Program Helps Young Scientists Prep for Academic Job Market and Raise Awareness of Nuclear Physics

The academic job market is very competitive and applying for a faculty position requires a range of skills that many young scientists haven’t explicitly been trained in. Now, a program supported by the JSA Initiatives Fund is helping these young researchers work on the skills crucial for a successful job search.

The JSA Promising Young Scientist program helps postdoctoral researchers develop and fine tune a range of skills necessary for succeeding in the tight academic job market, according to Wouter Deconinck, assistant professor of Physics at the College of William & Mary and principal investigator of the program.

“The program helps our junior nuclear physicists work on their public speaking, communication and job interview skills, as well as with preparing application materials such as their resume, CV (or Curriculum Vitae), a teaching statement and a research statement, and crafting and delivering a colloquium,” Deconinck notes.

“Crafting and presenting an accessible colloquium-level talk,” he points out, “is likely the most important aspect of the academic job interview process. This program provides the participants with guidance and feedback so they can successfully develop, organize and deliver an outstanding colloquium.”

The postdoctoral fellows selected for the Promising Young Scientist program get feedback and guidance from the program’s committee on their application packages and their colloquium presentations. Each individual goes through a “mock” interview at one of the participating institutions, which includes giving his or her colloquium.

“Our primary goal is to improve the young scientists’ odds of getting permanent faculty and staff positions,” Deconinck emphasizes, “and in the process, we hope to re-invigorate the tradition of the colloquium geared to a general audience, which will help improve the understanding of and appreciation for nuclear physics research.”

He maintains, “This public accessibility is crucial to ensure that nuclear physics retains funding and support from the larger community.

“We just finished this year’s selection, and we have selected five promising young scientists who will each be invited to a university,” Deconinck said on behalf of the selection committee. Those selected will give a colloquium in the coming fall or early spring of 2013.

-- John Leckey, a postdoc at Indiana University, working on the Gluonic Excitations Experiment, or GlueX, in Hall D, has been invited to present a colloquium at Christopher Newport University.

-- Seamus Riordan, a postdoc at the University of Massachusetts, working on parity violation and nuclear structure experiments in Hall A, has been invited to present a colloquium at Mississippi State University.

-- Pedro Jimenez-Delgado, a postdoc at Jefferson Lab, working on parton distribution functions in the Theory and Computational Physics group, has been invited to present a colloquium at Idaho State University.

-- Narbe Kalantarians, a postdoc at Hampton University, working on the Super High Momentum Spectrometer drift chambers for Hall C and the DarkLight experiment in the Free-Electron Laser facility, has been invited to present a colloquium at the University of New Hampshire.

-- Vince Sulkosky, a postdoc at Massachusetts Institute of Technology, working on short-range correlation experiments in Hall A, has been invited to present a colloquium at the College of William & Mary.

“I think we provide a great service to our postdocs, and they are grateful for the opportunity to practice skills that you otherwise only use when you are in a real job-search situation,” Deconinck said. “Previous participants have said that this experience helped them tremendously in their first job interviews!”

Jean-Francois Rajotte, Massachusetts Institute of Technology, participated during the 2011-12 academic year. Afterward, he said, “I feel lucky to have been selected for the JSA Promising Young Scientist program. I don’t see how else I
could have learned about the faculty application process in such a concrete way. I am thankful to the physics department of Mississippi State University, especially professors Dipangkar Dutta and Gautam Rupak who welcomed and guided me for three days on their campus. Several professors spent time with me discussing their research and their life as faculty members. In addition to the colloquium, I also gave a lecture at the undergraduate level, another useful experience that does not come often to a postdoc.”

“This program not only offers valuable entries for my CV, it is also informative about the life of a professor and reveals a ‘behind the scenes’ look at a faculty position interview,” Rajotte added. “I recommend everyone who is considering an academic career to apply for the program.”

Another participant from last cycle, Juliette Mammei, also had very positive comments about the program.

“I have only been a postdoc for two years, but people told me to apply early and often so I decided to apply for several tenure-track faculty positions at universities that I felt would be a good match for me,” she said. “I also applied for the JSA Promising Young Scientist program, and was very happy to be accepted.

“Before I even gave my colloquium,” she continued, “I had already received valuable feedback on my research plan and teaching statement, which were part of the application for the program. I was invited to give a colloquium at William and Mary. Afterward, some of the audience members gave me constructive criticism; they were very encouraging and helpful. In addition to getting feedback about the colloquium, the department also conducted a mock interview, with visits to various faculty members as well as an interview portion with faculty who had volunteered to serve as a search committee. The whole experience gave me confidence by letting me know what to expect during my subsequent interviews.”

“I went for my first real interview a week after I gave the colloquium at William and Mary,” Mammei said. “A month after the JSA Promising Young Scientist mock interview and practice colloquium, I went for an interview at the University of Manitoba, and am proud to say that I will be starting there as an assistant professor this fall.”

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