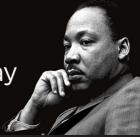


At PPPL  
**THIS WEEK**

MONDAY, JAN. 20

Martin Luther King Jr. Day



MLK Day Celebration

1:15 p.m. ♦ Richardson Auditorium

Princeton University

Keynote speaker: Omar Wasow

Assistant professor of politics,  
Princeton University

WEDNESDAY, JANUARY 22

PPPL Colloquium

4:15 p.m. ♦ MBG Auditorium

Addressing Big Data Challenges in  
Simulation-based Science

Manish Prashar, Rutgers University

WED., JAN. 22 - WED., JAN. 29

Business Clothing Drive

8-9 a.m & 12:30-1:30p.m. ♦ A116

Please donate gently used business  
clothing, discarded eyeglasses & stuffed  
animals (that will be used to create dog  
toys).

SATURDAY, JANUARY 25

Science on Saturday Lecture

9:30 a.m. ♦ MBG Auditorium

The atmosphere as a laboratory:  
aerosols, air quality, and climate

Peter DeCarlo, Drexel University

SUNDAY, JANUARY 26

Andrew Zwicker, Featured Speaker

10:30 a.m.-2 p.m. ♦ TEDx Conference

Global Change: Clean Energy  
by Creating a Star on Earth

Princeton Charter School,  
110 Bunn Drive, Princeton

**INSIDE...**



Whitman appointed  
..... page 2



Zwicker TEDx Talk  
..... page 3



Cafe@PPPL Menu  
..... page 6

**New committee will tackle  
diversity plan for PPPL**

By Jeanne Jackson DeVoe



Andrea Moten, PPPL's employment manager, who is heading a new diversity initiative at PPPL, with Atiba Brereton, a mechanical engineer who came to PPPL through PPPL's Engineering Apprenticeship Program.

PPPL has long had programs to encourage women and minorities in the STEM fields and has focused on making the staff more diverse. Now the Laboratory is redoubling its efforts to promote diversity at PPPL and provide more support to all staff members, particularly new staff.

PPPL's diversity effort is in part a response to a Princeton University initiative spurred by a report that found the University has done a good job recruiting a diverse class of undergraduates but that women and minorities still make up a small percentage of graduate students, full professors and senior staff.

Similarly, PPPL has recruited a more diverse staff over the past few years. However, like Princeton, there are still few women among the senior staff, researchers and engineers at the Laboratory.

"We're doing well but we want to do better," said Andrea Moten, PPPL's employment manager, who is heading PPPL's diversity effort. "We don't want to become complacent. The demographics of the country are changing and we have to change with it."

Lab Director Stewart Prager said PPPL is strongly committed to the effort to make the Laboratory more diverse. "It's important for the Laboratory to do everything we can to diversify the workforce, particularly the engineering and research workforce," he said.

**First step: a PPPL Diversity Committee**

The first step at PPPL will be to form a diversity committee, which will look at what sort of programs PPPL should pursue as part of its own strategic diversity plan. (If you are interested in joining the committee, please contact Moten, [amoten@pppl.gov](mailto:amoten@pppl.gov).) One goal of the committee will be to provide more support and encouragement to staff members, especially early-career staff who are just coming into the Laboratory.

# Whitman appointed to DOE's Minorities in Energy Initiative

By Jeanne Jackson DeVoe

**F**ormer Gov. Christine Todd Whitman has been named as an ambassador for the U.S. Department of Energy's Minorities in Energy Initiative, which aims to increase the participation of minority communities in businesses and careers in science and technology fields related to energy and climate change.

The Minority in Energy Initiative's Ambassadors Program selects key leaders in industry, government, academia and non-profits to work with the DOE's Office of Economic Impact and Diversity to inform and inspire the public about the critical need for more minority participation in these fields.

For more information see:

<http://www.energy.gov/diversity/services/minorities-energy-initiative/ambassadors-minorities-energy-initiative>

U.S. Secretary of Energy Ernest Moniz said the U.S. will need to draw on a large pool of talent as energy technologies develop to address climate change. "We are talking about a multi-trillion dollar business issue globally as we evolve today's energy technologies," he said when the program was launched on Sept. 24. "We've got to be on the train if we want to lead that technology revolution and to do so we're going to need an awful lot of talent."

Women and minorities have been vastly underrepresented in the STEM (science, technology, engineering and math) fields. While Hispanics, African Americans and Native Americans represent 24 percent of the overall workforce, they make up only 9 percent of the U.S. science and engineering workforce, according to the Initiative website.


The ambassadors will travel to high schools and minority communities to encourage more participation in STEM and energy-related fields among young people, entrepreneurs and business people. They will also be involved in a yearly recognition awards program recognizing minority leaders in the energy field, particularly young people.

The program is based on a similar international program for women as part of the Clean Energy Education and Empowerment Initiative launched by the DOE and MIT in 2012. That initiative has ambassadors who aim to recruit, retain and advance women in clean energy fields and who select award recipients.

For more information see:

<http://www.energy.gov/articles/us-department-energy-and-mit-energy-initiative-announce-women-clean-energy-program-united>

Whitman was among 22 persons appointed as Minorities in Energy Initiative Ambassadors. The group includes Nina Davuluri, the 2014 Miss America; as well as former Secretary of Energy Hazel O'Leary, former New Mexico Governor Bill Richardson, and numerous business and non-profit leaders.

Whitman was governor of New Jersey from 1994 to 2001 and left her position to become administrator of the U.S. Environmental Protection Agency from 2001 to 2003. She has since served as president of the Whitman Strategy Consulting Group, a consulting firm specializing in energy and environmental solutions for businesses. She was named co-chair of the Clean and Safe Energy Coalition, an organization that promotes nuclear energy, in 2006. She is co-chair of the Republican Leadership Council, which she founded with former U.S. Senator John Danforth, and author of the 2005 book, "It's My Party Too." 



Former Governor Christine Todd Whitman  
(Photo courtesy of the U.S. Environmental Protection Agency).



## Science Bowl Volunteers Needed Feb. 21 and Feb. 22



PPPL will host 48 teams of middle and high school students (about 250 students total) on Friday, Feb. 21 and Saturday, Feb. 22 for the New Jersey Regional Middle and High School Science Bowls.

**We need your help!** Please volunteer to help out as moderators, science/rules judges, time/score keepers, lunch attendants etc. Lunch will be provided for competition day volunteers. Please contact **Deedee Ortiz** at [dortiz@pppl.gov](mailto:dortiz@pppl.gov) or ext. 2785 to sign up or for more information.



## Zwicker to give TEDx talk January 26



Andrew Zwicker

Physicist Andrew Zwicker will give a public talk on magnetic fusion entitled, “Global Change: Clean Energy by Creating a Star on Earth,” at a TEDx conference for young people entitled “Change: Personal, Local & Global,” on Sunday, Jan. 26 from 10:30 a.m. to 2 p.m. at the Princeton Charter School, 110 Bunn Drive, Princeton. The conference is free and open to the public.

In his 18-minute talk Zwicker focuses on the limits of future energy and how creating fusion energy could solve problems posed by current energy sources by creating a clean, available, compact, affordable and safe source of energy that is not subject to the weather.

As fusion research moves forward, Zwicker explains, the challenge is, “to design a magnetic bottle and create a star on earth.”

Other speakers include Erin Schrode, co-founder of “Teens Turning Green,” who will discuss “Conscious Consumerism: Avoiding Toxins in Everyday Life;” Jonathan Lightner, a health-educator at HiTOPS, who will discuss the definition of success, and the effect of parental and academic pressures on mental health; freelance journalist Ben Taub, who

will discuss “the difference between journalism and war tourism in conflict areas;” Menelaos Mazarakis, a senior at Princeton High School who is president of the Princeton-Peru Partnership; and Steven Chan, a senior at NYU and a co-founder of Student to Student. The conference will also show other TED Talk videos.

RSVP by emailing [tedxprincetonyouth@gmail.com](mailto:tedxprincetonyouth@gmail.com) to reserve tickets, which will be distributed at the site. Those who don’t reserve tickets will receive tickets on a first-come, first-served basis.

The event’s website is <http://tedxprincetonyouth.starflag.net>.

TEDx is an independent event that follows the general guidelines of TED talks, 18-minute talks on a wide range of topics from experts around the world.

Zwicker’s TEDx talk at Saint Peter’s University in Jersey City last year is posted on the TED site at

<http://tedxtalks.ted.com/video/Creating-a-Star-on-Earth-The-Pa;search%3Azwicker> 📺

## Science on Saturday kicks off

Some 300 people came to PPPL on Saturday when Science on Saturday marked its 30-year anniversary with a talk by PPPL research physicist Walter Guttenfelder on plasma physics.

The series continues through March 15. A full downloadable schedule is available at

[http://www.pppl.gov/2014\\_SoS\\_Full\\_Schedule](http://www.pppl.gov/2014_SoS_Full_Schedule).

**Walter Guttenfelder’s Science on Saturday lecture was entitled, “Containing a Star on Earth: Understanding Turbulence at 100 Million Degrees.”**



**The audience packed the auditorium Jan. 11 to hear Guttenfelder’s talk on the first day of Science on Saturday.**

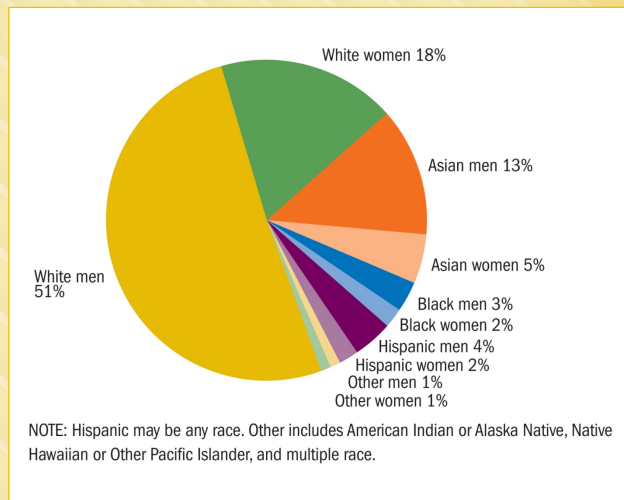
# diversity plan

continued from page 1

Princeton University President Christopher L. Eisgruber announced the plan to make the University more diverse last September, after releasing a report by a 19-member Trustee Ad Hoc Committee on Diversity that surveyed 2,500 people on campus.

The diversity report urged Princeton to “renew its commitment to diversity with a sense of urgency” and make “substantive changes.” It recommended each department, including PPPL, come up with a diversity plan with specific goals. Each department will be held accountable for meeting those goals in a phased-in program over three years that will reward progress and have penalties for a lack of effort. The committee also made numerous other recommendations to increase diversity among graduate students, tenured professors and senior administrators.

## Scientists and engineers working in science and engineering occupations: 2010



Women, Minorities, and Persons with Disabilities in Science and Engineering: 2013  
[www.nsf.gov/statistics/wmpd/](http://www.nsf.gov/statistics/wmpd/)

PPPL and all University departments will submit their plans by the end of this year and will put them into place in 2015, Moten said.

### University and PPPL confront similar statistics

The University’s diversity report found that while Princeton’s undergraduate student population is much more diverse than a decade ago, other areas of the University still lack diversity, particularly when it comes to the percentage of underrepresented minorities, which include African-Americans, Hispanics, and Native Americans. The undergraduate class that entered its freshman year in 2012, for example, is diverse: half are women, 8 percent are Hispanic and 8 percent are African-American. And while 36 percent of doctoral students are women, only 3 percent are black and 6 percent are Hispanic. Among Princeton’s 505 full professors, 4 percent are black, 2 percent are Hispanic and 22 percent are women. While 50 percent of Princeton’s 396 senior staff is female, the group is 86 percent white. Just 6 percent of senior staff members are black and 2 percent are Hispanic.

At PPPL, the statistics are similar. About 81 percent of all staff members are male and the same percentage are white (as of October 2013). The 19 percent of minority staff members include 10 percent Asians, 1 percent American Indians, 6 percent African-Americans, and 2 percent Hispanics. There are very few physicists and engineers who are female or are members of minority groups.

Moten noted that PPPL has succeeded in recruiting a diverse pool of new employees. Women made up 35 percent of the employees hired in 2012, for example, compared with 22 percent in 2008. Minorities made up 30 percent of all employees hired in 2012, compared with 26 percent in 2008. However, these percentages applied to a small pool of employees since just 23 people were hired in both years due to a low employee turnover rate at PPPL.

### A nationwide problem

The statistics at PPPL and Princeton University reflect a nationwide problem. A report on “Women, Minorities, and Persons with Disabilities in Science and Engineering: 2013” by the National Science Foundation shows that 26 percent of all science and technology jobs are held by women, 5 percent by African-Americans and about 7 percent by Hispanics. The statistics also show that fewer than 10 percent of engineers are women, 6 percent are of Hispanic descent and 5 percent are African-American.

“It’s been a dogged problem with some deep social causes that’s been really difficult to solve,” Prager said. “We are working very hard at addressing this issue.”

The University diversity report cited the case study of the Diversity Programs in which representatives of two University science departments, Molecular Biology & Quantitative & Computational Biology at Princeton, worked to attract women and minorities. The leaders employed a host of initiatives to significantly increase the number of underrepresented minority doctoral students from 3 percent between 2003 and 2007 before the program started to 22 percent between 2008 and 2012. These included an undergraduate research program, a summer sabbatical program for faculty from two historically black colleges, aggressive recruitment of minority students, a more holistic approach to admissions, and an “intensive month-long summer boot camp,” course for incoming students. A report on the case study is available here: <http://www.princeton.edu/reports/2013/diversity/report/PU-report-case-study.pdf>.



# diversity plan

continued from page 4

## PPPL programs address gaps

One way PPPL tries to address the root causes of the lack of diversity in the STEM fields is by sponsoring the Young Women's Conference in Science, Mathematics, Technology & Engineering. Last year, the program brought more than 400 young women from seventh through tenth grade to Princeton University to meet and do hands-on science activities with female scientists and engineers from across the country.

A survey of girls who attended the conference in 2010 by PPPL's Science Education Department found the conference succeeded in changing girls' attitudes about women and science. The percentage of girls who think science and engineering are something women are "very good at," jumped from 6 percent before the conference to 18 percent after the conference, while the percentage of girls who said they would consider majoring in the physical sciences jumped from 8 percent to 18 percent.

Another PPPL program aimed at encouraging women and minority undergraduate engineers is PPPL's Engineering Apprenticeship Program, which offers paid summer internships at PPPL to a small number of students. Kelsey Treshermer and Atiba Brereton, both mechanical engineers at PPPL, are among the graduates of the program.

The Science Education Department also offers the Visiting Faculty Program for faculty at colleges and universities that primarily serve women and minorities or that have limited laboratory facilities.

## A focus on supporting and retaining new staff

The University's diversity report recommended that all departments at the University focus more on supporting and retaining staff members, particularly new and early career employees, to increase diversity in the senior staff. One focus of PPPL's diversity committee will probably be to develop new programs that do just that through formal training to improving employees' skills or through informal training with mentors, Moten said. "We spend a lot of time recruiting but when we get people here, it's important that we give them the tools that they need so they can be successful," she said.

PPPL's diversity committee will likely also consider forming employee resource groups to support specific groups of employees such as early career staff, women and minorities. In the past, the Laboratory had a Director's Committee on Women as well as a Minority Advisory Committee, both of which have been inactive for the past few years. The University's diversity report concluded that these resource groups could help "build relationships and support networks" and recommended the groups be given more resources.

Moten encourages employees at PPPL to take advantage of resource groups at the University that offer the chance for employees to socialize and network. These include a group for international employees, lesbian, gay and transgender people, and "Princetonians of Color." A new group forming this year focuses on employees who are veterans. See below for a complete list or go to <http://www.princeton.edu/hr/progserv/diversity/erg/> for more information.

The diversity report concluded that diversity is "a precondition for academic excellence" that will not only ensure that Princeton keep up with a changing population but will also create "an inherently more stimulating" campus. Moten agrees with that assessment. "In order to make the organization the best it can be, we need to get input from all kinds of people," she said. ☺

### Employee Resource Groups at Princeton University:

Chinese Community at Princeton (Website and contact info. not available)

International Employee Group at Princeton  
<http://www.princeton.edu/hr/progserv/diversity/erg/iegap/>

Latino Princetonians  
<http://www.princeton.edu/hr/progserv/diversity/erg/latinoprincetonians/>

Lesbian, Gay, Bisexual and Transgender Group (LGBT)  
<http://www.princeton.edu/hr/progserv/diversity/erg/lgbt/>

Network of African American Males at Princeton (NAAMA)  
<http://www.princeton.edu/hr/progserv/diversity/erg/naama/>

Princetonians of Color Network (PCN)  
<http://www.princeton.edu/hr/progserv/diversity/erg/pcn/>

Princeton Social Professionals (PSP) for young and "young at heart" professionals  
<http://www.princeton.edu/hr/progserv/diversity/erg/psp/>

South Asian Affinity Group (SAAG)  
<http://www.princeton.edu/hr/progserv/diversity/erg/saag/>



# COLLOQUIUM



## Addressing Big Data Challenges in Simulation-based Science

**MANISH PRASHAR**  
Rutgers University

Wednesday, January 22

4:15 p.m. (Coffee/Tea at 4 p.m.) • MBG Auditorium

# 2014 Science on Saturday

Princeton University Plasma Physics Laboratory Lecture Series



The atmosphere as a laboratory: aerosols, air quality, and climate

**PROF. PETER DECARLO**  
Drexel University

Saturday, January 25

9:30 a.m. • MBG Auditorium

# Café Menu

at PPPL

BREAKFAST ..... 7 a.m. • 10 a.m.  
CONTINENTAL BREAKFAST ..... 10 a.m. • 11:30 a.m.  
LUNCH ..... 11:30 a.m. • 1:30 p.m.  
SNACK SERVICE ..... until 2:30 p.m.

— MARK GAZO, *Chef Manager*

	MON. 20 JAN.	TUE. 21 JAN.	WED. 22 JAN.	THU. 23 JAN.	FRI. 24 JAN.
<b>COMMAND PERFORMANCE CHEF'S FEATURE</b>	 <b>Sautéed Chicken Piccata with Roasted Potatoes &amp; Veg</b>	 <b>Baked Macaroni &amp; Cheese w/ Broccoli &amp; Stewed Tomatoes</b>	 <b>Cheese Ravioli Bolognese with Tomato Basil Salad</b>	 <b>Apple Cranberry Stuffed Pork Loin</b>	 <b>Baked Tilapia over Tuscan Beans &amp; Escarole</b>
<b>EARLY RISER</b>	Raisin Bread French Toast, Cinnamon Cream Cheese & Turkey Sausage	Tomato Basil Omelet with Fresh Mozzarella & Italian Sausage	Ham, Cheddar & Apple Panini with Hash Browns	Egg White & Cheese Breakfast Quesadilla with House Made Salsa	Philly Steak, Egg & Cheese Wrap
<b>COUNTRY KETTLE</b>	Broccoli & Cheddar	Bacon & Corn Chowder	Tomato Vegetable with Lentil	White Bean Chard Soup	Seafood Chowder
<b>GRILLE SPECIAL</b>	Grilled Vegetable Wrap, Hummus, Spinach, Eggplant, Olives & Feta	Steak Pizzaiola on Focaccia Bread	Grilled Pork, Ham, Bacon & American Cheese on Texas Toast	Popcorn Shrimp Po' Boy, Remoulade Sauce & Hush Puppies	Asian Style Chicken Burger with Pineapple Slaw
<b>DELI SPECIAL</b>	Greek Gyro Pita with Tzatziki Sauce	Prosciutto & Provolone Hoagie	Maryland Seafood Salad on Rye with Arugula & Tomato	Pesto Chicken with Apple, Cream Cheese & Spinach on French Bread	Egg Salad Sandwich on Multigrain Bread with Avocado & Tomato
<b>PANINI</b>	Classic Muffuletta, Ham, Salami, Provolone, Swiss & Olive Spread	Open-Faced Tuna Melt, Tomato & Swiss Cheese & Seasoned Fries	Country Fried Chicken, Ranch Dressing, Ched Chse & Tom, Ciabatta	Roasted Peppers & Goat Cheese Ciabatta	Roast Beef & Cheddar on Ciabatta Grilled Red Onion & BBQ Chipotle
<b>VALUE MEAL \$5</b>	Cheese Omelet with Home Fries & 12 oz. Beverage	Veg. Flat Bread Pizza, Feta Cheese, Side Salad & 12 oz. Beverage	2 Stuffed Shells, Side Salad, Garlic Bread & 12 oz. Beverage	Hot Turkey & Cheese on a Bun with Chips & 12 oz. Beverage	Crab Cake with French Fries & 12 oz. Beverage

MENU SUBJECT TO CHANGE WITHOUT NOTICE

VEGETARIAN OPTION

[CLICK HERE FOR A PRINTABLE WEEKLY MENU](#)

# WEEKLY

Editor: **Jeanne Jackson DeVoe** ♦ Layout and graphic design: **Gregory J. Czechowicz**  
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