

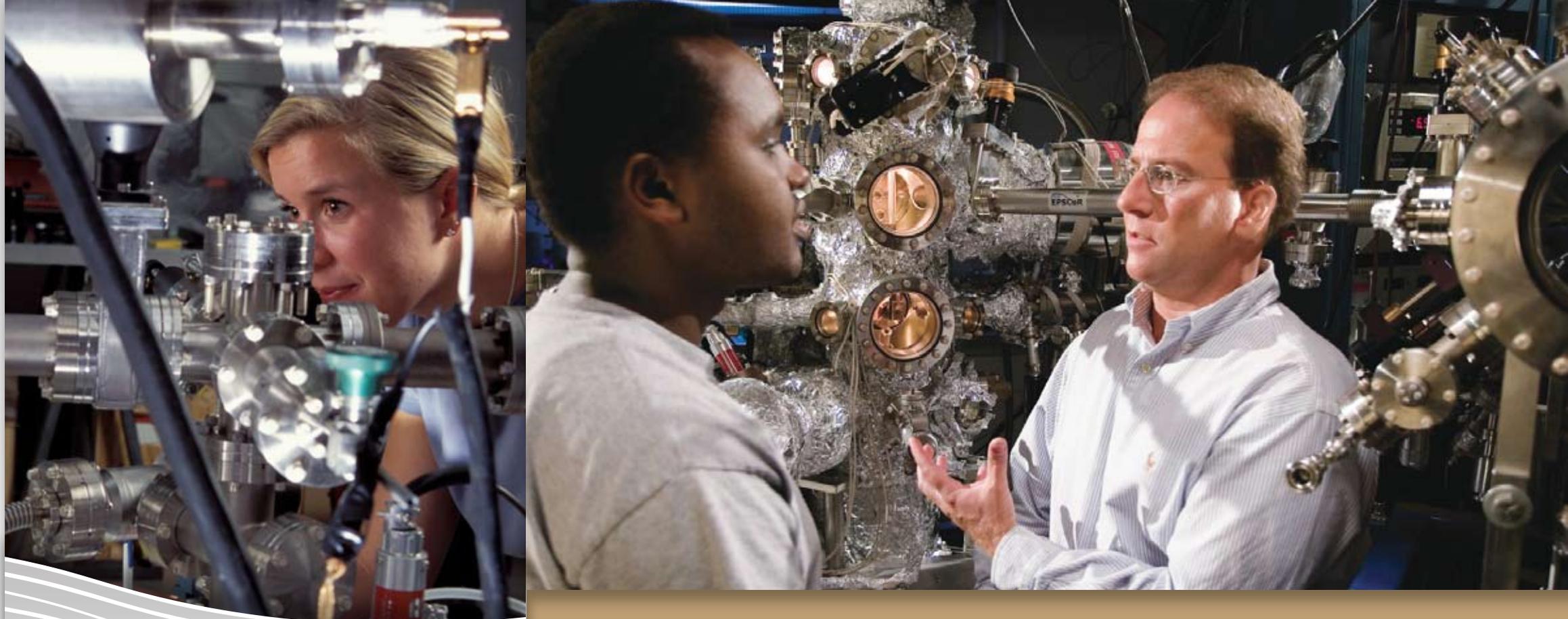
About the University

The University of Idaho offers all the advantages of a small private university at public university prices. With nearly 12,000 students, the university offers many programs but maintains a personal touch. The University of Idaho is located in the city of Moscow, a picturesque university town of 25,000 residents. The University of Idaho is consistently listed as one of "America's 100 Best College Buys" and has been featured in U.S. News & World Report, Kiplinger's Magazine, and Barron's Best Buys. The University of Idaho is a residential campus where a strong sense of community exists. The University also is a multicultural meeting place. Students and faculty from 80 countries and all 50 states come together to learn and explore.

The University of Idaho is the chief research center for the state, and offers more than 75 master's and education specialist degree programs, and more than 25 doctoral programs. It also offers cultural and recreational activities from the world-class Lionel Hampton International Jazz Festival, art galleries, movie theaters, live theater and music performances to NCAA Division I-A athletics, an 18-hole golf course, and nearby skiing, hiking, and camping. It is currently ranked in the top 20 percent of all research universities in the nation for funds from federal, state, and private sources. With graduate enrollment approaching 2,300, our programs are large enough to foster the vital interchange of ideas among students and faculty that is necessary for advanced studies, and yet are small enough to permit close student-faculty relationships.

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21st Century PHYSICS in the Great Inland Northwest

University of Idaho
A LEGACY OF LEADING

The University of Idaho **Physics** Department **WANTS YOU!**

We offer a highly personalized physics educational experience with world-class researchers preparing our students for future careers as scientists and engineers. Join us in the exciting educational and research opportunities at the University of Idaho.

The University of Idaho Department of Physics is the primary Ph.D.-granting physics department in Idaho. Our faculty is internationally recognized for their outstanding research in condensed matter physics, biophysics, nuclear physics and astronomy. We are a friendly and vigorous faculty who enjoy and take personal pride in engaging our graduate and undergraduate students in the excitement and challenges of forefront research. We have a first-rate support staff that assists in all educational, research, and outreach activities.

Research Programs



Biological Physics

The UI biophysics program researches the application of the basic theories and methods of physics to questions in biology. Due to the interdisciplinary nature of biophysics research, our biophysics faculty actively collaborates with other faculty in biology and chemistry. Current efforts in computational biophysics are directed toward understanding how proteins function and interact with other molecules, providing exciting applications for the field of drug design. New computational techniques are being developed that will be used to classify protein structures generated via nuclear magnetic resonance spectroscopy.

For more information about biophysics research at Idaho contact Professor Marty Ytreberg at ytreberg@uidaho.edu.

Nuclear Physics

University of Idaho nuclear theorists study nuclear matter in which the fundamental theory for the strong interaction is quantum chromodynamics. Among the topics under investigation are: nucleon-nucleon interactions; meson theory of nuclear forces; chiral symmetry; relativistic potentials; and nucleon-nucleon scattering. They principally use analytical and computational approaches to solve the mysteries of the nucleus. Recently they have used their research to elucidate the mechanisms of carbon-14 dating and the properties of neutron stars, one of the most extreme forms of matter in the universe.

For more information about the nuclear physics research program at Idaho, contact Professor Ruprecht Machleidt at machleid@uidaho.edu or Professor Francesca Sammarruca at fsammarr@uidaho.edu.



Astrophysics and Planetary Physics

The astrophysics and planetary physics program investigates the physics governing the origin, evolution, and current state of our solar system and the universe. Ongoing research involves the search for and characterization of exoplanets (planets that orbit stars other than the Sun), exploration of Saturn's moon Titan (the only moon with an atmosphere and lakes), studies of the physics of impact cratering on the Moon and Mars, and theoretical investigations of the dynamics of exoplanets and supernovae. We use computer modeling along with observations from spacecraft and ground-based telescopes in our work. We have on-campus observing facilities and telescopes for use in teaching and community outreach.

For more information about astrophysics and planetary research contact Jason Barnes at jwbarnes@uidaho.edu, Gwen Barnes at gbarnes@uidaho.edu, or David Jeffery at djeffery@uidaho.edu.

Employment Opportunities

A bachelor's degree in physics is a wonderful stepping-stone to a wide variety of well-paying, interesting and intellectually satisfying careers in high-tech industries, research, and teaching. Because of their extensive computer and technological background, physics majors have many possible careers open to them. Graduates from our program have gone on to and are prepared for careers in the semiconductor industry, medical physics and as researchers or faculty at some of the nation's most prestigious graduate programs and research labs. Some of the areas of graduate study for which physics is great preparation are materials science, electrical engineering, applied physics and, of course, physics. Typically our students who have gone on to graduate study are awarded tuition waivers and stipends to work as teaching and research assistants at their new physics departments. Recent reports on the employment of undergraduate majors with a science degree show that physics majors have one of the lowest unemployment rates in the nation.

Condensed Matter Physics

Our condensed matter experimentalists are at the cutting edge of research regarding the growth, application and investigation of the physics of nanowires, nanosprings, nanoparticles, nanoporous materials, and nanocomposite materials. They use these novel materials to investigate how the laws of physics work in these small structures to predict and understand their vibrational, magnetic and electronic transport properties. We have vigorous research being pursued in the application of nanomaterials for use in the biological sciences, information technology, magnetic storage, environmental remediation and other fields. Theoretical efforts include studying transport on the quantum scale where finite- and quantum-size effects predominate and how to design molecules and quantum dots with specific electronic properties.

For more information about the condensed matter research program contact Professor Leah Bergman at lbergman@uidaho.edu; Professor Christine Berven at berven@uidaho.edu; Professor David McIlroy at dmcilroy@uidaho.edu; Professor Liudmila A. Pozhar at lpozhar@uidaho.edu; Professor You Qiang at youqiang@uidaho.edu; or Professor Wei-Jiang Yeh at wye@uidaho.edu

