

FELLOWSHIPS

BLUE WATERS GRADUATE FELLOWSHIP

The prestigious Blue Waters Graduate Fellowship Program, funded by the National Science Foundation, enables select graduate students from across the country to immerse themselves in a year of focused high-performance computing (HPC) research. The fellowships empower these talented students to accelerate their research and advance their HPC knowledge.

"It was a wonderful experience. I don't think I would've gotten into higher performance computing without having the Blue Waters Fellowship."

SARA KOKKILA, STANFORD UNIVERSITY, 2014-2015 FELLOW

The fellow's academic institution also is asked to exempt the recipient of any other tuition and fee charges normally charged to students of comparable academic standing. Fellows will receive funds to support travel to a Blue Waters symposium and may also receive funding to present a paper at another scientific meeting. The fellowship provides an allocation of up to 100,000 node-hours on the Blue Waters system to support the fellow's research.

Blue Waters is a truly extraordinary supercomputer, designed to handle the most compute-intensive, memory-intensive, and data-intensive challenges in computational science and engineering. Blue Waters features:

- Nearly 27,000 very high-performance computational nodes including more than 4,000 GPUs.
- More than 1.66 petabytes of memory.
- More than 25 usable petabytes of online disk storage.
- Up to 500 petabytes of near-line tape storage.
- For complete details of the Blue Waters system, visit <https://bluewaters.ncsa.illinois.edu/hardware-summary>.

The fellowship is designed to support PhD students who are engaged in a program of study and research that is directly relevant to the use of the powerful Blue Waters petascale computing system at the National Center for Supercomputing Applications (NCSA).

The one-year fellowships include a \$38,000 stipend and up to \$12,000 in tuition allowance.

During the fellowship year, each



Researchers across the country are using Blue Waters to gain new understanding of how viruses attack our bodies, the formation of galaxies and of severe storms, space weather, sub-atomic physics, and other challenging topics.

For the fellowships, preference will be given to candidates engaged in a multidisciplinary research project that combines disciplines such as computer science, applied mathematics, and computational science applications. Applications will be evaluated based on:

- Academic record
- Research plan and its relationship to use of the Blue Waters supercomputer
- GRE score
- Related experience and service
- Letters of reference

Applicants should be in the second or later year of their graduate program with a well-developed, related research proposal. Applicants must be U.S. citizens or permanent residents of the U.S. by the time of the application deadline.

Applications are now being accepted for the 2016-2017 fellowships, with materials due Feb. 3, 2016.

For complete information on the fellowships, visit <https://bluewaters.ncsa.illinois.edu/fellowships>. Questions? Contact bwgf@nca.illinois.edu.

"There's no doubt that it's improved my career prospects, from what I've been able to accomplish, the people I've met, and...the widening of my universe."

DEREK VIGIL-FOWLER, UNIVERSITY OF CALIFORNIA, BERKELEY, 2014-2015 FELLOW