

SCIENCE

Catching Alzheimer's in the act

Like a thief hidden in the brain, the neurodegenerative disease called Alzheimer's steals away memory as it gradually destroys brain cells, changing personalities and disrupting lives in the process.

Because the risk of Alzheimer's disease increases as people grow older, it is typically associated with old age — but the disease is not a normal part of aging. The blurry distinction between Alzheimer's and typical symptoms of aging is one factor that contributes to late diagnoses of the disease, says ORNL's Nancy Munro.

"A lot of people get into their 60s and they start experiences changes in their memory — like not remembering somebody's name," Munro said. "If they go to their doctor and ask whether it's normal aging or Alzheimer's, the doctors have no easy way to answer that question. Right now, the doctors say it's probably normal and that these senior moments happen. But that might not be the case."

Munro is collaborating with fellow scientists at ORNL and the universities of

Kentucky and Tennessee on a method that could help primary care doctors detect Alzheimer's in patients during the early stages of the disease. An early diagnosis is considered critical because

medications currently available are most effective if they are used in the very early stages of Alzheimer's. Medications may be even more helpful if they are used when a patient has mild cognitive impairment, a condition that frequently progresses into Alzheimer's dementia.

"In a general or family practice environment, people aren't being screened early enough," Munro said. "Patients are usually only called to the attention of the family doctor when they're so far along into dementia that the memory medications aren't helpful anymore."

The team conducted a pilot project to identify preclinical Alzheimer's using a technique called electroencephalography, a relatively simple test that measures electrical activity from the brain's neurons with electrodes attached to the scalp.

Researchers at the University of Kentucky Medi-

"Regular exercise helps you

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cal Center collected EEG data from three groups: patients with no dementia symptoms, patients diagnosed with mild cognitive impairment and patients diagnosed with early Alzheimer's. Advanced data analysis performed by an ORNL and University of Tennessee collaboration revealed that the EEG tests succeeded in terms of sensitivity, accuracy and specificity in identifying the conditions of the different groups, Munro said.

"Although the sample sizes were relatively small, the results are highly encouraging,"

Munro said.

The team hopes to expand upon its initial study by increasing the sample size of the groups to validate and improve the screening abilities of EEG analysis. Ultimately,

the goal is to develop a simple, efficient device that could provide real-time analysis in a general practice or a community hospital setting.

Munro emphasizes that for now, prevention, particularly in the form of exercise, is deemed to be the best tool for staving off the onset of Alzheimer's.

"Regular exercise helps you repair and replenish the neurons that are important for an intact memory," Munro said. "The risk factors for cardiovascular disease are similar for Alzheimer's, so controlling diet, weight and cholesterol levels is good for both your heart and your brain."—Morgan McCorkle *



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For Retiree Stan David, 2011 includes seeing the Taj Mahal, visiting family, and developing friction-stir extrusion



Stan and Dolly David stand outside the Taj Mahal during a recent visit to India.

"I spend about 20 percent of my time out here, and my wife, Dolly, is very supportive of my activities."

Reporter is published for retirees of ORNL, which is managed by UT-Battelle for the U.S. Department of Energy.

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Cindy Johnson Design and Layout Stan David may have retired from ORNL two years ago, but he is still a fixture in the life of the Laboratory. He also mixes in a number of retirement activities.

A UT-Battelle Corporate Fellow and former leader of the Materials Joining Group, Stan has been involved in the development of friction-stir extrusion metal processing. He has collaborated with Zhili Feng, the current Materials Joining Group leader, and group member Alan Frederick.

Friction stir extrusion has the potential to become a revolutionary material synthesis technology to produce highly engineered materials, including nanoengineered materials, with great process-energy efficiency.

The process eliminates the melting and solidification common to conventional metal processing. Materials can be recycled through spinning metal against metal to produce friction, converting mechanical energy to thermal energy. For example, this technique has been used to produce a solid wire of a magnesium-aluminum alloy from machined chips.

"You get the product form that you want just by using the frictional heat," Stan said recently in a feature story that can be found on the ORNL web site at www.ornl.gov/news. With his knowledge and experience he also helps the materials joining group develop new programs.

"I spend about 20 percent of my time out here at the Lab, and my wife, Dolly, is very supportive of my activities," Stan said while sitting in his office in Building 4508.

Employed 31 years at ORNL, Stan continues as the editor in chief of *Science and Technology of Welding*, an international journal published in the United Kingdom. The journal has grown rapidly and is now recognized as the leading publication in the area of joining and is ranked 10th in the list of metallurgy journals.

"With two co-editors, I helped start the journal back in 1995, and we recently celebrated publication of the thousandth article in the journal," Stan said proudly.

Stan retains membership as a fellow of four professional societies: the Materials Society, ASM International, the American Association for the Advancement of Science and the American Welding Society.

Currently he is helping to organize ASM's ninth International Conference on Trends in Welding Research scheduled for June 2012 in Chicago.

"I've organized the first and subsequent seven conferences, but this will probably be my last one. I would like to turn this task over to younger members," Stan said.

Stan does not let his materials research or society work interfere with his having fun in retirement. He enjoys traveling and keeping up with national and international news and the stock market.

He and Dolly enjoy traveling to New Jersey and Pennsylvania to visit their children. Son Kevin is an oncologist at New Jersey Cancer Institute, while daughter Cheryl is a corporate lawyer in Pittsburgh. The Davids are planning to travel to Pittsburgh in late August to attend Steelers pre-season and Pirates baseball games.

The Davids have traveled to India three times in the past year to visit family and friends, visiting the Taj Mahal on one such visit. Later this year, they plan a 16-day cruise along the Danube and Rhine rivers from Hungary to Amsterdam.

Stan's only regret is that with all his activities not much time is left for daily exercise. However, he gets in a workout a couple of days per week.—*Fred Strohl* *

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UT-Battelle donates \$25,000 to Alvin Weinberg memorial effort

ORNL's managing contractor UT-Battelle donated \$25,000 to an effort to honor the memory of Alvin M. Weinberg, who was recognized as a nuclear pioneer and science visionary and served as ORNL's first director under DOE.

ORNL's current Laboratory Director, Thom Mason, announced the donation at a ceremony dedicating the new Chemical and Materials Sciences Building, a major addition to the Laboratory that Weinberg helped start nearly 70 years ago.

"It is indeed a privilege and honor to join the community in remembering Alvin Weinberg, whose contributions to ORNL and to modern science are immeasurable," Mason said.

Weinberg, who died in 2006, directed ORNL for nearly 20 years, presiding over the Laboratory's transition from a secret wartime project to a major multiprogram research institution. Following World War II he championed the peaceful uses of nuclear power — such as electric power generation and desalination of seawater — and wrote a textbook, *The Physical Theory of Neutron Chain Reactors*, with Nobel Prize winner Eugene Wigner.

Weinberg became a major influence in science policy as advances in nuclear physics and engineering resulted in large, complex, capital-intensive projects and in what he termed the "first nuclear era." As the

originator of the term "Big Science," his influence and reputation spanned the globe.

Weinberg was named ORNI's first official director in 1955 and served in that post

Weinberg was named ORNL's first official director in 1955 and served in that post until 1973. He remained in Oak Ridge the rest of his life.

UT-Battelle, a partnership between Battelle Memorial Institute and the University of Tennessee, began as managing contractor of ORNL in April 2000 and immediately embarked on a program of modernizing the Lab that Weinberg helped start. His legacy is recognized through programs such as the Weinberg Fellowships that attract top early career researchers to ORNL.

The UT-Battelle gift will go toward efforts to memorialize Weinberg through the Alvin Weinberg Memorial Committee. Those efforts include a planned documentary on Weinberg's career, a lecture series, commemorative plaques and the renaming of city of Oak Ridge tennis courts, where he avidly played, in his honor.

Members of the memorial executive committee include the Hon. Howard H. Baker, Gerald Boyd, Homer Fisher, Jack Gibbons, Tom Kilgore, Bill Madia, Thom Mason, Jack O'Hanihan, Andy Page, Ron Townsend and Alvin W. Trivelpiece.

Eight regional organizations have joined the Weinberg family and friends in efforts toward a memorial to Weinberg, including ORNL, Friends of ORNL, the local American Nuclear Society chapter, Oak Ridge Associated Universities, the Tennessee Valley Authority and the three Oak Ridge Rotary Clubs.

For more information on the Weinberg Memorial Fund, contact Steve Stow (865) 966-0268, shstow@aol.com or Tom Row, (865) 482-9096, tomhrow@comcast.net. Information on the Alvin Weinberg Memorial Fund and how to donate is available at http://www.alvinweinbergmemorial.info.—*Bill Cabage*



Would you like to receive *Reporter* sooner by e-mail instead of waiting for snail mail? If so, please send your e-mail address to ornlreporter@ornl.gov. You can always find all the published issues at ornl.gov/reporter.



Tom Row and Steve Stow accept a UT-Battelle donation to the Alvin Weinberg memorial fund from ORNL Director Thom Mason.

Club ORNL events

Get the details and latest news online via https://info.ornl.gov/sites/clubornl. Request an XCAMS account, which will allow you to participate in these events or contact Lara James at 865-576-3753 or jamesla@ornl.gov.

August 27 White Water Rafting

August 27 NASCAR Irwin Tools

Night Race

September 1 Crimes of the Heart -

Oak Ridge Playhouse

September 3 UT vs. Montana -

Football Game

September 10 Chattanooga Day Trip

September 10 UT vs. Cincinnati

Football Game

Brinkman dedicates new ORNL materials research facility



Office of Science Director Bill Brinkman speaks at the Chemical and Materials Science Building dedication as Michelle Buchanan, Johnny Moore and Thom Mason watch from stage right.

William Brinkman, director of the U.S. Department of Energy's Office of Science, recently joined officials from DOE and ORNL to dedicate a new Chemical and Materials Sciences Building.

The event celebrated the completion of a 160,000-square-foot facility that provides modern laboratory and office space for ORNL researchers who are studying and developing materials and chemical processes for energy-related technologies, including advanced batteries and high-efficiency solar panels.

"This new building represents the Department of Energy's commitment to lead the U.S. toward a clean energy future by investing in scientific research and development," Brinkman said.

The Chemical and Materials Science
Building replaces an aging 1950s-era
complex limited by high maintenance
and energy costs and outdated laboratory
spaces. The new three-story facility has
been designed and constructed to be
Leadership in Energy and Efficiency
Design (LEED) Gold certified and
meets strict guidelines for environmental

sustainability set by the U.S. Green Buildings Council.

"Our research staff members have been eagerly awaiting the completion of this state-of-the-art facility that provides forefront capabilities for tackling tough scientific challenges," said ORNL Director Thom Mason.

The building includes 56 laboratories that meet modern standards for safe and efficient operations, which were virtually impossible to attain in the old complex. The building design also provides 164 offices and 91 modular work stations, with an emphasis on more open, collaborative environments and flexibility to respond to future mission changes. It is home to two DOE Energy Frontier Research Centers—the Center for Fluid Interface Reaction Structure and Transport (FIRST) and the Center for Defect Physics (CDP).

Construction of the \$95 million facility began in June 2009, supported in part by funds from the American Recovery and Reinvestment Act. The construction contractor for the facility was McCarthy Building Companies; the architect-engineer was Cannon Design.—Morgan McCorkle



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Medicare and your ORNL medical benefits

Retirees become eligible for Medicare when they turn age 65, and this affects the health care benefits you receive from ORNL. The ORNL Benefits Office receives many calls and questions from retirees as they approach age 65. They have put together the answers to your most frequently asked questions.

Q I am retired and turning 65 soon. What will happen to my benefits?

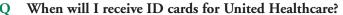
A As a retiree, when you turn age 65 you are no longer eligible to participate in the CIGNA medical plans or the dental plans with MetLife or Delta Dental. You become eligible for Medicare A&B, and ORNL offers a United Healthcare supplemental plan that coordinates with Medicare. As long as you do not enroll in Medicare Part D, you are eligible for the United Healthcare supplemental plan. ORNL also offers an over age 65 dental/vision plan from United Healthcare.

Approximately 3 months prior to your 65th birthday, we will mail you information and enrollment forms for United Healthcare medical (currently \$160/month per person) and United Healthcare dental/vision (currently \$41.82/month for the retiree and \$82.50/month for the retiree plus spouse). If your spouse is younger, he/she may continue on the CIGNA and Dental plans as long as you enroll in the over age 65 plans. If your spouse is already over age 65, they will be offered the United Healthcare plans concurrent with your enrollment, as well.

You must enroll within 30 days of your 65th birthday or within 30 days of your retirement date if you retire after age 65. Medicare will be your primary insurance during the month of your 65th birthday. CIGNA will be secondary during the month of your 65th birthday.

MetLife or Delta Dental coverage continues through the end of the month of your 65th birthday.

If you cancel coverage at any time for any reason other than because you have other ACTIVE employer group coverage through your employer or your spouse's employer, or if your medical coverage is dropped because you are covered under the Medicare Part D plan, *you or your spouse cannot re-enroll at a later time*.



A You will receive UHC medical and/or dental/vision identification cards approximately in the middle of the month following your 65th birthday, or following the month you enroll. You can print a temporary card from their website: www.uhc.com. Remember — Medicare A&B is your primary provider.

Q The \$75K lifetime maximum seems very low. What happens if I go over the maximum?

A There are several factors to consider. First, the cost of prescription drugs is not included in the lifetime maximum. Second, keep in mind that the UHC plan is secondary to Medicare A&B. Only expenses incurred in the UHC plan count toward the lifetime maximum. We have had very few members reach the lifetime maximum.

Q How does the United Healthcare plan offered by ORNL compare with other plans on the market, such as Humana, AARP, etc.?

A The medical component of the UHC plan is comparable to other Medicare supplement plans on the market. When comparing plans, be sure to compare prescription drug benefits. The ORNL drug benefit does not have a coverage gap, or 'donut hole,' like some plans. Remember that if you do not enroll in the ORNL plan, or if you ever cancel, you CANNOT re-enroll.

Q If I or my spouse becomes disabled after I retire, what happens to my benefits?

A If you or your spouse is under age 65 and approved for Social Security Disability after retirement, you must sign up for Medicare Part A and B at the time you are approved. Medicare becomes the primary carrier for your (or your spouse's) claims. If you do not sign up for Medicare A and B when first eligible, CIGNA will process claims back to your disability approval date as though you have Medicare A and B – which means they will only pay 20% of the claim and you will be responsible for the remaining balance.

If at the time you retire your spouse is on Medicare Part A because he/she is on Social Security Disability, your spouse must sign up for Medicare Part B concurrent with your retirement date. Medicare becomes your spouse's primary carrier and your Company plan becomes secondary payer.

Your dental coverage does not change if you or your spouse becomes disabled.

A Publication by and for the ORNL Employees of Carbide and Carbon Chemicals Company, Union Carbide and Carbon Corporation

OAK RIDGE, TENNESSEE



LAST ASSEMBLY AT ORNL FOR SCHOOL OF REACTOR TECHNOLOGY'S CLASS OF 1950-1951—School was officially over on Friday, August 24 for this class of the Laboratory's Oak Ridge School of Reactor Technology. Back row, left to right: D. T. Bray, H. T. Williams, L. H. Thacker, W. E. Edwards, C. M. Wetzel, G. N. Mahfery, T. J. Morley, F. R. Grisak, P. M. Wood, V. P. Kovacík, L. S. Mins, M. Shaw, E. Unbehaun, J. H. Hill, T. A. Redfield, M. C. Edlund (faculty). Front row, left to right: F. C. VonderLaage (Division Director), G. E. Gorker, K. A. Hub, D. G. Ott, F. D. Orazio, L. C. Widdoes, E. E. Mason, K. W. Downes, R. J. Beeley, R. A. Woll, G. H. Cohen, P. N. Haubenreich, P. O. Nadler, J. M. LaRue, G. E. Putnam, R. J. Stephenson (faculty chairman), D. D. Rauch. The picture was taken at the south side of the Reactor Training School Building, which formerly housed the ORNL Cafeteria.

The program of the Oak Ridge Civic Music Association for 1951-52 features a new series of concert artists which have been added to the regular subscription activities for no extra cost. Memberships are priced at \$7.50 per seat and include four concerts by the Oak Ridge Symphony Orchestra, conductor; William Starr, violinist; Yaltah Menuhin, planist; Menual Mann, violinist; and Blanca Renard, pianist.

There will be concerts by the Community Chorus.

The program of the Oak Ridge Civic Music Association for 1951-52 features a new series of concert artists which have been added to the regular subscription activities for no extra cost. Memberships are priced at \$7.50 per seat and include four concerts by the Oak Ridge Symphony Orchestra, conductor; William Starr, violinist; Yaltah Menuhin, pianist; Mila Seengage in experimental reactor physics research in the Physics Division.

The other students who have accepted positions with various agencies in the Atomic Community Chorus.

Renard, pianist.

There will be concerts by the Community Chorus and the well known Coffee Concerts which offer local musical talent in a friendly atmosphere. In addition to these attractions, a new series is presented featuring the New York String Quartet; Leonard Shure, pianist; and Frankel and Ryder, dance-duo. The Symphony Orchestra and the solo recitals will be held in the auditorium of the new High School. People at ORNL interested in joining ORCMA or desiring more information about it should contact Fred Drosten, 6633,

ISA To Hear Interesting Talk

appearances by David Van Vactor, conductor; William Starr, violinist; Yaltah Menuhin, pianist; Michael Mann, violinist; and Blanca Renard, pianist.

There will be concerts by the Community Chorus and the well known Coffee Concerts which offer local musical talent in a friendly atmosphere. In addition to these attractions, a new series is presented featuring the New York String Quartet; Leonard Shure, pianist; and Frankel and Ryder, dance-duo. The Symphony Crehestra and the solo recitals will be held in the auditorium of then well High School. People at ORNL interested in joining ORCMA or desiring more information about it should contact Fred Drosten, 6653, or Herb Pomerance, 6136.

ISA To Hear Interesting Talk

Isactor physics research in the Physics Division.

The other students who have accepted positions with various agencies in the Atomic Energy Commission's reactor development program are: Raymond J. Beeley and David H. Martin, North American Aviation; James H. Bick, William E. Edwards, George E. Gorker, and John N. Renaker, General Electric Company; Donathy Company; Kenneth W. Downes, Brokhaven National Laboratory; James J. Dutton, Consolidated-Vullee Aircraft Corporation; William S. Hogan, Kenneth A. Hub, Glen E. Putnam and Lawrence C. Williams and Phillip M. Wood, E. I. du Pont de Nemours & Co. David G. Ott, Prott & Whitney Aircraft. Aircraft.

ISA To Hear Interesting Tolk

A discussion of a recording electrometer with which values less than one-tenth micro-microampere can be recorded, will be given by Mr. J. V. Werme, Brown Instrument Company, at the monthly meeting of the Instrument Society of America scheduled for Wednesday, September 5. A neutron thermometer also will be explained. The meeting will begin at 7:30 and will be held at the Knights of Columbus Hall. Visitors are welcome.

Saving C. V. Friott & Willing Aircraft.

Students attending ORSORT under student saving the values of the rorganizations have returned to their home companies. They are: William G. Atkinson and George P. Letz, Electric Boat Company; B. Wade O. Dickinson, John H. Hill, Paul O. Nielle, S. Wilson, U. S. Air Force; Fred R. Grisak, Victor P. Kovacik, Giles G. Leeth and Fred D. Orazio, USAF Air Materiel Command; John M. LaRue, Bendix Aviation Corporation; Herbert L. Leichter, Continued on Page 3

Some 400 Attending Annual Oak Ridge SummerSymposium

SummerSymposium

The third annual Oak Ridge Summer Symposium got off to a rousing start Monday morning with some 400 representatives from universities throughout the country, industry and Atomic Energy installations, attending the opening session. Attendance was considerably above that for the two previous symposia.

In the keynote address, AEC Commissioner T. Keith Glennan told the assemblage that engineers and scientists were equal partners in the development of atomic energy. He reviewed a number of engineering problems facing the program and discussed the study contract which the AEC has entered into with four industrial teams to determine the feasibility of industrial operation of reactors. In one of the two public sessions of the Symposium, Dr. C. G. Suits, Vice President and Director of Research of the General Electric Company, Monday night discussed the disposition of our atomic bomb materials when the day of real peace is here. "The problem of beating atomic arms into plowshares will loom as a formidable one," Dr. Suits said. "The use of nuclear fuel for electric power generation seems to be the years of the survey generation seems to be the program of the survey generation seems to be the program of the survey generation seems to be the program of the survey generation seems to be the program of the survey generation seems to be the program of the survey generation seems to be the program of the survey generation seems to be the program of the survey generation seems to be the program of the survey generation seems to be the program of the survey generation seems to be the program of the survey generation seems to be the program of the survey generation seems to be the program of the survey generation seems to be the program of the survey generation seems to be the program of the survey generation seems to be the program of the survey generation seems to be the program of the survey generation seems to be the program of the survey generation seems to be the program of the survey and the survey generat



DR. LAWRENCE R. HAFSTAD, Director of Research for Reactor DR. LAWKENCE K. HASTIAN, Director of Research for Reactor Development, U. S. Atomic Energy Commission, will be "Speaker of the Evening" on the Summer Symposium program scheduled for 8 p. m., Wednesday, September 5 at the new High School auditorium.

Abstract of Talk Hafstad Will Give

The gist of what Dr. Hafstad will talk about next Wednesday night at the Oak Ridge High School auditorium is contained in the following teletyped message received from Washington: "Following is work abstract of my Symposium talk The Commission's program for reactors now under construction or in active development will be reviewed briefly. Typical contributions toward the development of an adequate reactor engineering technology from several of these reactor projects will be discussed. Several likely lines of future development leading out for

Sixty years ago this month Taken from The ORNL News for August 1951

- The ORNL Isotope Research and Production Division at Y-12 is producing the only electromagnetically stable isotopes in the country. Currently 177 isotopes of 43 elements have been successfully enriched to allow for a total of 1251 shipments to AEC projects, universities and independent investigators.
- The third annual Oak Ridge Summer Symposium, entitled "The Role of Engineering in Nuclear Energy Development," was presented jointly by ORNL and the Oak Ridge Institute of Nuclear
- ORNL has a new research tool not available at any other atomic energy facility. The Special Equipment Design Branch of the Engineering Department designed a sample holding mechanism for the new X-ray diffraction apparatus. Operated by remote control it grips and holds a metallurgical specimen in target position for the X-ray beam.
- To recognize National Chemistry Week, chemists from ORNL, K-25 and Y-12 will travel to New York City to celebrate with approximately 15,000 other chemists the Diamond Jubilee of the American Chemical Society and the World Chemical Conclave of the International Union and the International Congress of Pure and Applied Chemistry.—prepared by ORNL History Room volunteers

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THOM'S THOUGHTS

From the Lab Director

Office of Science Director Bill Brinkman joined us recently in dedicating the new Chemical & Materials Sciences Building. Dr. Brinkman's enthusiasm for the new facility is well founded: The CMSB is a fantastic place to do science. With the Office of Science's help and support, we've made great progress on updating our facilities. Now comes the science.

We announced at the CMSB dedication that UT-Battelle is contributing \$25,000 toward the Oak Ridge campaign to remember the late Alvin Weinberg. Memorial committee members Tom Row and Steve Stow, both former ORNL staff members, were on hand to accept the symbolic "big check." Alvin did more than anyone to shape and develop what we know as Oak Ridge National Lab, and he would have been delighted with recent growth that supports ORNL's continued contribution to solving the world's toughest problems.

Congratulations to Chemical Sciences Division Director Phil Britt and UT-ORNL Distinguished Scientist Jimmy Mays on their election as fellows of the American Chemical Society. Congratulations also to Cam Hubbard, who has been elected fellow

of ASM International. The National Academy of Engineering selected Lonnie Love to take part in the U.S. Frontiers of Engineering Symposium in September, and Claus Daniel will chair a session on energy storage for the NAE German-American Frontiers of Engineering Symposium next March. Larry Satkowiak, who leads our Global Security and Nonproliferation Programs, has been named a fellow of the Institute of Nuclear Materials Management.

Visitors to the Lab include participants in the Third International Workshop on Operation of Large Vacuum Systems and the Office of Science Graduate Fellows, who were addressed by Dr. Brinkman during their annual research meeting. Members of the East Tennessee Economic Council Board visited and toured the CMSB. Members of the 25x25 Alliance, a group of organizations, officials, and individuals who advocate renewable energy technologies, visited the BioEnergy Science Center.

Other visitors included

- a U.S.-India Civil Nuclear Energy Working Group, co-led by Assistant Secretary for Nuclear Energy Pete Lyons;
- a U.S.-India delegation on Clean Energy Research and Development Cooperation;
- Anne Harrington, Deputy Administrator for Defense Nuclear Nonproliferation in the National Nuclear Security Administration;
- Sharon Burke, Department of Defense Deputy Director.

The Directorate Challenge, one of the activities in the Lab's 2011 United Way Campaign, is under way. I urge everyone to give careful thought to this year's United Way contribution. During tough times for many in our community, our challenge is to respond generously. Please support campaign chair Johney Green, co-chair Hurtis Hodges, and our volunteers in the 2011 drive to again make ORNL a leader in supporting the service agencies of the United Way.

Thomas Mason

Thom Mason

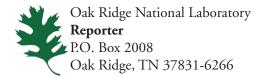


"I urge everyone to give careful thought to this year's United Way contribution."



Human Resources and Communications Director Debbie Stairs is not going to give up her Directorate Challenge trophy without a fight.





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ORNL after hours



The left half of the photo above is the result of a super-long exposure. If you're actually at the Lab at night, things are a little more gloomy. The darker half of the photo is the view from Holifield at normal exposure taken at the same time and place.

Don't feel sorry for photographer Jason Richards if he has to work late. Just ask him to see pictures. Jason took this night-time shot of the Lab campus recently, looking west from the Holifield Radioactive Ion Beam Facility. It's the result of a 151-second exposure and some other enhancements.

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