

## Controlling Violence, Other Injuries in New York State: BNL Scientist Heads Committee Releasing State Plan

Each year, some 3,700 New Yorkers — more people than BNL's entire population — die from violently inflicted injuries, according to an action plan released yesterday, April 14, by a statewide committee headed by Jerome Barancik, who leads the Injury Prevention & Analysis Group in BNL's Department of Advanced Technology (DAT).

Homicide is the leading cause of death by injury in the state, for the first time surpassing all other types of injuries for that dubious distinction, according to the plan compiled by the New York State Injury Control Steering Committee. More than 80 percent of the state's homicides occurred in New York City.

As a result, the committee strongly recommends that funding for research on violence and its prevention be increased, but not at the expense of other areas of injury study.

### In the Midst of an Epidemic?

"Violence, as we define it as intentionally induced injuries to other people or oneself, has most definitely increased," Barancik said. "Some would say we're in the midst of an epidemic, while others would say we're just entering that epidemic, and not only in New York State."

Overall, more than 9,000 fatal injuries accounted for 22 percent of the years of productive life lost in the state in 1991. In addition, the plan says, five million New Yorkers each year suffer non-fatal injuries that require medical attention. These range from falls — the most common cause of injury for infants and young children — to motor-vehicle injuries, which hurt 294,000 New Yorkers in 1990 alone.

The plan includes statistics about injuries related to sports and recreation, fires and burns, and occupational mishaps. It also outlines goals for acute care, emergency medical services, rehabilitation and professional injury-control education for New York.

The 21 epidemiologists and other specialists who compiled the report defined injuries as anything involving transfer of energy from the outside to a body. "That energy can come from a bullet, a moving vehicle, a fire or a drug such as alcohol," Barancik explained. "The epidemiological model of approaching problems, which has been effective in conquering many infections and chronic diseases, is now being applied to injuries and other trauma, and to health services."

With such an epidemiological ap-



**Jerome Barancik, DAT, chaired a committee which found that violence, including gun-related violence, is now the leading cause of death by injury in New York State.**

proach, Barancik said, injury prevention is possible. "It costs less to prevent injuries than to treat them, but to prevent them, we need to have more rigorous morbidity [non-fatal injuries] data," he emphasized.

Above all, the plan stresses the importance of gathering such data by coordinating computer databases and hospital records. The committee's members drew on state Department of Health records, as well as information

from other state and local agencies, to write the plan, which led them to realize just how much data were not being collected.

"The biggest issue we have is the information gap," Barancik said. "Secondly, we need to apply resources for research in the epidemiological and clinical areas, for prevention. We have a dearth of research on the root causes and distribution of non-fatal injury events throughout our society. And, if

we don't know that with accuracy, then we can't measure the efficacy of interventions because we don't have a baseline."

### An Under-Recognized Problem

Why study injury? Besides the cost of medical care, the report states, injuries also have a cost in terms of the goods and services that the injured cannot produce, and the years of economic productivity lost. These costs are not inconsequential: In 1990, based on figures calculated for the entire U.S., injuries that sent New Yorkers to the hospital cost the state's economy \$4.35 billion.

If studies by scientists such as Barancik are any indication, well-directed legislation and community action may bring that total down. For example, a DAT team consisting of Barancik, Caroline Kramer, Henry Thode and others found that New York's mandatory seatbelt law was already working to reduce injuries in Suffolk County in its first year, 1985. And the Injury Control report's information on the importance of bicycle-

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## LHC Magnet Collaboration Possibilities Explored

**Lyn Evans, Director of the Large Hadron Collider project at CERN, fields questions from the audience during the meeting at Brookhaven on March 24-26.**

Photos on this page by Roger Stoutenburgh



As part of the future of the U.S. high-energy physics program, participation in the project to build the Large Hadron Collider (LHC) at CERN, the European particle physics laboratory in Switzerland, is being considered. While not as powerful as the recently canceled Superconducting Super Collider, the LHC will collide protons with a total energy of 14 trillion electron volts, and experiments at this energy frontier are expected to begin around the year 2003. As a result,

Brookhaven plans to participate not only in the accelerator-physics effort to design and construct the collider, but also LHC detector collaborations.

To facilitate that effort, an informational meeting was held at Brookhaven, March 24-26, which brought 13 CERN representatives together with over 40 U.S. accelerator physicists from BNL and other national labs. During the meeting, technical matters were discussed, such as superconducting wires, cables and

magnets; magnet-measurement technology; and beam-simulation techniques. In addition, the meeting considered the depth of U.S. participation, which could range from intellectual interchange regarding LHC design to the delivery of accelerator systems developed in this country. CERN also expressed interest in having superconducting wire and cable for the LHC tested at BNL, as was done for the German lab DESY during its construction of the HERA collider.



## Helping DOE Facilities To Age Gracefully

Don't be deceived by the name — the conference on Aging Management and Life Extension, held March 30-31 at Berkner Hall, did not reveal the location of the Fountain of Youth. Instead, the 80 participants at the workshop, sponsored by the U.S. Department of Energy's (DOE) Office of Environment, Safety and Health (ES&H), discussed options for operating and maintaining aging DOE nuclear facilities, both reactor- and non-reactor-related. Staff from BNL's Department of Advanced Technology (DAT) hosted the conference, including (from left): Robert Lofaro, Bom Soon Lee, Robert Hall, Pamela Ciuffo, DAT Chairman Romney Duffey and Jeanne Madaia, as well as conference co-chairmen Paul Wu, DOE Office of ES&H, and John Taylor, DAT.

## BNL Develops Model Program to Classify Hazardous Waste

In response to a mandate from the U.S. Department of Energy (DOE), BNL has developed a program to assure that all hazardous waste transported off site is free of radioactivity.

The new certification process reduces the need for radiological analysis and significantly reduces costs.

Called process-knowledge certification (PKC), elements of the program have become the model for other DOE sites. PKC was developed by George Goode, Safety & Environmental Protection Division (SEP), with the help of Kevin Carney, Michael Clancy Jr., Leonard Emma, Philip Harrington, James Nemeth, Michael O'Brien, Michael Van Der Karr, and others in their SEP teams.

"This program required expertise in many disciplines and could not have been accomplished without the help of the team members," said Goode.

Hazardous waste is defined as waste that could cause harm to human health or the environment. The New York State Department of Environmental Conservation classifies hundreds of substances as hazardous waste, from corrosive chemicals, such as solvents, to potentially toxic substances, such as pesticides.

In 1991, DOE imposed a moratorium on all shipments of hazardous wastes that were potentially contaminated with radioactivity. The moratorium was precipitated by Louisiana state regulators finding radioactive waste at the Rollins Waste Disposal site during an inspection.

"Some DOE facilities were using the Department of Transportation rule



Reviewing waste characterization forms at the Lab's Hazardous Waste Management Facility are: (from left) Warren Vogelin, Karl Shurberg, James Nemeth, Philip Harrington and George Goode, all of the Safety & Environmental Protection Division.

that two nanocuries per gram of radioactivity was considered safe for transport," said Goode. "But incineration — the fate of most hazardous waste generated at DOE sites such as BNL — concentrates the waste 100:1. Thus, small quantities of rad material undetectable at a DOE site may be detected in ash at treatment facilities."

He added, "To lift the moratorium, each DOE site had to develop its own program to determine that no radioactive material was present in chemical waste. We had to work quickly, since regulatory permits require that certain toxic wastes can only be stored for

one year, or less. Otherwise, the Laboratory would be subject to fines."

Since about 700 employees on site generate hazardous waste, and its radiological analysis is difficult, as well as prohibitively expensive at a cost of about \$1,000 per sample, Goode, with his SEP colleagues, began to think of alternatives.

Goode then developed the criteria for documentation of PKC, which is written certification from a knowledgeable worker, preferably the person who generated the waste, that it has not been involved in any process that would make it radioactive.

The BNL certification process includes a questionnaire that must be completed by all waste generators on site for each sample of waste in storage, asking about the waste's origin, its storage, use and potential exposure to radioactivity. If the worker is uncertain about whether the waste contains radioactivity, then it is analyzed.

To be sure that the waste generators fully understand the form and regulations connected with it, they must complete a written test. SEP Facility Support personnel who review the forms are given more extensive training.

To comply further with requirements to lift the moratorium, extensive surveys were conducted of all hazardous waste and radionuclides on site, using new, rigorous survey procedures developed by Van Der Karr. Also, a quality-assurance program was written by Michael Greaves, SEP, and a system for filing and safeguarding PKC forms was created.

"The process-knowledge program has a lot of accountability built into it," said Goode. "DOE has access to our files and will eventually audit them."

As for the tally to date: Some 4,500 PKC forms have been completed at BNL, and only about 2 percent of all hazardous wastes were certified to be potentially contaminated, requiring analysis. Had all of the wastes from radioactive areas required analysis, it would have cost BNL an additional \$760,000. Also, hazardous wastes were removed from storage at BNL within regulatory deadlines, thus avoiding potential fines. — Diane Greenberg

## A Whole Lotta Changes at Housing

Look out, Conrad Hilton. The BNL Housing Office in the Staff Services Division (SSD) is on its way to providing the kind of high-quality service and accommodations you became famous for — on a slightly smaller scale.

While the Lab's apartment area may never look like the New York Hilton, the 19 multiple-unit apartment buildings are being made more energy-efficient and well-appointed than ever before. And a fast new computer system is making reserving a room in any of BNL's accommodations quicker and easier.

"We think the Lab's visitors and employees deserve the best possible services," said Dennis Joyce, Assistant SSD Manager, noting that SSD recently hired a former Hilton manager, Jeff Swenson, to oversee Housing's day-to-day operations and the transition from manual to computerized bookings.

"Before, it obviously took a lot more time to do a reservation manually," Swenson said. "Now, the information is virtually instantaneous, and we are able to provide even better service to guests and Lab users."

The computer system arrived in mid-October, using software especially designed for resorts and hotels. BNL definitely fits that description, with room for more than 1,000 temporary guests in dormitories, apartments,

efficiencies and summer cottages.

But the big news in BNL housing, Joyce said, is the revamping of the apartments from the outside to the inside and from top to bottom.

Although SSD has always prided itself on providing clean, well-provisioned apartments, Joyce explained, there was only so much it could do with buildings originally erected in the 1940s as temporary structures expected to last seven years. The lack of insulation had driven heating costs way up, while furniture and renovation budgets remained way down.

Faced with that situation, SSD Manager Ron Manning focused his team of employees on the improvement of BNL housing. The apartments came first on the list for major changes. SSD requested funding to install thermal windows, weatherproofing and insulation and to upgrade electrical wiring. The discovery that the wiring replacement would mean the removal of interior walls led to an application for companion funding to renovate the apartments' interiors. "Of course," Manning said, "Without the support and funding decisions of Lab management, none of this could be done."

By now, Joyce said, the project is well under way. All of the apartment buildings' exteriors have been renovated, with energy-saving measures funded by the U.S. Department of

## Help With Housing For Visitors

Right about now, each of the Lab's departments is sending the Housing Office a list of its summer visitors so that they can be placed in on-site apartments and dormitories. But, as in past years, supply will be less than demand, and some visitors will be seeking lodging off site.

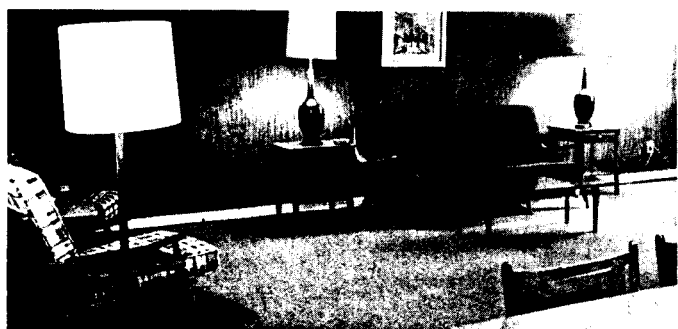
This year they will get help in their search: Marie Betzold has joined the Staff Services Division as Off-Site Housing Coordinator, with the mission of assisting this summer's visitors in finding short-term housing in nearby communities.

Although she's been here only two weeks, Betzold has already begun contacting the Lab's departments to let them know she can help accommodate their guests. And she has started to scout the local area for apartments, rooms and houses for rent, putting to use her experience in selling real estate on Long Island.

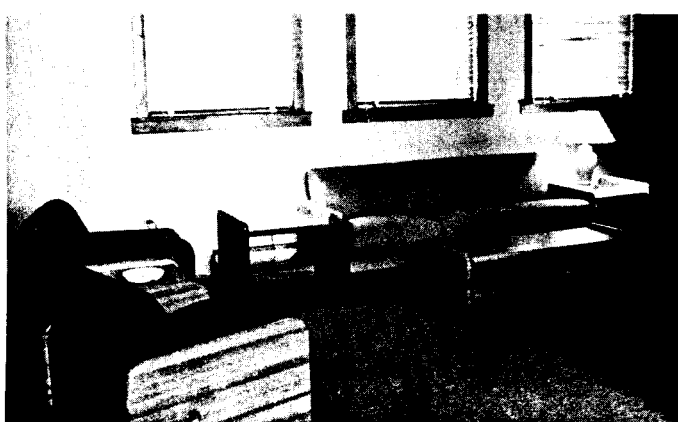
Housing Supervisor Jeff Swenson says that Betzold will be at BNL until the end of September. And, Betzold added, any BNLER who has or knows of a room, apartment or house for rent for this summer should give her a call at Ext. 4489.



Marie Betzold, outside the newly renovated, on-site apartment area.



Extensive renovations in the apartment area are well under way, as shown in these photos of a living room before (left) and after (right) its face-lift.



Energy's In-House Energy Management Program. With the cold, snowy winter of '94, the insulation and better windows have already begun to pay for themselves in energy savings.

The extensive interior and wiring changes will take longer, Joyce said.

Since only one apartment building, containing three or four units, can be out of circulation at a time and each building takes about four months to complete, the goal is to improve three buildings per year until 1999.

Five building interiors are already finished — more transformed than renovated. Banished are the dark, spindly 1950's-era living room furniture and the tired kitchen cabinets. In their places are solid, comfortable-looking pine couches and tables, and sleek white cabinet doors with pine accents. Now, SSD has plans to follow up the apartment renovations with a request for funding to begin such work on the Guest House and dormitories in future years. Said Joyce, "We're very proud of what we've done, but we realize that that much effort still lies ahead." — Kara Villamil

## Got a Problem With a Purchase? Call Ext. 3200

If you've experienced problems with purchased products or services, the Division of Contracts & Procurement (DCP) needs to know — so it can alert the suppliers of those products or services to take appropriate steps to avoid these problems in the future.

To make it easier for all BNLeers to report such problems, DCP, in conjunction with BNL's Quality Assurance Office, has established a special telephone line, Ext. 3200.

With this line, reporting a nonconformance takes only about three minutes: When you call Ext. 3200, you will be asked for seven pieces of information — your name, phone number, the purchase order number, name of product or service and/or part number, quantity received and quantity that does not conform, description of the nonconformance, and its disposition. As confirmation of your call, you will be sent a copy of the reported information.

Your short time on the phone can have a long-term effect. DCP expects that this reporting line will help improve the quality of purchased products and services, reduce the paperwork associated with reporting nonconformances, curtail additional costs and time delays that occur when substandard purchased products and services must be addressed, and build better partnerships with suppliers.

For more information, contact Fred Altrui, DCP, at Ext. 3155.

## ALARA Workshop

With an eye toward keeping radiation exposures to workers at nuclear power plants "as low as reasonably achievable" — a goal known as ALARA — the U.S. Nuclear Regulatory Commission and the ALARA Center of BNL's Department of Advanced Technology will sponsor the Third International Workshop on "Implementation of ALARA at Nuclear Power Plants."

The registration fee will be waived for BNL participants at the workshop, which will be held May 8-11 at the Radisson Hotel in Islandia; there will be a charge for meals. To register or for more information, contact Maria Beckman, Bldg. 703M, Ext. 3228.

## Violence

(cont'd)

helmet use by children was released as soon as it was compiled to agencies that could encourage both helmet use and legislative action.

To guide that kind of research, as well as other activities aimed at reducing mortality, morbidity and disability from injuries and violence, the state Health Department set up the Injury Control Steering Committee in 1989. Barancik, nominated to head the committee based on his career of epidemiological research, also contributed his expertise in several specific areas: motor vehicle and occupational injuries, and professional education.

As chair, he expressed gratitude to the committee's volunteer members, who came from hospitals, universities and other institutions around the state. "These people stuck to it, and, without their dedication and their



## '93 Golf Champs

Before the results start pouring in for the Brookhaven Golf Association's (BGA) 1995 season, congratulations to the winners from 1993: Arthur Dick (center, photo at left) took the Individual League championship, while Bill Pemberton (left) and Charles Flood (right) paired up to win the Team League competition. The deadline for joining the BGA for the current season is April 22, so call Rick Jackimowicz, Ext. 3803, for an application or more information.

## BERA Store Sales

The following items are on sale at the BERA Sales Office, Berkner Hall, which is open weekdays from 9 a.m. to 1:30 p.m. For more information, call Andrea Dehler, Ext. 3347.

### Great Adventure

Beginning Monday, April 18, buy tickets for Six Flags Great Adventure Amusement Park, which still features the Great American Scream Machine, as well as the newest Batman ride.

While the park tickets are regularly \$31.75 and the Park/Safari Combo is usually \$33.92, BERA prices are \$22 and \$24, respectively — a savings of time on line and approximately \$10 each ticket.

### New York Met Games

Tickets for weekend Met games, two to four seats per game, are still available at \$15 each. No single seats will be sold.

### Other Fun Stuff

- **Merchandise** — Photo processing services supplied by Employee Photo Service; film; designer greeting cards; Long Island postcards; T-shirts at \$7 each; sweatshirts at \$13 each; assorted mylar balloons at \$1.50 each; BNL postcards, mugs, hats and buttons.

- **Tickets** — free Magic Kingdom membership cards for Disney World, Epcot Center, Disneyland and MGM which can also be used for discounts at local Disney stores; United Artist Theater discount tickets at \$5 each; discount passes for Sesame Place, Hershey Park, Busch Gardens, Cypress Gardens, Sea World and Universal Studios; Metropolitan Opera tickets for the '94-'95 season will be on sale soon.

- **Discounts & Handouts** — Twofers for some Broadway shows; wholesale club information and brochures; discounts on a famous brand-name cellular phone; tickets for a May discount day at a local cosmetic factory.

- **Participation Awards** — The Sales Office is the official redemption center for BERA participation awards.

## Hospitality News

The Women's Forum, conducted by Marion Davis-Parzen and sponsored by the BNL Hospitality Committee, will meet Tuesday, April 19, from 10 a.m. to noon, in the lounge of the Recreation Building in the apartment area, to discuss any problems or concerns facing women. Wives of Lab employees and guests are welcome to join the group to share experiences, whether you are new to the Lab or have been here awhile.

## We Saw It in The New York Times

If you did *The New York Times* crossword puzzle on Thursday, April 7, you should have had no trouble with the answer to clue 60 Across. The five-letter synonym for "Brookhaven Laboratory site" should have been obvious to anyone living or working in Upton, though it probably stumped quite a few off-site puzzlers.

## Perfection Reaps Cash Reward



BNL's 1993 Perfect Attendance Awards — each a \$200 U.S. savings bond — have been won by 28 full-time employees who were on the technical and clerical schedules. Eight of them, whose names are highlighted below with a single star, also won the award in 1992, and six others, listed with double stars, have won three years in a row, starting in 1991, the first year the award was presented as part of the Lab's Employee Recognition Program.

Congratulations to the perfect attendees: (seated, from left) Patriche Windley, Fiscal Division; John Bloom, Reactor Division; Linda Jones, Fiscal; Lynette Finlay, National Synchrotron Light Source (NSLS); (middle, from left) Leonard Pharr\*\*, NSLS; Louisa Barone\*, Personnel Division; Paula Pozzoli\*\*, Staff Services Division; Fred Orsatti, RHIC Project; Eric Klug\*\*, Safety & Environmental Protection (SEP) Division; Mike Santana, NSLS; (back, from left) Ray Van Houten, Reactor; Anthony Curcio, Alternating Gradient Synchrotron (AGS) Department; Dan Oldham, RHIC; Paul Callegari\*, AGS; Michael Lehecka\*, RHIC; Joe Cracco, SEP. Not present were Marjorie Chaloupka\*, Department of Advanced Technology (DAT); Robin Gianopoulos\*\*, Reactor; William Jew\*\*, NSLS; Victoria Johnson\*, DAT; Lawrence Lettieri, SEP; William McKeon\*\*, RHIC; Ruth Merker, Management Information Systems (MIS) Division; Karen Natoli, MIS; Walter Richters Jr., Physics Department; Antonio Rodrigues\*, NSLS; Phyllis Tinsley-Smith\*, Biology Department; Richard Wall\*, Physics.

— Photos on this page by Roger Stoutenburgh

## BROOKHAVEN BULLETIN

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staffs' hard work, the plan could never have emerged as a genuine working document," he said.

Compiling such a broad report for New York was no small task, Barancik said. "Our state is very large and ranges from the most densely populated areas in the nation to some of the least populated rural areas, and the needs and concerns of each of these types of areas and those in between had to be examined and incorporated into the plan."

In the case of injury, an ounce of prevention could equal more than a pound of cure. For example, many injuries are related to alcohol and other drugs — not only injuries from homicide and automobile crashes, but also from incidents such as diving and cycling mishaps, falls, suicides and cigarette-related fires.

People whose judgment or coordination is impaired by alcohol may injure others or themselves. Half of New York City's homicide deaths involved the sale, distribution and use of illegal drugs. So, the report suggests, addressing drug and alcohol problems will, in turn, affect the number of injuries.

Confronting these issues head-on is but one goal: The plan also calls for more money to be poured into injury research. Above all, the committee found that information is the most needed commodity, in the hope that more data on how and why New Yorkers are injured can serve as a gateway to prevention.

— Kara Villamil

