PROGRAM HIGHLIGHTS

- $32,400 yearly stipend
- Payment of all tuition and fees
- Workstation purchase assistance
- Yearly conferences
- $1,000 yearly academic allowance
- 12-week research practicum at a DOE Laboratory
- Renewable up to four years

ELIGIBILITY:
This program is open to U.S. citizens and permanent resident aliens studying at a U.S. university who are exceptional senior undergraduates or are in their first or second year of graduate study working toward a Ph.D.

This is an equal opportunity program and is open to all qualified persons without regard to race, sex, creed, age, physical disability or national origin.

This program is sponsored by the Department of Energy’s Office of Science and National Nuclear Security Administration.
THE NEED
The Department of Energy (DOE) has a broad research portfolio in basic and applied science and engineering, with vigorous programs in combustion, climate change, nuclear stockpile stewardship, materials sciences, fusion energy, DNA sequencing, protein structure and many more fields.

Most of these efforts employ a powerful tool for discovery: computational science, the multidisciplinary use of high-performance computers to understand and solve complex problems through modeling and simulation. “Computational Science: Ensuring America’s Competitiveness,” a 2005 report to the president, described it as “one of the most important technical fields of the 21st century because it is essential to advances throughout society.”

In light of the integral role computational science plays in its research, DOE has a strong interest in developing future leaders in the field. More broadly, federal initiatives have identified education of future scientists as a fundamental requirement to fuel technological innovation and economic growth for years to come.

THE FELLOWSHIP
The Department of Energy Computational Science Graduate Fellowship (DOE CSGF) was established to meet these needs. With support from DOE’s Office of Science and National Nuclear Security Administration, the fellowship has trained hundreds of scientists and engineers at more than 60 U.S. universities since 1991. The fellowship provides support and guidance to some of the nation’s best doctoral students, who go on to work in DOE laboratories, private industry and universities. And demand for their skills is only growing.

THE COMMUNITY
The DOE CSGF also helps create a nationwide interdisciplinary community of computational scientists and engineers. It links fellows with DOE lab staff, university faculty and DOE CSGF alumni through:

• An annual conference featuring technical talks and opportunities for mentoring, networking and career advice.
• An online presence incorporating wikis, webinars, courses and committee meetings.
• Regional events for networking and sharing research interests.
• Gatherings at professional society meetings for mini-symposia, outreach and networking.

PRAISE
The DOE CSGF has earned praise for helping meet the nation’s technological workforce needs. A 2006 independent review said: “This relatively small, but incredibly effective program has succeeded in the critical area of advanced scientific computing by operating a program ... that results in an enhanced graduate education in this important field.” Michael Strayer, director of DOE’s Office of Advanced Scientific Computing Research, also commended the program in 2006: “Today, CSGF alumni bring their diverse top-level skills and knowledge to DOE laboratories, to industries such as Proctor & Gamble, Lockheed Martin and Intel, and to universities, where they are training the next generation of computer scientists.”