

At PPPL  
**THIS WEEK**

THURSDAY, NOV. 28

Lab closed  
Thanksgiving Holiday

FRIDAY, NOV. 29

Lab closed  
Thanksgiving Holiday

UPCOMING EVENTS

December 2  
PPPL Weekly will not be published

December 4  
**PPPL Colloquium**  
4:15 p.m. ♦ MBG Auditorium  
Observing the Deep Sea Globally  
Stephen Riser, Univ. of Washington

December 11  
**PPPL Colloquium**  
4:15 p.m. ♦ MBG Auditorium  
DIII-D Explorations of Fusion Science to Prepare for ITER and FNSF  
R. Buttery, General Atomics, DIII-D

December 18  
**PPPL Colloquium**  
4:15 p.m. ♦ MBG Auditorium  
Lithium Tokamak Experiment (LTX)  
Richard Majeski, Princeton University

December 20  
**PPPL Holiday Luncheon**  
Noon ♦ LSB Lobby and Café

Dec. 23 - Jan. 1  
**Lab Closed - Holidays**

January 11  
**Science on Saturday Lecture Series begins**  
9:30 a.m. ♦ MBG Auditorium

**From pharma to fusion: Gangemi takes on post as HR Director**

*Murphy-LaMarche steps down after 31 years*

By Jeanne Jackson DeVoe

**F**or Paulette Gangemi, PPPL's new director for human resources, PPPL is a perfect fit.

She has worked more than a decade as a human resources expert for the pharmaceutical industry, where she developed in-depth experience in scientific enterprises employing a diverse workforce and interacting on a regular basis with federal agencies. And she has happily worked for organizations committed to solving important problems.



Susan Murphy-LaMarche



Paulette Gangemi

When she first saw the job description for the position as director of human resources at PPPL, it seemed to mirror her background exactly. "I laughed and said, 'I had no idea a job like this existed!'" she said. "They said, 'We had no idea someone like you existed!'"

Throughout her career, Gangemi has been drawn to companies that make products aimed at changing people's lives, whether it was a drug that combats cancer or a medical device that heals wounds. The more she learned about PPPL's mission to do research aimed at developing magnetic fusion as an alternative energy source, the more certain she became that she wanted to support that goal. "This is global, this is the future," she said. "Our goal is to develop an unlimited amount of energy for the world. This touches everyone."

Gangemi (pronounced Gan-jem-ee with the accent on the second syllable) arrived at PPPL on Oct. 28.

**Susan Murphy-LaMarche steps down after 31 years**

Gangemi succeeds Susan Murphy-LaMarche, who is retiring as the Director of Human Resources after working at PPPL for nearly for nearly 31 years. Along with assisting Gangemi with the transition, Murphy-LaMarche is working on special projects for Princeton University Human Resources through February.

Murphy-LaMarche said she has enjoyed the many years at PPPL between 1983 and her retirement date in 2014. She jokes that there was a lot of history in the dash between her beginning and ending dates. "I've had a great dash," she said. "I try not to think about the fact that there are so many people that are my friends and part of my life that I may well not see again or work with again."

continued on page 2

**INSIDE...**



**ARD Photos** .....  
page 3



**Science Ed Website** ...  
page 4



**Cafe@PPPL Menu** ...  
page 6

**PPPL's MINDS at center of plot in TV's "NCIS: Los Angeles"**

by Kitta MacPherson, from the PPPL blog (<http://blogs.princeton.edu/pppl/>)

**F**usion and its spinoffs are so fascinating, it's easy to imagine why these subjects can so easily capture the public imagination. Sheldon has been known to talk magnetic fusion on CBS-TV's "The Big Bang Theory" and the National



continued on page 5

# New HR Director

continued from page 1

She came to PPPL the year after the Tokamak Fusion Test Reactor (TFTR) started operating and now she and many of the people she started work with are retiring. "We came here and worked on a wonderful project called TFTR and now people are going on to the next wonderful part of their lives," she said.

## Ensuring a smooth transition

Murphy-LaMarche said she is looking forward to retiring in February. "It's kind of fun to think about what might be next," she said. At the same time, she is focusing on helping to ensure Gangemi has a smooth transition as she begins the job. "I really want to look back and feel I left everything in the best possible shape so Paulette and the staff can be as successful as they can be. That's what's really important to me."

Adam Cohen, PPPL's Director for Operations, said the Lab will be sad to see Murphy-LaMarche leave. "I can't thank Sue enough for all her efforts for the Lab," he said. "She has been wonderful. She's a great font of knowledge. She has creativity and understanding of everything from the pulse of the Lab at a personal level to the interactions with Princeton and the DOE. And that's very hard to replace."

In Gangemi, Cohen said, the Laboratory has found another gem with unique talents and capabilities. "It's very exciting to have Paulette and her experience and new ideas coming to the Lab," Cohen said. "It's wonderful to have someone with that experience who understands HR in an organization comparable to what we have here."

## Overseeing HR for PPPL's staff

As the director of Human Resources, Gangemi will oversee a staff of seven people, a departmental budget, and many programs that touch all facets of the Lab. These include the hiring and recruiting of staff as well as administering compensation and benefits for the Lab's approximately 440 employees. She will oversee the development of environment, safety and technical training and ensure the Lab complies with U.S. Department of Energy and Princeton University policies. She will also manage the Lab's Occupational Medical Office and the Furth Plasma Physics Library.

Murphy-LaMarche said Gangemi brings "incredible skills and depth of knowledge" to the position. "I know she'll be very successful," she said. "She brings wonderful experience to the Plasma Physics Lab and she cares so much about people. I like that so much about her. She understands one of the key duties of human resources: You have to want to help people be successful in the workplace."

Gangemi couldn't agree more. "I want people to know that I'm here to help solve problems," she said. "I'm here for everyone."

## Learning about companies' technologies

At each company she has worked for, Gangemi has made an effort to learn about the technology that created the company's products, whether it was learning about generic drugs for the pharmaceutical company Actavis Pharmaceuticals or learning about biologically-based cancer treatments for ImClone Systems, which has a manufacturing plant in Branchburg, N.J. Gangemi said she was particularly proud of her work as associate director for human resources for ImClone. "That place was magic and I worked with some of the smartest people I've ever worked with," she said.

In her most recent job, Gangemi was the HR member of the site leadership team for the Japanese pharmaceutical company, Daiichi Sankyo, for the start-up of a

manufacturing plant in Bethlehem, Pa. She wrote every job description, policy and handbook and hired all 70 of the company's new employees. She also was responsible for ensuring the plant complied with federal safety guidelines during U.S. Food and Drug Administration inspections. "They did a beautiful job on the plant, we hired some really talented people and I got to touch everything," she said.

Now Gangemi says she is eager to learn about the cutting-edge research at PPPL. "In order to be a good HR practitioner, I feel like it's very important to understand the business that you're in," she said.

Gangemi and her twin sister, Colette, grew up in Colts Neck and Brielle, N.J., not far from PPPL. She attended the Green Mountain College in Poultney, Vt., where she was on the ski race team and worked as a seasonal police officer in Spring Lake during the summer.

## Turning a battleship into a museum

After college, she went to work for Assemblyman Joseph Azzolina on a campaign to convert the dry-docked Battleship New Jersey into a floating museum. The quest succeeded and the battleship was restored and moved to Camden, N.J. as the Battleship New Jersey Museum and Memorial.

Gangemi moved on to a job working for Salomon Smith Barney (now Smith Barney/Citigroup) in New York where she met her mentor, Lorrie A. Warner, the Managing Director and Head of Healthcare Strategic Advisory Services. Warner encouraged Gangemi to further her education and taught her a great deal about both finance and mergers and acquisitions. She "had a profound impact on my career," Gangemi said.

She commuted from New Jersey to the World Trade Center each day but happened to be out of town when two planes crashed into the twin towers on Sept. 11, 2011. The attacks prompted her to take a new position in New Jersey and to begin her first job in human resources, working for CheckFree Investment Services in Jersey City.

## Traveling up and down the East Coast

Gangemi's next job was the regional HR manager for much of the Northeast with Kinetic Concepts Inc. (KCI), a large medical device manufacturer based in San Antonio, Texas, that produces the Vacuum-Assisted Closure or VAC, a device that uses negative pressure to heal a wound.

Her job required her to travel to meet with employees in offices located in an area stretching from North Carolina to Maine. "I was constantly on the road," she said. Meanwhile, she attended graduate school at night for five years to earn a master's degree in labor and employment relations from the Rutgers University School of Management and Labor Relations.

Even when away from the Lab, Gangemi is committed to aiding others. A former volunteer fire fighter, Gangemi enjoys volunteering with the Shawnee Mountain Ski Patrol. She also spends her free time helping to restore her mother's house in Belmar, N.J., which was heavily damaged by Hurricane Sandy.

And there's another reason for Gangemi to enjoy her new post: PPPL is much closer to her home in New Hope, Pa., than her previous job.

"I'm looking forward to getting out there and seeing the experiments – I'd like to see what people do," she said. "I just ask that people are patient with me as I learn. It really is a new business." 📧

# A fashionable America Recycles Day at PPPL



Dana Eckstein shows off her dress made out of recyclable CDs during America Recycles Day.

PPPL celebrated America Recycles Day one day early on Nov. 14 with a fashion show of dresses made out of recyclable or compostable materials found at the Laboratory. There were also recycling displays and a home electronics collection, which netted more than 1,000 pounds of electronics to be recycled.



Kyron Jones and Stephen DeLuca have some fun with the "Rock Band" guitars donated during the electronics collection, which resulted in 1,450 pounds of electronics that will be recycled through Unicor.



Jim Hirsch and Virginia Finley examine a poster breaking down recycling in various departments at PPPL.



Garry Stevens signs a recycling pledge in the LSB lobby.



PPPLers show off the recycled/compostable dresses displayed in the LSB lobby as part of a contest. The winning dress was #3 created by Margaret Kevin-King, who also created dresses #1, #2 and #4. Dana Eckstein created dress #5 and dress #6, which she is wearing. From left to right: Sonja Patterson, Virginia Finley, Leanna Meyer, Eckstein, Joanne Bianco and Kevin-King.

## The evolution of PPPL's External Website



PPPL Webmaster Chris Cane, at left, presents an overview of the evolution of the Lab's external, Drupal-based website to members of the DOE Web Council during a Nov. 14 teleconference, while Kitta MacPherson, at right, looks on. PPPL was selected as the first National Laboratory to undergo a Peer Review by the DOE Web Council of PPPL's external website. Cane described the technology that underlies the website as well as the content and messaging that exists that is tied in with the Lab's Strategic Communications Plan. Members of the DOE Web Council include many information technology experts within the DOE complex as well as webmasters representing the National Labs. In a discussion based on the Best Practices model, they queried Cane about the number of users for the site, decisions over choices of content management systems, the nature of the most searched/most popular items on the website, and the scale of the PPPL Office of Communications. Cane received highly positive reviews.

## Science Education launches new website!

The Science Education Department has a new public website at [www.pppl.gov/education/science-education](http://www.pppl.gov/education/science-education) and it's full of great photos and stories about Science Ed's many programs.

The website was launched at the end of October. It uses the same Drupal technology as PPPL's new website, which was launched one year ago, so it highlights photos and stories at the center of the site with information about upcoming events and programs listed below.

"It is head and shoulders above what we had," said Andrew Zwicker, head of Science Education. "It's clean and it's easy to navigate and it's got an excellent layout and great photos. It now fits the look of the Laboratory, so all those things are great."

Zwicker said Science Education staff members, led by program administrator Deedee Ortiz, will be adding information as they go along but the site already has information about the undergraduate and high school internship programs, which are currently taking applications; and the upcoming Science on Saturday program, which begins Jan. 11. "It's just better, faster, shorter," Zwicker said.

Ortiz, said it took her a month to transfer most of the information and photos from the old site but the effort was worth it. "I'm really happy with it. It looks good. It's so much neater than the other one," she said. "It just looks great!"

Science Education | Princeton Plasma Physics Lab  
www.pppl.gov/education/science-education

emergency.pppl.gov Join Our Mailing List

PPPL PRINCETON PLASMA PHYSICS LABORATORY  
A Collaborative National Center for Fusion & Plasma Research

HOME ABOUT NEWS EVENTS RESEARCH EDUCATION ORGANIZATION CONTACT US

Science Education  
About  
Blog  
Programs  
Galleries  
Upcoming Events  
Lab  
Outreach Efforts  
Graduate Programs  
Off Site University Research (OSUR)

SCIENCE EDUCATION

PPPL scientists present cutting-edge results at major physics meeting

More than 1,500 researchers, including scientists from the U.S. Department of Energy's Princeton Plasma Physics Laboratory (PPPL), have gathered in Denver, Colorado, for the 95th Annual Meeting of the American Physical Society's (APS) Division of Plasma Physics (DPP).

Welcome to the Science Education Department at PPPL, where we combine the core research activities of the Princeton Plasma Physics Laboratory (PPPL) with science education programs to create a center of excellence for students, teachers and the general public. We contribute to the training of the next generation of scientists and engineers, collaborate with K-12 teachers on ways to improve science teaching using an inquiry-based approach to learning, and improve the science literacy of the community at large.

Upcoming Events Science Education

November 25, 2013  
9:00am  
2014 High School summer internship application opens

December 14, 2013  
9:00am  
2014 High School spring semester-long internship application closes

January 11, 2014  
9:30am to 11:00am  
Science on Saturday

January 18, 2014  
9:30am to 11:00am  
Science on Saturday

Science Education Ongoing Programs

Community College Internship (CCI)  
High School Internship  
National Undergraduate Fellowship Program (NUF)  
New Jersey Regional Science Bowl  
Plasma Camp  
Science Undergraduate Laboratory Internship (SULI)  
Visiting Faculty Program (VFP)  
Young Women's Conference in Science, Technology, Engineering & Mathematics

continued on page 5



*The MINDS team at PPPL: From left to right: William Davis, Charles Gentile, who led the development of the MINDS device, and Kenneth Silber.*

Ignition Facility's inertial confinement laser complex was featured in the recent "Star Trek Into Darkness."

Now, a technology that engineers from PPPL (shown in photo above) developed from basic research, a nuclear detection system called MINDS, has figured at the center of an episode of "NCIS-Los Angeles." Episode 8, titled "Fallout," continued the show's consistent plot pattern of pitting a crack crew of investigators against evildoers. The show, its title an acronym of "Naval Criminal Investigative Service," offers a potent brew that combines the genres of police detective story and military drama. The series premiered on the CBS network in 2009.

Meredith Jacobs, writing about the Nov. 12 episode on examiner.com, an online entertainment news site, reported that a bad guy in the episode accessed a computer at the U.S. Department of Energy and obtained the locations of MINDS devices. "If terrorists knew where those devices were, they'd know where to transport bombs," Jacobs wrote. The storyline develops to involve stolen federal secrets, international relations with Russia, and a chase to recover computer drives. In the end, the champions of good, the NCIS team, triumph and the secrets of MINDS are secured.

"It is nice to know that MINDS as featured on the "NCIS-LA" show now joins the ranks of other fusion-related technologies that have appeared in 'Spider Man,' 'Iron Man,' and 'Star Trek,'" said Charles Gentile, who led the development of MINDS at PPPL with a team of engineers and was delighted to hear of MINDS' television debut. "Clearly the imagination of Hollywood is intrigued with fusion technologies."

I wrote about MINDS for the first time in 2009 when I worked as the science writer for Princeton University's Office of Communications. I remember the dramatic story related by the team of how the complex technology was developed over many years. The "Miniature Integrated Nuclear Detection System" (MINDS) was created by the engineers while working on decommissioning the Tokamak Fusion Test Reactor, PPPL's legendary experimental device that produced world records for fusion and high temperatures. After 9/11, the developers of MINDS realized the techniques they had developed for determining the identity and amount of extremely minute levels of elements in TFTR could be used as a defensive measure to detect and identify nuclear materials. The simple, portable device identifies materials through their characteristic energy signals, as unique as fingerprints, and is now used in ports and transportation hubs to protect the public.

At the time I was first writing about MINDS, John Ritter, director of Princeton University's Office of Technology Licensing and Intellectual Property, told me: "This technology may provide a method to protect the public from different kinds of threats. Viewed from that standpoint, we are very excited about MINDS."

It is also exciting to know that Hollywood gets it, too. 📺



*Two members of the NCIS team, G. Callen, played by Chris O'Donnell; and Henrietta "Hetta" Lang, played by Linda Hunt, discuss the case of the MINDS device (seen in the lower left) stolen from a fictional U.S. Department of Energy facility in the Dec. 12 "NCIS: Los Angeles" episode.*

## Welcome PPPL New Hires

PPPL welcomes the employees pictured below who have recently joined our staff.



**PAULETTE GANGEMI**  
Director  
Human Resources



**KEVIN GURBISZ**  
Electrical Technician  
Engineering & Infrastructure



**JEETENDRA VAZIRANI**  
Help Desk Administrator  
Information Technology

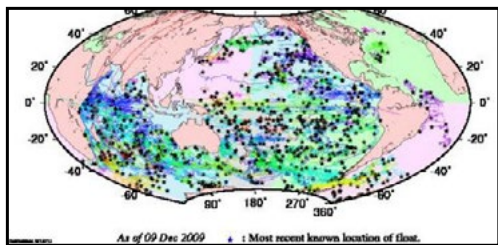
## Welcome Back Neil Gerrish!

Neil Gerrish, an industrial hygienist at PPPL, is back at the Laboratory after serving eight months in Afghanistan, where he was connected to the Bravo Company, 6th Battalion, 101st Airborne Division. He also performed crew duties aboard a CH-47F Chinook helicopter, logging 360 combat flight hours. He was awarded three Air Medals, the Combat Action Badge and the Master Air Crewman Badge. He and his fiancée Tracy are planning a Dec. 7 wedding.



*Neil Gerrish*

# COLLOQUIUM



## Observing the Deep Sea Globally

**STEPHEN RISER**  
University of Washington

**Wednesday, Dec. 4**

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

## Food Contributions Needed for Local Food Bank

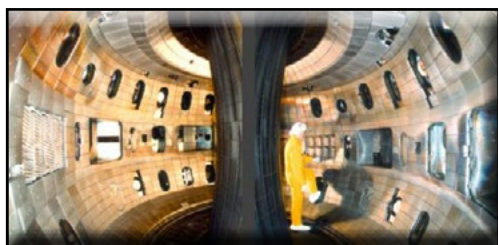
More than 25,000 people in Mercer County depend on food provided by the Mercer Street Friends Food Bank, which serves more than 50 pantries, shelters and soup kitchens.

You can help by bringing your donations of canned or packaged food (no glass please!) to the LSB Lobby from Nov. 25 through Dec. 18 as part of the Princeton University Food Drive.

The most needed items include canned protein such as tuna fish or chicken, Parmalat, cereals, and peanut butter and jelly. The Food Bank also needs personal care products such as soap, shampoo, deodorants, feminine products and laundry soap.

Items needed for the Send Hunger Packing Program, which provides food to school-aged children to get them through the weekend, include: single servings of Parmalat, individual servings of cereal and individual servings of microwaveable food, granola bars and pudding cups.

# COLLOQUIUM



## DIII-D Explorations of Fusion Science to Prepare for ITER and FNSF

**RICHARD BUTTERY**  
General Atomics, DIII-D

**Wednesday, Dec. 11**

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

## PPPL's contribute to United Way



Thank you to all the PPPL'ers who contributed \$9,500 to the PPPL and Princeton University United Way as of Nov. 18. We also raised \$448 from the two bake sales held at PPPL. Your contributions will help numerous organizations in Mercer county, including groups that mentor at-risk high school students in Trenton, provide housing for homeless people and help seniors and a group that helps people with disabilities stay in their homes. Please continue to send in your contributions and keep those donations coming!



# Menu

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*

COMMAND PERFORMANCE  
CHEF'S FEATURE

**MON. 25**  
NOV.



**Balsamic Chicken Breast & Fresh Tomatoes Served With Pasta**

Raisin Bread French Toast with Cream Cheese & Turkey Sausage

Broccoli & Cheddar

Steak Pizzaiola on Focaccia Bread

Grilled Vegetable Wrap With Spinach, Eggplant & Feta Cheese

Roast Beef & Cheddar On Ciabatta Bread with Grilled Red Onion

VALUE MEAL \$5

**Cheese Omelet with Home Fries & 12 oz. Beverage**

**TUE. 26**  
NOV.



**Baked Potato Bar with All Your Favorite Fixins**

Tomato & Basil Omelet with Fresh Mozzarella & Italian Sausage

White Bean Chili with Chicken

Greek Gyro Pita with Tzatziki Sauce

Prosciutto & Provolone Hoagie

Open-Faced Tuna Melt on English Muffin with Swiss & Fries

**Spinach Pie with Greek Salad & 12 oz. Beverage**

**WED. 27**  
NOV.



**Pasta Bolognese served with Garlic Bread**

Ham, Cheddar & Apple Panini with Hash Browns

Seafood Chowder

Popcorn Shrimp Po'Boy served with Hushpuppies

Classic Muffaletta with Ham, Salami, Provolone & Swiss

Country Fried Chicken & Cheddar Cheese & Tomato On Ciabatta

**2 Manicotti, Side Salad, Garlic Bread & 12 oz. Beverage**

**THU. 28**  
NOV.



*Happy Thanksgiving*

**FRI. 29**  
NOV.



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**  
Photography: **Elle Starkman** ♦ Web: **Chris Cane** ♦ Admin. support: **Pamela Hampton**

The PPPL WEEKLY is published by the PPPL Office of Communications on Mondays throughout the year except for holidays. Deadline for calendar item submissions is noon on Thursday. Other stories should be submitted no later than noon on Wednesday. Comments: [commteam@pppl.gov](mailto:commteam@pppl.gov) ♦ PPPL WEEKLY is archived on the web at: <http://w3.pppl.gov/communications/weekly/>.

The PPPL Weekly will not be published on Dec. 2 due to the Thanksgiving holiday. The next issue will appear on Dec. 9.