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.

About the position and course:
We are currently looking to hire an adjunct instructor for RBIF 109: Biological Sequence Analysis. The instructor for RBIF 109 will develop and teach the course designing a syllabus and creating content that aligns with course outcomes. RBIF 109 is a core course that provides a foundation in biological sequence analysis, including methods for handling next-generation sequencing data. Course content topics include genomic assembly and variant detection using short reads, methods for homology detection, functional annotation of sequences, and use of databases and visualization tools.

At the end of the course, students will be able to:
- Align short reads to a reference genome
- Call variants using NGS data
- Evaluate the quality of a genomic assembly
- Search large databases for homologous sequences
- Annotate protein sequences using profile-based tools such as HMMer
- Identify functional features in genomic sequences, such as protein-coding sequences or small regulatory motifs

Qualified candidates will have Subject Matter Qualifications in the following areas:
Required:
- Current active employment in the Bioinformatics field, or related industry
- At least 3 years of experience processing and analyzing NGS (next generation sequencing) and human genome data in a cutting edge research environment
- Experience with processing large amounts of sequencing data, functional annotation of both protein coding and non-protein coding sequences, and use of databases and visualization tools
- Strong demonstrated experience in scripting/programming and statistical analysis
- Minimum of a Masters degree

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 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](http://www.brandeis.edu/gps/community/apply-to-teach.html).