

# NEWSLETTER

## Student Spotlight on: *Joseph O'Rourke*

The Connecticut Space Grant Consortium has awarded many grants and fellowships the past few years. One student who has consistently had research projects worth funding is Joe O'Rourke, a senior double majoring in Geology & Geophysics and Astronomy & Physics at Yale University. O'Rourke has received four awards from CT Space Grant.

In spring 2009, he received a travel grant to support a plasma physics experiment that he and six others conducted during a NASA parabolic flight campaign through Johnson Space Center's Reduced Gravity Student Flight Opportunities Program.

In fall 2009, spring and fall 2011, he received fellowships to support a variety of research projects, including high pressure mineral physics experiments on the melting curve of potassium and another parabolic flight experiment on the solidification of fluids in various gravities.

His most recent award is an undergraduate fellowship for the 2011-2012 academic year. He investigates the evolution of terrestrial planets with Prof. Jun Korenaga in Yale University's Department of Geology & Geophysics. Specifically, he studies the thermal histories of planets lacking plate tectonics, like Mars and Venus, using parametrized models of stagnant-lid convection.

Joe says that research experiences that CT Space Grant supported have been "invaluable to his career plans." He hopes to pursue a research career in planetary science, beginning with earning a PhD in the subject. Conducting research allowed him to demonstrate his technical prowess and academic enthusiasm to graduate schools.

O'Rourke is working on obtaining his private pilot license, and he writes about science policy as a staff columnist for the *Yale Daily News* during his free time.



## UTC SUMMER INTERNSHIP



A growing program for the CT Space Grant Consortium is the Summer and Part-time industrial internship program. One of our grant recipients in this program for the Spring 2011 application season was Grace Cotnoir, a junior at the University of New Haven.

Grace studies System Engineering and worked with the System Engineering (SE) and Material & Process (M&P) Engineering groups at Sikorsky Helicopter this past summer. During her internship, she had a specific project, which focused on improving the system engineering process with an emphasis on environment and safety system design material and process considerations.

She enjoyed working with the people there and liked gaining experience. While there, she was given the chance to

fly a helicopter simulator, which she says was a highlight of her experience.

Ms. Cotnoir expresses that she had a great overall experience, from which she learned a lot. She enjoyed being able to apply the things she is learning in school to real life situations. It has also enhanced her studies at school as she has a greater understanding of the things she learns in the classroom now.

Cotnoir thinks that working in industry is a great experience for students; it gives them hands-on experience to pairs greatly with the theory that they learn at school. She found that she enjoys working in industry and learned the aerospace/defense field interests her.

She is currently continuing an internship at Sikorsky. Upon graduating next year she says she will probably pursue a career in industry; perhaps continuing in the aerospace field.

In her free time, Grace volunteers with Guiding Eyes for the Blind, plays the piano, and likes to travel.



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*Make the United States the Aerospace leader of our solar system.*

### VISION STATEMENT

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