Reinhold Mann Named New ALD For Environment & Life Sciences

Reinhold Mann, former Senior Vice President for Research and Development at Brookhaven National Laboratory (BNL), has been named Associate Laboratory Director for Environment & Life Sciences at BNL, effective July 1.

With 210 employees and an annual budget of $41 million, BNL’s Environment & Life Sciences Directorate encompasses the Medical Department, Biology and Technology, and Environmental Sciences Department, with research focusing on bioscience and technology, climate science, and computational science. The research in these areas ranges from doing basic studies to understand DNA mechanisms and climate change, to developing new materials and using tracer technology to detect air pollutants for environmental or national security purposes.

Researchers in the directorate have access to world-class facilities at the Lab, including the Center for Functional Nanomaterials, the National Synchrotron Light Source, and the National High Magnetic Field Laboratory. They have made significant contributions in each of three broad areas of science: distinguished contributions to basic sciences, especially in understanding the physical and computational science, and advanced engineering, until he became Director of ORNL’s Life Sciences and Technology Program (LSTP) in 1997.

In 2001, Mann joined DOE’s Pacific Northwest National Laboratory (PNNL), where he was appointed as Laboratory Director for Science and Technology, and, a year later, became Chief Research Officer and Associate Laboratory Director. In 2004, Mann moved back to ORNL as Associate Laboratory Director, Biological and Environmental Sciences, overseeing approximately 450 staff members and $140 million in research funds.

In 2008, Mann became Senior Vice President for Research and Development at Battelle Science and Technology in Malaysia in Kuala Lumpur, Malaysia, where he was a member of a start-up team that developed the concept and plans for a national renewable energy laboratory as a joint venture between Battelle Memorial Institute and Petronas, the Malaysian-owned international oil and gas company. Also from 2007 to 2008, Mann served as Chair of the Board of Directors for DOE’s Bioenergy Science Center.

Mann’s research has been focused on the intersection of the physical and computational sciences with life and environmental sciences. He has led... See ALD Mann on pg. 2

BNL’s BLIP and the South Dakota Deep Underground Science Laboratory

What’s the Connection?

The world’s highest-intensity neutrino beam will start in Illinois and head straight through the earth all the way to South Dakota. What does that have to do with the Brookhaven Linac Isotope Producer (BLIP)?

Here’s the story: The neutrino beam will be produced at Fermi National Accelerator Laboratory (Fermilab) and sent 1,300 kilometers to be measured by detectors for the Long Baseline Neutrino Experiment (LBNE) at the proposed Deep Underground Science and Engineering Laboratory in the former Homestake gold mine in South Dakota, a project funded by the DOE Office of Science. From these measurements, scientists hope to learn more about the three known types of neutrinos and how they oscillate, or change from one type to the other.

BNL scientists have had a central role in the conception, planning, and execution of the LBNE project. The initial discussions for the experiment originated in a BNL-based working group that culminated with ideas for using the discontinued Homestake gold mine as a site for a very large array of detectors coupled to an intense neutrino beam from Fermilab.

Target Experiments at BLIP

To create the extraordinarily high-intensity beam of neutrinos, scientists propose bombarding a durable target with bunches of highly energetic protons. For the past several months, hundreds of scientists at BNL have been conducting experiments on potential materials for producing neutrinos.

BLIP, primarily used to produce medical isotopes, can recreate the anticipated conditions and consequently the effects that can be expected on the target. By assessing an array of target materials at BLIP, scientists can see which of the materials produce the best neutrino beams and establish their useful operational life. This will help ensure that no unexpected failure of the target will interrupt beam production.

The BLIP facility and the BNL Linac proton beam parameters were the natural choice for this experiment because at their beam energies (100 to 200 million-electron-volts or MeV), the effects on materials are accelerated, compared to the much higher 120 billion-electron-volt (GeV) energy at the LBNE experiment. These "accelerated" effects will enable lifetime assessment of the materials under study.

Teams from BNL and Fermilab have been working together to design and execute the BLIP experiment using the 180-MeV Linac beam, which started on March 18 and ran until the end of May. At BNL, Nick Simos is coordinating the BLIP experiment. Harold Kirk, a co-principal investigator in the project, Hans Ludewig, and Nicholas Souchals, a postdoctoral fellow on the experiment, have been providing scientific and technical expertise. The BLIP staff, headed by Leonard Mausner, provided technical and operational expertise, especially in guiding the design of the experiment and, in particular, the integration of the LBNE target with the BLIP medical isotope producing operation. The Fermilab team is headed by Vaia Papadimitriou (BNL Neutrino Beam Manager) and coordinated by Patrick Hurl. Scientists and engineers include Jim Hylen, Bob Zwaska, Nikolai Moskov and Joel Mink. See Neutrinos on pg. 2

15 BNLers Recognized With Lab’s Highest Accolades

The annual Employee Recognition Awards recognize one type of heroes, held in Berker Hall on Friday, June 18, recognized outstanding achievement in the Laboratory. Awards of $10,000, given for distinguished contributions in research and development of work at the Lab, are the highest accolades given by Brookhaven. This year, Director Sam Aronson presented the Brookhaven Award, given to key contributors in support functions, to Andrew Ackerman, National Synchrotron Light Source (NSLS) Director, and to several other members of the NSLS-II team.

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The winners are pictured above. More details of their contributions will be featured in the Bulletin over the coming weeks.

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Sam Aronson (front left) and Mike Bebon (back right) with Brookhaven Award winners (back from left) Kathleen McIntyre, Thomas Schlager, (front from left) Susan Perino, Andrew Ackerman, and Avril Woodhead.
Students Summer at Brookhaven Lab
More Than 200 Interns Arrive for BNL Summer Programs

Schools out for summer — but the fun doesn’t stop for the students from universities across the country as they begin a 10-week summer research program at BNL.

“You will find your experience at Brookhaven to be one that continues to bring value throughout your career,” said Ken White, manager of the Lab's Office of Educational Programs (OEP), as he welcomed the incoming undergraduate, graduate, and faculty participants at the opening ceremony in Berkner Hall on June 7.

The students were also welcomed by Lab Director Sam Aronsen and DOE Brookhaven Site Office Manager Mike Hol- land at the opening ceremony. Both noted the important contribution the new generation of scientists will make in tackling national challenges such as energy and homeland security.

Once again, this will be one of OEP’s largest groups of summer interns. More than 1,500 applied for the 213 available internships. The interns who were selected will participate in six different DOE programs:

- BERAC (DOE-ACs), Faculty and Student Teams (FaST), Graduate Research Internship Program (GRIP), Pre-Service Teacher (PST), and Science Undergraduate Laboratory Institute in order to work in six different DOE programs, to Science Undergraduate Laboratory Institute in order to work in six different DOE programs.

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Between now and August 13, participants will work with their BNL mentors in nearly every area of the Lab’s scientific community, including at major facilities such as the Center for Functional Nanomaterials, the National Synchrotron Light Source, and the Relativistic Heavy Ion Collider, and in departments such as such as Chemistry, Physics, and Environmental Services, Instrumentation, and Waste Management.

“While most of our summer students do not have to work, those who do work in a lab, they are asked to take part in a job-rotation program that allows them to experience our facilities such as the Center for Functional Nanomaterials, the National Synchrotron Light Source, and the Relativistic Heavy Ion Collider.”

For more information, please contact BNL’s Joseph Falco, at Ext. 3666, or DOE’s New York Resource Center (716) 832-2650, or email EEOICP at info@bnl.gov.

Federal Energy Workers Compensation Program Ads

Employees may have seen the advertisement at right, sponsored by the Department of Energy's National Medical Screening Program, in local newspapers. The ad offers free medical screenings to former Brook- haven employees and contractors, and is linked to a U.S. Department of Labor program under which Brookhaven Lab, subcontractors and contractors who worked at the Lab 250 days or more between 1947 and 1979 are now available for compensation for specific types of radiation-related diseases.

The program is open to cancer victims employed at BNL before 1980 who have been diagnosed in certain pre-1980 radiation exposure records as determined by a National Institute for Occupational Safety and Health review.

For more information, contact the Department of Energy, Building Trades National Medical Screening Program, at 1-800-941-3943, or email info@bnl.gov.

Small Business Workshop At Stony Brook, 7/14

The Stony Brook Small Business Development Center announces the next in its free workshop series, “The Direction of Renewable Energy.” BNL is a sponsor of this series. The next workshop, “Small Business Innovative Research & New York State Energy Research & Development Authority Grants,” will be held on Wednesday, July 14, 8:45 a.m. - noon, at the Small Business Development Center, Stony Brook, Room 17. For advance registration and directions, call (631) 632-9837.
Meet Joe Gettler... See His Photo Exhibit

Often in the Bulletin, you can read an article written by Joe Gettler, who works in the Lab’s Media and Communications Office. This article, however, is not written about Joe Gettler and his professional photography show, “The End East: Night and Day’s Light,” which opens this weekend.

Throughout July, a free exhibit of Gettler’s photographs will be on display at Hampton Bays Public Library. Many of the works to be shown are long exposures made at night on Long Island’s East End, including Shinnecock Inlet, Montauk Lighthouse, the windmill at Watermill, and the Montauk Lighthouse.

“This End East exhibition features three different photography styles,” Gettler explained. “You see everything that happened during the exposure, everything touched by light, or even some of the seeing all the pages of a flip book at the same time.”

Any BNLLers can make images by controlling light that hits an electronic sensor or a piece of film. On a sunny day, less than a thousandth of a second light can make for a fine picture. When much less light is available, making a good exposure can take 30 seconds or longer. Gettler’s photographs are made mostly in the 30-seconds to one minute time frame, leaving enough time for the camera to record sets of waves rolling in at the ocean, or entire trains passing by, in the same exposure.

Gettler’s interest in photography sparked while he was taking a course in college, and he picked up experience volunteering as a photographer for Habitat for Humanity. He began regularly photographing Long Island’s East End, both night and day, in 2008. His photos have been published in Newsday, the Philadelphia Inquirer, and the Press of Manasquan & the Moriches.

“End East Night and Day’s Light” will be on display in the first-floor gallery at the BNL Media and Communications Office, 2-4 p.m. Wednesdays and 7-9 p.m. Thursdays, July 1-22.

— LIZ SEUBERT

BHERA Summer Camp Update

BHERA Summer Camp begins next week on July 7. There will be no access to the men’s locker room and the gym from 3–5 p.m. each day while camp is in session until August 27. As always, please drive safely – particularly near the Hall, gym, and pool – while the children and summer students are here.

The Bulletin July 2, 2010
Exciting science shows, tours of world-class science facilities, and entertaining activities for children and adults are all part of the free and learning opportunities offered to employees and the public by BNL during Summer Sundays, July 11 to August 8.

No reservations are needed to take part in Summer Sundays at the Lab, but all ages and over must bring a photo ID. Visitors may arrive any time between 10 a.m. and 3 p.m. A different tour and exciting new science show will be featured each week.

Visit BNL on Summer Sundays, July 11 - August 8

On Sunday, July 11, all are invited to visit the Center for Functional Nanomaterials, where Brookhaven researchers probe structures as small as a billionth of a meter. Follow scientists’ path of discovery to innovative energy technologies. Be mesmerized by “The Magic of Chemistry.” This tour is appropriate for adults and children age 10 and over.

Watch the Bulletin for more details of the following featured visits at BNL:

July 11 — Fueling the Future & Exploring the Ultra Small

July 15 — Comics and Graphic Novels: A Superhero Science Tour

July 18 — Bright Light, Dazzling Discoveries at the National Synchrotron Light Source

July 22 — Family Fun Day at the Science Learning Center

July 25 — Family Fun Day at the Science Learning Center

Visit BNL on Summer Sundays, July 11 - August 8

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For Sale

KILN - Prori – 2 rooms, new appartment, newly painted, quiet and safe th rd flr, ny full basement, all elec. see vac: $10,000 neg.

KILN - Prori – 2 rooms, newly painted, quiet and safe th rd flr, all elec. see vac. $10,000 neg.

KILN - Prori – 2 rooms, newly painted, quiet and safe th rd flr, all elec. see vac. $10,000 neg.

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In Appreciation

To all my BNL Friends...it has been wonderful working with you these past 30 years. Stay safe, and keep in touch. May God bless you with the luckiest guy in the world. Best wishes in all your future endeavors. — Gerry Van Derlakte

On-Site Services

Cafeteria - Fresh-made salads daily. Budget Rent-a-Car - Desk in 240 lobby. Rent for a half-day or longer.

Published weekly by the media & Communications Office for the employees, family users, and retinues of Brookhaven National Laboratory.

2010 Summer Sundays

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If you want to know more, visit our website at www.bnl.gov/bnlweb/pubaf/bulletin and click on “Summer Sundays.”