Dr. Robert A. Ellis, Jr. Fellowship Program  
Princeton Plasma Physics Laboratory

**Background:**

Dr. Robert A. Ellis, Jr. was born in 1927. He received his bachelor's degree in 1948 from Fisk University - a highly ranked historically black university, and received his master's degree in physics from Yale University in 1949. After receiving his master's degree, Dr. Ellis taught at Tennessee Agricultural and Industrial (A&I), later known as Tennessee State University - a historically black land-grant public university. He then went to earn his doctorate at the University of Iowa. In 1956, Dr. Ellis joined Project Matterhorn - a small group headed by Lyman Spitzer Jr. at Princeton University working on controlled fusion. Project Matterhorn would later become the Princeton Plasma Physics Laboratory (PPPL). Dr. Ellis became a key member of the team studying the magnetic confinement and heating of plasma in stellarators and in 1988 he was appointed head of experimental projects at PPPL.

During his later years, he devoted much of his time to furthering international collaboration in science. He served as foreign secretary of the Advisory Committee on the USSR and Eastern Europe of the National Academy of Science, a member of the Science Advisory Committee for the NASA Research Laboratories, and head of the physics section of the International Atomic Energy Agency in Vienna. In 1984, he became the U.S. representative to the Commission on Plasma Physics of the International Union of Pure and Applied Physics.

Dr. Ellis was a pioneer in modern experimental plasma physics until his death on December 15, 1989. To his colleagues he is best known for his ability to come up with relevant information on almost any topic, and above all, his flashing wit. He also had a deep and gentle understanding of people-their hopes and ambitions, their motivations and frustrations.

*From NSBP honors (February 2020) and Physics Today (March 1991)*

**Fellowship Program Description:**

Princeton Plasma Physics Laboratory (PPPL) sponsors the Robert Ellis Fellowship Program. To advance the values of scientific excellence and leadership, this prestigious Fellowship is awarded to doctoral thesis students and post-doctoral researchers who are enthusiastic, passionate and have a deep interest and a strong desire to pursue a career in plasma physics or fusion science, computation, engineering or a related field. The program provides funding for a nominal two-year appointment with the possibility of extension to a third year (contingent upon favorable annual performance).

Student fellows from institutions interested in collaborating with PPPL / Princeton University can receive financial support pending identification of a PPPL/Princeton thesis co-advisor or mentor working collaboratively on a thesis topic of mutual interest to the student’s home institution, PPPL/Princeton, and the co-advisors. Postdoctoral fellows will be PPPL staff members exclusively. PPPL will provide the fellow with mentorship, training, professional development, and outreach opportunities to build a sense of community with PPPL and Princeton University colleagues and to launch a successful scientific career. The program also recognizes and supports researchers who can contribute to advancing the Laboratory’s diversity and inclusion efforts. The overarching intention of the program is to provide several pathways to a successful career in plasma physics and/or fusion.
Eligibility:

Graduate student earning (or post-doctoral researcher who has earned) a Ph.D. in plasma physics or fusion science, computation, engineering or a related field.

How to Apply:

Applicants to this Fellowship must submit an online application (search for Robert Ellis Fellowship) and attach the following items to the application as a single PDF document:

1. A well-organized letter of intent outlining research interests, not to exceed five pages.
2. The name or names of potential PPPL advisors (for students) or supervisors (for postdocs) who have expressed interest in supporting the applicant’s research goals (if available)
3. A curriculum vitae (CV) including a list of publications (if applicable) and other accomplishments relevant to the fellowship goals.
4. Two letters of recommendation for students, three letters of recommendation for postdocs

The application is complete when all of the above items have been received. Applicants from historically underrepresented groups, including for example, women, underrepresented minorities (African-American/Black, Hispanic/Latino/American Indian/Alaskan Native), people with disabilities, and members of the LGBTQ+ community are especially encouraged to apply.