The Countdown Has Begun

Special Centennial Clock Will Mark Off the Next 100 Years

By Anne Barber

The seconds tick off, one by one, marking the time until the next 100 years roll around—the year 2087. The clock, a blue metal box containing 10 glowing red digits that measure about one inch high, has been programmed to count down until the second NIH 100 year mark has been reached. Dr. James B. Wyngaarden, NIH director, started the clock at the Centennial Commemorative ceremony, Oct. 16, officially opening NIH's second century.

The clock was designed by the Biomedical Engineering and Instrumentation Branch, part of the Division of Research Services. According to Dr. Henry Eden, deputy chief, BEIB, "It is a very simple, straightforward circuit. We chose to count down seconds—rather than display years, months, and days—because it was easier to implement within the short deadline for the project.

"We took leap years into account to come up with the right number of seconds—3,155,695,264," he continued. "It was a project within BEIB and my role was simply to coordinate it. Allen Markowitz, an electronic engineer, and Burt Chidakel, electronic technician, designed and built the electronics, and Thomas Tedder, biomedical instrument maker, built the cabinet enclosure. Purchasing agents Maxine Anders, Patricia Hales and Chris Hansen procured all the parts."

Explained Eden, "We were given some latitude with the design—and we considered producing an hourglass or a spiraled tube filled with liquid and a ball marking the years—but, because of the short turnaround time required, we chose to go with a design that we knew would work."

According to Markowitz, design was not the problem; getting the parts was. The main chip for the clock came from California and the sockets for the light-emitting diodes came from New Jersey.

"If you don't have the parts, you can't have a design," he said.

Glued to an inside wall of the clock is a slogan borrowed from a DRS brochure; it reads "Proud to serve.”

The clock, along with a Centennial time capsule (yet to be fabricated) will eventually be located in Bldg. 10, along with other Centennial memorabilia.

Dr. Samuel Korper, chairman of the NIH Centennial subcommittee that has responsibility for the time capsule and other aspects of the celebration, says it will probably be December or later before all time capsule contents are received.

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Seminars Focus on Lab Safety

By Blair Gately

The recent laboratory-acquired infection of two people working with the AIDS virus, HIV, has prompted the Division of Safety to sponsor several programs to acquaint employees with preventive measures.

Dr. Joseph E. Rall, NIH deputy director for intramural research, told the audience at a recent Clinical Center Grand Rounds, "Working in a lab has never been a particularly safe profession. Worksite-acquired infections are not new."

He said studies have analyzed how the two workers became infected with HIV and what measures should be taken to avoid additional cases of infection.

The Grand Rounds session not only focused on HIV, but also on hepatitis B and Rocky Mountain spotted fever.

Dr. Robert McKinney, director, Division of Safety, related a case involving two laboratory support service workers who died after becoming afflicted with Rocky Mountain spotted fever.

"It was not possible to establish the source of their infection," he said. "Their duties were

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New NMR Center Opens

By Blair Gately

The NIH In Vivo NMR Research Center has opened in a one-story building adjacent to the Clinical Center's "D" wing.

The new facility, which was dedicated late last month, is the first centralized NMR facility on campus and will be the focus of biomedical NMR research, according to Dr. Cherie Fisk, Office of Research Services. It houses three nuclear magnetic resonance imaging and spectroscopy instruments, two for animal studies and one for patients.

Nuclear magnetic resonance is used to study anatomical and physiological processes in living systems. The new center has a 1.0 Tesla whole-body instrument and two wide-bore animal NMR machines, one with a 2 Tesla field and the other with a 4.7 Tesla field, and associated data stations and computer facilities. In addition, a 7 Tesla 10-cm spectrometer is there for special applications in NMR spectroscopy.

By having machines for both animal and human images in the center, researchers will be able to conduct directly analogous experiments.

The center also has a small patient care area with waiting, dressing and preparation rooms.

"This is a day many of us have been looking

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Laboratory Technician Elwood Claggett Dies; Was 35-Year Assistant to Dr. Weinbach

After a courageous 5-year struggle with multiple myeloma, Charles Elwood Claggett, biological laboratory technician, died on Sept. 30, 1987. Claggett joined NIH in 1947 in the Microbiological Institute and remained within that institute (now NIAID) until his death. He was the assistant to Dr. Eugene Weinbach for 35 years in an unusual and perhaps unique association at NIH.

Starting at NIH without having finished high school, he rose to the highest technical level. On his own initiative, Claggett completed high school requirements, course work at Montgomery Junior College, George Washington University and graduate studies at the NIH Graduate School. Scrupulous in his work, Claggett conducted experiments that were characterized by utmost reliability and fastidious attention to detail. He was a master of instrumentation, and his manual dexterity was extraordinary; he was known outside of the NIH community for his meticulous preparations of mitochondria.

Claggett was one of those rare individuals who consistently gave. He cheerfully accepted all responsibilities, and served on various committees within the institute. In addition to his full career at NIH, he worked part-time (floor manager at Safeway stores) for 16 years prior to his illness. Claggett truly was an outstanding and exemplary member of NIAID and the NIH.

Above and beyond his scientific achievements was Elwood Claggett the man. His strong character with its deep religious roots was an inspiration to all who knew him. He seldom "bad-mouthed" anyone, preferring to look at the bright side of unpleasant persons and situations. During the long period of his illness, he frequently counseled and encouraged others who were seriously ill; he never lamented over his own incurable disease.

Claggett's hobbies included active participation in sports: softball and golf in the early years, and bowling with his family more recently. A memorial service was held Oct. 3 at Dickerson United Methodist Church.—Dr. Eugene Weinbach

CC Adopts New Names

The Clinical Center is adopting new names that will identify for patients and visitors its two distinct sections, said Dr. John L. Decker, director of the CC.

"Using the term 'ACRF' only serves to confuse rather than enlighten our patients and visitors," Decker said. "Our friends and employees already know their way around, but I think patients are often frustrated by the confusing use of several different names for the same thing. Therefore, in honor of the NIH Centennial and for the next 100 years I'd like everyone to use the new names."

The Ambulatory Care Research Facility (ACRF) has never been a favored handle, according to an unscientific survey conducted by Decker and others in the office of the director. Therefore, the name ACRF will be dropped and simply become known as "the clinic." The older section of the CC will be known as "the hospital."

"This is not an attempt to change the name of the Warren Grant Magnuson Clinical Center," Decker said, "but rather to designate its two distinct parts with names that reflect their respective functions, and to help our patients and visitors find their way throughout the building. I hope everyone will adopt the new names and use them in all their references to the Clinical Center."
Women Are Taking Charge of Their Health

By Anne Barber

Women of all ages, from teenagers to the elderly, attended the "Women's Health Seminar: Taking Charge" at Masur Auditorium on Oct. 23. The moderator and spokeswomen for the seminar was Renee Poussaint, news anchor for WJLA-TV, Washington, D.C.

Speaking to a packed audience, Poussaint said the basic concept of the seminar was to get women to take charge of their health and assume responsibility for it. "It is time women began to be proactive with their health instead of reactive," she said.

Covering the role of women's health during the past 100 years was Dr. Ruth Kirschstein, director, NIH Office of Women's Health. In 1900 a woman's life expectancy was 48 years; today it is 78 years. "It is clear we are entering an era in which the health of women has been improved," she said.

Dr. Louella Klein, professor and chairman, department of gynecology/obstetrics at Emory University School of Medicine, spoke on controlling and combating risks of common diseases.

"Every woman needs to know how to get health care for herself and for her family," she stated. This includes knowing about prenatal and well-health care, making an informed decision about breast cancer, dealing with menopause and osteoporosis, gaining protection from sexually transmitted diseases, and knowing what effects smoking has on the body.

Klein said more than 23 million adult females smoke in the United States and lung cancer now surpasses breast cancer rate among women.

"Smoking is a preventable problem," she stated. "It causes lung cancer, heart disease, strokes, early menopause, aging and wrinkles, yet women continue to smoke."

Added Poussaint: "Unfortunately, we all grew up in the generation when we thought smoking would make us look like Lauren Bacall."

According to Klein, women can have a healthy lifestyle by eating well, exercising, detecting cancer early, not overdosing on medication, and seeking treatment for their health problems.

A "wellness triangle" was introduced by Dr. Clair Callan, director of medical affairs for Abbott Laboratories. The triangle consisted of nutrition, energy, and exercise. "As a matter of life, the way you eat will determine how much energy you will have. And if you have energy, you will exercise," she said.

"There are things we can all do to help ourselves," she continued. "Fasten seat belts, reduce alcohol intake, stop smoking, exercise daily, and diet."

Dr. Stephanie S. Covington, a psychotherapist from La Jolla, Calif., spoke on drug dependency. Asked, "Who is the drug-dependent woman?" Covington said: "There are no characteristics typical of this woman. However, there are 2 million women addicted to over-the-counter drugs and 4 million addicted to alcohol and other drugs."

"Unfortunately," said Covington, "we live in a society that teaches us relief is just a swallow away."

But, she quickly points out, there are things women can do for themselves. For example, examine drinking habits. Two drinks a day for a woman is considered heavy drinking; addiction can also be to cigarettes, coffee, sugar, relationships, and credit cards. Women who think they have a problem should seek professional help.

"In order to make our outer life work, we must have a good inner life," Covington said.

The second half of the seminar was called, "What Do We Do With What We Learned?" Speaking for the Food and Drug Administration was Karen Garthwright, who serves on the special health program staff. Garthwright spoke on distinguishing useful health information from fads and quackery.

"Only from reliable information are women able to make decisions to take charge of their health," she said. Bad information thwarts this process.

According to Garthwright, health fraud can cause women to delay needed medical treatment. In the case of arthritis, health fraud promotes pain killers and cures. Ersatz medicine merely kills the pain and does not treat the problem.

Another fertile area for fraud is diet. "It is estimated that three-fourths of all teenagers are on a diet," said Garthwright. There are approximately 50,000 diet plans currently touted, most of which promise quick weight loss. "The best diet, of course, is to eat balanced meals, exercise, and remember that a moderate weight loss stays off the longest," Garthwright said.

"Remember Lydia Pinkham's pill. 'Pink pills for pale people?" she continued. "That was on the market in the 1880's and not taken off until 1960. It was advertised to relieve complaints of women's problem."

Garthwright pointed out several advertising pitches that should send up red flags of warning: If it seems too good to be true, it probably isn't true. Also, beware of testimonials.

Overall, she stated, "Women must first be informed consumers in order to take charge."

Dr. Sheldon Greenfield, professor of medicine and public health, University of California, Los Angeles, spoke on how to talk with your doctor. A major issue is finding the right doctor. Criteria he suggested included: "humaneness, communications skill, and personal reputation."

According to Greenfield, it is possible to improve the nature of the patient/doctor relationship. Studies have shown that when this happens, the patient actually changes his/her health status. "Patients who don't ask questions are unaware of their options," he said. "If a doctor/relationship cannot take some challenge, change doctors."

Dr. Edith Irby Jones, clinical assistant professor at Baylor College of Medicine and the University of Texas, stated, "What we are celebrating here is not so much the longevity of life

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WOMEN
(Continued from Page 3)

as the quality of life we enjoy, regardless of our life span.”

Taking charge and doing the best with what we have, Jones feels, includes physical, mental and spiritual well-being.

“Wellness for women is a target that has not shifted; it is a never-ending battle. Good health is not just being in good physical shape,” she continued. “It is feeling good about yourself.”

Jones said that poor mental attitude can destroy one’s physical condition. “If something happens you can do something about, do it. If not, move on.”

Jones recommended three tactics for wellness: (1) Think clearly—know who you are, what you can be; (2) Act decisively—do something about your problems; and (3) Serve diligently—know some purpose in your life.

“Even as you care for yourself, care for others,” she continued. “When you are in fine health, help someone else.”

Summarizing the proceedings, Kirschstein said attendees should become emissaries for women’s health and spread the word. “Get out there and network,” she said.

In her closing remarks, Poussaint stated, “The movement of women in the health field is the same as in other businesses. We have a long way to go.” She was then presented with a certificate and pin honoring NIH’s 100th anniversary.

Attending the seminar were 32 young women, ages 11-12, from the seventh grade at Takoma Park Intermediate School. The students are enrolled in the school’s math, computer and science magnet program.

Said Meryl Moran, their science teacher, “I think it is great that the girls wanted to come to this. I am in favor of current information being provided to students.”

The seminar was an NIH Centennial event sponsored by the NIH Advisory Committee on Women’s Health Issues, and the NIH Federal Women’s Program, Division of Equal Opportunity.

NICHD Seeks Volunteers

NICHD needs volunteers for a study on parenthood. They should be married women, ages 20-40, without children, to participate in a study of responses to infant cries.

Two 1-hour visits, approximately 5 months apart, are required. Participants will be paid $30.

For more information, call Dr. Lynne Huffman, 496-8226.

Special Accommodations for Handicapped Computer Users Available from DCRT

To provide better service to hearing or speech impaired users, the DCRT Computer Center training unit has installed an additional telephone line for use with a telecommunications device for the deaf. A TDD is a small, portable device that makes possible a two-way conversation over regular telephone lines by allowing typed instead of voice communication.

The only requirement is that each party have their phone connected to a TDD during the conversation.

The TDD phone number in the training unit is 496-8294. Persons with a TDD are invited to call this number to contact any person or office within the Division of Computer Research and Technology.

If the service requested is one normally provided by the training unit (such as information on courses offered, assistance in selecting courses, assistance in completing class assignments, questions on the hardware and software supported by the Computer Center), the training unit staff will provide an immediate response.

If the call is for any person or service outside the unit, a message will be forwarded to the appropriate person within DCRT. That person may then use the TDD in the training unit to respond to the caller.

The telephone will be answered during the unit’s regular hours: Monday through Friday, 8 a.m. to 4:30 p.m.

All computer users, including handicapped individuals, are welcome to attend any course for which they meet the prerequisites. Bldg. 12A is accessible by wheelchair from both entrances. There is elevator service to the classroom level, and both the classrooms and the restrooms on the same floor are wheelchair-accessible.

If any special services such as a sign language interpreter, recorded notes, or specialized terminal will be needed the prospective student should contact the training unit as early as possible to make the necessary arrangements. Such special requirements should also be noted on the training course application form. It is generally impossible to provide such services on the day of the class without prior notice.

Specialized Vendor Services

The IBM Corporation operates a specialized “IBM National Support Center for Persons with Disabilities” (P.O. Box 2150, Atlanta, GA 30055) to assist people with disabilities in using IBM computers. This center serves as a clearinghouse for information on IBM hardware and software designed or adapted for use by persons with specific disabilities. They will be happy to talk directly with anyone needing special assistance in using a computer and help in locating the necessary resources. The IBM center can be reached by telephone at 1-800-IBM-2133 and by TDD at (404) 238-3521.
**Mice Secrete Human Protein Through Genetic Engineering Technique**

By applying the latest techniques of genetic engineering, scientists have induced laboratory mice to secrete in their milk a human protein called tissue plasminogen activator.

The protein is an experimental anticlotting agent that shows promise as a treatment for heart attacks and various clotting disorders. It is found naturally in human blood.

Scientists from NIDDK, NICHD, and Integrated Genetics, Inc., described the advance in heart attacks and various clotting disorders. It is the first published report in which a research team has, by introducing into mice a combination of human and mouse genetic material, induced the animals to produce a biologically active human protein in their milk.

Building on recent gains from genetic research and genetic engineering, the scientists first isolated and characterized genetic material that regulates formation of a milk protein, known as whey acidic protein, in mice. This regulatory segment of a mouse gene was fused with a human gene that codes for tissue plasminogen activator.

The hybrid gene was then injected into newly fertilized mouse eggs, which were then returned to "foster mother" mice that brought the embryos to term. Female offspring that carried the hybrid gene produced plasminogen activator in their milk and passed on this trait to later generations.

The research resulted from the collaboration of Heiner Westphal and Eric Lee of NICHD, Lohnt Hennighausen of NIDDK, and Katherine Gordon, James Vitale, and Alan Smith of Integrated Genetics, Inc., in Framingham, Mass.

The success with transgenic mice brings scientists one step closer to applying the same technology in animals that produce larger quantities of milk such as cows, goats, and sheep.

"We think genetic engineering methods like this will someday enable animals to produce in their milk large amounts of useful proteins," Hennighausen said.

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**NIDR Scientists Win Award**

A Swiss-based foundation interested in animal protection has presented its 1986 scientific award to four NIDR scientists who developed an assay for rapidly testing the invasiveness of tumor cells. Their finding reduces the need for animal studies.

The award from the Dorenkamp-Zbinden Foundation, which includes a $26,000 prize, was presented to Drs. Adriana Albini, Yukihide Iwamoto, Hynda Kleinman, and George Martin in a recent ceremony at the Johns Hopkins School of Public Health.

The NIDR researchers developed an in vitro assay—a test conducted in laboratory equipment instead of animals—that measures the invasiveness of tumor cells and can be used to test the effectiveness of anticancer drugs. The technique has the added advantage of allowing scientists to isolate invasive cells from tumors for further study.

"This new assay is doubly satisfying," said NIDR director Dr. Harold Lie. "It is a significant contribution to cancer research, and it also is a major step in the direction Congress spelled out for NIH 2 years ago." Congress requested, under the Health Research Extension Act of 1985, that NIH seek new methods of biomedical research and experimentation that reduce the number of animals used in research.

Mice are required in the assay, but "for every 200 mice we used to need for these kinds of studies, we now can use one," said Albini, one of the test's developers.

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**Normal Volunteers Needed at NIMH**

The National Institute of Mental Health is seeking women (ages 19-45) and men (ages 23-40) with less than 4 years of college to participate in neuropsychological research. Three-hour sessions are available Monday through Saturday. Volunteers will be paid.

If interested, call Scott Hunter or Lucene Wisniewski, 496-7674 between 1 and 5 p.m.
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not in the labs. However, results of the investigation strongly suggested that the workers had experienced a simultaneous exposure to an aerosol containing the infectious organism.

McKinney continued, "We need to monitor the performance of workers and apprise them of the hazards associated with their work. Diligence in following preventive measures is necessary."

Dr. David Henderson, chief, Hospital Epidemiology Service, CC, spoke about hepatitis B infection.

"The hepatitis B virus is ubiquitous in health care settings and is an occupational risk," he said. "In the average year, between two and five Clinical Center employees report the development of clinical hepatitis B."

Henderson said the Centers for Disease Control reported that 11 percent of the 300,000 cases of hepatitis B reported in 1981—or 33,000 cases—occurred in health care workers.

"The prevalence is highest in emergency room staff, surgeons, pathologists and blood bank personnel. The risk is clearly associated with blood exposure," he said.

Two vaccines against hepatitis B are available to all CC workers and the disease is "entirely preventable," according to Henderson.

Dr. W. Emmett Barkley, director, Division of Engineering Services, addressed the issue of infection by the AIDS virus. He told the audience that both people who acquired the virus were working in labs where highly concentrated HIV was prepared.

"Both were informed about the hazards of their work and proficient about safety precautions," he said.

When working with HIV, Barkley cautioned, "Put safety first. The risk of infection is low but the consequences are grave."

He advised all workers to follow Biosafety Level regulations appropriate for their labs and, in particular, to work in biological safety cabinets, to wear protective clothing and gloves and to avoid the use of needles and glass vessels.

A separate Division of Safety seminar focused on "Working Safely with HIV in the Research Laboratory."

Dr. Jonathan Richmond, chief, safety operations section, said that at least 40 labs on campus are working with human retroviruses, but officials do not know exactly how many are working with HIV or other human pathogens.

All labs engaged in research with human pathogens are required to file a registration form with the Occupational Safety and Health Branch, Division of Safety, by the end of this month.

Richmond outlined personal practices and procedures lab workers should adhere to in Biosafety Level 1, 2, and 3 facilities and showed a series of slides illustrating "facility design, safety equipment, and practices and techniques" that should be followed.

Richmond urged all workers to review the safety procedures specific to their labs and said the safety division will visit labs to assist workers in meeting proper criteria.

"Often, people cannot pinpoint the specific lab event when they became infected," he said, echoing the statements of the speakers at Grand Rounds. "There is a need for continuous training and diligence in the lab."

All researchers working with HIV are required to attend the session dealing with the virus.

The program will be repeated on Tuesday, Dec. 8, at 10 a.m. in the ACRF Amphitheater and monthly thereafter. Call 496-2346 for more information.

Exploring Research Safety

"Emerging Issues in Biomedical Research Safety" is the topic of the Division of Safety's 10th Research Safety Symposium, to be held Dec. 3-4 in Masur Auditorium, Bldg. 10.

As in past decades, rapid advances in biomedical research serve to challenge safety and health professionals. The symposium will examine anticipated technical and safety-related hurdles and will explore the projected technical advances as well as the institutional review process to resolve emerging safety problems before they constrain research.

Speakers will exchange their ideas in dialogues between various disciplines including biomedical researchers, safety professionals, public policy analysts, architects and engineers and biomedical research administrators.

For registration information, call the Division of Safety, 496-2801.

Writers Win Kudos

Two awards recently honored writers at NICHD's Office of Research Reporting.

Leslie Fink won an honorable mention in the National Association of Government Communicators' Blue Pencil Competition for her news release, "New Computer Software Developed for Diabetes Management at Home."

Maureen Gardner wrote and produced "Growth Through Research," a 10-minute slide-tape show about NICHD that took first place in the promotion category of the American Medical Writers Association's 11th video and film festival. Most of the photos in the show were taken by Bill Branson of the Medical Arts and Photography Branch, DRS.
Washington Hosts Nation’s Largest Meeting of Ethnic Minority Scientists

More than 2,100 ethnic minority students and faculty who conduct biomedical research through two NIH programs and one NIMH program at colleges and universities across the United States met last month in Arlington, Va.

Called the Minority Biomedical Research Support (MBRS)/Minority Access to Research Careers (MARC) NIH Centennial Symposium, the meeting was funded by the Division of Research Resources, the National Institute of General Medical Sciences, and the MARC program of the Alcohol, Drug Abuse, and Mental Health Administration.

The symposium, the nation’s largest forum for minority scientists, featured seminars and mini-symposiums by top experts in various biomedical research fields including cancer, cell and molecular biology, hypertension, neuroscience, the health problems of the minority elderly, and substance abuse. The conference also provided approximately 600 undergraduate and graduate students with valuable experience in communicating their research findings either through platform or poster presentations.

The event was a cooperative endeavor of two NIH programs devoted to increasing the involvement of ethnic minority faculty and students in biomedical research. The MBRS program was organized in 1972 within DRR to increase the nation’s disproportionately small number of minority biomedical scientists. The MARC program of NIGMS, which also provides special opportunities in biomedical science for students and faculty at institutions with substantial minority enrollments, emphasizes undergraduate research training for honors students, and predoctoral, faculty, and visiting scientist fellowships.

The symposium opened with Dr. Herman R. Branson, president emeritus of Lincoln University and renowned physicist who received international recognition for discovering that the alpha helix is a basic structure of proteins, discussing research findings presented by Morehouse College students Travis Weddleton (l), and Gerald Thompson (r), of Atlanta, Ga., during a poster session at the Minority Biomedical Research Support/Minority Access to Research Careers Symposium, held last month.

and MARC programs were celebrated with a combined session focused on their respective histories. The event featured former students from each activity who are now practicing biomedical researchers, a video presentation of the history, as well as introductions of those persons who helped to conceive and build the programs.

Several NIH participants were involved in the scientific seminars. Dr. Bernard Moss of the Laboratory of Viral Diseases, NIAID, presented a session on the “Use of Vaccinia Virus as a Vector for the Development of Live Recombinant Vaccines.” Dr. Edward Ginnis of NIMH also contributed a presentation on the “Molecular Neurology of Human Diseases.”

On the conference’s second day, invited papers were given on the “Mental Health of Minority Elderly.” Shirley Bagley, NIA, discussed “Issues in Minority Aging,” and served as expert presenter.

The next day, an invited mini-symposium was held on cancer research that included Dr. James Yang, NCI, speaking on “The Immunotherapy of Cancer.” That evening Rep. Louis Stokes of Ohio delivered the NIH Centennial MBRS/MARC Banquet address. Dr. William F. Raub, NIH deputy director, introduced Stokes. Dr. Geraldine Woods, NIGMS consultant, welcomed the students and faculty members.

During the 3-day event, some symposium sessions focused on instructional material for the evolving young scientists who made up much of the event’s audience. These sessions covered such topics as preparing for the graduate record examination, applying to graduate school, finding formal graduate training opportunities, improving the editorial process in scientific submissions, and understanding high technology instrumentation.

Coordinating this year’s symposium was Dr. Robert Hicks of San Jose State University. The next MBRS symposium will be held Oct. 13-16, 1988, in Los Angeles, Calif.

NIMH Needs Volunteers

Healthy normal volunteers over 18 years of age without a history of psychiatric illness are needed for a brain metabolism study at NIMH using the PET scan technique.

Two appointments are required for this procedure. A 1- to 2-hour appointment involves screening to evaluate suitability. The second appointment, for the experimental procedure itself, requires 4 to 5 hours. This procedure involves an injection of radioactive 18-fluoro-deoxy glucose, periodic blood sampling, an auditory attention task, and the PET scan. Volunteers will be paid for the two sessions. For further information, please phone 496-4022.
NMR  
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forward to for a long time,” Dr. Edwin D. Becker, NIH associate director for research services, said at the dedication ceremony in the ACRF Amphitheater. “This facility is a cooperative and collegial effort by NIH’s institutes.”

The keynote speaker at the ceremony, Dr. E. Raymond Andrew, professor of physics and radiology, University of Florida, spoke about the impact of “NMR in Biomedicine.”

“Nuclear magnetic resonance has become more important in biology and medicine over the last 10 years,” he said. “Initially it was the province of the physicist, then the chemist, and it has moved across the disciplines.”

Andrew showed a series of slides of his own head and abdomen to illustrate the results of NMR imaging.

Dr. S. Morry Blumenfeld of General Electric Medical Systems, the prime contractor for establishment of the center, told the audience, “Our goal is the creation of a new diagnostic modality to bring to the clinician not only the physical attributes of a patient, but also information on the chemistry and biochemistry of abnormal tissues.” GE designed, built, and equipped the new center.

Both imaging and spectroscopy make use of the magnetic quality of certain atomic nuclei.

The NMR phenomenon occurs when nuclei containing an odd number of protons and/or neutrons are introduced into a strong magnetic field. These nuclei behave as if they were spinning charges, and precess (gyrate like a top) in a preferred orientation in a strong magnetic field.

When a radio frequency (RF) pulse is introduced by a transmitter—often for only millionths of a second—the nuclear spins will reorient in the field and, as a whole, will absorb energy. Following the pulse, the nuclei “relax” to their original state. The time it takes the stimulated nuclei to relax after a burst of RF energy is a measurable quantity, characteristic of a particular molecular environment.

The relaxation times of these nuclei and the RF frequency for resonance are of use in physics, chemistry, and biochemistry. The distribution in space of these nuclei can be used to obtain images.

While imaging of human anatomy is perhaps the most widely known aspect of NMR, the procedure has been used at NIH for more than 50 years for basic research in organic and physical chemistry, and, more recently, for biochemistry and physiology. NMR can provide information on the structure of molecules.

“I was introduced to NMR 30 years ago by Dr. Becker and I was impressed then and have been ever since with the power of this technique,” said Dr. Joseph Rall, NIH deputy director for intramural research. “NIH is a good community for a center because of both the expertise and the clinical need that we have.”

NMR was discovered in 1946 by two American scientists, Felix Bloch and Edward Purcell, who were awarded the Nobel prize in physics in 1952 for their work.

Dr. E. Raymond Andrew, professor of physics and radiology at the University of Florida, gave the keynote address at the opening of the NMR Center.

Blending in evenly with the brick exterior of the Clinical Center is the one-story In Vivo NMR Research Center, adjacent to the CC’s D wing.

A portrait bust of the late Vice President Hubert H. Humphrey was unveiled at DHHS headquarters in Washington recently. Secretary Otis R. Bowen accepted the sculpture, which will remain on permanent display in the Humphrey Bldg. A gift of Humphrey’s sister, Frances Humphrey Howard (an NLM employee), and Joseph John Joesa, former U.S. ambassador to the Organization of American States, the bust is by Mexican sculptor Gabriel Ponzanelli.

Preschool Holds Book Sale

The NIH Preschool Developmental Program will hold a book fair in time for the holiday season. The sale will be held outside the cafeteria in Bldg. 35 on Dec. 2 from 11 a.m. to 3 p.m.

Orders will be taken from a large display of sample books. Books will arrive in plenty of time for Chanukah and Christmas giving.

Money is due when the order is placed. All proceeds will be used to benefit the program.

NIMH Seeks Male Twins

The National Institute of Mental Health is seeking male twins over age 20 to participate in research. Participants will be paid.

For further information call, Dr. Gabbay, 496-7672.
From Texans to Tar Heels

NIH Texans Retire in North Carolina

El ctra, Tex., population 3,755, and Wi n ters, Tex., population 3,061, have at least one thing in common beside location in the Lone Star State.

Both towns produced native daughters who chose science as a career, earned doctorates, and worked for a significant part of their careers at NIH, first in Bethesda and later in Research Triangle Park, N.C.

Now Drs. Mina Lee Vernon and Carrie E. Whitmire, who grew up about 150 miles from each other in Texas, are retiring at the same time and will be across-the-street neighbors in Cary, N.C.

Both retired from the National Institute of Environmental Health Sciences' Division of Toxicology Research and Testing, where Vernon was head of collaborative services in the Carcinogenesis and Toxicology Evaluation Branch, and Whitmire was Quality Assurance/Good Laboratory Practices discipline leader. They came to NIEHS from the National Cancer Institute; they transferred when certain components of the National Toxicology Program relocated from NCI to NIEHS.

Vernon received her double undergraduate degrees in premedicine and bacteriology from Texas State College for Women, and her M.S. and Ph.D. from the University of Oklahoma School of Medicine. She held academic posts at Baylor University School of Dentistry and the University of Oklahoma, and also held a public health research fellowship at NCI. She also worked in private laboratories before joining NIH as a permanent employee.

Whitmire received her undergraduate degree in bacteriology from University of Texas, Austin, and her M.S. and Ph.D. degrees in bacteriology from University of Kansas, Lawrence. She held science posts in private and federal laboratories before joining NIH. In 1979 and 1986 she received the Department of Health and Human Services' Special Achievement Award.

People who drive down a certain street in Cary, N.C., will unknowingly enter an area where the eyes of Texas may be upon them.

Friends at NIEHS presented them with twin retirement gifts—ceiling fans for their homes. Both look forward to relaxing and gardening in the days ahead. —Hugh Lee

Normal Volunteers Needed

Men and women, ages 20 to 65, in good physical health, with no personal or family history of psychiatric disorders are needed to participate in single administration medication studies in NIMH.

The studies require two to six 4-hour sessions of testing over a period of 3 months. Every session includes intravenous blood samplings and repeated behavioral ratings prior to and after drug administration. No painful procedures are employed.

Volunteers will be paid for their time. If interested, call Terry Piggot, 496-1891, between 9 a.m. and 5 p.m., Monday through Friday.

USUHS Seeks Volunteers

The Uniformed Services University of the Health Sciences is seeking male volunteers between 35 and 45 years old to participate in a study on the effects of stress and its relationship to cardiovascular reactivity.

Volunteers will be paid $35 for 2 hours of lab time.

For further details contact Rebecca Raymond, 293-3278.
Age of Electronic Mail

We are entering a new era of computing. Communication using personal and mainframe computers is revolutionizing the office and laboratory. The NIH Computer Center is developing easy-to-use, flexible facilities to provide communication between researchers, clerks, managers, and administrators.

The most important yet time-consuming and inefficient work in labs and offices is often the communications process. Countless hours are spent playing "telephone tag," writing and distributing memos, circulating reports and research papers for comment, filing letters and documents, and generally trying to control the incredible volume of paper inherent in any workplace.

The NIH Computer Center is addressing this situation with a major enhancement to its electronic mail. A new facility currently being developed—ENTER MAIL—will provide one of the most comprehensive electronic mail and communications processing capabilities available today. It will allow mail, messages, documents, and reports to be sent, read, listed (i.e., printed), forwarded, and answered quickly and easily.

The new ENTER MAIL facility is now being tested by the NIH Computer Center. Although a great deal of effort was put into the design of ENTER MAIL, the Computer Center is interested in getting additional comments from the user community before it is finished. Therefore, a series of seminars has been scheduled to demonstrate ENTER MAIL to interested people.

Two types of seminars are being offered—one for Wylbur users, and one for nonusers. The seminars for Wylbur users are Nov. 17 from 9:30 to 11:30 a.m. and Dec. 1 from 1 to 3 p.m., in Bldg. 12, Rm. B51. The seminars for people who have not used Wylbur are Nov. 23 from 9:30 to 11:30 a.m. and Dec. 4 from 1 to 3 p.m., in Bldg. 12, Rm. B51.

To sign up for a seminar, call the Training Unit at 496-2359 (TDD 496-8294). People can sign up individually, or as a group.
—Charlie Havelkos
Jordan Retires from NIAID

Dr. William S. Jordan, Jr., director of NIAID's Microbiology and Infectious Diseases Program for the past 11 years, retired Oct 2. Before joining the institute, he was dean of the college of medicine at the University of Kentucky, professor of community medicine and professor of medicine.

While at NIAID, Jordan directed the major institute extramural research program and worked closely with public and private agencies concerned with infectious disease prevention and research. An expert on infectious diseases and on vaccine development, he headed NIAID's Program for Accelerated Development of New Vaccines.

He was a member of the Panel on Review of Viral and Rickettsial Vaccines of the Food and Drug Administration from 1973 to 1978, a member of the Scientific Advisory Group of Experts for the World Health Organization's Vaccine Development Program, and served on the Immunization Practices Advisory Committee of the Centers for Disease Control, DHHS.

For 10 years, prior to joining NIH, Jordan was a member, and later, director of the Commission on Acute Respiratory Diseases of the Armed Forces Epidemiologic Board; he continues as a member of the board and as consultant to the Department of Defense.

A 1942 cum laude graduate of Harvard Medical School, he began his career in academic medicine at Western Reserve University in the departments of medicine and preventive medicine. With members of the latter, he participated in the landmark longitudinal study of illnesses in a group of families known as "The Cleveland Family Study," with his own laboratory research focusing on influenza and adenoviruses. Scientific papers detailing the results of this major research project were summarized in a book entitled, "Illness in the Home," by Dingle, Badger and Jordan.

Jordan holds the Department of the Army's Outstanding Civilian Service Medal for 1973 and that same award with bronze laurel leaf cluster for 1981. His most recent honor was the establishment of a chair in his name at the University of Virginia School of Medicine where he was professor and chairman of the department of preventive medicine and professor of medicine from 1958 to 1967.

The chair-called the William S. Jordan, Jr., professorship of medicine in epidemiology—is in the division of epidemiology and virology, department of internal medicine. He was honored as a “leader and role model in academic medicine and for his professional lifetime of distinguished service.”

At a recent lunch in his honor, Dr. Anthony S. Fauci, institute director, praised Jordan for his "dynamic and loyal service to NIAID" and for his role as an internationally recognized spokesman for the fields of microbiology and infectious diseases. He added his personal thanks to Jordan for his many contributions to the institute, to science and to the public's health.

In retirement, Jordan will serve as a volunteer with NIH/NIAID and as a consultant to the U.S. Agency for International Development. —Jeanne Winnick

Dr. William H. Pittluck was recently appointed research training and research resource officer in the Office of Extramural Research, OD. In this position, he will be responsible for developing and implementing trans-NIH initiatives focused on research training, career development and research resources. Previously, Pittluck served as deputy director in the Cooperative Developmental and Neuromuscular Disorders Program, NINCDS.
'French Kiss' Wins National Tennis Title

An amateur tennis team composed of NIH scientists went undefeated to win a national championship match sponsored by the United States Tennis Association and Volvo.

Led by Laurent Miribel, an NCI biologist, the 11-man team posted a 5-0 record against competition from across the country at a match held in Tucson, Ariz.

"It was like a mini-season," said Miribel, noting that team members played almost 6 hours of tennis each day of the 3-day tournament.

"Our record doesn’t reflect that most of the matches were extremely close," said Konrad Huppi, also an NCI investigator.

"Or that we played lots of tiebreakers," added Miribel.

The two NCI collaborators are part of a team dubbed "French Kiss." The name was borrowed from the French entry in America’s Cup yacht-racing competition and reflects the nationality of several team members, including Miribel, Philippe Arnaud (NCI), Jean Pierre Kinet (NIAID), Paul Basset (NHLBI) and Jacques Bechou (NCI). Other team members include David Hilbert and Corey Mallett of NCI.

Competing at the 2.5 level on a proficiency scale of 1.0 (beginner) to 7.0 (professional), French Kiss reached the nationals by finishing 5-1 in a local league and by winning a sectional championship in Virginia Beach, 4-1.

The team’s first match in Tucson was against a woe-begone collection of Minnesotan retirees, the oldest of whom was 78.

"They deserve a lot of credit," said Huppi. "They were very sportsmanlike, nice people."

He said an easy first match can be a disadvantage when subsequent competition is tough.

"You tend to let up a little bit against a weaker team," Huppi said. "I found myself just tapping the ball against the Minnesotans."

French Kiss needed all of its strength, however, to beat teams from Mississippi, Puerto Rico, California and Texas for the championship. The latter three challengers ended up tied for second place in the round-robin tournament.

Each team member won an engraved silver plate for the championship.

The team automatically will be bumped up to the 3.0 skill level next year. The best player, Kinet, must compete at 3.5; thus assuring the disintegration of French Kiss. Two other players already work outside Bethesda; Arnaud is in Charleston, S.C., and Basset is in France—he had to fly in for the finals.

"I think the team is going to break up," acknowledged Miribel.

Huppi is not so pessimistic: "NIH is a rich source of untapped talent with all its foreign players. We might start some sort of dynasty here by getting new players from other labs and divisions."

Though team members share sporting and scientific interests, they do not normally socialize.

"The only time we meet is on the court," said Huppi. "We don’t go out for pizza together after matches. I would never have met most of these guys were it not for tennis."

Both he and Miribel plan to play indoor tennis this winter, then put a new USTA/ Volvo amateur team together next spring. Should there be no NIH tennis dynasty, the two researchers at least have other sporting interests. Team captain Miribel enjoys high-mountain hiking and Huppi is a triathlete and runner.

STEP Examines Animal Care Policies

A STEP Forum entitled “Compliance with Animal Care and Use Policies: NIH/USDA/AAALAC” will be held on Dec. 9. NIH, USDA, and AAALAC are concerned with animal care and use but are differently focused. All perform onsite inspections and evaluate the same institutions.

The speakers are Dr. John G. Miller (OPRR, NIH), Dr. Solomor H. Cook (USDA), and Dr. Albert E. Neim (AAALAC). They will discuss the differences and similarities among the individual programs and what “compliance” means for each. An important part of these presentations will be descriptions of actual inspections and how inspectors evaluate institutions.

The forum will be held in Wilson Hall, Bldg. 1, 1–4 p.m. The program is open to all NIH professional and support staff, particularly those involved in site visits. No preregistration is required.

For additional information, contact the STEP Program Office, 496-1493.

Animal Use Training Classes

Special presentations of the NIH training course "Using Animals in Intramural Research: Guidelines for Investigators" will be held in Masur Auditorium, Bldg. 10, on Nov. 19 and Dec. 17 from 8:30 to 11:30 a.m.

Intramural principal investigators are required to attend this course (or comparable training approved by the director of the NIH Office of Animal Care and Use) before Jan. 1, 1988, in order to get approval of an Animal Study Proposal by their BID Animal Care and Use Committee.

To apply for either the November or December session, contact your BID personnel office.

Topics covered include:
- Public interest and humane treatment of animals;
- Principles and policies for animal use at NIH;
- Investigators’ responsibilities for the use of animals;
- Technical information and training opportunities for NIH animal users;
- Panel discussion of audience questions.

Volunteers Wanted for Endocrinology Research

The Developmental Endocrinology Branch, NICHD, is seeking healthy young women, ages 18-35, for menstrual cycle studies. Participants must have regular menstrual cycles and must have been previously pregnant. They should also be free of medical illness and currently taking no medication (including birth control pills). For further information, call Dr. Barista, 496-5909.