New Recommendations on Cholesterol and Children Released

All healthy children above the age of 2 should eat in a heart-healthy way to lower blood cholesterol and help prevent coronary heart disease in adulthood, according to new recommendations released by the National Cholesterol Education Program, which is sponsored by the National Heart, Lung, and Blood Institute.

The recommendations emphasize lowering the average blood cholesterol of all American children and adolescents through population-wide changes in eating patterns.

"Our review of the scientific evidence has convinced us that atherosclerosis begins in childhood and that this process is related to nutrition practices which affect blood cholesterol levels both in children and in adults," said Dr. Claude Lenfant, NHLBI director.

"Coronary heart disease is the leading cause of death in the United States," he added. "If we could delay the onset of heart disease, we could extend the years of healthy life for many Americans."

The new recommendations are contained in a report written by a panel of experts convened by the institute's National Cholesterol Education Program, which is sponsored by the National Heart, Lung, and Blood Institute.

Immunologist Max D. Cooper To Deliver 1991 Dyer Lecture

Internationally renowned immunologist Dr. Max D. Cooper, of the University of Alabama at Birmingham, will deliver the 1991 honorary R.E. Dyer Lecture on Tuesday, May 7 at 3 p.m. in Masur Auditorium, Bldg. 10. The title of his lecture is "A Comparative Analysis of T Cell Development." Each year, the NIH director chooses a leading expert in the area of infectious diseases to be the speaker for the Dyer Lecture series. The lecture is named after Rolla Eugene Dyer, an infectious disease researcher and NIH director from 1942 to 1950.

Cooper's lecture will focus on the ways the T cell develops in three species: mammal, bird, and amphibian. He will use man, chickens, and frogs as his models for individual cellular development.

Cooper studied medicine at the University of Mississippi Medical School and Tulane University Medical School, specializing in pediatrics. This work in pediatric immune deficiencies led to his identification of a new type of childhood lymphoblastic leukemia called pre-B cell leukemia.

One of Cooper's most recognized studies, conducted in the 1960's, established that the human immune system can be divided developmentally and functionally into B cell and T cell populations. This work led to better understanding of the mechanisms and treatments of immunodeficiencies and the process governing the development of lymphoid neoplasms. Cooper received a top award from the Society for Experimental Biology and Medicine for this discovery and later won the inaugural Sandoz Prize for Immunology with his collaborator on T cell function, Dr. Jacques Miller of the Walter and Eliza Hall Institute in Melbourne.

In 1988, Cooper was awarded a 7-year collaborative research grant by the National Cancer Institute on the genetic basis of immunodeficiency.

Gene Blocks Cancer Spread In Mice, Say NCI Scientists

National Cancer Institute scientists have demonstrated that a gene called \textit{nm23} can block the formation and spread of certain skin cancers in mice. The study was carried out by Drs. Patricia S. Steeg, Alvaro Leone and their coworkers at NCI, along with researchers at Molecular Oncology, Inc., and Program Resources, Inc. It is reported in the Apr. 5 issue of the journal \textit{Cell}.

"Surgeons take care of most primary tumors very nicely," Steeg said. "But almost half of cancer patients already have observable or occult (invisible) metastases at the time of diagnosis and surgery."

Scientists suspect that a number of genes act to control cell growth and prevent development of human and animal cancers. But until now, only two—\textit{RB} and \textit{p53}—had been proven to have this capability. In addition, \textit{nm23} has been shown to interfere specifically with tumor metastasis, the spread of tumor cells throughout the body that is responsible for most cancer deaths.

"Surgeons take care of most primary tumors very nicely," Steeg said. "But almost half of cancer patients already have observable or occult (invisible) metastases at the time of diagnosis and surgery."

In these patients, the disease is likely to recur. By understanding the factors involved in metastasis, scientists hope to learn how to interfere with the process and improve patient survival.

Steeg and her associates originally identified \textit{nm23} in mouse melanoma cell lines.

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investigator's grant from the Howard Hughes Medical Institute to continue his work in immunology. Despite offers at several prominent universities, Cooper decided to use his grant at UAB, where he has been conducting research and teaching for the past 24 years. UAB is one of only 26 universities with a Howard Hughes researcher on its staff.

Cooper became the first Alabamian to be inducted into the National Academy of Sciences when he was named to the prestigious board in 1990.

As the Howard Hughes investigator at UAB, Cooper directs a team of faculty members, graduate students and postdoctoral students from around the world who are studying the immunology of AIDS, cancer and leukemia. In addition, Cooper serves as director of UAB's division of developmental/clinical immunology as well as director of the Center for Interdisciplinary Research in Immunological Diseases and of the Cell Identification Laboratory. He is also a professor in the departments of medicine, microbiology and pediatrics.

Cooper serves as senior scientist at the Cystic Fibrosis Research Center, the Multipurpose Arthritis Center and the Comprehensive Cancer Center, all at the University of Alabama at Birmingham.—Margo Warren

Cruise to Bermuda with R&W

Give yourself something to look forward to: take a luxury cruise vacation this fall! R&W has secured special group rates for its members for a 7-night cruise to Bermuda aboard the beautiful Meridian, sailing from Baltimore on Oct. 13.

Enjoy swimming, golf, tennis, cycling, jogging, horseback riding, beautiful beaches, shopping, and more. Ship facilities include swimming pools and mile-age pools, whirlpools, health club, full casino, game room, library, first-run movies, children's playroom, and supervised teen activities. Night life on board features great entertainment, intimate lounges, lively piano bars, and open-till-dawn discs. And, of course, you'll enjoy award-winning cuisine throughout the cruise.

Inside cabins are available from $975 per person; outside cabins from $1,095. Third and fourth passengers in a cabin cruise for only $495. For more information, stop by the R&W Activities Desk in Bldg. 31 for a free color brochure, (or call 496-4600 and we'll send you one). Find out why cruising is becoming America's favorite way to travel.

Correction

The date of Dr. Shlomo Havlin's presentation on disordered systems, published in the last NIH Record, was incorrect. The presentation will be held Friday, May 10, at 1:30 p.m. in Bldg. 12A, Rm. B51.
**Noted Alzheimer’s Disease Researcher Raises New Questions About Risk Factors**

Long at the forefront of clinical research on brain chemistry, brain function, and Alzheimer’s disease, Dr. Robert Katzman is visiting the National Institute on Aging this spring with some new thoughts in mind. Last July, Katzman gave up his chairmanship of the department of neurosciences at the University of California at San Diego to more actively pursue a different brand of investigation—epidemiological studies to pinpoint the risk factors associated with Alzheimer’s disease. Today, Katzman is, as he puts it, “retooling in terms of epidemiology,” and NIA scientists are tapping the expertise of this Alzheimer’s disease research pioneer as they evaluate incoming data and design upcoming studies.

Katzman is spending 7 weeks at NIA out of a year-long sabbatical, working with scientists in the Neuroscience and Neuropsychology of Aging Program and in the Epidemiology, Demography and Biometry Program. His ideas about new areas to investigate in Alzheimer’s disease are adding to the excitement in the Alzheimer’s research program.

“His and other studies give us a great deal more insight on how to identify possible risks for Alzheimer’s disease,” says Dr. T. Franklin Williams, NIA director. “Dr. Katzman’s work is adding more dimensions to research worldwide.”

Continuing expansion of Alzheimer’s disease research is critical, Katzman says. “The more we know about the risks associated with Alzheimer’s disease, the better chance we have of preventing it or slowing its progress,” he notes. At a recent seminar sponsored by the NIH coordinating committee on Alzheimer’s disease, Katzman suggested that research should move beyond continued examination of well-known risk factors such as family history and genetics.

At that session, Katzman stressed three areas of possible risk that need to be evaluated—head injury, myocardial infarctions, and education. Some studies indicate that head injuries early in life, accompanied by brief periods of unconsciousness, may contribute to Alzheimer’s disease by being involved in the formation of plaques. These prior concussions may account for 5 to 15 percent of the cases of Alzheimer’s disease that develop before age 75. Newer research suggests a link between Alzheimer’s disease and heart attacks, with one recent study supported by NINDS suggesting that women over the age of 80 with a history of myocardial infarction were five times more prone to dementia than those without a history.

Recent preliminary work by Katzman indicates that education could be a risk factor as well. Data collected by Katzman and others from a population in Shanghai, China, showed that women with little or no education had significantly higher rates of all types of dementia, including Alzheimer’s disease. Perhaps, Katzman speculates, individuals with lower education levels may develop fewer synapses in the brain. With their brain “reserve” already lowered, they could be affected by the disease somewhat earlier than other Alzheimer’s disease victims, he theorizes.

“The question is, do we believe any of these epidemiological relationships?” says Katzman. “There is an urgent need to test these new findings in special populations to find out what is true and what is not.” For instance, if the public is armed with a greater degree of certainty about risks for Alzheimer’s disease, more attention might be paid to such areas as head injury prevention.

At NIA, scientists are working with Katzman on several of these questions. Epidemiologists are looking at ways to examine the head injury-Alzheimer’s connection further. Neuroscientists are planning an international meeting on possible environmental factors and other risks that could be linked to Alzheimer’s disease. Katzman is also working with scientists on assessing cognitive impairments and dementia in ongoing epidemiological studies in several areas, including Honolulu, Hawaii.

Katzman, a Harvard Medical School graduate, was recently the recipient of the Alzheimer’s Association Distinguished Service Award. He has been a member or chairman of several NIH and NIA committees. —Vicky Cahan

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**PEF Auction Scheduled for May 14**

The seventh annual Patient Emergency Fund Auction will be held May 14 in the Visitor Information Center, Clinical Center. Great get-aways, good food and fun things to do and see are on this year’s auction list. Already donated to the auction are: Sunday brunch for two at Hogate’s Restaurant on the waterfront in Washington, D.C., a two-night stay at Orlando, Fla., a golf package for two at Canaan Valley Resort, two box seats to Phantom of the Opera at the Kennedy Center, lunch for two at El Caribe, and many more.

The silent auction, which last year netted more than $11,000, begins at 11 a.m. and ends at 2 p.m. The live auction, complete with auctioneer, begins at 12:30 p.m. and lasts until 1 p.m. All are welcome to attend.

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**NIH History Is Topic of Former Director Fredrickson’s Lecture**

Former NIH director (1975-81) Dr. Donald Fredrickson, now a scholar at the National Library of Medicine, will give a lecture entitled, “NIH: The Crucible Years 1930-1948,” on Monday, May 6 at 2 p.m. in Lister Hill Auditorium, Bldg. 38A. The talk, an expansion of a popular presentation Fredrickson recently gave at Clinical Center Grand Rounds, is sponsored by NLM’s History of Medicine Division.
CHOLESTEROL  
(Continued from Page 1)

Education Program (NCEP). The report was approved by the coordinating committee of the NCEP—representatives of 42 major U.S. scientific, professional, governmental, and voluntary organizations concerned about cholesterol.

"This report represents a consensus of views from a broad range of disciplines, including pediatricians, pediatric cardiologists, pediatric nutritionists, and epidemiologists," said Dr. Ronald Kleinman, chairman of the committee on nutrition of the American Academy of Pediatrics.

The expert panel concluded that, compared to youths in many other countries, U.S. children and adolescents have higher blood cholesterol levels and higher intakes of saturated fatty acids and cholesterol. In addition, autopsy studies have found that early coronary atherosclerosis often begins in childhood and adolescence.

Children and adolescents with high blood cholesterol frequently come from families with a high incidence of coronary heart disease among adult members. According to the panel, high blood cholesterol tends to run in families as a result of both shared genetic factors and environments. In addition, a number of studies have shown that children and adolescents with high cholesterol are more likely to have elevated levels as adults.

"The expert panel recommends a two-pronged strategy to lower blood cholesterol levels in children and adolescents: a population approach to lower average cholesterol levels and an individualized approach to identify and treat those at highest risk of future heart disease," said Dr. Ronald Lauer, chairman of the expert panel, and director, division of pediatric cardiology, University of Iowa.

The population approach seeks to reduce blood cholesterol levels among healthy American children and adolescents through population-wide changes in nutrient intake and eating patterns.

To achieve adequate nutrition, the panel recommends, children should: eat a wide variety of foods and consume calories adequate to support growth and development; Saturates fatty acids should be less than 10 percent of total calories; total fat should average no more than 30 percent of total calories; and dietary cholesterol should be less than 300 mg per day.

The panel advises families to select, prepare, and eat foods low in saturated fatty acids, total fat, and cholesterol and to choose a variety of foods to ensure adequate intake of carbohydrates, protein, and other nutrients.

"Eating this way is safe—it supports normal growth and development," said Dr. James Cleeman, coordinator of NCEP.

The panel's recommendations are not

New Clinic Hours for OMS

The Occupational Medical Service (OMS) of the Division of Safety will change its operating hours in the Bldg. 10 and 13 health units beginning Monday, May 13. Before making this decision, the OMS reviewed data about the utilization patterns of its clinics and observed changing tour of duty practices among employees. The intent of the change is to better meet the needs of employees who begin their tours of duty early in the morning and of employees who work shifts.

The new hours of operation will overlap with every tour of duty and the alternate work schedules of many NIH employees. The Monday through Friday schedule will be as follows: Bldg. 10, 6th floor, 7:30 a.m.-10 p.m.; Bldg. 13, Rm. G904, 7:30 a.m.-4 p.m.

Should an injury or illness occur after these hours, and on weekends and holidays, call the NIH Fire Department on the fire/rescue emergency telephone number 116. The NIH Fire Department will send emergency medical technicians to the site of the incident and arrange for transportation to a local hospital. When necessary, the Fire Department will page the chief of the Occupational Medical Service for consultation.

In Bldg. 10, emergency service is available from the NIH Fire Department by dialing 116, and the Clinical Center code team by dialing 111.

For further information call the Occupational Medical Service, 496-4411. 

National Osteoporosis Prevention Week is May 12-18. Here, Dr. T. Franklin Williams, director, National Institute on Aging (second from l), is presented with a poster by the National Osteoporosis Foundation for the seventh annual event. The foundation's prevention week campaign focuses on the devastation caused by osteoporosis and emphasizes prevention. Osteoporosis is responsible for 1.3 million broken bones each year in people over 45, often resulting in severe disability and pain. Public education efforts during the week will outline healthy diets and regular exercise programs that can minimize risks of the disease. The campaign is supported by the NIA, NIAMS, the Administration on Aging, DHHS, and private foundations and companies. Williams is joined by Dr. Evan C. Hadley, associate director for geriatrics, NIA (far r), and Dr. Sheryl S. Sherman, director of geriatrics, NIA (far l). Presenting the poster are Dr. B. Lawrence Riggs, Mayo Clinic, president, National Osteoporosis Foundation, and Dr. Barbara Bayer Kaplan, associate executive director, National Osteoporosis Foundation.
Allen Spiegel Named NIDDK Scientific Director

Dr. Allen Spiegel, chief of NIDDK's Molecular Pathophysiology Branch, has been named director of NIDDK's Division of Intramural Research. Spiegel, 44, is a board-certified endocrinologist known for his research on the structure and function of G proteins.

"Dr. Spiegel has made outstanding and broad-ranging scientific contributions," said Dr. Phillip Gorden, director of NIDDK. "I believe he will provide excellent leadership to the intramural division."

Spiegel's investigations of pseudohypoparathyroidism, a disorder so named because it mimics a parathyroid hormone deficiency state, have helped establish that inherited diseases can be caused by defects in G proteins. G proteins serve as intermediaries between hormone receptors and effectors. Several types of G proteins are found in all cells. Spiegel traced the cause of pseudohypoparathyroidism to a defect in a particular G protein after noting that several common features of the disorder—obesity, short stature and mental deficiency—could not be explained by resistance to parathyroid hormone alone.

Pseudohypoparathyroid patients also had other hormonal disorders such as abnormal thyroid and gonadal function, which led Spiegel to look for a point of convergence early in the cellular pathway of hormone action. He hypothesized that G proteins mediating stimulation of the ubiquitous second messenger cyclic AMP, could represent such a point of convergence, and soon obtained evidence for a deficiency in G, function in cells from pseudohypoparathyroid individuals.

Recently, members of his laboratory identified mutations in the gene encoding the G protein in patients with pseudohypoparathyroidism. Spiegel's laboratory was also the first to produce antibodies against G proteins, which have proven extremely useful as probes of G protein distribution, structure and function. Spiegel has provided these antibodies to investigators around the world who study G proteins in diverse organisms and cell types. (Because G proteins have been highly conserved during evolution, the same antibodies used to study fruit flies can also be used to study humans.)

Spiegel has also published extensively with Dr. Gerald Aurbach, who recruited Spiegel to the Metabolic Diseases Branch of NIDDK in 1973. Spiegel, Aurbach and Dr. Stephen Marx, also of the Metabolic Diseases Branch, have collaborated on investigations of inherited and acquired forms of hyperparathyroidism.

After graduating sum laude from Harvard Medical School in 1971, Spiegel completed an internship and residency at Massachusetts General Hospital in Boston. He came to NIDDK's Endocrinology Research Training Program in 1973 (when NIDDK was known as the National Institute of Arthritis, Metabolism, and Digestive Diseases). After training, he became a senior investigator in the Metabolic Diseases Branch and chief of the section of molecular pathophysiology 8 years later. When his section became a branch in 1988, he was promoted to branch chief. He has received numerous awards in recognition of his accomplishments, including the Outstanding Service and the Meritorious Service medals from the Public Health Service.

As scientific director, Spiegel hopes to continue his research, spending several hours each week with members of his laboratory.—Kathy Kranefelder

Asthma and Allergy Awareness Week Observed, May 5-11

Asthma and Allergy Awareness Week is May 5-11. The National Institute of Allergy and Infectious Diseases is joining the Allergy Foundation of America in focusing public attention on the scope and nature of asthma and allergic diseases, the progress of research and clinical care, and future directions of research.

Allergies and asthma are among the nation's most common and expensive health problems, accounting for one out of every nine visits to physicians. More than 40 million Americans—about one out of every five—suffer from allergies to one or more substances. Hay fever, or allergic rhinitis, affects an estimated 22.3 million people. More than 33.2 million persons in this country suffer from chronic sinusitis.

After hay fever, chronic sinusitis, and chronic bronchitis, asthma is the most frequent chronic condition in persons under the age of 18, affecting between 10 and 15 million Americans. Asthma is the most frequent cause of hospital admissions for children, and it also leads the list of childhood diseases that cause a significant loss of time from school. The problem is compounded in the inner-city. Each year 4,000 deaths in the United States are caused by asthma.

"Continuous monitoring and therapy, rather than episodic care, can improve the health of people with asthma or allergic diseases," said Dr. Anthony S. Fauci, NIAID director. "Virtually all asthma-related deaths are preventable. Researchers—many funded by NIAID—are continuing their investigations aimed at finding the most effective way to manage asthma and allergies."

After a decade of steady declines, asthma mortality rates have been increasing, and children who live in the inner city are particularly affected. Because of the urgency of this problem, NIAID is funding a $2.5 million National Cooperative Inner-City Asthma Study to design, implement, and evaluate a comprehensive intervention program to achieve long-term reduction of recurrent asthmatic episodes and asthma-related deaths among African-American and Hispanic children living in the inner city. A network of centers at eight institutions in seven cities will identify factors contributing to the increased incidence of asthma in these children. NIAID also supports research at six Centers for Interdisciplinary Research on Immunologic Diseases and 10 Asthma and Allergic Disease Centers throughout the United States.

In fiscal year 1990, NIAID spent $4,312,258 on asthma-related research and $22,682,369 on studies in the field of allergic diseases.
GENE BLOCKS CANCER SPREAD IN MICE

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Melanoma is an often fatal type of skin cancer with a strong tendency to metastasize.

In their early experiments, the scientists found that in cell lines with a limited tendency to metastasize, the nm23 gene was expressed to about a tenfold greater degree (i.e., about 10 times more of its protein product was made) than in cell lines with a high metastatic potential. These and other results suggested that nm23 might be a cancer suppressor gene with specific antimetastatic effects.

Human cells also contain the nm23 gene. The human gene contains the blueprint for a protein that is 90 percent identical to the mouse nm23 protein.

Several studies in humans have found that cells from metastatic breast cancers contain less nm23 messenger RNA than cells from breast cancers that do not metastasize. (Messenger RNA acts as an intermediate between the gene blueprint and the final protein product.)

"In breast cancer, both my lab and other labs around the world have seen reduced expression of nm23 correlate with metastases to the lymph nodes, with reduced disease-free survival, and with reduced overall survival," Steeg said. "I don't think nm23 will prove to have a suppressor role in every type of cancer, but it looks like it will be important in breast cancer."

In the present study, Steeg and her coworkers used genetic engineering techniques to insert the nm23 gene into highly metastatic K-1735 TK mouse melanoma cells, which normally express this gene at very low levels. Some of the cells integrated nm23 into their genetic material and formed clones, or colonies of descendants, that continued to express nm23 (i.e., made nm23 messenger RNA and protein) at high levels.

The researchers compared these clones with controls—other K-1735 TK clones that had not received a new nm23 gene. When injected into mice, the clones with added nm23 produced fewer tumors than control clones. In addition, the nm23-engineered clones produced 90 percent fewer metastases in the mice.

The researchers did not see any significant effect of the added nm23 gene on tumor growth. This distinguishes nm23 from the previously identified p53 suppressor gene, which inhibits tumor cell multiplication.

Ultimately, gene therapy could be used to treat patients by inserting nm23 into cancer cells, but Steeg does not expect that to be feasible for many years. However, it should now be possible, she said, to select for drugs that increase expression of nm23, or mimic its effect, in cancer cells. This could lead to development of a new class of anticancer agents.

In addition to planning other experiments with nm23, Steeg's group intends to insert human nm23 into human breast cancer and ovarian cancer cells to see whether the gene inhibits spread of these cancers in laboratory systems.

A 36-inch Peterson gas fireplace log set was recently donated to the Children's Inn at NIH by Washington Gas Light Co., through its distributor, Yetter Distribution Co. David B. Zalenski, coordinator of sales planning for Washington Gas, was on hand for the donation, which he coordinated, as was Marcy Bradford, day manager of the inn. Washington Gas may also donate gas lights to the exterior playground and picnic area of the inn, so that patients and families may enjoy more attractive surroundings.
New NCI/NIA Cancer Education Initiative Targets Americans 65 and Older

NCI, in collaboration with NIA, is launching a major cancer education initiative targeting Americans 65 years of age and older and the health professionals who serve them.

"The same diagnosis and treatment approaches that reduce suffering and death in younger groups also help older Americans," said NCI director Dr. Samuel Broder. "Breast approaches that reduce suffering and death in younger groups also help older Americans."

"We need to redouble our efforts to see that all Americans have the benefit of the best information," Broder said. "Then each of us, no matter what our age, can make the decisions that help promote health and prevent disease."

"As a nation cannot afford to be bound by the myth that disease is an inevitable part of age," said Dr. T. Franklin Williams, director, NIA. "An aggressive education effort will let older people and their families know that it is never too late to tackle cancer through prevention, early detection, and treatment. The chances of surviving cancer are better now than ever before."

Ihde Is New NCI Deputy

Dr. Daniel C. Ihde has been appointed the new National Cancer Institute deputy director. In 1973, Ihde started his NCI career as a clinical associate in the Clinical Oncology Program, later becoming section head and then deputy chief of the NCI-Navy Medical Oncology Branch. During his years as a researcher and clinician, Ihde specialized in the treatment of lung cancer, publishing many articles on the natural history and therapy of lung, prostate, liver, and other cancers.

In addition to his branch activities, Ihde has had academic appointments with Georgetown University School of Medicine and the Uniformed Services University of the Health Sciences. He also serves as editor-in-chief of the Journal of the National Cancer Institute.

NCI and NIA will work with mass media and through agencies and organizations such as the American Association of Retired Persons. Messages about cancer will be delivered through print media, radio, television, and through organizational channels.

The institutes will also reach health professionals with information concerning the special issues and needs of older patients and how to prevent against age bias in diagnosis and treatment. They will work with key medical organizations to inform their memberships.

Bus Trips to O's Games

Do you love baseball but dread the drive to Baltimore's Memorial Stadium? If so, then you'll want to join us on one or more of our motorcoach trips to see the Orioles play. We've got trips planned to see three games: the O's vs. New York on May 24; vs. Boston on June 28; and vs. Oakland on July 26. All three games are on Friday nights, and the motorcoaches leave from NIH Bldg. 31C at 5:30 p.m. Cost for each game is $20 per person and includes transportation and game ticket. Sign up for more than one trip and cost is reduced to $19 per game. For more information call 496-4600.
Stephen Strauss Named Head of LCI

Dr. Stephen E. Straus, chief of NIAID's medical virology section, has been appointed chief of the Laboratory of Clinical Investigation (LCI), a major component of the institute's intramural clinical program.

"Dr. Strauss has shown an outstanding ability to use his creative 'bench' research and develop it into solid clinical studies—it's the kind of background needed to fuse the cross-disciplines that define LCI's role. He has also been particularly active as a member of the clinical and teaching staff," said Intramural Research Division director Dr. John I. Gallin in announcing the selection.

"If my work has been especially meaningful," says Straus, "it's probably because I found myself applying potent laboratory tools to the study of some very common viruses that affect considerable numbers of people. Some of the virology lab's most productive work, for example, has involved viruses that cause very familiar diseases, namely, diarrhea, chickenpox, shingles, genital herpes, and mononucleosis.

From the time he joined NIH as head of LCI's virology section in 1979, Straus began expanding his virologic horizons. Building on the knowledge of molecular virology he gained during his early work on adenoviruses, Straus' work is now focused on the molecular biology, pathophysiology, natural history, treatment, and prevention of human herpesvirus infections.

Using increasingly refined molecular tools, he and his coworkers were among the first to dissect the DNA of the varicella zoster virus. In so doing, they identified many of its major properties. The group was also the first to demonstrate where in human neuronal tissue both varicella zoster virus and herpes simplex virus establish themselves and also the fact that these viruses persist throughout the infected person's life. In his clinical studies, Strauss established the efficacy of the antiviral drug acyclovir in the treatment and suppression of genital herpes, severe Epstein-Barr virus (EBV) infections, and shingles. His knowledge of EBV also led him to examine possible laboratory correlates between the virus and the chronic fatigue syndrome.

Straus is particularly excited about his newest clinical undertaking. His group is investigating a genetically engineered vaccine that shows promise in preventing genital herpes infection—and even in treating patients already infected. He sees this study as the perfect marriage between practical clinical research and powerful new molecular technologies.

In the same way that Straus' virology laboratory covers a wide range of research expertise, LCI represents a broad sampling of NIAID's clinical interests. It will now comprise six sections: allergic diseases, medical virology, mucosal immunity, mast cell physiology, and mycology, along with the bacterial pathogenesis unit. Strauss will continue to head the virology section. In looking forward to the challenges of his new LCI position, Straus foresees greater interaction among the sections, with the aim of gaining new insights as the collaborators examine different facets of related clinical problems.

Straus' scientific training began at Massachusetts Institute of Technology, where in 1968 he obtained his B.S. in life sciences. In 1972, he received his M.D. from Columbia University College of Physicians and Surgeons. After his internship at Barnes Hospital in St. Louis, Mo., Straus' first NIH experience began in 1973, when he accepted a research associate position in NIAID's Laboratory of the Biology of Viruses. Returning to Barnes for his residency, he earned a fellowship in infectious diseases at St. Louis' Washington University, which he completed before he returned to NIAID as a senior investigator.

In 1983, the PHS recognized his scientific contributions with the presentation of the PHS Commendation Medal. He has since received the PHS Outstanding Service and the Meritorious Service medals. "Recognition aside," says Straus, "I like the benefits that come with the job. There is no better place to do the kind of research I'm interested in, and I now have my own office ... with a real door ... that closes. Now, a parking space—that would be an achievement!"—Karen Leighty

R&W Has Tickets to Murder

You are cordially invited to a dinner, a clue, and a murder or two. R&W invites you to help solve the crime on Saturday, June 8 at the Georgetown Holiday Inn, as "Mystery on the Menu" presents a murder mystery dinner theatre. The fun starts at 7 p.m. The murder mystery dinner package is only $39 and includes dinner, the show, tax, gratuity, parking, and a glass of champagne.

Coulter Elected AAAS Fellow

Dr. Charles L. Coulter, director of NCRR's Research Facilities Improvement Program and acting director of its Biomedical Research Technology Program, has been elected to the rank of fellow of the American Association for the Advancement of Science (AAAS). A fellow of AAAS is defined as "a member whose efforts on behalf of the advancement of science or its applications are scientifically or socially distinguished." Coulter was nominated "for work in guiding many NIH programs in biophysics, cell biology and medical research."

In addition to his current positions, Coulter was formerly head of the biological structure section of the Biotechnology Resources Program and director of the Analytical Biochemistry Program at NCRR's predecessor organizations. He was also a staff fellow in the Laboratory of Molecular Biology, NIAMD.

Coulter spent several years on the faculty at the University of Chicago, where his research program was in structural and molecular biology. He was trained in crystallography and physical chemistry at UCLA, and spent 2 years as a PHS research fellow at MRC Laboratory of Molecular Biology in Cambridge, England.

Disney Trip Planned Oct. 9-14

R&W invites you to join its annual trip to Walt Disney World over the Columbus Day holiday weekend. This 5-night, 6-day package includes: round trip air transportation and transfers to the resort; baggage handling; 5 nights accommodations at Disney's new Port Orleans Resort; 6 days unlimited transportation within the Walt Disney World Resort.

Price per adult (double occupancy) is $824. Children's prices range from $502 to $536. For more information, contact the R&W Activities Desk, 496-4600.
## NIAID Sponsors Scientific Summit on Organ Transplantation

Organ transplant scientists who convened at NIH last month for “Transplantation: 1990’s and Beyond,” discussed new research developments such as monoclonal antibodies and existing therapies including immunosuppressive drugs. At the meeting, sponsored by NIAID’s Division of Allergy, Immunology and Transplantation (DAIT), they discussed future efforts aimed at encouraging the body to tolerate foreign antigens. They also discussed the continuing problems of organ transplantation: how to improve the long-term survival rate of transplant patients, and how to evaluate new ideas without massive, lengthy, and costly clinical studies.

The researchers agreed on their goal: to get the body to accept transplanted organs so that the organs and the patients survive and function well without long-term use of drugs that affect the entire immune system, often for the worse. Monoclonal antibodies, which are pure, highly specific antibodies produced in the laboratory, offer hope for a more precise way to zero in on particular elements of the immune system because they can be targeted at a single antigen.

Researchers are using monoclonal antibodies, for example, to attack the T cells involved in transplant rejection. Early results from a clinical trial of such a monoclonal antibody, called T10B9, indicate that it is as effective as the current treatment, a monoclonal antibody known as OKT3 in reversing acute rejection of kidney transplants. According to Dr. John S. Thompson of the University of Kentucky School of Medicine, administration of T10B9 is followed by fewer side effects, a more rapid decrease in serum creatinine (indicating better kidney function), and fewer infections.

Monoclonal antibodies are also finding their way into designer molecules, which are developed to perform specific physiological tasks such as binding to particular cell receptors. Monoclonal antibodies directed against recipient T cells and natural killer cells have been coupled with the A chain of ricin, a plant toxin so potent that a single molecule reportedly can inhibit protein synthesis and lead to cell death. These immunotoxins, according to Dr. Bruce R. Blazar of the University of Minnesota Hospital in Minneapolis, have been useful in treating human graft-versus-host disease (GVHD) and are being studied in mouse models of bone marrow transplantation to further their effectiveness.

In GVHD, the donor’s immune system, in the form of cells in transplanted bone marrow, attacks the recipient’s immune system. But a trial involving 100 patients has shown that selecting in vivo T cell deletion of donor marrow with a monoclonal antibody that targets the cell’s CD6 receptor can prevent acute GVHD in about 85 percent of cases, and almost totally eliminate chronic GVHD. The trial also showed decreased risk of graft failure that occurs with some other methods of T cell depletion, according to Dr. Jerome Ritz of the Dana-Farber Cancer Institute in Boston.

Finding better ways to evaluate new agents and new regimens was a subtext of the meeting. FK506, a new antibiotic for immunosuppression, has garnered a lot of publicity. It appears to be a worthy successor to cyclosporine, the drug that made it possible to expand solid organ transplantation beyond the kidneys to the heart and liver, and which continues as a therapeutic cornerstone, usually in combination with other drugs such as steroids. FK506 is at least as good as cyclosporine against graft rejection, according to the University of Pittsburgh’s Dr. Richard L. Simmons, and may even be better. Liver transplant patients on FK506, for example, survive somewhat longer than those on cyclosporine, although the differences are not statistically significant. Organ transplantation has gotten so successful, Simmons said, that the big, easy-to-detect gains are behind us. From now on, he added, even a splendid new regimen will lead at best to a 5 or 10 percent improvement in outcome.

Side effects of the two drugs are similar, including their detrimental effects on the kidney. But FK506 appears to reduce the need for long-term steroid therapy and the disabilities associated with long-term steroid use. It also offers the hope, Simmons said, of therapy for autoimmune disorders like psoriasis, and extending transplantation to the last of the so-called "forbidden" organs: the bowel and pancreatic islets. Islet transplants could lead to a cure for type 1 diabetes, increasingly common in an aging population.

In vitro studies are a useful tool for researchers to assess the potency of new immunosuppressant drugs, according to the University of Pittsburgh’s Dr. René Duquesnoy. In just a week or two, he pointed out, it is possible to get an idea about how a drug functions at the molecular level and at what stages. The researchers agreed on the utility of animal models and animal studies, while acknowledging that these studies are costly and not always informative about the effects of a regimen in human patients.

Despite the great advances in organ transplantation, frustrations remain. None of the immunosuppressive agents are free from side effects, and despite big strides in short-term success, long-term outcome has stubbornly failed to improve. In kidney transplants, for example, between 80 and 90 percent of the time the graft now survives to 1 year. But after 10 years, the success rate drops to about 50 percent. NIAID will be tackling some of these problems directly next fall when it launches the first multicenter cooperative clinical trials in kidney transplantation. A group of researchers at several transplant centers will be carrying out common protocols with new immunosuppressive agents, using kidney transplantation as the model system. Dr. Robert Goldstein, DAIT director, said the trials “will provide NIAID with a method of studying the next generation of immunosuppressive agents, whether they are drugs or monoclonal antibody-based agents, in a meaningful way.”

### NLM's Senior Photographer Retires

Doug Jones of the Audiovisual Program Development Branch, NLM, retired recently from government service. As NLM's senior photographer for the last 10 years, he was known by many.

Jones joined the library in 1980 when NLM’s photo department was being formed. Over the years he photographed just about every part of NLM and was present at many "momentous moments," capturing them for posterity. He was called upon to do just about every form of photography for NLM—he photographed books, computer terminals and screens, conferences, presentations, did microphotography, copywork and portraiture. He even ventured up in a hot air balloon to get needed pictures. His pictures of the library were not only published many times, but also given as lasting mementos to retiring NLM employees.

**Doug Jones**

Jones studied at the New York Institute of Photography and before joining the NLM staff, worked for the NCI Laboratory of Viral Carcinogenesis, where he worked in electron microscopy, light microscopy and gross animal photography.

Before coming to NIH, Jones, also an accomplished musician who studied at the Peabody Conservatory in Baltimore for 4 years, was with the National Symphony Orchestra full time as a percussionist until 1960. After that time he worked with the symphony as an extra player, until 1977, when he retired from music.

Jones says he is happily enjoying his retirement and his life with wife Elizabeth and grandson Mark.
DNAFIT Sizes Acid Fragments

Scientists seeking an efficient, reliable way to estimate nucleic acid fragment size need look no further than DNAFIT, a new program developed by NICHD and NCI collaborators for DOS-based personal computers. Estimating the molecular size of nucleic acids in acrylamide and agarose gel electrophoresis is important in identifying and characterizing restriction fragments and in studying native and denatured DNA and RNA. But current graphic and visual methods of size estimation have been subjective and imprecise. DNAFIT is based on an empirical model linking migration distance to molecular size using the "four parameter logistic model" (Anal. Biochem. 189:233-243, 1990). The program offers the following advantages:

- Accuracy in describing the relationship between electrophoretic mobility and molecular size;
- Excellence of fit for a wide range of fragment sizes and electrophoretic conditions;
- Estimation of the precision of calibration curve and of the size estimates for unknown fragments;
- Reliable evaluation of reproducibility and, hence, quality control.

Data are entered from a file or a digitizing pad, and the program fits a standard curve, displaying it with high-resolution graphics. The program's quality-control potential, say its authors, should prove useful and time-saving in large-scale projects such as genomic mapping or routine RFLP analysis—especially in evaluating the stability of an automated apparatus.

DNAFIT was developed by Drs. Karen Oetter (NICHD), Peter Munson (DCRT, formerly NICHD), Wesley McBride (NCI), and David Rodbard follow the curve.

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<tr>
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<tr>
<td>3/9</td>
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Staff interested in attending one of the May training sessions may register by telephone. Contact either Carole Bowie or Joan Casey, 496-4606 by May 3 to attend the May 9 session and by May 17 to attend the remaining sessions.

- Conference—This portion of the MBB allows users to exchange ideas, ask/answer questions, and make suggestions to the moderator of the bulletin board.

The MBB is currently available to any WYLBUR user simply by typing the following command at the WYLBUR prompt: enter bbs bb=MANUALS

Although DMP is still in the design and development phase for the MBB, it has already received positive feedback from current users who have indicated they are pleased with the information that is now available. Because of the demand for and interest in this information, DMP is offering a training session/demonstration of the MBB to familiarize potential users.

Seven training sessions are scheduled in May. Each will last approximately 2 hours and can accommodate up to 22 users. DMP recommends, at a minimum, that administrative officers and their staff attend a session. The following times and locations have been reserved:

Helping dedicate the newest NCRR General Clinical Research Center (GCRC) at the University of Miami are (from l): Dr. William F. Raab, NIH deputy director; Dr. Judith Vaitukaitis, acting director for extramural resources and director, GCRC program; Dr. Luis Glazer, executive vice presidant and provost, University of Miami (UM); Nancy Noble, associate dean of faculty affairs, UM; and Adel Yunis, GCRC program director, UM. The new GCRC joins a nationwide network of 74 such centers supported by NCRR that provides the unique clinical environments used by more than 6,500 investigators who conduct nearly 4,300 research projects annually.
The NIH Training Center of the Division of Personnel Management offers the following:

Courses and Programs Starting Dates

Management and Supervisory 496-6371
Efficient Reading for Professionals 5/29
Effective Listening and Memory Development 6/11
Practical Approaches to Stress Management 6/17
Communication Issues (Phase II) 6/18
Federal Budget Process 6/20
Effective Presentation Skills 6/24
Getting Results in Task Oriented Groups 6/26
Managing Behavior in the Work Environment 6/26

Office Operations and Administrative Systems Training 496-6211
Buying from Small and Large Business on the Open Market 5/16
Telephane Communication 5/20
Delegated Acquisition Training Program 5/20
Professional Development for Secretaries 5/29
Federal Supply Schedules 5/29
Introduction to Working at NIH for New Support Staff 6/3
Accelerated Reading 6/6
Time Management for Office Support 6/10
Filing and Maintenance 6/21
Foreign Travel 6/24
Basic Time and Attendance 6/27

Special Courses 496-6211
Retirement Planning Seminar 5/6
Basic Labor Relations 5/9
Basic Employee Relations 6/5
Caregiver Assessment and Life Planning 6/6
Appropriation Law Seminar 6/24

The NIH Training Center, DCRT and other training information is available on WYLBUR. Logon to WYLBUR and type ENTER TRAINING.

**TRAINING TIPS**

Robert Tumstall, a supervisor for Bldg. 10's housekeeping department, makes the right moves by maintaining his weight and having his blood pressure monitored regularly by Occupational Medical Service (OMS) nurse Ann Crawford. During May, National High Blood Pressure Education Month, OMS will expand its blood pressure screening and monitoring hours. (See schedule). If you haven't had your blood pressure checked in the past year, visit one of the OMS blood pressure screening sites during May. Be sure to talk to the nurse about steps you can take to better control your risk factors for heart disease and the ongoing schedule for blood pressure monitoring.

**Blood Pressure Screening Schedule for May**

<table>
<thead>
<tr>
<th>Building</th>
<th>Location</th>
<th>Date</th>
<th>Time</th>
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<tbody>
<tr>
<td>Bldg. 1</td>
<td>Wilson Hall</td>
<td>May 3</td>
<td>8:30-11 a.m.</td>
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<tr>
<td>Bldg. 10</td>
<td>Health Unit</td>
<td>May 2-30</td>
<td>Mon. 1:15-4:15 p.m.</td>
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<td></td>
<td>Rm. 6C306</td>
<td></td>
<td>Thurs. 8:15-11:15 a.m.</td>
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<tr>
<td>Bldg. 10</td>
<td></td>
<td>May 8</td>
<td>8:30-11 a.m.</td>
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<td></td>
<td>Special Events</td>
<td>May 13</td>
<td>8:30-11 a.m.</td>
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<td></td>
<td>Rm. 1C174</td>
<td>May 21</td>
<td>noon-2 p.m.</td>
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<td></td>
<td>Bldg. 12A</td>
<td>May 28</td>
<td>8:30-11 a.m.</td>
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<tr>
<td></td>
<td>Conf. Rm. 3026</td>
<td>May 3</td>
<td>noon-4 p.m.</td>
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<tr>
<td>Bldg. 13</td>
<td>Health Unit</td>
<td>May 1-31</td>
<td>8:30-11 a.m. and</td>
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<tr>
<td></td>
<td>Rm. G904</td>
<td></td>
<td>1:30-3:30 p.m.</td>
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<td>Bldg. 29</td>
<td>May 14</td>
<td>closed Tues. and Thurs. at noon.</td>
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<td>Rm. 115</td>
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<td>10 a.m.-1 p.m.</td>
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<td>Bldg. 50</td>
<td>Conf. Rm. 132</td>
<td>May 20</td>
<td>8:30-11 a.m.</td>
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<tr>
<td>Bldg. 31</td>
<td>Rm. B2B57</td>
<td>May 7, 14</td>
<td>1:15-3:15 p.m.</td>
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<td>Bldg. 31</td>
<td>21, 28</td>
<td>11 a.m.-1 p.m.</td>
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<td></td>
<td>Fitness Center</td>
<td>May 1</td>
<td>11 a.m.-3 p.m.</td>
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<tr>
<td>Bldg. 36</td>
<td>Rm. IB07</td>
<td>May 17</td>
<td>11 a.m.-3 p.m.</td>
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<tr>
<td>Bldg. 38</td>
<td>Rm. B1N28G</td>
<td>May 1, 8</td>
<td>2-4 p.m.</td>
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<tr>
<td>Bldg. 10</td>
<td>Rm. 1B07</td>
<td>15, 22, 29</td>
<td>8:45-10:45 a.m.</td>
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<td></td>
<td>Bldg. 38A</td>
<td>May 2, 16</td>
<td>1-3 p.m.</td>
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<td>EFN, Rm. 103</td>
<td>30</td>
<td>8:30-11 a.m. and</td>
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<td></td>
<td>Federal Bldg.</td>
<td>May 2, 9</td>
<td>1:30-3:30 p.m.</td>
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<td>Rm. 10B08</td>
<td>16, 23, 30</td>
<td>closed Tues. at 2:30 p.m.</td>
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<tr>
<td>Westwood Bldg.</td>
<td>Rm. 28</td>
<td>May 1-31</td>
<td>and all day Thurs.</td>
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NIH Asian/Pacific American Heritage Program To Be Held May 10

NIH will host its 19th annual Asian/Pacific American Heritage celebration on Friday, May 10, with a lunchtime program of food and demonstrations and an evening program of Asian music and dance. The theme this year is “Asian Pacific Americans: Education, Dignity, Distinction and Advancement.”

The lunchtime program will take place between 11:30 a.m. and 1 p.m. on the patio of Bldg. 31A with demonstrations of the Indian sari, t'ai chi, and Asian food preparation. Delicious foods from China, India, Japan, Korea, Thailand, and the Philippines will also be on sale.

NIH families and patients will enjoy “An Evening of Music and Dances from Asia,” beginning at 7:30 p.m. in Masur Auditorium, Bldg. 10. The program will feature musical selections by representatives from China, Cambodia, Korea, Hawaii, and the Philippines. A reception in the NIH Visitor Information Center will immediately follow the program. Everyone is invited to the reception to taste Asian cakes and tea and to meet the artists.

The program is sponsored by the NIH Asian/Pacific American cultural committee and the Asian/Pacific Islander American advisory committee, Division of Equal Opportunity. For information on accommodations for individuals with disabilities, contact DEO, 496-6301.

Three Join NEI Council

Three new members have been named to the National Advisory Eye Council, the principal advisory body to the National Eye Institute. They are Drs. Wilbur C. Blount, Mary Beth Burnside, and Maurice F. Rabb.

A specialist in retinal and vitreous diseases, Blount combines private practice in ophthalmology with teaching at Ohio State University College of Medicine in Columbus. As a retired colonel in the U.S. Air Force Reserve, he has a special interest in aerospace ophthalmology.

Burnside is a professor of biology at the University of California, Berkeley; she was dean of biological sciences at Berkeley from 1983 to 1990. Her research has concentrated on the function and structure of the light-sensitive photoreceptor cells in the retina.

Rabb, who is an international authority on retinal disease, has served as an adviser to a variety of federal agencies, including the Food and Drug Administration, Centers for Disease Control, and several of the NIH institutes. He is currently professor of clinical ophthalmology, University of Illinois; chief of the division of ophthalmology, Mercy Hospital and Medical Center, and director of the National Society to Prevent Blindness—all in Chicago.

Asian/Pacific Islander Cultural Workshop Planned, May 16

On Thursday, May 16, the Division of Equal Opportunity will sponsor the fourth in a series of cultural workshops. The presentation, which will highlight the Asian/Pacific Islander cultures, will be held in Wilson Hall, Bldg. 1, from 11:30 a.m. to 1 p.m.

The panel will consist of Finau Mara, charge d’affaires from the Embassy of Fiji, and Dr. Joanne S. Yamauchi, professor of communication at American University. Mara’s presentation will focus on the culture and customs of the Fiji Islands. Yamauchi will discuss the various cultures of Asia and the Pacific Islands.

Yamauchi received her undergraduate degree in English and theater from Goucher College, her master’s in speech communication (with honors) from Columbia University, and her Ph.D. in communication studies from Northwestern University. Her research and training have focused on managing culturally diverse communication in organizations and on values and communication patterns of Asian American professionals. Yamauchi has conducted international seminars for major federal government agencies, national Asian-American organizations, and numerous private corporations, nonprofit organizations, and universities. Currently, she is developing an instrument to measure cultural sensitivity among managers in complex organizations.

All NIH employees are invited to attend this workshop. Sign language interpretation will be provided. For additional information, please contact Toni Pineau of the DEO, 496-6301 (voice) or 496-9755 (TTY).