

The Chance to Make a Difference

Many students can go to college. If you think you have what it takes to contribute to human welfare through excellence in research science, the STARS program may be for you. We offer an outstanding education in the biosciences that will be the bedrock of professional success for those with the discipline to excel.

Graduates of STARS will be leaders in the scientific community who give back to the nation and their communities by advancing knowledge in biotechnology, medicine, and the fundamental life sciences. If you want to be proud of your education and your purpose in life, now is the time to investigate becoming a STAR.

For More Information

School of Molecular Biosciences
Washington State University
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Pullman WA 99164-4234
509-335-1276
molecular.biosciences.wsu.edu/STARS

Admission to Washington State University and the STARS program is granted without regard to race/ethnicity, color, creed, religion, national origin, gender, sexual orientation, age, marital status, disabled veteran or Vietnam-era veteran status, disability, or use of a service animal.

Professor John Nilson is the director of the School of Molecular Biosciences at Washington State University. His research in molecular endocrinology is known across the nation and drives innovation in biotechnology and the fundamental life sciences.

Applications

Applicants to the STARS program must have been accepted as students to WSU or be current undergraduates.

Entering freshmen need to have an excellent high school GPA. Preference is given to students from schools in Washington.

Students who are already undergraduates must have a minimum GPA of 3.6 in their basic science and math classes.

Students must show a clear interest in science* as indicated by their high school and/or college coursework and experience.

Students must show a strong interest in earning a doctorate (Ph.D.) in molecular biosciences at WSU, as communicated by their essay in the STARS application.

*This program is not intended for students pursuing preprofessional studies in the health sciences (i.e., premed).

Visit molecular.biosciences.wsu.edu/STARS for details and information about how to apply.

STARS:

Students Targeted toward Advanced Research Studies

The fast-track from undergraduate to doctorate

School of Molecular Biosciences



Biochemistry major Lisa Cannon led development of a new and faster method to quantify the active ingredient in a nutritional supplement. With the help of faculty, she chronicled her discovery in the journal Analytical Biochemistry.



Accelerate Your Success and be a STAR

Scientists change the world. Washington State University can help you become a professional scientist, as comfortable in a research laboratory as you are in a classroom. In the STARS program you'll receive generous support including scholarships, employment, and one-on-one advising.

If you are accepted into STARS in the School of Molecular Biosciences and make progress through the program you will receive:

- Thousands of dollars in scholarships when you are a freshman, with scholarships of greater amounts each subsequent year
- Stipends each summer you are an undergraduate to do research in the laboratories of WSU's best faculty in the life sciences
- Advising support from university faculty that extends from your freshman year through the completion of your doctorate
- The opportunity to major in your choice of biochemistry, genetics and cell biology, or microbiology

Overall, STARS students receive Ivy League caliber support and education while studying biosciences right here in Washington.

Join the Ranks of Elite Science Students

You can find a purpose greater than yourself through accomplishments in molecular bioscience. The STARS program is designed for students with a clear record of exceptional performance in science and math classes in high school or college. Good fundamentals, a serious work ethic, and dedication to success are the ingredients for excellence in the program. We welcome your application and look forward to the outstanding accomplishments of the students who are accepted.

The STARS program will let you enter the ranks of professional scientists on the fast track. You'll enjoy interacting with highly-motivated peers who help accelerate your learning as an undergraduate. The program will also facilitate your transition into doctoral work during your senior year at WSU. The result is that you can complete your doctorate in as little as seven years after you left high school. This is a two to four year time-savings compared to the education of many young scientists.

Four undergraduates discuss the results of a biosciences research project at WSU's annual Research Poster Competition.



Undergraduates Showcase Their Research

Each spring at WSU, science majors have the opportunity to present their research projects in a setting that replicates professional conferences.

"The Research Poster Competition is a wonderful learning experience for our students," said Associate Dean of Sciences Mary Sanchez Lanier. "Students create a professional poster and give an oral presentation of their work. They then get written feedback from judges on their total effort. One student said she had better questions posed to her at our event than at an American Chemical Society meeting where she had given a similar presentation."

The poster competition illustrates the fact that undergraduate education has always been the cornerstone of WSU. With the STARS program, the College of Sciences is taking that tradition to a higher level.



Student Spotlight: Biochemistry

Chris Oldfield, a biochemistry major at WSU and a member of the Honors College, hit a grand slam with his undergraduate thesis work. Oldfield's research on disordered proteins led to two widely cited publications in *Biochemistry*, a journal of the American Chemical Society.

"Proteins are the workhorses of the cell," Oldfield said. "Understanding the means by which they carry out biological processes is of paramount importance to biology and medicine."

Intrinsically disordered proteins (IDPs) pose challenges for researchers across the nation in molecular biosciences. The fact that Oldfield's publications about IDPs are cited by other researchers means that his ideas are influencing the research done at many institutions around the world.

Looking back at his experience as a student at WSU, Oldfield said, "WSU is unique as far as providing research opportunities for undergraduates. The quality of the education offered equals any I have seen (elsewhere)."

Broad Support for Students

In addition to the special benefits given to students in the STARS program, life-science majors at WSU receive the following support for their intellectual and personal journeys:

- The Gannon-Goldsworthy Residence Hall is filled with science, math, and engineering students. A special floor of the hall is reserved for bioscience majors. The hall includes a fully equipped computer lab and offers tutoring opportunities.
- Social and professional opportunities to interact with other students and the faculty are common within the School of Molecular Biosciences.
- An award-winning Student Recreation Center is open throughout the day and most of the night for exercise and socializing.
- University-wide multicultural student offices and the Women's Resource Center are available to all students for support and activities.
- A newly renovated Student Union Building with excellent facilities is available for dining and recreation.

Careers

Outstanding careers in research science are available in molecular biosciences. WSU students earning doctorates in this field may:

- become research scientists in industry and business
- expand their careers as entrepreneurs in biotechnology
- teach the next generation of research stars as faculty members at colleges and universities across the nation
- refine their skills by attending medical school and becoming research-based physicians

Regents' Professor Rod Croteau hoods a doctoral student at university commencement exercises. The ceremonial hood represents the doctoral degree, and tradition dictates that the faculty advisor puts the colorful hood over the new graduate's shoulders. Professor Croteau is in WSU's Institute of Biological Chemistry and mentors students within the School of Molecular Biosciences. He is a member of the National Academy of Sciences and is credited with creating a laboratory process that generates a sustainable and affordable supply of Taxol, a major anticancer drug in use around the world.

