

# Mark O. Robbins Prize

# in High Performance Computing

The Mark O. Robbins prize will be awarded annually to two PhD students who exemplify Dr. Robbins legacy by recognizing their outstanding achievement in high-performance computing. A third annual award, the Robbins Future Faculty award is targeted for post-doctoral students.

### **About the Robbins prize:**

Mark Robbins received BA and MA degrees from Harvard University. He was a Churchill Fellow at Cambridge University, U.K., and received his PhD from the University of California, Berkeley. Dr. Robbins was a professor in the Department of Physics and Astronomy at Johns Hopkins from 1986 until his untimely death in 2020. He was a renowned



condensed matter and statistical physicist who played a key role in supporting the development of computational facilities at Johns Hopkins, through his leadership for the Maryland Advanced Research Computing Center in the Institute for Data-Intensive engineering and Science.

The Robbins prize was instigated in 2020 to recognize outstandingly talented PhD students who reflect Dr. Robbins contributions to computational science and engineering.

#### **Eligibility:**

- The PhD prizes are intended to reward students who are within 6 months of their defense, regardless of the number of years in the program. We will accept nominations for students who have already defended their PhD degree within 12 months of the deadline for nominations.
- All PhD nominees must have a sustained record of using the MARCC facilities.
- The Future Faculty prize for post-docs is open to new and existing post-docs.

#### Selection:

The nomination materials will be reviewed by members of the HRCC, and representatives from IDIES, and HEMI.

Up to three winners (1 or 2 PhD awards and one Future Faculty award) will be selected based on merit, defined by the criteria listed below.

#### Criteria:

1. Research quality and creative contributions to computational science and high-performance computing (which should be clearly identified in the nomination letter)

Service to their research group, department, and the broader WSE community through teaching, outreach or related dissemination.

## **Nomination Process for PhD awards:**

The nomination application must be submitted as a single PDF file via email to Tara Engel (tengel@jhu.edu) by March 31, 2021.

- Senior PhD students must be nominated by their department Head or Chair, a maximum of two nominations per department. Self-nominations will not be accepted.
- A nomination package shall consist of the following:
  - From the student, an abstract (<1 page) describing their research accomplishments related to computational science and engineering over the course of their PhD degree, and a copy of their CV.
  - O A letter of support from their PhD advisor
  - O A letter of support from the department Head / Chair describing the departmental selection process and the nominee's contributions to computational science and HPC development, e.g., through algorithm development, opening access to a new class of problems, solving a unique problem using computation, and including any contributions to the teaching mission in computationally related subjects, etc.

# Nomination for the Future Faculty award (restricted to postdocs):

Same application as for the PhD application (abstract, CV, letters from the department Head/Chair and from their research advisor) with one distinction:

Since the FF award will contain an allocation of computational resources on ARCH (Advanced Research Computing at Hopkins), the applicant's abstract shall be devoted to providing a plan, essentially a research proposal, to use this allocation.

#### Award:

Awardees will be presented with a plaque. Winners of the post-doc award will receive a generous allocation of time. All awardees will be recognized by the presentation of their work at an ARCH-sponsored conference on high-performance computing that will be held (perhaps virtually) on June 15st, 2021.

## **Acknowledgements:**

The Robbins' Prize is made possible thanks to generous donations from Department of Chemical and Biomolecular Engineering, Hopkins Extreme Materials Institute (HEMI), The Institute for Data Intensive Engineering and Science (IDIES), Department of Mechanical Engineering, and the Department of Physics and Astronomy.