Biotechnology and pharmaceutical organizations are relying more and more on bioinformatics’ mathematical, statistical and computational methods.

The MS in Bioinformatics program equips students to be able provide insight into complex biological systems through data synthesis and application of a wide range of computational biology approaches. They are able engage in productive bioinformatic research and effectively communicate research projects and findings to multidisciplinary project teams.

All GPS Masters courses are 10-weeks long and taught asynchronously in the online learning environment with no set days or times for interaction.

About GPS Faculty:
GPS Faculty instructors are active practitioners in the industries that align with our programs and have the professional expertise to bring to course discussions and threads. Instructors are part time and work fully online, with no requirement to appear on campus. Our faculty have earned at least a master's degree with many holding terminal academic degrees and industry-specific credentials. Previous experience teaching online is not required; GPS offers a comprehensive training program for qualified applicants.

How to apply:
GPS welcomes applications for its adjunct faculty pool on an ongoing basis. The application process consists of the online application and, if subject matter qualifications are met, a series of interviews at the discretion of the Program Chair and Director of Program Development. Complete your application online at http://www.brandeis.edu/gps/community/apply-to-teach.html.