Science programs at Stevens have been carefully designed to expose you to broad knowledge in several disciplines while giving you the opportunity to focus on a major field of interest. Your time will be spent building research practice to develop into a highly functional and contributing member of a professional research team or to pursue advanced study in competitive graduate or professional schools. This focus on practice is a fundamental part of all Stevens programs. As a result, you will develop several critical competencies:

+ The ability to analyze and develop creative solutions to problems
+ Self-reliance in approaching open-ended challenges and in the use of information technologies
+ Effective teamwork and communication skills
+ An understanding of the societal, economic, environmental, and ethical impact of scientific research projects
+ An openness to entrepreneurial concepts, through special programs

For example, the Stevens Physics curriculum is built around the SKIL (Science Knowledge Integration Ladder) course sequence. This six-semester core sequence allows students to work on projects of their own choosing. This fosters independent learning, innovative problem solving, collaboration and teamwork, and knowledge integration under the guidance of a faculty advisor. In our Chemistry and Chemical Biology programs, your coursework will build to a two-semester Chemical Project or Chemical Research sequence, in which you will put your foundational knowledge to work in a major project.

What's more, you will work closely with research professors during your time at Stevens, benefiting from their expertise and training. The small size of our programs allows for a great level of interaction among students and faculty, which means more access, opportunities, and exposure to research methods and outcomes for our students.

At Stevens, we use what we learn in the classroom and research labs to make positive change in the world. The transformative value of knowledge—our methods, discoveries, and outcomes—is the realization of our pursuits. Stevens provides you with the tools that will give you the technological literacy to succeed in your profession immediately and in the decades to come. In the science disciplines, this agility has tremendous value, whether your future is in a lab, a classroom, or a corner office.

**PROFESSIONAL RESEARCH EXPERIENCE**

The experience of Science students at Stevens is distinctive because the rate at which undergraduates are involved in meaningful research is unparalleled. Engaging in research alongside renowned faculty equips our students with the exceptional problem-solving and critical thinking skills necessary for success in today's workplace. As a major research university, Stevens gives you the opportunity to pursue scientific discovery and see the impact that research has on the challenges faced by society. Within the Schaefer School of Engineering and Science at Stevens, we have aligned engineering and science programs to create a collaborative research culture that closely mimics real-world research and development (R&D) and nurtures the lifecycle of innovation. In this environment, laboratory discoveries are put into play in high-impact products and devices that move to the marketplace. This is the environment in which you will study and gain hands-on experience. It represents a structure that is consistent with the project teams found in today's workplace. Because your science degree includes the breadth of science and the humanities, you'll be prepared to contribute to a wide range of projects. At Stevens you can have meaningful hands-on research opportunities while taking advantage of the benefits of being at a major research university and the collaborative nature of work here.
sary for advanced studies. In many cases this experience leads to co-authorship and presentation of papers, patent applications, or peer-reviewed journal articles. Stevens faculty strongly encourage and support the involvement of undergraduate students in faculty-mentored research. This provides a connection to how new knowledge and new technologies are created and the excitement that goes along with it. This also allows you to become familiar with the research process and obtain a deeper understanding of a particular area of interest.

**SUMMER RESEARCH OPPORTUNITIES**

**STEVENS SCHOLARS PROGRAM**
The Stevens Scholars Program offers qualified students the opportunity to focus on several areas of study and to either participate in undergraduate research or pursue an accelerated program leading to a dual bachelor’s/master’s degree in four years. As part of the Scholars Program, we offer special honors seminars at the freshman and sophomore levels in chemistry, computer science, mathematics and physics. Scholars also have the opportunity to work on a special research project with a faculty research mentor during the summer months.

**INNOVATION & ENTREPRENEURSHIP SUMMER RESEARCH PROGRAM**
This undergraduate summer research opportunity allows students to engage in innovative research projects. Students conduct research on campus on a full time basis and with the direct supervision of a faculty or research staff member from Stevens. You will also have the opportunity to work closely with engineering and business students as well as other science majors, which will help you develop an openness to entrepreneurial concepts that will facilitate professional success in a rapidly changing global environment. All summer research is presented to the campus community in a fall poster session.

**GRADUATE AND PROFESSIONAL SCHOOLS ATTENDED BY RECENT STEVENS GRADS**

- Albert Einstein College of Medicine
- Baylor College of Medicine
- Columbia University
- Cornell University
- Georgetown University Medical School
- New York University
- University of Arizona
- University of California, Irvine
- University of Medicine & Dentistry of New Jersey
- University of Pennsylvania

“As a chemistry major involved in sophisticated research in biologically active molecules, I was treated as a valuable member of a research team. This approach allowed me to discover what I want to do and make an important impact at the same time. It also made my resume stand out. I was accepted to five Ph.D programs. This had a lot to do with the experience I received at Stevens.”

– Alex White ’12, B.S. in Chemistry, currently a doctoral student in organic chemistry at the University of California, Irvine.

As an undergraduate at Stevens, Amanda DiGuilio had a productive research career. A two-time participant in the Stevens summer research program, she has also conducted cryo-electron tomography sample analysis in Germany and is the co-author of a peer-reviewed paper resulting from nuclear pore complex research conducted in the Chemical Biology lab of Dr. Joseph Glavy. In the lab, she works with Ph.D candidates and faculty to advance her own skills as well as the future of medical science.