

## CALENDAR

### OF LABORATORY EVENTS

- The BERA Sales Office is located in Berkner Hall and 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.
- Additional information for Hospitality Committee events may be found at the Lollipop House and the laundry in the apartment area.
- The Recreation Building (Rec. Hall) is located in the apartment area.
- Contact names are provided for most events for more information.
- Calendar 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](http://www.bnl.gov/esol/schedule.html) for schedule. Jen Lynch, Ext. 4894.

#### Mondays: CIGNA Rep On Site

10 a.m.-3 p.m. CIGNA's Janice Petgrave is in Bldg. 185, to assist CIGNA medical plan participants with claims issues. Call Linda Rundlett, Ext. 5126, for 30-min. appointment.

#### Mondays: BNL Social & Cultural Club

Noon-1 p.m., Brookhaven Center, South Room, free beginners dance lessons. Rudy Alforque, Ext. 4733, [alforque@bnl.gov](mailto:alforque@bnl.gov).

#### Mondays & Thursdays: Kickboxing

\$5 per class. Noon-1 p.m. in the gym. Registration is required. Christine Carter, Ext. 5090.

#### Mon., Wed., & Fri.: Tai Chi

Noon-1 p.m., Brookhaven Center North Rm. Adam Rusek, Ext. 5830, [rusek@bnl.gov](mailto:rusek@bnl.gov).

#### Tues., Thurs. & Fri: Ving Tsun Kung Fu

Noon-1 p.m., Brookhaven Center, North Room. Taught by Master William Moy. Tuition. Scott Bradley, Ext. 5745 or [bradley@bnl.gov](mailto:bradley@bnl.gov).

#### Tue., Thu. & Fri: Upton Nursery School

On Summer Recess. Call Ext. 5090 for information on Sept. enrollment.

#### Tuesdays: Welcome Coffee

10 a.m.-noon, apartment area gazebo. First Tuesday of every month is special for Lab newcomers and leaving guests. Lisa Yang, 979-3937.

#### Tuesdays: BNL Music Club

Noon, North Room, Brookhaven Center. Come hear live music. Joe Vignola, Ext. 3846.

#### Tuesdays: Jiu Jitsu Club

6:30-7:30 p.m. in the gym. All levels, ages 6 and above. \$10 per class. Tom, Ext. 4556.

#### Tuesdays: Toastmasters

1st and 3rd Tuesday of each month, 5:30 p.m., Bldg. 463, room 160. Guests, visitors always welcome. [www.bnl.gov/bera/activities/toastmstrs/](http://www.bnl.gov/bera/activities/toastmstrs/).

#### Tues., Wed. & Thurs: Rec Hall Activities

5:30-9:30 p.m. General activities, TV, ping pong, chess, games, socializing. Christine Carter, Ext. 5090.

#### Wednesdays: On-Site Play Group

10 a.m.-noon, apartment area gazebo. An infant/toddler drop-in event. Parents meet while children play. Fang Dong, 871-5362.

#### Wednesdays: Market Day

11:30 a.m.-1:30 p.m., Berkner Hall parking lot. Fresh vegetables, plants, arts & crafts, and more. Joanne Rula, Ext. 8481.

#### Wednesdays: Weight Watchers

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

#### Wednesdays: Yoga

Noon-1 p.m., B'haven Center. Free. Ila Campbell, Ext. 2206, [ila@bnl.gov](mailto:ila@bnl.gov).

#### Thursdays: Reiki Healing Class

Noon-1 p.m., Bldg. 211 Conference Rm. Nicole Bernholz, Ext. 2027.

#### Fridays: Family Swim Night

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

#### Fridays: BNL Social & Cultural Club

Noon-1 p.m., Brookhaven Center, South Room, free beginners dance lessons. Rudy Alforque, Ext. 4733, [alforque@bnl.gov](mailto:alforque@bnl.gov).

## In Memoriam, Julian David Baumert

Julian David Baumert, a Brookhaven physicist working on the cutting edge of research on liquid surfaces and thin organic films, died of melanoma on June 24, 2006. He was 31.

Described as dedicated, bright and caring, Baumert was a relatively new research associate in the Soft-Matter and X-ray groups in the Condensed Matter Physics and Materials Science Department.

"Julian was an exceptionally talented, hard-working young researcher, who loved his work," said colleague John Hill. "He understood his research at a deep level and it was always a pleasure to ask him what he was working on and hear his clear, precise, and enthusiastic explanations of his latest results and what they meant. It is such a tragedy to lose him so early in his life and in his career. We will all miss him immensely."

A native of Molfsee, Germany, Baumert was educated at the Institute of Experimental and Applied Physics (IEAP) at the University of Kiel and the Institute Laue-Langevin (ILL) in Grenoble, France, where he studied a compound known as methane hydrate, which is found naturally on the sea floor and is a major worldwide energy resource. His thesis focused on the structure and dynamics of this compound using neutron and x-ray scattering techniques and numerical simulations. Baumert obtained his Ph.D. from the University of Kiel in February 2004, receiving the prestigious "Familie-Schindler-Foerderungs-Preis" of the Faculty of Science in Kiel.

"He was a very cheerful person," said colleague Oleg Gang. "We deal with so many difficult and complicated things here, but he created this atmosphere around him where everything was positive."

Baumert came to BNL in July 2004 and conducted his research at beamline X22 of the National Synchrotron Light Source, where he was part of a team of scientists learning to make smaller and more powerful molecular-scale circuit components that could someday

make electronic devices more efficient. He was the principal investigator on a paper published in February 2006 in the *Proceedings of the National Academy of Sciences* that described the first measurements of the structure of a molecular junction at buried interfaces. He was working to elucidate how the structural and electrical properties of these molecular junctions depend on the molecular coverage.

"He had such great promise to be an extremely successful scientist," said Ben Ocko, who hired Baumert into his research group. "He was easy-going and friendly, and exhibited a high level of creativity, great skills as an experimentalist and the ability to explain complex phenomena in simple and elegant terms. He had such a bright future ahead of him."

In the past year, Baumert was diagnosed as having skin cancer and underwent extensive treatment. That didn't stop him from continuing his research at Brookhaven. "Even when his health deteriorated, he continued to come to the Lab daily to work on experiments and to discuss science with his colleagues," Ocko said. After an operation last summer, Baumert continued his scientific research including travel to the Advanced Photon Source last December to investigate how "surface freezing" modifies the capillary wave spectrum at the surface of long-chain alkane molecules using a technique called x-ray photon correlation spectroscopy.

"It was really amazing how he dealt with it," said Baumert's office mate and colleague Masa Fukuto. "He must have known the odds were against him, but he was courageous to the very last minute. He never lost hope."

A resident of Sound Beach, Julian Baumert is survived by his wife, Maren; his parents, Ingrid and Jürgen; and his sisters, Anna and Sophia. Donations in his memory may be made to the Melanoma Research Foundation, 24 Old Georgetown Rd., Princeton, NJ 08540.

— Kendra Snyder

## New X-Ray Delivery Method Could Improve Radiation Therapy

(cont'd)

and brain-imaging scientist who heads BNL's 9.4 tesla MicroMRI Facility; neurosurgeon Pantaleo Romanelli, BNL and SBU guest scientist from NEUROMED, Pozzilli, Italy; Ruiliang Wang of Medical, a magnetic resonance (MR) imaging engineer at BNL's 4-tesla MRI Facility; Jeremy Welwart of Medical, SBU student intern; Tetsuya Yuasa, imaging specialist fellow to BNL from the University of Yamagata, Japan; and physicist Zhong Zhong, NSLS, spokesperson and scientist-in-charge of the X17 superconducting wiggler beamline whose B1 branch has been the host beamline for MRT.

"We first exposed the spinal cord and the brain of rats to high doses of radiation using microbeams up to 0.68 mm thick to demonstrate that a beam thickness within the capability of specialized x-ray tubes has little effect on healthy tissues. In the second step, we interlaced two sets of parallel arrays of such thicker microbeams at a 90-degree angle so that the beams of one array would fill the spaces of the opposite array. This geometry allowed us to produce the equivalent of a solid beam in the target only, increasing the killing potential there, while

retaining the technique's hallmark feature of sparing healthy tissue outside that target. The effectiveness of the method at different doses to produce targeted rat brain tissue damage without affecting the surrounding tissue was monitored by MR imaging," says Dilmanian.

Said collaborator Eliot Rosen, a radiation oncologist at Lombardi Comprehensive Cancer Center, Georgetown University, "This form of microbeam radiation therapy could improve the treatment of many forms of cancer now treated with radiation, because it can deliver a more lethal

dose to the tumor while minimizing damage to surrounding healthy tissue. It may also extend the use of radiation to cases where it is now used only judiciously, such as brain cancer in patients under three years of age, because of the high sensitivity of young brain tissue to radiation."

And, according to collaborators Anshel and Romanelli, the technique may also have applications in treating a wide range of benign and malignant brain tumors and other functional brain disorders such as epilepsy and Parkinson's disease.

— Karen McNulty Walsh

## Delay in Posting June 30 TIAA-CREF Contributions

The June 30, 2006, contributions to the Brookhaven 401(a) Retirement Plan and the Brookhaven 401(k) Plan were not posted by TIAA-CREF on June 30 due to a TIAA-CREF systems issue. TIAA-CREF expects the remittance will be posted shortly. TIAA-CREF notified BNL of the delay and has advised the Laboratory that the contributions will be given an effective date of June 30, which is the day that TIAA-CREF received the funds.

Since the contributions were not posted in time for the quarter close, they will not appear on the June 30th Quarterly Review statement, but the corrected amounts will be reported on employees' statements for the period ending September 30, 2006. If you would like to review your total account value or verify contributions in the interim, you can log in to your account at [www.tiaa-cref.org](http://www.tiaa-cref.org) with your User ID and password.

TIAA-CREF apologizes for any inconvenience this may have caused and assures BNL employees that they will not lose any investment activities associated with these adjustments. If you have any questions, please call TIAA-CREF at 800-842-2776, Monday through Friday, from 8 a.m. to 10 p.m., and Saturday, from 9 a.m. to 6 p.m.

## Estate Planning, 8/16

Join speaker Nancy Burner for the Elder Law Lecture "Estate Planning With Retirement Funds: What You Need to Know" on Wednesday, August 16, from noon to 1 p.m. in Berkner Hall, Room B.

Check your mailbox for registration forms. For more information, contact Michael Thorn, Ext. 8612 or [mthorn@bnl.gov](mailto:mthorn@bnl.gov).

## Join in the Talent Show!

### Summer students, BNL staff will light up the stage, 7/18

Summer students and members of BNL staff will be performing in a Talent Show hosted by the Office of Educational Programs and produced by Tabatha Wyche. The show, to be held at 5:30 p.m. on Tuesday, July 18, will consist of a variety of acts such as violin, piano solo, gospel, step dance, belly dance, comedy, and Hip Hop. All kinds of talents are very much needed to help make the show a success: volunteers will be warmly welcomed either to participate as performers or behind-the-scenes aides. To join in the show, contact Wyche at [twyche@bnl.gov](mailto:twyche@bnl.gov) or Ext. 4000.

## Attention Parents of 3- and 4-Year Olds: On-Site Nursery School Enrollment Under Way

Enroll your child now in the Upton Nursery School, a not-for-profit, cooperative pre-school that meets at the Recreation Building in the apartment area and provides a warm, caring, and stimulating environment for 3- and 4-year-old children. The school offers certified and caring teachers, social and language development, academic readiness for kindergarten, and a multinational student body. Classes are forming now for September.

To register your child or for more information, contact Katalin Petreczky, 821-4131, [julika@optonline.net](mailto:julika@optonline.net), or visit the school's website at [www.bnl.gov/nurseryschool](http://www.bnl.gov/nurseryschool).

## Friday Fun at the Science Learning Center

The BNL community and their families are invited to the Science Learning Center (SLC), Bldg. 935, Railroad Ave. and E. Fifth St., on four Fridays, July 14 & 28 and August 11 & 25, from noon to 1:30 p.m. to explore the many interactive exhibits and to visit the 3D visualization theater. See what makes the SLC such a popular visit for more than 25,000 elementary school children each year. The SLC also offers a limited selection of science-related toys for sale. An adult must accompany children under 14 years old.

## One-On-One TIAA-CREF Retirement Counseling

A TIAA-CREF consultant will visit BNL on Wednesday, July 19; Friday, July 28; and Monday, July 31; to answer employees' questions about financial matters. The consultant will help BNLers understand the importance of protecting assets against inflation, find the right allocation mix, learn about TIAA-CREF retirement income flexibility, and compare lifetime income vs. cash withdrawal options. For an appointment, call Arlene Lyons, (866) 842-2053, Ext. 4629. (Not the on-site Ext. 2053.)

## CIGNA Representative On Site, Mondays

Each Monday, Janice Petgrave of CIGNA Healthcare will be available in Human Resources, Bldg. 185, to assist CIGNA medical plan participants with claims issues, 10 a.m.-3 p.m. Be sure to bring all pertinent documentation. For a 30-minute appointment, call Linda Rundlett, Ext. 5126.