



Top Battery Innovator Esther Takeuchi Joins BNL, SBU

Roger Stoulenburgh D050612

The hunt for renewable energy sources sits at the heart of the DOE mission, part of a plan to improve national security, diminish adverse environmental impact, and raise people's quality of life. Equally critical to the generation of power is the effective storage of it — what good is abundant electricity without batteries to store and supply it to everything from smart phones to pacemakers?

Esther Takeuchi, an electrochemist and one of the world's leading energy storage researchers, has joined BNL to advance projects that will move a vibrant, sustainable energy economy closer to reality. Takeuchi, who was awarded the 2009 National Medal of Technology by President Obama for her innovations in lithium battery technology and biomedical devices, will help lead the Lab into the future as Chief Scientist for the Global & Regional Solutions Directorate.

"I hope to expand Brookhaven Lab's focus on energy and energy storage related research," Takeuchi said. "The Lab has top-flight scientists and instrumentation that will be outstanding to deploy on these issues."

Joint Hire With SBU

As a joint hire with Stony Brook University (SBU), Takeuchi also joins their faculty as a SUNY Distinguished Professor of both chemistry and materials science.

SUNY, Greatbatch

Takeuchi brings skills developed in extensive industrial technology innovation, and recently in academia. She comes to BNL and SBU from the State University of New York (SUNY) at Buffalo, where she taught chemical, biological, and electrical engineering from 2007, becoming a SUNY Distinguished Professor in 2009. Takeuchi will continue her SUNY affiliation as a member of SBU's Materials Science and Chemistry Departments. She will also lend her talents to SBU's Advanced Energy Research and Technology Center (AERTC), already recognized as a leader in advancing clean energy technology.

Before teaching, Takeuchi spent more than 20 years at Greatbatch, Inc., a company founded in 1970 by the co-inventor of the first implanted pacemaker. The Clarence, N.Y.-based company is dedicated to advancing essential medical device technology. Greatbatch later funded Takeuchi's professorship at Buffalo and provided a significant gift to help support her continued research into biomedical power sources.

"Greatbatch had a tremen-

Esther Takeuchi, new Chief Scientist for the Global & Regional Solutions Directorate at BNL, visits the construction site of the Interdisciplinary Sciences Building, where she will lead efforts in advanced energy research.

dous environment for innovation and for meeting the needs of a growing and dynamic field," Takeuchi said. "I had the chance to apply my background in chemistry and electrochemistry to the opportunities at Greatbatch."

Impacting Lives

Takeuchi rose at Greatbatch from senior chemist to chief scientist, received more than 140 patents, and established herself as one of the country's most prolific inventors. She is perhaps best known for developing compact lithium batteries for implantable defibrillators, which use electrical shocks to stop heart attacks and bring the heart back into normal rhythm, though her research extended into helping people live with many debilitating diseases.

"Batteries impact everyone's lives," Takeuchi said. "On a daily basis we all use commercially available batteries powering electronics such as cell phones, iPads, laptop computers and GPS devices. The search for better batteries can impact a diverse set of industries, such as aerospace, medicine, transportation and even the grid, where implementation of renewable and intermittent forms of energy generation depends on storage."

Honors

Takeuchi has received numerous forms of recognition from her peers in the scientific community. Highlights from her 30 years of research include induction into the National Academy of Engineering in 2004, becoming a Fellow of the American Institute for Medical and Biological Engineering, multiple inventor of the year awards, and several recognitions for her singular impact as a woman in the sciences. A prolific inventor who has been recognized as having more patents than any living woman, Takeuchi was inducted into the National Inventors Hall of Fame in 2011.

Takeuchi attributes much of her tenacity to the influence of her father, an electrical engineer who encouraged her to embrace math at a young age. She also noted that the right outlook can help motivate research. "Curiosity is a major driver in science, and it creates boundless enthusiasm for seeking and expanding the next horizon," she said.

See *Esther Takeuchi* on p. 2

Vietnamese Delegation Visits BNL

On the agenda: discussion of potential future collaborations

On May 25, BNL hosted a delegation of Vietnamese scientists and diplomats seeking to learn about BNL's laboratory operations and technology transfer programs, and to explore potential future scientific collaborations. The group, on its second visit to the Lab, represented the Vietnam Academy of Science & Technology (VAST) and included VAST Vice President Duong Ngoc Hai and Phan Tien Dung, Vice Director of VAST's Department of Application and Department of Technology.

The group toured the Relativistic Heavy Ion Collider, the National Synchrotron Light Source (NSLS) and Center for Functional Nanomaterials, and discussed Lab operations, research collaborations and technology deployment, and of managing light sources and other user facilities. They were also given a brief tour of NSLS-II to discuss potential future work there. The Vietnamese scientists are keenly interested in agricultural technologies and were particularly intrigued by BNL's plant research, which could provide pathways to improve crop



Joseph Rubino D05070512

Meeting at BNL are (front row, from left) Nguyen Gia Lap, Lab Director Sam Aronson, and VAST Vice President Duong Ngoc Hai, and (back row, from left) Bihn Thanh Le, Erik Johnson, Phan Tien Dung, and Walter Copan.

yields and also present opportunities for biofuel production.

VAST recently received a global grant from the World Bank to support development of technology transfer efforts and to advance the Academy's research operations through adoption of best practices of other organizations in the United States and around the world. The goal is to improve the

productivity of research in Vietnam and to build partnerships with other scientific institutions.

Battelle-Japan supported the U.S. visit, which included stops at Battelle headquarters and Ohio State University. Founded in 1975 as the Vietnam Academy of Science, VAST was renamed the Vietnam Academy of Science & Technology in 2008. — Kay Cordtz

Scientists Identify Mechanism For Regulating Plant Oil Production

Findings suggest ways to increase oil production for biofuels and industrial processes

Scientists at BNL have identified key elements in the biochemical mechanism plants use to limit the production of fatty acids. The results suggest ways scientists might target those biochemical pathways to increase the production of plant oils as a renewable resource for biofuels and industrial processes. This research was funded by the DOE Office of Science and Bayer CropScience.

"Now that we understand how this system operates — how plants 'know' when they've made enough oil and how they slow down production — we can look for ways to break the feedback loop so they keep making more oil," said biochemist John Shanklin, leader of the group publishing the work in the *Proceedings of the National Academy of Sciences* the week of June 4, 2012. Similar biochemical feedback loops regulate a wide range of metabolic processes in living things. They work similarly to the way a thermostat maintains a relatively constant temperature in your home: When it gets too warm, the heating system turns off until the temperature falls to the set point, at which time it turns on again.

"There were hints that such a feedback system might exist for plant oil production," said Shanklin, who credits Carl Andre — a former postdoctoral research fellow now working at BASF Plant Science in North Carolina — with designing and carrying out the intricate biochemical detective work that uncovered the details.



Roger Stoulenburgh D050612

Former BNL postdoc Carl Andre (left) and biochemist John Shanklin of BNL's Biology Department

"It's very difficult to work on developing oil seeds because they are very tiny," Shanklin explained. So the scientists performed their biochemical tests using a plant embryo cell culture to simulate what goes on in the seeds.

With assistance from the Radiotracer Chemistry and Biological Imaging group at Brookhaven, Andre synthesized "labeled" forms of the fatty acids that occur as intermediates along the metabolic pathway that leads to oil production. He fed these, one at a time, to the plant cell cultures, measuring the labeled metabolites with the help of analytic chemist Richard Haslam of Rothamsted Research in the UK. They also looked to see which added intermediates would inhibit oil production.

Andre's work pointed to a fatty acid that occurs fairly

late in the production process, coupled to a carrier protein (essential to making the oily substance soluble in water), as the key intermediate that puts the brakes on oil production. It's the first "desaturated" fatty acid — the first one with a double bond between two of the carbon atoms, formed after all 18 carbon atoms are added to the chain.

Then, knowing that this intermediate somehow sent the "slow-down" signal, the team sought to determine its "target" — how it actually inhibits oil synthesis.

"From our findings, we concluded that the accumulation of the first desaturated fatty acid in the synthesis process inhibits the enzyme that operates at the first step, which converts acetate to malonate," Shanklin said. "That enzyme is...

See *Plant Oil Prod.* on p. 2

CALENDAR
OF LABORATORY EVENTS

• The BERA Store in Berkner Hall is open weekdays from 9 a.m. to 3 p.m. For more information on BERA events, contact Andrea Dehler, Ext. 3347, or Christine Carter, Ext. 2873.

— REGULARLY —

Weekdays: Free English for Speakers Of Other Languages Classes

Beginner, Intermed., Adv. classes, various times. All welcome. Learn English, make friends. See <http://www.bnl.gov/esol/schedule.asp> for schedule. Jen Lynch, Ext. 4894.

Mondays: Yogalates

Noon–1 p.m. at the Rec Hall (Bldg. 317). Will resume in September.

Mon. & Thurs.: Kardio Kickboxing

\$5 per class. 12:15–1:15 p.m. in the gym (Bldg. 461). \$5 per class. Ext. 2873.

Mon., Tues., Thurs., & Fri.: Tai Chi

Noon–1 p.m., B’haven Cntr (Bldg. 30), N. Rm. Adam Rusek, Ext. 5830, rusek@bnl.gov.

Tuesdays: Hospitality Welcome Coffee

10:30 a.m.–noon. Rec Hall (Bldg. 317). Will resume in September.

Tuesdays: Pilates

On summer break.

Tuesdays & Wednesdays: Zumba

Tuesdays: Noon–1 p.m., in gym (Bldg. 461). Wednesdays: 5:15–6:15 p.m., at the Rec Hall (Bldg. 317). On summer break.

Tuesdays: Toastmasters

Two monthly meetings: 1st & 3rd Tuesdays, 5:30 p.m., Bldg. 463, Room 160. Guests and visitors welcome. www.bnl.gov/bera/activities/toastmasters/.

Tuesdays & Thursdays: Aerobic Fitness

5:15–6:30 p.m. in the Rec. Hall (Bldg. 317). Will resume in September.

Tuesday & Thursday: Aqua Aerobics

5:30–6:30 p.m., Pool (Bldg. 478). Will resume in September.

Wednesdays: Ballroom Dance

5:30, 6:30, 7:30 p.m., Brookhaven Center (Bldg. 30). Will resume in September.

Wednesdays: Play Group

10 a.m.–noon at Rec Hall (Bldg. 317). Parents meet while infants/toddlers play. For events, see <http://www.meetup.com/BNL-Playgroup>. On summer break.

Wednesdays: Yoga

Noon–1 p.m., B’haven Center (Bldg. 30). Free. Ila Campbell, Ext. 2206, ila@bnl.gov.

1st Wednesday of month: LabVIEW

1:30–3 p.m., Bldg. 515, 2nd fl. Seminar Rm. Free technical assistance from LabVIEW consultants. Ext. 5304, or Terry Stratoudakis, (347) 228-7379.

Thursdays: BNL Cycletrons Club

5 p.m., Brookhaven Center. First Thurs. of month. Andy Mingino, Ext. 5786.

Thursdays: Reiki Healing Class

Noon–1 p.m., Call for location. Nicole Bernholz, Ext. 2027.

Thursdays: Postdoc Social Night

6:30 p.m. ASAP Lounge (Bldg. 462). www.bnl.gov/asap.

Thursday: Judo Class

7:30 p.m. Gym (Bldg. 461). Tom Baldwin, Ext. 4556.

Fridays: Family Swim Night

5–8 p.m. Pool (Bldg. 478). \$5/family. Ext. 2873.

Just How Does a Garden Grow?

Talking Plants and Metabolic Networks With BNL Biochemist Jörg Schwender

Ask Jörg Schwender how a garden grows, and he won’t mention a thing about silver bells or cockle shells. Schwender is a biochemist at Brookhaven Lab, and he is developing computational models to study plants’ metabolic networks, the pathways of biochemical reactions where nutrients are converted into energy that plants need to survive and flourish. While Schwender is focused on exploring these metabolic networks, advances could be used to increase plant oil and biomass production for renewable biofuels, materials, and more.

Schwender grew up in Germany and now lives in Rocky Point. He joined the Biology Department at Brookhaven Lab in 2005.

Schwender gave the 479th Brookhaven Lecture on June 20, but he explains his work here, too.

— Joe Gettler

What basics do people need to know to understand what you do?

When you look at a map of the highway system, you see the pathways connect many different locations across the country. Some of these roadways have heavier traffic volume during rush hour and others on weekends. I study metabolic networks in plants, which are similar to highway networks. Instead of roadways and vehicles, however, I look at the pathways of biochemical reactions in plants. One of the major things that is happening along these pathways is that nutrients are converted into the energy that living organisms — including plants — need to sustain life, grow, maintain their structure, and respond to their environments.

What’s “cool” or interesting about your work?

I study metabolic networks in plants by systematically analyzing how hundreds of different enzymes and substrates in living organisms are organized, as well as how they interact and work together as a whole. Biological sciences have made great progress in detailing parts of these networks. The big challenge is to understand these interactions to be able to predict how the network behaves. I focus my research on the fundamental ways these systems behave, but new insights could be used to alter oil and biomass

production for renewable biofuels and many plant-derived materials such as plastics, paints, and detergents.

What are you working on now?

My team and I are working with seed embryos to improve the mathematical models of metabolism so we can make more predictions that are more accurate. We typically work with rapeseed plants, which common canola cooking oil is derived from, but in recent years, we also started working on green alga and duckweed, which are aquatic green organisms that can grow very fast and have potential for biomass and oil production.

Why do this at BNL?

There are very good plant scientists and computational resources at Brookhaven, and both are instrumental for advancing this research.

Have your efforts contributed to any discoveries?

In the 1950s, scientists discovered a metabolic pathway for forming a class of substances called terpenoids. That pathway had long been assumed to be universal in all organisms. I discovered that while plants indeed have the “classical” terpenoid pathway, they generally use an entirely different pathway in parallel to produce many terpenoids, including pigments that make fruits and vegetables so colorful. This demonstrates



Joseph Rubino D1380612

Biochemist Jörg Schwender uses advanced computational modeling to study plants’ metabolic networks — pathways of biochemical reactions where nutrients are converted into energy that plants use to survive and flourish.

how there still are important details about metabolic networks to uncover.

Who does your work benefit?

I would categorize my work mainly as basic research. While we also try to answer questions like how to increase oil production in plants, the methods and insights developed in the research deepen understanding on how things work in biological networks. I’m hoping that my work might again uncover some new mechanism or pathway.

Who do you work with?

I work with other plant scientists here at BNL — in particular, with John Shanklin and Changcheng Xu’s groups — to establish and extend a focus on plant lipid research. I am also collaborating with Alistair Rogers of Brookhaven’s Environmental Sciences Department and four academic and industrial collaborators outside BNL in a Cooperative Research and Development Agreement. In this project, we compare cultivated rapeseed plant varieties that differ in seed oil content to determine where and when in the metabolic network specific enzymes can make a difference in oil content.

Who funds your work? And why are they interested in what you’re doing?

My group is funded by the Office of Basic Energy Sciences within the U.S. Department of Energy (DOE) Office of Science, as well as the DOE Office of Energy Efficiency and Renewable Energy. Industrial funding on rapeseed research is provided by BAYER Cropscience. BNL has also provided me with a grant through its Laboratory Directed Research and Development Program to analyze plant metabolism.

Have you won any awards? Which one are you most proud of?

I don’t know that these quite count as awards, but one publication written by my group was selected as “Paper of the Week” in the *Journal of Biological Chemistry* and two were selected as “featured articles” in *The Plant Journal*. In addition, it was fun to see our work featured on the covers of both journals.

Do you have any special talents?

Nothing too special — I like growing veggies in my garden and playing guitar.

Summer Sundays 2012 Begin July 15

On several Sundays during the summer ever year, Brookhaven Lab welcomes members of the public to its site. These “Open House” days include visits to BNL’s facilities, opportunities to speak with researchers, special activities for adults and children, and much more — and it’s all free! Details: www.bnl.gov/community/summer_sunday.asp.

Family Exploration Day: July 15. An exciting day of family fun. Visit the Science Learning Center to discover basic scientific theory using magnets, mirrors, and more.

Plant Oil Prod. from p. 1

...Acetyl-CoA carboxylase, or ACCase.”

Further tests confirmed that the team had correctly identified both the slow-down signal and the target.

With the details of the oil production feedback mechanism in hand, Shanklin’s team is now exploring how they might interfere with the process, including biochemical schemes to keep the “slow-down” signaling metabolite from accumulating, ways to block its effects on ACCase, and more.

“If we can interrupt this process, we hope to fool the cells so they won’t be able to gauge how much oil they have made and will make more,” Shanklin said.

For more information, go to www.bnl.gov/bnlweb/pubaf/pr/PR_display.asp?prID=1418.

— Karen McNulty Walsh

Esther Takeuchi from p. 1

Energy Goals

Gerald Stokes, BNL’s Associate Laboratory Director for the Global & Regional Solutions (GARS) Directorate, noted Takeuchi’s potential to advance the Lab’s energy goals.

“Esther has a proven record of moving fundamental scientific understanding not only to a successful place in the market, but to making a significant impact on society,” Stokes said. “She is a superb role model for the mission of GARS and for the Lab community.”

Esther Takeuchi’s husband, Kenneth Takeuchi, will also be joining the faculty of SBU’s Chemistry Department. An award-winning SUNY Distinguished Teaching Professor, he is a nationally recognized expert in the synthesis and characterization

of innovative new materials.

Esther Takeuchi received her B.A. in chemistry and history from the University of Pennsylvania and her Ph.D. in organic chemistry from the Ohio State University. She went on to complete her postdoctoral work at the University of North Carolina at Chapel Hill and SUNY Buffalo, where she recently taught. She now moves into this new position at BNL, which offers unique opportunities to apply her energy expertise at facilities such as the Center for Functional Nanomaterials (CFN), the National Synchrotron Light Source (NSLS), and the forthcoming National Synchrotron Light Source II (NSLS-II).

“This new collaboration with Brookhaven is very exciting,” Takeuchi said. “I look forward to getting to know the scientists and possibilities here.”

— Justin Eure

In Memoriam

Mary Doroski, who became a key-punch operator in the Applied Mathematics Department on August 5, 1968, and retired from the Management Information Systems Division as a senior data services assistant on April 2, 1993, died on April 22, 2011, at age 79.

Howard Sachs, who joined the Chemistry Department as a scientist on October 1, 1983, and retired on September 30, 1987, died on December 6, 2011. He was 85.

Frank Mazzeo, who joined BNL in the Central Shops Division on December 1, 1958, as a welder, and retired on December 13, 1972, as an experimental welder, died at 94 on March 27, 2012.

Anthony Calligeros, who became an assistant staff specialist in the Plant Engineering Division on February 13, 1984, and retired as a maintenance coordinator on October 13, 1989, died on March 28, 2012. He was 86.

Joseph Cuccia, who joined the Alternating Gradient Synchrotron Department on January 7, 1957, as a draftsman B, moved to the Accelerator Department in 1986, and retired as a design engineer on October 31, 1991, died at 81 on April 12, 2012.

Fred Griswold, who joined the Reactor Division on April 14, 1958, as a pile operator III, and retired as a nuclear reactor operator A on September 15, 1989, died on April 17, 2012. He was 90.

Bruce Klemm, who joined the Lab as an associate scientist in the Department of Applied Sciences (DAS) on January 1, 1975, and was promoted to scientist in 1977, died at 69 on March 30, 2012. A long-time member of the DAS Combustion Sciences Division, he focused mainly on combustion research. He retired on January 15, 2002.

Edward Dale, who joined the Plant Engineering Division as a facilities engineer II on January 1, 1976, and retired from the Alternating Gradient Synchrotron Department as a senior project engineer on March 31, 2000, died on May 3, 2012. He was 73.



Safety Day 2012: Lab Comes Together to Teach and Talk Safety

Safety is a top priority at BNL, and the third annual Safety Day showed the Lab community's commitment. On June 6, Safety Day filled Berkner Hall and its environs with a diverse representation of staff, summer students, subject matter experts, and outside safety product vendors for a fun and useful learning experience. Each year, the event, organized by the Safety & Health Services Division (SHSD) within the Lab's Environment, Safety, and Health Directorate (ES&H), grows in size and popularity with members of the Lab community.

"I think today's event is even better than last year's," said Lab Director Sam Aronson. "In terms of participation and engagement, I'm very happy to see everyone here." And Aronson said he has personally benefited from Safety Day: "Last year, I bought a better ergonomic chair for myself, after I saw it in one of the displays."

Attendees met with subject-matter experts covering safety topics such as distracted driving, personal protective equipment, ergonomics, emergency planning, and noise protection. They also had the opportunity to meet with vendors demonstrating the safety features of industrial supplies, personal protective equipment, construction tools, and office furniture, to name a few.

"The success of Safety Day 2012 is an indication that safety is being integrated into the culture of Brookhaven Lab," said Ed Nowak, manager of SHSD. "This year's event had a large turnout and proved very successful. There was great engagement at all levels and on many different safety topics and activities. Also, we were pleased to see so many summer students in attendance."

Nowak also noted the excellent work of the Safety Day 2012 organizing committee, which built upon the success of the two previous annual Safety Day events to structure this year's event, including seminars, a video series, and prizes for attendees who "demonstrate

Watch a video from Safety Day online: <http://bit.ly/M4H8uI>

engagement and a good safety attitude."

The Safety Day crossword puzzle is always a hit with Lab staff, and this year a completed puzzle was an entry into a prize drawing. This year also saw the introduction of the Safety Day Passport, that attendees used to get stamps, like visas, from each vendor or subject matter expert they visited, and which also counted as a prize drawing entry. Prizes included a GPS, fire extinguisher, bike helmets, a ladder, and more.

In all, 194 crossword puzzles and 167 passports were entered into the prize drawing. And the winners are: Yuenian Huang, Collider-Accelerator Department; Deborah Jackson, Site Resources Division; Janine Lambert, Office of Educational Programs; Troy Mayo, Site Resources; Richard Rosero, Chemistry Department; Carlene Santiago, Fiscal Services Division; Kelly Smith, Nonproliferation & National Security Department; Vencil Stewart, Procurement & Property Management Division; Ana Toldo, Human Resources & Occupational Medicine Division (HROM); Connie Turpin, Site Resources; Gary Welch, HROM; and Emil Zitvogel, Photon Sciences Directorate.

The Children's Poster Contest featured creative safety interpretations by Lab employees' children. The winners are:

- Ages 4-6: Carrie Davis, "Always Swim With an Adult"
- Ages 7-10: Lexington Armann, "Safe/Not Safe"
- Ages 11-14: Romel Delgado, "Working and Playing Safe"

To try your hand at the crossword puzzle or watch the newest slate of "I Made BNL Safe" videos, visit www.bnl.gov/safetyday/.

— Will Safer

BERA Events

Annual Plant Swap: Wednesday, June 27, from noon to 1 p.m. in the parking lot outside Berkner (Bldg. 488).

Do-As-You-Please Trip to Brooklyn Flea Market: Sunday, July 8. Flea market with hundreds of vendors and the Brooklyn Brewery nearby. Leave Brookhaven Center at 9 a.m. and leave to return at 4 p.m. \$15 per person, children under age two are free.

Horseback Riding in Montauk: Saturday, July 14. 1.5-hour trail and beach ride, picnic at park (BYOF: Bring Your Own Food), then to ocean. Leave Brookhaven Center at 8:30 a.m. and leave Montauk at 4 p.m. Not recommended for children under 10 years old. \$85 per person.

Service Station On Site To Close For One Day, 7/6

The vehicle repair shop and gas station on site will be closed for a vacation day on Friday, July 6.

Wanna Join In?

Purchase tickets at the BERA Store in Berkner (Bldg 488), and open from Monday to Friday, 9 a.m. – 3 p.m.

Arrivals & Departures

— Arrivals —

Kristie Bonti Medical
George Sterbinsky.... Photon Scis
Samuel Tenney CFN
Dawn Verdugo NNS

— Departures —

Xinhui LuCMPMS
Michelle PotockiS&H
Mingfeng Wang CFN

BSA Noon Recitals: Pianofest, 6/27, 7/25

Participants in Pianofest, a summer workshop held in the Hamptons, will be showcased in two recitals, one on Wednesday, June 27, and the next on Wednesday, July 25, at noon in Berkner Hall. Sponsored by Brookhaven Science Associates, the company that manages the Lab, the concert is free and open to the public. All visitors to the Laboratory 16 and older must bring a photo I.D.

Now in its 23rd season, Pianofest is an East Hampton-based intensive workshop that addresses the fine points of professional pianism. Its alumni have gone on to make their mark nationally and internationally. For each recital at Brookhaven, the workshop's founder and director, Paul Schenly, brings a selection of outstanding Pianofest participants to perform from the great classical repertoire. The program may include renditions of popular concertos, using two pianos. For more information on Pianofest, go to: www.pianofest.com. To see and hear a wonderful 2-minute video of selections from Pianofest 2011, go to www.bnl.gov/bnlweb/pubaf/pr/PR_display.asp?prID=1420.

CALENDAR

— WEEK OF 6/25 —

Monday, 6/25

Defensive Driving Class, Part 2.
6-9 p.m. Brookhaven Center South Room.

Tuesday, 6/26

*IBEW Meeting
6 p.m. Centereach Knights of Columbus Hall, 41 Horseblock Rd., Centereach. A meeting for shift workers will be held at 3 p.m. in the union office. The agenda includes regular business, committee reports, and the president's report. See below.

Sambamurti Memorial Lecture
3:30 p.m. Berkner Hall. Dan Dwyer, Lawrence Berkeley National Laboratory, will talk on "The Trouble With Neutrinos." All are welcome to this free event. Visitors to the Lab of 16 and older must carry a photo ID.

Wednesday, 6/27

BSA Noon Recital: Pianofest
Noon. Berkner Hall. Star pianists will perform. All are welcome to this free public event, sponsored by Brookhaven Science Associates. Visitors to the Lab of 16 and older must carry a photo ID. See notice below. To enjoy a 2-minute video of selections from Pianofest 2011, go to www.bnl.gov/bnlweb/pubaf/pr/PR_display.asp?prID=1420.

Annual Plant Swap
Noon-1 p.m. Berkner Hall parking lot. Bring plants to swap or just come and talk gardening. All the Lab community is welcome.

Employee Awards Ceremony
4 p.m. Berkner Hall. On behalf of the Director's Office, the Lab community is invited to the Employee Awards Ceremony, where 14 BNL staff will be honored for their contributions to BNL's mission. Refreshments will be served in the lobby following the presentations.

— WEEK OF 7/2 —

Wednesday, 7/4

Independence Day. Lab Closed.
No Bulletin this week.

Note: This calendar is updated continuously and will appear in the Bulletin whenever space permits. Submissions must be received by the preceding Friday at noon to appear in the following week's Bulletin. Enter information for each event in the order listed above (date, event name, description, and cost) and send it to bulletin@bnl.gov. Write "Bulletin Calendar" in the subject line.

IBEW Meets Tuesdays

The monthly IBEW meetings held at Knights of Columbus Hall in Centereach will now be held on Tuesdays, not Mondays, until further notice. The next meeting will be on Tuesday, June 26 (see calendar above).

Fidelity Investments One-on-One Meetings

A representative from Fidelity Investments will visit BNL on July 20 and August 3 to answer employees' questions about financial matters. To schedule an appointment, please call 1-800-642-7131 or go online at www.Fidelity.com/atwork/reservations.





Alex Reben 0000612

PPE Demo Room Means ‘Try Before You Buy’

The Personal Protective Equipment (PPE) demo room, managed by Safety & Health Services Division’s Bob Selvey, is located in the Brookhaven Center, Bldg. 30. There, BNLeers can try out safety glasses, gloves, lab coats, hearing protection, and more, before ordering the product. Watch a video online to learn how this demo room helps people at the Lab: <http://1.usa.gov/MDNOHj>.

Safety makes science possible at Brookhaven National Laboratory

Classified Advertisements

Current job openings and a statement of job placement policy at BNL are available on the homepage at www.bnl.gov/HRI/careers/. To apply for a position, go to www.bnl.gov and select “Search Job List.” For more information, call Ext. 2882.

Motor Vehicles & Supplies

05 JEEP WRANGLER 4X4 – 86K mi. a/c, c/c, hdtop, 6 spd manual, towing pkg, 1 yr warr. \$11,900. \$11,900 neg. Ext. 5711.

01 HONDA ACCORD – 139K mi. V6, Ex Sedan, a/t, dealer maint, new tires/struts, minor body work. \$4,850. 398-3203.

01 TOYOTA TACOMA TRUCK – 43.3K mi. blk, 4 cyl, 2.4 ltr eng, 4/spd, 2wd, a/t, a/c, stl whls, cargo bed liner, more. \$9,000 neg. 929-3388.

99 ISUZU RODEO SUV – 152K mi. manual tranny, gd running cond. \$2,200. 398-3203.

99 FORD ESCORT SE – 120K mi. 4-cyl, 2 Ltr, ABS, a/t, a/c, all pwr, dual air bags, new t. belt/batt/brake, \$2,300 neg. Lu, Ext. 2458.

98 BUICK LESABRE – 110K mi. runs excel \$1,200 neg. Ext. 8440, 831-4647.

4 TIRES – 4 Jp Wrglr stock tires, less then 20K mis; Grt cond; Sz 255/75/17. Steven, 516-655-6876 or sdasaro@bnl.gov.

CARGO CARRIER – Yakima, 6’, \$200/ neg. 603-731-8687 or vblass3@aol.com.

TRAILER HITCH – Class 2J, fits full sz Blazer or Suburban, incs draw bar, \$25. Lynda, Ext. 7235 or fitz@bnl.gov.

WRANGLER SAHARA WHEEL COVER – Plain, black, still in box \$60. dmcarthur@bnl.gov.

Boats & Marine Supplies

19’ CRUISE CRAFT - OLD – No trailer or engine. Will help load onto your trailer. Pics avail. \$60. Lynda, Ext. 7235, 286-1018.

OUTBOARD ENGINE – 6 hp Johnson Seahorse short stroke, v/ gd cond, maintd & stored, new gas tank. Leonard, Ext. 4691.

Furnishings & Appliances

BABY CRADLE – Wood, Rocks or locks into place w/pins, clean, w/waterprf mattress. \$30. Ying, Ext. 5360 or ylou@bnl.gov.

BUNK BEDS – 8 yrs old, white/\$200, Dresser/Changing Table, 13 yrs old, white/\$100, grt cond. 678-3299, dgordon@bnl.gov.

FREEZER – H. Duty Commercial, \$450, 20.7 cu’, 70hx27.5wx30d, sec lock w/key, adj shelf, defrost drain, more, pics. Ext. 2826.

DINING TABLE – IKEA extendable dining table, grt cond, see pic at <http://tinyurl.com/6uvytdx>. ask \$60. Ying, Ext. 5360.

ENTERTAINMENT CENTER – Fits up to 36” TV, glass side dr & shelves, 3 lower cabinets, mint cond, \$125. Karl, Ext. 3116.

BED HEADBOARD – & frme, King, Wilmington woven havana fiber, espresso-stained, value \$720, sell/\$100. 929-0596.

LOVE SEAT, MORE – Pine, excel, \$200/neg, sm pine end tbl/\$50/neg; 3 wall mirrors, 5’8”Lx1’4”w, \$100/ea/neg. 603-731-8687.

PIANO, UPRIGHT – Samick, beaut wood, standard piano or play digital/cd/karaoke, no tuning! SXP411, \$1100. 831-4342.

Audio, Video & Computers

32” SONY TRINTRON TUBE TV – Sony Trinitron Model KV-32HS510 flat screen tube tv. 50\$. Jim, Ext. 7460.

CAR AUDIO, 36 – Kicker ZX700.5 5 ch amp w/rem cntrl/\$400, Kicker DC122 2 12” sub-wfr/\$200; both new in box, more. Ext. 3970.

COMPUTER MONITOR – 13x16” Dell Color Monitor, \$125/neg. 603-731-8687.

IPHONE 4 – new, white, in box, unused, ask/\$400/neg. Dorothy, Ext. 2585.

MACBOOK AIR – 1.8GHz Dual-Core Intel Core i7, 4GB, 1333MHz DDR3 SDRAM, more. \$1400. Renee, Ext. 8278.

MAESTRO GUITAR – new w/case, neck strap, beginner CD, extra strings and care booklet/\$85. 929-0668.

SONY PLAYSTATION 2 – wireless rem 2 mem cards, games. \$40. Jim, Ext. 7460.

SOUND CARD/VIDEO CARD – Dynex 5.1 surround sound PCI c=d 10\$ ATI Radeon X800XL PCI express video. Jim, Ext. 7460.

YAMAHA POWERED SPEAKERS – KA-10 45 watt spkrs for keybrd/elect guitar, gd shape, some nicks, \$40/pr. shrey@bnl.gov.

Sports, Hobbies & Pets

2004 KODIAK K235 CAMPER – 23’, slide out, dinette, 2 qu beds, m/wave, oven, full ba, heat, A/C, more, slps 6+ \$8000. Ext. 7978.

BICYCLE GEAR: – 2 Frostline Model #232 bicycle pannier kits, u sew, \$5/ea. Nick, Ext. 2490 or gmur@bnl.gov.

BIKE RACK – Thule, #963, fits any vehicle w/rear mounted spare tire, holds two bikes, bracket to easy install. \$115. 208-8131.

BIKE RACK – Receiver Hitch Bike Rack, used 2x. Holds 3-4 Bikes, Like new, very nice unit \$75. Rich, Ext. 8186.

BIKE RACK, INVISIBLE DOG FENCE – Thule trunk mount rack for 3 bikes/75; In-notek IUC-4100 new in box/\$240. Ext. 3970.

JETS TICKETS!!! – 3 seats, prkg pass: sec344 row7,12/13/14, Reg season games: \$340/face val, pre-seas games: \$170/half pri. 626-3724.

PHOTOGRAPHY – Nikon Pronea S camera \$30; Cavalier Auto Tele f=200mm 1:3.5 lens \$20. Nick, Ext. 2490.

SKATEBOARDS/PAINTBALL GUNS – 3 skbrds; 1 ZooYork/Deck, 1 Enjoi & 1 Plan B full brds/\$125/all, Tippman Gryphon & Tpmn 98 Cust, like new/\$150/bo. Ext. 3333.

SPORTS ITEMS – Game table, “Poker & Blackjack”, \$40. Mary, Ext. 6344.

STALLS FOR RENT IN RIDGE – lit ring, plenty of trails, TLC for yr horse, sep turn-outs, clean, nr Lab! \$525/mo. 924-0002.

VIOLIN – J.P. Lupot 4/4 by Eastman Strings 2010. Bow, Arcos Brasil Nickel-mounted Pernambuco, & case, \$1400. Ext. 7870.

WETSUIT – Youth size 12, excel cond, \$50. Lynda, Ext. 7235 or fitz@bnl.gov.

YAMAHA – Alto Sax, excel cond, w/2 new reeds, neck strap, cork grease, case, 2 band music books, stand, \$850/neg. 929-0668.

Tools, House & Garden

CRAFTSMAN 12 HP LAWN TRACTOR – Needs work. \$100. John, Ext. 8206.

CRAFTSMAN, CAST IRON TABLE SAW – \$75, wired 110v can be 220v, on casters, sm size, older model, pics. Ext. 3644.

Seasonal Warning on Ticks

All individuals who walk, work, or play sports outdoors should be alert to the summertime problem of disease-transmitting ticks across BNL’s 5,300 acres. At this time of year, adult ticks are present. The smaller nymphal stage of ticks will also be present until about August. Both the adult and nymph stages of ticks can transmit one of several diseases, such as Lyme disease, Ehrlichiosis (now called Anaplasmosis), and Babesiosis, a small parasite related to malaria that causes malaria-like symptoms.

Preventive Steps to Help Stay Safe

Pedestrians should stay on sidewalks and avoid shortcuts across grassy areas or brush.

Outdoor workers should wear knee-high boots. Eliminate any gaps in clothing that would allow the larvae access to the skin. Avoid coarse-weave socks and pants. Tape pants to boots or tuck the pants into socks/boots. Wearing seamless coveralls without any gaps is also a good control measure. When working in high brush, wear dense-woven long-sleeved shirts, coveralls, or Tyvek suits.

Insect repellents containing permethrin or DEET should be applied in the area of pants cuffs and work boots, according to repellent can directions. K70766 Deep Woods Off for skin and clothing treatment (containing DEET) and K70764

HUSKY WORK BOX – approx 4’L x3’W x3’H Rougher shape, has keys/\$200/obo. 294-5392.

RIDING MOWER – Murray, mint, 30”- 6 positn cutting deck, 5 spds, xtra-tight turning radius, w/bagging access, \$490. 277-5025.

STEAM MOP, MORE – Shark, light & easy, unopnd in box/\$60; Lawnmowers: \$35-\$65; Radial Arm Saw, needs blade \$70/neg. 603-6285.

Miscellaneous

BABY CARSEAT & STROLLER – Graco metrolite travel, clean, from no-pet family, free stroller shield, ask/\$20/total. ylou@bnl.gov.

BABY GRACO SWING – girls-used lightly, in v/gd cond/\$50, pics avail upon request. Erika, ereyes@bnl.gov.

BOARDING IN/NR NYC – Antoine, 15, 12th-grader, lives Pt. Jeff, seeks board 4 nights/wk, fm early Sept, (sch. yr) w/NYC family, at bus or subway distance to Lycée Francais de NY on 75th E side.Francois, Ext. 8204.

ELECTRIC GUITAR – excel cond, gd starter, barely used, can send pics, pd/\$175, ask/\$75. William, Ext. 3644.

HANDBOOK FROM KOREA – ladies M, blue, w/all accessories in orig box, \$20/obo, pics. 494-6061, pmdaum@optonline.net.

MEDELA NURSING PUMP – double suction at same time/\$150, pics avail. Nina, Ext. 5894, 813-0497 or vbri1@aol.com.

MOTORHOME – ‘98 Newmar Kountry Aire, 40’ Diesel Pusher fully equip, 1 slide-out, 50K/mi, ask/\$25K. Bob, 289-1834.

POOL LADDER – for app, steps go into the water, hardly used, \$50, pics avail. 813-0497 or vbri1@aol.com.

PRINTERS – HP Office Jet wide format printer-brand new in box,\$155; HP Desk Jet 9800 Wide Format Printer, \$65. 929-3388.

VIOLIN – full size, mint cond, case has a tear, missing one string, looks brand new/\$100, pics. William, Ext. 3644.

Yard & Garage Sales

WADING RIVER – Commnity Sale, Sat, Aug 4, 9a-3p. Wildwood Acres Assoc, 114 Hulse Av. Stop at Pavilion, get map of participating homes, call for info. 375-7264.

Happenings

CABARET AT MONTAUK LIBRARY – “LATINAS!” Yvette w/Bob on piano/guitar, debuts cabaret show “LATINAS” with popular songs by favorite Latina singers & heroines, 7:30p July 11. Yvette, Ext. 5591 or yvette@yvettemalavet.com.

DINNER/SHOW OUTING – see Jonah at Sight n Sound Theatre in PA, Sat, Oct 13, 2012. Deposits due now. Kim, Ext. 2896, 399-3098.



Sawyer Clothing Treatment (containing permethrin) are available to staff through Central Stores.

Duct tape can be used to remove visible larvae from pants. Thorough heating and drying of infested clothing by running them through a hot dryer is an effective way to kill the larvae.

Workers should immediately shower and thoroughly wash with soap and water all areas of potential skin exposure and bites.

Take Action if Bitten

“Members of the BNL community should come to the Occupational Medicine Clinic (OMC) if they believe they have gotten tick or chigger bites on site,” said OMC Manager Joe Falco. “If you’ve been bitten off site, you can also come to OMC for first aid and guidance.”

According to Falco, an adult tick bite usually does not require treatment other than removal of the tick and disinfection of the attachment site (unless a tick-borne disease later develops). For a tick discovered at home, an individual

WOODLANDS FOLK FESTIVAL – Family & eco-friendly celebration of great music, 11:30-7p, Sat June 30, 3 stages of great artists in peaceful setting, info, schedule & tickets: www.woodlandsfolkfest.org or info@woodlandsfolkfest.org

Free

NTDIT AWARD WINNING FILM – “Between Life and Death” is a documentary produced by New Tang Dynasty Television. George, georgewei@bnl.gov.

STOVE & FURNACE EQUIP’T: – 1 AmeriTherm Model T500 thermally activated flue damper, 5”diam; 1 stove flue pipe catalytic combuster, 8”diam. Ext. 2490.

Wanted

ADOPT-A-PLATOON – Monetary donations gratefully accepted towards mailing shipments to our platoon overseas and sending packages to BNL family members. Thank you. Joanne, jrula@bnl.gov.

BNL FAMILY MEMBERS IN MILITARY – If you have a family member deployed overseas, please contact Adopt-a-Platoon so we may send a goodie package. Joanne, jrula@bnl.gov.

CARPET INSTALLER – need a carpet installed in Port Jeff Station/12x10/rm, can trade for hvac work or pay! Ed, 626-3724 or egranger@bnl.gov.

FIREARMS – Firearms wanted, Pay Fair \$\$ for unused Firearms, New or Old. No firearms can be brought on site. Joe, 487-1479.

HOUSING – Looking for a rm to rent or hse/apt to share, female preferable. karina5661@hotmail.com.

WOMAN’S MOUNTAIN BIKE WANTED – good, used. ccardone@bnl.gov.

Lost & Found

FOUND – Wrist watch, Armitron, on sidewalk nr CFN, Building 735. ID it to get it back. Donald, Ext. 7237 or sievers@bnl.gov.

For Rent

CENTER MORICHES – 1 bdrm apt, full bath, grnd flr, close to Lab, conv to all, nice area, incs all. \$950/mo. 325-2549.

CENTEREACH – 2-3 bdrm split lvl, nr LIE, deck w/gazebo, 4-car gar, ingrd pool,non-smkr, no pets, 1.25 acre, utils not incl, upgraded applis, 2/mos sec. \$2,800/mo. 516-380-7322.

EASTPORT – all new applis, 2/3bdrm, 2.5 ba, d/r, l/r, f/p, quiet, secluded townhse, lake, bird sanc, no pets. \$2,100/mo. 516-314-0234.

MANORVILLE – 3 bdrm Town Hse in gated commw, 10 min to BNL, avail immed, 6 mos or full yr. \$2,250/mo. 875-6066.

can remove the tick with clean tweezers and pulling with a gentle, steady force. It is okay if the mouthparts do not come out with the tick — do not go digging for them since they will fall out eventually. See the tick identification section below for information on the issue of post-tick bite antibiotics. In the days after the tick bite, individuals should see a personal physician if they (1) develop a spreading red rash around a tick bite, (2) feel ill, or (3) develop a fever.

Chigger bites do not transmit disease but are extremely itchy, so treatment is directed at reducing the itch. Treatments include benzocaine or hydrocortisone ointments, calamine lotion, Chigaid, or New Skin liquid bandage. Oral Benadryl (antihistamine) can be helpful but should not be used at work or before driving or operating machinery due to a drowsiness side effect. Occasionally an individual will have a more severe allergic-type reaction, with symptoms such as skin swelling. This requires prompt medical attention.

Learn More:

For more information, see the Tick Safety 1-Minute Safety Topic at <http://intranet.bnl.gov/safety/toolbox/ticks.asp>. Magnified pictures of different tick types are available at www.bnl.gov/esh/shsd/PDF/Handout%20Prevention%20121509.pdf.

N.SHIRLEY – 1 bdrm furn apt, grnd flr, nr Lab, quiet, clean, sep ent, 1 mo rent/sec, incs all, no smkg/pets. \$850/mo. Ext. 3849.

RIDGE – 1 bdrm, kitchenette, full bath, mins to Lab, incs all, sep ent/prkg. \$975/mo. Lynne, 924-0002.

RIVERHEAD – 3/bdrm, 2/full ba, Western Ranch, kit, dw, l/r, d/r, gar, new windows & furnace, quiet, nr shops, no smkg/pets, refs, cc reqd, 1/mo sec + util. \$2,150/mo. 512-6470.

ROCKY POINT – Studio Apt: Avail: mid-July. Grnd lvl, priv. ent., l/net, Dir.TV, A/C, cathedral ceiling. 1 pers, no pets. Rent incl. all. \$875/mo. 516-250-7764.

SHOREHAM – share a lg hse w/professional, furnd bdrm, cable, int, no smkg/pets, 7 mi to BNL, cell phone:464-8134. \$650/mo. gg19582003@gmail.com.

SHOREHAM – 1 bdrm furn apt, l/r, d/r, full kitch/bath, no smkg/pets, pvt ent/drvwy, util incl, 1 mo sec/5 min to Lab. \$1,150/mo. Judy, 375-7959.

For Rent or Sale

JAMESPORT – 3 lvl 3000 sq’ condo-3.5 ba, cac, hot tub, 2-car gar, priv beach for condo, pool, tennis, all applis, upper deck, lower patio, also for sale. \$2,500/mo. Carmine, Ext. 5101.

SPRING HILL, FL – priv ranch on Gulf, 70m Orlando, 45m Tampa, fly Islip direct, near beach/tennis/park, SW architecture, 3/bdrm, 2/bath, d/r, f/p, 2gar, igp in lanai, fruit trees, see review.oktane.net/House-Tour. \$450/wk, \$120,000 neg. 344-5537.

For Sale

BAYPORT – 2300 sq ft, Frank L. Wright-style mid-cent.-modern hse, 1 acre nr Grt S Bay, 4 bdrm, 2½ bath, open flr plan, lg windws, rad. heat, \$525,000. 617-332-6264.

CORAM – spacious 1 bdrm co-op, updated open kitch, updated b/r, laundry nr unit, alarm syst, MLS#2501596 Contact for link to listing. \$110,000. Warren, Ext. 8329.

CORAM-BRETTON WOOD – 3 bdrm, 2.5 bath, l/r, d/r, new eik/heating/cac/carpets/baths, lg priv bowling/golf/swim/tennis. \$249,900. Bob, 516-314-0234.

HOLBROOK – Condo, 2 bdrm, 1.5 ba, townhse style, updated, s/s applis, cac, alarm, pool, quiet courtyd area, 20 mins to Lab, pics. \$275,000 neg. 419-6854.

PORT JEFF STATION – 1 lg upper bdrm, 1 ba Co-op, eik, applis/windows, a/c, d/r, Indry/pool on site, great location. \$91,000. 828-2743.

SHOREHAM – 3/bdrm Col, c-de-sac, updated ba & kitch/ss applis, den/fp, bsmt, lrg deck & wood shed, gar, 10 mins to Lab. \$344,000. Andrea, Ext. 3347, 744-8793.