Bulletin



Does Seeing Food Make You Want to Eat?



o you like watching cooking shows on TV? Do commercials for yummy treats make you salivate? Could these and other food images drive people to overeat?

Whether you answer yes or no to these questions, you can help researchers in BNL's Medical Department find out by volunteering for a brain-imaging study.

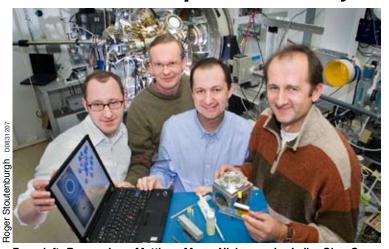
All you have to do is watch videos of foods you get to choose from a menu while lying in the bed of Brookhaven's magnetic resonance imaging (MRI) scanner. There are no injections and no chemicals involved, though blood samples will be taken. The MRI scanner will non-invasively monitor blood flow in your brain, identifying which areas are most active using functional magnetic resonance imaging (fMRI) as you watch the video.

The research group, led by Medical Department Chair Gene-Jack Wang, has received widespread scientific acclaim and mainstream media publicity for its efforts to better understand the neurological mechanisms that underlie compulsive overeating. Because this study is relatively non-invasive, it's an excellent opportunity for BNLers to take part in this research.

Wang's group is looking for people with all body types, from thin to overweight. Tell your offsite friends as well. All participants will be compensated. Personal information will be kept strictly confidential. If you are interested in participating or simply receiving more information, call on site Ext. 5015, or 1-888-352-7380 from off site.

- Karen McNulty Walsh

American Physical Society Meeting, March 2008 **DNA-Guided Nanoparticle Assembly**



From left: Researchers Matthew Maye, Niels van der Lelie, Oleg Gang, and Dmytro Nykypanchuk.

controlling the self-assembly of nanometer and micrometer-sized particles. Based on designed DNA shells that coat a particle's surface, the method can be used to manipulate the structure of numerous materials. Such fine-tuning of materi-

BNL scientists have devel-oped a new method for lead to numerous applications, including cell-targeted systems for drug-delivery and biomolecular sensing for environmental monitoring or medical applications.

"Our method is unique because we attached two types of DNA to the particles' surfaces,"

Many scientific talks were presented by researchers from BNL at the American Physical Society meeting, March 10-14, 2008, at the Morial Convention Center, New Orleans, Louisiana.

Two among these talks were featured in The Bulletin, March 28, 2008, and two more follow in this issue. The research described was funded by the Office of Basic Energy Sciences within DOE's Office of Science.

said Dmytro Nykypanchuk of BNL's Center for Functional Nanmaterials, who gave a talk about this work at the APS meeting on March 10. "The first type of DNA forms a double helix, while the second type is non-complementary, neutral DNA, so it provides a repulsive (continued on page 2)

Closing the 'Pseudogap' on Superconductivity



ne of the biggest mysteries in studying hightemperature (Tc) superconductors — materials that conduct electrical current with no resistance below a certain transition temperature — is the origin of a gap in the energy level of the materials' electronic spectrum. BNL physicists Hongbo Yang, Peter Johnson, Tonica Valla, Genda Gu, and Alexei Tsvelik, all of the Condensed Matter Physics & Materials Science Department (CMPMS) with J.D. Rameau, CMPMS and Stony

LI Technology Hall of Fame **Awards BNL Scientists**



BNL's Associate Laboratory Director for Life Sciences Fritz Henn (right) congratulates scientists James Hainfeld (left) and Avraham Dilmanian, who display the Long Island Technology Hall of Fame award.

BNL scientists Avraham Dilmanian and James Hainfeld, with Gerard Morris, a guest researcher at BNL who is a senior research scientist at Morvus Technology Ltd., Wales, have won The Long Island Technology Hall of Fame award for the most innovative patent in the category of innovation for the individual. The patent for a method for implementing an experimental procedure to treat cancer, called microbeam radiation therapy (MRT), was chosen from among more than 1,600 patents that were granted to Long Island residents in 2007.

"I am very enthusiastic about and supportive of this new technology. In my opinion, it holds great promise for providing a new modality to treat brain tumors that are currently difficult to manage due to their proximity to radiosensitive, normal tissues. Eventually, I see its application in other cancers with similar geographic constraints," said Allen Meek, Professor of Radiation Oncology, Stony Brook University (SBU) School of Medicine.

As it was first implemented, MRT used BNL's National Synchrotron Light Source (NSLS) to produce arrays of parallel, very thin x-ray beams to irradiate and destroy malignant tumors, while keeping normal adjacent tissues free from harm. MRT research was initiated in the early 1990s at the Lab by now retired BNL scientist Daniel Slatkin and the late Per Spanne, also of BNL, and Dilmanian.

In 2006, Dilmanian, with colleagues from SBU, the IRCCS NEUROMED Medical Center in Italy, and Georgetown University implemented the method of delivery for interlaced MRT, using thicker microbeams. The patent describes a way to interlace the arrays of thicker beams to produce an unsegmented radiation field at the target to increase the

killing potential there, while still sparing healthy tissue.

"The interlacing method looks very promising for treating spinal cord tumors, brain tumors of small and medium size, and regularly shaped, small and medium size tumors of the head and neck. In particular, this method is ideal for treating areas near radiosensitive organs because surrounding tissue is kept intact, and the dose from the interlacing method sharply stops at the edge of the targeted tissue," Dilmanian said.

The beam thickness used in this recent research could be produced by either a dedicated synchrotron facility or specialized x-ray tubes of extremely high voltage and current. The use of x-ray tubes, which may be developed in the future, would make the technology readily available in hospitals.

"However, more studies must be done before the method can be used in patient trials," Hainfeld said. "My colleagues and I are encouraged by its success, and we hope that future studies will lead to an improved cancer therapy."

In addition to his medical scientist position at BNL, Dilmanian is Associate Professor of Research, Department of Radiation Oncology, at SBU School of Medicine. Hainfeld, a BNL biophysicist, is also founder and CEO of Nanoprobes, Inc., a Long Island company based in Yaphank.

Brookhaven Science Associates, the company that manages BNL for DOE, holds U.S. Patent No. 7,194,063 for the improved method for implementing MRT. The recent MRT studies were also done at the NSLS, which is funded by DOE's Office of Basic Energy Sciences. — Diane Greenberg

For more information, see www.bnl.gov/bnlweb/pubaf/pr/ PR_display.asp?prID=08-29.

Brook University, have been studying this "pseudogap." Yang presented a paper on their research at the APS meeting on

Understanding the pseudogap may help scientists understand the mechanism for high-temperature superconductivity, which in turn could lead to the strategic design of

superconductors for practical applications such as high-capacity, highly efficient power transmission lines.

There are competing theories for the origin of the pseudogap. In one, the material is considered a normal metal from which superconductivity starts to emerge via the pairing (continued on page 2)

The Bulletin April 4, 2008

CALENDAR

OF LABORATORY EVENTS

- The BERA Store in Berkner Hall is open weekdays from 9 a.m. to 3 p.m. For more tion on BERA events, contact Andrea Dehler, Ext. 3347, or Christine Carter, Ext. 2873.
- Additional information for Hospitality Committee events may be found at the Lollipop House and the laundry in the apartment area.
- Contact names are provided for most events for more information.
- Events flagged with an asterisk (*) have an accompanying story in this week's Bulletin.

- EACH WEEK -

Weekdays: Free English for Speakers Of Other Languages Classes

Beginner, Intermediate, Advanced classes. Various times. All are welcome. Learn English, make friends. See www.bnl.gov/esol/schedule. html for schedule. Jen Lynch, Ext. 4894

Mondays: BNL Social & Cultural Club Noon-1 p.m., Brookhaven Center, South Room, free beginners dance lessons. Rudy Alforque, Ext. 4733, alforque@bnl.gov

Mondays & Wednesdays: Pilates 5:15-6:15 p.m. Rec. Hall. Ext. 5090

Mondays & Thursdays: Kickboxing \$5 per class. Noon-1 p.m. in the gym. Registration is required. Ext. 8481

Mon., Thurs., & Fri.: Tai Chi Noon-1 p.m., B'haven Cntr N. Rm. Adam Rusek, Ext. 5830, rusek@bnl.gov

Tuesdays: Hospitality Coffee

10:30 a.m-noon, Rec. Hall lounge. All welcome. Ext. 5090 Tuesdays: BNL Music Club

Noon, B'haven Center, N. Room. Come

hear live music. Joe Vignola, Ext. 3846 Tuesdays: Knitting Class

2 p.m. Rec Hall. All levels of skill. Ext. 5090 for information.

Tuesdays: Toastmasters

1st & 3rd Tuesday of month, 5:30 p.m., Bldg. 463, Rm 160. Guests, visitors welcome. www.bnl.gov/bera/activities/toastmstrs/

Tue., Wed. & Thu: Rec Hall Activities 5:30-9:30 p.m. General activities, TV, ping pong, chess, games, socializing. Christine Carter, Ext. 5090.

Tue., Thurs. & Fri.: Ving Tsun Kung Fu Noon-1 p.m., B'haven Center, North Room. Taught by Master William Moy. Scott Bradley, Ext. 5745, bradley@bnl.gov

Tuesday & Thursday: Aerobic Fitness 5:15 p.m., Rec. Hall. 10 classes for \$40 or \$5 per class. Pat Flood, Ext. 7866, flood@bnl.gov

Tuesday & Thursday: Aqua Aerobics 5:30-6:30 p.m., Pool. Ext. 5090

Wednesdays: On-Site Play Group

10 a.m.-noon. Rec. Hall. Infant/tod-dler drop-in event. Parents meet while children play. Petra Adams, 821-9238.

Wednesdays: Ballroom Dance Class

B'haven Center, N. Ballroom. Instructor: Giny Rae. Starts September 12 and 19. Ext. 3845.

Wednesdays: Weight Watchers

Noon-1 p.m. Michael Thorn, Ext. 8612

Wednesdays: Yoga

Noon-1 p.m., B'haven Center. Free. Ila Campbell, Ext. 2206, ila@bnl.gov

Thursdays: BNL Cycletrons Club

Noon-1 p.m., Only on first Thurs. of the month. Berkner Hall, Room D. Toni Hoffman, Ext. 5257

Thursdays: Reiki Healing Class Noon-1 p.m., Call for location. Nicole Bernholc, Ext. 2027

Fridays: Family Swim Night

5-8 p.m. BNL Pool. \$5 per family

Fridays: Family Gym Night 5-8 p.m. Family gym activities. Free.

Fridays: BNL Social & Cultural Club Noon-1 p.m., B'haven Center, South Room, free beginners dance lessons. 7-11:30 p.m. North Ballroom, Dance Social, workshops. Rudy Alforque, Ext. 4733, alforque@bnl.gov



Food Drive bins are ready for donations of canned goods in many buildings on site. Or, send a check made out to BNL Food Drive, c/o Linda Rundlett, Bldg. 400; or Maria Beckman, Bldg. 120.

BERA Elections 2008: Congratulations, New Board Members

ongratulations to this year's BERA election winners of fouryear terms on the BERA Board. The new Board members are: Phyllis D'Avanzo, Plant Engineering Division; Helen Savage, Fiscal Division; Thomas Seda, National Synchrotron Light Source Department; and Richard Wagener, Environmental Sciences Department. They will join current Board members Frank Dusek, Joann Giambalvo, Tom Nolan, and Ed Sperry to help organize



Phyllis D'Avanzo





Thomas Seda

and plan for BERA business, activities, sports, trips, and events. Says Christine Carter, Supervisor of Quality of Life, BERA, and Recreation at BNL, "The four outgoing members of the BERA Board, Toni Hoffmann, Board President; Susan Wells, Board Vice President; Beth Lin and Jody Mitchell have done a wonderful job for BERA. We are all grateful for their hard work and enthusiasm." Liz Seubert



Richard Wagener

Nominations Wanted: For Environmental Stewardship Awards

Helen Savage

As part of BNL's commitment to environmental stewardship, the Lab presents awards annually to employees who help to make the environment healthier and more livable. Nominations are requested for employees who have demonstrated an outstanding contribution in the areas of pollution prevention, recycling, waste minimization, energy conservation, compliance, or resource conservation. Awards will be presented at the annual Earth Day Award Ceremony on April 24.

If you believe you or someone you know should be recognized for environmental stewardship efforts, forward your name, or your nominee's name, extension, division, Bldg. number, and an overview of the contribution, with any supporting documentation, to Karen Ratel, Bldg. 120, by April 16. For more information, contact Ratel at Ext. 3711 or ratel@bnl.gov.

Meet BNL's Jill Clough-Johnston



Jill Clough-Johnston (left) and Jenny

Till Clough-Johnston may work with small businesses, but she has a big heart.

The small business liaison officer, who joined the Lab five years ago, has been mentoring 14-year-old Jenny, a girl from an at-risk family who needs someone to talk with and trust. The two met three years ago when the Long Island Youth Mentoring organization came to Clough-Johnston's church to seek volunteers.

"I immediately signed up," said Clough-Johnston. "I don't have children of my own, so I thought this would be a great way for me to experience what it's like to share time and thoughts with a young person. Jenny and I connected right away and we have both benefited from our relationship. She really is a great kid, and I believe the two of us will be friends forever."

In addition to touring the Lab during Summer Sundays, the two typically spend time together talking over dinner, watching movies, and listening to local musicians. "I think music facilitates self-expression, so I've worked hard to bring music into Jenny's life," said Clough-Johnston. "We go to restaurants to hear local blues and jazz bands. Jenny is

delighted when my husband Jeff joins the musicians on stage to play harmonica. She is now involved with Girl Scouts, and keeps busy with various scout activities that also help build her confidence and teach her the importance of volun-

In addition to her time spent with Jenny, Clough-Johnston is the caretaker for her elderly mother and volunteers at her church and local garden club. But volunteerism isn't new to her. She has worked with the National Association of Blind Athletes and has been an advocate for Nassau County Services for rape victims. In 2007, she received the President's Award for Volunteerism and in 2006 she was the recipient of the Town of Brookhaven's Women's Achievement Award.

Adds Clough-Johnston, "I thoroughly enjoy working with small businesses and teaching them how to do business with the Lab, if applicable, and helping them expand their companies, while at the same time helping the Lab meet and exceed its small business goals. However, helping to make a difference in the life of just one young girl has been the most rewarding experience of all, by — Jane Koropsak

Fourth Annual Dr. Mow Shiah Lin Scholarship Call for applications

DERA's Asian Pacific American Association (APAA) is accepting $oldsymbol{\mathsf{D}}$ applications for the 4th annual Dr. Mow Shiah Lin Scholarship, honoring the late Lin, a distinguished scientist in BNL's Energy Sciences & Technology Department.

In honor of Lin's research, remarkable achievements, and inventions, a one-time award of \$1,000 is granted each year to an Asian immigrant with a student visa who is matriculating toward a doctorate at an accredited institution of higher education on Long Island (including Queens and Brooklyn) in environmental & energy technology, biology, or chemistry.

The criteria for selection include academic records, references, career goals, and other factors deemed appropriate by the committee. The winner is chosen by a selection committee consisting of scientists at BNL and members of the APAA. The scholarship will be granted independent of financial need and without regard to other forms of aid to the student.

With this scholarship, the Lin family hopes to make a difference for students who come to the United States, like Lin, to pursue higher education and achieve their research goals with the purpose of making significant contributions to the environment and improving the lives of all humankind.

Administered by the BNL Diversity Office, the APAA is now accepting applications for the Dr. Mow Shiah Lin Scholarship through May 31, 2008. School transcripts from the previous two semesters, two professional letters of reference, and an essay, which summarizes the objectives of the applicant's education program and longrange research goals, must be attached to the application. The essay should be concise, limited to one page, and double-spaced.

For more information or to obtain copies of the application form, contact the BNL Diversity Office via phone (631-344-6253) or email (sge@bnl.gov), or visit the APAA web site at www.bnl. gov/bera/activities/apaa/.

DNA-Guided Nanoparticle Assembly (cont'd)

force. The addition of the repulsive force allows for regulating the size of particle clusters and the speed of self-assembly with more precision."

Other BNL scientists working on this research include Matthew Maye and Oleg Gang of the CFN and Niels van der Lelie, Biology Department.

At the March 12 APS meeting, Gang presented Part II of the team's findings. He explained that in subsequent experiments, the researchers used DNA to guide the creation of three-dimensional, ordered, crystalline structures of nanoparticles. Engineering such 3-D structures is important for producing materials with unique properties that exist at the nanoscale, such as enhanced magnetism and improved catalytic activity.

This new assembly method relies on the attractive forces between complementary strands of DNA, but the scientists also heated the DNA-linked particles, then cooled them back to room temperature.

"This 'thermal processing' allows the nanoparticles to unbind, reshuffle, and find more stable binding arrangements," Gang said.

A patent application has been filed for the technology.

— Diane Greenberg

Superconductivity 'Pseudogap' (cont'd)

of electrons. In another, the pseudogap is thought to reflect the competition between superconductivity and another condition of the material - some other "ground state."

"Our new results indicate that the first theory is clearly incorrect, that these are not normal metals that simply become superconductors," said

Yang presented the results of how the gap changes at

various temperatures and with various levels of doping — that is, with different amounts of various other atoms added to the material.

"The results show that the underdoped system in the normal state behaves differently from all regions of the phase diagram in the superconducting state, and point to potentially different origins for the pseudogap," he said.

Karen McNulty Walsh

The Bulletin April 4, 2008

Service Anniversaries

The following BNL employees celebrated a service anniversary during January 2008:

- 30 Years -

John Lemmon	IIL
James Gordon	CFS
Hue-Anh Pham	C-AE
Roy D' Alsace	NSLS
Samuel Aronson	. Dir's Office
John Gallagher	NSLS
Ernst Sohn	CFS
HelenTodosow	QMC
Jeanne Madaia	EENS

25 Years —

Doon Gibbs...... Dir's Office - 20 Years -

Eileen Pinkston...... HROM Gary Hanlon...... Plant Eng. ີ້ ຊື່ Christopher Frosina..... Plant Eng. Robert Kelly HROM Scott Newton...... Plant Eng.

- 10 Years -

Gabriel Genoino, Jr. IAO Office Warren Booker, Jr. Plant Eng. Lidia Didenko..... Physics Patricia Edwards HROM Shigeki Misawa..... Physics

Arrivals & Departures

- Arrivais -	
Jesus Graciani	.Chemistry
Zhi Wei Lin	CMPMS
Sumanta Nayak	C-AD
Dmitri Volja	CMPMS
Departures -	_
Frank Cetero	NNS
Andrei Chitov	CMPMS

Conrad Foerster NSLS Robert Kaszuba.....NNS Brian Kushne Qual. Mngmt. Darlene Sappo...... C-AD Christian Schmidt...... Physics John Spiletic Comp. Sci. Joyce Wund...... HROM

Come to Lunch! Bring Friends, Meet Friends At BREA's Annual Luncheon, 6/4



At the recent Brookhaven Retired Employees Association meeting in March, having fun talking about plans for the upcoming luncheon are: (standing, from left) Sonja Santos, Flo O'Brien, Ronnie Evans, Graham Campbell, Martine O'Connor, David Cox, Arnie Peskin, seated, Richard Skelton, Carol Kramer, and Alyce Daly. Missing from the picture are: Robert Marr, Harriet Martin, and Ken Mohring.

The Brookhaven Retired Employees Associa-I tion (BREA) Luncheon Committee has been busy making plans, and now they announce that the Fifth Great Annual Luncheon will be held on Wednesday, June 4, at the Three Village Inn in Stony Brook.

All are invited to join in this afternoon of good food, friendly atmosphere, and wonderful company. The price of \$35 per person includes a half-hour of hors d'oeuvres and wine from noon to 12:30 p.m., then a splendid three-course meal, with cash bar. Roger Colleo will provide soft background music on his keyboard player.

To reserve your seats, send your name, address, and telephone number, and a check made out to BREA to cover \$35 for each person in your

party. Send it to BREA, BNL, P.O. Box 5000, Bldg. 475, Upton, NY 11973-5000. The deadline for checks to be received is May 28. The Three Village Inn is a beautiful setting for a lunch party, and it's easy to find. Take the Long Island Expressway to Exit 62, turn north up Nicholls Road, all the way to the end, at 25A. Turn left, and continue about 2 miles to a T junction, at which you turn right onto Main Street. Continue straight for just over a quarter of a mile, and you will see the Inn on the right.

"The more who come, the merrier," says retiree Flo O'Brien, who is one of the principal planners of this favorite event. "So, everyone, plan for June 4 right now in your calendar. We want everyone to be part of the enjoyment." Liz Seubert

CALENDAR

— WEEK OF 4/7 —

Wednesday, 4/9

*BSA Noon Recital

Noon, Berkner Hall. Violinist Solomiya Ivakhiv will perform. All are welcome to this free concert. See notice below, left.

WEEK OF 4/14 —

Wednesday, 4/16

*LabVIEW Meeting, More

8-11 a.m. Bldg. 515. 2nd. Fl. Seminar Room. See notice be-

Verizon Wireless Demo

11 a.m.-1:30 p.m. Berkner Hall lobby. Representatives from Verizon Wireless will discuss services available. BNL employees receive a 15 percent discount on service and 25 percent off accessories. Contact: Mavi Baig, 917- 881-2748.

435th Brookhaven Lecture

4 p.m. Berkner Hall. Nicholas Camillone of the Chemistry Department will speak on "Ćrossing Interfacial Frontiers: Surface Chemical Dynamics at the Temporal and Spatial Limit." All are welcome to this free lecture. Visitors to the Lab of 16 and older must carry a photo ID.

- WEEK OF 4/21 —

Monday, 4/21

436th Brookhaven Lecture

Noon. Berkner Hall. As part of BNL's Earth Day program, Vasilis Fthenakis, head of the National Photovoltaic Environmental Research Center at BNL, will give a talk titled "Solar Grand Plan." All are welcome.

Wednesday, 4/23

BSA Noon Recital

Noon. Berkner Hall. Stony Brook Opera singers will present scenes from operas. All are

- WEEK OF 4/28 -

Monday, 4/28

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.

Friday, 5/2

Symposium: Neutrino Helicity at 50

9 a.m.-5 p.m. Large Seminar Room, Bldg. 510. All are invited to a symposium organized in the Physics Department, en-titled "Neutrino Helicity at 50: A Celebration of the Goldhaber-Grodzins-Sunyar Experiment." The experiment will be recalled and its impact on particle physics discussed. Also highlighted will be some of the current worldwide activities in neutrino physics and the future prospects for the field. Featured speakers will include R. Garwin, L. Grodzins, W. Haxton, W. Marciano, H. Sobel, Y. Suzuki. J. van der Velde, and J. Wilkerson. For more information and to register, see http://www.bnl.gov/nh50/, or contact Event Coordinator Deborah Kerr, Ext. 3857, fax: 631-344-4741, or dkerr@bnl.gov. Registration is free, to join the dinner afterwards is \$30. Regis-

BSA Noon Recital: Violinist Ivakhiv, 4/9 Accompanied by Pianist Korth



Solomiya Ivakhiv

n Wednesday, April 9, ✓ Ukrainian violinist Solomiya Ivakhiv will give the next BSA Noon Recital in Berkner Hall, accompanied by pianist Jonathan Korth. All are welcome to this free public event,

sponsored by Brookhaven Science Associates, the company that manages BNL. Visitors to the Lab of 16 and older must carry a photo ID.

Ivakhiv made her debut as a soloist with Lviv Philharmonic Symphony Orchestra at the age of 13. Among her awards are the F. Kreisler Gold Medal from the Curtis Institute of Music and Award in Classical Music from the President of Ukraine.

Jonathan Korth is a graduate of the Peabody Conservatory of the Johns Hopkins University, Korth is currently finishing his DMA degree at Stony Brook University. Korth made his Carnegie Hall debut at the Weill Recital Hall in 2002 under the sponsorship of the La Gesse Foundation, and returned again in 2003 to present the world premiere of Robert Sirota's "Mixed Emotions." He has appeared as soloist with the Des Moines, Fort Dodge, and Stony Brook Symphony Orchestras.

LabVIEW & More, 4/9

On April 9, at 8-11 a.m. in Bldg. 515's Seminar Room on the second floor, Terry Stratoudakis, from ALE System Integration, will be available for free technical assistance and consultation on BNL employees' automated test, control, and measurement applications. Stratoudakis is also a certified LabVIEW developer, so participants are invited to bring all their LabVIEW questions. Also on hand will be Robert Berger, the local National Instruments representative. Coffee & donuts will be provided by ALE System Integration. For more information, contact Christine Herbst, Ext. 5304 or herbst@bnl.gov.

Take Children to Work Day' Volunteers Needed

Parent volunteers are needed to help prepare for "Take Our Children to Work Day," which will be held on Thursday, April 24. Contact Ernie Tucker, Ext. 5735, tucker@bnl.gov, or Liz Gilbert, Ext. 2315, gilbert@bnl.gov for more information.

BNL's Hispanic Heritage Club Offers Four \$500 HS Scholarships

The Hispanic Heritage Club (HHC) at Brookhaven National Laboratory is proud to announce that it will be granting four \$500 scholarships to high school seniors who are interested in pursuing a science or engineering degree.

Applicants should a) have a minimum 3.0 cumulative GPA, b) be accepted by a college for fall 2008 classes with the goal of obtaining a degree in science or engineering, c) attend Bellport, Longwood, Riverhead or William Floyd High Schools, d) have some degree of Hispanic ancestry, and e) be U.S. citizens or permanent residents. The application deadline is April 7, 2008. The application form can be downloaded from www.bnl. bov/bera/activities/hispanic. The winners will be announced

The Hispanic Heritage Club at BNL was founded in 2001 and is part of the Brookhaven Employees Recreation Association. It currently has about 30 members. The HHC is committed to supporting educational achievements of Hispanic students. This will be the second time the HHC is embarking on such a project. The scholarships are funded by proceeds from ticket sales of past events sponsored by the HHC.

One-on-One Retirement Counseling

A TIAA-CREF consultant will visit BNL on Wednesday, April 9; Wednesday, April 23; and Wednesday, April 30; to answer employees' questions about financial matters. The consultant will help you: understand the importance of protecting your assets against inflation; find the right allocation mix for you, learn about TIAA-CREF retirement income flexibility, and compare lifetime income vs. cash withdrawal options. For an appointment, call Suzanne Leone, (866) 842-2053, ext. 4601.

Spring Comes Suddenly — Don't Give Up!



CIGNA Representative

A CIGNA Healthcare representative is available as needed in Human Resources, Bldg. 400, or by phone to assist with claims issues you have been unable to resolve yourself through CIG-NA's Customer Service number (1-800-CIGNA24). Mary Beth Kivlen will be available by appointment only. You will need to provide all pertinent documentation. To schedule, call the Benefits Office, Ext. 5126.

Classified Advertisements

Placement Notices

The Lab's placement policy is to select the best-qualified candidate for an available position. Candidates are considered in the following order: (1) present benefits-eligible employees within the department/division and/or appropriate bargaining unit, with preference for those within the immediate work group; (2) present benefits-eligible employees within the Laboratory; and (3) outside applicants. In keeping with the Affirmative Action Plan, selections are made without regard to age, race, color, religion, national origin. sex. disability or veteran status. Each week, the Human Resources Division lists new placement notices, first, so employees may request consideration for themselves, and, second, for open recruitment. Because of the priority policy stated above, each listing does not necessarily represent an opportunity for all people. Except when operational needs require otherwise, positions will be open for one week after publication. For more information, contact the Employment Manager, Ext. 2882. Access current job openings on the World Wide Web at www.bnl.gov/HR/jobs/.

To apply for a position, go to www.bnl. gov. Select "Careers at Brookhaven" then "Employment Opportunities."

LABORATORY RECRUITMENT - Opportunities for Laboratory employees

Lamp Cleaners - (2) One-Month Term Appointments - As directed, cleans a variety of light fixtures in offices, shops and buildings using detergents and other cleaning agents, replaces lamps and starters. Generally cleans fluorescent and incandescent light fixtures excluding high intensity mercury lighting. Takes standard safety precautions with specific respect to electrical equipment encountered. Reports the occurrence of light fixtures, wires and related electrical equipment needing repair. Works from ladders and scaffolds as necessary. May operate fixed building cranes and drive pickup type truck as required by described duties. Plant Engineering Division. Submit all transfer requests to Diana Hubert, Bldg. 400B.

OPEN RECRUITMENT – Opportunities for Lab employees and outside candidates.

POSTDOCTORAL RESEARCH ASSOCI-ATE - Requires a Ph.D. physics, chemistry, materials science or similar field. Competency in characterization techniques such as diffraction, calorimetry, mass spectrometry and electron microscopy is necessary. Experience with a variety of preparation methods (vapor deposition, ball milling, surface functionalization, and organome tallic synthesis) is also desired. The successful candidate will take part in basic and applied research on energy storage materials such as metal hydrides for hydrogen storage. Research involves developing new candidate hydrogen storage materials (liquids and solids) and characterizing fundamental properties such as hydrogen capacity, structure thermodynamics and kinetics. Under the direction of J. Graetz. Energy Sciences & Technology Department. Apply to Job ID # 14427.

POSTDOCTORAL RESEARCH ASSO-CIATE - Requires a Ph.D. in nuclear or elementary particle physics. Experience with both detector hardware and the use of modern computing tools for detector simulation and data analysis is desired, as well as having outstanding credentials in Relativistic Heavy Ion physics. The successful candidate will join the PHENIX group in the Physics Department to do reearch on the PHENIX experiment at RHIC and will participate in the collection and analysis of data and working on detector operation, maintenance and upgrades, devoting efforts between the two. Under the direction of D. Morrison, Physics Department. Apply to Job ID # 14428.

POSTDOCTORAL RESEARCH ASSOCI-ATE – Requires a Ph.D. in organic chemistry or related field. Experience in preparation, characterization and handling of ionic liquids is highly desirable. Expertise in microwave synthesis, thermal analysis (DSC, TGA), viscometry, NMR spectroscopy and Karl Fischer titration is also desired. Project involves the development of improved methods of using ionic liquids to structurally degrade lignocellulosic materials to facilitate their fermentative conversion to biofuels. Under the direction of J. Wishart, Chemistry Department. Apply to Job ID # 14429.

POSTDOCTORAL RESEARCH ASSOCIATE - Requires a Ph.D. in environmental sciences, physics, chemistry, or a related field. Experience in x-ray absorption spectroscopy and/or x-ray fluorescence microprobe is required, preferably in the field of earth and environmental sciences. Experience with x-ray optics, solid state detectors, EPICS and/or IDL programming languages is highly desirable. Responsibility of this position will be to provide scientific and technical support to researchers at a NSLS hard x-ray microprobe beamline, to

carry out independent research utilizing these techniques in the field of earth and environmental sciences, and to participate in the development of new beamline capabilities. Under the direction of L. Miller, National Synchrotron Light Source Department. Apply to Job ID # 14430.

POSTDOCTORAL RESEARCH ASSOCI-ATE - Requires a Ph.D. in structural molecular biology, biochemistry or related fields to participate in the development of biomolecular solution scattering. Extensive experience in utilizing x-ray solution scattering to perform structural analysis of biomolecules is required. Candidate must be capable of carrying out original scientific research, including the development of new analysis methods for solution scattering data. Interest and experi-ence in liquid handling instrumentation and macromolecular crystallography are a plus. The responsibility of this position is to carry out independent research to explore new methods of making use of solution scattering data and to provide support to inexperienced solution scattering users at the new X9 beamline and participating in the development of capability for high throughput measurements. The high throughput capability will eventually evolve into a mail-in service for solution scattering users. Under the direction of L. Yang, National Synchrotron Light Source Department. Apply to Job ID # 14431.

DIRECTOR OF HUMAN RESOURCES (M-5) - The Director of Human Resources is a senior leadership position, reporting to the Laboratory Director, and has line management responsibility for all aspects of HR operations, the Occupational Medicine Clinic, and the Training & Qualifications Office. In addition, the HR Director is the champion for the Laboratory's strategy to attract and sustain top talent. Must have a minimum of 20 years of experience in more than one functional area in Human Resources and a proven ability to lead and direct the work of other HR professionals. Requires a Master's degree and experience in employee relations and/or labor relations, as well as significant supervisory or leadership experience. Will serve as a member of various Laboratory-level committees, including the Policy, Management, and Science Councils, and is also a member of the Personnel & Compensation committee of the Brookhaven Science Associates Board. The HR Director also interacts with individuals within the Department of Energy (DOE) and other HR Directors in the national laboratory system. Experience within DOE, and/or the national laboratory system is a plus. The successful candidate must be a strategic thinker, have excellent communication skills, be able to relate to all levels of employees at the Laboratory, be seen as being trustworthy, and must be innovative. Human Resources & Occupational Medicine Division. Apply to Job ID # 14423.

TECHNOLOGY ARCHITECT/CYBER IN-VESTIGATOR, TECHNICAL EXPERT (I-9) - Requires a bachelor's degree in a technical or related field; masters degree desirable; and 10-plus years' experience of which five or more years must be in cyber investigations, or significant professional experience in a related field. Requires considerable skill in interview techniques and oral and written communications. Experience in developing and conducting defensive cyber training and briefing programs; familiarity with word processsecure data bases, presentation, and e-mail applications are necessary. The Northeast Regional Counterintelligence Office (NRCO) will be responsible for BNL, LLE and PPPL. Responsibilities include developing, implementing, managing, enhancing, and maintaining all required elements of the Cyber Counterintelligence Program for the NRCO. Will detect, deter, and neutralize cyber threats targeting laboratory facilities and information systems from foreign intelligence services and terrorist organizations. Will provide integrated counterintelligence cyber/technical expertise supporting all aspects of the counterintelligence mission through the use of cyber investigations, cyber analytical activities, and the evaluation of security systems and analysis. Conducts briefings and de-briefings of travelers to foreign countries, hosts of foreign national visitors and assignees, and employees with significant foreign national interactions. Conducts CI Cyber Awareness training for all categories of employees. Coordinates with and assists the U.S. Intelligence Community members in queries and investigations. Provides assistance and support for activities of CI concern within the Unclassified Foreign Visits and Assignments, Official Foreign Travel, OPSEC, Information Security, Security Education and Awareness, and Personnel Security Programs. Must successfully complete a rigid background check to include a limited-scope polygraph examination concerning National Security issues. U.S. citizenship and the ability to obtain and maintain DOE "Q" and "SCI" Access Authorizations required. Candidates successfully competing for this position may be requested, as a pre-condition to an offer of employment, to submit to the above polygraph examination. Counterintelligence Office. Apply

Motor Vehicles

06 FORD MUSTANG GT - lime green, convertible, V8 Auto, blk int., pics avail., excel cond. 19K mi. \$22,000. Ext. 4144.

04 FORD F250 CAB - 4x4, 8 cyl., 5L, a/t, super duty crew, silver, XLT/tow pkg. excel. 29K mi. \$20,900/neg. 929-4886.

03 HARLEY DVDSN ELECTRA GLIDE STD - stage one kit reinhart true duels, all records avail. \$13,500/neg. 474-4672.

00 DODGE DAKOTA - excel. cond., gar, 4cyl 2.5L, 2wd 5 spd., a/c, am/fm/cass, orig. owner. 100K mi. \$4,000/neg. 516-316-6346. 99 ISUZU RODEO - 4dr, 4wd, 6cyl, a/t, c/c, acss/cd, p/l, p/w, dlr maint, 19/24mpg, excel. 117K mi. \$4,200/neg. 734-2593.

98 VOLVO S70 GLT - 4 dr. white, all opts, well maint., Kelly BB price. 202K mi. \$4,000/neg. Stephen. Ext. 3822 or 929-6527.

96 JAYCO POP-UP - sleeps 6, 3 burner stove, sink, heater, elect., cold/hot chest storage, excel. cond. \$2,500. 516-381-0534. 91 JEEP CHEROKEE - orig owner, 4-

wheel drive, 6 cyl., ac, great for the beach, 170K mi. \$1,250/neg. 929-4563. 68 PLYMOUTH BARRACUDA - If your passion is to restore muscle cars, this may be the one for you. 744-0790.

23 FORD T-BUCKET - when fully finished this T-Bucket will be an eye catcher... 350 mi. \$10,000/neg. Ext. 3556 or 767-1392.

Boats

27' C&C C&C 27 MK1 - fully equip. for race or cruise, 10 hrs on reblt atomic 4 inboard, \$10,500/neg. 298-7022/335-7173.

Furnishings & Appliances

CORNER SOFA SECTIONAL - 3-pc., Huntington Hse, seats 7, Wht on wht w/sage floral, stripe. \$275. Ext. 4507 or 878-1060.

BEDROOM SET - queen, whitewash oak sleigh bed, armoire, dresser, mirror, 2 end tables, pics avail. ask/\$1,000. Ext. 4144. CEILING FAN - 3 Speed, Brown \$25. David, Ext. 5460.

COMPUTER DESK - w/o hutch, 59"w, 29"h, w/hutch, 53'h, 25"d, lots of storage, \$100. Dan, 281-1028.

COUCH - chaise, loveseat ottoma, wall unit, \$800. 803-0005.

DEHUMIDIFIER - great cond., \$45. Joe, Ext. 3783 or 487-1479.

DINING TABLE - oak, custom, 48" round pedestal, two 12" leaves, 6 matching oak chrs. Opens to 72". \$600. 587-5553.

DINING TABLE - wooden, 4 chairs, pic avail., \$200/neg. Babu, Ext. 2568.

DINING TABLE - 57 1/2x43" w/2 inserts, gd. cond., 4 mtchg chairs & other chrs, \$100; queen metal bedframe, \$25. Ext. 7647.

ENTERTAINMENT CENTER - gd. cond., fits 32" tv, maple color, \$75. Linda, Ext. 7430.

GLASS TABLE - 2 glass shelves, 2'h x 5'L x 13"w; brass trim on legs. \$75. Cheryl, 732-7634.

GRANITE COUNTER TOP - 7'1"Lx 25.5"D, blk, 1 piece, \$1,000. Andrew, Ext. 4408. HANGING LAMP - stained glass, can

MATRESSES, DINING TABLE, TV - Moving sale: Household: vaccum, m/wave, desk w/hutch, TV, ded sets, more. 729-6229.

email pics. \$20. David, Ext. 5460.

MATTRESS - Serta, twin, bxspring, headbrd, base support, used 10 mos. by children, 2 sets. \$100/ea. Babu, Ext. 2568.

SECTIONAL - Douglas MRGR, new, 2 reclining loveseats w/wedge, micro-fiber fabric w/5-yr. warr., pic., \$1,500. Ext. 5873. TABLE - round, formica, almond, \$75; 2

twin maple beds, \$100/ea. 874-3606. VANITY - 1 pce, 6'L x 22"D, blk. granite top, 2 sinks, decorative, \$900. Ext. 4408.

Audio, Video & Computers

COMPUTER DESK - w/wheels, blonde, 58"L,28"W, 28/34"H, shelves & drawer, can e-mail pics. ask/\$35. Richard, Ext. 7013.

SLIDE SCANNING - 35mm scans, restores slides, prints, negs, deliv. on DVD, www.pictureperfectscans.com 928-6469. TV - Toshiba 24", flat screen, \$125/neg. Babu, Ext. 2568.

Sports, Hobbies & Pets

AIR HOCKETY TABLE - gd. working cond., lg. size, 4 goals in corners, 2 or 4 players, 3 pucks, \$60/neg. Don, Ext. 2253.

DAPPLE DASCHUND - purebred, male, long haired, 12 wks. old, beautiful, cuddly, and just a doll, \$600. 289-5319.

TICKETS - 2 Mets Home Opener vs, Phillies, \$125/ea., box behind home plate and PEDRO on the mount. Warlyn, Ext. 3633.

Tools, House & Garden

GENERATOR - Honda, 2200 watt, eg 2200, older unit aprox. 25 hrs., mint, ask/\$265, weigand@bnl.gov. Edward, Ext. 7160.

LAWN MOWER - Lawn-Boy, 4.5HP push mower side dischge w/bag, can op as mulcher, needs tune-up, \$20. Ext. 2593.

LAWN TRACTOR - Troy-Bilt, 15 HP Hydro Drive ride-on mower, model 13036. \$350. Ken. 744-0790.

WHEELBARROW - Craftman, full size, metal type, \$45. Joseph, Ext. 3783 or 487-1479.

BERA Spring Trips

Buy tickets at the BERA Store in Berkner Hall, open weekdays, 9 a.m.-3 p.m. Trips depart from the Brookhaven Center.

Brooklyn Botanic Garden, Saturday, May 3. Depart BNL at 9 a.m., depart Garden at 4:30 p.m. \$12 for adult or child. Look ahead to what you will see at www.bbg.org/exp/cherries/.

Captain Bob's Fishing Charter, Saturday, May 17. \$60 per person. Advance registration and payment is required at the BERA Store. No bus transportation is provided for this trip — be at the Mattituck dock by 7:45 a.m. Return at 3 p.m. See also www.captbobfishing fleet.com/boats1.cfm.

Annual Office Supply Swap, 4/22 & 23 Clean House, Minimize Waste, & Help Recycle!

As part of the Lab's Earth Week celebrations taking place the week of April 21, the annual Office Supply Swap will be held on Tuesday and Wednesday, April 22 and 23, 11:30 a.m.-1:30 p.m. in Berkner Hall lobby.

This is an opportunity to spring clean your offices, supply closets, and conference rooms of items no longer used, but still in good condition. Root them out and bring them to Berkner on April 22 and 23 to be "recycled." Even if you have nothing to bring, you should stop by and take away any item you want to use in your office — free! All kinds of things may donated . . . paper, notebooks, pads, pens, pencils, folders, binders, small office equipment such as calculators, staplers, 3-hole punches, computer-related accessories, etc., to be "recycled" for use within the Laboratory.

Bar-coded items may not be swapped.

Please spread the word! To learn more, contact Francine Donnelly, Ext. 3381.

Miscellaneous

CAR SEATS - Infant, \$25, toddler, \$50. pic. avail., girl chothes, 0-12 mos. 2T-4T, name brands, mb@bnl.gov. Mary, Ext. 3670.

CERVICAL NECK SUPPORT - \$10; Lavalamp,\$15; Beanie Babies, .25/ea, EuroPro Port. Shark Steam Clner, \$10. Ext. 7647. CRIB BEDDING -, pink/white hardly used, pic. avail., matching lamp, \$75/all, 2 girl

trikes, more, mb@bnl.gov. Mary, Ext. 3670. PIANO - old, white, fr. prestig. Waters Piano Co., NY, clean, newly repaired/parts replaced, excel. cond., \$500/neg. 342-3965. REFRIDGERATED WATER DISPENSER Uses 5 gall bottles-hot/cold faucets-38"x13" -remvbl drip tray. \$50. Ext. 7779.

TICKET - 2, Emerson String Quartet at Stony Brook, April 17, \$30/ea. 744-6794. WREATHS - 2, extra lg., 1/blue and mauve hydrandeas, 1/red and cream, \$30/ea.

Yard & Garage Sales

MT. SINAI - Sun. 4/13, 10 am-3pm. Temple Beth Emeth, 52 Mt. Sinai Av. Clothes, \$5/ bag, electncs, applis, more. 744-8632.

pic. avail., mb@bnl.gov Mary, Ext. 3670.

RIDGE - Moving Sale, all must go, glass curio cabinet; glass; 7-drawer double dresser; 6-drawer dresser; desk, computer desk w/bookshelf; night stand. 873-6899/775-8708.

Happenings

SOUND SYMPHONY - concert, April 12, 8 p.m., Wm. Floyd HS, Bizet's Carmen, tickets \$10, age 12 & older. Mona, Ext. 5056.

Free

CHILD BOOSTER CAR SEAT - hardly used, for children older than 5, up to 80 lbs. Kelly, Ext. 4901.

DOORS - wood int., old, solid, med/dark stain, 28", 2-30", 31.5", u pick up, hoffman1@bnl.gov or Toni. Ext. 5257.

Wanted

LIFEGUARD RESCUE TUBE - 375-2680. DOGS TO GROOM - by MOBILE DOG GROOMER. We come to you. Reasonable rates. Angela, 281-6097.

FIREARMS - old/new fair \$\$\$ pd. Joe, Ext. 3783 or 487-1479.

HANDY MAN - insured w/reasonable rates for sr. citizens in East Quogue, plumbing, elect., painting etc. Denise, Ext. 7860.

JAZZ MUSICIANS/STUDENTS - for Monday evening jams. Ext. 7657.
TOTES FOR TOTS PROGRAM - is in need

TOTES FOR TOTS PROGRAM - is in need of new back packs and comfort toys for children of all ages. Brookhaven Town Interface. Christine, Ext. 5090.

Lost & Found

GOLD HOOP EARRING - found week of 3/24 @ bldg. 400. Ext. 5090.

For Rent

BROOKHAVEN HAMLET - rm. in lovely, quiet area, 10 mi. to Lab, pvt. ent., deck, avail. now, incl. util. \$875/mo. 776-9091.

CENTER MORICHES - Small sep cute 1.5 bd rm cottage. Grt area, close to Lab&all. Near water.+util. Full bath, storage. \$1,000/mo./neg. George, 878-1178.

CENTER MORICHES - Waterfront, 2 BR house, 2 car gar., 85 ft. bulkhead, w/d, d/w, gas fp, 1/2 acre, no pets, credit check, utilities included, \$1,800/mo. 487-4201.

FARMINGVILLE - Large bdrm in house, full kit., I/r, d/r, share bath w/1, cable, wifi, phone, elec incl. \$575/mo. Ben, Ext. 5879.
FARMINGVILLE - bdrm. in Ig house, full kit., I/r, d/r, share bath w/2, cable, wifi, phone,

KINGS PARK - spacious studio, priv. entr., walk to shopping, train and bus, lower level, no smoking/pets, rent includes all! \$850/mo. 631-793-0181, Ext. 4144.

elec. incl. \$495/mo. Benji, 513-8275.

MEDFORD - 1 bdrm, lg. bath, huge l/r, f/p, eik, new appli., heat, water, cable tv/int., incl., pvt. ent., part furn., avail., on deadend. \$1,000/mo./neg. 730-8866.

ROCKY POINT - share 2 bdrm apt. w/phD student, kit., l/r and 1 bath, \$550/mo. incl. heat, mcbennet@umich.edu \$550/mo. Marcus, Ext. 4962.

ROCKY POINT - 1 bdrm. cottage, wood stove near beach, no pets, 1 mo. sec., plus util. \$1,000/mo. 744-5282.

SHOREHAM - Brand new, 1 bdrm, garden apt, 1st flr, indep. entr/dr'way, full bath, kit, l/r, cac, no smkg/pets, few mi. to BNL, 1 mo. sec., all incl. \$1,300/mo. 821-8683.

ST. MARTEEN - T/share-Flamingo Beach Resort 6/21-6/28.Studio slps 4, full kit., top flr. unit overlks beach/Carribean sea priv. balc. pool, dining, casino. \$700/wk. 475-0373.

STOWE, VT - 2 bdrm, 2 bath, avail. April 19-26, Trapp Family Lodge. \$700/wk. 909-1498.

TREASURE ISLAND, FL - Timeshare, on the beach, for wk. 25, sleeps 2-4, '08 maint. fees pd. \$2,750/wk. 804-725-3098.

YAPHANK - Whispering Pines off W. Floyd,

YAPHANK - Whispering Pines off W. Floyd, 1 mi. to Lab, 2 or 3 bdrm condo, all renov., 1 & 1/2 bath, clubhouse, pool, pets okay, \$1,600/mo, commons chg incl. 988-8233.

For Sale

BELLPORT - 4-BR. ranch, 2 bth, I/r w/dble fp to den, d/r, eik, oak firs, screened deck, laundry rm, fin. bsmt: w/4th BR, bar, full bth, 2 rms; gar., 2 sheds, sprinklers, \$398,000; 949-7797.

MILLER PLACE - well maint Old Field

Ranch 3bdrms, full bath, Ir w/brick fp, 1.5 car det gar w/elec, .34/acre level propty. \$320,000/neg. Mike, 744-5254. RIDGE - beautiful 4 bdrm, 2½ bath Colonial, Builder's acre. fin. bsmt w/ose. //r w/fp, fdr.

den, agp, igs, pvc fence w/side gate, move right in! \$489,999/neg. 252-3356.

SHOREHAM - Middlecross Estates, 4 bdrm., 2.5 bath Col., frml l/r & d/r, den w/fp,

bdm., 2.5 bath Col., frml l/r & d/r, den w/fp, lg. kit. w/dinette, 2 car gar., fin. bsmt., igs, SWRSD, more. \$559,000/neg. 821-3320.

WADING RIVER - Ig. 3 bdrm, 2 bath, .5 acre, Ig. mstr. bdrm w/cath ceilg, 1.5 car gar., unfin. bsmt. SWRSD, nr. .5 mi to Sound, \$499,000/neg. Ext. 4391 or 379-2282.

In Appreciation

On behalf of the Pomaro Family, we thank all those who have expressed their condolences during the loss of my Mom, Emanuela Pomaro. Flowers and cards sent have touched our hearts deeply. Thank you all very much for your support during this time of sorrow. — Frank Pomaro

The family of Edward Pluta thank friends for their thoughtfulness and prayers during his time of illness and in recognition of his passing on 30 May, 2007. His memory will span the ages and be cherished by all who were touched by his presence.

— The Pluta Family

For a printed list of employee services, contact 344-2346 or lseubert@bnl.gov.



to Job ID#14425.