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## **NEWS RELEASE**

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## Purdue researcher receives presidential award

WEST LAFAYETTE, Ind. - A Purdue University researcher will receive a Presidential Early Career Award for Scientists and Engineers (PECASE).

Alice L. Pawley, an assistant professor in the School of Engineering Education, is among 96 researchers named as recipients. PECASE is the highest honor bestowed by the U.S. government on science and engineering professionals in the early stages of their independent research careers.

Ian Kaplan, an assistant professor of entomology in Purdue's College of Agriculture, also is among the 96 chosen for the award this year.

"Dr. Pawley's pioneering research represents an important component in efforts to increase diversity in engineering," said Leah H. Jamieson, Purdue's John A. Edwardson Dean of Engineering. "She is working to learn some of the root causes underlying why women and people of color continue to be under-represented in engineering fields."

The awards were announced Monday by the White House. Awardees are selected for their pursuit of innovative research at the frontiers of science and technology and their commitment to community service as demonstrated through scientific leadership, public education or community outreach.

"It's a huge honor to be recognized by the White House," said Pawley, who also is an affiliate faculty member in Purdue's Women's Studies program and the Division of Environmental and Ecological Engineering. "Such recognition encourages the American public and funding agencies to support studies aimed ultimately at improving diversity in engineering. I am thrilled that feminist research methods hailing from women's studies, blended with engineering education research questions have been recognized in this way."

Pawley was among six Purdue faculty members to receive a Faculty Early Career Development award in 2010, the National Science Foundation's most prestigious honor for outstanding young researchers.

She is studying why some groups, including white women and people of color, have remained chronically under-represented in engineering degree programs. Women represent about 18

Page 2 Purdue News

percent of undergraduate engineering students – a proportion that hasn't changed much in two decades. To address issues of under-representation, Pawley uses information from the personal experiences of under-represented undergraduate students to better understand how different institutional structures affect their persistence and success. The research may help policymakers learn how to better structure institutions to better meet the needs of under-represented students. She is developing tools, including systematically collected and analyzed stories from students, to teach policy makers to "learn from small numbers" of under-represented engineering students, rather than through statistics alone.

Pawley holds a bachelor's degree in chemical engineering with distinction from McGill University, a master's degree in industrial engineering and a doctoral degree in industrial and systems engineering from the University of Wisconsin, Madison

The federal agencies involved in nominating the presidential award winners include the NSF; the departments of Agriculture, Commerce, Defense, Energy, Health and Human Services, and Veterans Affairs; and the National Aeronautics and Space Administration.

The award was established in 1996. Four previous Purdue faculty members to win the award were Demetra Evangelou and Monica Cox in the School of Engineering Education, Douglas Adams in the School of Mechanical Engineering and Carol Anne Clayson in the Department of Earth and Atmospheric Sciences. Other engineering faculty members to receive the award before joining Purdue are Shirley Dyke, a professor of mechanical and civil engineering, John Sutherland, a professor of mechanical engineering and head of the Division of Environmental and Ecological Engineering, and David Bahr, recently named as head of the School of Materials Engineering.

The awards ceremony will be July 31 in Washington, D.C.

Pawley is a member of the American Society for Engineering Education, International Network for Engineering Studies, National Women's Studies Association and other organizations.

Writer: Emil Venere, (765) 494-4709, venere@purdue.edu

Source: Alice Pawley, apawley@purdue.edu

Leah H. Jamieson, 765-494-5346, lhj@purdue.edu

## **Related Websites:**

Alice Pawley: http://web.ics.purdue.edu/~apawley/ Her research group: http://feministengineering.org/

White House news release: http://www.whitehouse.gov/the-press-office/2012/07/23/president-obama-honors-

outstanding-early-career-scientists