ACCESS Allocations

The record was updated successfully.

Summary of DEB190022 - Submitted

Title:

Request for Compute Resources to Support the Workshop in Molecular Evolution at the Marine Biological Laboratory at Woods Hole, MA, USA, 2023

Request Type	Request Number	Field of Sciences	Keywords
Renewal	DEB190022	10206 - Informatics, Analytics and Information Science (Secondary) 10604 - Genetics (Secondary) 10699 - Other Biological Sciences (Secondary) 10103 - Statistics and Probability (Secondary) 90500 - Science and Engineering Education (Secondary) 10606 - Systematics and Population Biology (Primary)	workshop, molecular, evolution, phylogenetics, coalescent

Public Overview

Since the Workshop in Molecular Evolution (MOLE) began being in 1988 at the Marine Biological Laboratory (MBL) in Woods Hole, Massachusetts, MBL records show that 1930 scientists have been introduced to the state of the art in statistical and computational methods in molecular evolution, comparative genomics, population genetics, and phylogenetics. The scale of modern genomic data sets demands that biologists become comfortable using remote computing resources. Many participants experience their first exposure to bash, ssh, git, and command line

interfaces in the MOLE workshop, and our ability to help students over this hurdle was tremendously improved in 2022 through the use of an Xsede allocation, which allowed us to provide virtual machines from Jetstream 2. This provided a consistent and fast computing environment for each participant; light years better than the aging and speed-heterogeneous cluster housed at MBL that was graciously provided for our use in past years by a research lab at MBL (it is not an MBL-wide resource). We are proposing to use Jetstream 2 instances again in the 2023 MOLE workshop. While this application is entirely educational in nature, and no research or publications will result from this project per se, the MOLE workshop serves as a great introduction to the use virtual machines for 45 of the best and brightest senior graduate students and postdoctoral researchers, who will be made aware of the existence and usefulness of computing resources made available through Access in their current and future research. Scientific computing in the future will be increasingly cloud-based, and learning about how to loan a cluster for your computing needs instead of purchasing/maintaining your own cluster is thus an important additional lesson that we can add to this venerable workshop. All lectures and computer lab tutorials presented at this workshop are openly available via the public course web site at molevolworkshop.github.io.

Opportunity Questions

Is the planned work associated with any of the following types of activities? Check all that apply. This information is used for tracking and informational purposes and does not affect the merit of your request in any way.

- Classroom or training activities

Resources

ACCESS CREDITS

Amount Type	Amount	Comments
Requested	68,080.0 ACCESS Credits	We ask for computing resources sufficient to operate a Jetstream2 quad-core VM continuously for the 10 days of the workshop for each of 68 participants/faculty/TAs (68*4*24*10=65280), plus 100 hours extra for 7 VMs for pre-workshop software installation and testing by TAs and PI/Co-PIs (7*4*100=2800). Total request: 65280+2800=68080

Personnel

Last Name	First Name	Position	Organization	Email	Username	Phone	Request Roles

Kubatko	Laura	Unknown	Ohio State University	kubatko.2@osu.edu	lkubatko		**CoPI:** 2022-11-14 - Allocation End Date
Beerli	Peter	Faculty	Florida State University	beerli@fsu.edu	cretens	850-559-9664	**CoPI:** 2019-11-23 - Allocation End Date
Lewis	Paul	Faculty	University of Connecticut	paul.lewis@uconn.edu	plewis	860-486-2069	**PI:** 2019-11-23 - Allocation End Date

Supporting Grants

There are no supporting grants for current request

Uploaded Documents

- summary2022.pdf (23 KB)
- LKubatko_ShortCV_2022.pdf (63.5 KB)
- beerli_cv_november14_2022-3pages.pdf (76.7 KB)
- Paul_Lewis_CV_2022-3page.pdf (117 KB)

Get started

Overview

Resource providers

Reviewers

Manage allocations

Overview

Submit a request

Manage my projects

Manage users

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