Rodman Scholars
Annual Report
2014
Letter from the Director

As director of the Rodman Scholars Program at UVA, there are a lot of things I could write about in this letter. What I would like to focus on is a concern that often arises for students considering engineering as a field of study, but who have strongly competing interests and passions, whether they be music, history, philosophy, economics, or something else. This applies to many Rodman Scholars and, I’m sure, to many prospective Rodmans. My view: you shouldn’t have to choose. Engineering presents you with an incredibly universal skillset, which you can use to accomplish almost anything you set your mind to. Think of your engineering education as a means and your passions as the ends.

The choice between engineering and the liberal arts as fields of study is a false one. Engineering is a profession; a set of skills by which we harness the creativity of the human mind and our knowledge of science and mathematics to generate technological progress. The liberal arts, on the other hand, are a set of keys to unlock the doors to our full potential as human beings and as members of human society. Engineering, and the science on which it is based, can tell us much about how to best accomplish the things we wish to, but it cannot make these choices for us, and it cannot tell us why we should do them.

As Rodman Scholars, you have the opportunity to develop as more than a professional engineer. Rodmans enjoy the curricular flexibility to explore other fields through minors, university seminars, independent research and design projects, international study, and through society and technology coursework. They also have an unparalleled community of scholars who are passionate and dedicated, yet genuinely supportive of one another. The point is, we don’t choose between engineering and our passions, we choose to pursue our passions with the mindset and skillset of an engineer.

Dana Elzey
Director, Rodman Scholars Program
Letter from the Presidents

It has been an exciting year to lead Rodman Council. In addition to organizing traditional events such as an alumni tailgate, inter-class advising, and RodFest at Professor Elzey’s house, this year’s Council has also launched several new initiatives. We have begun a dinner series to offer scholars a chance to discuss graduate school and career plans with a professor. Student-led Rodman Seminars have continued to grow; this year’s offerings included courses on improv comedy, web design, military strategy, casino games, and Caribbean steelpans. We were also able to award more grants to fund student research and design projects, publications and presentations, conference travel, and service learning initiatives. This year, Rodman funds have been put toward everything from disability research and design in Zambia to the development of accent reduction software. We look forward to further developing the ability of the Rodman program to support exciting student projects like these!

Being in a community of talented and driven scholars has inspired us with new ideas and motivated us to perform at a higher level. Rodman Scholars’ involvements are a testament to the fact that students need not wait until graduation to gain meaningful engineering experience and make an impact on communities in Charlottesville and abroad. Professor Elzey’s strong mentorship and dedication to the program also help to create an unparalleled experience. Few other mentors would give their students the chance to spend a whole semester working on a project of choice, or invite the entire Rodman community to a dinner at their house! There is no doubt that the Rodman program has greatly enriched both of our experiences at UVA. We look forward to welcoming the newest class of Rodman Scholars next fall!

Yiqi Cao ‘15
Alisha Geldert ‘15
Co-presidents, Rodman Council
What Rodmans Have Been Doing This Year

RodSem: Singing Steel

David Griggs (‘14) has led a Rodman Seminar for the past two semesters where students create their own Caribbean steel drums from scratch. Beyond hammering, measuring, playing with fire, and more hammering, the students learned about materials science principles like work hardening and modal vibration, and see them in reality as they build their drums!

Service: Davis Project for Peace, Tanzania

Lacey Williams (‘13) and Carolyn Pelnik (‘13) spent the past summer in Ngongongare in northeastern Tanzania. They worked with the Davis Program to promote women’s empowerment and food security by providing a women’s microfinance group. The group included a business training program, interactive community education garden, and curriculum in sustainable agriculture techniques.

RodSem: Public Speaking through Comedy

Purnam Jantrania (‘14) and Mike Kumar (‘13) started a very popular Rodman Seminar in the Spring of 2013 with a simple goal: Gain confidence in front of crowds by learning to perform comedy! Mike and Purnam are members of UVa’s comedy performance community, and were able to share their knowledge and skills to great acclaim by the students. Those who had never performed, let alone improvised, came away with newfound appreciation and public speaking confidence. Purnam has continued the RodSem since Mike’s graduation.
**Research: Johns Hopkins NanoBioTech**

Sarah Hansen (‘15) participated in a prestigious summer 2013 research program at the Johns Hopkins Institute for NanoBioTechnology. Her internship was at the intersection of nanomedicine and gene-based therapies, specifically focusing on glioblastoma and how to use non-viral vectors for targeted DNA delivery to treat them.

**Competition: Global Health**

John Hack (‘16), Sreemoyee Som (‘16), Chris Cai (‘16), and their fellow second-year teammates took first place in UVA’s First Global Health Case Competition by coming up with a human-centered approach to increasing access to primary healthcare in Dharavi, India via retro-fitted auto-rickshaws that would be manned by community health care workers. The team is now working on implementing their solution in Dharavi!

**Bonding: Third Annual Rodman Camping**

In the spring of 2013, for the third year in a row, Charles Eckman (‘14) hosted all interested Rodman Scholars at his family’s farm house for camping, fishing, kayaking, playing Frisbee, making s’mores, telling stories, and spending quality time together. Though it was a very cold night, all twenty Rodmans who came for the weekend had a blast. Charles is hosting camping again in April; hopefully it’ll be warmer this time around!
Rodman Scholars at a Glance

The Class of 2017:

- Top 2% average HS class rank
- 2253 average SAT score
- 7 fives, 2 fours average AP scores
- Top 5.3% of admitted SEAS students

All Rodman Scholars:

- 83% of Scholars secure summer internships or research by the end of their 2nd year; this number rises to 100% by the end of 3rd year
- 71% of Scholars graduate with some kind of international experience

- 128 organizations have Rodmans as members, including student government, service, entrepreneurship, tour-giving, sports, activism, honor societies, Greek life, politics, and theater. The Rodman community includes the Student Council President, the President and Vice President of the Engineering Student Council, the Engineering Representative to the Honor Committee, the winners of the UVA Engineering Entrepreneurship Competition, the Editor in Chief of The Spectra undergraduate research journal, and even the captain of the Ultimate Frisbee team!

Fourth years in the class of 2014 are going on to study in graduate schools like Cornell, Stanford, and MIT in fields such as computational biology, materials science, medicine, computer science, and neural engineering. Others have accepted jobs at employers like Bain & Company, GE Aviation, Tesla Motors, Google, ExxonMobil, and National Instruments. Locations include New York City, Seattle, Boston, Atlanta, Austin, and San Francisco.