Vol. 52 - No. 12 March 20, 1998 SKOXH **BROOKHAVEN NATIONAL LABORATORY**

Spent-Fuel Pool At HFBR Emptied; **Year-Long Tritium Remediation Project Concluded**

Since the beginning of 1998, the pages of the Brookhaven Bulletin have been dominated by news of the transition of BNL's management from Associated Universities Inc., to Brookhaven Science Associates.

But there has been other news over the past few months, and a particularly noteworthy example was the



The contributions of the hundreds of BNL and U.S. Department of Energy staff who were involved in the Tritium Remediation Project were acknowledged at a gathering in January, after the project's completion.



At left, spent fuel elements are stored in the pool in the High Flux Beam Reactor, covered by water containing the radioactive element tritium. At right, in a photo taken after December 30, 1997, the pool is empty: spent fuel elements have been removed and shipped off site for safe storage, and the tritiated water has been pumped from the pool.

completion of the Tritium Remediation Project — ahead of schedule and under budget.

Headed by Robert McNair, Reactor Division, the Tritium Remediation Project involved hundreds of BNL and U.S. Department of Energy staff.

"It was truly a team effort," McNair said. "Everyone involved gave significant input, and without their individual contributions, the project would not have been successful."

The Tritium Remediation Project was essentially completed on December 30, 1997, when water from the spent-fuel pool of the High Flux Beam Reactor (HFBR) was pumped out almost a year after BNL first discovered tritium contamination in monitoring wells immediately south of the HFBR.

As a result of the January 1997 discovery, BNL took the following actions:

• identified the HFBR spent-fuel pool as the major source of this tritium contamination, which was confined to groundwater on BNL property and never posed any danger to anyone, either on or off site.

· completed extensive characterization of this tritium contamination.

· started interim pumping of groundwater from an area of low tritium contamination to prevent the tritium from ever leaving the site in concentrations above the state and federal drinking-water standard.

· completed shipping all spent fuel elements and other equipment from the spent-fuel pool.

• incorporated the area of tritium contamination into the federal Superfund process for a final decision on handling this contamination.

· emptied the spent-fuel pool of tritiated water and pumped the water to double-walled tanks on the BNL site. removed sediment from the pool bottom.

The HFBR was already shut down for routine maintenance when the tritium contamination was discovered a year ago.

The reactor has remained shut down, and DOE is conducting a formal environmental review that will help determine its future.

Tomorrow — A Day to Discover LI's Pine Barrens

Brookhaven National Laboratory will be among the many exhibitors that will be on hand at a special event this Saturday, March 21 — a day aimed at teaching Long Islanders about the unique pine barrens ecosystem that they all



Now that tourists vacation anywhere from the jungle to the Arctic, and scientists understand minute interactions of matter with almost commonplace accuracy, what is left to explore?

Well, among a few alluring alternatives . . . axions!

To describe these elusive, hypothetical particles and some of his research at BNL and elsewhere aimed at detecting axions, Physicist Yannis Semertzidis of the Physics Department will deliver the 335th Brookhaven Lecture, "Let There Be Darkness: A Search for Axions." Semertzidis





will give his talk in Berkner Hall on Wednesday, March 25, at 4 p.m., when he will be introduced by Physicist William Morse.

As Semertzidis will explain, axions may be X, the unknown particles that could shed light on one of the universe's most intriguing mysteries: dark matter. Dark matter is the name given to the huge amount of the universe - 90 percent — that an astronomer in 1933 noted to be "missing." It is known to exist because of its observed gravitational pull on the motion of the galaxies, yet it is invisible to all wavelengths of electromagnetic light.

Various explanations of dark matter have been proposed, but the nature of this missing mass - of what particles dark matter is made — is still unknown. One characteristic seems certain: Dark matter particles must react so weakly with almost everything that they pass through it and so seem invisible. Among several canObservations of spiral galaxies, such as the one pictured surrounding Yannis Semertzidis, give evidence of the existence of dark matter.

didates is the hypothetical particle called the axion.

Physicists have other reasons to search for axions, mainly, as the explanation for what is called CP violation. Discovered in 1963 at BNL by James Cronin and Val Fitch, who won the 1980 Nobel Prize in physics for their find, CP violation is a vital part of the theory known as quantum chromodynamics, or QCD, which describes strong interactions between quarks, the smallest entities known to make

up matter. Success in the axion search is expected to have important implications for this comparatively little-explored area of physics.

After receiving his B.S. in physics in 1984 at the Aristotle University of Thessaloniki, Greece, Semertzidis earned his 1987 M.S. and 1989 Ph.D., both in physics, at the University of Rochester, where, from 1990-92, he became a research associate.

Semertzidis' first links with BNL (continued on page 2)

share. Called Pine Barrens Discovery Day, the event will be completely free and family-friendly, with displays, talks and short hikes scheduled throughout the day, from 8



a.m. to 4 p.m. at Suffolk Community College's Eastern Campus off Route 51 in Riverhead.

The BNL booth will feature pictures of the Lab's 3,500 acres of pine barrens, and our efforts to protect and clean up our local environment. Stop by with your family and say hi to the volunteers staffing the booth!

For more information, call Jan Naidu, Ext. 4263.

We're Heating With Gas — And Reducing Emissions!

How is this heating season different from last year's at BNL? This winter, about 63 percent of the Lab's buildings are being heated with gas — a move that reduces emissions that contribute to air pollution.

In the conversion completed last August, the Lab has also retained its capacity to heat with oil, providing a flexibility that should cut fuel costs.

The Laboratory has agreed to purchase natural gas over a period of about three years from the Long Island Lighting Company (LILCO) to heat approximately 80 buildings on the 5,300-acre site. LILCO has installed two miles of natural gas main leading to BNL's central steam plant, which provides steam for cooling and heating the Lab's buildings.

In the BNL-LILCO contract, the utility has the option of temporarily discontinuing gas service to BNL in the winter when supplies are low. In exchange, the Lab will pay lower rates.

To reduce emissions, Brookhaven had switched to a very low-sulfur, lownitrogen fuel oil in 1995. With the conversion to gas, the Lab's emissions will be reduced even further.

BNL engineers calculate that sulfur-dioxide emissions will be reduced by 95,000 pounds per year, while nitrogen oxide emissions will be cut by 120,000 pounds per year.

The conversion to gas heat cost the Lab \$1.2 million in engineering and construction costs, which involved changing safety systems, burners, piping and burner-management systems.

However, since the new heating flexibility is expected to save BNL approximately \$500,000 per year about \$400,000 in fuel oil costs and \$100,000 in operational expenses the construction costs should be recovered in about two years.

Mark Toscano, BNL's energy manager, said, "This dual capacity to heat with oil or gas provides us with several options that should lead to significant savings. We have a 1.8-million-gallon storage capability for fuel oil, so we can buy large quantities of oil in the summer, at a cheaper rate. Also, after the Laboratory fulfills its contract with LILCO, we can purchase natural gas from any supplier. Fur-



Standing behind Boiler No. 7 at BNL's Central Steam Plant, which was recentlyconverted to burn both natural gas and No. 6 fuel oil, are Plant Engineering Division staff: (from left) Energy Manager Mark Toscano, Steam Plant Group Leader Ron Wagner, Utilities Project Engineer Walter Bay, Energy Project Engineer Chris Channing and Steam Plant Supervisor Ernie Simon.

ther savings could then be accrued, since we would look for the most attractive price of both oil and gas." signed by BNL engineers, with burner design and installation by Peabody Engineering Corporation of Stamford, Connecticut. — Diane Greenberg

The conversion project was de-

Healthline Lecture Heart Disease: Treatment Trends

Each year, 1.5 million Americans experience heart attacks, but, today, heart attacks are not necessarily fatal: Two out of three people survive, thanks to improved awareness of their symptoms and improved treatment.

What is being done to increase those survival odds will be discussed during the next Healthline lecture: On Thursday, March 26, cardiologist Mitchell Saunders will speak about "Current and Future Trends in Treating Heart Disease" at noon in Berkner Hall. All are invited to attend this lecture, which is sponsored by the Health Promotion Program (HPP) of the Occupational Medicine Clinic.

Mitchell Saunders, M.D., is a board-certified cardiologist specializing in cardiac rehabilitation. For the past eight years, he has been practicing with North Suffolk Cardiologists.

To register, return the completed bottom portion of the Healthline flyer recently sent to all employees to Health Promotion Specialist Mary Wood, Bldg. 490, by March 24. For more information about HPP and its Healthline lecture series, call Ext. 5923.

Pick Up Daffodils — Help Cancer Research

Again this year, BERA is selling daffodils to benefit the American Cancer Society. Each bouquet is \$6, and whether or not you have already reserved an order, stop by and pick up a bunch of spring in the lobby of Berkner Hall, Thursday, March 26, 11:30 a.m.-1:30 p.m.

While supplies last, daffodils will also be available in the BERA Sales

HazWoper Training

A free, 40-hour HazWoper training class will be offered on site from Monday to Friday, May 4-8, 8:30 a.m. to 5 p.m., by Local 8-431 of the Oil, Chemical & Atomic Workers International Union. The course, which meets all DOE and OSHA regulations for environmental remediation work, will be limited to 20 employees. Call Lou Evers, Ext. 4417, for details and reservations.

Recognized for Energy Savings



Four members of the Plant Engineering Division's Energy Management Group: (from left) Tom VanderPutten, Mark Toscano, Barbara Pierce and Chris Channing, display the energy-management award presented to them by the U.S. Department of Energy at a ceremony held in Washington, D.C., last October. They were honored for helping reduce energy consumption at the Lab by more than 20 percent per square foot in fiscal year 1996, compared to 11 years ago. This reduction exceeds the requirements set forth in the amended National Energy Conservation Policy Act, which states that all federal buildings must reduce energy consumption by 20 percent — compared to fiscal year 1985 — by the year 2000. To achieve that four years early, BNL made heating, ventilation and air conditioning improvements, installed computerized energy-management control sys-

tems, and upgraded insulation and lighting. In addition, the Lab installed new windows and replaced old wood siding with vinyl siding in dozens of buildings on site. — Diane Greenberg

Weight-Loss Classes

Weight Loss/Nutrition Education classes will be offered at \$99 for eight to ten weeks on Thursdays at noon, starting Thursday, April 2. Taught by a certified, registered dietitian, the program can include a personal program tailored to your special medical and/or nutritional needs.

With each registration, a complementary gift — admission for the May luncheon "Quick and Easy Healthy Cooking Workshop" — will be given by Total Wellness, Inc., which is offering the classes.

To register or for more information, call Health Promotion Specialist Mary Wood, Ext. 5923, before Tuesday, March 31.

BNL Lecture

(cont'd.)

were from 1986 to 1989, when he worked on Experiment 805, a Rochester-BNL-Fermi National Accelerator Laboratory search for galactic axions. Also, 1987-92, still from Rochester, he worked at BNL on Experiment 840 on light pseudoscalar or scalar coupling to photons.

Joining BNL's Physics Department in 1992 as an assistant physicist, he moved to CERN as a fellow for 18 months, 1993-95. After returning to BNL as an associate physicist for two years, he was named Physicist in 1997. Currently, he is working full-time on the muon g-2 experiment at the Alternating Gradient Synchrotron.

After the lecture, all are invited to

Office on Thursday and Friday, March 26 & 27. For more information, call Andrea Dehler, Ext. 3347.

join Semertzidis for discussion and refreshments. To accompany the lecturer for dinner at a restaurant off site, call Jackie Mooney, Ext. 3743, by noon on Wednesday, March 25.

— Liz Seubert

Volunteers Wanted

Healthy volunteers aged 21 through 45 years are wanted to participate in a magnetic resonance study of the human brain.Candidates should nei-

Note to Employees:

Attendance at lectures, meetings and other special programs held during normal working hours is subject to supervisory concurrence.

Summer Students

This year, the Office of Educational Programs will once again conduct a Summer Student Program.

Student placement will involve online review of applications in a central computer database established by the U.S. Department of Energy.

Final information on the review process is expected by early next week: Look for an announcement initiating the placement process.

ther have medical or psychiatric conditions, nor suffer from claustrophobia, which is anxiety in cramped spaces.

Successful candidates will receive \$20/hour for their participation.

Anyone interested in volunteering for this study should contact either Jullie Pan, Ext. 3708, or Hoby Hetherington, Ext. 5274.

Introducing the Candidates for Upcoming BERA Board Elections

After the ballots are counted in the elections scheduled for the week of Monday, March 30 through Friday, April 3, two of the four candidates below will have been elected to represent the members of the Brookhaven Employees Recreation Association (BERA) on the BERA Executive Board. BERA members who are eligible to vote are employees of BNL, BSA, AUI, DOE and any permanent on-site contractor.

Carol Bell

Carol Bell, a senior data assistant specialist in the Environmental Safety & Health Services Division, has been a

member of the BNL Gospel Choir for eight years, Bell also participates in BERA volleyball and softball and was co-captain of the Park Avenue softball team for six years.

"If I am elected, I would like to see

more family and community programs, as I think it's important for the Lab that BERA members get as involved as they have time for in their local communities," said Bell, whose community activities include Girl Scouts, her local parent-teacher organization and Flanders Little League.

"For example," she said, "BERA sports members could help with the Special Olympics program. More family and sports outings might also be organized to include some of BERA members' neighbors, so that people outside the Lab can get to know BNL employees in a relaxed atmosphere.

"It took me a while to really get into feeling part of BNL" said Bell, who came in 1986, "but BERA activities help employees break the ice and give them opportunities to blossom socially. The friendships you develop act as a stress reliever in everyday life. BERA is an important part of BNL, and I would certainly work hard to do my best at the job of being on the Board."



Tracy Blydenburgh

Tracy Blydenburgh is an administrative assistant in the Reactor Division whose contri-

butions to BERA

include both playing and coaching volleyball and softball. More recently, she bowls with the Bowling League and is the League's recording secretary. "One thing I

like about BERA

sports is that employees of varying levels of skill are made welcome, from beginners to experienced players," Blydenburgh said. "The more people who play, the more teams of different levels are available, so you can join the one that suits you. So I think it's important to get more BERA members to participate.

"If I had not gotten involved with BERA activities, I would not know nearly as many people as I do, and both my personal and my professional life would have been less rewarding," she continued. Recreational activities are a great way to socialize and stay physically fit and generally more alert.

"When I dedicate myself to a project, I give 100 percent," she said. "I believe that this can be an asset to the BERA Board, if I am elected. One aim I have is to make it easier for interested employees to make suggestions for new activities or improvements for wellknown ones."

— Photos by Roger Stoutenburgh

During their four-year terms, which will begin on May 1, the winners will have the opportunity to affect recreation policies and decisions for all members. So take a few minutes to read about the candidates so you can make an informed choice at the polls. Election times and polling places will appear in next week's Bulletin, but if you will not be on site during election week, you may submit an absentee ballot in person at the Recreation Office, Bldg. 185, through Friday, March 27.

Bob Colichio

Bob Colichio is a senior technical specialist in the Environmental Safety & Health Services

Division. Having played on employee softball leagues for all ten years that he has been at the Lab, Colichio is entering his eighth year as captain of the Skeleton Crew softball team and



"I've always thought BERA should be more visible to new employees and guests as to the activities offered key word, 'activities' — because most employees associate BERA only with sports," declared Colichio. "I enjoy BERA events because I get to know fellow co-workers socially, in addition to the professional environment. I would like to promote more active BERA involvement.

"I think BERA members can help BNL right now by joining in their local community as well as in Lab activities because they are a link between different groups," added Colichio, who has been a volunteer firefighter and now works with young people in the Civil Air Patrol.

"If you feel relaxed with a BERA group," he concluded, "it is easier to join in something new outside the Lab. I would like to encourage that."



Richard Conte, a senior technical specialist with the Relativistic Heavy Ion Collider Project, is an active member of the Amateur

Radio Club, participating in most of its activities and serving as system operator of its Packet Radio Station. He is also active in the Rifle & Pistol Club and has served as club secretary for several years.



Conte has played in two of the Lab's softball leagues and is currently a member of the Bombers.

"I believe that BERA has much to offer the Lab community in terms of morale building, friendships and new relationships," he said. "I would like to help expand BERA's mission by encouraging the creation of new clubs, offering additional forms of entertainment and increasing BERA's presence on the World Wide Web.

Conte's plan would be to make the board more accessible via an organizational e-mail address and a suggestion form on the web. "While I have some general ideas of how I would proceed if I win, I feel it is more important that the Lab community provide suggestions and desires as to what they would like BERA to offer," he emphasized. "My goal is to provide an open forum for that to happen."

Liz Seubert

Amateur Radio

The BERA Amateur Radio Club will meet at noon on Thursday, March 26, in Room D, Berkner Hall. All Lab employees, guests and licensed amateurradio operators are invited.

For more information, call Chris Neuberger, Ext. 4160, or Nick Franco, Ext. 5467.

Arrivals & Departures

Arrivals

Montreece B. SimpsonES&H Serv.
Departures
This list includes all employees who have termi-
nated from the Lab, including retirees:
Michelle S. CummingsFinan. Serv.
Mary G. DernbachEnv. Rest.
Douglas H. FisherRHIC
Charles E. RuferRHIC
Paul W. Sawina
George J. VirtesPhysics

Gospel! Saturday, April 4

The spotlight will be on gospel singers in Berkner Hall as well as on Afro-American art, crafts and photography displayed in the lobby, as the Lab's Afro-American Culture Club will once again sponsor its popular Gospel Extravaganza, starting at 7 p.m., on Saturday, April 4.

The featured group will be the 35-member ARC Gospel Choir of New York City, which started in 1975, when eight residents of the Addicts Rehabilitation Center began singing to the congregation at the Manhattan Christian Reform Church in Harlem.

Also on the program will be the Young Adult Choir, Somerset, New Jersey; the Stephens Singers (pictured at right) of Jersey City, New Jersey, sisters who have been singing together coast-to-coast for 32 years; the First Baptist Church Choir, Riverhead; and BNL's own Gospel Choir, composed of Lab employees.

Tickets are on sale now at \$10 for adults and \$6 for children under 12, at the BERA Sales Office in Berkner Hall, open weekdays, 9 a.m.-1:30 p.m. There will be no reserved seats, and no tickets will be sold at the door.





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Upton Nursery School Open House

Come to Upton Nursery School's open house in the Recreation Building in the apartment area on Thursday, March 26, from noon to 1 p.m., to see where three- and four-year-old children of BNL employees, guests, on-site contractors and their families have been attending preschool since 1965.

Upton Nursery School is an on-site, parent-run cooperative nursery school that meets three mornings a week from September through June in the Recreation Building. The school provides small classes and a warm environment, involves the parents in their children's preschooling and has a reasonable tuition. The Upton Nursery School is not affiliated with the Child Development Center.

The nursery school is now accepting registration for the 1998-99 school year; non-English speaking children are welcome. Children should be three years old by December 1998.

For more information or to register your child, call Michelle Hilton, president, 744-9443, or Jennifer Greene, secretary, 345-5194.

Marburger to Speak At Next ANS Meeting

"The Future of Brookhaven National Laboratory" will be the topic addressed by BNL's Director John Marburger at the next dinner meeting of the Long Island Section of the American Nuclear Society (LIANS). The meeting will be held on Thursday, March 26, at the Radisson Hotel, Islandia, and all are invited.

After cocktails at 6 p.m. and dinner at 7 p.m., Marburger will address the Lab's future at 8 p.m. To make reservations, at \$24 for LIANS members and their spouses, or \$25 for guests, call Ken White, Ext. 4423, by Tuesday, March 24.

IBEW Meeting

Local 2230, IBEW, will hold its regular monthly meeting on Monday, March 23, at 6 p.m., in the Knights of Columbus Hall, Railroad Avenue, Patchogue. There will be a meeting for shift workers at 3 p.m. at the union office. The agenda includes regular business, committee reports and the president's report.

Computer Training

The Computing & Communications Division plans the following classes for May:

C⁺⁺ Programming Perl Programming Solaris System Administration C Programming

Introduction to UNIX. To register your interest in any of these classes, e-mail Pam Mansfield at pam@bnl.gov.

Volleyball

Standings as	of March	12
League I		Lea

League I	League I League III		
Bikers & Spikers	58-11	Silver Bullets	42-9
Set to Kill	41-28	Group Sets	37-11
Scared Hitless	35-31	Just 4 Fun	29-22
RudeDogs	36-33	Upton Ups	24-24
ReTurners	1-68	Six Samurai	16-29
League II		Just In Time	13-35
Safe Sets	43-11	NWO	7-38
Spiked Jello	40-14	<u> </u>	
Monday Nite Live	39-15	Open League	
Jao-About-That	32-22	Spikers	48-18
Undecided	30-24	Shank,Carry&Throw 38-28	
Nuts & Bolts	20-34	Death Volley	28-38
Fossils	10-44	Pass, Set & Crush	25-38
Setups	2-52	Far Side	23-40

Bowling

Week of March 9

Red & Green League

G. Mack 224/603 scratch series, E. Larsen 209, A. Pinelli 206, E. Sperry 201, H. Arnesen 201, R. Mulderig Jr. 200, R. Raynis 200.

Purple & White League

R. Eggert 247/243/233/725 scratch series, R. Raynis 255/219/653 scratch, K. Koebel 214/207/198/619 scratch, R. Koebel 207/190/171, Don King 220/190, B. Giuliano 218/218, M. Meier 208/198, B. Tozzie 205/ 183, G. Mehl 202/199, T. Dilgen 200/190, J. McCaffrey 192/186, P. Manzella 182/178, B. Mullany 244, K. Conkling 214, M. Addessi 214, L. DiPierro 210, R. Mulderig 205, E. Sperry III 200, T. Blydenburgh 200, Donna King 198, J. Zebuda 196, K. Batchelor 193, M. Guacci 191, J. Pinelli 190, F. Simes 189, J. Addessi 188, N. Fewell 182, J. Meier 182, M. G. Meier 188, B. Rothe 185, K. Eggert 174.

Classified Advertisements

Placement Notices

The Laboratory's placement policy is to select the best-qualified candidate for an available position Candidates are considered in the following order: (1) present employees within the department/division and/or appropriate bargaining unit, with preference for those within the immediate work group; (2) present 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.

POSTDOCTORAL RESEARCH ASSOCIATE - Trained in theoretical condensed-matter physics, with experience in computational electronic structure meth-ods. Experience in large-scale parallel computing is preferred. Will focus on studies of the properties of metallic alloys, phase stability, and microstructure and defects. Contact: Michael Weinert, Physics Department

OPEN RECRUITMENT - Opportunities for Laboratory employees and outside candidates

NS7587. PROGRAMMER/ANALYST POSITION -Requires an MS in computer science, physics or related field, with at least seven years' experience in database management and software development. Experience in a scientific environment is preferable. Database design experience and good problem-solving skills are required; experience in C, C++, Java, or Perl languages highly desirable. Sybase experience is desirable. Will participate in database design and development of database interface tools for the accelerator controls environment. Alternating Gradient Synchrotron Department.

DD7315. TECHNICAL POSITION (Crane Inspector) -Will perform inspections of overhead cranes, hoists and mobile lifting equipment; witness acceptance/ load tests for new cranes, develop and update procedures for material handling operations, develop and implement training programs related to material han-dling. Will also be required to perform construction safety inspections and evaluate Rigging Plans. Must have significant experience and training in Crane and Hoist Inspections and Rigging Safety as well as good communication, interpersonal and computer skills, such as MS Word or WordPerfect, Access and Excel. Plant Engineering Division.

Except when operational needs require otherwise, positions will be open for one week after publication.

For more information, contact the Employment Manager, Ext. 2882; call the JOBLINE, Ext. 7744 (344-7744), for a complete list of all job openings; use a TDD system to access job information by calling (516) 344-6018; or access current job openings on the World Wide Web at http://www.bnl.gov/JOBS/jobs.html.

The following vacancies are exempt from the Director's hiring freeze

SCIENTIFIC RECRUITMENT - Doctorate usually required. Candidates may apply directly to the department representative named.

POSTDOCTORAL RESEARCH ASSOCIATE - Recent DVM or DVM/PhD who must have training in veterinary pathology; experience in neuropathology is highly advantageous, and a PhD in veterinary pathology is desirable. Will work in a multi-disciplinary group developing boron neutron capture therapy (BNCT), an experimental form of radiation therapy for the treatment of brain tumors. Research involves the radiation biology of BNCT in tumors and especially in the normal tissues within the treatment field. Will extend BNCT to other sites, such as lung tumors. Will be expected to develop research projects using immu-nohistochemical and molecular biology techniques to study the radiobiological effects of BNCT. Contact: Jeffrey Coderre, Medical Department.