Shoring the Ranks

Education Office Tackles NIH Recruitment Challenges

When the NIH Office of Education was created 1½ years ago, it faced a mammoth twofold mission—to attract the best and the brightest to careers in biomedical science in NIH's intramural research programs, and to advance intramural education and training efforts for students ranging from precollege to postdoctoral levels.

The OE, under the direction of Dr. Michael Fordis, was immediately confronted with serious obstacles. The Clinical Associate Program was no longer keeping pace with the changes in academic training and was adversely affected by the shrinking applicant pool. Nearly one-fourth of the clinical associate positions were vacant in the class entering in 1990. None of the residency training programs in the subspecialties of internal medicine were accredited. Subspecialty boards were becoming increasingly resistant to recognizing any training in an unaccredited program as meeting the qualifications toward board eligibility. Applicants voiced concern about the accreditation status of NIH programs.

Working closely with program directors, the OE became the focal point for efforts to obtain accreditation by the Accreditation Council for Graduate Medical Education (ACGME). New institutional policies and procedures were implemented in preparation for

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Four-legged Officer

Bomb Chaser Joins NIH Police Force

By Anne Barber

The latest officer to be hired by NIH's Division of Security Operations is not your typical new recruit. In fact, this rookie has little in common with the other officers except that she is an NIH employee, she is registered with the Maryland State Police, and she has a badge and identification card like all members of the police force.

The new recruit is a four-legged female named Turbo. Hired as NIH's first bomb detection dog, she is a 4-year-old yellow Labrador retriever. Donated originally to the United States Park Police for specialized training, Turbo and her round-the-clock partner, Officer Pat Pozar, have recently completed 3 months of explosive detection training at the Park Police facility in Anacostia.

The course teaches dogs (usually ages 18 months to 3 years) how to detect explosives through scent discrimination. "Since Turbo was older, she already knew how to sit, heel and stay," says Pozar. "Trained originally to

(See TURBO, Page 10)

NHLBI Pioneers

Gene Therapy for CF Looms

Scientists at the National Heart, Lung, and Blood Institute have used a genetically modified cold virus to implant a normal copy of the human gene involved in cystic fibrosis (CF) in the lungs of live animals.

The research, published in the Jan. 10 issue of Cell, is an important step in the development of a practical therapy for CF, a common fatal inherited disorder that afflicts about 50,000 Americans, only half of whom survive beyond their mid-twenties.

CF has posed a challenge to researchers hoping to employ gene transfer techniques. Scientists need to alter the genetic composition of cells lining the lungs. But the lungs are like a hollow upside-down tree, with as many as 100,000 branching passages, making it virtually impossible to get inside and withdraw cells for genetic correction and reinsertion.

Instead, NHLBI Pulmonary Branch researchers, led by Dr. Ronald Crystal, used a method that modifies the genetic program of cells in vivo. They "borrowed" a cold virus (adenovirus), replacing its genetic makeup with that of a normal cystic fibrosis transmembrane conductance regulator (CFTR) gene. Subsequent tests showed that the inserted gene was successfully instructing the lung cells to manufacture the desired human CFTR protein.

The scientists must conduct efficacy and safety tests, and human clinical trials before the promising research becomes a therapeutic reality for those with CF.

100 Percent of Goal Met

Combined Federal Campaign 1991 Is NIH's Best Ever

NIH's Combined Federal Campaign, which began in October 1991 and closed in December, "has been by far the most productive one yet in terms of reaching the money goal and garnering employee participation," says John Mahoney, NIH CFC coordinator and NIH associate director for administration. NIH exceeded 100 percent of its lofty goal of $859,500 (see table, p. 2). "An unbelievable accomplishment," he commented. "This reflects the generosity of NIH employees and dedication of key workers. Employee participation reached 64.8 percent; up from 60.2 percent participation in 1990's campaign.

"Although the campaign has closed, we are still getting and accepting late contributions," says Dave Chichirichi, ICD CFC coordinator and executive officer for NIA.

"The success of this campaign," he continues, "is due to the excellent work by ICD coordinators, deputy coordinators, and particularly the key workers who did an excellent job of promoting the activities of the many agencies that benefit from the Combined Federal Campaign.

"The organizational efforts within a large number of ICDs resulted in many of them exceeding their assigned goals. There will be an awards ceremony held Mar. 10 to recognize individual ICDs," Chichirichi states.

Winners of the CFC raffle included Lynn Jenkins from the Division of Safety, who won the grand prize of a 27-inch stereo color television, VCR and stand donated by the NIH

(See CHARITY, Page 2)
Federal Credit Union. Adrian Coleman of NEI won two roundtrip domestic flights donated by USAir. Jenkins and Coleman qualified for the drawing by pledging a minimum of $26 to CFC. Richard Gourdine of CC's clinical pathology department won the keyworker raffle of two USAir roundtrip domestic flights.

\[\text{MSG Study Needs Vols}\]

 \text{NIAID staff at the Clinical Center are conducting an investigation on the effects of the flavor-enhancing agent monosodium glutamate (MSG) in asthma and allergic reactions. Anyone with a history of asthma interested in participating as a volunteer in this study should contact Dr. Sheldon Cohen, 496-0705.} \]

\[\text{Sickle Cell Volunteers Sought}\]

 \text{NIDDK seeks individuals 18 years and older with sickle cell disease for neuropsychological assessment (CAT, PET, motor skills tests, etc.). Individuals must have no prior history of strokes, seizures, or head trauma and must be able to withstand a medication-free period. Volunteers must currently be under the care of a physician. Transportation costs will be provided. For more information, call Cindy, 402-3087.} \]

\[\text{NCRR, NCHGR Support Genetic Resource Plan for Blacks}\]

 \text{Genetics researchers at Howard University, in Washington, D.C., are planning ways to set up an organized collection of family histories and DNA samples from African-American families. The Howard collection, to be called the African-American Reference Family Panel, will be modeled after a similar collection at France's Centre d'Etude du Polymorphisme Humain, which is based on information from 61 Caucasian families and is used worldwide in genetic mapping studies. Funds for the 2-year planning project supplement a Research Centers in Minority Institutions grant provided by the National Center for Research Resources. Planning the African-American Reference Family Panel will cost approximately $424,888, and will be supported by the National Center for Human Genome Research.}

 \text{Expanding genetics research tools to include information about African-Americans will help scientists identify gene-based differences in drug responses and susceptibility to diseases and environmental factors among different populations groups.} \]

\[\text{Oral Herpes Study}\]

 \text{The NIDR seeks healthy volunteers, ages 18-65, who have one or more episodes of oral herpes (fever blisters) per year. This study is designed to potentially prevent reactivation of oral herpes. Subjects will be paid. For more information call 496-1836.} \]

\[\text{MSG Study Needs Vols}\]

 \text{NIAID staff at the Clinical Center are conducting an investigation on the effects of the flavor-enhancing agent monosodium glutamate (MSG) in asthma and allergic reactions. Anyone with a history of asthma interested in participating as a volunteer in this study should contact Dr. Sheldon Cohen, 496-0705.} \]

\[\text{The lucky winner of the CFC grand prize drawing is Lynn Jenkins of the Division of Safety. The prize is a 27-inch stereo color television, VCR and stand donated by the NIH Federal Credit Union. Pictured are (from l) Dr. Robert McKinney, director, DS; Ed Pfister, CFC deputy coordinator for DS; Jenkins; Sandeep Singh and Lindsay Alexander of the NIH Federal Credit Union; John Mahoney, NIH CFC coordinator and NIAH associate director for administration; and Dave Chichirishi, ICD coordinator and executive officer, NIA.} \]
NIGMS Holds Minority Symposium, Almost 1,000 Attend

By Janet Glover

Participants in the NIGMS Minority Access to Research Careers (MARC) and Minority Biomedical Research Support (MBRS) Programs were challenged by leading scientists and policymakers at this year’s NIGMS Minority Programs Symposium to help improve Americans’ health by pursuing biomedical research careers.

About 1,000 science students and several hundred faculty members from more than 120 colleges and universities with substantial minority enrollments gathered for the recent meeting at the Washington Convention Center and Grand Hyatt Hotel. Highlights included a keynote address by NIAID director Dr. Anthony S. Fauci, remarks by DHHS secretary Dr. Louis W. Sullivan, and a banquet address by Rep. Louis Stokes (D-OH), a key supporter of NIH minority programs. Leading research scientists presented lectures on developments in several exciting areas of biomedical research during meeting symposia.

Fauci outlined the spread of AIDS through inner-city communities and the rising number of cases among women who are infected by bisexual or drug-abusing partners. He showed data that demonstrated the devastating effect the disease is having on communities already adversely affected by poverty and inadequate health care. After describing some of the current research and development of AIDS vaccines and the clinical trials of drugs to combat the disease, Fauci stated that “we all must rise to the challenge of the AIDS epidemic,” and emphasized the need for scientists and other members of society to address the social, as well as the biomedical, problems associated with the disease.

Stokes also challenged audience members to work together “to make a positive difference” in the health of all Americans. “The future of the entire nation depends upon how you respond to this challenge,” he said.

Citing disparities between the health of minorities and that of whites, Sullivan called the attendees to “a life of personal responsibility and community service.” He noted that the DHHS task force on Black and minority health found that each year there are more than 60,000 excess deaths in minority communities, that the infant mortality rate is double that for whites, and that life expectancy for Black Americans is 6 years less than that for white Americans. He emphasized that the students’ commitment to community service throughout their lives will have “a profound impact on our world.”

Sullivan said that the MARC and MBRS programs are “trailblazers in our efforts to address disparities in our minority communities and to increase minority participation in medical education and biomedical research.”

In his banquet address, Stokes pointed to the decline in the number of students entering research careers, a decrease that has been well documented in a number of reports. The National Science Foundation predicts a shortfall of about 560,000 scientists by the year 2010. At the same time, minority groups are growing more rapidly than other segments of the United States population. Minority students have not been drawn to science careers in the past, and are therefore underrepresented in science and engineering fields.

“Programs like MARC and MBRS provide vital nurturing of our nation’s most valuable resource—our young people,” said Stokes. “The biomedical sciences are of particular concern to us as advances in this area save lives and improve the quality of life for our citizens.”

The meeting also featured oral presentations and poster sessions that gave several hundred students the opportunity to showcase their research accomplishments as well as to gain experience in discussing their work with other scientists. In addition, these sessions allowed students to demonstrate their competence to the faculty of graduate institutions that the students may wish to attend.

The meeting symposia were designed to give participants “snapshots” of the research being done and of advances in the fields of cell biology, gene therapy, biochemistry and biophysics, plant and microbe systems, and drug development. These symposia featured eminent scientists from federal research laboratories, biotechnology companies, and private research institutes. The speakers included two NIH scientists, Dr. Steven A. Rosenberg, chief of NCI’s Surgery Branch, and Dr. Ronald G. Crystal, chief of the Pulmonary Branch, NHLBI.

Two of the meeting workshops enabled attendees to see demonstrations of innovative research technologies. Dr. Gregory S. Leppert, codirector of the biotechnology firm Exon-Intron, Inc., presented a workshop on the analysis of gene structure and expression. Participants learned about the laboratory techniques of basic molecular biology and were able to observe gel electrophoresis procedures and to handle scientific equipment. The demonstration was assisted by students from Howard University in Washington, D.C.

Another workshop featured an overview of the polymerase chain reaction (PCR) technology. Dr. Larry Hafl, principal scientist at the Perkin-Elmer Corporation, addressed such issues as the current and future use of PCR in experimental design, diagnostic tests based on PCR, and special considerations in using the technique.

The meeting also gave students an opportunity to learn valuable career planning skills and to meet informally with scientists and recruiters. A GRE workshop conducted by Dr. Elizabeth McGrail, an examiner from the Educational Testing Service, and Dr. Vernon Avila, a professor of biology from San Diego State University, familiarized students with test-taking skills needed for graduate admissions examinations. Dr. George R. DeMuth, director of the Medical Scientist Training Program at the University of Michigan Medical School; Dr. Carlos G. Gutierrez, MBRS program director at California State University, Los Angeles; and Dr. James V. Staros, chair of the department of molecular biology at Vanderbilt University, led a workshop that offered students advice on graduate school

(Continued on Page 4)
selection and tips on obtaining financial aid for graduate study.

Representatives from 130 graduate school programs, scientific societies, federal agencies, and industry were available to talk with students in the exhibit area at the Convention Center. Participants became acquainted with graduate programs at some of the nation’s top academic institutions and biomedical career options at government organizations and biotechnology companies.

Some of the student attendees also met with scientists during a visit to NIH in a specially arranged tour. Researchers from 40 laboratories explained their work, demonstrated scientific equipment, and walked participants through their facilities. The students were formally welcomed to NIH by Dr. Kenneth Olden, NIEHS director, and informed of intramural educational opportunities by Dr. Michael Fordis, director of the NIH Office of Education.

Conference attendees assisted the effort to generate an interest in science careers among younger students. MARC and MBRS students served as mentors for minority high school students from the District of Columbia, Maryland, and Delaware at the symposium’s high school student luncheon and seminar. The high schoolers heard talks on the MARC and MBRS programs, both of which are celebrating 20th anniversaries in 1992, as well as the NCRR Minority High School Student Research Apprentice Program. The students saw a videotape about NIH, had an opportunity to ask questions about science careers, toured the exhibits, and attended poster and platform presentations.

Smithsonian Needs Scientists Who Want To Teach Kids

The Smithsonian Institution needs life scientists who would enjoy participating in weekend science workshops designed to create a positive attitude in elementary school children about science.

The program is being developed to meet the needs of children who are eager to investigate science at an early age but do not have any science enrichment programs available due to recent budget cutbacks.

Scientists in fields related to biology, chemistry, physics and engineering are needed to participate in this hands-on science program.

Individuals should be able to attend a 2-day training program Mar. 6-7 and the first program at the Smithsonian Mar. 23-27. Additional sessions with school children may be scheduled after school, on weekends, or during the summer.

For more information, contact Ann Benbow at the American Chemical Society, (202) 872-6179.

Fogarty International Center Honors Volunteers

The Fogarty International Center held its fourth annual FIC volunteer recognition ceremony recently to thank the 57 volunteers who gave their time to help foreign scientists during the past year.

The Volunteer Services Office (VSO) offers orientation, information, referral and problem resolution to visiting foreign scientists and their families to help them adjust to their new cultural environment. VSO assistance covers a wide variety of nonwork matters such as housing, transportation, furniture, schools, child care, NIH activities, and community, social and cultural resources.

Three groups of volunteers were recognized at the ceremony in the Lawton Chiles International House (formerly Stone House): the 30 VSO office volunteers; the 15 volunteers who crafted a quilt for the Children’s Inn at NIH; and the 12 volunteers who drafted the 49-page fifth edition of the Handbook for Japanese Scientists at NIH, written in Japanese.

FIC director Dr. Philip E. Schambra, Dr. Kenneth A. Collins, chief of the International Services and Communications Branch at FIC, and Linda Beach, volunteer coordinator, praised the volunteers for so generously donating their time to assist foreign scientists—more than 4,000 hours in fiscal year 1991 alone. Schambra pointed out that the VSO received more than 3,600 requests in 1991 for assistance, provided help to 1,885 visiting foreign scientists and their families, and answered 1,732 phone inquiries.
Dushanka Kleinman Named NIDR Deputy Director

Dr. Dushanka V. Kleinman, a researcher who has been investigating the epidemiology of oral mucosal tissue diseases and disorders, has been named deputy director of the National Institute of Dental Research. She has held several management positions within the institute.

"Dr. Kleinman is an accomplished researcher and administrator," said NIDR director Dr. Harald Loe. "Her experience on policy issues here at NIDR and her scientific expertise will be invaluable in furthering the goals of the institute. We are all pleased to have her as deputy director."

On joining NIDR in 1980 as the evaluation officer, Kleinman undertook a review of the institute's craniofacial anomalies research activities. Her recommendations were key in shaping the research plan for this program for the 1980's. In 1983 she became chief of the institute's planning and evaluation section, where she served until 1986. She spent the following 5 years in the Epidemiology and Oral Disease Prevention Program, first as a special assistant to the associate director for program coordination, then as chief of the soft tissue, craniofacial defects and pain section.

While in the epidemiology program, Kleinman and her colleagues conducted studies to assess the prevalence of a wide range of mucosal lesions, particularly smokeless tobacco-associated lesions and oral manifestations of HIV infection. They also developed methods for collecting and recording data on oral mucosal tissue pathologies. Their work has included many collaborations with other agencies, domestic and international.

During 1990, Kleinman was detailed to Surgeon General Antonia C. Novello's office as the special assistant for program activities. In that capacity she worked on women's and children's health projects, including "Healthy Children Ready To Learn," an initiative emphasizing the importance of health and education activities.

Kleinman is currently a coinvestigator for a Walter Reed Army Medical Center-NIDR study on the natural history of oral manifestations of HIV infection. Additionally, she is an investigator for the oral health component of the latest National Center for Health Statistics survey, the National Health and Nutrition Evaluation Survey (NHANES III).

Kleinman earned a B.S. in zoology from the University of Wisconsin and a D.D.S. from the College of Dentistry at the University of Illinois. She later studied at the Henry M. Goldman School of Graduate Dentistry at Boston University, where she received an M.Sc.D. in dental public health.

Now a captain in the U.S. Public Health Service Commissioned Corps, Kleinman began her PHS career in 1978 as a lieutenant. From 1978 to 1980 she was a staff dental officer in the Division of Dentistry at the Health Resources Administration working on projects related to epidemiology, nutrition, and prevention. Before joining the corps, she was a general practitioner and an assistant professor at the Baltimore College of Dental Surgery, Dental School, University of Maryland.

Kleinman has received many honors, including several PHS awards. One was for her work in developing the NIDR long-range plan for the 1980's and another for her contributions to the 1986 surgeon general's report on smokeless tobacco. Most recently she has received the Surgeon General's Exemplary Service Medal for her work on behalf of the health of children.

For more than 20 years Kleinman has been active as an elected officer, executive board member or chair of a committee in many professional organizations. She is a past president of the American Association of Women Dentists and currently is vice-president and a diplomate of the American Board of Dental Public Health.

Kleinman lives in Washington, D.C., with her husband and two daughters. She enjoys spending time with her family and together they participate in numerous summer and winter sports. —Mary Daum □

Alcohol-Related Injuries Subject of Conference

The HHS Office for Substance Abuse Prevention will convene a conference entitled, "Healthy People/Healthy Environments: The Secretary's National Conference on Alcohol-Related Injuries," on Mar. 23-25 at the Sheraton Washington Hotel in Washington, D.C.

Some 1,000 participants and experts in the field are expected to attend the conference, whose goals are to discuss, develop, and recommend solutions to preventing alcohol and other drug-related injuries.

For information or registration, contact Kathy Otts at Westover Consultants, 1-800-937-OSAP. □

Wallace P. Rowe Symposium Examines Animal Virology

The eighth annual Wallace P. Rowe Symposium on Animal Virology will be held Feb. 3-4 in the Lister Hill Auditorium, Bldg. 38A. Investigators from all over the United States will review recent findings from their research on retroviruses, viral immunology, DNA and RNA viruses, and prions. The program begins at 8:55 a.m. on Monday, Feb. 3, with the final presentation beginning at 4:15 p.m. on Tuesday, Feb. 4. Preregistration is not required.

The morning of the first day will be devoted to retroviruses. Anthony Fauci will discuss HIV immunopathogenesis; Kuan-Teh Jeang, HIV tat; Vanessa Hirsch, SIV as a model for AIDS; and James Cunningham, MuLV receptor.

Afternoon talks will focus on viral immunology and DNA viruses. Dennis Burton, cloning human antibodies; Carol Prives, p53 tumor suppressor protein; Robert Liddington, poliovirus structure; and Nicholas Muzyczka, parvovirus replication.

Day two of the symposium will focus on DNA and RNA viruses and prions. Arne Stenlund will discuss papillomavirus replication; David Knipe, the effects of host cell function in herpes simplex virus; Enzo Paoletti, attenuated poxvirus vectors; Mary Estes, molecular characteristics of Norwalk virus; Kathryn Holmes, molecular genetics of MHV receptor; Karla Kirkegaard, poivovirus genetics; and Stanley Prusiner, prion diseases.

Sponsored by NIAID, the symposium honors the late Wallace P. Rowe, who was an internationally recognized authority on animal virology. He was chief of the Laboratory of Viral Diseases at NIAID from 1968 until his death in 1983. □

Property Hotline, Helpline Set

As part of continuing efforts to strengthen NIH's equipment management practices, the Division of Logistics has established a personal property Helpline and Hotline.

The Helpline, which can be reached at 402-2855, is available for advice and assistance concerning any property management issue. The ICD staff are encouraged, however, to consult with their internal property custodial officers before requesting assistance through the Helpline. The ICD administrative officer should be contacted for the name of the property custodial officer that services each custodial area.

The Hotline, which can be accessed on 402-2850, permits employees wishing to report waste, fraud, abuse or situations that may ultimately impact negatively on any property management matter, including the control, care or disposition of NIH equipment, to provide relevant information anonymously.
an onsite visit by the ACGME in January 1991 to verify that all residencies were in compliance with ACGME educational guidelines.

“They sent out a team to see what we were all about,” recalled Dr. Gregory Curt, associate director of NCI’s Clinical Oncology Program. “And when the team came, they were just hugely impressed—with the kinds of patients we see and with the training program we have. The training program we have here is unique and broad. It allows those interested in research the opportunity to do what they can do nowhere else.”

By the end of summer 1991, the OE was informed that all six of the programs submitted and the institution as a whole had received formal accreditation. This doubled the number of ACGME-accredited residencies. The six newly accredited programs include critical care medicine, endocrinology and metabolism, hematology, infectious diseases, medical oncology, and rheumatology. The OE is working in partnership with other program directors to further expand the list of accredited residencies.

“Mike is the education czar,” Curt quipped. “He really drew all of us together. Unfortunately, there’s a feeling now out in the extramural community ‘as a potential competitor for the best trainees.’”

The thing that drew me to NIH was the flexibility and diversity of the programs here,” said Dr. Beth Goens, a staff fellow in NHLBI’s Laboratory of Molecular Cardiology who was in the middle of an unusual pediatric cardiology fellowship at the University of Colorado before applying to Dr. Robert Adelstein’s lab here in November 1990.

“Most fellowships are clinical in the area I was interested in,” she continued, “but I wanted to do research in the lab. The information I needed was available from the Office of Education. They were able to accommodate me at the exact time I was ready to leave Denver. I was impressed with the application process. NIH compared favorably with other programs.”

By joining forces with the Educational Commission for Foreign Medical Graduates, the body authorized to credential foreign medical graduates for U.S. training, the OE was also able to develop the NIH-International Medical Scholars Program. This program provides foreign physicians with opportunities for training in both clinical and basic sciences, similar to those available to U.S. physicians.

As a result of the more unified and broader recruitment effort, applications for the programs more than doubled. The first test came when the next class of clinical associates was to enter. By July 1991, 93 percent of the clinical associate positions were filled. Encouraged, Fordis is still not content.

“Even that improvement is not cause for complacency,” he said. “Because of downsizing over the past 5 to 6 years, we want to return to the optimal level of trainees. We’re not looking just to fill positions. Quality is extremely important as well.”

A new measure undertaken by OE to raise visibility for research careers and to identify and attract the best and the brightest residents is the Residents Awards Program, which will invite young researchers nationwide to apply to present their work during NIH’s annual Research Festival. Fifty residents will be selected by a panel of intramural scientists and asked to present side by side with NIH researchers; five of the 50 will then be chosen to receive cash bonuses. Beyond that, a program offering clinical electives for residents will begin this calendar year. Potential trainees...
will be able to see first-hand the high quality of clinical and research training at NIH.

The residents awards address the quality question, but NIH recruitment efforts (and the efforts of most other medical and scientific institutions as well) faced a far larger problem—the downsizing of the medical community. The corps of students entering biomedicine has been on a steady decline. There is a tendency for students seeking subspecialty and postdoctoral research opportunities to remain at their local universities and institutions.

"Fewer and fewer people are going into research," Curt noted, "and fewer and fewer people are going into subspecialty medicine. Therefore, the universities want to keep the best people for themselves." The numbers of people applying for subspecialty training have dropped precipitously. The reason is simple, and generally agreed upon.

"It's clearly money," said Curt, who worked as a director of medical education at Brown University for 1 year before returning to NIH. He explained the circumstances of the average medical student, who is $80,000 to $100,000 in medical school loan debt, having borrowed at about 12 percent interest. After graduation, the new resident pays about $1,200 per month—basically in interest only—on the loan while working daily at a hospital and being frequently on call. A resident's salary is roughly $18,000 to $24,000 a year. The residency is completed in, for example, internal medicine, after 3 years. With accrued interest, the M.D. has compiled some $120,000 in debt at that point.

Continued Curt, "And then someone says to you, 'Hey, why don't you do a subspecialty?' in which you'll spend yet another 3 years making $24,000 before you start making $50,000 or $60,000 at a university. The subspecialties where the training is short and the reimbursement generous are where the smartest young people in medical school are going..."

Areas like diagnostic radiology, dermatology, radiation oncology, and ophthalmology—procedure-oriented subspecialties—are attracting large numbers of applicants. A board certification in medical oncology, on the other hand, requires a minimum investment of 5 years. In economic terms, NIH is selling its intramural programs in a buyer's market. Applicants are wisely seeking the best deal. And Fordis wants NIH to be prepared to offer it. The OE is working closely with other offices on programs designed to address the financial obstacles.

"In addition," Fordis emphasized, "it's crucially important that any recruitment effort not be divorced from a viable training program. We're looking to build programs that demonstrate our commitment to the long-term careers of our trainees. One of the best tools for recruiting the most talented people is not only to have high quality training programs, but also to offer substantial long-term career opportunities."

Toward this end, the OE is taking steps to enhance NIH's commitment to the careers of trainees at the agency and beyond. Their efforts have included a review of the pay structure for postdoctoral fellows and a proposal to increase the salary scales. The OE has recently joined forces with NIGMS to help expand the current NIGMS workshop for fellows on preparing research grant applications. The OE is also developing a series of seminars to help exiting trainees attract research funds from nongovernment sources. A core set of courses for fellows is in the planning stages to address topics relevant to basic and clinical research as well as to bioethics. With respect to the latter, a course developed with members of the CC bioethics department will be offered in the spring and will open with a dialogue between gene therapy pioneer Dr. French Anderson of NHLBI and Dr. LeRoy Walters, director of the Center for Bioethics at the Kennedy Institutes of Ethics. The OE is also working on issues related to graduate education at NIH.

In addition, the OE has developed a number of teaching programs that will create a pipeline of scientific talent starting with students at the precollege level and extending through college. One program in which high school students and teachers work for a full year on campus is the subject of a mini-documentary video. This summer a new program for preservice and inservice teachers will be inaugurated. In the fall the OE will initiate a new program to bring talented undergraduates to campus for courses and a research experience.

Also, the OE created the NIH Science Education Academy in which teachers, OE staff and NIH scientists work to develop curriculums for new programs and materials for dissemination to schools and to the public.

In its first summer, the academy planned a new program for initiating science teachers to the biomedical sciences; a lecture series and supporting materials for scientists teaching in the classroom; an electronic bulletin board, called EdNET, which carries mini-reviews for students and permits students and teachers constant contact with NIH; an NIH speakers bureau; and a number of videotapes for dissemination nationwide.

"We view all these programs as part of a continuum," said Fordis. "We have to attract students into science early, offer stepping stones to science careers and be there to offer long-term opportunities for advanced training. Each experience must be linked to a followup opportunity, lest students become disillusioned and lose to us."

OE's Biomedical Research Preparatory School is an example of capturing the attention of young people early. Developed with support from NIH associate director for minority programs Dr. John Ruffin, the prep school is designed to attract members of underrepresented populations into biomedicine. On Saturdays, students are exposed to a variety of science careers and are trained in molecular biology, bioethics, electronic searching of medical literature and resume preparation.

(Continued on Page 8)
"The aim is to encourage them to apply for our summer programs," said Fordis. "There's no better way to discover science than to do it. There's no better way to see what scientists are like, to feel the excitement of the chase and to be part of the solution, than to do it."

Although various NIH entities had already been offering summer opportunities to area teachers and students, OE gathered many of them under one umbrella and centralized the application process.

"We had all these disparate programs that desperately needed coordination," said Dr. Michael Gottesman, chief of NCI's Laboratory of Cell Biology and member of the Foundation for Advanced Education in the Sciences, which provided funding for many of the summer training projects. Gottesman, with the late Dr. John Eberhart, also developed the Sobel Summer Program, now supported in its fifth year by the Howard Hughes Medical Institute.

"It's a very complicated dance that we do," he said. "If it's a square dance, then it's nice to finally have a caller." He agreed with Fordis that the major benefit of these concerted efforts is long term.

"Our next generation of scientists comes from this generation," Gottesman continued. "Occasionally you have a student or teacher who will make a real scientific contribution. And that's great, but it's not the primary goal. We hope that some of these people will think about NIH at career time. In addition, a substantial goal is to attract populations—women and minorities—that have not pursued science careers in large numbers in the past."

Gottesman said the returns on investing in science education exceed NIH's boundaries and affect the entire biomedical science community. Besides being able to update the content of the average school science textbook and establishing valuable contacts for students, having teachers in the lab conducting research side by side with senior investigators allows them to get a firsthand view of the sociology of science.

"Most of the teachers say the lab experience is an eye-opener," Gottesman concluded. "In acquiring an appreciation for research, they can transfer that appreciation to their students. If we could affect 100 students for every teacher, imagine the impact on science in the classroom. And too, it's a chance to pass on what we've learned. Finally, we're getting an educated public and that's important for supporting our efforts."

According to Curt, in the 1970's and early 1980's, NIH was seen largely as "the finishing school" for biomedical research. Times changed and change was needed at NIH. In a short time, the OE has made significant progress in areas that are absolutely vital to the health of the intramural community.

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**CC's Biomechanics Lab Marks Sixth Anniversary**

The biomechanics lab, which celebrates its sixth anniversary as part of the Clinical Center's department of rehabilitation medicine, conducts state-of-the-art human motion studies and is used collaboratively with institutes to evaluate patients with such disorders as Parkinson's disease, rheumatoid arthritis, stuttering and osteogenesis imperfecta.

One specific area of interest is gait measurement. To the casual observer, two people may have similar gaits, but may be using different muscles and mechanisms to move around. Biomechanic technology identifies and measures those differences.

Researchers worldwide—most recently from Great Britain, Russia, Brazil and China—have come to observe the lab's facilities.

"These visits allow us to demonstrate what we've accomplished over the last 6 years," said Dr. Steven Stanhope, biomechanics lab chief. "The lab is recognized as one of the premier research/clinical evaluation facilities in the United States."

In addition to its human motion studies and consultations with foreign researchers, the lab staff has set in motion a Cooperative Research and Development Agreement with a private sector scientist to further enhance the capabilities of the lab. This would be the Clinical Center's first formal CRADA since such agreements were made possible in 1986.

In the photo above, a patient is hooked up to the reflective targets, which are seen by a series of cameras connected to a computer. Using software developed by the biomechanics lab staff, the computer generates the picture seen below. Specific measurements—such as the force placed on certain parts of the foot—can then be calculated. Physicians can use these evaluations to determine degree of disability before or after surgery.
Spring Semester Offers New Seminars and Perennial Favorites

On Jan. 21, "What's New in GCG Sequence Methodology (LSM)" will present Weiss, Physical Sciences Laboratory (PSL) and Richard Shragger, Laboratory of Statistical and Mathematical Methodology (LSM) will present "Signal Processing," a series of five lectures on digital filtering of scientific data.

Later in the term, Dr. Adrian Parsegian of PSL will give three lectures on the "Physics of Biomolecules." In May, toward the end of the term, Luther Barden and John Powell of the Computer Systems Laboratory (CSL) will lead a two-part seminar "Topics in Flow Cytometry," which will discuss the CAP and LAP software packages for Vax-based systems. Also in May, Dr. Moshe Gitterman, CSL, will give a new seminar, "The Modern Concept of Chaos."

New computing techniques will make NIH grants data more available than ever before. A seminar on EGAD, the electronic grants applications system, will discuss the ways in which these data can be used.

The value of computer programs is greatly enhanced if they can easily be used on multiple platforms. C language has become popular because its code is highly portable. The spring term will offer three classes appropriate for students at every level. "Getting Started with C," "C Language Fundamentals," and "C Language Data Structures." Another issue of concern to advanced programmers writing complex systems with large numbers of variables is to create systems that can be easily expanded and updated. Two different solutions to this problem are CASE (computer assisted software engineering) and object-oriented programming. Marvin Katz, Data Management Branch (DBM) will give a seminar on software engineering with CASE, and Dr. Sanford Orlow, CSL, will offer three seminars on object-oriented programming.

Image processing will be the topic of a number of offerings in the spring term. Wayne Rashband, NIMH, will repeat his popular seminar on the Image software for the Macintosh, and Mark Vivino, CSL, will present "Image Processing." a look at the toolbox used in this image analysis system. The Image software was developed at NIH and is available without charge. Dr. Benes Trus, CSL, will give an overview of image processing techniques being used at NIH in a series of four seminars comprising "Introduction to Image Processing."

SAS has long been the most popular software for statistical analysis at NIH. The Laboratory of Statistical and Mathematical Methodology, which supports this system, has completely revamped the courses for the spring term. Separate sections will be offered for programmers and nonprogrammers at both the beginning and more advanced levels, and a new seminar will provide an orientation for students who have no previous mainframe experience. "Running SAS Software in the PC-DOS Environment" will present this topic for users with previous SAS experience.

SPSS, another widely used statistical package, will be presented for both the mainframe and PC platforms in "Introduction to SPSS at NIH," "SPSS Tables," and "SPSS/PC + Getting Started Under DOS." The S-PLUS interactive system for statistics and graphics is available on the Convex mainframe, Unix workstations, and IBM PCs running DOS and will be demonstrated in a new seminar by Alyson Wilson and Fred Yamada of LSM.

Database is one of the most exciting fields in computing today. The spring program will offer a number of classes for beginning and more advanced students in this area. The emerging technology of client-server databases will be covered from the PC and local area networks/mainframe perspectives in two seminars, and a full program of DB2 classes will be offered ranging from "Getting Started with DB2" to "DB2 Application Programming." The network facilities that are doing so much to enable communications among computers and individuals locally and worldwide will be the subject of a number of seminars. "Networks for Scientists," "NUnet, LAN and Mainframe Mail Connectivity," and "Technology for Connecting Networks at NIH" examine the RESNet, NUnet, and NIHNet facilities developed here at NIH. "Network Services," "Using the Internet," "High-Speed File Transfer and Full-Screen Remote Access via NUnet" focus on the uses of networks. "LAN Concepts" will provide an introduction to local area networks while networking of Macintoshes will be discussed in "Macintosh Networking with System 7" and "Macintosh Networking with TCP/IP." Electronic mail and the centralized electronic bulletin board system will be discussed in three seminars, "ENTER MAIL," "BITNET," and "ENTER BBS."

Those unfamiliar with the NIH computing environment will benefit from three brief seminars, "Welcome to the NIH Computer Utility," "Introduction to the Convex Supercomputer," and "Mainframe Services at NIH." Online mainframe tools and services will be presented in the "Introduction to WYLBUR," "Beyond Basic WYLBUR," and "Creating and Using Simple WYLBUR CPs" classes. CPs (or command procedures) are programs written in the WYLBUR CF language.

DCRT Course Teaches Mainframe Computer Capacity Planning

Recently announced is a special DCRT course on capacity management for mainframe computers. "Performance Management with BEST/1-MVS" will be given Feb. 3-4. Time and place of the course were unavailable at press time but will appear in the NIH Calendar of Events and on postings around campus. The presentation will be made by speakers from BGS Systems of Waltham, Mass. The course is developed by BGS Systems, is a modeling package used for capacity management of computer systems.

The course should be of interest to NIH managers with responsibilities for mainframe capacity planning and information resources management. It will introduce general principles, survey available products, and discuss model calibration, workload forecasting, and reporting and graphics. The morning of Feb. 3. The remainder of the course will cover technical details of the BEST/1 software package.

Call DCRT, 496-2339, for updated information or to register for the course.
hunt ducks, she was accustomed to fetching the object of her search. She had to be retaught not to fetch in bomb detection."

The new Pozar and Turbo team had only 1 month to get acquainted before they went off to class. "However," says Pozar, "it was instant bonding. We just hit it off." Continuing to brag about her partner, she says, "Turbo was just great. By the end of the second week, she was well ahead of the other dogs in the class."

Turbo was taught to detect the different scents of chemical components used in making bombs such as smokeless powder, TNT, blackpowder, potassium perchlorate and many others. "She adapted exceptionally well in picking up the scent of semtex, one of the hardest plastic explosives to detect. The training officer for the class was very much impressed with Turbo's intelligence," says Pozar. "After discovering the bomb's location, Turbo sniffs excessively, wags her tail, turns around and looks at me, then sits down and stares at her target. She graduated with honors as one of the 'top dogs' in the training class."

This is not the end of training for K-9 Turbo and Officer Pozar. It takes about a year to conclude training for a working dog. While they will have to return to the training facility every month, Pozar says, "I work with her daily practicing searches in cars and wooded areas."

There are few bomb detection dogs in the area, so when other jurisdictions need assistance, Pozar and Turbo help out. Recently, they went to the Kennedy Center to work with the Park Police to secure that area before Barbara Bush attended a function there. "In the future," says Pozar, "we will be able to secure our own buildings here at NIH when the president or other dignitaries come to visit. Before, the Secret Service brought in their own canines and conducted the search."

She continues, "K-9 Turbo as an NIH employee is allowed inside buildings, not just on the grounds. She is also authorized to ride the Metro because she is recognized as a police officer. Actually, she has more authority than I do. I just follow the lead."

Why is a bomb detection dog needed at NIH? Division of Security Operations Director Jim Sweat says, "Desert Storm certainly exacerbated the need. At that time many government facilities and agencies received various threats, including bomb threats. Scientists across the nation have received threats from various groups opposed to some aspects of biomedical research. While NIH gets no more than three or four a year, it doesn't really matter how many you get," he emphasizes, "all you need is for one to be valid.

"If certainly has not been a serious problem at NIH but if we were to err, it is better to err on the side of caution. This is one additional step to ensure the safety of all patients, employees, visitors, and guests to NIH. Our policy is that an ounce of prevention is worth a pound of cure."

Turbo does have another canine companion on the police force, Nicky—an 18-month-old male Dutch malinweau whose partner is Sgt. Gerald Watson. Nicky is trained to bring down an attacker and to locate narcotics. The malinweau is a special type of dog imported from Belgium and guaranteed to be trainable. Basically, it is a combination of three shepherds in one—German, Dutch, and Belgian.

"Police departments across the country are using these dogs," says Sweat. "NIH is at the forefront in getting one. These dogs are highly intelligent and react extremely well to their handlers' commands."

Watson has been with the NIH police force for 22 years and for the past 10 has worked with a canine companion. His first was a donated dog named Maverick. "Unfortunately, Maverick had to retire due to hip problems," Watson states. "But malinweaus are professionally bred and have no hip problems."

"These dogs search aggressively—digging and pawing. Nicky is especially good at tracking narcotics, marijuana, cocaine, heroin, PCP and dirty money. Thus far, convictions based on his work have held up in courts of law. We have had great success with Nicky's tracking," Watson says. "He once located keys that had been dropped in deep snow, and has assisted in several narcotic searches."

Police canines serve as great deterrents to crime, say Pozar and Watson. As handlers they both agree, "Trust your dog." Both work with their dogs daily to keep them sharp as well as attend training sessions once a month for tracking, searching and obedience.

Watson is called upon to use his canine partner about two or three times a month. So far, Turbo has not been called into service. "But we've only been back from training a few weeks," Pozar says.

Each dog lives with its handler. "While we receive excellent veterinary care from Dr. Victoria Hampshire and others in Bldg. 28, there are no kennel facilities here on campus," says Pozar. "They travel with us everywhere."

While on duty, Watson drives a jeep that has been modified for Nicky; Pozar drives a station wagon with adjustments, crafted by the Division of Engineering Services staff, so Turbo can travel safely.

Will NIH be getting more canine recruits? "At this time, we have no plans to increase our canine corps," says Sweat. "Although bomb threats went up 30 percent nationwide in 1991," he continues, "we are planning on just maintaining what we have—one aggressive canine trained to bring an attacker down and detect drugs; and one bomb dog that cannot be aggressive because she cannot touch the object."

"We also have a bomb-detecting x-ray machine in the mailroom," Sweat adds. "Another result of Desert Storm, it scans any suspicious mail coming into NIH. These additional steps complement DSO's policy of providing a safe and secure environment for the NIH community."

**Seminar Talks Taxes**

Tax time is scary enough for Americans; it can be a nightmare for foreigners working in the United States.

The Fogarty International Center's International Services and Communications Branch (ISCB) is hosting free tax seminars to help foreign scientists unravel the U.S. income tax system.

Eleven sessions have been scheduled from Feb. 14 through Mar. 20. The locations and times vary but will be announced in the NIH Calendar of Events. Sessions will be held not only on the Bethesda campus but also at NIH sites in Frederick, Baltimore, and Research Triangle Park. The talks will cover federal and state annual returns as well as such special issues as tax treaty benefits.

The seminars are open to NIH Visiting Program participants, nonimmigrant guest researchers and special volunteers, nonimmigrants on expert or expert consultant appointments, FIC scholars-in-residence, FIC international research fellows, and other nonimmigrant scientists officially at NIH.

Stop by the ISCB Volunteer Services Office in Bldg. 31A, Conf. Rm. 3 or call 496-7357 to obtain a copy of the schedule.

The ISCB also offers free, one-on-one tax consultations for NIH foreign scientists. The tax consultant will not prepare forms, but will advise scientists about problems and procedures. To schedule an appointment, phone 496-6166.
TRAINING TIPS

The NIH Training Center of the Division of Personnel Management offers the following:

Courses and Programs

Management and Supervisory 496-6371
Successful Middle Management at NIH 1/29
Customer Centered Management 2/4
Managing Conflict in the Workplace 2/5
Recognition Secrets: Innovations for Rewarding Today's Workers 2/5
Congressional Operations Workshop 3/9
Report Writing 3/10
Leader Led Change 3/10

Office Operations and Administrative

Systems Training 496-6211
Commissioned Officers Leave and Attendance 2/7
IMPACT System for Personnel Staff 2/13, 3/10
IMPACT System for MOs 2/27
IMPACT System for Admin. Staff 3/19
Professional Development for Secretaries 3/2
Filing and Maintenance 3/16
Property Management Information System 3/3
Writing Fundamentals I 3/16
Federal Supply Schedules 3/24

Seminars on Advanced Procurement

Topics 3/26

Special Courses 496-6211
Mid-Career Financial Planning 2/10
Retirement Planning Seminar 3/11

Personnel Management 496-6211
Introduction to Personnel Management 2/24
Position Management 3/9
Employee Relations for NIH Personnelists 3/3
Negotiate to Win for Personnelists 3/27
KSA Methodology Training 3/16

Attention Commissioned Officers!

Hours for identification cards for commissioned officers and dependents are as follows: Monday, Wednesday, Thursday and Friday from 9 to 11 a.m. When presenting family members for ID cards, bring photocopies of appropriate documentation such as birth certificates, marriage licenses, etc. To speed the process, call 496-4212 to request the necessary forms for completion in advance.

Baseball Card Fans Wanted

Well-established and beginning collectors are needed for the NIH Baseball Card Collecting Club. Activities include buying, selling and trading baseball and other sports cards, arranging outings to area card shows and events, and hosting a show at NIH, with admission fees benefitting the Children's Inn and Camp Fantastic. For more information call Tony Pirrone, 496-5475.

Former NIGMS Employee Taylor Dies

Dr. William M. Taylor, a former health scientist administrator in the NIGMS Biophysics and Physiological Sciences Program, died recently of complications from strokes. He was 71.

An experimental and physiological psychologist, he retired in September 1985 after 20 years with NIGMS.

In 1965, Taylor joined the NIGMS Research Training Grants Branch, where he developed training programs in the behavioral sciences. The following year, he became a program administrator in the institute's Clinical and Physiological Sciences Program. In 1978, two NIGMS programs were combined, and Taylor became part of what was then the Physiology and Biomedical Engineering Program. A year before he retired, the program was modified and renamed the Biophysics and Physiological Sciences Program.

Prior to joining NIH, Taylor taught at Beloit College in Beloit, Wis., Georgetown College in Georgetown, Ky., Case Western Reserve University, and the University of Akron. While in Akron, he was also director of the physiological psychology laboratory at Goodyear Aerospace Corp.

A native of Des Moines, Iowa, Taylor received his bachelor's degree from George-town College and his M.S. and Ph.D. degrees from Purdue University. During World War II, he served in the Army Signal Corps.

Taylor wrote articles on experimental psychology and coauthored the book Laboratory Experiments in General Psychology.

He is survived by his wife, Jean, two children, a brother and a grandson.

Vince Sabados Retires After 31 Years in Maintenance Section

A shop planner in the Division of Engineering Services' north maintenance section, Vince Sabados retired on Jan. 5 after working 31 years in that section. When he joined NIH in 1960, there was only one maintenance section covering all NIH buildings. "It was located in Bldg. 13," he recalls. "But with all the growth on campus, we were split into two sections—north and south—and north was eventually moved to Bldg. 31."

As a shop planner, Sabados took trouble calls and dispatched them to the different engineers on duty. The section operates around the clock, all day, every day.

"I remember the big snow that came in over a weekend during the late 1960's and a lot of areas were completely snowed in. I lived in Washington at the time so I didn't have any trouble making it to work." He continued, "In fact, some of the fellows on duty stayed over and I also worked several 16 hour shifts in order to help out. It was so bad that we had to fly food to the animals at the Poolesville facility and get them some heat."

A native of Pennsylvania, Sabados says, "I've spent about as much time in this area as I did originally in Pennsylvania, so I plan to stay here after I retire. But, I'll go back and visit old friends, as well as do a lot of fishing."

Ballet Tickets Available

Spend an evening with Kevin McKenzie, Franz Liszt, George Balanchine, Paul Hindemith, Choo-San Goh, Benjamin Britten, and the dazzling dancers of the Washington Ballet at the Kennedy Center's Eisenhower Theater. R&W has discounted tickets to the Washington Ballet's Winter Series productions on Friday, Feb. 14 and Saturday, Feb. 15 at 7:30 p.m. The program includes L'Etude by Kevin McKenzie, Balanchine's The Four Temperaments, and Goh's Synonyms. Rear orchestra center seats are discounted to $30.50, $4 off the regular ticket price. For more information or to order tickets, call or stop by the R&W Activities Desk in Bldg. 31, 496-4600.

Computer Training Classes

Classes

Getting Started with DB2 1/22-24, 2/12-14
ENTER MAIL 1/22
Signal Processing Concepts 3/2, 3/9, 3/25, 2/12, 2/19
BITNET 1/23
Welcome to the NIH Computer Utility 1/28
Convex Questions and Answers 1/28
Introduction to Microsoft Windows 1/29
Introduction to the Convex Supercomputer 1/30
Intermediate PC-DOS 2/9, 2/7
Editing with Emacs 2/7
Introduction to PC Mainframe 2/6
Communication with Kermit 2/6
Analyze Workshop 2/10, 2/11, 2/12, 2/14
SPSS Tables 2/13-14

Classes are offered by DCRT's Computer Center Training Unit, without charge. Call 496-2339 for more information.
Conference Focuses on Ovarian Cancer in Older Women

By Karen McCrory Pocinski

Gaps in information about how age affects the diagnosis and treatment of ovarian cancer, as well as the poorer prognosis of older women with this disease were the focal points of "Perspectives on Ovarian Cancer in Older-Aged Women: Current Knowledge and Recommendations for Research," a 2-day, multidisciplinary meeting cosponsored by NIA, NCI, and the American Cancer Society (ACS).

"This conference was designed to begin to bridge the information gaps that exist between what we know about aging processes and what is known about the diagnosis and treatment of ovarian cancer," said Dr. Gene D. Cohen, NIA acting director. "The research projects that result could save the lives of many older women."

The major emphases of the working conference, which was chaired by Dr. William J. Hoskins, chief of the gynecology service at Memorial Sloan-Kettering Cancer Center, were on epidemiology, tumor biology, endocrinology, early detection, and treatment of ovarian cancer in the subgroup of women 65 years and older. Scientists from various fields of research focused on the problems of ovarian cancer through the lens of age contrasts.

Until recently, ovarian cancer has been perceived as a disease of younger women. However, according to Dr. Rosemary Yancik, NIA assistant director for liaison and applied research on aging and head of the conference planning committee, age-specific ovarian cancer incidence rates from the NCI Surveillance, Epidemiology, and End Results Program show that cancer of the ovary occurs relatively less frequently before age 45. Incidence rates increase gradually from age 45 to peak rates in the 70 to 84 age group. The highest incidence rate is observed in the 75 to 79 age group.

Age comparisons of ovarian cancer also indicate that a disproportionate number of older women are initially diagnosed with advanced disease. According to national death statistics from 1988, more than 60 percent of ovarian cancer deaths in the United States were in women 65 years of age and older. As the population ages, even greater numbers of American women will be affected by this devastating disease.

Conference participants discussed age-related differences in the pathology of ovarian cancer. Younger women, for example, frequently develop "tumors of low malignant potential," or borderline tumors. The 5-year survival rate for patients with this disease is approximately 95 percent. Older women, on the other hand, are affected by the most aggressive form of ovarian cancer. Survival for patients with serious surface papillary carcinoma, a type of ovarian cancer commonly found in older women, is only about 16 months. Among the research questions that need to be addressed is why such differences occur.

Early stage ovarian cancer is difficult to detect. In most women, the disease has already spread beyond the pelvis by the time a diagnosis is made. Two new technologies—CA125 and transvaginal ultrasound—may prove useful as screening tools. CA125 can be detected in the blood of patients with ovarian cancer. Transvaginal ultrasound images the ovaries from the vagina with little discomfort and more accuracy than traditional transabdominal ultrasound. The NCI is planning a randomized trial of CA125, transvaginal ultrasound, and pelvic examination versus routine medical care in women ages 60 to 74. This study is part of a larger trial to determine the efficacy of screening for lung, colorectal, and ovarian cancer in women; and for lung, colorectal, and prostate cancers in men.

Participants reported that older women are often treated less aggressively than younger patients. However, data from a number of clinical trials indicate that older patients without other major medical problems can tolerate the same level of dose-intensive therapy as younger patients and that age alone should not be used as a reason to modify treatment in older women with ovarian cancer.

Proceedings of the conference will be published as a supplement to the ACS journal Cancer. "Collaborations such as this between government and nongovernment groups are the wave of the future," noted Dr. Walter Lawrence, ACS president. "We hope to encourage more opportunities for collaborative research."

A number of collaborative efforts currently are under way between the NIA and NCI to expand the knowledge base on cancer in the aged. Prominent among these is a study to ascertain the extent to which competing health problems influence early detection and treatment of older people diagnosed with cancer, including ovarian cancer and several other types of malignancies.

In addition, a joint NIA/NCI cancer education initiative will target Americans 65 years of age and older and the health professionals who serve them. Education efforts are aimed at bringing the latest information about cancer to older people, increasing early detection and other health promotion practices in this age group, and increasing the proportion of older cancer patients who receive optimal cancer treatment.

Chamber Players Give Concert

The NIH Chamber Players will present a program of music for piano and strings on Monday, Feb. 3 at noon in Masur Auditorium, Bldg. 10, sponsored by FAES.

The concert will feature Mozart's Trio No. 5 in G Major, K. 564 and the Trio No. 1 in D Minor, Op. 49 by Mendelssohn. All are invited to attend.

Dr. Bernadine Healy, NIH director, accepts her 1992 R&W membership card on behalf of R&W staff and board members (from l) Linda Huss, assistant treasurer; Kelly McManus, R&W staff; Jack Arthur, treasurer; Dr. Helen Gift, president; and Randy Schools, general manager. Memberships for 1992 are available at any R&W store or by mail for only $4 through the end of January (price increases to $5 on Feb. 1). For more information call 496-4600.