**Prives To Give Pittman Lecture**

Dr. Carol Prives, a scientist internationally recognized for her work on the p53 tumor suppressor gene, will present the NIH Director's Margaret Pittman Lecture on Wednesday, Nov. 18, at 3 p.m. in Masur Auditorium, Bldg. 10.

The title of her talk is "Signaling to the p53 tumor suppressor protein."

Gene p53 is often referred to as the "guardian of the genome" because the protein it codes for, p53, stops cell division until damaged DNA can be repaired, thereby preventing the formation of cancerous cells. If the damage is irreparable, the cell initiates programmed cell death, a process known as apoptosis. This mechanism helps to prevent the development of cancer.

NIH'er Fifth in World in Finding Way Around

By Rich McManus

If you think the name Rogaine applies exclusively to a drug that encourages hair growth, you may be clueless as well as hairless. The ungainly term originated in Australia as an acronym for a sport: Rough Outdoor Group Activity Involving women participating in the 3rd ROGAINE World Championships held in British Columbia.

**NIH Absorbs Biggest Dollar Increase Ever—$2.03 Billion**

By Rich McManus

While there have been larger percentage increases in NIH's budget in decades past—mostly during the Shannon era in the early sixties, when new institutes began proliferating—the $2.03 billion addition to the FY 1998 level signed by President Clinton on Oct. 21 is by far the largest dollar increase in agency history. The 14.9 percent bump-up brings the FY 1999 appropriation to $15.652 billion, a figure hailed jubilantly in all corners of the agency.

"This degree of confidence in NIH by the Congress, the administration and the American people brings with it a special responsibility to continue the high quality research traditions at NIH laboratories and among our grantees, and to ensure the highest quality of administration of these funds," said Tony Itteilag, NIH deputy director for management.

Enacted in Public Law 105-277, the budget also brings new entities and names to the campus, including new status for the former Office of Alternative Medicine, which is now the National Center for Complementary and Alternative Medicine (with a $50 million appropriation), and renaming of the National Institute of Dental Research, which has elongated to National Institute of Dental and Oral Health.

**NIAID Celebrates 50 Years of Advancing Knowledge and Improving Health**

This year, NIAID celebrates 50 years of "Advancing Knowledge and Improving Health" with a commemorative scientific symposium on Thursday, Nov. 19 from 9 a.m. to 5 p.m. in Natcher Conference Center auditorium. Everyone is invited to hear distinguished investigators from NIH and elsewhere speak about current knowledge and future research goals related to the institute's emphasis areas: allergy, immunology and infectious diseases.

"NIAID scientists and grantees have been in the forefront of basic and clinical research in immunology and infectious diseases since the creation of the institute," says Dr. Anthony Fauci, NIAID director. "As we celebrate 50 years of outstanding research accomplishments, NIAID has enhanced its efforts in finding new tools for the diagnosis, treatment, prevention and control of immunologic, infectious and allergic diseases."

The immune system is at the core of NIAID's research mission. NIAID research has established many of the basic principles in...
is beyond repair, p53 is also thought to initiate a cascade of biochemical reactions resulting in death of cells damaged beyond repair. Although it plays a role in preventing cancer, p53, like other genes, is itself susceptible to mutation and subsequent malfunction. In fact, mutations in the p53 gene are thought to contribute to 60 percent of all human cancer cases.

Prives began studying p53 in 1989. In 1991 together with Bert Vogelstein of Johns Hopkins University, she was the first to show that p53 binds to a specific sequence of DNA. Prives and her coworkers are currently investigating the chemical mechanisms that signal the cell to produce p53 when DNA is damaged as well as the mechanisms that shut down cell division and result in cell death when large amounts of p53 are produced.

Prives was born in Montreal, and received her B.S. and Ph.D. degrees at McGill University. She undertook postdoctoral research at Albert Einstein College of Medicine in the laboratory of Dr. J.T. August, from 1968 to 1971. She then went to the Weizmann Institute in Israel on a senior visiting fellowship and was eventually promoted to associate professor with tenure. In 1979 she took a position as associate professor in the department of biological sciences at Columbia University, where she was promoted to professor in 1987. In 1995 she was appointed the DaCosta professor of biology at Columbia.

The lecture series honors Dr. Margaret Pittman, who was named, in 1958, chief of the Laboratory of Bacterial Products in the Division of Biological Standards, which was part of NIH at the time. Pittman is recognized for her significant contributions to microbiology, including devising serological typing methods for identifying Hemophilus and her work on the development of pertussis and tetanus toxin vaccines. She was also the first woman to hold the position of lab chief at NIH.

For more information or for reasonable accommodation, call Hilda Madine, 594-5595.

**NCMA Holds Food Drive**

The Bethesda/Medical chapter of the National Contract Management Association is sponsoring a food drive to help needy people in the Washington area. Nonperishable food items can be dropped off Nov. 18-Dec. 2 at EPS, Rm. 620C. Last minute food items can be brought to EPN, Conf. Rm. H on Dec. 2 between 11:45 a.m. and 1 p.m. Contributors are invited to listen to motivational speaker Bruce Johnson, who will lecture that day from noon to 1 p.m. The meeting is open to all and no registration is required. Call Sharon Miller, 435-3783, for details.

**Abeles Takes on Special Projects in OBSSR**

Dr. Ronald Abeles recently joined NIH’s Office of Behavioral and Social Sciences Research, where he will collaborate with its director, Dr. Norman Anderson, and other OBSSR colleagues on several trans-NIH initiatives in the behavioral and social sciences. Abeles’s work will enhance a focus on older populations.

Among his initial activities will be educational workshops for interdisciplinary research, implementing the anticipated congressionally mandated initiative on mind/body research, and assisting in other projects. He will be exploring a possible new initiative on conceptualizing and measuring the social environment in behavioral genetics research. Abeles will also continue to serve as chair of the NIH behavioral and social sciences research coordinating committee as well as of the organizing committee for the NIH Behavioral and Social Sciences Lecture Series.

Abeles will also continue, on a limited basis, his program development activities at the National Institute on Aging related to the personality and social psychology of aging and adult psychological development.

He has published widely on aspects of life-course and aging research.
Framingham Heart Study Celebrates 50 Years

By Louise Williams

The autumn afternoon was stiflingly hot and the non-air-conditioned, stately Memorial Building in Framingham, Mass., was packed. But the thousands gathered there didn’t mind. They’d come to celebrate an extraordinary anniversary—the 50th year of the Framingham Heart Study (FHS), the longest running epidemiological study in U.S. medicine.

The attendees—who included U.S. surgeon general Dr. David Satcher, National Heart, Lung, and Blood Institute director Dr. Claude Lenfant, past FHS directors and the current director, congressmen, state representatives, TV journalist Dr. Timothy Johnson, and more than 1,500 FHS staff and participants—had a lot to celebrate. Since its start in 1948, the FHS has saved and improved countless lives in the United States and worldwide.

The town of Framingham is 18 miles west of Boston. The study, part of NHLBI, began with 5,209 healthy Framingham residents, aged 30-60—about 20 percent of the town’s population—and grew to include 5,124 of their children (and their spouses) in an Offspring Study. More recently, 500 members of Framingham’s minority residents were recruited to form the Omni Study.

FHS’s many achievements include discoveries about the relations between risk factors and cardiovascular disease (CVD). The FHS helped make Americans aware of the health dangers of high cholesterol, high blood pressure, physical inactivity and smoking. The study also has published findings on such topics as psychosocial factors and heart disease, diabetes, obesity and dementia.

As Rep. Edward J. Markey (D-Mass.) told the crowd, “The thousand scientific papers produced by Framingham have become the holy book” of medicine. The findings have “moved America toward prevention,” he added, “giving the message that people can control their own destiny.”

Lenfant thanked participants for their “dedication and enormous contributions to the study and to medical knowledge. The study could not have succeeded without the commitment of the people of Framingham.”

His thanks were echoed throughout the afternoon. Dr. Aram Chobanian, dean of Boston University’s School of Medicine, who has used Framingham data in his research, said, “Thank you for all you have done for cardiology, medicine, and all the people in the United States.”

Satcher, who gave the afternoon’s keynote address, also thanked the Framingham participants for their “commitment, dedication, and perseverance.” He said he’d asked himself what makes FHS so special and came up with six key factors: The study is scientifically rigorous, longitudinal, community- and family-based, and has always involved men and women, and most of all has mutual trust between participants and staff. “The issue of trust and its development is a real challenge,” he said. “And that’s true whether about a study or any kind of medical care in the United States.”

He said Framingham changed how people look at health and disease. “Before, a lot of people, especially when it came to cardiovascular diseases, thought it was a matter of luck or fortune. Framingham shows that it’s not just that but how people behave,” including the dangers posed by risk factors.

He added that “Framingham shows us that just as we use the public health approach in infectious diseases, we also can intervene with chronic diseases.” He stressed that prevention through public education has to become a way of life in America.

“Too few physicians are putting prevention into practice,” he said and called for a worldwide effort to promote healthy lifestyles.

Current FHS director Dr. Daniel Levy called his staff the “unsung heroes” of the Framingham story. “You and the ordinary citizens of Framingham have advanced our understanding of coronary heart disease.”

He also pledged that the Framingham story had only begun. “Today and in future years, Framingham will continue to have a great impact on many lives. We and you are not done yet.”

He said studies under way cover such topics as early identification of CVD in those still free of symptoms, investigations of the genetic causes of CVD, arthritis, and osteoporosis, and more research on racial and ethnic differences in risk factor development.

The afternoon also brought a message of congratulations from President Clinton. But mostly, the afternoon was a demonstration of the bond that exists between FHS’s participants and staff, who took time before and after the formal presentations to warmly thank each other.

Participant spokesperson Jay Lander, a member of the Offspring Study, described how many felt about being part of FHS. “We go through life, most of us,” he said, “knowing only the effect we have on the people around us...Only a small percentage of people get to make a permanent contribution to humanity.”

He added, “But this study has given each of us in Framingham some small role in producing a lasting achievement,” and “as long as the planet is inhabited, the contribution of Framingham to the quality of that life will be remembered.”
BUDGET, CONTINUED FROM PAGE 1

Dental and Craniofacial Research (see sidebar). The new Consolidated Laboratory Facility, now under construction as Bldg. 50, will be named in honor of Rep. Louis B. Stokes (D-Ohio), and the new Vaccine Research Center (Bldg. 40), on which work has already begun, will be called the Dale and Betty Bumpers Vaccine Research Facility. Off-campus construction also got a boost as $30 million was provided for NCRR-sponsored extramural building projects.

The FY 1999 appropriation will enable NIH to fund more than 9,000 research project grants this year, and allow the agency to make significant progress in its goal of paying close to recommended levels for RPGs, noted Francine Little, director of the Office of Financial Management. The salary cap for researchers financed through grants and contracts also has been raised from $123,500 to executive level III (currently $125,900).

Clinical research, too, has been bolstered by creation of three new "K" award programs expected to increase significantly the number of clinical investigators. NIH is also going to be able to provide an across-the-board stipend increase of 25 percent for recipients of National Research Service Awards. Trainees, visiting fellows and volunteers will also gain transit subsidies as the law provides NIH permanent authority to offer Transhare to a wider pool than just full-time employees.

The omnibus measure also continues the NIH director's authority to transfer funds between appropriations (limited to 1 percent of the budget); provides $500,000 to the Foundation for the NIH (formerly the National Foundation for Biomedical Research, which is permitted to raise funds and donate them to NIH); offers $90 million in FY 1999 plus advance funding of $40 million—available Oct. 1, 1999—to complete the new Mark O. Hatfield Clinical Research Center; and allocates $10 million for vaccine research and development activities in support of the President's bioterrorism initiative. AIDS research is identified at $1.799 billion. The bill continues the federal prohibition on human embryo research.

Other emphases within the budget law include establishing two to five "mind/body" centers, bolstering the number of African American investigators involved with HIV research (including prevention and risk-reduction), and helping the Institute of Medicine complete a study on cancer among minorities.

NIDR Gets New Name

The National Institute of Dental Research, which turned 50 this year, became the National Institute of Dental and Craniofacial Research when President Clinton signed the congressionally approved Omnibus Consolidated and Emergency Supplemental Appropriations Act, H.R. 4328. The bill provides NIDCR with a FY 1999 budget of $234,338,000—representing the largest single-year increase in the history of the institute. "For half a century, the institute has been the driving force in oral health research and training in the United States, but our name has not been representative of the breadth of the institute's activities and accomplishments," said Dr. Harold Slavkin, the institute's sixth director.

Although a single word "craniofacial" is the focus of the name change, it is a word of great impact, says the institute. Craniofacial refers to the head, face and neck, and NIDCR research in this area covers the developmental processes that form the human face and the plethora of diseases and disorders that involve dental, oral and craniofacial tissues and structures.

Birth defects of the human face are particularly devastating and have become an area of increased attention. Investigators began studying the most common craniofacial birth defect, cleft lip and cleft palate, in the early days of the institute. Today, several hundred genetic conditions are known to produce craniofacial syndromes, and scientists have identified more than 100 associated regulatory and structural genes.—Wayne Little

BIG Money Management Seminar

The NIH chapter of Blacks in Government will sponsor a financial planning seminar on Monday, Nov. 23 from noon to 1 p.m. in Bldg. 31, Conf. Rm. 6 (C-wing, 6th fl.). Topics on the agenda include 1999 Tax Breaks, Budgeting for the New Millennium, and Is It Ever Too Soon to Plan for Retirement? All are welcome. For more information, contact O.H. Laster, 496-6302 or Felicia Shingler, 435-0948.

Use or Lose Reminder

Don't forget to schedule your "use or lose" annual leave in writing no later than Saturday, Nov. 21. Questions concerning use or lose leave should be directed to one's human resource office or other program official designated by your institute or center.
OEO Approaches Diversity through Literature

As part of its Workplace Diversity Initiative, the Office of Equal Opportunity has unveiled its Diversity Book Bridge Project. The project is an innovative approach to learning about diversity in the workforce through reading and discussing issues reflected in literature and relating them to the NIH environment.

While many books might have been chosen, Naomi Churchill, director of OEO, heeded the recommendation of Dr. Mary Brown, educator, diversity specialist and Book Bridge Project coordinator for OEO. The book choice, *Brothers & Sisters* by Bebe Moore Campbell, and project outline, were modeled after the Prince George's Community College Project, where Brown is a faculty member. *Brothers & Sisters* features a range of characters set in Los Angeles in the weeks and months following the Rodney King verdict and the ensuing riot.

OEO invites employees to read the novel in preparation for forums where subjects drawn from the book are discussed. The forums include dramatic readings from the novel, presentations by expert panelists on diversity issues, and an opportunity for dialogue between panelists and the audience. The theme for the project is "Enhancing the Environment through Active Communication."

The first forum was held Oct. 5, when panelists explored the subject of sexual harassment. Susan Persons of the Office of Behavioral and Social Sciences Research spoke of social behavior (both good and bad) that occurs in the text of *Brothers & Sisters*. The discussion brought out the role that sex/gender-stereotyping and power relationships play in condoning sexual harassment in the workplace.

Michael Reilley of OEO spoke on recent United States Supreme Court cases that have begun to affect policies that regulate behavior in the workplace.

The following four forums are scheduled through May 1999, in Bldg. 1, Wilson Hall, 9 to 10:30 a.m.: Monday, Nov. 30—Diversity in the Scientific Community; Monday, Jan. 25, 1999—Welfare-to-Work; Monday, Mar. 29, 1999—Community Involvement (Church, School, Neighborhoods, Citizen Groups); Monday, May 24, 1999—Author Bebe Moore Campbell Visits NIH.

For more information contact Joan Brogan or Gary Morin, 402-3663 or 496-9755 (TTY).

Paid Vols for Cholesterol Study

The Cardiology Branch, NHLBI, is recruiting patients with high cholesterol levels (250 mg or higher) who have no other medical problems to be included in a 3-day outpatient study. Participants will be paid. Call 496-8739.

NIDDK To Study Common Prostate Condition

Men who have unexplained discomfort or pain in the pelvic area or chronic abacterial prostatitis are needed for a 5-year, $5.5 million study funded by the National Institute of Diabetes and Digestive and Kidney Diseases.

Although no one knows how many men have prostatitis, experts think it is the most common genitourinary ailment in men younger than 50, and the chronic abacterial form—for which there is no known cause and no diagnostic test or reliable treatment—predominates. Prostatitis occurs in men of all ages and races and accounts for an estimated 2 million visits to doctors each year, according to a national survey.

Abacterial prostatitis is a syndrome of pain in the genital area and lower back, usually accompanied by frequent and urgent urination. It can effectively chain severely affected men to their bathrooms. Other symptoms such as burning or pain during voiding or ejaculation vary widely and may come and go without warning. The walnut-sized prostate sits forward of the rectum, below the bladder and surrounding the urethra, the tube through which urine passes out of the body.

"It's amazing to me that we can't reliably treat the majority of men who have prostatitis. We hope this study will help us do a better job diagnosing and treating these men in the future, but we recognize the road ahead will probably be quite unpredictable," said Dr. Leroy M. Nyberg Jr., NIDDK study director.

From Nov. 9 through October 2001, six medical centers will recruit more than 600 men for the Chronic Prostatitis Cohort Study. Patients may contact the nearest participating center for more information. The nearest one to NIH is at the University of Maryland, Baltimore. Call Dr. Richard B. Alexander, (410) 605-7233.
Shuttle System Improvements Planned

Starting in late November, NIH'ers riding the shuttle buses will notice some changes that should improve the way they get around campus. For one thing, the bus routes will be more easily identified through color coding. Two major hubs at Bldg. 31 and the new Bldg. 10 South Entry will serve not only the campus route but also all off-campus shuttles. A new stop on Center Drive will serve as a minor hub providing additional service to the Natcher Bldg. and the Library of Medicine. The Medical Center Metro stop will be the second minor hub with direct routes to Bldgs. 10 and 31 in addition to the regular campus shuttle. All shuttles will run in one direction throughout the day eliminating much of the current confusion. Finally, new signs at all bus stops will have clearly posted route maps and stop schedules.

While the changes are prompted by the upcoming opening of the new South Entry to Bldg. 10, revising the NIH shuttle system has been a high priority for the Office of Research Services for some time. “We always felt that the shuttle buses are an integral part of the NIH transportation management plan,” says Stella Serras Fiotes, master planner with ORS’s Facilities Planning and Programming Branch. She has been collecting information and considering improvements since the parking and transportation survey late last year. With the recent formal transfer of the shuttle buses to ORS, changes are being coordinated directly with other ongoing parking and transportation initiatives. Further reductions in the campus parking supply will increase employee reliance on the NIH shuttle buses to access outlying campus lots, off-campus satellite lots and the Metro station. The closing of the current north entry to Bldg. 10 and the opening of the South Entry will result in a total reorientation of pedestrian, vehicular and bus circulation to the Clinical Center. With over 6,000 employees and numerous visitors coming to this building, it became apparent that the shuttle buses would not only need to service the new South Entry but also provide more options for accessing the rest of the campus.

The concept underlying the proposals is simple. The entire NIH shuttle system is viewed as one integrated network of routes. Off-campus routes are linked at the hubs to the campus shuttle, which will continue to provide “loop” service around the entire campus. Riders waiting at the shuttle hubs will have more than one option to travel to any of the other hubs. By coordinating routes and stops, Fiotes hopes to take better advantage of the fleet of over 20 shuttle buses serving NIH. Information is key to increasing awareness and, with luck, ridership. ORS plans to print brochures, publish articles and create a new Web page. The new signs at the stops should also go a long way in explaining and promoting the shuttle bus system. “And if it sort of reminds you of the Metro maps and signs,” says Fiotes, “that’s not a coincidence. Washington area commuters are accustomed to finding their way around the Metro system. Why not build on a good thing?”

Symposium on Craniofacial Morphogenesis

Eight NIH institutes and offices and the March of Dimes are cosponsoring an international symposium entitled “Toward a Molecular Understanding of Craniofacial Morphogenesis,” Nov. 22-24 in the Natcher Conference Center. The symposium will highlight recent progress in a variety of disciplines that are contributing to this rapidly advancing research area. Insights from clinical phenotypic description, genetics, evolution of craniofacial patterning, bioinformatics, in vitro and animal modeling, imaging and other areas are merging to open many new research opportunities.

Attendance at the symposium is free, but registration is required. You may register online at http://KEVRIC.com/ndirwa21.htm or call the KEVRIC Co. at (301) 588-6000. For other questions contact Susan Wise, 594-7550, or Ken Yamada, 496-9124 in NIDCR.

After 18 years at NIH, Bill Hall, communications director of the Office of Medical Applications of Research, Office of Disease Prevention, is leaving for a newly created position as deputy director of the news division in the Office of the Assistant Secretary for Public Affairs, HHS. He will be involved with coordinating and managing media activities for the department. “Exceptional” is how Drs. William Harlan, NIH associate director for disease prevention, and John Ferguson, OMAR director, characterize Hall and his accomplishments at NIH. His colleagues warmly describe him as “a fountain of knowledge and a wizard of versatility.” He created Web sites for three ODP offices and promoted many of their activities. He also oversaw all press activities for more than 50 NIH consensus development conferences. During his NIH career, he has been recognized with a number of awards, including the Special Act or Service Award for designing and developing the ODS Web site, and the NIH Merit Award “in recognition of the interpersonal relation skills, creative energy, and dedication in effectively implementing and imaginatively expanding OMAR’s congressionally mandated information dissemination program.”
Workshop Analyzes Alcoholism Genetics Data

Statistical geneticists from around the world met in Arcachon, France, recently to test newly developed statistical methods for mapping genes that influence genetically complex diseases. The 11th biannual Genetic Analysis Workshop (GAW 11) was supported by a grant from the National Institute of General Medical Sciences. GAW has previously analyzed data on the genetics of a variety of diseases including diabetes, breast cancer, multiple sclerosis, Huntington's disease and Alzheimer's disease.

Participants in GAW 11 analyzed large data sets on the genetics of alcoholism. The data had been gathered over the past 9 years by the National Institute on Alcohol Abuse and Alcoholism's Collaborative Studies on the Genetics of Alcoholism (COGA), a consortium of six research sites. COGA provided data obtained from 1,214 individuals comprising 105 extended families with a high incidence of alcoholism. The COGA data are the first comprehensive genome-scanning data to be analyzed in the 16-year history of the GAW.

In a series of 46 presentations based on the analysis of the data on alcoholism and 22 presentations on biological markers for alcoholism, investigators confirmed the COGA investigators' published findings that genes on chromosomes 1, 7 and several others influence the disease of alcoholism. Results of the analyses will be published in a forthcoming issue of Genetic Epidemiology.

Gene Site Associated with Scleroderma Found

A study blending modern-day genetic marker research and century-old tribal records has identified a chromosomal site associated with the connective tissue disease scleroderma in Oklahoma Choctaw Native Americans. Although scleroderma affects members of all ethnic groups, the disorder is particularly prevalent among the Choctaw.

The study, coordinated by the National Institute of Arthritis and Musculoskeletal and Skin Diseases' Specialized Center of Research in Scleroderma at the University of Texas-Houston Health Science Center, has implicated the gene for the protein fibrillin-1 as a possible susceptibility gene for scleroderma, a disease characterized by tissue scarring within skin, internal organs and small blood vessels. Fibrillin-1 is also known to be responsible for a scleroderma-like condition in a mouse model of the human disease.

The study, published in the October issue of Arthritis & Rheumatism, moves scleroderma research a step closer to identifying a susceptibility gene. The work was cofunded by the National Human Genome Research Institute and the National Institute of General Medical Sciences, as well as other groups.

Volunteers Needed for Hypertension Study

The Cardiology Branch, NHLBI, is recruiting patients with high blood pressure for a 3-day outpatient study. Volunteers should not have any other medical problems and should not have a cholesterol higher than 200mg/dl. Participants will be paid. Call 496-8739.

Humane Society Honors Stokes

Dr. William S. Stokes has received a certificate of recognition from the Humane Society of the United States under its Russell and Burch Awards program for outstanding contributions toward the advancement of alternative methods of toxicity testing.

Alternative methods are those that can replace or reduce animal use for specific procedures, or refine the procedures so that animals experience less pain and distress. The “three R’s” of laboratory animal welfare are replacement, reduction and refinement.

The award was presented Nov. 2 in Washington, D.C., in connection with the Pain Management and Humane Endpoints conference at the National Academy of Sciences.

As associate director for animal and alternative resources, Stokes heads the alternative methods program at the National Institute of Environmental Health Sciences.

Since 1993, NIEHS and Stokes have played a leadership role in the interagency coordinating committee on the validation of alternative methods, which is a government-wide effort to facilitate the review and adoption of improved alternative methods for toxicity testing.
Like the drug used most commonly by men, ROGAINE participants are mostly male. There simply aren’t that many women who enjoy spending 24 hours covering 240 square kilometers on foot as they try to read maps directing them to checkpoints worth a certain score. At the World Championships in August, daytime highs were 104, nighttime lows were in the 50’s, and the bugs were so bad that Zerfas estimates that, at any given moment, she was contending with 30-40 mosquitoes. “It was the worst I’ve encountered in my life,” said the outdoorswoman.

Racers carry a compass, whistle, water and some food and clothes to compete in the races, which typically include thick forest, streams and steep ascents. Brainwork is as essential as endurance—winners pick the sites on the map that garner them the most points within the shortest time; the sport requires the ruggedness of a jackrabbit and the ingenuity of a chess master. Some participants in the championship didn’t sleep at all during the 24-hour contest held at Douglas Lake Ranch; Zerfas and her partner crashed for only an hour and a half. Though she downed some 20 liters of water during the contest, which covered about 50 miles, she shed 5 pounds.

Reared in Reading, Mass., north of Boston, Zerfas is new to both NIH and rogaineing. She has worked in the Laboratory of Neurobiology for the past 2½ years, and only began rogaineing recently when her times in racewalking and roadrunning events were subpar for world-level competition. A hiker, biker and swimmer all her life, Zerfas took up running near the end of college, simply to lose weight. “Then I got all hooked into competing,” she explains. Working out 6 days a week, she trimmed her 10,000-meter run time to 37 minutes, which left her a few minutes away from the elite level. She then turned to racewalking, but again was a tad slow. She met Keg Good, a cartographer (mapmaker) with 20 years of orienteering experience, at a road race. “Keg drafted me,” recalls Zerfas. “She said my speed was right for the national orienteering team.”

Zerfas learned orienteering at dozens of local meets, many sponsored by the Quantico Orienteering Club, to which she belongs. Meets typically last a little over an hour and involve color-coded courses of varying difficulty. Racers stagger-start and wend their way over the terrain following a map that they are handed—upside down—just moments before the race begins. Wearing a compass on her left thumb and carrying the map in her right hand, Zerfas sets out in running shoes, rip-stop lightweight pants (over which she fastens soccer-style shinguard), singlet and hat to “hang the control” as often as possible. “Controls” are orange-and-white triangular boxes that are the grails of orienteering/rogaineing. They contain a hole-punch with a unique mark; racers insert a card into the punch, which leaves proof that they were there. Easy controls are worth a mere 20 points;
Hot weather on the ranch prompted Zerfas and her partner to head quickly into the cover of woods.

hard ones count for as much as 100.

“You just hustle between points as fast as you can,” Zerfas explains. “Sometimes the woods are so thick you can’t run. Sometimes you have to go around lakes or swamps. If the terrain is really steep, you can’t even run.”

Zerfas quickly built up her skills from the white courses, which are the easiest—chiefly traversing marked trails—through yellow and orange, which are more difficult off-trail runs that are still replete with obvious clues. Green, red and blue courses are long and hard. “There may be no clues to catch you if you make a mistake” on these courses, she says.

Zerfas and Good warmed up for the world championships by competing in July in a ROGAIN in central New York, where they placed first among women. “There were 45 stops on the New York course (versus 60 in the championships); no one gets to all of them,” Zerfas said. “On a well designed course, which can take years to make, it’s impossible to reach all the controls.”

They got their map an hour before the race in New York, and 4 hours before the worlds began. A period of intense scrutiny commences during which the racers weigh, “What can we get?”

Since it was so hot at the world championships, Good and Zerfas plotted a course that took them quickly to the cover of the woods. It was a sensible strategy—they not only survived to finish fifth among all women entrants (some 300 competitors from 10 countries participated), but also had enough energy left to compete in the U.S. championships just days later, both in a solo event (running alone, Zerfas finished “near the bottom” as Good placed second) and a pairs relay (she and Good finished 13th out of 26 teams).

Back home now, Zerfas contents herself with weekend orienteering events, grueling daily workouts, and dreams of a high finish at the 2000 World ROGAIN Championship in New Zealand. In case you are interested, she’s looking for a new partner. One rugged enough to scramble unflustered through the hairiest terrain.

**Orientation to Extramural Staff Offered**

The Office of Extramural Programs, OD, will present an NIH orientation course entitled “Fundamentals of NIH Extramural Activities” on Monday, Feb. 1, 1999. The course is designed specifically for extramural staff with service of 2 years or less. It will be held in the Natcher Center’s E1&2 conference room. The course times will be 8:30 a.m. to 5 p.m. Morning registration begins at 8.

The course will include an overview of NIH organization and history; missions and goals of the ICs; the process of extramural grant and contract support; and a discussion of special issues and programs.

Participation will be limited to 125 people. Registration will be conducted via email on a first-come, first-served basis. Microsoft Exchange mail users can email their requests to the ESATRAIN (OD) mailbox on the NIH global address list; other mail system users can email using the Internet address: ESATRAIN@od.nih.gov. All requests must be received by Jan. 14, 1999. Applicants will be informed of the decision about their registration within 2 weeks of their submission. For more information contact Shelly Palacios, (301) 596-2471.

**STEP Forum on Avoiding Rage**

There will be a STEP forum on “Rage: Steering Clear of Trouble,” on Tuesday, Dec. 1 from 8:30 a.m. to noon in Bldg. 1, Wilson Hall. Hear from the experts on how to handle tense situations in the office and on the road. Learn where the flash points are and how to get out of the way. This may be especially important during the coming holiday season. This forum is designed for you—the NIH commuter, coworker or manager. Speakers include Dr. Arnold Nerenberg, known as “Dr. Road Rage” and featured on 48 Hours, and Cynthia Fields, Employee Relations Consultant, Inc.

This session is free and open to all NIH’ers on a first-come, first-served basis. No advance registration is necessary. Inform STEP of any need for sign language interpretation or reasonable accommodation by Nov. 24. For more information call 435-2769.
Pollen, such as the ragweed pollen being collected below circa 1970, is one of the fertilizing elements of flowering plants, trees or grasses. These microscopic grains, if sticky, can be carried by insects. If the pollen grains are light, they can be transported by air. When inhaled by allergic individuals, the airborne variety, which is abundant, causes the itching, swollen eyes, runny nose and sneezing associated with hay fever.

**ANNIVERSARY, CONTINUED FROM PAGE 1**

this field. Advances in which the institute has played an important role include:
- The first description of the molecular structure of immunoglobulins, also known as antibodies;
- The definition of the role of the thymus in immunologic processes and delineation of the role of T and B lymphocytes;
- The description of the basic chemistry and function of the complement system, another important component of the immune system;
- An understanding of how the genes of B cells are able to produce an array of antibodies against foreign antigens;
- The discovery of the role of T cells in recognizing antigens.

Today, NIAID grantees are developing ways to induce tolerance to transplanted organs and tissue grafts in order to prevent rejection by the recipient's immune system. New approaches to inducing tolerance could revolutionize the field of transplantation in the next century and benefit tens of thousands of patients whose lives could be saved or improved by a donated organ. In addition, the growing knowledge of immunologic tolerance will help in understanding and treating other conditions such as cancer, autoimmune conditions, and allergic and infectious diseases.

**Allergic Diseases**

Allergic diseases are among the major causes of illness and disability, affecting as many as 40 million to 50 million Americans. NIAID grantees contributed significantly to the understanding of allergic diseases by identifying the IgE antibody as the factor responsible for immediate hypersensitivity in allergic disease, and by describing the complex structure of the receptor on allergy-causing cells to which IgE antibodies attach.

Among many other important advances, NIAID-supported research led to the discovery of the chemical structure of the leukotrienes, important mediators of inflammation and potent stimulators of muscle contraction and mucus secretion.

**Infectious Diseases**

As the 21st century approaches, it is clear that the world remains vulnerable to infectious diseases, old and new. In addition to diseases that have been in existence throughout history, more than 30 newly recognized diseases have emerged in the last two decades. Infectious diseases are the world's leading cause of mortality and the third leading cause of death in the United States. In addition to their human toll, the financial burdens of infectious diseases are enormous. Costs associated with infectious disease have been estimated to exceed $120 billion annually in the United States alone.

Over the past half-century, NIAID researchers have made numerous groundbreaking contributions to infectious disease research. NIAID's scientists and grantees have identified infectious agents and have developed vaccines, diagnostics, and therapies for most of the important human pathogens. For example, NIAID-supported scientists have identified or isolated the agents responsible for many diseases including hepatitis A; respiratory infections caused by adenoviruses, parainfluenzaviruses and respiratory syncytial virus; pneumonia caused by Mycoplasma pneumoniae; Lyme disease; and enteropathogenic E. coli.

In the late 1970's and early 1980's, NIAID research led to the landmark development of the first antiviral drugs for herpes simplex infections and influenza, paving the way for antiviral therapies for HIV/AIDS.

The institute has also had major success in developing and evaluating new and improved vaccines. Many of these vaccines have had a profound impact on health, such as the new vaccines for Haemophilus influenzae type b, a serious type of meningitis that was a major cause of mental retardation, deafness, and even death among infants and young children. Today this disease has been virtually eliminated through widespread use of vaccines.

NIAID research also led to the development of the
new vaccines for hepatitis A, hepatitis B, rubella, pneumococcal pneumonia, and rotavirus, a leading cause of infant diarrhea worldwide, as well as improved vaccines for whooping cough, rabies and a number of other illnesses.

Inexpensive, rapid and accurate diagnostic tests are critical to the practice of medicine. NIAID basic and applied research has contributed to developing many diagnostic tests. Among these are urine tests to quickly detect such sexually transmitted diseases as chlamydia and gonorrhea.

HIV/AIDS

"The era of the HIV/AIDS pandemic has been a time of both great excitement and frustration in the struggle to find ways to successfully manage the disease," recalls Fauci. "NIAID research has been translated into significant advances that have improved the prognoses of people living with this disease. Many HIV-infected people in this country are leading longer and healthier lives.

"Through intensive basic research we now know more about the biology of the AIDS virus and how it works than is known about many diseases that have been around for hundreds of years," Fauci adds. "In addition, we established a treatment evaluation network that has tested virtually every approved therapy we have today. We have shown the effectiveness of a treatment regimen for pregnant women to reduce the chances their babies will be born infected with HIV; and we have tested dozens of candidate HIV vaccines."

NIAID continues its commitment to finding the therapies and vaccines of the future so that diseases like HIV, malaria, tuberculosis, and many others will seem as remote as smallpox and polio are today.

Fauci says, "As we pause to celebrate the extraordinary impact of NIAID's research activities over the past 50 years, we realize that much has been accomplished. However, many challenges remain, and it is clear that the things we do as an institute—research into immunology, microbiology, infectious and allergic diseases—are more important than ever before."

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**NIAID Profiles in Science**

**DR. ANTHONY FAUCI**, director of NIAID since 1984, first came to NIH in 1968 as a clinical associate in NIAID’s Laboratory of Clinical Investigation (LCI). He became head of the clinical physiology section, LCI, in 1974, deputy clinical director in 1977, and chief of the Laboratory of Immunoregulation in 1980—a position he still holds. Fauci has made many contributions to basic and clinical research on the pathogenesis and treatment of immune-mediated diseases. He has pioneered the field of human immunoregulation by making a number of basic scientific observations that serve as the basis for current understanding of the regulation of the human immune response. He is also widely recognized for delineating the precise mechanisms whereby immunosuppressive agents modulate the human immune response. Among his accomplishments is the development of effective therapies for formerly fatal diseases such as polyarteritis nodosa, Wegener’s granulomatosis, and lymphomatoid granulomatosis. Since AIDS appeared in the 1980’s, Fauci has made seminal contributions to the understanding of how the AIDS virus destroys the body’s defenses leading to its susceptibility to deadly infections. He has also delineated the mechanisms of induction of HIV expression by endogenous cytokines. Furthermore, he has been instrumental in developing strategies for the therapy and immune reconstitution of patients with this serious disease. He continues to devote much of his time to identifying the nature of the immunopathogenic mechanisms of HIV infection and the scope of the body’s immune responses to the AIDS retrovirus.

Since the late 1950’s, **DR. ALBERT KAPIKIAN** of NIAID’s Laboratory of Infectious Diseases (LID) has studied the viral causes of disease. He pioneered the use of immune electron microscopy to discover, detect and characterize important viruses of human disease such as the Norwalk virus, which causes epidemic gastroenteritis, and the hepatitis A virus. A major part of his career has been devoted to studying rotavirus, the leading cause of life-threatening diarrhea in children under the age of 2. Shortly after the discovery of rotavirus almost 25 years ago by Australian investigators, Kapikian and his colleagues first identified it in the United States in stool samples taken from young patients at Children’s Hospital in Washington, D.C. Over the years, as head of the epidemiology section in LID, he led the NIAID team that developed and patented an oral vaccine against rotavirus. With the assistance of many outside collaborators, the vaccine was tested in nearly 18,000 people in the U.S. and abroad and this year was licensed by the Food and Drug Administration for use in protecting babies. Worldwide, rotavirus diarrhea affects 130 million infants and children each year, some 18 million of whom have moderate to severe disease, resulting in 873,000 deaths.

Studies indicate that the widespread use of the vaccine would not eliminate the virus, but will dramatically reduce the incidence of severe disease.
NIH Observes Fire Prevention Week

A pumper truck and several fire fighters gathered outside NIH's Bldg. 1 on Oct. 6. But there was no emergency. The confab was part of the agency's Fire Prevention Week activities, sponsored by the Emergency Management Branch of the Office of Research Services' Division of Public Safety. Smokey the Bear visited, as did Ronald McDonald, Sparky the Fire Dog, and staff from the Maryland Forestry Department. NIH's own fire-safety workers—including the bomb and search & rescue dogs and their trainers—were also on hand to answer questions and give demonstrations. Door prizes of fire extinguishers, and carbon monoxide and smoke detectors were given away. However, the most popular draw for passersby reputedly was the savory smoke emanating from O'Brien's Pit Barbecue Truck, which provided lunches at the event.

Perennial Fire Prevention Week favorite Sparky the Fire Dog greets youngsters from the NIH preschool. With Daisy and Belle (at right), Sparky had plenty of canine help to kick off NIH's Fire Prevention Week celebration.

Smokey Bear and a friendly forest ranger remind kids: "Only YOU can prevent forest fires." Later, they all mug for photos in front of Bldg. 1.

Smokey Bear visits NIH and points out features of the pumper truck. On hand just for the day, he also managed to recruit several fire chiefs who were most eager to hear the siren and see the flashing strobe lights.

PHOTOS: ERNIE BRANSON

Kathy Kilinski (above, l) volunteers to operate the "Dial 9-1-1" booth for the day. She is joined by a few of the miniature fire chiefs NIH hosted from the NIH preschool. At right, one chief demonstrates the know-how.
Gerald LaVeck, Third NICHD Director, Dies at 71

NICHD's third director, Dr. Gerald LaVeck, died after a brief illness on Sept. 20. He served at NICHD for 7 years, from Oct. 9, 1966, through Sept. 1, 1973. During his tenure, he presided over a reorganization of the institute that separated responsibility for intramural and extramural research and created 7 intramural laboratories. He also saw the construction of a $7.5 million NICHD Gerontology Research Center in Baltimore and the establishment of NICHD's Center for Population Research. During this period, he also held an appointment as clinical professor of pediatrics at Georgetown University.

"Dr. LaVeck's driving interest was in mental retardation research," said NICHD director Dr. Duane Alexander. "He helped to build NICHD's program in mental retardation research and spurred the interest of many young clinicians. There is no doubt he will be missed."

LaVeck was born in Seattle on Apr. 19, 1927. He graduated from Seattle's Garfield High School in 1945, then earned a B.S. degree from the University of Washington in 1948 and a doctor of medicine degree in 1951. He served a residency at the Seattle-King County health department, and then served in the Epidemiologic Intelligence Service of the Centers for Disease Control. He returned to Seattle for a residency in pediatrics and a fellowship in mental retardation at the University of Washington. From 1958 to 1962, he served as medical and clinical director of the Rainier State School for mentally retarded individuals, where he developed what many consider to be a model program for mentally retarded individuals.

"He was a good man," said Dr. Felix de la Cruz, chief of NICHD's Mental Retardation and Developmental Disabilities Branch. "I worked for him at the Rainier State School and he is singly responsible for spurring my interest in mental retardation research."

While at NICHD, LaVeck was often called on to brief Congress and the President on mental retardation and children's health research issues. Before becoming institute director, he held the posts of acting scientific director and head of NICHD's mental retardation program. Upon leaving the institute, he served as the director of the clinical trainee unit of the Child Development and Mental Retardation Research Center at UW. From 1976 to 1977, he was director of research at the Maternal and Child Health Bureau in Rockville.

According to his wife, Beverly LaVeck, Dr. LaVeck's scientific interests included genetics, infectious diseases, endocrinology, neurology, pharmacology, as well as human reproduction and contraception. She said his interest in mental retardation began at UW, during a mental retardation fellowship under Dr. Robert Deisher.

"Others have commented on how well he could listen, absorb information and make decisions," Mrs. LaVeck said. "He was unusually perceptive of others' abilities and supported them in positions where they could exercise those abilities."

A colleague at UW, Dr. Irv Emmanuel, said in an article in the Seattle Times that LaVeck had a modest demeanor that tended to obscure the fact that he was an important figure in the improvement of pediatric care, pediatric research and the education of physicians and other health care workers.

Since 1978, LaVeck had served as clinical professor, department of pediatrics at the School of Medicine at UW. He also held an appointment in the department of epidemiology at the School of Public Health there.

After his retirement from the Public Health Service in 1985, LaVeck enjoyed hiking near his cabin in Washington State's North Cascades. He died just 4 days after the death of NICHD's first director, Robert Aldrich, his mentor who was influential in bringing him to NIH.

He is survived by his wife, one son, three daughters and nine grandchildren. Contributions in his memory can be made to the Center on Human Development and Disability, Box 35790, University of Washington, Seattle, WA 98195-7920.

Dr. Gerald LaVeck

At the annual NIGMS awards ceremony recently, institute director Dr. Marvin Cassman (second from r) recognized three employees with the NIH Award of Merit. The recipients were (from l): Dr. Anthony René, NIGMS assistant director for referral and liaison; Dr. James Anderson, program director, Division of Genetics and Developmental Biology; and Beverly Venable, supervisory grants management assistant, Division of Extramural Activities.
Douglass, Former DRG Director, Dies

Dr. Carl D. Douglass, former director of the Division of Research Grants, died of cancer at the age of 73 on Sept. 23. He had retired from NIH in 1985, after 24 years of distinguished service, including 8 years as director of DRG.

Previously at NIH, he had been: deputy director of DRG (1972-1977); associate director for statistics, analysis, and research evaluation, DRG (1970-1972); associate director for program development and then associate director, Division of Research Facilities and Resources (1967-1970); chief, Research and Training Division, National Library of Medicine (1964-1966); and nutrition program officer, National Institute of Arthritis and Metabolic Diseases (1961-1964).

Before coming to NIH, Douglass was chief of the FDA Nutrition Research Branch after leaving his home state of Arkansas, where he had been associate professor in the department of biochemistry, University of Arkansas.

Douglass received several honors and awards, including a citation for superior performance from the FDA and a DHHS Superior Service Award. One of his most memorable experiences occurred in 1957, when he was on the faculty of the University of Arkansas. During the crisis in Little Rock, he was the physics and math tutor for Ernest Green, the senior member of the group of African American students known as the Little Rock Nine, who were seeking to integrate Central High School there.

Survivors include his wife, Vera, of 52 years, two children (Rev. Katherine and Joseph), and two grandsons (Adam and Joshua).

Symposium on Therapeutic Oligonucleotides

On Friday, Dec. 4, the Therapeutic Oligonucleotide Interest Group will hold its third symposium, "Therapeutic Oligonucleotides: Discovery and Milestone Achievements." The meeting will be held in Masur Auditorium, Bldg. 10, from 8:30 a.m. to 5:30 p.m. In addition to local talent from NIH, FDA, Johns Hopkins and Georgetown, speakers will be coming from Columbia University, UPenn, Cleveland Clinic, University of Iowa, the University of Alabama and several biotech companies. Reservations are not required. Contact Yoon Cho-Chung (chouchung@helix.nih.gov) for more details.

DWD Training Tips

The Division of Workforce Development (DWD), OHRM, will offer the courses listed below. Hands-on, self-study, personal computer training courses are available through the DWD's User Resource Center at no cost to NIH employees. For details, visit DWD online at http://www-urc.od.nih.gov/dwd/dwdhome.html or call 496-6211.

Administrative Systems
Delegated Acquisition Training Program (DELPRO) 1/4/99

Computer Applications and Concepts
Introduction to Corel WordPerfect 7.0 1/5
Windows Intermediate: Customizing Your System 1/5

Career Transition
Mid-Career Benefits and Financial Planning 1/5

CIT Courses and Seminars

All courses are on the NIH campus and are given without charge. For details call 594-3278 or consult visit http://livewire.nih.gov.

- Search Engines and Your Website 11/23
- Windows NT Startup 11/24
- Java 11/23-24
- Designing Effective Scientific Slides 11/24
- Introduction to the Helix Systems 11/30
- Advanced SAS Tabulate Features 11/30
- Hubs, Switches and Routers 11/30
- Creating Presentations with PowerPoint 97 12/1
- Account Sponsor Orientation 12/1

CSR's Ellen Ring Mourned

Ellen Ring, who retired at the end of August as chief of the Technology Services Branch, Center for Scientific Review, died of cancer on Saturday, Oct. 17.

Ring's life was an excellent example of the success a person can achieve through hard work, determination, intelligence and a sense of humor, said coworkers. Beginning her career with the government as a GS-2 inventory clerk, she advanced to a GM-15 supervisory computer specialist. Along the way she reared three children (Barbara Beatty, John Ring and Eric Ring), and returned to school, graduating cum laude from the University of Maryland with a degree in technology and management. She became skilled in the installation, troubleshooting, use and repair of various computers, and in all phases of office system technology. She also developed and conducted workshops and seminars on office computer use.

Chris Wisdom, CSR executive officer and Ring's last supervisor, praised her determination always to give her best as well as her ability to respond to high levels of stress with calmness and sanity. Dr. Ellie Ehrenfeld, CSR director, also noted her determination and intelligence, stating that Ring had served CSR with skill, hard work and absolute dedication.

In addition to her three children, Ring is survived by four grandchildren: Sarah and Morgan Beatty, Marcus Dutton and Celeste Ring.
Neurologist Jonathan Cole Lectures on Face

Jonathan Cole—physician, neurologist, and author of the new book About Face—will speak on Friday, Nov. 20 at noon in the Natcher Conference Center. His talk, sponsored by NIDCR, will focus, in his words, “on a natural history of the face and an unnatural history of those who live without it.”

A clinical neurophysiologist at Poole Hospital and senior lecturer in clinical neuroscience at Southampton University, Great Britain, Cole’s research interest lies in what is special about the face and what happens when neurological conditions make expression or comprehension of the face unavailable. In the words of physician and author Oliver Sacks, Cole’s recent book, About Face, is “…a remarkable book, the first comprehensive exploration of the face, and a fascinating one, which combines the clinical and the human, the biological and the cultural, in an altogether original way.”

In his NIH lecture, Cole will explore the themes in his book, covering studies of blind, autistic and neurologically impaired persons, including those with Möbius syndrome, in which individuals are born with a total inability to move their facial muscles or make facial expressions. Cole suggests that it is only by studying such personal narratives of loss that we can understand facial function and something of what all our faces reflect. Drawing on work in neurology, human development, anthropology, philosophy and the arts, he will discuss the biological evolution of the face, the mechanics of expression and perception, and the importance of the face in the development of emotion and communication.

Cole received both his undergraduate and master’s degrees from Oxford University. Following completion of his medical training in London in 1978, he interned for 3 years and then returned to Oxford where he completed a doctorate in sensory physiology in 1984. His next move was to the University of Southampton, where he began conducting research on pain control. It was at this time that he developed a particular interest in motor control and encountered a patient with a large fiber sensory neuropathy who had no perception of touch, movement or position sense below the neck. Cole’s biographical account of this “deafferented” man, Pride and a Daily Marathon, was published by MIT Press in 1995. The book formed the basis of an account used by Peter Brook in his play, The Man Who, which toured Europe and later came to New York. Cole also helped write and narrate a BBC television documentary on the same subject, entitled The Man Who Lost His Body, which was broadcast in October 1997.

Cole is a fellow of the Royal College of Physicians, a member of the Physiological Society, and serves on the council of the British Society for Clinical Neurophysiology.

At the NIH Golf League’s fall outing on Sept. 19, NCI’s Dr. Joe Tangrea (shown here with his wife Elena, also an NIHGL member), a third-year golfer, shot a hole-in-one on the 150-yard par 3 8th hole at Beaver Creek Country Club in Hagerstown. All 40 players in the event paid a fee to ensure a hole-in-one cash prize for each par 3. Joe won $1,000, paid by SportWorx, a sports-risk prize insurer. It has been estimated that the odds for an average golfer making a hole-in-one are 1 in 12,000.