**2018-2019 CompGen Fellow Application**

**Name**:

**Departmen**t:

**E-mail**:

**Phone**:

**Degree Status**:

**Major**:

**GPA**:

**Major Advisor**:

**Collaborator or Co Advisor:**

**Publications, Conference Presentations, or Proceedings**:

**Past Fellowships or Awards**:

**Project Description (no more than 500 words)**

**The CompGen program aims to become self-sustaining so please include a statement (no more than 200 words) on plans to apply for new funding during the fellowship period, in order to continue and expand the CompGen project after the end of the fellowship.**

**Applications should be e-mailed as a PDF file to** [**katchley@illinois.edu**](mailto:katchley@illinois.edu)**. The subject line for e-mail submissions should be “CompGen Fellow Application”**

***Deadline for submissions is April 20, 2018.***

**Please Note:**

1. Applications should also include a one page resume.
2. The names of up to two research advisors (one should be your major advisor, the other a collaborator or co-advisor) are required. In order to encourage applications from new research groups to participate, we will no longer require two advisors (this is a change from last year); however we encourage students to nominate a co-advisor or collaborator from another department if this fits with their proposal. Note that two supporting letters are required, one should be from the student’s major advisor. If two advisors are nominated then letters should be sent by both advisors**. Letters should be emailed separately to Katchley@illinois.edu by the same deadline, April 20. Subject line for submissions should say "CompGen Fellow Application"**.
3. Applicants will be evaluated on their academic resume, letters of recommendation, the relevance of their project to CompGen, and past performance in the case of current fellows seeking renewal. We will evaluate project descriptions on the following criteria:
   1. Fellowship recipients should propose projects that plan to leverage and help to advance the CompGen group of researchers and / or currently funded CompGen grants such as the NIH BD2K KnowENG project or the NSF-funded CompGen instrumentation award. Towards this end, we request projects in genomics applications, computational biology, data analysis or tools development.
   2. For example, projects aimed at enabling drug discovery through the use of microbial genomes, mining protein structure data from genome sequences, processing genomes for agricultural applications or advancing human or animal genome science using computational methods could all be appropriate. Genomics or gene expression studies applied to the social sciences or humanities with computational methods can also be an appropriate focus.
   3. Tools development could include accurate detection of genomic variation, development of statistical methods and methodologies for metagenomics, improvements in phylogeny reconstruction, information theory, compression and storage, reconstruction of gene networks, statistical methods, and construction of flexible software platforms.
   4. A third example could be projects with potential to contribute to the hardware and software engineering of the CompGen instrumentation, such as optimization of the storage hierarchy, identification of primitives that are common across algorithms, visualization and toolkits for mathematical tools, tool flow optimization, and performance and reliability assessment.