'Not a Spectator Sport'
OD Launches Formal Year-Long Mentoring Program

By Carla Garnett
No one will argue that it takes a host of measurable resources—education, training, experience—as well as unmeasurables—ambition, motivation, enthusiasm—to make up a successful career, or that some ingredients are much harder to come by than others.

Recently the Office of the Director offered 10 employees who demonstrated one sign of success—initiative—the promise of another rarer, and increasingly more important, component.

Goal Surpassed Again
CFC Raises Record Amount in Difficult Year

By Don Luckett
Despite many difficulties, the NIH 2002 Combined Federal Campaign ended on a high note: Employees pledged a record $1.63 million to CFC charities—116 percent of this year's goal, with a participation rate of 53 percent. As a result, many awards were handed out at the Feb. 5 CFC awards ceremony in Wilson.

Biodefense, Global AIDS Research Get Boosts
Budget Request for 2004 Reflects Post-Doubling Priorities

On the same day he visited NIH to launch Project BioShield (see Feb. 18 NIH Record story), President George W. Bush on Feb. 3 sent his budget request for fiscal year 2004 to Congress. Following 5 years of double-digit growth that fulfilled Congress's 1998 promise to double the NIH budget by 2003, NIH is now requesting $27,893 million—an increase of $549 million or 2 percent—in FY 2004.

Excluding bioterrorism and one-time infrastructure, the research portions of the budget grow by 4.3 percent,” said Don Poppke, NIH acting budget director.

Among administration priorities emphasized in the new funding proposal is the HHS/NIH commitment to protect the nation's citizenry from biological and chemical terrorism.

The FY 2004 budget proposal allows NIH to award 10,509 competing research project grants—an increase of 344 competing RPGs over FY 2003—and will fully fund 322 competing grants.

Measured in Feet, Not Inches
Winter Storms Dump Most Snow in 7 Years

Two winter storms—one mild on Feb. 15, and one major from Feb. 16 to 17—dumped the most snow that NIH has had since the record snowstorm in 1996, according to Lynn Mueller, chief of NIH's grounds maintenance and landscaping section, Office of Research Services. A little more than 2 feet—26 inches—was recorded on the Bethesda campus, with 4 inches accumulated from the first storm and 22 inches more by President's Day, Feb. 17.

A much smaller snow squall on Feb. 18 probably dropped
Hall, which was packed with CFC deputy coordinators, assistant coordinators and others who played key roles in the campaign.

NIH director Dr. Elias Zerhouni told the crowd he was touched by the way NIH’ers were “willing to help at a time when other people are hurting...Nothing happens without champions, and you all are champions.” He thanked CSR director Dr. Ellie Ehrenfeld for leading the successful campaign, and CSR Executive Officer Chris Wisdom and her staff for coordinating it. He also encouraged CFC workers to tell those back at their institute or center how much their pledges are appreciated.

Ehrenfeld noted that things didn’t look so promising when the campaign began last September on the Natcher lawn. “Besides the rain,” she said, “the campaign was threatened by economic uncertainties and disturbing reports about the United Way, which is the fiscal steward of the CFC.” She thanked the crowd for “focusing on the good things CFC charities do and for keeping the spirit and momentum of the campaign positive and strong...NIH employees responded with great generosity."

Ehrenfeld also cited a recent Washington Post article that reported United Way contributions from the private sector were only a third of what they were last year, and that CFC campaigns at other local agencies were averaging just 90 percent of last year’s collection. “Our campaign has thus been a wonderful exception,” she said. “NIH can be very proud.”

Wisdom concluded the ceremony with a musical PowerPoint presentation covering the highlights of the 2002 NIH CFC. When she got to the slide for the last week of the campaign, she played a rock-and-roll classic that’s been popular since its 1959 release, the Isley Brothers’ “Shout.”

NIH Special Emphasis Committees Return

The Office of Equal Opportunity and Diversity Management has reestablished the special emphasis programs employment committees. Operating under Executive Order 11478, EEO Commission management directive 714 and other regulations that govern NIH’s equal opportunity program, the committees are responsible for providing advice, guidance and recommendations to the OEODM director on employment and advancement of special populations of employees in the NIH workplace. Each committee has a common goal of assisting OEODM in maintaining an environment that is conducive to the recognition, development, promotion, understanding and utilization of employee abilities, skills and knowledge to achieve maximum productivity.

Committees and their current chairs include the American Indian/Alaskan Native employment council, Frank GrayShield, NHLBI; Asian American/Pacific Islander employment committee, Dr. Bill Bunag, CSR; Black employment committee, Zita Givens, NIA; employees council on disabilities, Theresa Oliver, NIMH; Federal Women’s Program Network, Joan Brogan, OEODM, acting chair; and Hispanic employment committee, Eddie Ribas, OD/OHR.

Career Development Workshop, Mar. 17

The NIH fellows committee will hold a career development workshop titled, “Careers in Biodefense,” on Monday, Mar. 17, from 9 a.m. to noon in Masur Auditorium, Bldg. 10. No reservation is required. For more information, contact bconnle@box-b.nih.gov or millert@cbcr.fda.gov. A reception will be given following the event.
NICHDI Grantees Receive Wolf Prize
By Marianno Glass Duffy

Three grantees of NICHD's Reproductive Sciences Branch have received the Wolf Prize, an award presented to outstanding living scientists and artists.

Dr. R. Michael Roberts, professor of biochemistry and animal sciences at the University of Missouri, Columbia, and Dr. Fuller W. Bazer, associate vice chancellor of agriculture and life sciences for the Texas A&M University System, received the Wolf Prize in Agriculture for their work in discovering proteins essential to pregnancy. Their work has helped clarify the mystery of how a successful pregnancy begins and comes to term. They will share the $100,000 prize.

Dr. Ralph L. Brinster, professor of reproductive physiology at the University of Pennsylvania School of Veterinary Medicine, received the Wolf Prize in Medicine for his development of techniques to maintain mouse and other mammalian eggs in vitro. He shares the prize with researchers Dr. Oliver Smithies of the University of North Carolina and Dr. Mario R. Capecchi of the University of Utah (both of whom are long-time NIH grantees, who shared the 2001 Lasker Award for Basic Medical Research; Smithies has been supported by NICMS since 1973 and also receives funds from NHLBI while Capecchi has been funded by NICMS since 1969, in addition to his NICHD grants).

Both Roberts and Brinster are recipients of the NICHD Mentor Award for Excellence in Research Training.

The three researchers will travel to Jerusalem where they will receive their awards from Israeli President Moshe Katsav at a May 11 ceremony.

Roberts and Bazer are sharing the Wolf Prize for their work in identifying interferon-tau and other proteins and mechanisms that regulate embryo development, fetal growth and the immune system. Interferon-tau, which they first identified in animals, ultimately may be useful in treating diseases such as osteoporosis and leukemia in humans. Roberts and Bazer collaborated on the research for 16 years while at the University of Florida.

Brinster, a veterinarian, developed a culture system to maintain mouse and other mammalian eggs in vitro, and identified many fundamental requirements of growing eggs in culture. He was the first to microinject fertilized eggs with RNA and pioneered the application of these microinjection methods to generate transgenic mice.

The Wolf Prize is given through a foundation established by the late Dr. Ricardo Wolf, a German-born inventor, diplomat and philanthropist. The prize is awarded annually in five areas: agriculture, chemistry, mathematics, medicine and physics. A sixth prize, in the arts, rotates annually among the fields of architecture, music, painting and sculpture.

Five Join NIAID Advisory Council

Five new appointments have been made to the National Advisory Allergy and Infectious Diseases Council. The new members are: Dr. Anthony M. D'Alessandro, professor of surgery at the University of Wisconsin; Dr. Charles Davis, Jr., assistant professor of medicine at the Institute of Virology in the School of Medicine at the University of Maryland in Baltimore; Anne Munoz-Furlong, CEO and founder of the Food Allergy and Anaphylaxis Network in Fairfax, Va.; Rev. Raymond C. O'Brien, professor of law at Catholic University of America in Washington, D.C.; and Dr. Anjana Rao, professor of pathology at Harvard Medical School.

D'Alessandro is director of multiorgan transplantation and executive director of the Organ Procurement Organization at the University of Wisconsin. He has been actively involved with the United Network for Organ Sharing.

Davis' background and training is in the areas of infectious diseases and internal medicine. His primary areas of interest are in HIV immunotherapy, alternative therapies and controlling HIV replication through cell-cycle modification.

Munoz-Furlong has published many educational booklets about managing food allergy, and she has also been the executive producer for a series of educational videos on food allergy and anaphylaxis.

O'Brien is a Roman Catholic priest of the Archdiocese of Washington, D.C., and a permanent visiting professor of law at Georgetown University Law Center in Washington. He is coauthor of a casebook, statutory book and treatise in family law and long-term care.

Rao is senior investigator at the Center for Blood Research at Harvard Medical School. She is an internationally recognized investigator in the areas of immunology, molecular biology, signal transduction and gene transcription.

FEW To Hold Meeting, Mar. 11

Federally Employed Women, Bethesda chapter, hosts writer and speaker Robin Gerber on Tuesday, Mar. 11 from noon to 1 p.m. in Bldg. 31, Conf. Rm. 6C6. Author of Leadership, the Eleanor Roosevelt Way: Timeless Strategies from the First Lady of Courage, Gerber will discuss "The Leader in You: Lessons from Eleanor Roosevelt." All are invited to attend. Sign language interpretation will be provided. For other reasonable accommodation, contact Allyson Browne by Mar. 7 at abrowne@mail.nih.gov.
another inch or so, but was not counted in Mueller’s unofficial total. The previous biggest storm—the “Blizzard of 1996”—that occurred from Jan. 6 to 8 dumped about 24 inches at NIH, he said.

Various unofficial tallies in other parts of the region topped 30 inches, although the official U.S. Weather Service accumulation total for the Washington metropolitan area was 16.2 inches, which was recorded at Washington Reagan National Airport. The 2003 storm went into Washington weather history books as the sixth largest snow total since records have been kept, and virtually paralyzed most of the major travel corridors along the East Coast, from Virginia to New York. Washington, D.C., Maryland and Virginia governments all declared states of emergency during the heaviest snowfall on Feb. 17. At the height of the storm, Maryland officials imposed a restriction on its roads that excluded all but emergency vehicles from traveling in the state; the embargo was lifted late Monday night, but motorists were still discouraged from venturing onto as-yet-uncleared roadways.

For a time, weather conditions closed all runways at BWI and National airports, and reduced Dulles airport to just one open runway. Amtrak train traffic also was shut down completely from Washington to points south, and considerably to points north and west, owing to snow on the tracks. In addition, local transportation—Metrorail, and such commuter railways as MARC—severely curtailed service to and from the area. Most school systems were also closed through the week.

Although the federal holiday gave most employees a 3-day weekend and record snow accumulations forced the Office of Personnel Management to add a fourth day off for cleanup, Mueller said the entire grounds maintenance crew worked around the clock since Friday. Ten employees from Mueller’s unit plus 10 workers who volunteered from the Public Works Branch made up the crew, which was supplemented by about 18 contract employees who worked to clear building entrances and bus stops.

“The last guy—Ken Hunter—just left this morning to go home after being on campus for 108 hours straight,” Mueller reported on Feb. 19, which was the first official day back to work for federal employees. Mueller himself had stayed on campus since Sunday evening. “The guys are literally falling over with exhaustion. We have about 17 miles of sidewalk, 497 building entrances and more than 42 acres of parking lots, not to mention 36 loading docks and the security inspection stations to clear. By Sunday afternoon our smaller plows were overwhelmed. All in all, I would say [our effort] has been rather successful. Of course, we still haven’t cleared everything yet and now we must be concerned about opening the 337 snow-blocked storm drain inlets to allow all this to melt away. In ’96 there was some severe flooding on the Potomac. It’s going to take a few more days to get everything cleared, but so far we have received only a few complaints compared to the size of this job.”

Although most NIH’ers spent the 4-day weekend at home digging out from under snow piles, some were lucky enough to be snowed in at Canaan Valley ski resort in West Virginia, following the annual Family Ski weekend put on by Camp Fantastic. Closed roads extended their stay an extra day, and most were convinced their snow-covered cars left in NIH parking lots would delay them further from getting home. But a happy surprise awaited them.

“The main story was the helpfulness and kindness of Lynn Mueller and the NIH snow removal team,” said Randy Schools, R&W president. “When we arrived back at NIH, all the cars were ready to go. They had them ready for families, and off we went. We thought we would be digging out for hours.”—Carla Garnett
year, NIH looks to receive $1.625 million for research on combating various terrorist threats.

NIH is requesting 125 more FTEs to support biodefense research activities and provide for management of the biodefense research program. NIH will coordinate activities in this area with both the newly established Department of Homeland Security and the White House Office of Science and Technology Policy.

NIH has a plan to apply proposed increases to several critical areas already identified, notably three outlined below:

- Expansion of basic research, including the addition of four Regional Centers of Excellence for Biodefense and Emerging Infectious Diseases to provide and maintain the research and development capacity needed for identifying and responding to emerging diseases and bioterrorism events;
- Expansion of the number of candidate drugs and vaccines under research using FDA's "animal model rule," the principal approach to showing scientific "proof of concept" for a candidate drug or vaccine that is under development as a countermeasure to a potential agent of bioterrorism;
- Expansion of clinical research projects to support phase I and II clinical trials of candidate vaccines/drugs, including a next-generation smallpox vaccine, a plague vaccine and an Ebola vaccine.

In another budget item mentioned during his visit to campus, the President requested a boost for AIDS research funding to $2,870 million, an increase of $110 million.

Clear Paths to Progress

Key to tackling the wide array of new challenges facing the agency is the NIH Roadmap, an ongoing strategic plan developed by NIH director Dr. Elias Zerhouni in consultation with dozens of scientists asked to brainstorm about future directions. Soon after arriving at NIH last spring, Zerhouni launched an agency-wide effort to identify critical roadblocks and knowledge gaps that limit advances in biomedical research progress.

The resulting guide, or Roadmap, consists of three broad initiatives: New Pathways to Discovery, which include new approaches and enabling technologies such as a comprehensive parts list for biology, pathways and networks in health and disease, regenerative medicine, structural biology, molecular libraries, nanotechnology, computational biology and bioinformatics and molecular imaging; Multidisciplinary Research Teams of the Future, which will expand traditional models of conducting research to incorporate more and greater collaborative efforts among scientists, labs, ICs, organizations and networks, and examine ways to enhance synergism both inside and outside the agency's federal environment; and Re-engineering the Clinical Research Enterprise, which will allow NIH to rethink technical and human infrastructure requirements to translate findings from genetics and proteomics into front-line treatments used by health professionals on patients.

The FY 2004 budget request for the Office of the Director includes an increase of $35 million for these initiatives; Roadmap funds will be allocated by the NIH director to institutes and centers for solutions to reach specific goals.

Other Budget Highlights

Addressing what have been widely recognized as two of the nation's fastest growing health problems, the 2004 request includes a new $14 million effort as part of expanded trans-NIH research programs in diabetes and in obesity, a national epidemic that threatens the country's health by sharply increasing the incidence of type 2 diabetes, fatty liver disease, kidney failure, cardiovascular and other diseases.

The budget proposal also maintains NIH's commitment to priming the biomedical research talent pipeline for the future. Stipend levels for the Ruth L. Kirschstein National Research Service Award trainees will increase by 4 percent over FY 2003 levels for predoctoral fellows, and decrease from 4 percent to 2 percent, based on years of experience, for postdoctoral fellows.

Also included in the 2004 request is an increase of $25 million—for a total of $210 million—for the Institutional Development Award program, a continuing effort to build a corps of competitive biomedical researchers in states that have not fully participated in NIH research funding in the past.

Saving and Consolidating

The 2004 budget also necessarily reflects belt-tightening measures. NIH will absorb a $109 million reduction in the information technology budget, incorporating savings from ongoing IT consolidation efforts that include project streamlining.

Other areas in the 2004 budget where spending will be trimmed reflect implementation of the President's Management Agenda and include $41 million in cost savings from consolidating administrative functions, organizational delaying, competitive sourcing via A-76 and adoption of other efficiencies in operations.


As the Record went to press, the appropriations bill for FY 2003—which began last Oct. 1—had just been passed by Congress and was en route to the White House for the President's signature. "Under the '03 appropriations the doubling of NIH is essentially complete," Poppke concluded.
ment of accomplishment—a good mentor.

On Jan. 30, 20 intrepid NIH’ers—10 workers looking to advance in, or perhaps change, their career fields, and 10 employees seasoned in the desired fields—embarked on a unique year-long training partnership made possible by the OD equal opportunity advisory committee. Conducted by a local firm called Total Learning Solutions, the formal mentoring program is designed for employees in positions up to GS-8. Participants were selected from a pool of applicants by a review panel. Each is provided with a mentor and up to $1,000 for training according to their short- and long-term goals.

“All of you are about to begin an absolutely unusual program,” said Hilda Dixon, OD Diversity and Special Emphasis Program manager and advisor to the committee, whose office researched and contracted with the training provider and otherwise got the program up and running. “For the mentorees, it’s about the individual and what you’ve said you want to be. For the mentors, you’ve been chosen because you have been a success in your career and for your real honesty in telling people what is good for them to do to accomplish their goals.”

What is different about OD’s program is two-fold: its focus and its perspective. Most such programs are designed to benefit the organization and the employee mutually. While OD’s program will indirectly provide its sponsoring organization with 10 happier workers (more, if you count the mentors), the main idea is to help employees be the best they can be right now and to help them move from one place in their careers to another. That’s a novel concept—at least in the federal workplace, according to Cory Edwards, a certified career management coach from Total Learning Solutions who herself logged more than 20 years in government service at the U.S. Postal Service and the Department of Defense.

“The goal is advancement in the government, not necessarily at NIH,” she pointed out.

In addition, because most of the core concepts in the training module were recommended by an employee, the curriculum reflects a virtual wish list of qualities wanted in a mentor.

“I thought about what I would have wanted in a mentor,” said Darlene Pearson, an OD advisory committee member who was recently promoted to EEO specialist in the NIH Office of Equal Opportunity and Diversity Management.

Pearson, along with committee members Emily DeVoto, Roland Case, David Clary and Yolanda Robinson, created the OD Mentoring and Training Program, outlining roles of both partners and the module’s four phases—implementation, training, maintenance and completion. “I felt if I had had a

mentors representing a variety of career fields at NIH.

maker like the ones in the program,” Pearson explained. “I would not have made some of the mistakes I made, and I think I would have advanced faster.”

Of particular importance to many mentorees is the structured environment of the program, which was modeled loosely after an earlier NIH mentorship program as well as one used in the intramural science community on campus, the Guide to Training and Mentoring. Featured parts of the training include a 2½-hour session on creating a career development plan, a shadow day and a two-on-one mentor/mentoree meeting with a facilitator.

“Accountability is very important,” Pearson explained, “because many times people will say they’ll mentor you and then you may never hear from them again. [Earlier in my career] I wanted someone who was knowledgeable about their work environment, someone who knew people or was well-connected, but most of all someone who was enthusiastic about being a mentor and would give me their all.”

Those hopes and past frustrations were reflected in comments by some of the mentorees chosen for the new OD program.

“At first I thought [this program] might fold,” said Parthenia Walker of OD’s Office of Management, during introductions at the orientation on Jan. 30. “But I thought about it and realized it’s an opportunity to grow. I decided to take my chances.”

“I’m always open to learning from someone who has been where I am,” agreed Sheila Davis of the Office of Extramural Research.

The structured course clearly spells out the mentoree’s role in his or her career track, and the level of involvement by mentors.

“This training is not a spectator sport,” Edwards stressed. “You all are expected to be active partners.
Mentorees, remember, it's not the agency's job to get you developed or promoted. That's your job. What you can learn in this program is how to take charge of your career and how to communicate better in your jobs. Mentors, you have agreed to share your time and to be accessible. Although this program is scheduled to last only a year, I've often seen mentorships last much longer. Some people mentor for life. I hope that doesn't scare any of you.

Exercises during the orientation were focused on defining individual strengths and weaknesses of both mentorees and mentors. Each partner also completed a Personal Profile System questionnaire that helped categorize personal traits and strategies in problem-solving. Edwards said identifying each other's personality styles and strong points will help partners communicate effectively.

"Strengths overused become weaknesses," she explained, discussing the benefits and drawbacks of such qualities as loyalty, directness and diplomacy. "These exercises are not to peg us, but to give us insight into ourselves."

In addition, mentors were required to write and submit an individual development plan, complete with measurable targets and deadlines. Partners may meet as often as they choose, and may terminate their partnership at any time. Upon completion of the program, both partners will be asked to evaluate both the training and the mentorship.

If partners stay on course, the benefits of formalized mentorships will be mutual: Mentorees will get a jump on their next career step and mentors will be satisfied to have provided the boost.

Concluded mentor Henry Dove, a supervisory contract specialist in the Office of Management, "I'm glad to have the opportunity to share what I've learned over the years at NIH."

Blackburn To Give Mahoney Lecture, Mar. 12

Dr. Elizabeth H. Blackburn, professor in the department of biochemistry and biophysics, University of California, San Francisco, will present the 17th annual Florence Mahoney Lecture on Aging on Wednesday, Mar. 12 at 3 p.m. Her title is "Telomeres: No End in Sight."

In the 1980's Blackburn and her colleagues discovered the unique RNA-protein enzyme telomerase, which rebuilds telomeres. She theorized that active telomerase is an important factor in maintaining the capacity of cells to proliferate. Cells stop dividing, she proposed, when their telomeres become critically short and consequently dysfunctional. Her discovery of telomerase is considered by some to be one of the most important achievements in molecular genetics.

Recently, however, she has accumulated evidence suggesting that the stability of telomere structure, apart from telomere length alone, might be important, too. In these studies, she discovered that some cells with extremely short, but structurally sound telomeres continue to proliferate, while others with long, but "frayed" telomeres undergo senescence.

Before the lecture, Dr. Robert Butler, first director of the National Institute on Aging and currently president and CEO of the International Longevity Center, and Dr. Richard Hodes, NIA director, will remember Mahoney, who died last Nov. 29 at age 103. She was a lifelong champion of health research and an unflagging advocate for NIH and NIA. As a charter member of the National Advisory Council on Aging from 1974-1978, she contributed time, energy and enthusiasm to help ensure NIA's success.

Blackburn earned her B.Sc. (1970) and M.Sc. (1972) degrees from the University of Melbourne in Australia, and her Ph.D. (1975) from the University of Cambridge in England. She did postdoctoral work in molecular and cellular biology from 1975 to 1977 at Yale University.

In 1978, she joined the faculty at the University of California, Berkeley, in the department of molecular biology. In 1990, she moved to the department of microbiology and immunology at the University of California, San Francisco, where she served as department chair. In addition to being professor in the department of biochemistry and biophysics, she is also a non-resident fellow of the Salk Institute.

She is a fellow of the American Academy of Arts and Sciences (1991), the Royal Society of London (1992), the American Academy of Microbiology (1993) and the American Association for the Advancement of Science (2000). She was elected foreign associate of the National Academy of Sciences in 1993, and is currently a member of the President's Council on Bioethics. A reception will follow her talk.

STEP Session on 'Designer Medicine'

The staff training in extramural programs (STEP) committee will hold a Science in the Public Health session titled, "Hey, Those Are My Genes! The Promise and Problems of Designer Medicine," on Thursday, Mar. 20 from 8 a.m. to 12:30 p.m. in Lister Hill Auditorium, Bldg. 38A.

The program will examine the current status of diagnosis, treatment and prevention of disease using individual genetic information, and the multiple uses of such information by patients and practitioners, the health care industry and society. The program will also explore the impact of the "post-genomic" era on NIHers' responsibilities for promoting and monitoring progress in the research and use of such knowledge. The forum is offered for ESA credit.
Dr. Jeffrey Drazen, editor-in-chief of the *New England Journal of Medicine* and Parker B. Francis professor of medicine, emeritus, at Harvard Medical School, demonstrated his mastery of study design as he described several decades worth of clinical trials focusing on asthma, a respiratory ailment that has been on the rise in this country and whose root causes remain unknown.

“We still don’t understand the primary pathobiology of asthma—we could treat it if we did,” he told a large audience in the newly refurbished Lipsett Amphitheater, where he spoke on Feb. 12 as the sixth of 10 lecturers in the 2002-2003 Contemporary Clinical Medicine: Great Teachers series, a special feature of Clinical Center Grand Rounds.

Drazen said physicians currently treat asthma based on how severe it is. The spectrum of severity includes four categories:

- **Mild Intermittent**—About half of all asthma patients fall into this category, which is characterized by fewer than 2 or 3 asthmatic episodes per week, and no difficulty sleeping at night. No continuous control treatment is necessary.

- **Mild Persistent**—Patients typically have tightness and wheezing weekly, but relatively normal lung function overall. One controller is sufficient to manage the illness.

- **Moderate Persistent**—Daily episodes characterize this stage, but the flare-ups are manageable with two medications.

- **Severe Persistent**—Episodes occur daily, despite therapy with more than two controllers.

Drazen said that therapies addressing the symptoms of asthma are “effective, but not terribly so. They prevent exacerbations, but they don’t really modify or address the underlying problem.” There are a number of downsides to long-term use of inhaled corticosteroids (ICS), he reported. Some studies have shown mild detrimental effect on bones, including a small effect on height. “Bone loss can be accelerated through use of steroids, but the effect may be small and hard to detect,” he said.

“Over time, higher ICS use leads to bone loss. It’s not a huge risk, but it does enhance (loss),” Drazen said. Steroids must be used with caution; there are systemic effects, including some suppression of the hypothalamic-pituitary axis.

Interestingly, asthma is more common in boys than girls, he reported, but a switch occurs in adulthood, when the disease becomes more common in women than men.

Drazen said doctors who manage persistent asthma should choose an inhaled steroid that has the maximum pulmonary effect and the minimum downside. “Do the least you can do,” he advised, recommending low-potency ICS therapy.

Comparing oral anti-leukotriene therapy, which arrived in 1997, to ICS, Drazen said studies give ICS a slight edge in improving symptoms, although many patients find it easier to take a pill than take puffs off of an inhaler. “Neither treatment is great,” he cautioned. “We need to do better.”

Some asthma patients, he reported, have been reluctant to get influenza vaccines, for fear of exacerbating their asthma. He demonstrated that such concerns are groundless.

Drazen concluded with recommendations for the four categories of severity: for mild intermittent asthma, 8 rescue inhalers per year are probably sufficient; for mild persistent sufferers, anti-leukotriene therapy or low-potency ICS should do the trick; for moderate persistent patients, long-acting beta agonist therapy and ICS is the ticket; and for severe cases he advised, “Get help!”—Rich McManus

**Wednesday Afternoon Lectures**

The Wednesday Afternoon Lecture series—held on its namesake day at 3 p.m. in Masur Auditorium, Bldg. 10—features Dr. Elizabeth H. Blackburn on Mar. 12, giving the annual Florence Mahoney Lecture on Aging (see story on p. 7).

On Mar. 19, Dr. Arthur Weiss, professor of medicine and of microbiology and immunology, Ephraim P. Engleman distinguished professor of rheumatology, chief, division of rheumatology, and HHMI investigator, University of California, San Francisco, will discuss, “Regulating T Cell Antigen Receptor Signaling.”

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