

# The NIEHS Environmental Factor

LEAP YEAR ISSUE: FEBRUARY 1980

## NIEHS INSTITUTE SEMINAR SERIES INAUGURATED BY SCIENTIFIC DIRECTOR

A new seminar series has been organized under the auspices of the Office of the Scientific Director. It will feature research presentations by promising young investigators from the various laboratories of the NIEHS Intramural Research Program. Titled the "NIEHS Institute Seminar Series," seminars will be held on payday Tuesdays at 3:30 p.m. in the Building 18 Conference Room.

The primary purpose of the series is to provide an Institute-wide forum through which young and nontenured scientists can present their research with an emphasis put on recognition of potential for outstanding achievement. Another objective is to facilitate scientific communication across laboratories and hopefully enhance interaction and exchange of ideas among scientists from different disciplinary areas. Investigators participating were nominated by their Laboratory Chief.

All Institute scientific and technical staff are urged to attend and support this endeavor. Investigators from outside the Institute are also welcome to attend. A complete seminar schedule will be posted throughout the Institute early in February, and notices for each individual presentation will be disseminated the week prior to the seminar.

The first seminar will be March 4. Dr. Carl Barrett, LPFT, will lead off with a presentation titled, "Mechanism of Cancer: Genetic, Epigenetic or Both?" On March 18, Dr. Brian Smith, LP, will discuss "Interactions of Pulmonary Tissue with Xenobiotics."

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DR. RALL, RIGHT, HOSTS THE NTP BOARD of Scientific Counselors January 14-15 in Building 18. Board members are, left to right, Dr. Mortimer L. Mendelsohn, Dr. Joseph C. Dunbar, Dr. Thomas H. Shepard, Dr. Margaret Hitchcock, Dr. Majorie G. Horning, Dr. Norton Nelson (Chairman), and Dr. Curtis Harper. Not pictured is Dr. Alice S. Whittemore.

## FLEXITIME OFFERS NIEHS EMPLOYEES NEW OPTIONS IN WORK SCHEDULES

Work units throughout the Institute have buzzed with flexitime discussions lately. NIEHS along with all components of the National Institutes of Health has been offered the option of varying work hours under a plan already in effect at some other Federal agencies, including EPA here in the Park.

Flexitime has three variations of work-scheduling choices, all requiring the traditional 80 hours per work period minimum, no matter what, but allowing the 80 hours to be worked on various schedules. Each work unit is being asked to reach a concensus within its ranks as to which of the three options is most suitable to its situation. This will allow uniformity for each work unit and somewhat simplify Flexitime's necessarily more complicated time-keeping system.

All units have the additional option of remaining on the 8:30 to 5:00 schedule, as may some individual employees within a work unit under Flexitime options, though within a work unit all timekeeping procedures must be consistent.

All three Flexitime options provide for employees to be on duty during core hours, 9:30 to 11:00 a.m. and 1:30 to 3:30 p.m. The three options are as follows. 1) Flexitour allows modified start and end times for the work day, but these remain fixed for each employee and must be scheduled no earlier than 7 a.m. and no later than 6 p.m. 2) Flexitour With Credit Hours provides the employee the ability to work more or less than eight hours a day, with the employee present during core hours every regular work day during a pay period, and 80 hours in total during a pay period; 3) the Compressed Work Schedule allows employees to perform their 80 hours in less than 10 work days and may provide for an extra day off during each pay period. Under the compressed work schedule option, the 80 hours could be completed in 8 work days with two days off; though required coverage of all offices and labs for all Institute business during regular work hours (8:30 - 5 p.m. M-F) might make this arrangement difficult. All employees will need to arrange and modify their schedules to attend meetings and fulfill all work obligations occurring outside their Flexitime schedules. For example, meetings will not be limited to core hours only.

Executive Officer Paul Waugaman and Payroll Liaison Arnetta Wicker briefed supervisory people on Flexitime at a January 17 meeting and pointed out that the freedom offered by the plan carried with it added obligations on part of everyone, both in fulfilling proposed work hour and task obligations and in exerting the extra effort to maintain communication and rapport to make Flexitime work in those units electing to use it.

A broad concensus should be evident within a work unit before it attempts to go on Flexitime. "If you have to vote on this, you are not ready for it," Mr. Waugaman said, pointing out the close cooperation, compromises, and adaptations needed to make Flexitime work.

Though supervisors do not have to be in attendance at all times that their people are working, those supervised must know what they are to do during all working hours and have a clear understanding of what to do when unexpected problems arise. Supervisors are always obliged to provide direction and guidance for subordinates.

NATIONAL ADVISORY ENVIRONMENTAL HEALTH SCIENCES COUNCIL MEETS  
HEARS ABOUT AGENT ORANGE, BUDGET, AND TOXIC CHEMICAL WASTE DUMPS

The National Advisory Environmental Health Sciences Council met January 28 and 29 to review pending NIEHS research grant applications and to hear special reports on various aspects of Institute activities. Dr. David P. Rall, Director, reported that NIEHS is part of the White House Interagency Task Force addressing the health impact of Agent Orange and related substances, with specific reference to Vietnam veterans' complaints that it has affected their own and their families' health.

Dioxin-related research at the NIEHS campus includes reproductive studies in mice by Dr. John Moore, who is Chairperson of the Science Panel under Task Force Chairperson and DHEW General Counsel Jody Bernstein; analytical chemistry work by Dr. James McKinney; neurobehavioral research by Dr. Cliff Mitchell; and mutagenicity work by Dr. Errol Zeiger. Other studies are being funded through Extramural Programs.

Paul Waugaman, Executive Officer, reported on the President's proposed budget, which shows an NIEHS increase from 84 to 97 million, providing 5 million dollars and 55 positions for staffing the South Campus support unit. Budget hearings were held before the Senate subcommittee February 5 and will be held before the House subcommittee February 28.

Dr. Robert A. Goyer spoke on the toxic chemical waste dump problem, created by disposal of 40 million tons of chemical industry waste generated each year. He said that the chemical industry is not going to begin producing less waste, so there must be proper disposal methods put into force, and better methods developed. For the immediate future, he said, public health officials are confronted with locating the toxic chemical waste dumps, since many are not even on record. Among other approaches, a toll-free telephone number has been suggested so residents can call in about suspected dumps. EPA estimates that there are 50,000 chemical waste dumps nationwide, with Michigan suspected of having approximately 200.

Dr. Goyer added that the Love Canal in New York has become the textbook case of improper disposal, with evidence of health effects being established by incidence of low birth weight and miscarriages in the area population. The situation has illustrated various points of the waste dump problem. First, that local governments and local interests bear heavily on detection of the problem and its solutions. Second, that when many chemicals are dumped on a single site, sampling and identifying them becomes immensely complex. Third, that the very complexity tests the state-of-the-art in chemical assessment. Dr. Goyer noted that toxicological data exists on less than half the chemicals identified at Love Canal.

The Council will meet again May 27-28 in Bethesda.

#### DR. RALL TO GIVE PRESENTATION AT MAJOR CANCER RISK CONFERENCE

The Institute Director will give a presentation on "Issues in the Determination of Acceptable Risk," on the first day of the conference, "Management of Assessed Risk for Carcinogens," which will be March 17 through 19 at the Mount Sinai Medical Center in New York.

The conference is being chaired by Dr. William J. Nicholson of the Mount Sinai Medical Center Environmental Sciences Laboratory which is funded in part by NIEHS. The conference will feature speakers representative of all facets of risk assessment, including those from the chemical industry; labor unions; government research agencies; regulatory agencies; as well as public health officials, scientists, and scholars from abroad. Dr. Rall is on the Advisory Committee for the Conference.

#### DR. WU TO CHAIR SESSION AT FOURTH ANNUAL SYMPOSIUM ON CANCER RESEARCH

Dr. Reen Wu, LPFT, will chair the third session of the Fourth Annual Symposium of The Cancer Research Center March 21-22 at the University of North Carolina School of Medicine in Chapel Hill. The symposium will bring together scientists from across the country working on important problems related to the regulation of cell proliferation. Researchers will discuss recent advances in the characterization of growth factors and the analysis of their regulatory mechanisms.

The symposium is being organized by Dr. W. Jackson Pledger and Dr. H. Shelton Earp of the Cancer Research Center. Attendance is free of charge except for an optional banquet on March 20. For additional information about the symposium program or for reservation information for the symposium and/or banquet, contact Ms. Mimi Minkoff at UNC-CH, 966-3036.

#### DR. FOWLER TO PRESENT PAPER AT NEW YORK ACADEMY OF SCIENCES CONFERENCE

Dr. Bruce A. Fowler, LOFT, will present a paper on the "Biological Interactions of Cadmium with Calcium" at the New York Academy of Sciences "Conference on Micronutrient Interactions: Vitamins, Minerals and Hazardous Elements," February 20-22 in New York. Dr. Fowler has done extensive research on trace metals and their relationship to nutritional factors, and was the coordinator of an International Conference on Environmental Cadmium in Bethesda in June 1978. He has also done research on the interrelationships between lead, arsenic and cadmium, silver and selenium, and other trace metals.

#### DR. BEND RECOGNIZED FOR DUTY AS ACTING LAB CHIEF

Dr. John R. Bend received special thanks in the form of a certificate and letter of appreciation from Dr. J. R. Fouts, Chief, LP, for his superior performance of duties as Acting Lab. Chief while Dr. Fouts was on a work/study assignment in Switzerland. In a special presentation at a LP Seminar, Dr. Bend was cited for his ability to encourage collaboration between scientists in and outside the Institute and for his astute administration of laboratory support, budget, and ordering procedures.



#### JOE SLATER TO ASSIST IN REWRITING NATIONAL LAB ANIMAL MANUALS

Joe Slater, a Biological Laboratory Technician with the Comparative Medicine Branch, has been asked to participate in rewriting the Assistant Laboratory Animal Technician Manual and the Laboratory Technologist Manual which are both used nationally and prepared by the American Association for Laboratory Animal Sciences.

Mr. Slater, along with Ms. Theresa K. Musser, a technician in New York, will collaborate rewriting the section on the hamster as a laboratory animal, covering the history, uses, housing, and food and water provisioning of hamsters.

This honor befell Mr. Slater because of his specialized knowledge which he acquired while developing a breeding colony of 15/16 Hamsters, a special inbred strain. The breeding colony of 80 animals is perhaps the only one in the world, since the originators of the strain have ceased breeding them. Asked about the importance of hamsters as laboratory animals, Mr. Slater explained, "Hamsters are important in carcinogenesis work because they have a unique immunologic system which accepts transplanted tumor tissue much more readily than other animals." The finished manual article will run approximately 5 to 10 pages and is planned to expand considerably on the chapter appearing in the previous editions.

#### MS. CYNTHIA HALL WINS GRAD STUDENT AWARD FOR RESEARCH PRESENTATION

Ms. Cynthia Hall, a NCSU graduate student working on her thesis research with Dr. Michael Galvin of the Laboratory of Environmental Biophysics, received one of three awards presented for graduate student presentations for her paper, co-authored with Dr. Galvin and Dr. Donald I. McRee on "Microwave Interaction with Isolated Cardiac Cells."

The awards were given for scientific papers presented by graduate students at the Southern Poultry Science Society meeting in Atlanta, Georgia, January 22-23. Ms. Hall's research involved microwave exposure of heart cells derived from 9-day-old Japanese quail embryos, and suggested that microwave radiation induces subtle alterations in cell membrane permeability.

#### DR. McLACHLAN RECOVERS FROM SERIOUS AUTO ACCIDENT

Dr. John A. McLachlan continues to make good progress recovering from injuries sustained in a serious automobile accident that occurred January 18. He was hospitalized in the intensive care unit and later on in a ward of the Duke University Medical Center, but progressed so rapidly he returned home January 26 after surgery to repair his jaw. Cards may be sent to him at home, addressed to 5901 Shamrock, Durham, N.C. 27707. Factor and all his friends at the Institute wish him speedy recovery and nominate him for the Most Durable Scientist Award. Dr. McLachlan is Head of the Transplacental Toxicology Section in the Laboratory of Reproductive and Developmental Toxicology.

From the Library: the Library Newsletter now includes a list of manuscripts approved for publication by the Scientific Director. Also, the Library reminds all patrons to be sure to check out books at the circulation desk, so they may be continuously accounted for. Journals, though not routinely checked out may be checked out to reproduce photographs.

The NIEHS Personnel Office has recently acquired a new little family member, Patrick Marcus was born to Liz and Marvin Mickens on September 27th. He processed in at 7 lbs. 13 oz. and as of his last performance appraisal he weighed 20 lbs 7 oz.

The Institute Photographic Services Contract now covers all services not provided by the NIEHS photography unit. All Lab/Branchs should use the contract with Alban Graphics, through Research Services Branch, and stop using BPA's set up during the interim period when no photography contact was in effect.

On the lighter side, at the recent Flexitime briefing, one of the scientists was heard to quip: "This Flexitime sounds great, only working 80 hours a pay period instead of the sixteen hours a day we've been working."

Safety Officer Chris Hunt qualified for certification in Comprehensive Practice of Industrial Hygiene and for membership in the American Academy of Industrial Hygiene, a professional organization for safety officers.

Ms. Martha C. Devonc, RRP, has been elected associate Loyal Lady Ruler of the University Assembly Order of the Golden Circle, a social and service organization.

#### BUILDING 15 SUGGESTION BOX GATHERS USEFUL IDEAS

The Animal Husbandry Section of the Comparative Medicine Branch initiated a Building 15 employee suggestion box in November of 1978. To date, it has proved to be successful, with 18 suggestions submitted and 12 adopted. The suggestions have ranged from safety to improving work conditions.

A few of the suggestions implemented were:

- 1) To allow parking in the Building 15's parking lot during the daylight hours on Saturday, Sunday and holidays.
- 2) To install a sink in the 1421 animal room.
- 3) To install a window in the Building 15's office door for safety.

Some of the contributors were Vergie Mangum, Harriet Burgess, Tony Alston, Willie Mae Johnson, Evelyn McCollough. Other suggestions were submitted anonymously. Congratulations to all on their excellent suggestions.

## PROCUREMENT OFFICE CAUTIONS ON PURCHASE AUTHORITY

Institute employees need to be aware of restrictions and limitations with regard to purchasing, the Procurement Office advised in a recent memo.

UNAUTHORIZED PROCUREMENTS ARE ILLEGAL. RATIFICATION OF AN UNAUTHORIZED PROCUREMENT IS EXTREMELY DIFFICULT, EMBARRASSING TO BOTH YOU AND YOUR SUPERVISOR, AND ONLY ALLOWABLE IN UNUSUAL INSTANCES. TO AVOID THEM, ALWAYS CONTACT PROCUREMENT FIRST.

Only specified individuals within the Procurement Office have the authority to commit the Government to a purchase, repair, or service of any type. The only exception would be for blanket purchase arrangements or term purchase orders, where limited authority has been granted by Procurement to an approved and designated individual to place orders up to a certain dollar value with a specific vendor.

As a Government employee without purchasing authority, you should be aware of the following limitations which apply to you where you do not have an existing, applicable, BPA or TPO:

1. You may not, without exception, provide a vendor with a purchase order number in order to speed up an order or hold certain products. Notify Procurement if an "emergency" situation exists.
2. You may not place an order directly with a vendor. Be careful when you fill out "order forms" from companies to insure that you submit them with your requisitions to Procurement rather than mailing them directly to the company.
3. You may not authorize the repair of equipment or other items.
4. You may not authorize the removal of an item for update, repair, or exchange.
5. You may not commit the Government in any way for anticipated expenditures.

## WATCH ITEM 13 IN APPLYING FOR A JOB, PERSONNEL OFFICE ADVISES

The Personnel Office offers this tip when applying for a job. On the SF-171, a question in item 13 asks for, "Lowest pay or grade you will accept." This can be very important. For example, if a posted job is offered as a GS-9 and the application says GS-11, the applicant is ineligible and no further consideration or referral is made. If an announcement says GS-4 or GS-5, and the application indicates GS-5 as the lowest grade accepted, consideration and ratings are given only for the GS-5 level. The Personnel Office reports that often an applicant is not highly qualified at the higher or maximum grade but would have been at the lower grade. Employers and applicants are urged to carefully consider what they will accept and state that fact. If you really wish consideration at all posted levels, an easy way to indicate this is to leave this item blank.

## SECRETARY HARRIS, DR. FREDRICKSON BAN SEXUAL HARASSMENT

Describing sexual harassment as a major employment problem for women and an insidious component of sex discrimination, Dr. Fredrickson, NIH Director, conveyed to NIH employees DHEW Secretary Harris' warning that, "We will not tolerate sexual harassment in this Department."

Examples of sexual harassment cited by the Secretary are explicit or implicit promise of career advancement in return for sexual favors; explicit or implicit threats that the victim's career will be adversely affected if sexual demands are rejected; and/or deliberate, repeated, unsolicited verbal comments, gestures or physical actions of a sexual nature such as touching, ogling, pinching, or patting another person.

Dr. Fredrickson said, "Women are the most common victims of sexual harassment, but men can also be affected. Pressure can come from a person of either sex against a person of the same or opposite sex and from peers as well as supervisors. It is an infringement of an employee's rights and will not be tolerated."

## WILD RODENTS PRESENT PEST CONTROL PROBLEMS

Filth that jeopardizes peoples' health, infections that threaten laboratory animals and research, property damage, and contamination of food-stuffs are cited as some of the problems caused by wild rats and mice. Their presence is often unwittingly encouraged by careless disposal of snack and lunch food and animal feed. The only sure way to keep these pests away is to eliminate their sources of food and water.

Dr. Julius Thigpen, Pest Control Officer, recently enumerated several incidents of rodent problems on the campus. He said the traps he used to catch them used adhesives that bind animals' feet and contain no toxic substances that could harm laboratory animals.

- \* A rat weighing over a pound trapped in the cafeteria stock room did \$150 damage to foodstuffs that had to be discarded.
- \* In Building 13, a wild Norway rat chewed electrical wires and plastic tubing on a spectrophotometer; wires and tubing had to be replaced.
- \* In Building 7, mice carried food into the electron microscope causing it to malfunction and closing down the approximately \$150,000 unit for several days. An EM technician had to come in to readjust the scope.
- \* Wild rats have been trapped outside Buildings 2 and 15, and one inside Building 15.
- \* About 50 mice have been trapped inside Building 14 and 15, in animal rooms, feed storage rooms, and in the warehouse where several bags of feed have had to be discarded.



--SPECIAL NOTE ON SAVINGS BONDS--

ENERGY SAVINGS BONDS PHASED IN FOR THOSE WITH ALLOTMENTS

DHEW's expected conversion date to United States Energy Savings Bonds Series EE is the pay period ending March 8, 1980 -- payday March 18. Current \$25 and \$50 Bond buyers will have their allotments applied toward EE Bonds of higher denominations. In no case will the amount allotted per pay period toward the purchase of Bonds be increased without written permission. Information and reminders on the new Bonds will be issued with Earnings and Leave Statements. Questions concerning conversion to EE can be answered by writing the U.S. Savings Bonds Division, Room 120 Federal Building and Courthouse, N.C. 27402, or telephone FTS 699-5461.

WANDERING TRAYS AND UTENSILS MAY LEAVE US EATING WITH OUR HANDS

Cafeteria manager Big John Walton and Assistant Executive Officer Battling Bob Cullen have become "trail bosses" in the big roundup of cafeteria trays and tableware that have strayed from the herd on the cafeteria line. Some of these mavericks are stranded in the snow on picnic tables across the campus and others are camped out behind cabinets, bookcases and desks in labs and offices. Meanwhile, back at the cafeteria, trays and silverware coralled there must be washed almost continuously, just to keep them ready for use in the chow line. So Pardner, lasso a stray tray, knife, fork or spoon on your way to the cook shack in Building 10. Head 'em up and bring 'em on in.

FWP TO OFFER FINAL SEMINAR IN FEBRUARY SERIES

"Child Abuse and Battered Wives" will be the subject of the next seminar in the Federal Womens Program Community Awareness Month series, and will be offered by Officer Simmons of the Raleigh Police Department and the Women's Aid Service for Abused Women February 20 in the Building 18 Conference Room. Other seminars in the series have been "How to Save on N.C. Income Tax" and "Drug Action." A "Rape Crisis" seminar was cancelled due to severe weather but will be rescheduled.

FRIENDS OF COLLEGE OFFERS 22nd SEASON

Friends of the College, a concert series billed as the "greatest concert bargain in the United States" is beginning its membership drive for its 22nd season. Concert performances by eight internationally acclaimed groups will be presented monthly at Reynolds Coliseum at NCSU, starting in October. Attendance is by season ticket only and still costs only \$10.00. Call Arneta Wicker, extension 4661 for more information, or forms for ordering tickets.



NEVER TOO LATE -- Though the story ran, the melody (and picture) linger on . . . thanks to a renewed photo contract, Factor herewith presents a picture of the champion Old Dudes and the Dudette volleyball team featured in a story last issue. Pictured left to right are Dr. Allan Wilson, Dr. Coral Lamartiniere, Dr. Dick Philpot, Dr. George Lucier, Ms. Brenda Smith, Dr. Jim Lamb, and Dr. Ken Korach. Not pictured are Dr. Pen-Erik Mansson and general manager Dr. John McLachlan.



ONE OF DOZENS OF HOLIDAY PARTIES, an open-house-style gettogether was given by Office Services in the Mail Room. The refreshments were shared with all those who stopped by. Left to right are. Lucille Reaves, Robert Pennington, Fleenoil Lane, James Isler, Dawn Fields, Lucy Flagler, and Zadock McCoy.

#### THE "BIG BANG" and the BIG ITCH

The energy of natural and other events was listed in Science, vol. 207, p. 266, 1980, and is shared with Factor readers by Dr. Herbert Posner, OHHA. Some examples are as follows: the "big bang" for creation is estimated to be  $10^{75}$  ergs; the sun's radiation,  $10^{41}$  ergs; the ocean's hydrogen in fusion,  $10^{41}$  ergs; the largest H-bomb,  $10^{24}$  ergs; a major league pitch,  $10^9$  ergs; striking a typewriter key,  $10^5$  ergs; and a flea hop,  $10^0$  (or 1) erg. It is then noted, as a side observation, that "It appears that the ocean's hydrogen could fuel the sun's radiation process for 1 year or sustain a leap for  $10^{41}$  fleas."