

The NIH Record

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National
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of
Health

Nutrition College Honors Dr. Shock

NIH scientist emeritus, Dr. Nathan W. Shock, received the 1981 award of the American College of Nutrition during their 22nd annual meeting, Sept. 14-15, in Bethesda. He also gave a lecture on the Relationship of Nutrition to Aging.

Dr. Shock was honored in recognition of his outstanding research contributions to the knowledge of the role of nutrition on the biochemical, physiological and psychological aspects of aging.

For four decades, he has been a prominent national and international leader in the field of gerontology. He was the first scientist to recognize the importance of undertaking long-term studies of the aging process in a healthy, community-dwelling population.

Dr. Shock has served as both chief of the Gerontology Research Center, and scientific director of the National Institute on Aging. In addition, he is a former president



of the Gerontological Society, and also the International Association of Gerontology.

His numerous honors include distinguished service recognition from HEW, the American Heart Association, and the Gerontological Society. He has also received the Brookdale Award from the Gerontological Society, the William O. Thompson Research Award from the American Geriatrics Society, and the Ollie A. Randall Award from the National Council on the Aging.

Currently, Dr. Shock continues his work as NIH scientist emeritus at the NIA Gerontology Research Center in Baltimore. □

Soft Tissue Sarcoma Treatment Advance Announced by Cancer Institute

Researchers at the National Cancer Institute have announced a major advance in treatment of patients with soft tissue (muscle, fat, nerve, and connective tissues) sarcoma of the extremities. Carefully designed combination treatments—surgery, radiation, and chemotherapy—have dramatically increased survival rates and spared the majority of these patients from amputation of a limb, the researchers reported.

“Our studies reinforce the fact that careful application of the right combinations, sequences, and amounts of treatment can produce substantial improvement in patient outcome,” Dr. Steven A. Rosenberg, chief, NCI Surgery Branch, and principal investigator, commented.

“A major finding of the studies is that aggressive use of chemotherapy immediately after surgery can lead to marked improvement in freedom from disease recurrence, and possible cure of these patients. The chemotherapy was given even though there was no clinical evidence of disease spread at that time,” Dr. Rosenberg said.

In two recent NCI studies involving 43 and 64 patients, respectively, the disease-free 3-year survival rates of patients in the new treatment programs rose to 91 percent compared to generally reported 40 to 50 percent survival rates in such patients. Most recurrences are known to take place in the first 2 years after therapy.

“While long-term followup of patients in the NCI studies will be needed,” Dr. Rosenberg added, “this effective treatment of soft tissue sarcomas uses principles that may be applicable to the treatment of other solid tumors with low cure rates.”

The new treatment strategies developed at NCI for soft tissue sarcomas of the extremities have not only increased survival rates, but substantially improved the quality of life. Limb sparing was possible in most of the patients without additional risk of disease recurrence.

Since 1975, there have been no local (at the site of the tumor) recurrences of cancer in NCI patients meeting criteria for limb salvage designed by the studies. This compares to a generally reported rate close to 40 percent for local recurrences. The NCI criteria enabled limb-sparing surgery in about two-thirds of the patients.

The researchers also made special efforts to define and monitor side effects of radiation and chemotherapy with the ultimate goal of minimizing toxicities associated with effective treatments.

Soft tissue sarcomas are cancers of the connective tissue, such as muscle, fat, and nerves. These sarcomas are highly malignant solid tumors which strike mostly people in their twenties, thirties, and forties. There are an estimated 5,000 new cases a

(See *SARCOMA*, Page 9)

ACRF Dedication Will Be Held On Thursday, October 22

The dedication ceremony of the Warren Grant Magnuson Clinical Center and the Ambulatory Care Research Facility is scheduled for Thursday, Oct. 22, at 11 a.m. in Masur Auditorium.

Dr. Thomas E. Malone, Acting NIH Director, will introduce Richard S. Schweiker, Secretary of the Department of Health and Human Services.

A luncheon honoring former Senator Magnuson will be held at noon in the lobby of the ACRF. Invited guests include congressmen, former NIH Directors and Deputy Directors, deans of medical

(See *DEDICATION*, Page 6)

Nobel Prize Winners Announced

Two NIH grantees and one NIMH grantee will share the 1981 Nobel Prize for Physiology or Medicine for their work on “signals to the human brain” and “information processing in the visual system.” The awards were announced by the Royal Academy in Stockholm, Sweden.

Dr. Roger W. Sperry of California Institute of Technology has been a longtime grantee of the National Institute for Mental Health. Dr. David H. Hubel and Dr. Torsten Wiesel, received NIH grant support for many years at Harvard University through the National Eye Institute and the Division of Research Resources.

Complete details will be given in the next issue of the *NIH Record*.

The NIH Record

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Art Auction Will Benefit Child Care Programs

On Friday, Oct. 23, Parents of Preschoolers, Inc., will hold an art auction at the Stone Ridge School, 9101 Rockville Pike, Bethesda, to benefit their child care program.

The auction, conducted by the Art Guild Gallery of Bohemia, N.Y., will include a wide selection of art at reasonable prices. Most of the work presented will have a starting bid of \$30 to \$75.

Activities of the evening will include a wine and cheese preview of the art, beginning at 7:30 p.m., with the auction starting at 8:30 p.m.

Tickets are \$2.50 each, and may be purchased at the R&W Activities Desk in Bldg. 31, or the NIH Preschool Development Center in Bldg. 35.

For further information call, 496-5144. □

MLAB Computer Course Offered

On Nov. 5, the Laboratory of Statistical and Mathematical Methodology of the Division of Computer Research and Technology will begin a course on MLAB, an interactive system for mathematical modeling.

This versatile computer language assists in performing such varied functions as radioimmunoassay analysis, molecular weight determination, the study of infectious disease dynamics, and modeling of simple enzyme reactions.

MLAB results may be displayed as high-quality graphics on video display terminals or on plotting devices. The plots produced on paper by MLAB are of publication quality. Newly available fonts allow the MLAB user to construct elaborate labels and titles on the graphics printed for publication or posters.

MLAB requires no previous programming knowledge.

For a course description, see the *Computer Training Courses and Seminar Catalog*, available from the Technical Information Office, Bldg. 12A, Rm. 1017, 496-5431. To register, call the DCRT training unit, 496-2339. □

CFC Campaign at NIH Is 'Off and Running'

The 1982 NIH Combined Federal Campaign will start off in full swing today as 18 campaign coordinators, under the direction of William Fitzsimmons, NIH coordinator, spring into action.

Keyworkers and coordinators have been meeting for the past week for CFC indoctrination and training in groups of 30 people. These sessions were conducted by HHS-selected "loaned executives," James Delaney and Hoyt Wheeland.

The preliminary sessions featured a 10-minute film, "Message of Love," containing candid unrehearsed local Federal employees and a moving visual presentation of people helped by CFC-supported agencies. Prefaced by remarks from HHS Secretary Richard S. Schweiker, the film was narrated by Hollywood actor Leslie Neilson.

The official campaign being conducted under the theme, "Reaching People Who Need You," started today, Oct. 14, and will continue for 6 weeks.

In our world today, it is easy to forget that all people do not get enough food, do not get any education, do not get adequate clothing or shelter. For those of us who are prone to forget, the annual NIH campaign period is the time to remember. □



Dr. Thomas E. Malone, Acting NIH Director, and the NIH 1982 Combined Federal Campaign chairman (l), signs his pledge card signaling the Oct. 14 starting date of the NIH-CFC campaign, as Dr. Ruth L. Kirschstein, Director, NIGMS, and vice-chairman of the campaign (r), looks on.

Science Writers' Seminar To Discuss Hormones

Hormones: Cell Signals and Information Transfer will be the subject of an NIH Science Writers' Seminar on Oct. 21, from 9:30 to 11:30 a.m., in Bldg. 31, Conf. Rm. 10.

Dr. Phillip Gorden, clinical director and chief, Clinical and Cellular Biology Section, Diabetes Branch, NIADDK, will be the moderator and will discuss hormonal communications with cells in relationship to diabetes and metabolic diseases.

Dr. Kevin J. Catt, chief of NICHD's Endocrinology and Reproduction Research Branch, will describe recent advances in knowledge of the receptors and actions of

gonadotropins (sex hormones).

Research on insulin-like growth factors that mediate the action of growth hormone will be the subject of a presentation by Dr. S. Peter Nissley, a senior investigator in NCI's Metabolism Branch.

Science Writers' Seminars, sponsored by the Intramural scientists of NIH and the Division of Public Information, OD, are designed primarily to provide members of the press with background information on the various areas of research conducted at NIH.

For additional information, call Bobbi Bennett, 496-1766. □

Running, Schizophrenia Next in 'Layman' Series

Are Runners Healthy? is the topic of the next Medicine for the Layman lecture Tuesday, Oct. 20. Dr. Ron Crystal, chief of the Pulmonary Branch, NHLBI, will discuss the benefits and risks of exercise. Dr. Crystal is an experienced runner himself, having completed his fifth Boston marathon this year.

On Oct. 27, Dr. Daniel Van Kammen, chief of Neuropsychopharmacology of the Biology Psychiatry Branch, NIMH, will speak on schizophrenia. He will define this brain disorder and its symptoms, including

incoherence, illogical thinking and speaking.

He will also clarify some common misconceptions about schizophrenia and discuss the genetic risks for family members of schizophrenics. Dr. Van Kammen will explore advances in the treatment of this disorder, both through antipsychotic drugs and management of environmental factors.

The Medicine for the Layman lectures are held Tuesday evenings at 8:00 p.m. in the CC's Masur Auditorium. □

Health's Angels To Hold Election on Oct. 21

The Health's Angels will hold an election meeting on Wednesday, Oct. 21, at noon, in Bldg. 31, Rm. 2A-52. After the election, a videotape of the 1981 Institute Relay will

be shown.

All old and new runners are encouraged to attend this meeting. Membership cards and dues will be administered at the time. □

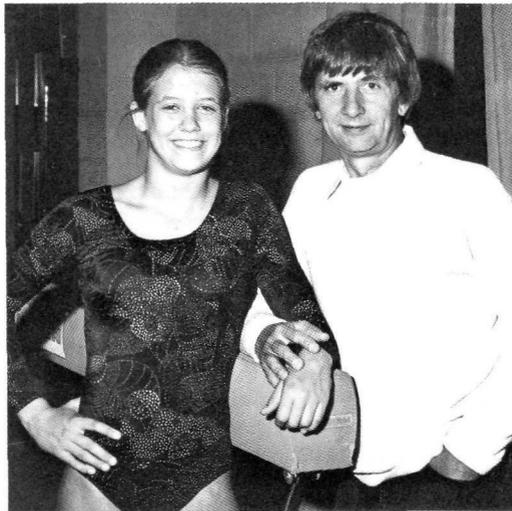
Gymnast Shari Mann, Daughter of NCI Researcher, To Compete in World Games at Moscow in December

"Moscow, Moscow, Moscow" is the city that is now on the mind of 16-year-old Shari Mann, who won a place on the U.S. Women's Gymnastics Team last month in competitions held at Colorado State, making her eligible to compete this December in Moscow at the World Games.

Ms. Mann is a 5-foot 4-inch, 106 pound, lithe young lady, whose grace, power, style, and daring were exhibited at the trials in four different compulsory gymnastic events: the balance beam, uneven parallel bars, side horse vaulting, and floor exercise. Her 75.35 score out of a possible 80.0 made her one of eight young American women to be selected by the judges to make the trip to the Soviet capital.

She is the daughter of an NCI researcher, Dr. Dean L. Mann. Dr. Mann, his wife, Darleen, and their five other children, have supported Shari's athletic career since she was 9 years old when she joined her two older sisters in the sport.

Dr. Mann, senior investigator in the Division of Cancer Biology and Diagnosis, says that the experience of being involved in the development of a world-class gymnast has proven to be enriching. He has seen his children develop self-assurance through



Dr. Mann stands with his daughter after she breaks from a practice session on the balance beam. Photo courtesy of Hill Photo.

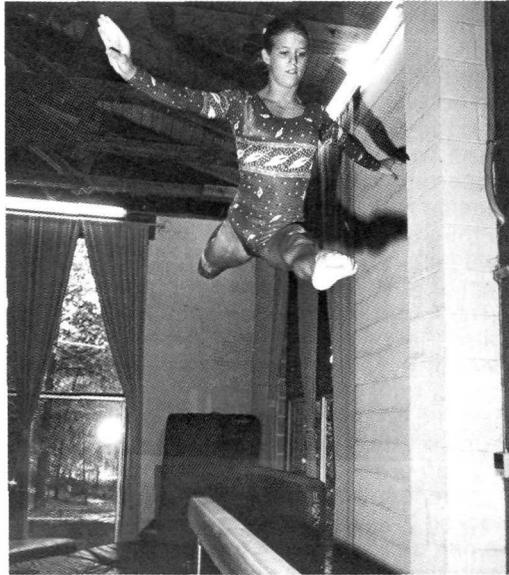
the discipline that the sport imposes.

"The rewards are now self-sustaining," says Dr. Mann about his daughter's recently recognized success, and the international travel that now goes along with it.

Since the beginning, he or his wife made the 1-hour round trip from their Potomac home to MG Gymnastics, a 6-acre training site located in Ashton, Md. Future Olympic gymnastic hopefuls are trained there.

To prepare for Moscow, Shari continues her 6-day a week, 6-hour a day workouts under the watchful eyes of her coaches, Margie Weiss and husband, Gregor.

They are athletes with long gymnastic experience; she was a national champion in 1969 and he was member of the 1964 U.S. Men's Olympic Gymnastics Team. What has developed, as described by those



Ms. Mann is able to get great height off the balance beam when she performs.

involved, has been a labor of love between parents, coaches, and gymnast, with each taking increasing pride and finding new confidence in the string of successes that have occurred.

This is the second year that Shari Mann has competed internationally, an experience that has left her remarkably unspoiled and appreciative of the opportunity of seeing new places and meeting athletes from all over the world.

France, this June, was especially memorable for her when she placed first and was the first American to win a gold medal in the 1981 Antibes Invitational.

A 9.85 score was awarded for her unique performance on the uneven parallel bars, considered her strongest event. She finished second in the balance beam, third on the vault, free exercise and all-around.

There, she competed against Maria Filatova, a two-time member of the Soviet Olympic team; Wu-Wen-Li, the national champion of China and the meet's all-around champion, and other top international gymnasts that will figure prominently in the 1984 Olympics in Los Angeles.

"I can feel her concentrate," says Dr. Mann, when he watches his daughter compete. He believes that this is one of the keys, along with hard work, which has led to her success as a world-class gymnast.

Shari says that when she is in competition, she closes out the audience. "I don't even think that they are there. It's all done on cues," she says, noting that her performance is guided by some internal tape recorder that plays back her coaches' advice about how to approach the next series of maneuvers.

"Her coaches are good spotters," says Dr. Mann, concurring with MG's safety policy to "better spot a child than have a child hurt," adding, "Shari has been remarkably injury free; although last year she did break a toe that kept her out of competition for a few months, and had

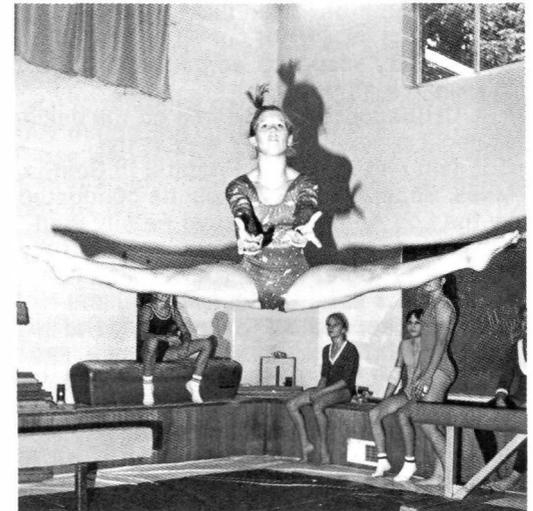
minor cartilage surgery on both legs."

"Nothing scares her—not even the balance beam, and everyone is afraid of it," stressed Mrs. Weiss. For the past 2 months, Shari has been using an unbelievable maneuver known as a back-layout on to the balance beam. The layout requires a catapult off the vaulting board through the air, do a somersault in the blind, and land perfectly on the 4-inch-wide beam.

Equally spectacular is her dismount known as a free hip Hecht backflip, a move so powerful and quick that the performer becomes almost a blur before landing. This maneuver is only attempted by two or three other gymnasts today in competition.

The Churchill High junior says that her travels this year have recently produced a regular series of letters between her and other young gymnasts from Canada, Great Britain, and Hungary. "We write about everything—from school to gymnastics," she says.

Although Moscow is on Shari's mind now, she knows that some day her competition days will be over. "I'd like to pursue a career in medicine, perhaps sports medicine, and teach gymnastics," she says. In fact, two other Mann children are now preparing themselves for careers in medicine.



Other MG students watch Shari practice.

However, in the meantime, she says, that although she is successful with her gymnastics, sometime in the near future she would like to try her hand at being a television commentator like former Olympic gymnast Kathy Rigby.

"I didn't sleep that night," says Ms. Mann, after learning that she had been selected for the World Games team. She plans to work extra hard over the next 2 months to be one of the six actual American women who will compete.

"I'm really glad that they have been with me; and let me continue with gymnastics," says Shari regarding the support she has received from her parents. "I or her mother never pushed her (into the sport); other than give the support she needed," says her father. □

Old Birth Control Device, Cervical Cap, To Be Studied by Three Research Projects

The cervical cap, a "barrier" birth control device similar to the diaphragm, is receiving renewed interest from many women wishing to avoid the health risks associated with the Pili and the IUD.

First described in medical literature more than 140 years ago, the cervical cap will be studied in three research projects supported by the National Institute of Child Health and Human Development.

Like the diaphragm, the cap fits snugly in the upper vaginal canal and acts as a barrier that holds contraceptive cream or jelly preventing sperm from entering the uterus. Usually made of plastic or rubber and similar in shape to a thick thimble, the cap is smaller in diameter and more rigid than the diaphragm.

Unlike the diaphragm, the cap is held in place by suction, and blocks only the cervix, or opening to the uterus, instead of the entire upper vaginal canal.

A properly fitted cap is reportedly less likely to become dislodged during intercourse than the diaphragm. A drawback of the cap is that it is more difficult than the diaphragm to insert and remove.

The cap's main advantage over the diaphragm is that it offers contraceptive protection for days at a time, rather than a matter of hours for the diaphragm, according to its proponents.

Although it has been used widely in Europe, the cap is not currently available in this country except to women participating in research studies.

NICHD-supported research on the design of cervical caps is under way at the Brigham and Women's Hospital in Boston, Mass. Separate projects will be conducted by the Los Angeles Regional Family Planning Council and the International Fertility Research Program in North Carolina to evaluate the safety, effectiveness, and popular acceptance of several kinds of caps.

At the Brigham and Women's Hospital, doctors are working to design an improved cervical cap. They began studying the characteristics of the cervix itself, and found it to be far more mobile and changeable than previously described.

Although these factors make it more difficult for the cap to stay in place, the investigators believe these problems can be

overcome.

The biggest area in question about the cap is its effectiveness. Up to now, little research has been performed on this topic, and conflicting results have been obtained from the few minor studies already done.

The largest of the three NICHD-supported projects, to be run by the Los Angeles research study, will focus mainly on the effectiveness of two kinds of cervical caps, as compared with standard diaphragms.

The 4-year multicenter, multimillion-dollar trial began in July 1981. In the first 2 years of the study, four health centers will enroll a total of 2,400 women; in randomly assigned groups of 800, to the diaphragm or one of the two caps: the Prentif Cavity Rim Cap or the Vimule Cap.

Throughout the study, the women will be checked to compare the pregnancy rate, the risk of any adverse effects, and the discontinuation rate for each of the three devices.

The Los Angeles investigators will also examine the question of how long the caps can be safely worn. Although cap manufacturers recommend wearing the cap no longer than 24 hours, many women's health groups contend that it can be worn safely for 3 to 7 days. The study will initially determine whether the caps can actually be worn for 7 days without significant side effects.

The third cervical cap project, to be conducted by the International Fertility Research Program, will test a newly developed model totally different from those most currently available. Ironically, this recent version has something in common with the first cervical caps described in 1838: custom fit.

Unlike its prototype, however, the "Con-tracap" has a one-way valve that permits menstrual and cervical fluids to exit while preventing sperm from passing through. According to its developers, the Con-tracap can be worn continuously and does not need spermicide to be effective.

For each of the 300 women in the 18-month study, researchers will make a cast of the cervix to create a model (this takes only 5 minutes); then they will shape a flexible copolymer material into a Con-tracap. □

Dr. E. Neufeld To Receive 1981 Gairdner Award

Dr. Elizabeth Neufeld was recently named to receive one of seven 1981 Gairdner Foundation Awards for outstanding contributions to medical science. She is chief of the Genetics and Biochemistry



Dr. Neufeld

Branch, National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases.

Dr. Neufeld was cited for clarifying the enzyme defects in certain mucopolysaccharide storage diseases, heritable disorders that may cause skeletal abnormalities, mental retardation, and death.

Since its founding in 1957 in Toronto, Canada, the Gairdner Foundation has honored 146 scientists worldwide for superior achievements in the field of medicine.

The 24th annual awards, to be presented in Toronto on Oct. 22, include a \$15,000 prize and a guest lectureship at the University of Toronto. Dr. Neufeld will address the topic of lysosomal enzymes and their diseases.

Lysosomes are cellular organelles specialized in breaking down complex molecules. Lysosomal storage diseases are caused by the accumulation within the lysosomes of materials that should be destroyed but are not because one or more key enzymes is missing.

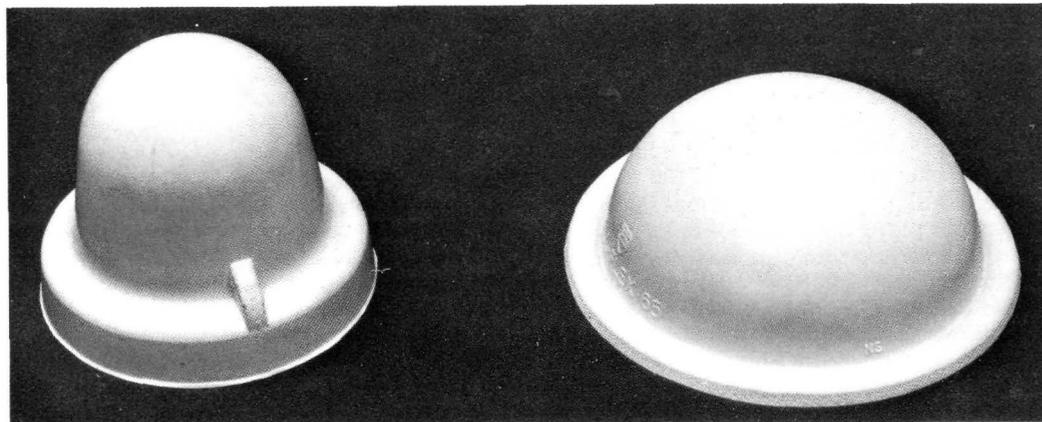
Dr. Neufeld developed a technique to study the mucopolysaccharide storage diseases using cells (fibroblasts) cultured in the laboratory. She showed that these cells manifest the same enzyme deficiencies that cause disease in patients.

While using this technique in 1968, she and Dr. Joseph Fratantoni and Clara Hall found that cells cultured from patients with genetically distinct forms of these disorders could correct each others' biochemical deficiency.

This process was shown to occur by the transfer of macromolecular factors, later identified as hydrolase enzymes. Dr. Neufeld identified the missing lysosomal enzyme in six mucopolysaccharide storage diseases and used the corrective factor technique to distinguish several variants of these disorders. This knowledge is now routinely used to provide diagnosis and counseling to affected families.

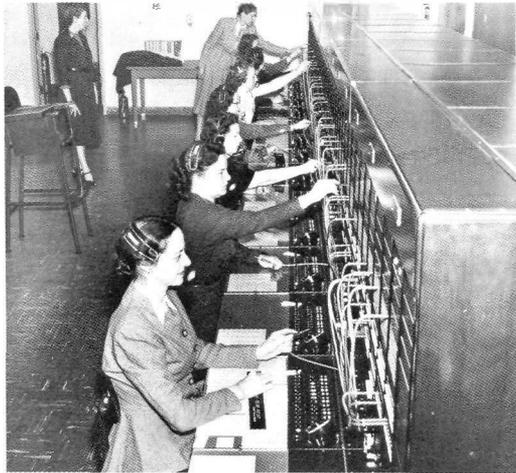
She recently showed that another lysosomal storage disease, call T-cell (inclusion-cell) disease, is due to the absence on many lysosomal hydrolases of a specific cognition marker essential for targeting the enzymes to the lysosomes. □

In most places nowadays, risking life and limb with Fourth of July fireworks is illegal. You have to use an automobile.—*Changing Times* □



The cervical cap (l) is smaller in size than the diaphragm, fits securely by suction and does not have to be removed for several days.

Telephone Operators Have Many Functions; Assist Over 33,000 NIH Calls Monthly



A picture similar to this ran on the front page of *The NIH Record* in 1953. The telephone operators had just moved from the basement of Bldg. 1 to begin working at the new switchboard just installed in the soon-to-be opened Clinical Center. The new system provided additional lines as well as 24-hour service.

How would NIH ever function without the use of telephones? One might receive a mixed reply from the 19 women and 1 male volunteer staffing the NIH Telephone and Directory Section, Telecommunications Branch, DAS, in Bldg. 10.

The telephone operators handle all overseas international telephone calls (non-direct dial), collect calls, and calls placed by Clinical Center patients. They provide general information, intercept calls, hook up telephone conferences, and operate the signal and page system for locating CC doctors, nurses, and technicians.

Over 100 incoming/outgoing international calls are placed each day at NIH, mostly to or from England, Germany, and Italy. There are approximately 33,000 operator-assisted calls incoming and outgoing on campus per month. "NIH is probably the Bell system's largest customer in suburban Maryland," said Joseph G. Whitlock, Telecommunications Branch chief.

Next door to the operator's section, all telephone calls made by NIH employees on campus either locally or direct-dial long-distance are handled by the C&P Telephone Company Centrex electronic telephone system. The C&P estimates an excess of 1 million direct-dial calls going in and out are placed per month by NIH employees.

"The NIH is provided telephone service by an electronic Centrex II telephone switch, which is the latest state-of-the-art. "It is probably the most modern switch available on the market," Mr. Whitlock said.

Using headphones and handsets, the 20 operators work at nine CRT display terminals hooked up to a minicomputer running 24 hours a day. When a call comes in for a particular person, the operators key up the first three letters of an individual's last name to locate the appropriate telephone number on the terminal.

However, if the person is named Brown or Smith, it's a different story—there are 200 to 300 Browns or Smiths on NIH's cam-

pus, so the operator then keys up the first initial to locate the right person.

For an international call, each operator writes a ticket of the call, time spent, and the appropriate Institute to be charged. Tickets are also made for CC patients placing calls after 5 p.m. At the end of the month, all patient tickets are separated, tallied and distributed for charges.

There are three lead operators in the Telephone and Directory Section, supervised by section chief Betty L. Taylor, who are responsible for managing the other operators. They inform them of office procedures and rules, coordinate any name changes due to marriage, or other changes.

When a number is changed, the operators terminal will flash "intercept." New numbers are written on a large blackboard so that all operators can easily see where to refer calls. There are usually at least 20 new numbers.

Setting up conference calls is another function of the Bldg. 10 telephone operators. Five lines are tied together usually for one call, but there are 10 available. Two conference calls can be held at the same time; operators usually handle one or two, or sometimes four a day.

Operators Handle Emergencies

All Bldg. 10 emergencies are received through this office, mostly through the signal and page system. Operators look up a doctor's name in an extensive file to find the appropriate signal beeper number that will set off the doctor's personal pager.

The operators also use an electronic voice paging system, which once announced, pages throughout Bldg. 10. They use this system to announce CC patient activities, bingo, and church services.

Every day, one of the lead operators makes a four-page list of all CC doctors, nurses, technicians, chaplains, and blood bank employees "on call" from 5 p.m. to 8 a.m. the next day.

This section also maintains the NIH Telephone and Service Directory listing all



Lois Crider sits in front of her computer terminal and console as Shirley Cefaratti looks on. Behind Ms. Crider's console (on the right) are three stacked boxes which are lights and numbers corresponding to each elevator in all NIH buildings. When one flashes, the operator connects to those stuck in the elevator and calls elevator repair for help.

Clock your FTS calls

effective October 1



A new procedure for computing the cost of FTS intercity (long distance) telephone calls became effective Oct. 1.

Previously, a standard charge was applied for each call regardless of how long the user talked. A 2-minute call to Chicago cost the same as a 10-minute call.

The "time conscious" user, who made an effort to keep his/her calls short was subsidizing the user who monopolized the FTS circuits and made little or no effort to conduct business efficiently and free the line quickly.

Starting Oct. 1, all calls are being *timed* and *measured* according to their duration. Charges will be based on the length of the calls.

Long distance calls are very often necessary during the course of official business. Those who implement "time" controls will reap the benefit of a smaller telecommunications bill.

NIH employees, organizations and services. The telephone book is published three times a year, now completely printed by computer.

"The correctness of the directory depends entirely on the proper submission by all B/I/D's of individual personnel changes to the Telecommunications Branch," said Mr. Whitlock. "Any new name change can be inserted into the computer as quickly as you've said it, but there is a form to be used which is listed in the directory." The form is NIH-433 and a copy is on page 3 of the directory.

Occasionally, one or two CC patients will work in the telephone operators section as part of a work therapy rehabilitation program. They are allowed to work there as long as they are CC patients and can handle the workload. Many times, the office has provided practical experience for the discharged patients when seeking a job.

Including direct-dial and operator-assisted calls, it is estimated that there are well over 1,033,000 calls coming in or going out every month at NIH. This figure is indicative of the dependency of NIH personnel upon telephonic communication. □

Dedication

(Continued from Page 1)

schools, presidents of area medical societies, and many other dignitaries.

Following the luncheon, a scientific symposium will be held in Masur Auditorium at 2 p.m. CC Director Dr. Mortimer B. Lipsett will introduce the speakers.

Former NIH Director Dr. Donald S. Fredrickson will speak on New Structure, New Paradigm. Dr. David Rogers, president of the Robert Wood Johnson Foundation, will discuss Ambulatory Care—A New Research Frontier. Dr. J. Richard Crout, director of the Bureau of Drugs, Food and Drug Administration, will address New Drugs—Their Entry and Surveillance.

Dr. Robert Levy, vice president for health sciences and dean of the School of Medicine, Tufts University (and former NHLBI Director), will conclude the program with a talk on Clinical Trials—Are the Benefits Worth the Cost? There will be limited seating available for NIH employees for this part of the ceremony.

Invited guests may tour the new facility after the ceremony. NIH employees will be able to do so on Friday, Oct. 23, from noon until 3 p.m. □

Two Workshops Planned By Library AV Center

The National Library of Medicine's National Medical Audiovisual Center has announced two workshops for health professionals to be held in the center's facilities later this year.

The first, Developing and Evaluating Audiovisual Instructional Materials, will be held Nov. 16-18. In this workshop, participants will work in teams to create audiovisual instructional units consisting of a storyboard and related materials. These units are peer-reviewed, tested, and evaluated for later production.

Designing Simulation Activities in the Health Sciences is the second workshop, and will be held Dec. 7-9. Participants will create instructional simulations (structured learning experiences which resemble real life events) for classroom use.

There is no registration fee for these workshops. Participants are responsible for their own travel and lodging arrangements.

For more information, including an application form, write Educational Training and Consultation Branch, NLM, Bethesda, Md. 20209, or call 496-6308. □

Follow Sensible Drinking Habits

Alcohol produces changes in mood and behavior. Most people who drink are able to control their intake of alcohol and to avoid undesired, and often harmful, effects. Heavy, regular use of alcohol can lead to cirrhosis of the liver, a leading cause of death. Also, statistics clearly show that mixing drinking and driving is often the cause of fatal or crippling accidents. So, if you drink, do it wisely and in moderation.—*Health Style*— PHS 81-50155 □

1981 Management Interns Complete Half of Training



1981 NIH Management Interns are (l to r, back row): Cynthia Kauff, Charles Hamilton, Dennis Rodrigues, Janice Grice, Susan Pucle, and Bronna Cohen. (First row): Christine Grewell, Fredette West, and Mary Anne Yeary. Donald Poppe was not present.

Members of the 1981 NIH Management Intern class have now completed approximately 6 months of their 1-year training program. Each member of the class independently negotiates four separate 3-month assignments in various managerial disciplines.

A majority of these assignments are conducted at NIH, but program flexibility allows assignments at PHS, HHS, Congress or other government agencies.

A degree of pliancy is necessary since every intern must design the nature and sequence of each training experience. The interns frequently attend meetings in which a

variety of guests present informal talks on selected subjects.

Intern classes are urged to plan their year as a group in addition to individual assignments. This year's class organized a trip to the National Institute of Environmental Health Sciences for a 2-day visit and orientation.

At the end of the year, each intern will assume a permanent position in a chosen administrative or managerial area. Interns of past years occupy a spectrum of responsible positions throughout the entire NIH community. □

Dr. Yaffe is New Director For Mothers and Children Center

Dr. Sumner Yaffe has joined the staff of the National Institute of Child Health and Human Development as the new director of the Center for Research for Mothers and Children.

Dr. Yaffe was formerly professor of pediatrics and pharmacology at the University of Pennsylvania School of Medicine where he developed a research and teaching program in pediatric clinical pharmacology and teratology.

Prior to his career in Pennsylvania, he served as chairman, department of pediatrics, and director of research at the State University of New York, Buffalo. His interest focused on research in health problems of infants, children, and pregnant women.

In his new position, Dr. Yaffe will provide leadership and guidance in planning innovative research programs and determining the need for new research approaches to the special health problems of mothers, infants, children, and families.

He received his M.D. from the University of Vermont School of Medicine in 1954 and an M.A. in pharmacology from Harvard University Division of Medical Sciences in 1950. □



This summer, NIH employees enjoyed their lunches more because of the progressive jazz sound heard emanating from Bldg. 31's patio. Flutist Harold L. Dupree, a custodian with the Housing Services Section, also entertained CC patients on his own time. Mr. Dupree is looking for other NIH musicians who share his interest in jazz.

Spring Forward—Fall Back

Don't forget! On Sunday, Oct. 25, Eastern Standard Time returns. Everyone should set their clocks back 1 hour.

Enzyme Replacement: Emerging Treatment For Lipid Storage Diseases?

By Ray Fleming

The youngsters on the fifth floor of NIH's Clinical Center have been fighting a common enemy: a hereditary metabolic disorder known as Gaucher's disease. It has not been easy, but with the help of a treatment pioneered by Dr. Roscoe Brady, a National Institute of Neurological and Communicative Disorders and Stroke neuroscientist, their health is now improving.

For some time, Dr. Brady and his fellow scientists have been trying to reverse the dangerous buildup of fatty compounds (lipids) that occurs in patients with Gaucher's and other lipid storage disorders such as Tay-Sachs, Niemann-Pick, and Fabry's diseases.

The abnormal lipid accumulation can result in a variety of potentially life-threatening problems, including swollen organs, lost and damaged nerve cells, bone degeneration, and reduced numbers of platelets and white blood cells.

The cause of the trouble is a genetically determined shortage of effective enzymes—proteins that normally break the lipids apart.

Dr. Brady believes his technique, enzyme replacement therapy, can eventually become an effective treatment. The strategy entails administering the missing enzymes to the patient, in somewhat the same way diabetics are treated to overcome their insulin shortage.

But before the therapy can be considered successful Dr. Brady must first obtain enough pure enzymes, direct them to sites in the body where excessive amounts of lipids are stored, and in some cases move them through the blood-brain barrier—the wall of cells that prevents large molecules from entering the central nervous system.

For much of his career Dr. Brady, now chief of NINCDS's Developmental and Metabolic Neurology Branch, has been in the forefront of research in prevention and treatment of the genetic lipid storage diseases.

It was his discovery of specific enzyme deficiencies in several of these illnesses that prompted the scientific community to try different ways to supplement the enzyme shortage.

Because of the difficulty of obtaining sufficiently large quantities of highly purified enzymes, Dr. Brady and other scientists originally attempted organ transplants to provide an enzyme source in the body.

The results of this strategy were not encouraging, but the preferred approach—administering pure enzymes directly to the patient—had to wait until techniques for isolating enzymes from human tissues were developed.

By the mid-1970's, Dr. Brady and others were extracting small amounts of purified enzymes from human urine and placentas. As their procedures improved, larger

amounts of the proteins became available, and clinical tests of direct enzyme replacement therapy became possible on a limited basis. Dr. Brady and his fellow scientists began administering the purified enzymes to Tay-Sachs, Gaucher's, and Fabry's patients via the bloodstream.

The results of such enzyme replacement clinical trials up to now have been mixed. Some tests have succeeded in temporarily lowering the lipid level in the blood and liver storage sites, and overall the condition of a number of Gaucher's patients seems improved. However, little difference has been seen in patients whose symptoms involve the nervous system.

Scientists have discovered that the replacement enzymes, once administered, rapidly leave the bloodstream and enter cells and tissues in the body, but do not necessarily migrate to the areas where scientists want them to go: sites of high lipid concentration.

In some cases, the placentally derived enzymes are lured away from areas with high lipid accumulation by other cells which find the enzymes' structure chemically attractive.

Other studies have shown that the enzymes are being rebuffed at the blood-brain barrier, thus preventing them from reaching brain cells where lipids are accumulating.

But the work of Dr. Brady and his colleagues (NINCDS's Dr. John Barranger, F. Scott Furbish, Andrew Gal, Edward Ginns, Peter Pentchev, and Daniel Stowens) has produced some promising bright spots.

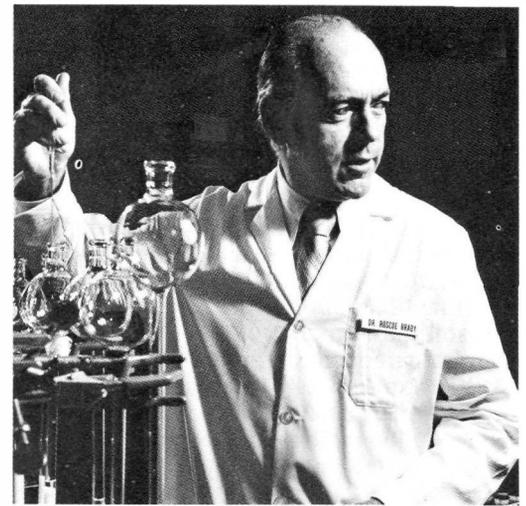
In a recent trial conducted by Dr. Brady and others at the Clinical Center, eight youngsters with Gaucher's disease, treated on monthly and bimonthly schedules, showed general improvement in their health: the swelling of the liver, spleen, and other organs has stopped, and the blood platelet level has stabilized.

Successful replacement therapy on a large-scale basis, however, is still elusive. "I think our technology is on the verge of giving us the solutions we need," says Dr. Brady. "But until we can produce the required enzymes in much greater quantities and target them to specific areas, replacement therapy will have to be considered experimental."

For scientists studying hereditary lipid storage diseases, the emerging technology of genetic engineering could have special applications. Using recombinant DNA techniques, they may soon be able to employ bacteria to produce the large quantities of enzymes necessary to treat the disorders—and to produce them at an affordable price.

Such mass-produced enzymes would have the additional advantage of being more amenable to specific storage-cell targeting procedures.

"With the revolution in genetic engineering," says Dr. Brady, "we might even expect to tailor the enzymes for distribution to critical areas where they now aren't drawn."



"Compared to the status in a number of other disorders, we've come a long way," Dr. Brady says. "We've found the source of the problem and can diagnose it, even before birth. I believe that we are close to successful treatment too!"

In the meantime, NINCDS scientists are trying new ways to direct replacement enzymes to where they are needed. By actually modifying the basic molecular structure of placental enzymes, they hope to make them chemically attractive enough for the lipid-storing cells and tissues to draw them in.

But if enzyme replacement therapy is to be effective in treating the progressive cellular, motor, and mental damage caused by the storage diseases that involve the nervous system, the enzymes must ultimately penetrate the protective blood-brain barrier.

Dr. Brady and his colleagues are now conducting studies of barrier modification in animals, which they hope can be applied to the problem. By introducing concentrated solutions of certain sugars into the bloodstream to the brain, they have been able to temporarily "shrink" the cells of the barrier, thus allowing enzymes to pass through to storage sites in the central nervous system.

For now the clinical trials of replacement therapy continue, in spite of a limited supply of enzymes. Dr. Brady is optimistic about the chances of ultimate success. □

Preschool Program Has Vacancies

The NIH Preschool Developmental Program is accepting applications for immediate and future vacancies.

NIH employees with children between 3 and 5 years of age may obtain applications in Bldg. 35, Rm. 1B-05.

For further information, call 496-5144. □

Ski Club To Hold Meeting

The NIH Ski Club will hold its first meeting this season to discuss upcoming ski trip plans. The club will meet on Tuesday, Oct. 27, from noon to 1 p.m., in Bldg. 31, Conf. Rm. 4.

For further information call 496-4600. □

Medicine for Layman Discusses Human Genetics

Dr. Ruth L. Kirschstein, Director of the National Institute of General Medical Sciences, began her Medicine for the Layman lecture, Understanding Human Genetics, by defining genetics as the scientific study of heredity—the branch of biology that examines the means by which information leading to the development and functions of all living organisms is transmitted from generation to generation or from parent to offspring.

She gave a short historical background on the early geneticists, describing Gregor Mendel's innovative work on sweet peas and Archibald Garrod's studies on "inborn errors of metabolism."

Dr. Kirschstein discussed the structure of cells, particularly the nucleus that contains the chromosomes and, in them, the genes. She explained how cells divide by mitosis and meiosis.

Delving into the mysteries of DNA, "the very stuff of life," she described it as a complicated three-dimensional structure made up of four basic chemicals—adenine, thymine, cytosine and guanine.

These nucleotides or bases, as they are called, are bound together by a sugar and a phosphorus that provide the backbone for the molecule. DNA is responsible for the structures of the various proteins that provide the specific functions of living.

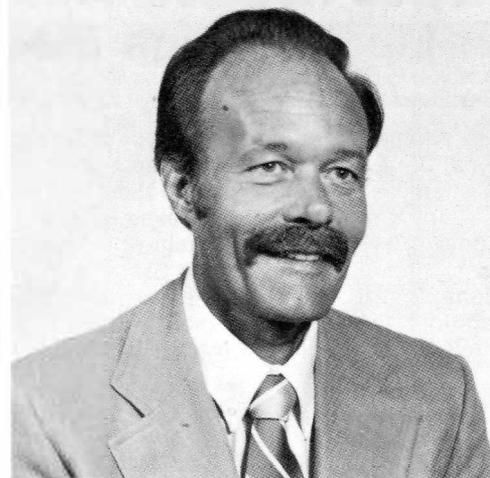
Dr. Kirschstein then discussed recombinant DNA technology and explained that the recombinant DNA grown in the cell or the bacterium can produce large amounts of a specific protein.

This has exciting clinical possibilities since proteins such as interferon or human growth hormone can be produced in quantities needed to correct or treat certain diseases.

She grouped hereditary diseases into four categories: 1) single gene disorders, such as Huntington's, Tay-Sachs, achondroplasia, sickle cell anemia and thalassemia; 2) chromosomal abnormalities, such as Down syndrome; 3) congenital defects, such as cleft palate, club foot and hydrocephaly; and 4) polygenic disorders, which are common but have a genetic component, such as atherosclerosis, hypertension, diabetes, peptic ulcer and asthma.

Genetic counseling was also discussed, and a booklet which indicates where a family can obtain counseling was distributed. Dr. Kirschstein also discussed cell banks that store skin fibroblasts obtained by a procedure called a "punch biopsy."

Cultures of skin fibroblast cell lines can be frozen for future use. Thus cells from individuals with any of the multitude of genetic disorders can be cultured and made available for study as needed. □



Dr. Charles H. Rodgers, formerly an associate professor of psychology and physiology at the University of Illinois Medical School since 1972, has joined the Grants Associates Program for a year of training in health science administration. Dr. Rodgers received his Ph.D. in physiological psychiatry in 1958, and went onto a teaching career in psychology, physiology and pharmacology. He has received research grants from both NICHD and DRR, and is the author and co-author of numerous articles in his field.

Panel Retains Mandatory Retirement Age for Pilots

A National Institute on Aging panel studying the medical aspects of mandatory retirement of certain pilots at age 60 has recommended that the present age limit be retained. This decision was based on the absence of medical appraisal systems that can predict individual pilot health and performance.

However, the panel proposed an approach requiring a program of medical and performance appraisal that could be applied on an individual basis to permit some pilots to continue flying to age 65.

The panel concluded that there is "no special medical significance to age 60"—or to any other specific age—for mandatory retirement of airline pilots.

Yet it found that "age-related changes in health and performance adversely influence the ability of increasing numbers of individuals to perform as pilots with the highest level of safety."

The panel recommended that "The Federal Aviation Administration or some other appropriate Federal agency be requested to engage in a systematic program to collect the medical and performance data necessary to consider relaxation of the current age 60 rule."

The panel further stated: "In view of the growing importance of commuter air carriers, the present age limit be extended to cover all pilots engaged in carrying passengers for hire in order to provide a level of safety equivalent to that of commercial air carrier operations."

The report is the result of a congressionally mandated examination of the effect of aging on pilot health and performance.

Public Law 96-171 assigned the study to the Director of the National Institutes of Health, in consultation with the Secretary of Transportation. NIA was the lead NIH component in this activity.

The legislation questioned the adequacy of medical certification procedures and examinations for commercial and airline transport pilots and, in particular, the "age 60 rule." This rule prohibits air carriers from assigning a person who reaches 60 years of age to piloting duties, either as pilot-in-command or as co-pilot.

Only those aspects of the age 60 rule that relate to medical factors and pilot performance were to be considered in the NIH report.

NIH contracted with the Institute of Medicine of the National Academy of Sciences to obtain an objective examination, summary, and assessment of existing scientific knowledge relevant to the questions posed in the legislation.

Having decided that the age 60 rule is not defensible on medical grounds, the panel proposed an approach by which the age limit might be raised without increasing the risk to public safety.

This program would involve gathering more comprehensive medical and performance data than are currently required. Those pilots permitted to fly past their 60th birthday would remain in the testing program and be subject to annual reviews of test results until they reached 65.

Single copies of the panel's report are available by writing to: Pilots Report, NIA, Bethesda, Md. 20205. □

Visiting Scientist Program Participants

Sponsored by Fogarty Internat'l Center

9/3—**Dr. Giuseppe Scala**, Italy, Laboratory of Microbiology and Immunology. Sponsor: Dr. Joost Oppenheim, NIDR, Bg. 30, Rm. 322.

9/4—**Dr. Johannes Groffen**, Netherlands, Laboratory of Viral Carcinogenesis. Sponsor: Dr. Ernest Plata, NCI, Frederick Cancer Research Center.

9/4—**Dr. Takashi Yanagawa**, Japan, Biometry Branch. Sponsor: Dr. David Hoel, NIEHS, Research Triangle Park, N.C.

9/8—**Dr. Ilan Bleiberg**, Israel, Laboratory of Developmental Biology and Anomalies. Sponsor: Dr. George R. Martin, NIDR, Bg. 30, Rm. 416.

9/8—**Dr. Roland Herrmann**, Germany, Laboratory of Vision Research. Sponsor: Dr. Peter Kador, NEI, Bg. 6, Rm. 230.

9/8—**Dr. Ruth Lifschitz**, Israel, Immunology Branch. Sponsor: Dr. Dinah Singer, NCI, Bg. 10, Rm. 5B17.

9/8—**Dr. David T. Mao**, China, Laboratory of Medicinal Chemistry and Biology. Sponsor: Dr. David Johns, NCI, Bg. 37, Rm. 6D30.

9/8—**Dr. Kazuyuki Nakamura**, Japan, Laboratory of Chemistry. Sponsor: Dr. E. R. Stadtman, Bg. 4, Rm. 135.

9/8—**Dr. Janusz Rajkowski**, Poland, Laboratory of Neurophysiology. Sponsor: Dr. Edward Evarts, NIMH, Bg. 36, Rm. 2D12.

9/8—**Dr. Padam Sharma**, India, Laboratory of Chemistry. Sponsor: Dr. Arnold Brossi, NIADDK, Bg. 4, Rm. 135.

9/8—**Dr. Yoshio Takasato**, Japan, Gerontology Research Center. Sponsor: Dr. Stanley Rapoport, NIA, Baltimore, Md.

9/8—**Dr. Shigemasa Takeda**, Japan, Diabetes Branch. Sponsor: Dr. Phillip Gorden, NIADDK, Bg. 10, Rm. 8S243.

9/8—**Dr. Jarda T. Wroblewski**, Poland, Laboratory of Preclinical Pharmacology. Sponsor: Dr. Erminio Costa, NIMH, William A. White Bg., St. Elizabeths Hospital.

9/11—**Dr. Paola Allavena**, Italy, Laboratory of Immunodiagnosis. Sponsor: Dr. John R. Ortaldo, NCI, Bg. 10, Rm. 8B08.

Former Long-Term 'Pill' Users Found To Have Increased Heart Attack Risk

Women who use oral contraceptives for 5 years or longer carry an increased risk of heart attack which persists at least 9 years after Pill use is stopped.

This finding comes from the first study large enough to uncover such a relationship, and the investigators warn that the data should be interpreted with caution until the results are repeated elsewhere.

Directed by Boston University's Dr. Dennis Slone, a research team from the BU School of Medicine, the Harvard School of Public Health, and the University of Pennsylvania School of Medicine surveyed the coronary care units of 155 hospitals.

They located 556 women between the ages of 25 and 49 with first episodes of heart attack, and compared the medical and drug use histories of these women with those of 2,036 age-matched controls.

In line with earlier reports, the researchers found that current use of oral contraceptives increases the risk of heart attack three to four times.

The new finding is that the risk for long-term users, those on the Pill for 5 years or longer, does not reverse once Pill use is stopped. It can remain as much as three times higher than the normal risk for at least 9 years, and further research may show that it lasts even longer.

Overall, former Pill users in the study had only a 20 percent greater chance of heart attack than did women who never used the Pill. The added risk was far from evenly distributed, however.

An analysis of the length of time of Pill use showed that women who used the Pill for less than 5 years had no added risk; those with 5 to 9 years of Pill use had a 60 percent greater chance of heart attack; and

those with 10 or more years of use had two to three times the normal risk. Because of the scarcity of data for younger age groups, this analysis was limited to women aged 40 and older.

The higher risk was found even in long-term users who had stopped taking the Pill up to 9 years earlier. There were too few subjects who had been off the Pill for 10 or more years to indicate if the risk continues beyond the 10-year post-pill interval.

While some of the large studies on the Pill have shown an increased risk of heart attack in current users, it was not previously feasible to perform the kind of detailed analysis found in this project.

In other studies there simply were not enough heart attack cases to analyze. This is because even in a high risk group of Pill users, heart attack is still rare; it occurs in an estimated 9 in 10,000 Pill users between the ages of 40 and 44.

The investigators note that the link between past Pill use and heart attack points toward mechanisms that involve clogging of the arteries, atherogenesis.

Because of the Pill's established effects on certain functions that affect the health of the arteries, including lipoprotein metabolism, glucose tolerance, and blood pressure, the researchers believe that accelerated atherogenesis might be expected.

However, it is not certain whether these side effects alone are responsible for the increased risk this study revealed.

This research, funded in part by the National Institute of Child Health and Human Development, was reported in the *New England Journal of Medicine*, Volume 305, Number 8. □

See Colts Charge the Chargers

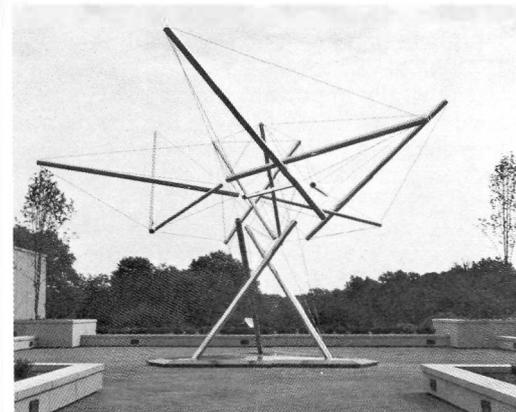
R&W has obtained 50 tickets on a "first-come" basis for the Baltimore Colts vs. San Diego Chargers on Sunday, Oct. 18. The \$17.50 fee includes upper reserved seats and bus transportation to Memorial Stadium. Buses will leave Bldg. 31C at noon.

Sign up now at the R&W Activities Desk, Bldg. 31, Rm. 1A-18. □



Although many wince when approached for contributions, you can be assured your dollars are being well spent when you give to the Combined Federal Campaign, which helps support 237 service organizations of the United Way, National Health Agencies, International Service Agencies, National Service Agencies and local non-affiliated agencies. □

New NLM 'Tree I' Sculpture Dedicated



As part of GSA's art-in-architecture program for Federal buildings, artist Kenneth Snelson's "Tree I" sculpture has been dedicated at the NLM.

"Tree I," a stainless steel and steel cable sculpture, was dedicated Friday, Oct. 2, at the National Library of Medicine.

Commissioned under the U.S. General Services Administration's art-in-architecture program for NLM, the tree-like construction by artist Kenneth Snelson, is installed on the plaza between the Library and the new Lister Hill Center for Biomedical Communications.

Appears To Float

The work is 20 feet high, expands 32 feet, is symmetrical on three axes, and appears to float. It cost \$125,000 including design, engineering, drawings and models, materials, fabrication, transportation and installation.

Mr. Snelson's works are in the permanent collection of several prominent museums and have been exhibited in galleries and museums in the United States, United Kingdom, Germany, Japan, France, the Netherlands and Spain.

Among those attending the dedication were GSA Administrator Gerald P. Carmen; Dr. Lionel Bernstein, Lister Hill Center director; Livingston Biddle, chairman, National Endowment for the Arts; Abram Lerner, Hirshhorn Museum and Sculpture Garden director; and NLM Director Dr. Martin L. Cummings, who said, "the sculpture represents the 'tree of knowledge,' showing the relationship between science, the arts, and the humanities." □

That's Life

The life cycle from birth to death will be the subject of a five-part workshop conducted by the Employee Assistance Program.

The seminars, combining lectures with discussion, deal with the psychological and physical aspects of the various stages of life. The topics will include infancy and childhood, adolescence, adulthood, and old age.

Morris Schapiro and Rachelle Selzer, co-leaders, will present the programs on Oct. 25, Nov. 2, 9, 16 and 23 from noon to 1 p.m. in Bldg. 31, Rm. B2C-07.

For further information, call 496-3164. □

SARCOMA

(Continued from Page 1)

year in the U.S.

Most soft tissue sarcomas occur in the extremities and local recurrence rates following standard treatment (limited excision or amputation) outside of NCI studies have been about 40 percent.

The tumors tend not only to recur locally but tend to spread early to the lungs. The challenge is to develop treatments to prevent both while preserving the limb.

The NCI studies were designed to determine optimum use of surgery and radiation for "local" control, and chemotherapy for "systemic" control (spread of tumor to other areas).

The NCI studies of patients with soft tissue sarcoma of the extremities were conducted by the Surgery Branch, in conjunction with the Radiation Oncology and Medicine Branches. Researchers collaborating with Dr. Rosenberg in the recent studies are: Dr. Eli Glatstein and Dr. Joel Tepper, Radiation Oncology Branch; and senior surgeons, Surgery Branch, NCI. □

Heart Patient Needs People Who Speak His Language

Volunteers who speak either—Bengalee, Hindi, or Urdu—are needed for a 23-year old seaman from Bangladesh who this month will undergo open-heart surgery in the Clinical Center.

"It is vitally important that we have the services of an interpreter for the period of this young man's hospitalization," said Dr. Stephen E. Epstein, chief, Cardiology Branch, NHLBI.

In August, the young seaman was taken off his ship in Baltimore harbor and examined at the U.S. Public Health Hospital there. After medical examinations in Baltimore and at the CC, it was determined that he had to have cardiac surgery.

Normally, the CC's Office of Patient Representative and Volunteer Services retains a list of qualified interpreters who speak a variety of languages. Some of these people are researchers assigned here to NIH and others are persons who have learned about the program and have volunteered.

In the seaman's case, it is expected that because of the operation's delicate nature that it would be necessary for several people who speak his language to be on hand for several hours at a time to communicate with him during his expected month-long convalescence.

Officials hope that people at NIH who speak this man's language, or perhaps a family member, might volunteer to help him. Betty Schwering is coordinating names for this project. She can be reached at 496-2626. □

Linda Cross Wins NIH Record Trophy

Linda Cross, information specialist in the Office of Scientific and Technical Reports, NIADDK, has received *The NIH Record* Writers Award for outstanding contributions to the publication during the first 6 months of 1981.

Ms. Cross is the first recipient of the "perpetual trophy" which will be transferred every 6 months to deserving *NIH Record* correspondents. □

Chamber Music Series Opens

The first concert of the 1981-82 Chamber Music Series sponsored by the Foundation for Advanced Education in the Sciences, will be held on Sunday, Oct. 18, at 4 p.m. in Masur Auditorium.

The concert will present Michael Hume, tenor; Fred Scott, pianist; and the Emerson String Quartet.

Admission is by ticket only. For further information call 496-5272. □

CORRECTION

The NIEHS reorganization plan was published in the July 27 issue of the *Federal Register*. Due to an erroneous submission, it was recently reported in the *NIH Record* as July 24. □

'Eat Well, Be Well' Visits Nutrition Congress



Present at the Eat Well, Be Well exhibit at the congress are (l to r): Carole Passadin and Doris Bressler, Metropolitan Life Insurance Company; Dr. Herbert; Karen Donato and Dr. A. P. Simopoulos, Nutrition Coordinating Committee.

NIH's Nutrition Coordinating Committee exhibited the popular Eat Well, Be Well series of videotapes at the XII International Congress of Nutrition held in August in San Diego.

The theme of the Congress, sponsored by the International Union of Nutritional Sciences, was Nutrition: Basic to Human Health and International Development.

Over 2,600 physicians, nutritionists, dietitians, researchers, and other allied health professionals from 84 countries attended the San Diego congress.

The session covered topics in biochemical, metabolic, and clinical research to the areas of pediatrics, food science, public health, agriculture, nutrition education and food policy.

During the congress, over 1,000 papers and poster sessions on various nutrition-related topics were presented, and colleagues participated in small workshops and conferences. The exhibit area housed products, instruments, services and publications of nonprofit organizations, commercial firms, and government agencies.

The Eat Well, Be Well exhibit featured the series of 26 segments of 4¼ minutes and one 30-minute anthology. Each segment offers nutritional information and discusses commonly held fallacies about nutrition.

The Eat Well, Be Well series features Helen Hatton—a marathon runner, professional nutritionist and chef—who demonstrates different recipes that are tasty, easy to prepare, and are nutritional.

The series was produced by the Metropolitan Life Insurance Company, in consultation with the NCC and Dr. Victor Herbert, past president of the American Society of Clinical Nutrition.

In March, the series was beamed via satellite to 225 public television stations across the country, and many have decided to show the series as part of their fall programming schedule.

During the Congress, some 1,500 par-

ticipants from around the world visited the exhibit. Requests for copies of the series came from England, Australia, Canada, Africa, Mexico, and other countries.

Representatives from industry, universities, and the media also previewed the series and expressed interest in it. A segment was featured on San Diego's channel 8 newscast.

The DHHS/USDA publication *Nutrition and Your Health . . . Dietary Guidelines for Americans*, the Eat Well, Be Well recipe card sets, and a leaflet on the availability of the videotape series were distributed at the congress.

In conjunction with the congress, 16 participants visited NIH later in August for a half-day tour where presentations on NIH's nutrition and intramural and extramural programs were discussed.

The group also visited NCI, NEI, and NIADDK laboratories, and made a tour of the National Library of Medicine and the Clinical Center's Nutrition Department. □

R&W Wants You to 'Get Involved'

Want to learn more about NIH's multifaceted Recreation & Welfare Association? How about volunteering to serve on the R&W executive council? As a B/I/D representative, any thoughts, suggestions and ideas can be submitted to the board of directors for a part in organizing new programs and activities.

To volunteer for this year's election, contact your executive officer, or send your name, B/I/D and phone number to the R&W Office, Bldg. 31, Rm. 1A-17. □

Did you know that a biweekly deduction gift of \$8 will provide daily transportation service for a handicapped adult to a therapy or activity program? Reaching people who need you: that's what the CFC is all about. □

Dr. Gross Dies in Accident While In Germany

Dr. Erhard Gross, 53, chief of the Section on Molecular Structure, Endocrinology and Reproduction Research Branch, NICHD, died Sept. 12 in Germany, from injuries received in an automobile accident.

Employed at the NIH for 23 years and a section chief since 1968, Dr. Gross's initial work on the nonenzymatic cleavage of proteins culminated in the discovery in 1961 of the cyanogen bromide cleavage of methionine residues in proteins.

This specific chemical cleavage method for methionine has become one of the most important steps and widely used techniques in the structural analysis of proteins, which contributes greatly to the understanding of the structure-function of hormones and enzymes.

Dr. Gross and his associates applied similar techniques toward the structural analysis of naturally occurring peptide antibiotics such as nisin, subtilin, cinnamycin



Dr. Erhard Gross

and duramycin which contain dehydro-amino acids and other unusual amino acids such as β -methyl lanthionine.

Synthetic work on these compounds resulted in the development of new protecting groups of peptide synthesis and new methods of forming the peptide bond. Synthesis was recently expanded into the area of LH-RH analogs containing similar structural features with a view to finding super agonists or antagonists.

Dr. Gross was awarded the Alexander von Humboldt Prize for outstanding senior American scientists in 1978 and organized and was chairman of the 6th American Peptide Symposium in 1979. He was coeditor of the continuing series *The Peptides—Analysis, Synthesis, Biology*, the fourth volume of which had just been published at the time of his death.

He was a graduate of the University of Mainz, Germany; in 1956 he received a degree in chemistry from the Institut für Organische Chemie, University of Frankfurt, and in 1958 a Ph.D. from the University of Frankfurt/Main. The same year, he came to the NIH. □

Dr. Salans Named NIADDK Acting Director

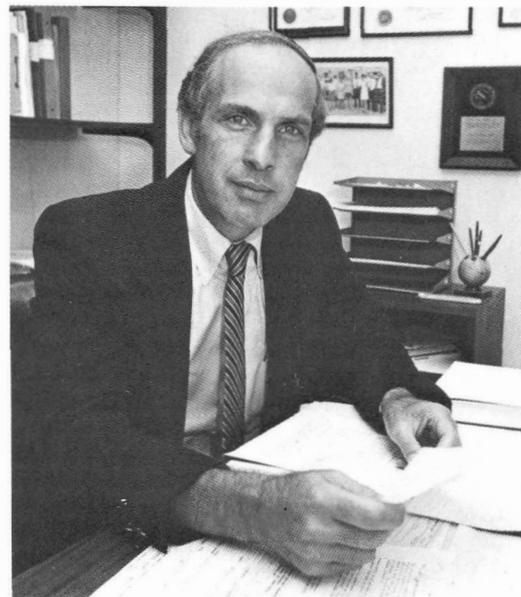
Dr. Lester B. Salans was appointed Acting Director of the National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases on Oct. 1. He fills the post vacated by Dr. G. Donald Whedon who resigned Sept. 30 after 19 years as Institute Director.

A noted endocrinologist and authority on obesity and diabetes, Dr. Salans has been associate director of NIADDK's Diabetes, Endocrinology and Metabolic Diseases Program since 1976.

In addition to his programmatic responsibilities for the diabetes effort, he chaired both the NIH and Interagency Diabetes Mellitus Coordinating Committees, and served on the National Diabetes Advisory Board.

Dr. Salans came to NIH 5 years ago from Dartmouth Medical School, N.H., where he was associate professor of medicine and head of the section on endocrinology and metabolism. He received his M.D. from the University of Illinois College of Medicine in 1961, performed his internship and residency at Stanford University Medical Center, and received his research training at Rockefeller University.

The author of more than 50 publications on diabetes, metabolism, and obesity, he continues to pursue his research interest in



Dr. Salans directed the government-wide implementation of the Long-Range Plan to Combat Diabetes, the body of recommendations put forth by the National Commission on Diabetes.

the mechanism of insulin action as chief of NIADDK's Laboratory of Cellular Metabolism and Obesity. □



Dr. Donald I. McRae, work group leader for non-ionizing radiation from the National Institute of Environmental Health Sciences, has been elected vice president and president elect of the International Bioelectromagnetics Society. He will automatically assume the presidency from June 1982 to June 1983. The society, which has approximately 450 international members, is concerned with research on the biological effects of electromagnetic radiation, as well as its potential diagnostic and therapeutic applications.



FIC Fellows Arrive From Finland, Mexico, Canada

Three foreign scientists have arrived at NIH in the past 2 months to begin international center research fellowships of the Fogarty International Center.

Dr. Toivo Tapio Ranta, a lecturer at the University Central Hospital, Helsinki, Finland, will be under the preceptorship of Dr. Levin J. Catt, NICHD. Dr. Ranta's research is in endocrinology.

Dr. Ruy E. Perez, a teaching assistant at the Universidad Nacional Autonoma, Mexico City, will be at NIADDK under the preceptorship of Dr. Henry Metzger. Dr. Perez is doing research on membrane/receptor.

Dr. Gregory A. Dekaban, a graduate student at the Department of Biochemistry, University of Western Ontario, London, Ontario, will be training under the preceptorship of Dr. Peter J. Fischinger at the Frederick Cancer Research Center. His research is on molecular biology of viral and chemical carcinogenesis. □

'I Will Be Revenged, Jack Dalton!'

Villians, heroes, and heroines will dash around the stage on Melodrama Nights at the Masur Auditorium in November. Staged by the NIH/R&W Theatre Group, the proceeds will go to the Patient Welfare Fund. The performances are scheduled for Nov. 13 and 14 at 8 p.m., Nov. 15 at 3 p.m., and Nov. 20 and 21 at 8 p.m. □

I prefer the challenges of life to the guaranteed existence.—Dean Alfange □

Individual Retirement Accounts Offered Jan. 1 by Credit Union

Individual retirement accounts (IRA) will be offered by the NIH Federal Credit Union Jan. 1, 1982. Recent congressional legislation stipulates that for the 1982 tax year, individual wage earners, even those covered by other pension plans, will be able to make tax deductible contributions to IRA's of up to a maximum \$2,000 or 15 percent of their income, *whichever is less*.

These new maximums represent a substantial increase over the current ceilings, especially for those working part-time. In addition, the limit on joint spousal IRA's for nonemployed spouses has been increased from \$1,750 to \$2,250, which must be split equally by the two parties.

Initiated under the 1974 Employee Retirement Income Security Act, IRA's were started to help the 30 to 50 million people with no retirement plans and to ease the burden on the Social Security supplemental retirement system.

Originally, those in private industry not participating in a qualified pension plan, profit-sharing plan, or stock bonus plan could open an IRA account, but if participating, were not eligible for an IRA. IRA's were also off limits for government employees.

The new legislation has removed these limitations, and employees are now allowed the same deduction privileges either for IRA contributions or, in private industry, for voluntary contributions to their employer-sponsored plan.

The NIHFCU anticipates offering insured IRA accounts at a tentatively set 9 percent dividend rate. Accounts may be opened before 1981's income tax deadline of Apr. 15, but may not be claimed until the next year's return, whose deadline for account opening is Apr. 15, 1983.

If an individual enrolls in a payroll deduction plan and overpays the IRA, that money may be adjusted or reinvested. For additional information or advice, call the NIHFCU, 496-2331. □

Dr. E. L. May Receives Nathan B. Eddy Award

Dr. Everette L. May, former chief of the Section on Medicinal Chemistry, Laboratory of Chemistry, NIADDK, recently received the Nathan B. Eddy Award. The prize \$25,000 and a small gold medal portrait of Dr. Eddy, was presented last summer in San Francisco at the annual meeting of the Committee on Problems on Drug Dependence.

The award is given annually for outstanding contributions toward solving the problems of drug abuse and the discovery of new and improved medicines that act on the central nervous system. It honors Dr. Eddy, a world-renowned pharmacologist who devoted most of his professional life, including 32 years at NIH, to the study of drug-abuse problems.

Dr. May is currently professor of pharmacology at the Medical College of Virginia. He retired in 1976 after 35 years of research at NIH. He developed a method leading to the total synthesis of a series of analgesics in which their activity could be clearly demonstrated to be free of undesired opiate side effects in monkeys.

This work inspired hundreds of scientists throughout the world, resulting in the de-

velopment of new agonist-antagonist analgesics, including pentazocine, the first drug of its kind to be approved and used clinically.

During World War II, Dr. May prepared scores of potentially useful antimalarial compounds while working for the then Chemotherapy Section of the Institute of Experimental Biology and Medicine, forerunner of the present NIADDK.

One of the compounds he developed was found to be the most effective drug in combating a deadly strain of malaria in Vietnam, which later formed the basis of even more potent antimalarial drugs developed by the U.S. Army.

The Committee on Problems of Drug Dependence is an interdisciplinary group of chemists, pharmacologists, sociologists, psychiatrists, psychologists and other scientists engaged in research on all aspects of drug dependence and is sponsored by nine professional societies. Dr. Arthur Jacobson, a research chemist in the Section on Medicinal Chemistry, NIADDK, coordinates the committee's biological interests. □

HELP!

Will the good NIH samaritan who helped a lady whose car broke down on the road to the Eastern Shore on the evening of Oct. 2 please come forward?

The woman, an employee of the Treasury Department, would like to locate this gentleman who assisted her. All she knows is that "he is in his late 40's, has a wife, two daughters, and a schnauzer named Max, drives a station wagon, and owns a home on Taylors Island."

The number to call is 566-2033; ask for Janet Paluck. □

Everything comes to him who hustles while he waits.—*Thomas Edison* □

Assertiveness Can Help Develop Career, Personal Life Situation

"The ability of a person to present one's self in a positive assertive manner on a job interview can make the difference between being rejected or getting the job," says Rachele Selzer, chief Mental Health Counselor in the Employee Assistance Program.

She will conduct a 4-week assertiveness training workshop for NIH employees. The 1-hour workshops will be held from 11:30 a.m. to 12:30 p.m., Oct. 22 and 29, and Nov. 5 and 12 in Bldg. 31, Rm. B2B-35

"Our assertiveness courses actually are presented as starting points to make people think and experiment with new behaviors," she says. "Frequent feedback from former participants in the course indicates that they have used their newly acquired knowledge and communication skills to improve either their careers or personal life situation."

Confidence Created

There are many instances where assertiveness can create self-confidence, according to Ms. Selzer, who possesses a master's degree in counseling psychology from Antioch University.

"For instance, in conference participation, people will sit there for hours and never utter a word," she noted. "Our courses show people how to 'risk' their opinions and become active in give-and-take communication."

The majority of assertiveness course participants have been women, but lately more male NIH employees have evidenced an interest in attending the group sessions.

Call Ms. Selzer at 496-3164 for a pregroup interview. □

New Pay Rates for Federal Employees (As of October 1, 1981)

LONGEVITY STEPS	1	2	3	4	5	6	7	8	9	10
GRADE GS-1	\$8,342	\$8,620	\$8,898	\$9,175	\$9,453	\$9,615	\$9,890	\$10,165	\$10,178	\$10,439
2	9,381	9,603	9,913	10,178	10,292	10,595	10,898	11,201	11,504	11,807
3	10,235	10,576	10,917	11,258	11,599	11,940	12,281	12,622	12,963	13,304
4	11,490	11,873	12,256	12,639	13,022	13,405	13,788	14,171	14,554	14,937
5	12,854	13,282	13,710	14,138	14,566	14,994	15,422	15,850	16,278	16,706
6	14,328	14,806	15,284	15,762	16,240	16,718	17,196	17,674	18,152	18,630
7	15,922	16,453	16,984	17,515	18,046	18,577	19,108	19,639	20,170	20,701
8	17,634	18,222	18,810	19,398	19,986	20,574	21,162	21,750	22,338	22,926
9	19,477	20,126	20,775	21,424	22,073	22,722	23,371	24,020	24,669	25,318
10	21,449	22,164	22,879	23,594	24,309	25,024	25,739	26,454	27,169	27,884
11	23,566	24,352	25,138	25,924	26,710	27,496	28,282	29,068	29,854	30,640
12	28,245	29,187	30,129	31,071	32,013	32,955	33,897	34,839	35,781	36,723
13	33,586	34,706	35,826	36,946	38,066	39,186	40,306	41,426	42,546	43,666
14	39,689	41,012	42,335	43,658	44,981	46,304	47,627	48,950	*50,273	*51,596
15	46,685	48,241	49,797	*51,353	*52,909	*54,465	*56,021	*57,577	*59,133	*60,689
16	*54,755	*56,580	*58,405	*60,230	*62,055	*63,880	*65,705	*67,530	*69,355	
17	*64,142	*66,280	*68,418	*70,556	*72,694					
18	*75,177									

*NOTE: The maximum pay must not exceed \$50,112.50 because of congressionally imposed ceiling.

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