ABSTRACT

Software can be deployed to BioHPC Computing Laboratory facility for bioinformatics research. A variety of software packages are available including ABySS 1.9.0, HyPhy, and the ALLMAPS 20150710 package. New applications can be added based on user requests. If you have a program that is not installed, contact us. We will add future applications that benefit a valuable group of users and that do not require excessive development effort.

IDENTIFY

Bioinformatics software is maintained and updated by the core facility staff.

User guides and basic instructions for each-software package are available on the core facility web site.

New applications can be added based on user requests. If you have a program that is not installed, contact us. We will add future applications that benefit a valuable group of users and that do not require excessive development effort.

Overview

The Bioinformatics Facility of the BioHPC Computing Laboratory is a cloud computational resource configured for biologists. The Lab is targeted for biologists who want to learn Linux or Windows operating system, and to de-biologists data analysis themselves. It provides investigators with direct access to a wide range of biostatistical data analysis software tools on appropriate hardware platforms. The available hardware ranges from small 16‐GB RAM machine to large 96‐core 312‐GB RAM machines and 64 core 704 TB RAM machines.

Access: Workstations are reserved using an online calendar. Reservations of only registered lab users can make reservations. All workstations are accessible remotely with only the lab’s access. Workstations can be accessed off-site.

Storage: The BioHPC Computing Lab has over 672 TB of network storage. Each registered active user gets 200 GB storage space; users can purchase additional storage.

Training: The Bioinformatics Facility offers workshops introducing biologists to the Linux computing environment. Users can also log on during office hours (Monday and Tuesday, 1:00–3:00 pm, appointment required for consultation and training).

Administration: The BioHPC Computing Laboratory is maintained by the Bioinformatics Facility of the BioHPC Computing Laboratory, which is part of the Cornell University Institute of Biotechnology.

Open to All: The resources and services of the Bioinformatics Facility are open to all investigators at Cornell University and Cornell affiliated institutions. The facility also provides services to external investigators at both academic institutions and non‐academic organizations (e.g., Center for Advanced Technology in Chemistry, CAT, NY State companies). We do not provide no‐fee services.

Resources

Software

A variety of software packages are available including ABySS 1.9.0, HyPhy, and the ALLMAPS 20150710 package. New applications can be added based on user requests. If you have a program that is not installed, contact us. We will add future applications that benefit a valuable group of users and that do not require excessive development effort.

Consultation, Workshops and Training

The BioHPC Lab provides consultations and training on a variety of software tools available on the core facility web site.

Hardware

Multiple tiers of hardware resources are available for different data analysis applications, including systems with very fast RAM and high memory.

The BioHPC Computing Lab provides biostatistical workshops and bioinformatic training.

Access

The BioHPC Computing Lab also provides biostatistical workshops and bioinformatic training.

Future

More applications are being added, along with instruction.

Extension to the cloud: We plan to add options to run BioHPC Lab services in the cloud using the same configuration as our local servers, i.e., with access to our software and storage.

Contact Information

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