

The NIH Record

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Tooth Sealants Urged

Citing unequivocal evidence as to their effectiveness and safety, an NIH Consensus Development Panel has recommended widespread use of tooth sealants in millions of children to offer increased protection against tooth decay.

Sealants are currently underused in private and public dental health care delivery systems. The panel urged that "intensive efforts be undertaken" to increase their use.

The Dec. 5-7 conference, titled "Dental Sealants in the Prevention of Tooth Decay," was jointly sponsored by the National Institute of Dental Research and the NIH Office of Medical Applications of Research.

The Consensus Development Panel consisted of biomedical investigators, dentists in private practice and in public health programs, academicians, a dental hygienist, and representatives from public interest groups.

Before making their recommendations, the panel heard a day and a half of scientific presentations from experts who addressed these key questions:

(See SEALANTS, Page 10)

Dr. Albert Sabin, Co-Conqueror of Polio, Fights Polyneuritic Paralysis at CC

He has been associated with NIH for over 30 years: as a Fogarty scholar, an NCI consultant, an NINCDS investigator—and now as a patient.

Dr. Albert B. Sabin, who developed the oral polio vaccine that helped eradicate polio nearly worldwide, is himself now paralyzed.

Diagnosed with an undetermined form of polyneuritis that has affected him mostly from the waist down, the 77-year-old medical pioneer has been hospitalized at the Clinical Center since October as a subject of research on polyneuropathies.

NINCDS scientists are investigating what causes polyneuritis and how to treat it. According to Dr. John Sever, chief of the NINCDS Infectious Diseases Branch, "We are examining the possibility that polyneuritis may be triggered by a viral infection."

Dr. Sever says that Dr. Sabin is a particularly interesting study patient because of his prior exposure to measles virus. Until the onset of his illness last May, Dr. Sabin was working with Dr. Sever and other colleagues on an aerosol vaccine designed to immunize children against measles in developing nations.

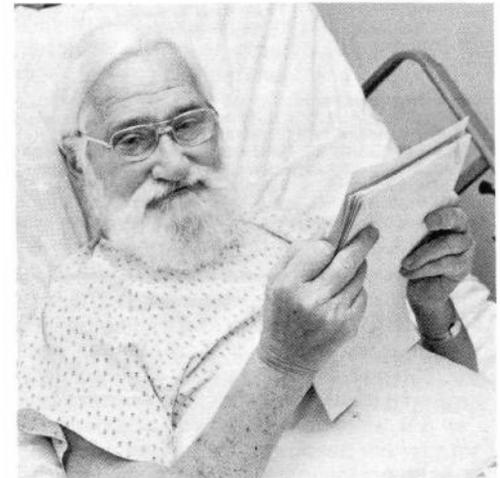
"It is unlikely that Dr. Sabin's work on the measles vaccine caused his neuropathy," said Dr. Marinos Dalakas, an investigator in the Clinical Investigations Section of the NINCDS Infectious Disease Branch. "But we're studying the possibility by measuring the antibodies to several viruses in his serum."

In the 8 weeks since being admitted to NIH, Dr. Sabin has recovered substantially, especially movement in his back and legs. Dr. Dalakas has done extensive research on the disorder that afflicts Dr. Sabin, technically termed chronic idiopathic polyneuropathy. "In our patients, we have found abnormal proteins in the spinal fluid and immunoglobulin deposits on the nerves," he explained. "These tell us that the patients may have an underlying defect in their immune systems, making antibodies against their own nerves."

To lower the production of abnormal immunoglobulins in the spinal fluid and serum, neuropathy patients receive immunosuppressant drugs, a treatment that was studied at NINCDS about 5 years ago. One such drug, prednisone, has emerged as the agent of choice: with it, most patients have regained much of their strength.

NINCDS research revealed the optimal dosage and timing of prednisone administration to prevent side effects or recurrence of weakness.

"If prednisone alone isn't helpful," Dr. Dalakas said, "we use other immuno-



Dr. Albert B. Sabin, a research patient at the Clinical Center, looks up from reading material on his measles vaccine research.

suppressant agents. Then, depending on our success, we may go to plasmapheresis, a process that removes putative antibodies from the blood that are potentially toxic to the nerves."

(See SABIN, Page 12)



Senator Lowell P. Weicker (Conn.) and staff members recently visited NIH. After NIH Director Dr. James B. Wyngaarden (l) welcomed Sen. Weicker to the ACRF, they visited the surgery observation area and the clinical pathology department, Institute laboratories involved with cancer and molecular genetics, and listened to presentations by four Institute Directors on chemoprevention, tropical diseases, child health research issues, and Alzheimer's disease and other dementias.

Genital Herpes Without Sex Possible, Scientists Say

Plastic-coated chairs and benches in the warm, moist environments of health spas may be the sources of nonsexually transmitted genital herpes, according to Drs. Lata S. Nerurkar, John L. Sever and colleagues in NINCDS's Infectious Diseases Branch.

The scientists report in the Dec. 9 *Journal of the American Medical Association* that under simulated health spa conditions, the herpes virus can survive on plastic surfaces for several hours.

More than five million Americans have genital herpes, and at least 300,000 new cases occur annually. The disease is usually caused by Herpes Simplex Virus Type 2.

"Let's not forget that the vast majority of genital herpes is spread as a sexually transmitted disease," Dr. Sever said. "But now that the virus is known to survive on plastic surfaces, it is possible that not every single case of herpes is transmitted sexually."

(See HERPES, Page 10)

The NIH Record

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Training Tips

The following courses, sponsored by the Division of Personnel Management, are given in Bldg. 31.

Office Skills	Course Dates	Deadline
Scientific Terminology	2/7	1/17
Executive, Management and Supervisory		
Federal Budget Process	1/25	1/9
Manage Your Meeting	1/24	1/6
Understanding and Managing Stress	2/22	2/6
Managing Performance Feedback	2/8	1/20
Communication Skills		
Assessment One: Job Analysis	1/11	12/12
Interpersonal Problem Solving	1/24	12/19
Effective Oral Communication	2/27	1/23
Advanced Assessment DELPRO	3/5	1/30
*Delegated Procurement		
Stock Requisition	2/10	1/22

To learn more about these and other courses, contact the Development and Training Operations Branch, DPM, 496-6371.

Dust Allergic Volunteers Sought for Skin Tests

The Allergenic Products Branch, FDA, is conducting a survey of the importance of common allergens found in house dust. Volunteers who are dust allergic will be skin tested to a variety of allergens found in dust. These allergens include molds, insects, mites and animal allergens. If you are interested in participating, contact Dr. Paul C. Turkeltaub or Dr. Charles O. Roberts on 496-4204. □

Parking Permits Up For Renewal

All NIH parking permits—general employee, preferential (red) and carpool—will expire sometime in 1984, and must be renewed.

The first—general parking permits of persons whose last names start with A and B—must be renewed in January.

General employee permits expire during various months as determined by the first initial of the employee's last name. All red permits expire in April and all carpool permits expire in October.

A few days before the month in which their permits expire, employees will receive a notice reminding them of the expiration date and giving details on getting new permits.

Employees will have the entire month to get their replacement permits. One employee can pick up permits for other employees if the individual has the necessary NIH Identification cards, and where necessary, copies of each vehicle's registration certificate. (See below.)

Renewal Schedule

All employees with general permits whose last name starts with A or B must renew their permits during January 1984.

Other renewal months as determined by initials follow:

C and D-Feb.; E, F and G-Mar.; H, I and J-May; K and L-June; M and N-July; O, P, Q and R-Aug.; S and T-Sept., and U, V, W, X, Y and Z-Nov.

Getting New Permits

To obtain a new general employee parking permit, employees are asked to come to the NIH Commuter Assistance Office, Bldg. 31,

Men Needed for Exercise Stress Study

The Department of Operational and Emergency Medicine in conjunction with the Exercise Laboratory, Departments of Physiology and Medicine at the Uniformed Services University of the Health Sciences (across from NIH), need volunteers for a study that will evaluate the differences in populations of white blood cells in physically unconditioned versus conditioned subjects. Preliminary data suggest that, with stress, there is a higher production of white blood cells in conditioned people.

Three Groups Needed

Three groups of men are needed: Non-conditioned men (with no regular endurance exercise regimen); men who run 5–15 miles per week; and men who run 50 or more miles per week.

All subjects must be nonsmokers between the ages of 18 and 40. A couple of hours one morning is all the time that is required for the test. Testing will be supervised by a physician. Benefits to the subject include physical fitness and heart disease risk evaluations.

If you are interested in volunteering, or want more information, contact: Ann Curiale, Department of Physiology, USUHS, 4301 Jones Bridge Rd., Bethesda, MD 20814, telephone, 295-3511/3623. □

Rm. B1C19, between 8:30 a.m. and 3:30 p.m. any workday during the appropriate month. Employees must present their NIH Identification Card and provide their building, room, and office telephone number.

Vehicle Registration Certificates

Employees who need only one parking permit may get it without a vehicle registration certificate.

Employees needing two or more parking permits, must provide a copy of the registration certificate for each vehicle on which the parking permits will be displayed. Employees making a second visit to the Commuter Assistance Office to obtain a second parking permit will be asked to provide a registration certificate for the vehicle displaying the parking permit already obtained, and for the vehicle which will display the additional permit. These copies of the registration certificates will be retained by the Commuter Assistance Office.

New parking permits will be valid for one year from the month in which they are issued. Permits will continue to be in the form of bumper stickers, and are to be permanently affixed on the driver's side of both the front and rear bumpers of employees' vehicles so that the entire sticker is clearly visible. Specific instructions on the proper placement of the parking permits will be provided with the new permits.

Existing parking permits may be peeled from the bumpers or removed with wood alcohol. New permits may also be placed over the expired ones.

New general employee parking permits must be displayed, beginning Wednesday, Feb. 1, 1984.

For additional information, please contact Cheryl Amatucci, Bldg. 31, Rm. 4B30, telephone 496-7644. □



Charles I. Twigg, a computer systems analyst in the Division of Computer Research and Technology, recently won first place in the Frederick County Horseshoe Pitching Championship beating out nearly 40 other participants.

—Photo by Richard T. Meagher, Frederick Post

NIH Tennis Club Winners Announced

Dr. Raymond Chen, NHLBI, was the winner and Herbert Dorsey, Bureau of Biologics, FDA, the runnerup, in the final standings of the NIH R&W Tennis Club ladder which had 61 participants. □

LINC: Genesis of Technological Revolution In Computing Celebrates 20th Anniversary

Twenty years ago this year, two scientists from the Lincoln Laboratories of the Massachusetts Institute of Technology (MIT) developed the Laboratory Instrument Computer (LINC), the first personal computer. As the principal sponsor of the LINC, the U.S. Public Health Service recently hosted a symposium marking the 20th anniversary of that event.

"Triggering breakthroughs in computer architecture, peripheral devices, and software, the LINC launched the minicomputer industry and ushered in the era of the personal computer," said Dr. William F. Raub, NIH Deputy Director for Extramural Research and Training and one of the coordinators of the LINC 20th anniversary symposium.

"The consequences of this innovation are visible today in virtually every field of science and commerce. The contributions to biomedical research and health services in particular have been immeasurable," he added.

Developed in 1963 by Wesley A. Clark and Dr. Charles E. Molnar of MIT, the LINC began a succession of advances leading to the multibillion dollar minicomputer industry of today. Today's desktop computers are direct descendants of this device.

Funds provided by NIH and the National



Dr. Molnar, currently director, Computer Systems Laboratory, Washington University in St. Louis, explains the section of the LINC he was associated with, as did each of the symposium speakers involved with LINC's creation. At the end, the LINC was reassembled.

ingenious synthesis of technical capabilities. The computer, though physically large by modern standards, was small enough to be accommodated directly in a research laboratory. The LINC tape was small enough to fit in a jacket pocket.

It was designed to satisfy four basic criteria: easy to program, easy to communicate with while in operation, easy to maintain and able to process biotechnical signals directly. Later, Mr. Clark added that it could not be too high to see over, and must cost at most \$25,000, the amount a lab director could spend without higher-level approval.

The programming language was simple enough for even novices to master quickly yet powerful enough to subserve an extraordinary variety of information-processing tasks. The operating systems (those programs that generally must be resident for the computer to function) and the hardware complemented each other beautifully, making the display screen and the pocket-sized LINCtapes very easy to use.

In addition, the ability to program the conversion of electrical signals either from analog form (varying voltages) to digital form ("bits") or the reverse, offered unprecedented opportunities for laboratory scientists to analyze and act on their experimental data while experiments were still in progress.

At the time of LINC's development, a typical research lab included an assortment of instruments for sensing and recording experimental data. To modify an experiment in progress based on the accumulating results was often impossible or difficult, at best.

When researchers had access to a digital computer, it was often a large machine serving an entire university, and direct control of experiments under such conditions was out of the question. Scientists had turned to digital computers almost solely for data analysis. But LINC seemed to promise real-time experiment control only dreamed of by some researchers.

Like many researchers ready and eager to try out their new LINC's, Joseph Hind, a University of Wisconsin neurophysiologist, put his LINC to work on his lab's study on the physiology of the auditory system, particularly the response of single neurons.

"LINC revolutionized the practice of neurophysiology. The LINC instruction set was amazingly visionary and far-reaching in its power," he said. Speaking recently he said, "Even today, machines lack the characteristics of LINC, especially its potential for hands-on control of experiments." He reported that "no experiment was ever interrupted or data lost by a LINC failure."

Not only was LINC an extraordinarily effective laboratory instrument, its reliability became legendary. After extensive evaluation, it was demonstrated that with a LINC, experiments could be designed and executed more quickly and efficiently. But more importantly, LINC had stimulated new insights into biomedical processes, knowledge that could only be gained with on-line, hands-on experiment control.

As computer components became faster and cheaper over time, the LINC's ultimately were replaced by newer machines. But its heritage endures. LINC pointed the way for succeeding information-processing generations. Perhaps equally important, the LINC program demonstrated that resourceful and imaginative Federal management could influence the course of both science and industry. □



NIH Director Dr. James B. Wyngaarden (l), HHS Assistant Secretary for Health Dr. Edward N. Brandt Jr. (c), and HHS Secretary Margaret M. Heckler attended a banquet for the LINC symposium participants.

Aeronautics and Space Administration fueled the efforts that established the LINC as a technological breakthrough. These funds helped the MIT group to demonstrate the feasibility of its concepts and enabled scientists in a wide variety of research settings, including several laboratories studying the cardiovascular and central nervous systems, to evaluate the new computer firsthand.

The LINC quickly emerged as a uniquely powerful laboratory aid, offering for the first time in a small, self-contained, programmable device such features as "on line" acquisition of experimental data, "real-time" control of laboratory instruments, and data analysis facilitated by conversational programs and a TV-like display screen.

Success of the LINC came from an



SEEING BY TOUCH—Deborah Sugg (standing) a computer programmer with a contractor at the National Institute of Environmental Health Sciences in Research Triangle Park, N.C., shares her expertise in using a braille computer terminal with a student from the Governor Morehead School for the Blind in Raleigh, N.C. Ms. Sugg, with her Red Setter guide dog Julie, has made working at the Institute routine, with a few adjustments such as placing braille labels above the elevator buttons. A group of students visited the Institute for a special demonstration of Ms. Sugg's use of the braille terminal.

Drs. Leventhal, Stadlan Appointed to NINCDS Top Program Positions As Overseers of Demyelinating, Atrophic, and Dementing Disorders

Drs. Carl M. Leventhal and Emanuel M. Stadlan have been appointed director and deputy director, respectively, of NINCDS's Demyelinating, Atrophic, and Dementing Disorders Program.

Before his appointment, Dr. Leventhal had served on detail as a senior policy analyst for life sciences in the White House's Office of Science and Technology Policy. A neurologist and research administrator, Dr. Leventhal's personal research interests have been degenerative neurological disorders of adult life, brain tumors, and the neurological aspects of cancer.

He returns to NINCDS where he began his Public Health Service career in 1964. During his career in Federal service, he has also been associated with the National Cancer Institute, and held the positions of assistant to the NIH Deputy Director of Science, deputy director of FDA's Bureau of Drugs, and deputy director of the National Institute of Arthritis, Metabolism, and Digestive Diseases.

Dr. Leventhal is a graduate of Harvard College and the University of Rochester Medical School. He was trained in medicine at the Johns Hopkins Hospital, and in neurology and neuropathology at Massachusetts General Hospital.

Dr. Standlan is a neurologist and neuropathologist who has been with NINCDS since 1979 as a medical officer (research) and chief of research programs in demyelinating, sclerosing, and infectious diseases of the nervous system.



Dr. Leventhal

A clinical professor at Georgetown University, Dr. Stadlan has served as chief of the division of neuropathology at the University of Tennessee Center for Health Sciences in Memphis, and as professor of pathology and neurology at the University of Tennessee. He has also held professorships in neurology at the University of Minnesota, Minneapolis, and has consulted in neuropathology at a number of health-care facilities, including St. Jude Children's Research Hospital in Memphis.

Dr. Stadlan received his B.S. and M.D. degrees from the University of Wisconsin, Madison, and served his neurology residency



Dr. Stadlan

at the University of Miami-Jackson Memorial Hospital. He was an NIH Special Fellow in Neuropathology and Neurology at the Neurological Institute of Columbia University College of Physicians and Surgeons.

The NINCDS Demyelinating, Atrophic, and Dementing Disorders Program was established in November 1982, and focuses extramural research support in the degenerative diseases of adult life, including Alzheimer's, Parkinson's, and Huntington's diseases. The program also administers research investigations in areas such as neuroimmunology, neuroendocrinology, and pain. □

Americans Underestimate Seriousness of Digestive Diseases, Know Little and Discuss Less About Them, Poll Shows

Americans don't think of digestive diseases as a serious health problem, according to a new Louis Harris poll, even though digestive diseases are the leading cause of hospitalization in the U.S. today.

Twenty million Americans are victims of chronic digestive diseases. The survey results indicate that widespread ignorance, belief in myths, and embarrassment about the diseases are commonplace.

The digestive system, which includes the esophagus, stomach, intestines, gallbladder, liver, pancreas, colon and rectum, is affected by a wide range of acute and chronic diseases.

"The first large-scale survey of its type shows that there is a stigma associated with digestive diseases and widespread ignorance and lack of appreciation for the seriousness of digestive diseases on the part of the American public," said Dr. Brent D. Ruben, chairman of the National Digestive Diseases Education Program Steering Committee and coordinator of the survey.

"Because of the stigma associated with rectal bleeding, constipation, or hemorrhoids, Americans are often too embarrassed to discuss their problem openly, and as a result may not get the health care they need," he said.

This study entitled, "Public Perception of Digestive Diseases: Lack of Knowledge, Misinformation and Myth," was conducted by

Louis Harris and Associates in consultation with the National Digestive Diseases Advisory Board, and is the first undertaking of the newly formed National Digestive Diseases Education Program to improve public, patient, and professional knowledge of digestive health and disease.

Because of the stigma Americans attach to digestive diseases, 63 percent of workers interviewed say they would feel very comfortable discussing chest pains with their supervisor, but only 20 percent say they would feel equally comfortable discussing a constipation problem.

Twenty-six percent say they would not feel comfortable discussing hemorrhoids. And while 47 percent say they would feel comfortable discussing the problem if they were coughing up blood, only 28 percent would feel at ease discussing rectal bleeding.

The survey also revealed that Americans have misconceptions about digestive health. Two-thirds of those surveyed agreed with the statement "a bowel movement each day is necessary for good digestive health," although most medical experts feel this is false.

Over half of the people responding said they thought that high-powered business executives are more likely than most people to develop ulcers, a view that is not shared by medical experts.

The study found that Americans believe

they know less about the nature and symptoms of digestive diseases than they know about cancer, heart, respiratory or circulatory disorders. Suzanne Rosenthal, president of the Coalition of Digestive Disease Organizations, pointed out, "Even people who have direct experience with digestive diseases do not know much about them."

Survey results also indicate that the public has little knowledge of the purpose and function of specific digestive organs, and is less familiar with methods used to detect digestive disorders than with comparable tests for other diseases.

In view of this limited understanding, it is not surprising to find that Americans do not consider digestive diseases to be very serious health problems, the study notes. Of the eight health problems examined, digestive diseases were perceived as least serious—behind cancers, heart disorders, respiratory diseases, diabetes, disorders of the nervous system, circulatory disorders and arthritis.

Also cooperating in this effort to combat digestive diseases were the National Digestive Diseases Education and Information Clearinghouse, National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases, 20 lay and professional organizations represented by the Coalition of Digestive Disease Organizations, and pharmaceutical and instrumentation companies. □

New CC Blood Bank Chief Sets a Fast Pace, On and Off Job

Everybody knows that you can't just walk in and give blood at a blood bank—you have to come clean first regarding your medical history.

It may be of some comfort to those who plan to donate blood at NIH that the new chief of the Clinical Center Blood Bank is forthright about his own addictions: novels, children's soccer and running.

Dr. Harvey G. Klein—formerly of Harvard (College), Johns Hopkins (medical school, intern/resident, hematology fellow), 9 years as number two at the Blood Bank, acting chief since Aug. 1 and now chief of that institution—may be known best by the professional milestones he has passed.

But to many people he is probably better known as one of the runners who include Cedar Lane as part of their daily jog.

"I used to run in marathons," Dr. Klein said. "Now I'm a little older and wiser."

The Boston native has twice competed in the marathon held yearly in his home town, with 3:12 being his best time. "I was not in competition," he admits.

"I think it's marvelous that people can push themselves that far. My basic philosophy is 'When it hurts, slow up.'"

The father of three (two daughters and a son, who plans a career as both professional soccer player and offseason scientist), looks forward to several changes in the operation of the Blood Bank.

"We are hoping to renovate in the next 6 months. We are one of the last departments to do so," Dr. Klein said.

His two main professional interests at the moment are upgrading the tissue-typing lab and developing increased capability to radiolabel cells other than red cells.

Regarding the current blood donor drive, Dr. Klein is something less than sanguine:



Dr. Klein

"We are still not where we'd like to be.

"The NIH donor pool (2,000 people, two-thirds of whom give regularly) is extremely important to us. We are very eager to expand that pool." He considers the number of active donors relatively small, given that more than 12,000 people work at NIH.

The Blood Bank, which is responsible for supplying blood and blood products to patients at the Clinical Center, is only meeting 65 percent of the current demand for red blood cells. The other 35 percent must be purchased from the Red Cross, Dr. Klein said.

The rate of deposit at the Blood Bank is about 5,000 units of blood a year, a very small fraction of which involve any side effects on the part of the donor.

"We rarely see reactions," Dr. Klein said. "Maybe one in 500 experiences transient diz-

ziness. Severe reactions are extremely rare, maybe one or two a year.

"There is good evidence that blood donors are healthier than nondonors," Dr. Klein explained. Due to the aforementioned predonation health screening, medical problems such as hypertension can be detected before they threaten a donor's health.

Routine lab work performed on blood samples has also yielded diagnoses of hepatitis and, in one case, detection of unusual antibodies that made one person a poor candidate for transfusion. That person, who did not know of his condition before, was given a card which would alert medical authorities to dangers of transfusion in his case.

Dr. Klein could probably do well to leave his running shoes on after his workout: in addition to supervising 63 Blood Bank employees, he is an attending physician in clinical hematology for the National Heart, Lung and Blood Institute, and is involved in several research projects, including an investigation of problems related to chronic transfusion in patients suffering from sickle cell anemia.

Regarding the professional standing of the organization he's taking over, Dr. Klein remarked that the Blood Bank has an international reputation for the quality of its work in hepatitis research, mainly due to Dr. Harvey Alter, chief of the immunology section, and former chief, Dr. Paul Holland.

The Blood Bank is also interested in determining whether AIDS (acquired immune deficiency syndrome) can be transmitted through blood.

Dr. Klein assures donors that none of their blood is wasted: the demand for platelets is "enormous" at NIH, mainly due to cancer research. And, the one percent of blood that is technically "outdated" (stored for longer than the 35-day limit) is used in research conducted by Institutes. □

Jessalyn L. Pendarvis, Appointed New Director, Division of Equal Opportunity

Jessalyn L. Pendarvis was recently appointed Director, Division of Equal Opportunity.

Ms. Pendarvis comes to NIH from the U.S. Commission on Civil Rights where she served as the Director of EEO since 1979. In that capacity she had responsibility for the development, implementation, and monitoring of all EEO programs, including complaint processing, affirmative action, Federal Equal Opportunity Recruitment Program (FEORP), special emphasis programs, upward mobility, and employee counseling. She has also served as project director in the Commission's Office of Program and Policy review, and as branch chief in the Commission's Office of National Civil Rights Issues.

Prior to joining the staff of the U.S. Commission on Civil Rights, she held positions as an attorney in the Civil Rights Division of the Department of Justice and as a hearing examiner in the Appeals Examining Office of the Office of Personnel Management.

Ms. Pendarvis graduated from Tuskegee Institute with a B.S. degree in political science in 1969 and from the University of Notre Dame Law School in 1972.



Ms. Pendarvis

She has conducted a number of EEO-related workshops and seminars. She has directed projects which produced a number of important publications which include: *De-*

segregation of the Nation's Public Schools: 29 Case Study Monographs; The State of Civil Rights (1977 and 1978); and Report on Findings of Religious Discrimination. She is active in a number of professional, civic, and service organizations.

Ms. Pendarvis assumed her new position today. All inquiries related to equal opportunity matters should be directed to her on 496-6301. □

BodyWorksWonders Begins

"BodyWorksWonders" will kick off its third year with NIH with two new programs designed to make you feel good all over. Both workouts offer cardiovascular endurance, coordination with muscle-toning work. The longer evening program also features deep stretching and constructive rest techniques. The program is designed and taught by Andrea Shaw, M.A. in dance and former staff member, UCLA.

Times: 12:15-12:45—Tues., Thurs;

5:15-6:15 p.m., Mon., Wed., Fri.

Place: All classes are taught in the Clinical Center 14th Fl. gymnasium.

Fees: Lunchtime class—\$28—Classes begin

Jan. 3 and run for 7 weeks. Evening class—1

week—\$25; 2 weeks—\$40; 3 weeks—\$45.

Classes begin Jan. 4. □

NCI Holds Awards Ceremony

Twenty-six National Cancer Institute employees were recognized for special achievements at the Institute's award ceremony on recently in Wilson Hall. NCI Director Dr. Vincent T. DeVita Jr. presided.

Two senior NCI scientists received PHS Outstanding Service Medals, honoring commissioned officers for continuing outstanding leadership or for a single accomplishment that has had a major effect on the health of the nation. The awards went to:

- Dr. Bruce Chabner, director of the Division of Cancer Treatment, for his "significant scientific and management contributions to the research programs and management" of the division.

- Dr. Peter J. Fischinger, associate director, NCI, for his "outstanding leadership, initiative and judgment" in contract competition and scientific evaluation of the Frederick Cancer Research Facility.

Eight PHS Commendation Medals were awarded to commissioned officers who have provided unique or imaginative solutions to problems, or made noteworthy technical and professional contributions to a particular area. They are:

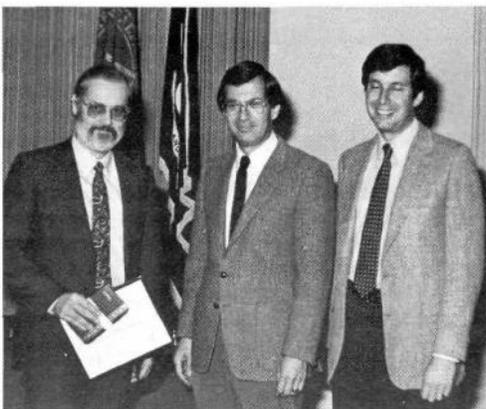
Dr. Jeffrey Cossman, a senior investigator in the hematopathology section of the Laboratory of Pathology, DCBD; Dr. Dorothy K. Macfarlane, program director for the Community Clinical Oncology Program, DRCCA; Dr. Douglas R. Lowy, deputy chief of the Dermatology Branch, DCBD; Dr. Paul H. Sugarbaker, a senior investigator in the Colorectal Cancer Section of the Surgery Branch, DCT; Dr. Lance A. Liotta, chief of the Laboratory of Pathology, DCBD; Dr. Berge Hampar, general manager and project officer, FCRF; Dr. Peter Greenwald, director, DRCCA, and Dr. Alfred Singer, Immunology Branch, DCBD.

Glenn A. Hegamyer, health services officer in the Cell Biology Section of the Laboratory of Viral Carcinogenesis, DCCP, received a PHS Achievement Medal.

Seven NCI employees received NIH Merit Awards, presented annually to a limited number of NIH employees whose superior service and achievement warrant special honorary recognition. Dr. DeVita presented plaques to:

Takis S. Papas, head of the Carcinogenesis Regulation Section and acting chief of the Laboratory of Molecular Oncology, DCCP; Dr. Jerome W. Yates, associate director of Centers and Community Oncology, DRCCA; Dr. Miriam C. Poirier, research chemist in the *in vitro* Pathogenesis Section, Laboratory of Cellular Carcinogenesis and Tumor Promotion, DCCP; Ruth D. Davis, toxicologist in the Toxicology Branch, Developmental Therapeutics Program, DCT; Dr. Alan S. Lichter, head of the Clinical Radiotherapy Section, Radiation Oncology Branch, DCT; John J. Barone, administrative officer of the Intramural Research Program, DCBD, and Rose C. Blake, grants financial analyst in the Grants Financial Data and Analysis Branch, Office of Administrative Management.

Four EEO Special Achievement Awards and one EEO Honorable Recognition Award were then presented by Dr. DeVita. "The dedicated people receiving these awards



Drs. Fischinger (l) and Chabner (r) receive PHS Outstanding Service Medals from Dr. DeVita.

have generously given their time to further EEO concerns and have made outstanding contributions to our EEO effort," he said.

The EEO Special Achievement Awards went to:

Dr. Curtis Harris, chief, Laboratory of Human Carcinogenesis, DCCP; Dr. David Jofes, chief, Contracts Review Branch, Division of Extramural Activities; Patricia Newman, chief, Reports Section, Reports and Inquiries Branch, Office of Cancer Communications, and Dr. Jeffrey Schlom, chief, Laboratory of Tumor Immunology and Biology, DCBD.

The EEO Honorable Recognition Award was presented to Helen Abbott, formerly a secretary in the Biometry Branch, Field Studies and Statistics Program. Although not now an NCI employee, she received the award for her outstanding support and dedication to the NCI EEO Program over 3 years ending in March of last year.

The final awards went to people with "staying power" Three employees received 40-year Length of Service Awards "not only for their longevity on our work force, but also for the quality of their work over many years." They were:

William Foster Jr., a biological laboratory technician (microbiology) with the Laboratory of Tumor Immunology and Biology, DCBDF, until his retirement from NCI last February; William Lourie Jr., a health statistician in the Demographic Analysis Section of the Biometry Branch, Field Studies and Statistics Program, DCCP, and Hilda Wexler, a biologist in the Tumor Immunology Section of the Surgery Branch, DCT. □

January 12 Deadline Announced For Two STEP Study Sessions

Application deadline for two modules being offered through the Staff Training in Extramural Programs (STEP) is Jan. 12. The sessions are Politics of Health Legislation: Forces and Interactions (Apr. 26-27); and NIH and Business: Partners in Research (May 8-9).

The modules have been designed primarily for personnel in extramural programs. Applications from other NIH staff members will be considered.

The brochure detailing this year's STEP Program is available in personnel offices or from the STEP Program Office, Bldg. 31, Rm. 1B63, (496-1493). □

NIH Nears CFC Goal

NIH has reached the 96 percent mark in pursuit of its 1983 Combined Federal Campaign goal of \$326,000. As the largest single agency in the Department of Health and Human Services, NIH has been asked to increase its contributions by 18 percent over last year to help the department reach its goal of \$1 million. Through Dec. 9, 4,770 employees had contributed \$312,640 to the 1983 CFC, an increase of 13 percent, or \$36,000, over 1982.

Five of 18 BIDs had over 50 percent participation, led by DRR with 93 percent, NIGMS with 72 percent and DRG with 59 percent. The NIH average to date is 36 percent participation. Five of 18 BIDs have collected more than \$40 per employee (NIGMS, DRG, DRR, NLM, and NICHD) with NIGMS being the first BID ever to contribute over \$50 per employee. The NIH average to date is \$23.49. Seven of 18 BIDs increased their contributions by more than 25 percent over last year, with the largest increases being registered by NIA (62 percent), DRS (50 percent) and NLM (39 percent).

The Lister Hill Center for Biomedical Communications produced a prototype training film for NIH Key/Workers that is being considered for government-wide use in the 1984 campaign.

(See accompanying story on NIEHS CFC Campaign.)

NIEHS Tops Own CFC Record

The National Institute of Environmental Health Sciences has topped its old record of contributions to the Combined Federal Campaign in Research Triangle Park, N.C. This year \$20,968.40 was contributed by 269 NIEHS employees, exceeding last year's record total of \$16,776.50.

The campaign was bolstered by a kickoff memorandum from NIEHS Director Dr. David P. Rall, who served as chairperson for the campaign.

CFC was also boosted by an information meeting for volunteer Key Workers who contacted their fellow employees, as well as lunchtime screenings of the CFC film featuring Washington Redskins' quarterback Joe Theismann.

Posters and standup cards throughout the Institute supplemented a special information effort to explain the advantages of CFC as a way to exercise choice in charitable giving.

Paul G. Waugaman, NIEHS executive officer, served as NIEHS representative on the Research Triangle Area CFC Committee, and Carol Matheny of the NIEHS Extramural Program was the Institute's CFC coordinator. Assisting her were Dr. William Lawrence, employee counselor, who served as coordinator, and Tom Hawkins, public affairs specialist, who served as CFC publicist.

Dr. Rall said, "On behalf of the Institute, I extend thanks to everyone who contributed to the Combined Federal Campaign this year and thereby made an important contribution to the quality of life in the Research Triangle Park area, and to helping agencies that reach across the United States and around the world as well." □

Three Indian Med Students at NCI Plan Ultimate Return to Reservations to Practice

Three American Indian college students from the *Indians into Medicine* (INMED) program at the University of North Dakota School of Medicine, have been working in the laboratories of NCI's Division of Cancer Cause and Prevention, learning scientific procedures common in today's cancer research.

The three students are planning careers in science and medicine.



Sharon Malotte

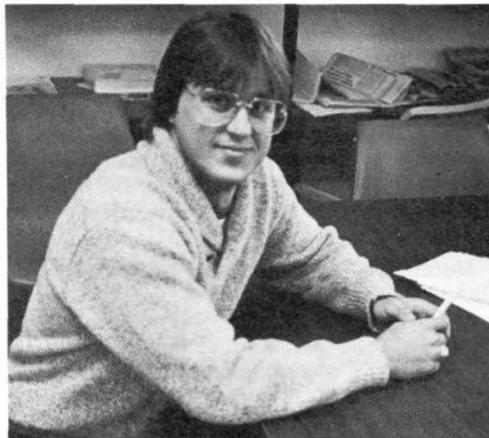
Sharon Malotte, of the Te-Moak Band of Western Shoshones of Northeastern Nevada, worked this past summer in the NCI Laboratory of Cellular and Molecular Biology, where she helped conduct sequencing experiments with the genetic information of retroviruses.

"My experience at NCI has been invaluable," she said. "Learning laboratory techniques and using laboratory equipment has greatly enhanced my knowledge of biochemistry and oncology." While on the east coast, Sharon visited Indian reservations in North Carolina and met with one of North Dakota's U.S. senators.

A graduate of Stanford University with a B.A. degree in human biology and additional social science background in Native American culture, Sharon is currently enrolled in the INMED program to prepare for medical school. When her medical training is com-

pleted, she plans to return to her tribe to practice in one of the two Indian Health Service hospitals in Nevada.

Barry Bender, a member of the Sioux Nation, spent this past summer in the Laboratory of Molecular Oncology, FCRC, where he helped with experiments on cell transformation by the ocogenes of retroviruses. After completing his medical training, Barry ex-



Barry Bender

pects to return to the South Dakota Cheyenne River Indian Reservation, where he spent much of his childhood, to work in the hospital.

"I saw suicide, diabetes and alcoholism become more common among the Indians while I was growing up," Barry said. "There was frequent turnover among the medical staff at the hospital, both because they didn't understand the Indian way of life and because of the prejudices the physicians experienced on the reservation."

Barry feels the INMED Program is "... finding people who understand the Indian culture and ways on the reservations, and giving them the training and the opportunity to work in health careers there." He is currently taking science courses at the University of North Dakota to prepare for medical school.

Margaret Henke, a member of three affili-

ated tribes, the Mandan, Hidatsa, and Arikara, is currently employed by the Laboratory of Human Carcinogenesis. As a biological technician, she prepares tissue cultures and is learning DNA isolation techniques.

A graduate of Washington State University with a B.S. degree in biology, Margaret was enrolled in zoology courses at the University of North Dakota, preparing for medical school entrance exams, when she learned of the opportunity to work at NIH.

The INMED Program is operated by the University of North Dakota School of Medi-



Margaret Henke

cine in Grand Forks to serve 22 reservations in North Dakota, South Dakota, Montana, Wyoming, and Nebraska. The program offers a variety of full-year academic programs aimed at increasing the interest of Indian students in health careers, helping them receive the necessary training, and assisting in placing them in health careers in Indian communities.

INMED works with Indian communities and schools to identify students with an aptitude for a medical career. Once enrolled in the program, students receive services such as career assistance, financial support, tutorial and resource services, and access to support groups.

For further information on the program, contact: INMED, Box 173, University Station, Grand Forks, N.D. 58202, phone (701) 777-3037.—**Sharon Quinn** □

Four Scholars-in-Residence Arrive for Study at FIC

Four Fogarty International Center scholars-in-residence have recently arrived at NIH.

Dr. Leon Heppel was educated at the University of California at Berkeley and at the University of Rochester. He joined the NIH research staff and was chief of the Laboratory of Biochemistry and Metabolism, NIAMD (now NIADDK), when he left in 1967 to assume his present position of professor of biochemistry and molecular biology at Cornell University.

He is well known for his earlier work on polynucleotides and in recent years has been concerned with membrane biochemistry, particularly protein kinases dependent on cyclic-AMP.

While he is at NIH, he will be associated with Dr. Claude Klee, NCI, with whom he collaborated during his first term in 1982.

Prof. Helmut Holzer, head of the Biochem-

istry Institute, Albert Ludwigs University in Freiburg, Germany, is beginning his final term as a Fogarty scholar.

Dr. Holzer's scientific work has dealt with the regulation of metabolic processes and the application of regulatory mechanisms to the field of differentiation.

During this term, Prof. Holzer will continue his collaboration with Dr. Ernst Freese in the Laboratory of Molecular Biology, NINCCS.

Also beginning a final term as an FIC scholar is **Dr. Bracha Ramot**, professor of medicine and head of the Institute of Hematology at the Chaim Sheba Medical Center in Tel Hashomer, Israel.

Well known for her studies on hematologic neoplasia and on the chemotherapy of malignant disease, she will be consulting with NIH scientists about AIDS.

Dr. David Givol is beginning his Fogarty

residence. He is professor of chemical immunology at the Weizmann Institute of Science, Rehoboth, Israel.

Dr. Givol was educated at the Hebrew University, where he studied biology. He received his Ph.D. in biophysics from the Weizmann Institute, to which he returned in 1974 after spending some time at NIH and in London.

His research has contributed much to our knowledge of immunoglobulins and antibodies. A particularly significant contribution was his preparation of antiframework antibodies to the V-region of mouse immunoglobulins which are of value in characterizing determinants on T-cells. His recent work has been concerned with antibody structures and their genetic control.

Drs. Heppel, Holzer, Ramot, and Givol can be reached at 496-1213. □

PET, Radiopharmaceuticals, Monoclonal Antibodies Have Revolutionized Diagnosis of Cancer, Heart Disease, Etc.

Nuclear technology is finding increasingly varied applications in the world of medicine, and the Clinical Center's Department of Nuclear Medicine is at the forefront of research and development in this field.

The creation of new radiopharmaceuticals and monoclonal antibodies and the development of precision scanning instruments to detect radioactive emissions have revolutionized the diagnosis and treatment of cancer, heart disease, neurological disorders, and numerous other human ills. Here are some of the highlights in nuclear medicine today.

Positron Emission Tomography

Positron emission tomography, or PET scanning, enables scientists to study the biochemical function of a living organ rather than just look at its structure and anatomy. Most impressive so far are studies of the human brain. One way to study brain activity is to measure glucose consumption in the brain.

To do this, a compound very similar to glucose, called fluorodeoxyglucose, is tagged with a radioactive isotope and injected into a patient's vein. The fluorine-labeled deoxyglucose is taken up by the brain and metabolized. Sensitive detectors surrounding the patient's skull measure the amount of radiation emitted by the isotope.

These emissions indicate the location and extent of chemical activity in different regions of the brain. PET scans may reveal abnormalities in brain function that could indicate the presence of a tumor or perhaps dementia or psychosis.

Radiopharmaceuticals

Various positron-emitting radionuclides must be available for different procedures if

the PET scanner is to be used to its fullest potential. Radionuclides can be produced with a cyclotron, an apparatus that accelerates atomic particles to sufficiently high speeds and energy so that, upon collision with a target, a radioisotope is created.

The Clinical Center has been preparing radionuclides at the Naval Research Laboratory's cyclotron. Radionuclides with very short half-lives are useful for only a limited amount of time, however, and some cannot be transported the distance from NRL to NIH.

Therefore, the Nuclear Medicine Department recently purchased its own cyclotron, and construction has already begun to house the apparatus. This will enable the department to produce radionuclides that previously were unavailable for use at the Clinical Center.

Monoclonal Antibodies

Monoclonal antibodies have been dubbed "magic bullets" and "guided missiles" by a medical community excited about the applications of these substances for diagnosis and therapy. For example, an antibody to a specific cancer antigen can be tagged with a radioisotope and injected into a patient's bloodstream.

The antibodies will circulate through the body and bind only to the targeted cancer cells. The radiation concentrated in areas of tumor makes it possible to scan and diagnose malignancies that are not yet apparent on X-ray or by other diagnostic methods.

These antibodies also have potential use in therapy. A tagged antibody can bind to the targeted cancer cells and release radioactive energy that kills only those cells without damaging healthy tissue, unlike chemotherapy.

NIGMS Names Dr. Wolff Deputy Associate Director

Dr. David A. Wolff of the National Institute of General Medical Sciences has recently been promoted to deputy associate director for program activities. Previously, he was assistant to the associate director for program activities.

Before joining NIGMS, Dr. Wolff was a health scientist administrator in NIDR (1979 to 1982) and a DRG grants associate (1978 to 1979).

Before coming to NIH, Dr. Wolff conducted research on animal viruses and taught courses in microbiology to graduate, professional, and undergraduate students at Ohio State University. In his 14 years there, he moved from assistant professor to associate and then full professor.

Dr. Wolff received his Ph.D. in microbiology and virology in 1965 from the University of Cincinnati. Among the professional societies to which he belongs are the American Society for Microbiology, American Society for Cell Biology, and American Association for the Advancement of Science. □



Dr. Wolff

Marilyn Farrand, NHLBI, Receives Medallion Award

Marilyn E. Farrand, public health nutritionist, Preventive Cardiology Branch, Division of Heart and Vascular Diseases, NHLBI, has received the Medallion Award from the American Dietetic Association. One of five members so honored, Ms. Farrand received the award during the 66th Annual Meeting of the Association in Anaheim, Calif.

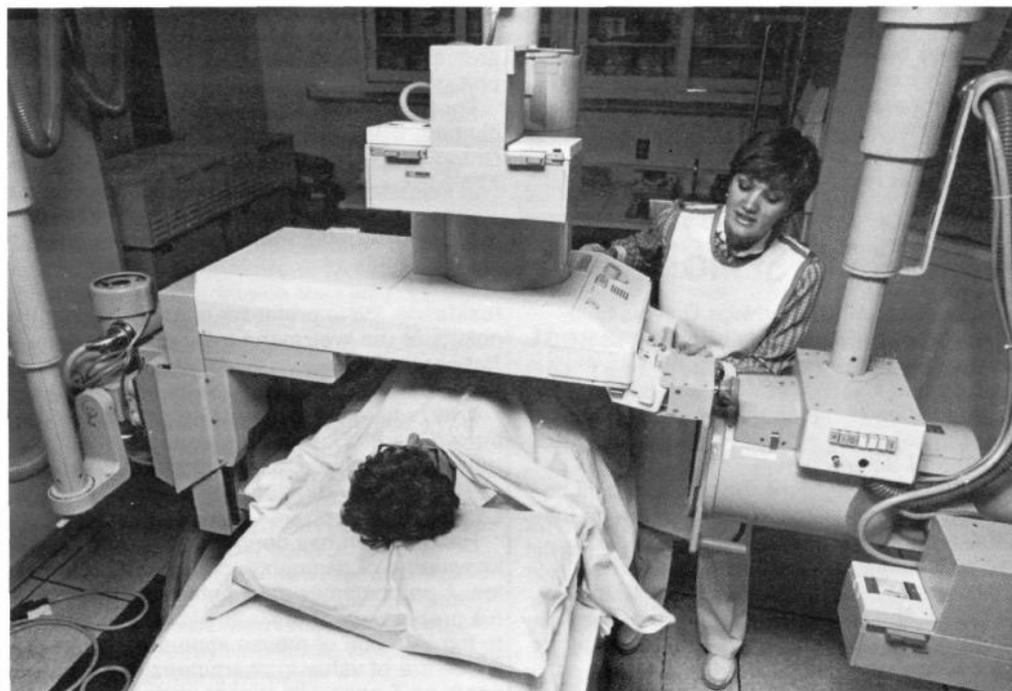
She was cited for outstanding leadership in the ADA, her exemplary contributions and high professional standards as a dietician, author and leader, her dedication to the prevention and treatment of cardiovascular disease through influencing the food habits of the public, and her personal qualities of leadership, dedication and generosity of spirit which serve as a role model for dietitians and other health professionals.

Ms. Farrand received her bachelor's and master's degrees from Case-Western Reserve University in Cleveland. She worked for the (then) National Heart Institute at the Cleveland Clinic Research Division as a nutritionist with the Dietary Project for the Control of Serum Lipids and the National Diet Heart Study from 1962-1967.

From 1967 to 1970, Ms. Farrand worked as a public health nutritionist with the Diabetes and Arthritis Control program of the Public Health Service, Washington, D.C. She joined NHLBI in 1970. □



Ms. Farrand



A technician in the Diagnostic Radiology Department demonstrates a bi-planar fluoroscope, which mixes X-rays in two planes of the body on both sides eliminating the need to turn a patient.

CC Blood Bank Discovery Enlarges Transfusion Supply

NIH investigators have found that the current minimum volume requirements for whole blood collection may be reduced to 275 ml. from the current minimum volume of 405 ml. This reduction in the minimum volume will allow the salvage of undercollected units that are currently discarded, and greatly increase the supply of blood available for transfusion.

The American Association of Blood Banks and American Red Cross have long required that the volume of whole blood drawn in standard blood packs be between 405 and 496 ml. The volume requirement was set in the 1940s when a certain anticoagulant-preservation solution was in common use. Today another solution which is superior in maintaining red cell viability during prolonged storage is widely used.

Dr. Richard J. Davey and colleagues at the CC Blood Bank have studied post-transfusion survival of red cells collected in both standard (450 ml.) and undercollected (275 ml.) volumes and stored for 5 weeks in the standard volume of anticoagulant. They found that the posttransfusion red cell survival is actually higher in the smaller units. This indicates that blood collected in small amounts meets survivability criteria for use in transfusion.

Reducing the minimum volume of whole blood accepted for donation could add the equivalent of between 55,000 and 109,000 units to the nation's yearly blood supply. □



Dr. Veronica Carstens, wife of the President of the Federal Republic of Germany, recently visited the NIH Clinical Center to learn about current research at NIH in multiple sclerosis (MS) and four NINCDS laboratories and the MS ward. The photograph on the left shows Dr. James B. Wyngaarden, Director of NIH, escorting Dr. Carstens through the lobby of the Clinical Center. In the photograph on the right, Dr. Dale E. McFarlin, chief, Neuroimmunology Branch, NINCDS, (2nd from l) is describing multiple sclerosis research activities in one of the NINCDS laboratories to Dr. Carstens.



Stress Management—How To Deal With It

The Occupational Medical Service will present a multidimensional program covering different aspects of stress management. There will be a short film, followed by a discussion with demonstrations on how to ease the tension of stress by Rachelle Selzer, Employee Counseling Service, and the NIH Fitness Center.

The program will be offered at the following dates and locations at 11:30 a.m. and 12:15. Tues. Jan. 17, Bldg. 10, Masur Auditorium. Wednesday, Jan. 18, Bldg. 1, Wilson Hall. Thursday, Jan. 19, Westwood Bldg., Conf. Rm. D. Friday, Jan. 20, Bldg. 38A, Rm. B1N30B. Monday, Jan. 23, Federal Bldg., Conf. Rm. B119. Tuesday, Jan. 24, Blair Bldg., Rm. 110. Wednesday, Jan. 25, Bldg. 13, Rm. G313. □

Summation of Civil Rights Contract Compliance Program

The NIH Division of Contracts and Grants is sponsoring a program entitled, "The NIH Contract Compliance Program for Civil Rights—Six Years of Progress" on Jan. 19.

The purpose of the program is to commemorate the accomplishments of the NIH Contract Compliance Program. The focus will be on the contributions of the NIH project officers and contracting officers/contract specialists to the Contract Compliance Program at NIH. All NIH project officers, contracting officers, and contract specialists are invited to participate.

For additional information, contact Maureen B.E. Miles, NIH Contracts and Grants Compliance Officer, Division of Contracts and Grants, Bldg. 31, Rm. 1B-50, 496-2973. □

Visiting Scientists Program Participants

Sponsored by Fogarty International Center

- 11/21—**Dr. Paul Amstad**, Switzerland. Sponsor: Dr. Curtis Harris, Laboratory of Human Carcinogenesis, NCI, Bg. 37, Rm. 2C07.
- 11/21—**Dr. Erella Livne**, Israel. Sponsor: Dr. Constance Oliver, Laboratory of Oral Biology and Physiology, NIDR, Bg. 30, Rm. 212.
- 11/23—**Dr. Kendo Kiyosawa**, Japan. Sponsor: Dr. Robert H. Purcell, Laboratory of Infectious Diseases, NIAID, Bg. 7, Rm. 202.
- 11/27—**Dr. Michele E. C. DeBortoli**, Italy. Sponsor: Dr. Yoon L. Cho-Chung, Laboratory of Pathophysiology, NCI, DCBD, Bg. 10, Rm. 5B43.
- 11/27—**Dr. Andrea Levi**, Italy. Sponsor: Dr. Bruce Paterson, Laboratory of Biochemistry, NCI, DCBD, Bg. 37, Rm. 4A21.
- 11/27—**Dr. Ban-Hock Toh**, Australia. Sponsor: Dr. Clarence J. Gibbs, Laboratory of Central Nervous System Studies, NINCDS, Bg. 36, Rm. 4A17.
- 11/28—**Dr. Jean P. Caron**, France. Sponsor: Dr. Bruce Nisula, Developmental Endocrinology Branch, NICHD, Bg. 10, Rm. 10B09.
- 11/28—**Dr. Monique Moreau**, France. Sponsor: Dr. Willie F. Vann, Laboratory of Bacterial Polysaccharides, NCDB, Bg. 29, Rm. 532.
- 12/01—**Dr. Matthias Kraus**, Germany. Sponsor: Dr. S. A. Aaronson, Laboratory of Cellular and Molecular Biology, NCI, Bg. 37, Rm. 1A07.
- 12/05—**Dr. Yasuko Uchigata**, Japan. Sponsor: Dr. Bellur Prabhakar, Laboratory of Oral Medicine, NIDR, Bg. 30, Rm. 122.
- 12/06—**Dr. Zoltan Szurmai**, Hungary. Sponsor: Dr. Josef Pitha, Macromolecular Chemistry Section, NIA, GRC, Baltimore.

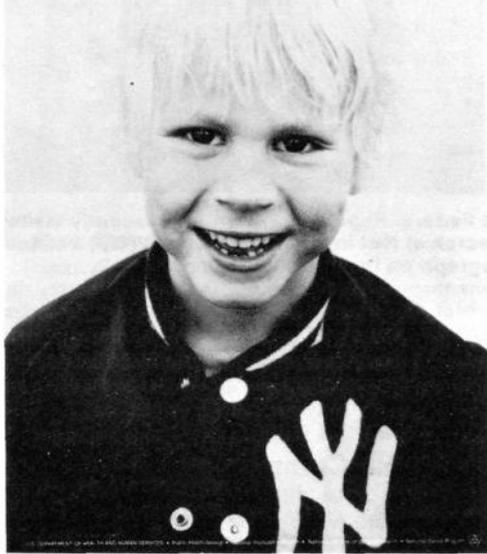


NICHD Director Dr. Mortimer B. Lipsett (l) recently presented the NIH Award of Merit to (l to r) Robyn Mathis, and administrative officer of the Institute's Intramural Research Program, for her contributions to the successful management of that program; Dr. Robert A. Weisberg, chief of the Microbial Genetics Section in the Laboratory of Molecular Genetics Branch, for his research in recombinant DNA; and Dr. Thor A. Fjellstedt, health scientist administrator in the Clinical Nutrition and Early Development Branch of the Center for Research for Mothers and Children, for his management of research on the nutritional and health benefits of human milk.

SEALANTS

(Continued from Page 1)

Sealants and Fluorides: A Winning Combination for Tooth Protection



This poster is available on request from the National Caries Program, Westwood Bldg., Rm. 549, 5333 Westbard Ave., Bethesda, MD 20205.

- With the current widespread use of fluorides and the general decrease in caries among children, is there a need for sealants?
- How effective are sealants?
- Are there risks associated with the use of sealants?
- What are the indications for using sealants in individual and community-based caries preventive programs?
- What are the clinical procedures involved in successful sealant application, and what training and education are required?
- What factors have influenced and should influence the adoption and utilization of sealants for caries prevention?
- What is the current status of sealant research and what should be the research priorities for sealants and their implementation?

1983-84 Washington, D.C. Coupon Book Available

The Maryland and Virginia editions of the Washington D.C. Coupon Book are available now at all R&W Gift Shops and the Activities Desk. Fifty-five pages of "Super Discounts"—**Food**—All Two for One—including Arby's, Holiday Inn, Oscar's Place (MD) and Arby's, Maxim's, Rustler (Va.) plus many more; **Entertainment**—Brandywine Stables, Market Tire, Putt Putt, Roth Theatres, Sam's Car Wash, etc. A great value for \$4. Get yours today! □

The reason the way of the transgressor is so hard is because it's so crowded.—*Kin Hubbard* □

The panel stated that the use of sealants in addition to fluorides would substantially reduce the occurrence of dental caries (tooth decay) in the U.S. population. Results published from the 1979-80 National Dental Caries Prevalence Survey (coordinated by NIDR) indicate that tooth decay among school children has decreased markedly during the past decade largely because of access to fluorides through community water fluoridation, school-based fluoride mouthrinse and tablet programs, and fluoride toothpastes.

Fluorides are mainly effective on the smooth surfaces of teeth, but most cavities occur on the chewing surfaces that have pits and fissures where food and bacteria become trapped.

Applying sealants—clear plastic films—to the chewing surfaces of teeth effectively guards against decay. Research findings over the past 15 years have consistently demonstrated that sealants provide 100 percent protection when retained on the tooth. The application of sealants is a painless procedure, involving no loss of tooth structure.

The panel strongly urged that all patients and parents be made aware of the availability of sealants, and appropriate use encouraged. Those individuals who can benefit most from the treatment are children with newly erupted molar teeth.

Dentists, dental hygienists, and dental assistants trained in the procedure can apply sealants. The plastic films may be placed on both primary (baby) molars and on permanent molars. Currently, there are three types of sealants, named according to the method they are cured (hardened)—chemical or self-cured, ultraviolet light-cured, and visible light-cured.

The application of sealants is a simple procedure. First, the chewing surfaces of molars are cleaned and dried. Next, the surfaces are etched with a mild phosphoric acid solution to improve adhesion. The teeth are washed and thoroughly dried, with care taken to avoid contamination by saliva. The sealant is then placed on the prepared surfaces and cured to hardness.

With the research findings overwhelmingly pointing to the benefits of sealants, the panel now urges practitioners, dental health agency directors, and dental health educators to incorporate the use of sealants into their practices and programs. □

Workshop on Head and Neck Cancer Scheduled for January 18-19 at NIH

On Jan. 18-19, the Division of Cancer Prevention and Control (DCPC) of the National Cancer Institute is sponsoring a workshop entitled "Head and Neck Cancer: The Integration of Treatment and Rehabilitation."

The theme of this workshop is the prevention or reduction of morbidity in patients treated for head and neck cancer. The workshop will be held in the Lister Hill Auditorium at NIH.

For further information contact Linda Wong, NCI/DCPC/CORB, Blair Bldg., Rm. 7A-05, Bethesda, MD 20205, phone (301) 427-8708. □

HERPES

(Continued from Page 1)

The few cases in which nonsexual transmission of the virus may occur probably involve other factors in addition to sitting on contaminated benches, Dr. Sever said. Most likely the virus would have to invade a person through a scratch or abrasion on the skin, he said. The virus may also be able to enter an area of skin that has been irritated by rubbing, he added.

Benches and chairs in recreational facilities are often coated with plastic. To approximate survival conditions of herpes simplex virus on these seats, the NINCDS investigators placed the virus on plastic Petri dishes and incubated them at a temperature and humidity normally found in spas.

Since these facilities are usually heated to about normal body temperature, the virus has a potentially ideal climate in which to survive. In the laboratory, the virus lived for about 4 hours on the plastic dishes, Dr. Nerurkar said.

"This survival rate means that some preventive measures should be taken to avoid nonsexual transmission of the virus," Dr. Sever said. Recreational staffs could wash plastic-coated seats with bleach to kill the herpes virus deposited by infected people, he said, but the very next person to sit on a clean bench could have herpes lesions.

Dr. Sever recommends that health spa bathers place clean, dry towels on seats to avoid inadvertently picking up herpes. He also suggests that towel sharing be avoided.

Though these simple precautions should be taken outside the hot tub, inside the tub bathers needn't worry about nonsexual herpes transmission, he said. "The water that we tested was safe," Dr. Sever said. The scientists could not find herpes virus in water samples obtained from spa hot tubs. In addition, when the virus was added to the samples, the organisms were instantly destroyed.

The scientists report that the organisms were probably inactivated by the chlorine and bromine routinely added to tub water as disinfectants. □



Dr. Patsy Hallock Sampson, coordinator of Adolescence Research and executive secretary of Maternal and Child Health Research Committee, NICHD, from 1973 to 1975, was inaugurated as the first woman president of Stephens College in Columbia, Mo.

Dr. C.E. Taylor Wins Young Investigator Award

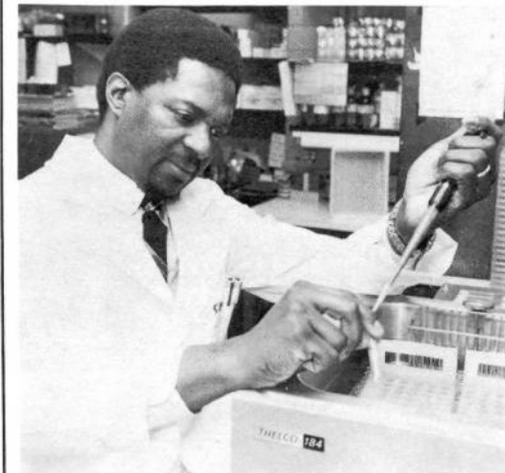
Dr. Christopher E. Taylor, visiting fellow with NIAID's Laboratory of Microbial Immunity, was presented a Young Investigator Award at the 23rd Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC) held recently in Las Vegas.

Dr. Taylor and three other investigators were selected as the first four recipients of this new ICAAC Award given to "outstanding researchers for their special contributions."

Dr. Taylor joined NIAID in 1981 under the sponsorship of Dr. Phillip E. Baker, head of LMI's Microbiology and Immunology Section. He is studying the regulation of the antibody response to the capsular polysaccharide of type III *Streptococcus pneumoniae* by suppressor and amplifier T cells.

Surface Antigens

His research has added new information concerning surface antigens, as well as other characteristics of regulatory T cells. Recently, he demonstrated that suppressor T cells can be activated by determinants on antigen-stimulated B cells.



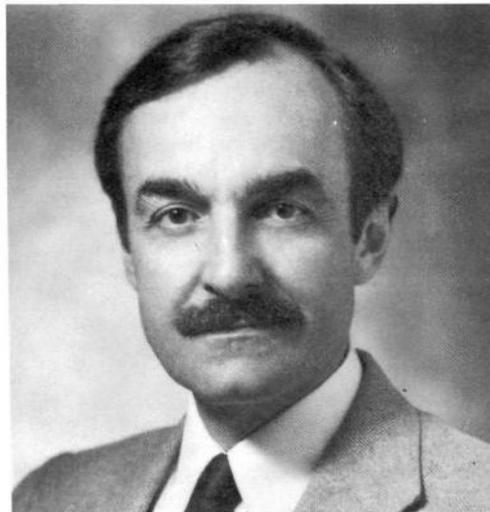
Dr. Christopher E. Taylor, visiting fellow with NIAID's Laboratory of Microbial Immunity, pipetting splint cells into a glass tube.

The Young Investigator Awards, established in 1983 for ICAAC through the American Society for Microbiology, are sponsored by Merck Sharp & Dohme. A total of four awards will be given annually at the ICAAC—two to infectious disease fellows and two to predoctoral and postdoctoral students in the basic sciences.

Nominees must be in "any of the sciences associated with the discovery, understanding, or application of chemotherapeutic agents as well as the study of infectious disease processes."

Born in Freetown, Sierra Leone, Dr. Taylor earned his B.S. and M.S. degree from Tuskegee Institute in Alabama, where he was the Institute Scholar in the School of Applied Sciences in 1971. He studied molecular microbiology and biochemistry at Purdue University of Indiana prior to attending the Johns Hopkins University School of Hygiene and Public Health where he was awarded the Sc.D. in virology in 1981. □

Dr. Pierre Renault New NIADDK Deputy Director



Dr. Renault

Dr. Pierre F. Renault has been appointed deputy director of the National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases (NIADDK) by Institute Director Dr. Lester B. Salans, effective Dec. 1, 1983.

Dr. Renault joined NIADDK in May 1982 as associate director for program planning and analysis. In that position, he had responsibility for overseeing development of the NIADDK research plan and research initiatives, and advising the Director on policy issues relevant to planning, program and policy analysis, and legislation.

A PHS commissioned officer, Dr. Renault received his M.D. degree from the University

of California, San Francisco, in 1962. He later trained in internal medicine and served as an internist in the U.S. Navy.

He completed a residency in psychiatry at the University of Chicago and later joined the faculty doing research in psychopharmacology and serving on the psychiatric consultation service of the University of Chicago Hospital.

After joining PHS in 1974, Dr. Renault became the chief, Clinical Behavioral Branch, Division of Research, National Institute on Drug Abuse, and later associate director for medical and scientific evaluation of the National Center for Health Care Technology, prior to joining NIADDK.

Dr. Renault is an assistant professor of psychology at The Johns Hopkins University School of Medicine and is a distinguished affiliate of the division of psychopharmacology of the American Psychological Association.

NIADDK conducts and supports biomedical research on many of the most serious diseases affecting the public health through grants and contracts to universities and medical schools throughout the United States, and at its own facilities in Bethesda, Md.

As NIADDK deputy director, Dr. Renault will assist in overseeing the functions of the Institute's six divisions: Arthritis, Musculoskeletal and Skin Diseases; Diabetes, Endocrinology and Metabolic Diseases; Digestive Diseases and Nutrition; Kidney, Urologic and Hematologic Diseases; Extramural Activities; and Intramural Research. □

Ultrasound Used in Measuring Oral-Motor Dysfunction

Measuring oral-motor dysfunction in persons with neurological disorders that affect speech, chewing, and swallowing has been shown to be aided by real-time ultrasound.

Devised by Clinical Center researchers, the ultrasound imaging system provides a reliable, harmless, and noninvasive technique for imaging lingual functions and soft tissue visualization of the oral area.

In the past researchers had to impose awkward or harmful procedures that interfered with normal articulation. This new system allows the subject to speak normally without jaw restriction or exaggerated head postures and to swallow. It also allows comparison and retrieval of multiple repetitions of speech samples in a digital format that can be subjected to computer analysis.

The system, devised by Drs. Barbara Sonies, Rehabilitation Medicine Department,

and Thomas Shawker, Department of Diagnostic Radiology, has use in diagnosing a variety of neurological conditions.

These include disorders that affect the muscles and nerves controlling the tongue, palate, lips, pharynx and larynx. It allows visualization of abnormal patterns of tongue movement, including involuntary contractions and tremor.

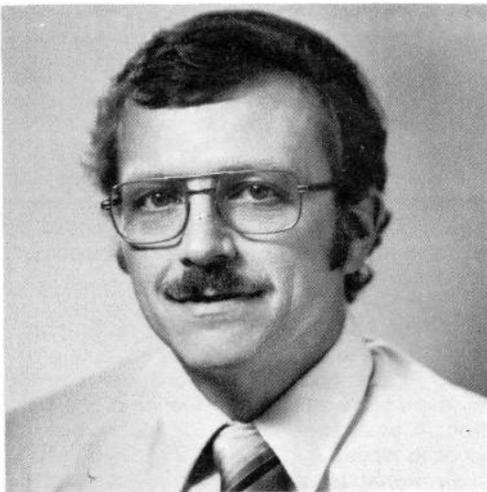
Another application involves predicting oral-motor problems that are life-threatening to the elderly and are sometimes manifested as sleep and swallowing disorders.

In addition to diagnosing oral-motor dysfunction, researchers at NIH are also exploring ultrasound of the tongue as a biofeedback training technique in treatment of articulatory and swallowing disorders. □

Cross Country Ski Trips

The R&W Ski Club is sponsoring cross-country ski trips. For instance, a 1-day trip to New Germany State Park, Md., on Jan. 28. Cost per person \$25; equipment is \$12 extra. Transportation will be by carpools. Instructions and light snack included.

A 2-day trip to Canaan Valley, W. Va., on Feb. 11-12. Cost is \$130 per person which includes: 2 nights lodging, 2 breakfasts, 2 lunches, 1 dinner, and 3 hours of lessons. Equipment rental is \$12 extra. Transportation will be by carpools. □



Dr. Hubbard

Dr. Van Hubbard Appointed Division Program Director

Dr. Van S. Hubbard was recently appointed nutrition program director of the Division of Digestive Diseases and Nutrition of the National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases. Dr. Hubbard has been associated with the Institute's Pediatric Metabolism Branch since 1976.

In his new position, Dr. Hubbard will administer the Institute's extramural nutrition program for research grants, contracts, training and fellowship awards. He will represent NIADDK on the NIH Nutrition Coordinating Committee and will share responsibility for the NIADDK national cooperative program with the National Cancer Institute for support of core grants for Clinical Nutrition Research Units.

In 1974, Dr. Hubbard was awarded both a Ph.D. degree in biochemistry and an M.D. degree from the Medical College of Virginia, Virginia Commonwealth University. He performed his internship and residency in the department of pediatrics, University of Minnesota Hospitals, Minneapolis. He is a Diplomate, National Board of Medical Examiners, and certified by the American Board of Nutrition and the American Board of Pediatrics.

Since 1979 he has been a senior surgeon of the U.S. Public Health Service. Dr. Hubbard is a fellow of the American Academy of Pediatrics and the American College of Nutrition. He is also a member of the American Society of Clinical Nutrition, the American Institute of Nutrition, the American Thoracic Society, and the North American Society of Pediatric Gastroenterology, among others.

Since 1981 he has been an assistant professor of child health and development at George Washington University; chairman of the nutrition advisory subcommittee, NIH Quality Assurance Committee; and a member of the board of trustees of the Cystic Fibrosis Foundation, Metropolitan Washington D.C. chapter. □

The test of a vocation is the love of the drudgery it involves—*Logan Pearsall Smith* □

SABIN

(Continued from Page 1)

Should these regimens fail, a compound containing interferon, now under design, will be used experimentally in the future. Researchers are evaluating the use of interferon in treating another neurological disorder, amyotrophic lateral sclerosis (Lou Gehrig's disease) and plan to extend their knowledge to polyneuropathy.

"What we have done over the years," explained Dr. Dalakas, "is to identify treatable causes of neuropathy, whether they be metabolic, viral, immunologic, or simply unknown." Immunology is an especially promising area in which scientists have had some success; they hope to develop even stronger agents to manipulate the immune system.

Among the forms of polyneuropathy, scientists have characterized at least three types: chronic idiopathic demyelinating polyneuropathy; polyneuropathy associated with monoclonal gammopathy, and amyloid polyneuropathy.

As an example of progress in these areas, Dr. Dalakas noted: "We've been able to characterize the type of amyloid—hard protein deposited in muscles and nerves of these patients—which is directing us to the appropriate therapy. We've also been able to identify the nature of the circulating immunoglobulin relative to the type of nerve component—such as myelin—it is directed against. These findings have helped us to study successfully a number of those patients referred to us with severe muscle weakness.

Neuropathy patients like Dr. Sabin are admitted to the Clinical Center for four major research purposes:

- to assess the status of the immune system (abnormal immunoglobulins, abnormal parameters in the spinal fluid, abnormal subsets of lymphocytes).
- to investigate the peripheral nervous system by doing nerve biopsies (looking for abnormalities in the myelin and Schwann cells, or deposits of immunoglobulins in myelin or blood vessels).
- to understand and develop treatments for the disease by defining an abnormality in the immune system and characterizing biochemically the responsible antigens.
- to look for viruses in the serum and spinal fluid, for possible association with neuropathies.

His experience as a research patient has brought Dr. Sabin new realizations about modern medicine. "For one thing," he said, "I am more than ever aware of the importance of controlling pain. Physicians should do everything possible to stop it. And," he continued, "I recognize the need for close surveillance of patients by medical staff."

One of the mainstays in Dr. Sabin's progress has been his Brazilian-born wife of 11 years, Heloisa. "She's my partner," he said, smiling. "If it hadn't been for her, I wouldn't be alive."

What about his goals for the future? "I want to be able to walk again," he said. "I can't be sure I will, since no one knows exactly what this condition is. But I am encouraged by my improvement thus far." Of his professional work, he says that he looks forward to "finishing the business of eliminating measles in tropical and subtropical areas by the mass use of the aerosolized vaccine."—**Emily Rudin** □

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