The AIP Career Pathways Project: Equipping physics majors for the STEM workforce

After four years of site visits, analysis, and product development, the AIP Career Pathways Project (CPP), which was supported by the National Science Foundation, is drawing to a close. This project has led to a number of new insights that may have a significant impact on the recruitment, retention, and career preparation of undergraduate physics students.

CPP was designed to identify common features among physics departments with a strong record of preparing physics bachelor's for the science, technology, engineering, and mathematics (STEM) workforce and to disseminate that information to the physics community. By equipping physics departments and their students with tools for effective career preparation, the project aims to increase the overall number and diversity of physics graduates, and of those joining the STEM workforce after the bachelor’s degree. The PIs included members of the Education Division and the Statistical Research Center, who were supported by three Society of Physics Students summer interns and a number of volunteers.

Through site visits to eight diverse physics departments with a record of success in preparing undergraduate students for the STEM workforce, we distilled ten common features.
Let's get to work: The Careers Toolbox

Solving difficult theoretical constructs, mastering hands-on experimental techniques, wrangling data acquisition and analysis, and developing skills in error analysis, technical writing, and computer programming make physics students excellent candidates for a wide variety of jobs. Translating those skills into marketable language for potential employers, however, can be a daunting task. Enter the Careers Toolbox for Undergraduate Physics Students, a product of the Career Pathways Project. This set of tools, available as a workbook and freely available on an engaging, interactive website, guides students through an exploration of career options and helps prepare them for success in their job search. Many of the tools can also be used to find internships, research positions, or even gain entrance into graduate programs.

Read more.

In search of the ultimate internship

For several years, The Physics Nucleus, a site sponsored by AAPT, AIP, SPS, and NSF-NSDL, was a popular destination for posting science and engineering internships and research opportunities for students. In mid-2014, however, when it became apparent The Physics Nucleus would soon be phased out, a need for a successive clearinghouse for such jobs was created. In October, after working closely with SPS, the Career Network launched a heavily revised SPS Jobs site, designed as the ultimate destination for early-career scientists.

Read more.

Member Society Spotlight

(Way) above the fold

Three Member Societies (AAPT, AMS, and AAS) held national meetings last week, and AIP was pleased to be a part of each one. Next week’s issue will provide more information. But it’s not often that news from a Member Society meeting appears “above the fold” on the front page of the New York Times. Check out AAS’s success in getting exciting astronomy news into the popular press: So Many Earth-Like Planets, So Few Telescopes by science writer Dennis Overbye. Astronomy took center stage with this January 6th article.

Coming Up

January 14

- AIP Management Retreat (College Park, MD)
January 19

- AIP and AIP Publishing closed for Martin Luther King Jr. Day (College Park and Melville)

January 19-20

- International Year of Light opening ceremony (Paris, France)

January 26-27

- AIP Board of Directors' Meeting

January 30

- Physics Today Advisory Committee Meeting (College Park)

February 4-6

- 2015 PSP Annual Conference (Washington, DC)

February 12-16

- AAAS Annual Meeting (San Jose, CA)

February 16

- AIP Investment Advisory Committee (IAC) Meeting (Phoenix, AZ)

February 25

- AIP Publishing Board of Managers Meeting (NY, NY)

February 26-27

- Physics Resources Advisory Committee Meetings (College Park, MD)

February 28

- Physics Resources Policy Committee Meeting (College Park, MD)