



## THE SCHOLARSHIP

The Department of Physics is pleased to announce the Randall D. Ledford Scholarship II. This is a four-year half-tuition scholarship awarded to a promising incoming physics major from North Carolina attending Wake Forest University. The award is worth a minimum of **\$80,000**.

## HOW TO APPLY

To apply for this award:

- Complete the Wake Forest University application for admission either in paper or online. See <http://www.wfu.edu/admissions/>.
- At least one recommendation should come from someone who can comment on your potential in science.
- Include a brief letter asking to be considered for the Ledford Scholarship, describing how you became interested in science, and describing your career aspirations. Please send your brief letter to:

Ledford Scholarship  
Department of Physics  
Olin Physical Laboratory  
Wake Forest University  
Winston-Salem, NC 27109-7507

The deadline for the Ledford Scholarship is **January 1**.

## QUESTIONS?

Want to find out more about our department or the scholarship? Please come and visit. We can coordinate your visit with our admissions office and a campus tour. Give me a call, write, or send e-mail:

Keith Bonin, Ph.D.  
Department of Physics  
Olin Physical Laboratory  
Wake Forest University  
Winston-Salem, NC 27109  
Telephone: 336-758-4962  
Fax: 336-758-6142  
E-mail: [bonin@wfu.edu](mailto:bonin@wfu.edu)  
<http://www.wfu.edu/physics/>

Thank you for your interest in physics. I hope that you will take the time to find out more about us.

Sincerely,

Keith Bonin, Ph.D.  
Chair  
Department of Physics  
Wake Forest University



WAKE FOREST  
UNIVERSITY

### Department of Physics

Olin Physical Laboratory  
P.O. Box 7507  
Winston-Salem, NC 27109-7507  
P (336) 758-5337, F (336) 758-6142  
E-mail: [wfuphys@wfu.edu](mailto:wfuphys@wfu.edu)  
<http://www.wfu.edu/physics/>

## RANDALL D. LEDFORD SCHOLARSHIP II IN PHYSICS

WAKE FOREST UNIVERSITY  
Department of Physics



WAKE FOREST  
UNIVERSITY

Wake Forest offers unsurpassed opportunities for students who wish to study physics. Wake Forest combines the values and emphasis on close faculty-student interaction that is characteristic of small colleges, while offering the opportunity to engage in research with internationally recognized scientists.

At Wake Forest, nearly all your classes will be small, and your physics classes will average only ten students. More important than class size is what happens outside the classroom. Your teachers are accessible; our faculty come here because they sought what we so uniquely offer – an opportunity to balance teaching and research, a place where they can continue to make new scientific discoveries while still having time to work one-on-one with undergraduates aspiring to become scientists.

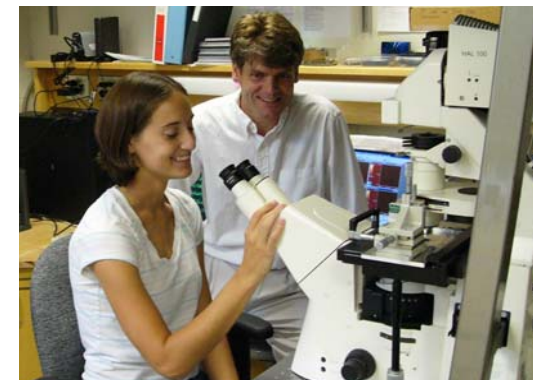
You will be encouraged to participate in research. We do not require it, but most of our students choose to pursue this experience. You will not just read about science – you will become a scientist. There is a good chance that you will co-author a publication or present a scientific paper at a national meeting.

*This scholarship is funded through the generosity of Dr. Randall D. Ledford, WFU class of 1972. Dr. Ledford is Senior Vice-President and Chief Technology Officer of Emerson Electric Company, one of the world's leading electronics companies. Before joining Emerson Electric, Dr. Ledford was president and general manager of several divisions of Texas Instruments Inc. including software, digital imaging, enterprise solutions and process automation. He began his career at Bell Telephone Laboratories where he worked on UNIX development, fiber optic communication and microwave transmissions. While at Texas Instruments, Dr. Ledford led the company's development of the Digital Light Processor (DLP). The size of a postage stamp, this device is the world's most complex microelectromechanical machine, with 2.3 million parts. The DLP was featured in the first digital theater premiere of a major motion picture, Star Wars: Episode I.*

We have special grants available to allow you to stay here for the summer working on research. Other grants fund student travel to national meetings to present their work. You will be able to work with biophysicists who are probing the fundamental processes of life, astrophysicists who are modeling things from the beginning of the universe to the creation of gravity waves during black hole collisions, solid state physicists who are laying the groundwork for the next generation of lasers and radiation detectors. You will have an opportunity to work, not only with our own fourteen physics faculty, but also with the scientists from around the world who frequently visit to collaborate and use our facilities.

We have remarkable facilities, from perhaps the world's top short-pulse laser lab (featured on the cover of *Laser Focus World*) to a leading center for nanotechnology that has already spun off two companies, one for solar electricity and the other for efficient lighting, to the speedy DEACNET parallel scientific supercomputing cluster used by the computational physicists in the department. And these facilities are all available to our undergraduates.

Smaller universities have historically been the most effective at preparing future scientists, as demonstrated by the demographics of those who hold doctorates in physics. Wake Forest, with its rare blend of outstanding facilities, extraordinary faculty, and small college values, is uniquely suited to develop in students a passion for learning and exploration that is the hallmark of all great scientists.



## THE UNIVERSITY

Wake Forest is unusual. Those familiar with our reputation are often surprised to find how small we are. We have over 4,500 undergraduates, making us the third smallest NCAA Division IA school. All our classes (except for some one-credit labs) are taught by faculty, not by graduate students. The beautiful 340-acre campus in Winston-Salem, NC is perhaps the most technologically advanced in the country. Every entering student gets a hot notebook computer with upgrades throughout the undergraduate period. Our campus has complete wireless coverage with speedy 802.11G and A networks.

Our student body has a tradition of community service, from building houses for Habitat for Humanity to working with the City of Joy. The University seeks students who have the ability and the desire to make a difference in the world.



WAKE FOREST  
UNIVERSITY

Department of Physics