

Not everyone belongs at Yale. It takes a highly self-directed, self-motivated & organized person to be successful there... autumn 2002

Medical students are by nature very competitive. The *Yale System* tempers the negative aspect of that kind of competitiveness...

Everyone loves the Yale System. So why can't they all agree?

Abandoning or even erasing the *Yale System* will result in Yale graduates being as devoid of curiosity and as boring as most physicians.

I think the *Yale System* should be abandoned.

I strongly support the traditional *Yale System* established in 1921. It not only sets Yale apart - as a graduate school - from other medical schools that act like "trade schools" - but affords freedom of expression and development of lifetime learning habits that are essential to the practice of good medicine.

The unique quality of the *Yale System* has influenced me profoundly and was a wonderful experience. I applaud your efforts to preserve it.

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AUTUMN 2002

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ON THE COVER

When a group of medical students wrote to alumni about exam requirements earlier this year, they received more than 500 responses, including the testimonials that appear on pages 38 to 42. In their letters, the majority of those writing recall a Yale System that allowed them the freedom to pursue knowledge independently and instilled a lifelong love of learning.

22	“A steam engine in pants” In 1920, Milton Winternitz became dean and ushered in a new era in medicine at Yale, creating the Yale System in the process. For much of his 15 years at the top, what Winternitz wanted, Winternitz got. <i>By Gerard N. Burrow, M.D. '58, HS '66</i>
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On the Web

info.med.yale.edu/yymm

On our website, readers can submit class notes or a change of address, check the alumni events calendar, arrange for a lifelong Yale e-mail alias through the virtual Yale Station and search our electronic archive.

Eyes opened, hearts extended

Kudos on Monique Tello's *Letter from Guatemala* ["Eyes Wide Open," Summer 2002]. It was well written and moving and probably similar to the experience of many medical students rotating outside of the industrialized world, where the "brutal social dichotomy" does indeed exist.

As for the challenge for the rest of us to "fight complacency, to open the closed and contented mind," many learned and well-meaning social crusaders have tried and failed miserably, being accused of American imperialism, cultural genocide and worse. For an example of the pitfalls inherent in this kind of work, read *Death Without Weeping: The Violence of Everyday Life in Brazil* about a California social worker who attempted to improve literacy and vaccination among Brazilian children at her own expense and was rewarded with continued expulsions from the country on the grounds of subversive activity.

Sometimes changing the political landscape must precede humanitarian efforts. For this we must look to our political science colleagues for guidance—and hope.

*Susan M. Richman, M.D., HS '83
Guilford, Conn.*

The writer is an assistant professor of obstetrics and gynecology and director of the Women's Center at Yale-New Haven Hospital.

Just the facts

I have become used to accepting regular misstatements of historical fact in *Yale Medicine*, but the Spring 2002 issue has tried my patience with two certain errors.

On page 7: "Yale scientist E.M. Jellinek pioneered the notion that alcoholism is a disease. ..." Not so. Thomas Trotter, a British Royal Navy physician, clearly defined alcoholism as a disease or medical condition in *An Essay, Medical, Philosophical, and Chemical, on Drunkenness and Its Effects on the Human*

Body (Bouvier, Philadelphia, 1813). In the United States at about this time Benjamin Rush in Philadelphia was defining alcoholism as a disease.

Charles A. Janeway is presented on page 35 as the person who "discovered gamma globulin deficiency." This is not true, as the present Dr. Janeway [his son] would be the first to confirm. Ogden Bruton described the syndrome in "Agammaglobulinemia," *Pediatrics*, 9, 722-728, 1952. The condition is now known as X-linked agammaglobulinemia (Bruton) and the enzyme affected is known as the Bruton tyrosine kinase.

Our medical school has one of the very best history of medicine faculties in the United States. I urge you to have them review articles which purport to state historical facts before you publish. This would save you the nuisance of chiding like this letter!

*Robert J.T. Joy, M.D. '54
Bethesda, Md.*

The writer is emeritus professor, Uniformed Services University of the Health Sciences, Department of Medical History.

Dr. Joy is correct that Drs. Rush and Trotter regarded alcoholism as a disease almost 200 years ago. Jellinek, however, is considered by many to be the most influential proponent of alcoholism as a disease in the 1950s. He presented a disease model for alcoholism, described four classes of drinkers and invented what is known as the "Jellinek curve," which describes the progression of the disease. His work is considered a major factor in the medical establishment's acceptance of alcoholism as a disease. Although the World Health Organization had recognized it as a medical problem in 1951, and the American Medical Association (AMA) declared it a treatable illness in 1956, it was only in 1965 that the American Psychiatric Association called alcoholism a disease. The AMA followed suit in 1966.

As for the senior Dr. Janeway's contributions, his son replies: "I have always resented the

claim that Ogden C. Bruton 'discovered' X-linked agammaglobulinemia, as my father had collected 13 cases and was about to publish his findings when Col. Bruton published first. Instead of publishing his original work on agammaglobulinemia, my father worked on the intramuscular and intravenous administration of the crude gamma globulin fraction of blood, which he had isolated as part of Dr. Edwin Cohn's plasma fractionation project during the Second World War."

More alumni news, please

I am delighted with the "new" *Yale Medicine*. It's readable and full of good information.

One disappointment, however. What has happened to alumni news? The undergraduate alumni journal, the *Yale Alumni Magazine*, ignores the medical school in its alumni section, and the medical journal has only a skimpy bit of news. For those of us whose graduation occurred almost 60 years ago, we are very interested in what is happening to our old colleagues in our class and those around us. More importantly, in the most recent issue, there was nothing before the 50s. Are those of us from the 40s written off? Many of us are still alive and vigorously kicking.

Make the class secretaries get to work and satisfy the old-timers as well as the more recent graduates.

*Raymond A. Gagliardi, M.D. '45
Boca Raton, Fla.*



HOW TO REACH US

Yale Medicine welcomes news and commentary. Please send letters to the editor and news items to *Yale Medicine*, P.O. Box 7612, New Haven, CT 06519-0612, or via electronic mail to yymm@yale.edu, and include a daytime telephone number. Submissions may be edited for length, style and content.

yale medicine

*Alumni Bulletin of the
Yale University School of Medicine*
Autumn 2002, Volume 37, No. 1

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W.E. Andrews of Connecticut Inc.

Yale Medicine is distributed to alumni, faculty, students and friends of the School of Medicine, as well as leaders in Yale University alumni activities.

Abbreviations commonly used in *Yale Medicine* include HS to denote the years of completion for house staff in Yale residency programs, FW for the final year of a fellowship, EPH for the Department of Epidemiology and Public Health and School of Public Health and YNH for Yale-New Haven Hospital.

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The state of The System

In the Spring issue of *Yale Medicine* we promised to report on the state of the Yale System, the school's eight-decade-old educational model and the subject of some debate earlier this year. As this issue of the magazine evolved over the summer, it became obvious that the topic was to play a starring role and figure prominently in the issue's three feature articles as well as in our coverage of the June reunions that begins on page 48. Wherever we turned, someone was talking about the Yale System.

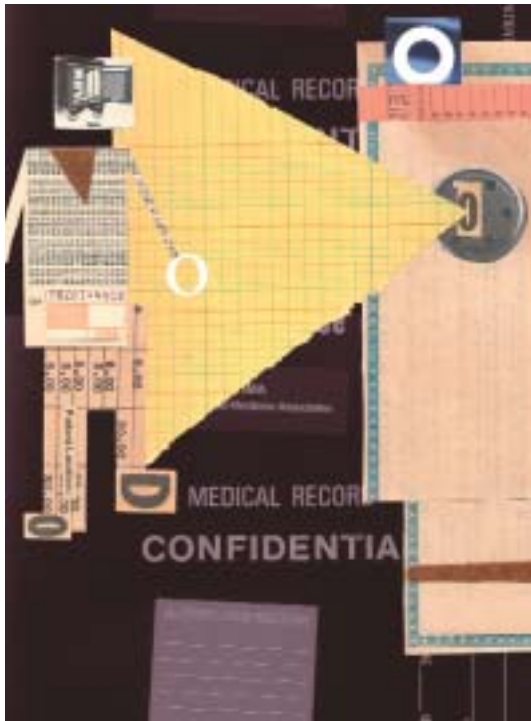
"Everyone Loves The Yale System. So Why Can't They All Agree?" (page 30) details recent initiatives by Dean David A. Kessler, M.D., and others to increase support for teaching at the medical school and explains the controversy that erupted in March after a mailing from a group of students to medical school alumni regarding exam requirements. Among the voices heard were those of more than 500 alumni who wrote passionately about the issue of testing and in doing so wonderfully articulated what it means to become a doctor at Yale. Excerpts from those testimonials appear on pages 38 to 42 ("The Yale System Lives! Long Live the Yale System.").

Finally, we take a look at the man who set the Yale System in motion more than 75 years ago. Adapted from a chapter in a new history of the school by former Dean Gerard N. Burrow, M.D. '58, HS '66, "A Steam Engine in Pants" (page 22) chronicles how Milton C. Winternitz, M.D., brought Yale back into the ranks of elite medical schools after a period of decline and gave birth to the Yale System in the process. It's a fascinating story that sheds light on the origins of the current debate.

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SECOND OPINION BY SIDNEY HARRIS





GREG MORGAN

Private lives, public concerns

Safeguards for patient data take on a new urgency as HIPAA's impact becomes apparent.

A patient's chart can be many things. It is a compendium of ailments and treatments, but it is also a life story, full of clues to a patient's state of mind, love life and financial status. In settings such as the Yale-New Haven Hospital and the School of Medicine, this window into a person's life is open to physicians, nurses, medical students, residents, clerical workers, pharmacists and others who might need access to it. Now the long-awaited implementation of a 1996 law requires that all health care workers privy to a patient's personal information be trained in protecting confidentiality.

The Health Insurance Portability and Accountability Act, or HIPAA, requires health care professionals to protect privacy and create standards for electronic transfers of health data. The Office for Civil Rights at the Department of Health and Human Services will enforce the regulations and impose penalties on institutions that do not make a good-faith effort on privacy and security. The deadline for university compliance is April 13, 2003. Electronic exchange standards will be required six months later.

Horror stories of people being denied jobs and loans because of their health status prompted Congress to pass the law in 1996. Also looming was the prospect of genetic discrimination given the possibility that one's genes might be predictors of disease

(See "Tailor-Made Medicines Are Within Our Reach" p. 6). "There is no question that legislation ensuring the right of privacy to medical information is necessary," said Jed M. Shivers, M.B.A., deputy chief operating officer of the Yale School of Medicine and a member of the university's executive steering committee on HIPAA compliance. The most pernicious abuses regarding privacy stemmed from the sale of information by insurance firms or others. But leaks of personal data also occur due to carelessness. For example, Shivers pointed out that staff can no longer discuss cases while another patient is in the room. Patient and drug names, which might provide hints of specific ailments, may no longer be listed on receipts. "Our strategy is to create a strong network, make the system locked down and have information take the appropriate path," Shivers said. Faculty will be trained to secure data on computers and portable devices with passwords, automatic locking screensavers and other tools.

"This is an opportunity to do the right thing and become more efficient by automating the processes that should be automated," said Susan E. Grajek, PH.D., director of communications and technical support for the medical school's information technology service, ITS-Med.

The regulations are still evolving, but they require most medical providers to obtain a patient's written consent before disclosing information; institutions must hold onto the consent forms for six years. "The concept sounds basic and straightforward, but there are hundreds of pages of complicated regulations," said Julie Behm Carter, J.D., associate general counsel for Yale.

The biggest changes will be in terms of education and awareness, according to David Stagg, PH.D., director of Systems Engineering and Security for ITS-Med and a research scientist in pharmacology. Care will be taken to keep records private, from

simple matters such as not leaving faxes exposed on a desk to installing encryption tools on computers.

The university is surveying more than 5,500 people, including employees, postdocs and other fellows, researchers and volunteers, to determine how and where records are stored, how many people must be trained and how protected information is used. Shivers expects everyone at the School of Medicine to undergo some training on an interactive website. Training is on hold while the government modifies the rules. Grajek does not expect the Web-based training sessions to last more than 90 minutes. "I'm optimistic that HIPAA won't be overwhelming," said Grajek, who also coordinated preparations for Y2K conversion at the medical school. "People must take HIPAA seriously, but there will be minimal disruption."

Shivers noted that the law is not perfect and will continue to evolve as institutions adapt. Already, the government has eased regulations about research and sharing knowledge with medical students.

"This will be an ongoing effort," said Janet E. Lindner, a project manager in the office of the vice president of finance and administration, who will organize implementation of HIPAA at Yale. "But people throughout the university are working together as a project team on a goal we all care about."

Smallpox vaccination study places administration's plans for terror response in doubt

In the aftermath of September 11, Yale public health specialist Edward H. Kaplan, PH.D., started thinking about how to fight bioterrorism. The result was a study on smallpox vaccination that made national headlines, in no small part because it criticized federal government terror reaction plans as being too little, too late.

Using a mathematical model, Kaplan found mass vaccination of the population in the area of an outbreak to be far more effective than "ring vaccination," the limited immunization strategy the government first recommended as the initial response to a smallpox attack. He published his study in the *Proceedings of the National Academy of Sciences* in July, shortly after the Bush Administration announced its policy.

Working with MIT colleagues David L. Craft, M.S., and Lawrence M. Wein, PH.D., Kaplan used their model to analyze how different vaccination strategies contain the spread of a smallpox attack that infects 1,000 people in a large city. Their study took key features of guidelines from the Centers for Disease Control and Prevention (CDC) and applied them to a disease transmission model. The least effective method was ring vaccination, which isolates the infected and vaccinates people found to be in close contact with them. Ring vaccination would allow 367,000 cases of smallpox and 110,000 deaths and would take 350 days to end the outbreak.

By contrast, a mass vaccination begun as soon as authorities learned of the attack would result in 1,830 cases and 560 deaths and end the outbreak in 115 days. (It takes two weeks for smallpox to incubate and for symptoms to appear.) The analysis found that switching from ring to mass vaccination on the 33rd day of a crisis would still allow 15,570 cases and 4,680 deaths.

Before smallpox was eradicated in 1980, ring vaccination was the accepted

strategy, because cases were isolated and most people had been immunized. Throughout the history of the disease, the government has been reluctant to undertake mass vaccination, since the vaccine uses a live virus that can cause severe side effects and even death. Still, Kaplan said the fatality risk of mass vaccination—about one person in 1 million—is minuscule compared to the possible death toll of a terror attack.

As *Yale Medicine* went to press in October, the CDC director, Julie L. Gerberding, M.D., M.P.H., and other top bioterrorism officials announced a change in strategy away from ring vaccination, recommending instead that voluntary immunization begin immediately for 1 million military personnel, followed by 10.5 million health care workers and emergency responders. The vaccine would then be offered to the public, most likely in early 2004. As President Bush considered the proposal, physician organizations including the American Medical Association and the American Academy of Pediatrics (AAP) urged caution and a continued policy of ring vaccination.

"The [recommendation] is flexible and could change if there is an actual outbreak of smallpox, or if a safer vaccine becomes available," said Robert S. Baltimore, M.D., professor of pediatrics and epidemiology at Yale and lead author of the AAP's policy statement.

Kaplan has found himself in political territory before. His landmark work on the New Haven needle exchange program led some to label him an activist for AIDS patients and drug addicts. But Kaplan rejects any notion that his research has a political dimension. "Many if not most would consider the needle exchange results to come from the political left and the smallpox results to come from the political right," he said. "The truth is, in both cases, the results came from reasoned analysis."

Tailor-made medicines are within our reach, Collins tells genomics conference

Within two decades a new generation of highly effective designer drugs will spring from our improved understanding of the human genome, according to the director of the National Human Genome Research Institute, Francis S. Collins, M.D., Ph.D. '74, FW '84.

As scientists delve more deeply into the human genome, they are developing faster and cheaper techniques to identify individual genetic variations, Collins told the audience attending the fifth annual Pharmacogenetics and Medicine Lectures sponsored by

Genaissance Pharmaceuticals in Harkness Auditorium in June. Locating these genetic polymorphisms is crucial to making drugs more effective and preventing harm, because genetic differences lead to different drug responses. Collins believes that by about 2010 information about individual variability will allow doctors to choose medications that best fit the individual's genetic makeup. "Doctors will have to get used to determining the genotype before writing the prescription," said Collins, who earned his doctorate in physical chemistry and did a postdoctoral fellowship in genetics at Yale.

Identifying variation is still painstaking, he said, because "the genome is a big place." Searching for polymorphisms by typing the whole genome for each individual in a study is too slow and far too expensive to be practical, even at the current cost of 50 cents per genotype, said Collins. If an individual's genome contains about 10 million places where variations are likely (out of

3 billion base pairs), then scanning each genome for the most common variation for a sample of 1,000 people with a disease and 1,000 controls would cost \$10 billion.

Researchers are developing shortcuts. One explores the relationship between variants in the genome and their neighbors. Once such a "haplotype map" is developed, this method would reduce the number of variants that have to be tested by a factor of about 40. Another promising shortcut for identifying disease-linked polymorphisms is to pool DNA samples from a large number of individuals, then compare the pooled genomes of people with a disease with the pooled genomes of controls. In Collins' lab at the NIH, this pooling method has proven accurate to within 3 percent and is far cheaper than analyzing each individual's genome separately. Collins estimated that a combination of the haplotype map, the pooling method and an anticipated drop in the cost of genotyping would put the price of a study of 1,000 affected people and an equal number of controls at about \$50,000.

Given the public's concern about potential misuse of genetic information, Collins said the nation urgently needs laws barring genetic discrimination and urged audience members to get involved in this debate. He predicted that primary care providers, especially nurses, would play a critical role in educating and counseling patients about how their health care might be affected by advances in human genetics.

A list of links to websites on the human genome can be found at www.genome.gov and also at www.nchpeg.org/resources/resources.asp. A free poster of the genome is available from http://public.ornl.gov/hgmis/external/poster_request.cfm. The site also has a guide for accessing and using the gene, protein and genetic disorder databases.



"Doctors will have to get used to determining the genotype before writing the prescription," National Human Genome Research Institute Director Francis Collins told a Yale audience in June.

Magazine gives students an outlet for creative work and a way to “unpack experiences”

Second-year M.D./P.H.D. student Kumar Narayanan recognizes that “not a lot of emotional experience in medicine is talked about. Part of being a professional is building a little bit of a wall between you and a patient ... and that’s not a bad thing.” But Narayanan still feels a need to “unpack experiences,” and he does this, in part, by writing. “Putting it down on paper or on a computer screen is a way to make something intractable, tangible. That’s the first step for me in engaging the experience.”

Narayanan’s “Reflections,” describing his evolving feelings as he performs a human dissection, is one of 28 poems, stories and personal essays (along with drawings and photographs) published earlier this year in *Scope: The Yale Health Professions Literary Magazine*.

Editor Ilene Wong, a third-year medical student, found the inspiration

to revive the medical school’s on-again, off-again literary magazine while taking part in a writing seminar led by author and retired surgeon Richard Selzer, M.D., HS ’61. It is her hope, Wong said, that *Scope* will expand the community of writers the seminar has created. Reading the work of colleagues can “make people realize there are other people [writing] out there” and convey the message that “you can support and pursue your literary goals in a medical setting.”

Selzer thinks his bimonthly workshop for a dozen students accomplishes that. Students “are overwhelmed with the new technology and this distancing of the caregiver from the patient. I am reminding them that there is a whole world of literature and humanities that they can bring to bear upon their contact with the sick,” said Selzer, whose 10 books include *Confessions of a Knife* and *Letters to a Young Doctor*. “The students love it. They want to write. ... I want them to be a generation of writing doctors that come after me.”

One story in the magazine describes a young doctor confronting a belligerent patient. Another meditates on a grandmother’s illness in light of a medical student’s expanding knowledge of pathology. A poem describes the use of an insulin needle to inflate worms for use as fish bait. Much of the work came from medical students, but contributors also include residents, nursing and public health students and a faculty member. Funding to print 150 copies of *Scope* came from the Office of Student Affairs, the Department of Internal Medicine and the Program for Humanities in Medicine.

“I was happy that people were writing and were willing to send something in,” Wong said. “I think it’s gutsy to send something into an unknown venue. It’s an act of vulnerability.”

Two M.D./P.H.D. students plan to publish another issue of *Scope* in the spring. They are Eyal Kimchi, a second-year student who helped with editing and layout, and classmate Jena Giltneane.



JACQUELINE PARK

Untitled

i read the news today, oh boy
– the beatles

but it’s what i didn’t
read
between the lines
paved with half-told lies
(capital L
capital I
capital E)
repeated so many times
we begin
to accept
as half-told truths
besides
who has the time
to check the facts ma’am
and form
easier to have
half-told opinions
mostly sold
bought up
eaten up

lies

Teeb Al-Samarrai

The student journal *Scope* provides aspiring physicians, nurses, physician associates and public health practitioners with an avenue for literary and artistic pursuits. Typical of the students’ efforts are the photograph at left by Jacqueline Park, M.D. ’02, and the poem by Teeb Al-Samarrai.

Assistant dean leaves Yale for a post at Cornell's new medical college in the Persian Gulf

In her 13 years at Yale in various posts, Cynthia A. Andrien, M.S., has seemingly done it all. She's been the bearer of glad, and sad, tidings every March at Match Day, the cheerleader for a charity football game, counselor and advisor to students, a source of information and, at times, a shoulder to cry on.

In August Andrien, the assistant dean for student affairs, left Yale for Cornell. But rather than hop Metro-North to New York City, she flew to Qatar, an oil-rich monarchy in the Persian Gulf. She started in September as associate dean for admissions and student affairs at the new Weill Cornell Medical College in Qatar, a joint project of Cornell and the Qatar Foundation for Education, Science and Community Development. The school will offer a six-year program; two years of premed followed by four years of medical education. The inaugural premed class entered this fall; the first medical school class will enter in 2004.

Andrien, the former registrar who started at Yale as administrative assistant to then-Associate Dean for Student Affairs Robert H. Gifford, M.D., HS '67, was approached earlier this year by a headhunting firm. She said several factors about the job intrigued her. There was "the opportunity of developing a program from square one," she said, and the excitement and exoticism of "working in a very different culture, living in a different area, being able to travel and experience other parts of the world."

The decision was not an easy one. Her husband, Steve, a sales representative for a company that markets class rings, will stay in Connecticut, at least for a while, she said, although she'll be able to visit every eight weeks. Andrien said she'll also miss the students. "At commencement, as the students were going by, I was feeling so torn and sad,"

she said. "But I kept thinking, 'They move on so it's OK if I move on.'"

It may strike some as a particularly difficult and dangerous time to be taking on a job in as volatile a region as the Middle East, but after a long weekend in Doha in June, Andrien found the country reassuring. "I felt very safe there," she said, noting that she'll live in a housing complex for international workers.

Qatar is a Connecticut-sized patch of desert on a peninsula that juts out into the Persian Gulf from its only land border, with Saudi Arabia. The country has a progressive administration that allows women to drive and doesn't require them to cover their faces. Andrien expects 70 percent of the school's first premed class to be women. "If women were not treated well I would not have taken the job," she said. "My key role is to be working with the students and counseling them academically, careerwise and somewhat personally."

That personal touch is what has endeared her to hundreds of medical students, as well as the medical school faculty. "You have made a big university feel like a community," said Richard Belitsky, M.D., associate clinical professor of psychiatry, one of the speakers at a farewell reception in July.

"She has this amazing ability to make you feel like you're so special," said Kavita Mariwalla, a third-year student. "She makes you feel like she is giving you her undivided attention."

Nancy R. Angoff, M.P.H. '81, M.D. '90, HS '93, admitted that her first thoughts on hearing of Andrien's leaving were selfish. "What am I going to do?" she asked herself. Then another thought came to Angoff. "The students in Qatar are the most fortunate medical students in the world right now."



JOHN CURTIS

Assistant Dean Cynthia Andrien talks with physiology professor Emile Boulpaep at Andrien's going-away party in July.

Executive of firm that cloned human embryos argues the research should continue

The future of therapeutic cloning rests on shaky ground as legislators contemplate new laws that would make it a crime not only to clone human embryos, but to use any products derived from such cloning. As Robert P. Lanza, M.D., vice president of medical and scientific development at Advanced Cell Technology (ACT), told a Yale audience in May, “we could go to jail for 10 years and be fined \$1 million if pending legislation is enacted.”

ACT hit the front pages late last year when it reported having cloned human embryos in hopes of harvesting stem cells for research, although the embryos grew for only a few hours to between four and six cells. The company has been at the forefront of research into technologies of genetic manipulation, restoring youth to aging cow cells, creating biodegradable scaffolding for replacement tissue and using animal cells to develop organs for xenotransplantation.

Yet research into such potential therapies is threatened, Lanza said at “The Future of Therapeutic Cloning,” a symposium sponsored by the Yale Bioethics Project. In his keynote talk, he said about 80,000 people are awaiting donor organs, yet only 20,000 will undergo transplants. “For many patients, their only hope of survival is the hope of getting a donor organ,” he said. “With the advent of cloning, we have a new technology at our disposal that might allow us to eliminate this problem of organ shortage as well as that of immunosuppressive therapy.”

The prospect of cloning human embryos to harvest their stem cells has been swept up in the ongoing national debate over abortion. Those stem cells can, theoretically, be prodded to differentiate into virtually any human tissue. But the embryos from which they are derived are destroyed in the pro-



JOHN CURTIS (2)



Human cloning holds the promise of treatments for disease, yet an ongoing ethical and moral debate has held up research in the field, according to Robert Lanza (top), an executive at Advanced

Cell Technology in Worcester, Mass. Joining Lanza in a discussion of the issues were Yale clinicians and scientists Jeffery Kocsis, Arthur Galston, Maurice Mahoney and John Young, from left.

cess, an act anathema to abortion opponents. “There will never be federal money for this work,” Lanza told an audience in Luce Hall in May. “The debate now is whether they are going to let anyone do it.” Should the so-called Brownback Bill that has been pending before the Senate since the fall of 2001 be passed, Lanza said, cloning of human embryos for any purpose, reproductive or therapeutic, would become a crime.

After Lanza’s talk, two panels of Yale ethicists, physicians and lawyers discussed the social, medical and moral implications of cloning and stem cell research. Science is pitted against “very strongly felt moral and ethical feelings,” said panelist Myron Genel, M.D., professor of pediatrics. “The scientific community, at least reflected by statements of our most prestigious organizations, is virtually unanimous that this research should go on.”

Lanza noted that before ACT published its report of cloning a human embryo in November 2001, a poll found 90 percent of the public opposed to human cloning, both therapeutic and reproductive. “There was no distinction between the applications,” he said. But within two weeks a CNN/USA Today/Gallup poll reported that 54 percent of the public supported cloning for medical purposes. “At last people are starting to understand that there is the kind of cloning to make babies and the kind of cloning to treat human disease,” Lanza said.

“People have different opinions as to the moral value of this entity,” said Lanza, referring to cloned embryos. “This isn’t an academic question. There are literally tens of millions of people out there who could benefit.”

For some in public health, changes to chicken have been foul deeds, indeed

The role of chicken in the American diet has changed radically during the past two generations: what was once the centerpiece at Sunday dinner is now a fast food; what was praised as a healthy source of protein is now maligned as a vehicle for fat.

The public health implications of this evolution were part of the conversation at a multidisciplinary conference at Yale College called “The Chicken: Its Biological, Social, Cultural, and Industrial History From Neolithic Middens to McNuggets.” Researchers, poultry workers and farmers attending the conference in May considered the chicken in relation to industrialization and globalization, workers’ rights and animal rights and even symbolism and folklore. Conference participants in public health focused on the “McNuggets” aspect of the contemporary chicken.

A roast chicken dinner was once considered a special meal, “a big deal,” said Marion Nestle, PH.D., chair of nutrition and food studies at New York University. “Now it’s a junk food, a fat food. ... It’s fried, so it gets maximum oil and breading.” Nestle believes that highly processed meats may be popular in part because Americans feel ambivalent about eating animals. McNuggets “don’t look very animal-like,” she said.

Deep-fried chicken meat, served as nuggets, “tenders” or strips, adds another inducement for overeating in a culture in which obesity is increasing—and where overeating is good for business. Food companies spend copiously on marketing because “the United States produces 3,800 calories per day for every man, woman and child in the country, and that’s about twice as much as most people need,” said Nestle. “The government is complicit in that marketing effort, because these companies are very, very large

and like any other business, they support congressional campaigns.” Federal subsidies and price supports help keep chicken cheap, she said. The actual “farm value” of food in the United States averages 19 cents for each dollar consumers pay for it, Nestle said. The other 81 cents are spent on labor, shipping, processing, packaging, advertising and profit.

In restaurants that offer children’s menus, young diners are most likely to choose chicken, according to a study by conference participant Kelly D. Brownell, PH.D., professor of psychology and of epidemiology and public health at Yale. Brownell and colleague Marlene B. Schwartz, PH.D., co-director of the Yale Center for Eating and Weight Disorders, surveyed 10 major fast food restaurants and “family-style” chains. In eight of these restaurants, some form of fried chicken was the top choice for children. And in each case the meals contained more calories and fat and less fiber than the U.S. Department of Agriculture guidelines suggest a child should consume in a single meal, Brownell said.

Chicken has been considered healthier than beef, because it has less fat. Now, says Brownell, “chicken has gone from being part of the solution to being part of the problem.”



THE CLYDE AND HELEN WU COLLECTION OF CHINESE PAINTINGS, GIFT OF DR. CLYDE WU.

A multidisciplinary conference considering the state of the modern chicken used this depiction of the bird on its program cover. *A Rooster and a Hen* by Yang Shanshen is from the collection of the Yale University Art Gallery.

Yale team assessing neural stem cells as a treatment for Parkinson's disease

Researchers at Yale are about to embark on a series of experiments to determine whether human neural stem cells can cure Parkinson's disease that has been induced in monkeys by a neurotoxin. Pilot studies have shown that these cells can be successfully integrated into the brains of fetal, neonatal, infant and adult monkeys for at least a month.

The experiments, funded by a \$2.4 million grant from the National Institute of Neurological Disorders and Stroke, are designed to determine whether the stem cells, once integrated into the brain, will restore the production of dopamine. Parkinson's results from unknown processes that kill dopamine cells, causing muscle rigidity, lack of coordination, difficulty moving and tremors. Primordial and uncommitted, neural stem cells can be propagated in large numbers and then safely differentiated into the necessary dopamine-producing neurons after they are injected into the brain. "Stem cells appear capable of becoming the appropriate replacement cells for the lost dopamine cells in Parkinson's disease," said lead investigator D. Eugene Redmond Jr., M.D., professor of psychiatry and neurosurgery. "This appears to happen spontaneously when they are implanted into the correct areas of the brain, and there are also known methods as to how to get them to do this in culture."

Stem cells have certain advantages over fetal brain tissue, which Redmond used in similar research a decade ago. In those experiments Redmond and other researchers, relying on private funding, transplanted brain tissue from aborted fetuses into the brains of patients with Parkinson's disease. They reported some initial success, but over the years outcomes were mixed. The progress of that research has been slow, with a major drawback being the

difficulty of finding sufficient quantities of suitable fetal cells.

Unlike the fetal cells, stem cells divide in culture, so adequate amounts can be produced and they can be made of uniform quality and meet established safety levels.

"The human neural stem cells migrate to populate developing or degenerating brain regions, perhaps allowing a functionally correct and effective reconstruction," said Redmond.

Federal funding for the research is permitted because the stem cell lines are derived from fetal-cadaver brain tissue, not embryos. Research involving embryonic stem cells remains controversial. Last year President Bush announced that federal funding would be permitted only for research involving embryonic stem cell lines derived prior to Sept. 9, 2001.

The project, to be carried out in conjunction with scientists from Harvard Medical School, the University of Colorado and the St. Kitts Biomedical Research Foundation, also seeks to test whether the cells will survive, differentiate and integrate into the brains of normal adult monkeys without immunological rejection or harmful overgrowth.

"These studies will advance our understanding of the neurobiology and safety of human neural stem cells in a well-established, clinically relevant primate model of Parkinson's disease and, if successful, will support safe clinical studies in patients with Parkinson's disease in the future," Redmond said. "The results will also advance our understanding of useful methods for studying and treating a broad range of neurodegenerative, genetic and traumatic conditions of the nervous system."

et cetera ...

NEW BUILDING NEARLY FINISHED

As the Congress Avenue Building approaches what is known in the construction trade as "substantial completion," much of the remaining work is going on behind the scenes. Workers began digging a tunnel under Congress Avenue in June to connect the new building with the Laboratory for Surgery, Obstetrics and Gynecology across the street. The final phase includes the testing of electrical, heating, air conditioning and air filtration systems, said project manager Reyhan T. Larimer. Moving will begin in November and continue through March under the supervision of Freeman Enterprises, a New York firm specializing in moving scientific laboratories. First the building will undergo customization to accommodate special laboratory equipment. "The building was designed generically," Larimer said. "Now we have to make minor adjustments for the people who are moving in." We'll examine the move in detail in the Winter 2003 issue of *Yale Medicine*.

TRIBAL TOURNAMENT

In late spring the Mashantucket Pequot Tribal Nation of southeastern Connecticut, owners of the world's largest casino, joined with 20 companies and dozens of individuals in a fund-raiser to benefit the Department of Pediatrics' section of immunology. The Timber Spears Memorial Golf Outing, held in memory of a 3-year-old tribal member who died in August 2001, attracted 146 participants and raised more than \$23,000. Timber Spears was born with a primary immune deficiency; his grandmother Phyllis Waite, a tribal elder, proposed the golf outing at the Foxwoods Country Club to encourage research into the condition. "We are grateful to his family for their efforts to help other children with primary immune deficiencies," said José G. Calderon, M.D., who treated Timber from the time he was 2 months old. "The gift will provide resources and keep the child's spirit alive." Steve Tantillo, a Mashantucket Pequot Athletic Commission coordinator, said the golf outing will be repeated next year.



HENRIK DRESCHER

When a death defies explanation

A method for flagging mysterious illnesses may be a useful tool in the battle against bioterrorism.

Even before last fall's anthrax attacks, physicians and public health experts worried about the nation's ability to identify and respond to outbreaks of infectious disease. In response to a 1992 report from the Institute of Medicine, the Centers for Disease Control and Prevention (CDC) had begun a surveillance strategy to detect new and unrecognized infectious diseases.

The project, called Surveillance for Unexplained Deaths and Critical Illnesses Due to Possibly Infectious Causes, grew out of two observations: new infectious diseases in this country were breaking out long before they were recognized, and the development of new molecular probes allowed infectious agents to be identified and characterized.

In 1995 the CDC, with partners at Yale and Stanford universities and in San Francisco, Minneapolis and Portland, Ore., began a population-based surveillance using diagnostic tests, death records and hospital discharge records to identify cases that would bear the label UNEX (for unexplained deaths and critical illnesses due to possibly infectious etiologies.) Preliminary results were published earlier this year in the journal *Emerging Infectious Diseases*.

"We found that in a population of 7.7 million, about 40 people are dying or becoming sick from unexplained illnesses each year," said Andre N. Sofair, M.D., M.P.H., HS '90, assistant professor of medicine and one of the authors of

the study. "While this number might seem small, it is rather significant when it is put into perspective. Each year, in a well-served population, there are many young people who become critically ill or die without a diagnosis."

The study, which is continuing, examined unexplained critical illnesses and deaths among people between the ages of 1 and 49 in the San Francisco Bay area, the state of Minnesota and New Haven County in Connecticut. It also looked for cases among people between the ages of 1 and 39 in Oregon. A UNEX case was defined as a previously healthy person who died or was hospitalized in an intensive care unit with a life-threatening illness bearing the hallmarks of an infectious disease for which no cause was identified. The study examined tissue or blood samples from 122 patients who died or became ill for unexplained reasons. The researchers divided patients into syndrome categories that represented their illness, such as a disease of lung or liver, and samples were tested accordingly, with each sample undergoing an average of 28 tests. No new infectious agents were discovered, but the cause of illness was determined in 28 percent of the patients tested.

This pilot study yielded numerous lessons, according to the authors. Future surveillance for UNEX, they found, could benefit from simplified case-finding methods, better quality of specimens and a more focused surveillance of specific syndromes. The authors believe their surveillance approaches will strengthen collaborations among clinicians, laboratory technicians and public health professionals and result in better detection of unexplained deaths and critical illnesses and better monitoring of emerging infectious diseases. "These preliminary findings are being used to direct programs to assist in bioterrorism preparedness and outbreak investigation," said Sofair. "Having more sophisticated diagnostic testing would be helpful in finding a cause of death or illness."

A tool for predicting mortality among older patients, across populations

Any one of 10 conditions—ranging from congestive heart failure to major stroke to diabetes—suggests that geriatric patients run a higher risk of dying within a year of being hospitalized, according to a Yale geriatrician. The list of conditions, said Sharon Inouye, M.D., associate professor of medicine and geriatrics, is not for application to individual cases. Instead, it should be used to make outcomes analysis uniform and to foster appropriate programs and policies for an aging population.

“It’s important to be able to compare how sick people are across populations, across hospitals and across studies,” said Inouye, senior author of the study published in March in the

Journal of the American Geriatrics Society.

Lead author Mayur Desai, PH.D., working with Inouye and her colleagues, wanted to develop a risk assessment tool that would be easy to use without extensive physicals or detailed chart reviews and which would take into account the high burden of illness among the elderly. “We wanted to come up with a system that is based on administrative data that are readily available, identifies high-risk diagnoses and indicates which segments of the population are at a high risk for mortality. We’re hoping this will be useful to people who do research with older patients or develop new systems to care for older patients.”

Inouye and colleagues found that elderly patients with any of 10 conditions were at higher risk of dying within a year of being hospitalized. In descending order of risk, the condi-

tions are congestive heart failure, pneumonia, chronic lung disease, solid tumor cancer that is localized, metastatic cancer, lymphoma/leukemia, major stroke, acute renal failure, chronic renal failure and diabetes with end-stage organ damage. This system is unique in being developed specifically for use with older persons, based on readily available hospital data.

“Given the potential for misuse or misinterpretation we do not advocate use of this index at the bedside for individual patients,” Inouye said. “The index is recommended for mortality prediction in patient groups or populations.”

A BETTER TAKE ON BETA BLOCKERS

A Yale study has debunked the myth that beta blockers—prescribed following a heart attack to guard against future episodes—commonly cause depression, fatigue and sexual dysfunction. Harlan M. Krumholz, M.D., senior author of a July paper in *JAMA*, found that there had been no systematic review of the alleged association and reviewed 15 clinical trials involving more than 35,000 patients. “We found no clear evidence that the use of beta blockers causes depression,” Krumholz said. There was a slight association with fatigue and sexual dysfunction, but Krumholz also found those symptoms among study subjects taking placebo. His conclusion? More patients than are now receiving the medication stand to benefit.

An easier operation for kidney donors, laparoscopy still carries a risk

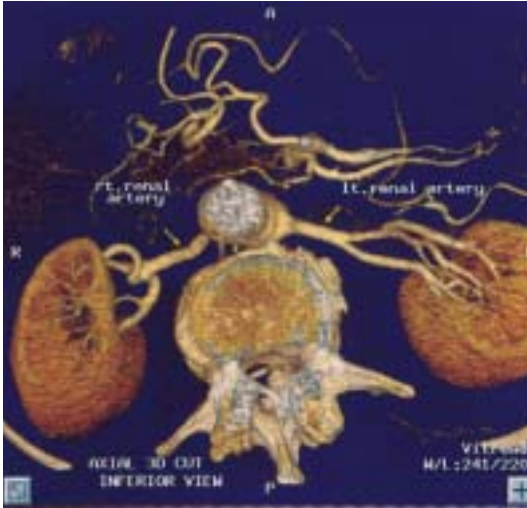
When potential kidney donors meet transplant surgeons Marc I. Lorber, M.D., and Amy L. Friedman, M.D., many have already read on the Internet that laparoscopic nephrectomy is easier on the donor than the conventional open surgery. But according to Friedman and Lorber, the choice is seldom clear-cut. Among the 37 donors who chose to give a kidney at Yale during the first 11 months the advanced procedure was offered here (starting in June 2001), only eight chose the new approach.

The donors' sophistication poses a challenge to Lorber and Friedman. True, laparoscopic nephrectomy offers advantages to people who wish to give a healthy kidney to a relative or friend in need. The technique minimizes scarring because the surgery is done through smaller incisions, including one for a tiny camera that surgeons use to watch their work on a monitor. Laparoscopy can speed recovery and reduce pain. But the technique may also pose risks, including an increased chance of damage

to the intestines and spleen, intra-abdominal scarring and, rarely, bleeding. Whether it's the best choice depends partly on the anatomy of the donor and partly on the donor's decision regarding risks and benefits, according to Friedman, who performs laparoscopic nephrectomies with urologic surgeon Kevin R. Anderson, M.D.

Although laparoscopy may attract new donors, it won't resolve the overwhelming kidney shortage. With 52,000 Americans waiting for kidneys—including 434 on Yale's list—the rate of 14,000 transplants per year falls short. Last year, 2,800 Americans died awaiting kidneys. At Yale and nationwide, most kidneys come from people who are brain-dead following a stroke or trauma (including 25 of 62 kidneys transplanted at Yale from June 2001 through April 2002). Yet only about half of Americans consent to donate the kidneys of a relative who dies.

The pressing issue, says Friedman, is not which type of surgery donors should choose. "The real problem is that we have all these patients who should be helped with a transplant, and we don't have kidneys for them."



The kidneys and renal arteries are clearly visible in this spiral computed tomography image of the anatomy of a kidney donor. The donor decided to have his kidney removed using a minimally invasive procedure that is less painful and has a shorter recovery period than open surgery.

A NEW TOOL FOR AUTISM TREATMENT

Risperidone, an antipsychotic drug, has proven effective for the treatment of behavioral problems in autistic children, according to a Yale study published in July in *The New England Journal of Medicine*. The clinical trial targeted not the core symptoms of autism, including impaired relations with others and delayed language, but related problems such as self-injury, aggression and tantrums, said Lawrence D. Scahill, M.S.N., M.P.H. '89, PH.D. '97, an associate professor at the Yale Child Study Center and lead author of the study. More than two-thirds of the children randomly assigned to risperidone showed a positive response, compared with 12 percent in the placebo group. No previous study on autism has shown this large a treatment effect.

et cetera ...

OLD DRUG, NEW TREATMENT

A postoperative pain reliever has a new role in the delivery room, according to a study by Yale doctors. When diluted, the drug hydromorphone, also known as Dilaudid, provides pain relief during labor and reduces the need for localized numbing agents, according to Raymond S. Sinatra, M.D., PH.D., professor of anesthesiology and lead author of a study published in the May issue of the journal *Anesthesia & Analgesia*. "By decreasing the amount of local anesthetics in the epidural, women are able to push more vigorously and can actually feel the baby being born without feeling pain," Sinatra said. On the basis of these findings, and clinical experience gained over several years, "hydromorphone is the epidural opioid of choice for labor and delivery analgesia at our institution," said Sinatra.

EMPLOYMENT AND WELL-BEING

Being out of a job increases one's chances of dying, according to a Yale scientist. "Employment is the essential element of social status and it establishes a person as a contributing member of society," said M. Harvey Brenner, PH.D., a visiting professor in the Global Health Division at the Department of Epidemiology and Public Health. "Employment also has important implications for self-esteem. When that is taken away, people become susceptible to depression, cardiovascular disease, AIDS and many other illnesses that increase mortality."

Brenner's study found that mortality rose when unemployment rose and declined when unemployment declined. Low levels of unemployment also led to an increased community sense of well-being. The results of the study, the largest of its kind on mortality patterns in Europe and the United States, were presented to members of the European Parliament in May. The European Union commissioned the study to give a human context to unemployment rates over the last 10 to 55 years in 16 countries.

June issue of *Gynecological and Obstetric Investigation*. "It may be that uterine contractions that are part of the female orgasm induce more effective menstrual-fluid clearance of the uterine cavity, which in turn may facilitate cervical outflow. Further, the use of tampons may be more efficient at the removal of menstrual fluid compared to the use of pads."

Women with endometriosis have endometrial tissue, which normally grows only in the uterus and is shed during menstruation, growing on the Fallopian tubes, ovaries, other sites in the pelvis or, in rare cases, outside the pelvic area. It is typically found in women who are childless or who have children later in life.

The study has provoked some controversy. "To state that women aren't getting endo because they're having sex—when it's just as likely that they are not having sex because they are experiencing the pain of endo—is jumping to conclusions," the Endometriosis Association stated on its website. Kliman claims that objections to his conclusions are related to a long-held belief that dioxin in tampons is the real culprit but, he said, "our study refutes this."

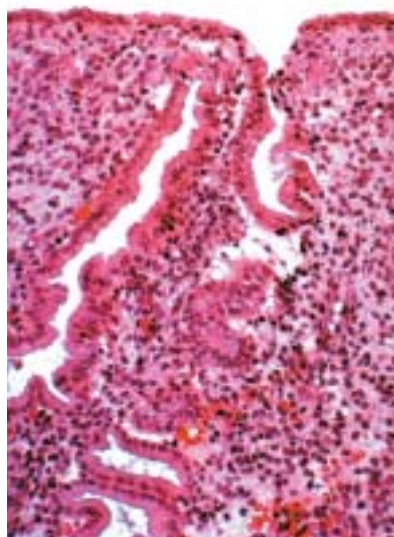
According to Kliman, a backup of menstrual fluid in the pelvic cavity is believed to play a prominent role in the pathogenesis of endometriosis. At the start of his research Kliman held to the conventional wisdom that tampon use, douching and sexual activity, especially with orgasm, at the time of menstruation would heighten the chances of developing endometriosis. Instead, he found that douching did not appear to lessen the risk of endometriosis, but sexual activity, orgasm and tampon use did.

"Our study has an important public health message for women, especially at a time when many women seeking infertility care have endometriosis as their primary diagnosis," said Kliman. "Our study suggests that tampon use could be one of the strongest protectors against endometriosis."

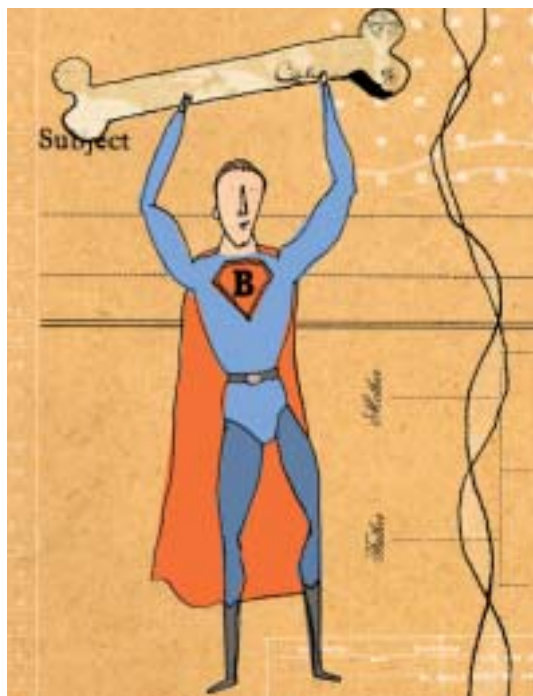
Scientist sees a connection between endometriosis and tampon use, orgasm

Tampons and sex appear to protect women from endometriosis, a painful condition that afflicts about 10 million American women and can cause infertility, according to research by a Yale physician.

The finding came as the result of a study exploring whether sexual behaviors, orgasm, tampon use and douching during menstruation modified the risk of endometriosis. "To our surprise, sexual behavior, orgasm and tampon use during menstruation were found to be less frequent among women with endometriosis compared to controls," said Harvey J. Kliman, M.D., PH.D., a research scientist in the Department of Obstetrics and Gynecology and lead author of the study published in the



A normal 25-day endometrium. Fragments of menstrual endometrium that are refluxed through the Fallopian tubes are theorized to be a cause of endometriosis.



“Unbreakable” bones prompt a hunt for genes

Aided by a Connecticut family with unusually high bone density, a Yale team sheds light on osteoporosis.

The DNA of an extended Connecticut family has yielded a possible target for the treatment and prevention of osteoporosis, according to Yale scientists who reported their findings in the May issue of *The New England Journal of Medicine*.

Members of this family carry a genetic mutation that causes high bone density. They have a deep and wide jaw and bony growth on the palate. Richard P. Lifton, M.D., Ph.D., chair of the Department of Genetics, along with Karl L. Insogna, M.D., professor of medicine and director of the Yale Bone Center, and colleagues, traced the mutation to a gene that was the subject of an earlier study. In that study researchers showed that low bone density could be caused by a mutation that disrupts the function of a gene called *LRP5*. In the recent study, the Yale team mapped the family’s genetic mutation to the same chromosome segment in *LRP5*. “It made us wonder if a different mutation increased *LRP5* function, leading to an opposite phenotype, that is, high bone density,” Lifton said.

Family members, according to the investigators, have bones so strong they rival those of a character in the 2000 movie *Unbreakable*. “If there are living counterparts to the [hero] in *Unbreakable*, who is in a terrible train

wreck and walks away without a single broken bone, they’re members of this family,” said Lifton. “They have extraordinarily dense bones and there is no history of fractures. These people have about the strongest bones on the entire planet.”

Insogna first heard about the family a few years ago during a discussion of a clinical case being studied at Yale. Joseph L. Belsky, M.D., clinical professor of medicine, told Insogna that he knew of a family with high bone density. “I mentioned that I, too, had been referred a patient with extraordinarily high bone density,” Insogna said. “When we pieced together the family tree, we realized these people were all related.”

Ultimately, 20 members of the family provided blood samples for DNA testing, and most also had their bone density measured. Seven had extremely high bone density in the spine, hip and throughout their bodies. Nine family members had normal bone density.

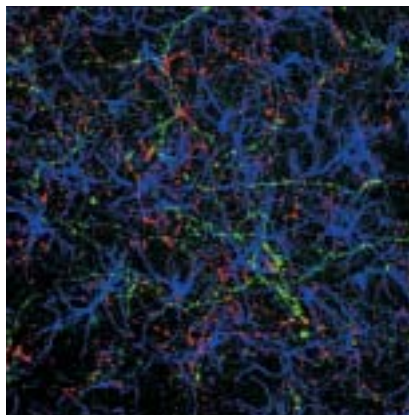
“What we found is that the high bone density in this family behaved as a single gene disorder,” Lifton said. “We then went on to map the location of the gene and identify the specific mutation responsible for the high bone density.” The study demonstrated that the mutation prevents the action of a normal antagonist of the Wnt signaling pathway, resulting in unopposed Wnt signaling and increased bone formation.

Most importantly, the new finding suggests that medications that mimic the effect of this mutation would promote increased bone density, providing a rational target for new drug development.

In experiment with rats, an engineered peptide helps the spinal cord regenerate

Building on their previous research, scientists at Yale have developed a synthetic peptide that promotes nerve fiber growth in the damaged spinal cords of laboratory rats.

If applied to humans, this finding could reverse the effects of brain and spinal cord injuries resulting from trauma, stroke or degenerative diseases such as multiple sclerosis. The study, published in the May 30 issue of *Nature*, confirms which molecules block axon regeneration in the spinal cord, according to lead author Stephen M. Strittmatter, M.D., Ph.D., the Vincent Coates Chair of Neurol-



STEPHEN STRITTMATTER

The explosion of color seen in these images confirms the growth of nerve fibers, shown in red, in the injured spinal cord of a laboratory rat. The green structures are regenerating axons, and the interconnecting blue lines are astrocytes.

ogy. It also shows that a peptide can spur new growth. Axons extend from neurons and carry nerve impulses to target cells.

In previous research Strittmatter discovered a protein he called Nogo, which inhibits regeneration of axons. A subsequent paper described the receptor through which Nogo acts. His latest research has found a way to counteract the action of the Nogo protein.

“We developed a way to block Nogo with a peptide that binds to the Nogo receptor and prevents it from doing its normal job,” said Strittmatter. “There is no drug used today to promote axon recovery in humans, so it is hard to predict how well this drug will work in humans.”

In laboratory rats the drug did promote the growth of nerve fibers, and the rats could walk better than those that did not receive the treatment. The peptide, comprising 40 amino acids, was inserted into each rat’s spinal canal through a catheter over four weeks. Human trials will not begin until researchers determine whether the synthetic peptide can promote nerve fiber growth for weeks or months after injury, and whether the peptide is effective and safe for use in humans.

“There is some reason to think the peptide might promote growth in older injuries, because some damaged nerve fibers in the brain and spinal cord just sit there,” Strittmatter said. “If we had some way to block these inhibitors the nerve fibers might grow back again.”

SIDS AND A FAULTY NEURON

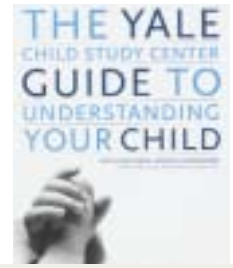
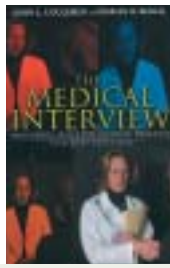
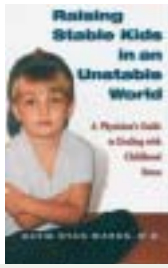
A study by Yale physicians suggests that sudden infant death syndrome (SIDS) may be linked to a defect in a neuron that alerts the body to high carbon dioxide levels.

“When someone falls asleep with their face in a pillow, carbon dioxide levels rise,” said George B. Richerson, M.D., Ph.D., HS ’91, associate professor of neurology and physiology. “The normal response is to wake up slightly, turn the head and breathe harder. There is evidence that some infants who die of SIDS lack this normal protective response.”

SIDS strikes one in 1,000 infants and is the leading cause of death of children between two weeks and one year of age. Physicians have identified risk factors including lying face down, prematurity, low birth weight and a recent, mild upper-respiratory infection. Previous studies had found abnormalities in serotonin-containing neurons in the brains of infants who died of SIDS. Richerson and his co-investigators reported in *Nature Neuroscience* that, in rats, serotonergic neurons are situated next to large arteries in the brain, an ideal location for sensing carbon dioxide levels in arterial blood.

SEEKING GENES AND PROTEINS

As part of a billion-dollar investment in science and engineering, the university announced in April that it will spend more than \$200 million on the new Yale Center for Genomics and Proteomics, which will explore the myriad functions and interactions of genes and proteins in a range of organisms including humans. The research will help scientists understand basic biological processes and promises to open doors for the diagnosis and treatment of disease. “In addition to research, the center will be used for teaching and to amplify our interactions and partnerships with industry,” said Director Michael Snyder, Ph.D., chair of molecular, cellular and developmental biology. Added Graduate School Dean Susan Hockfield, Ph.D.: “We’ve designed a structure that provides access to state-of-the-art technology to scientists all over our campus, and that will encourage collaboration in research and teaching. ... Our aim is to create a center without walls.”



Chiropractic: The Greatest Hoax of the Century? The Whole Truth, 2nd ed.

by Ludmil A. Chotkowski, M.D. '42

New England Novelty Books (Kensington, Conn.) 2002

This book proposes that the practice of chiropractic is a false health care procedure that has flourished unchallenged over the past century. Chotkowski contends that there is no scientific validity to the chiropractic theory of a vertebral body subluxation and that chiropractic cannot cure disease or promote wellness in any way.

Raising Stable Kids in an Unstable World: A Physician's Guide to Dealing with Childhood Stress

by David R. Marks, M.D. '89

Health Communications (Deerfield Beach, Fla.) 2002

This book can help parents help their children cope with the stresses they will face in their daily lives, from the aftermath of September 11 to the challenges of everyday events and activities.

Marks says some of the stresses are obvious and dramatic and are clearly a product of the "new world disorder," and others are more subtle and a result of the pressures parents place on their children, including an overload of activities and excessive pressure to succeed.

Marks shows how many stress-related disorders can be avoided and treated without medication. He offers suggestions for exercise, expression, breathing, visualization and meditation.

The Medical Interview: Mastering Skills for Clinical Practice, 4th ed.

by John Coulehan, M.D., and Marian R. Block, M.D. '71

F.A. Davis Company (Philadelphia) 2001

This text for students in physician, nurse practitioner and physician assistant training programs focuses on interactive skills as tools for gathering data objectively and precisely and for building relationships with patients. Real clinician-patient dialogues, both exemplary and flawed, are demonstrated.

The authors present topics such as alternative medicine, malpractice prevention, conveying bad news, interviewing adolescents, spirituality and cultural sensitivity.

The Grundilini: From the Chronicles of Audelae

by Benjamin R. Doolittle, M.D. '94, M.D. '97

New Canaan Publishing Company (New Canaan, Conn.) 2002

The Grundilini is a fantasy novel for young-adult readers (ages 9 to 13) in the tradition of C.S. Lewis.

Audelae, the young leader of her people, must rely on her cunning and bravery to overcome a more powerful foe and reclaim her people's most cherished possession. She seeks her magic flower, which has been stolen by the Grundilini—the most wicked mercenaries in the land. In facing up to the Grundilini, Audelae and her crew must make choices that test their human values and their very understanding of self.

Clinical Epidemiology & Evidence-Based Medicine: Fundamental Principles of Clinical Reasoning & Research

by David L. Katz, M.D., M.P.H. '93, associate clinical professor of public health and medicine, Laura Greci, M.D., and Haq Nawaz, M.D., M.P.H., clinical instructor in medicine and lecturer in public health

Sage Publications (Thousand Oaks, Calif.) 2001

If a patient is older or younger, or sicker or healthier, taller or shorter than—or simply different from—the subjects of a study, do the results pertain?

This book is a resource for all health care workers involved in applying evidence to the care of their patients. Using clinical examples and citing liberally from the peer-reviewed literature, the book shows how statistical principles can improve medical decisions. Plus, as Katz shows how probability, risk and alternatives are fundamental considerations in all clinical decisions, he demonstrates the intuitive basis for using clinical epidemiology as a science underlying medical decisions.

Comprehensive Guide to Interpersonal Psychotherapy

Myrna M. Weissman, Ph.D. '74, former professor of psychiatry and epidemiology, John C. Markowitz, M.D., and the late Gerald L. Klerman, M.D.

Basic Books (New York) 2000

This reference consolidates the art and research behind a treatment developed in the

1970s for depression. Applied now to disorders of behavior and personality as well as mood and adapted to new formats, interpersonal psychotherapy is presented as an empirically validated, time-limited and replicable treatment with rationales, techniques and case examples.

The Yale Child Study Center Guide to Understanding Your Child: Healthy Development From Birth to Adolescence

by Linda C. Mayes, M.D., the Arnold Gesell Associate Professor of Child Development in the Child Study Center and associate professor of pediatrics and psychology, and the late Donald J. Cohen, M.D., the Sterling Professor of Child Psychiatry, with John E. Schowalter, M.D., and Richard H. Granger, M.D.

Little Brown and Co. (Boston, New York, London) 2002

Focusing exclusively on developmental issues, the work of psychiatrists, psychologists, pediatricians, social workers and educators at the School of Medicine's Child Study Center has been compiled in this comprehensive reference guide for every family bookshelf. This book covers everything from preparing for the birth of your first child to understanding different learning styles, from toilet training to learning disabilities, from sexuality to substance abuse.

The descriptions above are based on information from the publishers.

SEND NOTICES OF NEW BOOKS TO Cheryl Violante, *Yale Medicine*, P.O. Box 7612, New Haven, CT 06519-0612, or via e-mail to cheryl.violante@yale.edu.



SCOTT BALLIN

“If you’re not going to ban them ...”

Past efforts to make a “safer” cigarette, attorney Scott D. Ballin told the audience at a seminar at the Institution for Social and Policy Studies, may have increased the risks to smokers. Ballin, a former vice president for public policy at the National Heart Association, said low-tar and low-nicotine cigarettes offered smokers a false sense of security. “People were compensating by smoking twice as much and inhaling more deeply,” he said at the May gathering. “I don’t think it is politically or economically feasible for tobacco products to be banned in this society. The real question we have to struggle with is, if you’re not going to ban them, what do you do with them?”

Ballin called for making cigarettes safer by removing carcinogens and other toxins known to cause disease. “Risk reduction can be an effective strategy,” he said, “but it has to be done based on science and with a regulatory mechanism, such as [that provided by] the FDA, in place. What we have done with other products regulated by the FDA should now be applied to tobacco.”



PHILL WILSON

“If not you, who? If not now, when?”

Phill Wilson, the keynote speaker at this year’s AIDS Science Day, got the most applause when he exhorted his audience to do more to help community groups in New Haven.

“People from places like Yale and Harvard and Princeton are the people who run the world,” Wilson said, speaking at the School of Public Health in April. “Use your privilege to make a difference.”

Wilson, the founder of the African American AIDS Policy and Training Institute, said AIDS takes thousands of lives a day, yet the international community has not offered a response commensurate with the epidemic. Action must be local as well as global, he said.

“There is something wrong with institutions like Yale that exist in poor communities like this,” he said, “if they don’t use their resources, their influence, their talent to strengthen the infrastructure of the organizations that live and die in their shadow. Community programs in New Haven should never have a shortage of evaluators, organizational-development folks, grant writers, researchers, website designers, policy analysts. ... If not you, who? If not now, when?”



MELVINA McCABE

Drawing on native culture in medical practice

For Melvina McCabe, M.D., the diversity of cultures found in the United States is a double-edged sword, a source of both richness and ugliness. “The richness of our culture is a gift that many do not appreciate. The ugliness is racism, intolerance and the belief that our culture, and therefore who we are, is better than any other,” said McCabe, an associate professor at the University of New Mexico School of Medicine. At a Humanities in Medicine lecture in April McCabe described her own journey through three cultures; the Navajo way of her family, the Christian teachings of the boarding school where she received her early education and the ethos of the medical world.

From her Navajo origins she has maintained the belief that wellness comes from a harmony with one’s self and all living things. “In no other place but health care is a flexible, open-minded approach so paramount,” she said. “It is here that we are trained to heal people, but truly heal them and take into account not only the physical aspects of a person, but also their desires, their culture and their ideas of health, wellness and illness.”



JOHN CURTIS (4)

CHRISTOPHER DODD

Making the case for better newborn screening

During a visit to the School of Medicine in August, U.S. Sen. Christopher Dodd couldn’t resist showing his audience a picture of his daughter, then just a few weeks away from her first birthday. But there was a point the doting father wanted to make about her birth at a hospital in Virginia. “At no stage were we ever advised of the importance of newborn screening,” he said at Pediatrics grand rounds.

Dodd’s daughter was born healthy, but newborn screening for genetic defects can mean the difference between life and death. Congenital metabolic defects that can be detected by screening can cause mental retardation and sudden death. Physicians check for eight disorders in Connecticut, and recent legislation will expand screening in January to cover two additional metabolic disorders. Access to screening varies, however, from state to state.

Dodd has proposed federal legislation that would provide funding to expand the scope of screening. “Parents must know what their state requires and their options to receive supplemental screening if they so desire,” Dodd said. He came to Yale at the invitation of Scott A. Rivkees, M.D., associate professor of pediatrics, who testified on the topic in June before a U.S. Senate committee.

A leather-bound diary, a young Harvey Cushing

Legendary neurosurgeon's travel journal reveals a focused mind and an eye for detail.

By Susan Froetschel



CUSHING/WHITNEY MEDICAL LIBRARY

The Cushing/Whitney Medical Library recently acquired Harvey Cushing's diary of his visit to the World's Columbian Exposition in 1893.

ABOVE Cushing in a portrait taken two years later, when he finished medical school at Harvard.

RIGHT Cushing's diaries are accompanied by records of four generations of physicians in the Cushing family.

During his weeklong trip to the World's 1893 Columbian Exposition in Chicago, Harvey W. Cushing, M.D., took in a football game, had a ringside view of the "slaughtering of cattle and hogs" and was particularly intrigued by an exhibit of contemporary Egypt. He also saw the Buffalo Bill show and spent \$2 on a hotel room.

Cushing's detailed observations of his trip, made with his older brother Edward, are in a journal that is now in the collection of the Cushing/Whitney Medical Library. It was part of a recent acquisition that also included a journal of a trip to Bermuda and account books listing patients and fees paid to his father, grandfather and great-grandfather, physicians all.

At the time of his Chicago trip, Cushing, an 1891 graduate of Yale College, was 24 and ready to start his third year of medical school at Harvard. The Morocco-bound diary—in hasty, yet compact, pencilled script—offers his observations interspersed with whimsical sketches.

Much as a diary leads to introspection, the fair provided an opportunity for national self-assessment. The huge event attracted millions of visitors and "represented the Victorian era's attempt both to acknowledge the reality of rapid change and to understand and control its direction," according to Reid Badger, in *The Great American*

Fair: The World's Columbian Exposition and American Culture. The Chicago fair introduced the electric light bulb, alternating current and a huge Ferris wheel that accommodated more than 2,000 riders at a time. Professional congresses debated topics ranging from women's suffrage to evolution to the necessity of a liberal education for students of medicine.

During his first day at the fair on September 13, 1893, Cushing visited the Women's Building and an English exhibit featuring a hospital room. He noted the "typhoid dishes and pens ... nurses' dresses, instruments ... colored glass for different solutions. Thermometer holder ... operating jackets for patients. Operation suits of different kinds—which tie with ribbons down front, side, etc." The diary sug-



JERRY DOMIAN

gests that he logged these ideas for future reference.

Cushing's entry for Sunday, when the fair was opened to make it possible for laborers to attend on their only day off (despite protests from religious groups), is among the lengthiest for the week. He described three hours spent in art galleries and a walk through the Midway, a section devoted to anthropology and presentations of indigenous peoples from around the world. By then, Cushing was entrenched in the physician's role and did not indulge in days of rest.

The diary reveals a broad range of interests and a fascination with art of all kinds. Cushing saved programs from concerts of European performers and wrote at length about a Japanese tea ceremony as well as an exhibit on forestry designed by Gifford Pinchot, an 1889 Yale College graduate who would go on to co-found Yale's School of Forestry in 1900. Cushing was complimentary about exotic Bedouin dancers and an exhibit on the streets of Cairo.

The exposition, with elaborate architecture and organized streets that accommodated millions of visitors, inspired new respect for urban planning and beauty, according to Badger. Still, Cushing's fine sketches, no larger than an inch or two, focus on people. Though the fair has since been criticized for stereotyping indigenous peoples as barbaric, his portraits reflect none of this.

The diary indirectly refers to the country's growing obsession with material wealth and consumerism. Tucked into the diary is a newspaper clipping that expresses amazement at the exposition's administrative building, with four pavilions, built of imper-

manent materials to last two years at a cost of \$550,000. Meanwhile, Cushing diligently lists his own expenditures—for example, a 35-cent breakfast and a two-cent newspaper. The fair was costly: Cushing began with \$91.84 and left with less than \$4.

Cushing was careful with money, but perhaps even more cognizant of the value of time. Throughout his notes, he frequently expressed regret for not having more time to explore. He fretted about arriving at Buffalo Bill's show too early, and toward the

end of the week he wrote, "I am foolish enough to squander time on the football game." (The Chicago Athletic Association trounced the New York Athletic Association, 6-0.)

The journals show the co-founder of Yale's medical library as a quintessential learner. His detailed observations foreshadow his astute and meticulous notes on patient care and reveal a limitless Victorian curiosity about ideas, culture and technology.

Susan Froetschel is a freelance writer and a tutor in the Bass Writing Program at Yale.



CUSHING/WHITNEY MEDICAL LIBRARY



CHICAGO HISTORICAL SOCIETY

TOP RIGHT Cushing's 1893 diary includes sketches of the World's Columbian Exposition in Chicago. The Exposition was open on Sundays, despite objections from religious groups, to allow laborers to attend.

RIGHT The interior of the exhibition hall.

“A steam engine in pants”

In 1920, Milton Winternitz became dean and ushered in a new era in medicine at Yale, creating the Yale System in the process. For much of his 15 years at the top, what Winternitz wanted, Winternitz got.



RIGHT Milton Charles Winternitz looks up from his papers in a photograph dated 1939, four years after he stepped down as dean. During his 15 years leading the school, Winternitz reorganized the medical school departments, recruited a legendary faculty and established the Yale System of medical education. His deanship is chronicled in Gerard Burrow's new history of the medical school, published in October by Yale University Press.

Milton C. Winternitz, M.D., was the catalyst behind the Yale School of Medicine's rise to elite status in the years between the two world wars and one of the most colorful and forceful personalities to emerge from the school's 192-year history. Invoked frequently as the originator of the Yale System of medical education, which took shape during his first term as dean, Winternitz was also a terror to faculty and students alike, an intimidating presence who inspired awe as well as furious devotion. He was, as former Dean Gerard N. Burrow, M.D. '58, HS '66, writes in his new history of the school (quoting former Yale President James Rowland Angell), “a steam engine in pants.”

Winternitz, who served as dean from 1920 to 1935, occupies a central chapter in the book, *A History of Yale's School of Medicine: Passing Torches to Others*, published in October by Yale University Press. The article that follows is adapted from the book and focuses on Winternitz's role in establishing the Yale System. The entire chapter, which reveals a great deal more about Winternitz's character and personality, can be read online at our website, info.med.yale.edu/yymm.4



RIGHT Abraham Flexner wrote in his 1910 report to the Carnegie Foundation that Yale’s medical school was among only 31 in the nation and two in New England worthy of survival. During Winternitz’s tenure as dean, Flexner would again be supportive of the school as a representative of the Rockefeller Foundation’s General Education Board.

BELOW Sterling Hall of Medicine in 1925, five years into Winternitz’s deanship.



BETTMANN/CORBIS

Burrow, who started the book after stepping down as dean in 1997, began his medical studies at Yale in 1954. After a residency in medicine at Yale, he was asked by Chair Paul Beeson, M.D., to stay on as an assistant professor, and he spent another decade in New Haven before joining the faculty at the University of Toronto in 1976, where he eventually led the Department of Medicine. In 1991, when a search began at Yale to find the successor to then-Dean Leon E. Rosenberg, M.D., HS '63, Burrow was a dean himself, at the University of California, San Diego. He made a trip to New Haven to lobby the search committee for the preservation of the Yale System. Not long after he was named the school’s 14th dean.

Burrow’s history of the school was commissioned for the university’s Tercentennial in 2001. Writing it “was incredibly painful,” Burrow said, laughing, during an interview in late July. “I’ve done six or seven textbooks: a couple I’ve written, a number of them I’ve edited. Writing this history was infinitely harder. In a textbook, you kind of know what you want to say. But with this book the history unfolds and then you find another letter, and that changes it. You get to a cer-



tain place and you say, ‘Gee, I wonder why that happened?’ And you realize that would add another five years to the book.”

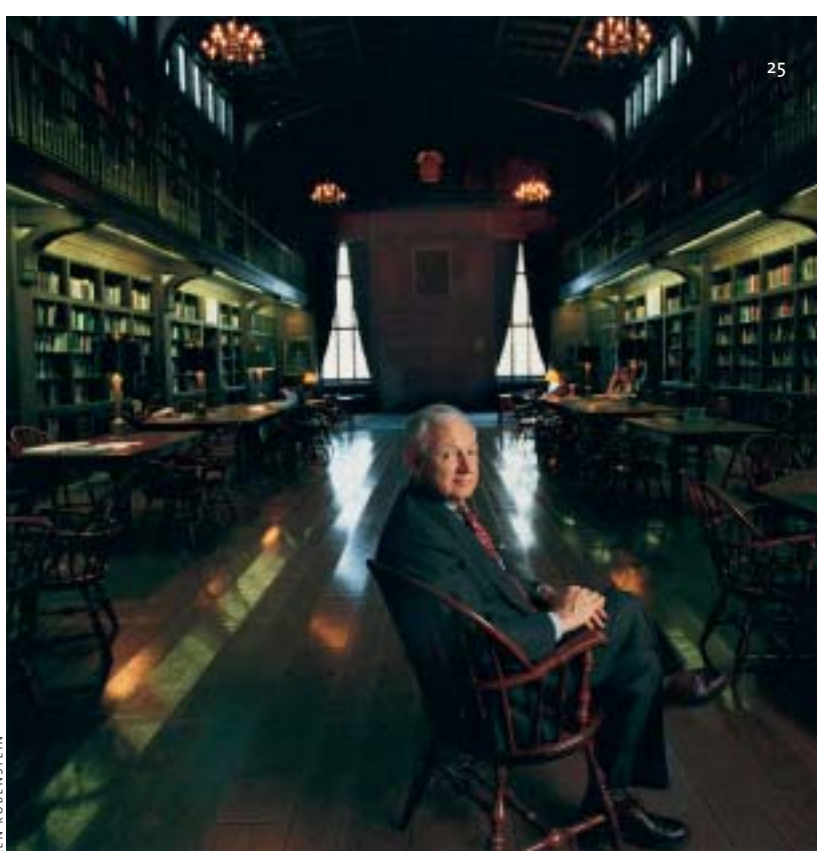
Once he finished writing, Burrow’s career path took an unusual turn. After nearly 10 years on the board of the Sea Research Foundation in Mystic, Conn., he was asked in 2001 to step in as interim CEO; he was already heading the board and indulging a lifelong fascination with the sea, marine mammals in particular. In January of this year, he became chief executive on a permanent basis. “I spend my time now trying to decide whether we bring in three 10-foot alligators or 15 two-foot alligators. We decided on the 15. ... I decide how we’re going to spread our advertising and marketing money, because we are virtually entirely dependent on attendance. And I end up talking with bankers about how to refinance bond issues. I’m doing things that are very different from medicine and very challenging and interesting.”

The former dean is now directing a breeding program designed to save an imperiled population of beluga whales. “I’m actually working with people at Yale to see if we can do artificial insemination.” As the foundation’s CEO, Burrow oversees both the Mystic Aquarium and the Institute for Exploration, directed by Robert Ballard. Three years ago, he accompanied Ballard 3,000 feet below the surface of the Mediterranean Sea to uncover ancient Roman ships. Next August he plans to join the explorer on a Black Sea expedition to look for evidence of civilization at the time of the Great Flood. He admires Ballard for his ability to simultaneously pursue good science, educate and entertain. “At times he’s like a cardiothoracic surgeon [in his intensity], but he’s got incredible vision and enormous amounts of energy.”

In exploring the origins of the medical school, Burrow focused on its relationship to the university, to Connecticut’s medical establishment and to the hospitals with which it has been affiliated. Chronic underfunding by the university in earlier days, he writes, led many times to the school’s near-demise, and it was hampered by a lack of control over the clinical facilities in which its faculty members practiced. The arrival of Winternitz was preceded by a long period of decline in the mid-1800s, followed by a slow revival that began with the establishment of the Sheffield Scientific School at Yale in 1861. By 1910, when Abraham Flexner reported to the Carnegie Foundation that Yale and Harvard were the only medical schools in New England worth saving, the school was on a much more stable course. Flexner later held out the promise of financial support from the Rockefeller Foundation if Yale would move to a full-time clinical system, which he felt was a solution to medicine’s woes.

Burrow sees Winternitz as one of the driving forces in the medical school’s evolution from a tiny school with a faculty of five in 1813 to one of the world’s pre-eminent biomedical institutions today. Winternitz was, Burrow writes, “a complex personality who was either loved or hated [but] involved in everything.”

—Michael Fitzsosa



LEN RUBENSTEIN

Gerard Burrow

From A History of Yale’s School of Medicine: Passing Torches to Others

by Gerard N. Burrow, M.D. ’58, HS ’66

“At a meeting of the Faculty of the Yale Medical School held on May 7, 1920, the following action was taken for transmission to the Corporation. Voted to nominate Professor Milton Charles Winternitz to the Corporation as Dean of the medical school for a period of five years.” The new dean was a man who evoked strong emotions. He was described by his friends and colleagues as a “vital and vivid man, an intense fountainhead of energy, an inexhaustible generator of ideas and constant stimulator of the imagination.” Others, while acknowledging his accomplishments, portrayed him as a “martinet,” “a terrible little guy who dissipated the financial resources of the school on impractical schemes.”

During his 15 years as dean, Winternitz firmly brought the medical school into the fold of the university by assuring that the medical faculty met the university’s academic standards and by reorganizing medical school departments as university departments. Under his firm hand, the full-time system for clinical teachers was hammered into place. He tirelessly raised funds for buildings and facilities.

Winternitz believed strongly in all he did, but he was particularly adamant that medical students should be treated as graduate students—a view that led to the creation of the Yale System of medical education.

Winternitz believed strongly in all he did, but he was particularly adamant that medical students should be treated as graduate students—a view that led to the creation of the Yale System of medical education.

Accomplishments of this magnitude cannot occur without cost, especially when achieved in so short a time. Diplomacy in human relations was not always one of Winternitz's strengths. Levin Waters, a pathologist trained by and devoted to Winternitz, took the view that “though his methods may continue to evoke controversy, there will always be agreement that Winternitz was the right man in the right place at the right time for the Yale School of Medicine.” John Fulton, physiologist, medical historian and friend of Winternitz, described him as “of Napoleonic temperament and stature and a thoroughgoing autocrat but honest as the day is long and possessed of a broad and sympathetic nature.”

Milton Charles Winternitz was born in 1885 in East Baltimore, the son of an immigrant doctor from Czechoslovakia. He was four when the Johns Hopkins University School of Medicine opened its doors in East Baltimore in 1893, four years after the founding of the Johns Hopkins Hospital. Growing up near the medical school must have been a powerful influence on a neighborhood boy whose father was a doctor. Hopkins's founding dean, pathologist William Henry Welch, had brought the excitement of German scientific medicine to the young school, which was to become the model for modern medical education in the United States. An outstanding student, Winternitz applied for a house-staff position in surgery under William Halsted, but he was turned down and went to work with Welch in pathology. Welch, a Connecticut native and a staunch Yale alumnus, was a dynamic and stimulating teacher. Winternitz was enthralled with Welch as a role model, followed him into pathology and was awarded a teaching position at Hopkins.

As Welch was in constant demand and traveled frequently, junior members of the faculty were often asked to fill in as lecturers at the last minute, and Winternitz developed a capacity for “extemporaneous elegance.” Like his mentor, he also made a number of trips, including several short visits to Leipzig, Berlin, Freiburg and Vienna. Despite his idolization of Welch, Winternitz developed a very different teaching style. Whereas students described Welch as “a kindly and infinitely wise old gentleman” who went out of his way to be helpful, they saw Winternitz as a martinet who taught by terrorism. John Paul, who had been a second-year medical student at Johns Hopkins, could not understand how “Welch tolerated him as a member of his Department, for even as long as a decade.”

Winternitz was a man of many facets. His granddaughter Susan Cheever described him as a “short man with a tyrannical manner, an intense charm that could make you feel that you were the only person in the world—and a raging temper that could make you wish you weren't.” He utilized his great charm to attract and marry Helen Watson, whom he pursued with “the sweetness of a kitten and the ferocity of a lion.” A Wellesley graduate and a medical student at Johns Hopkins, she was beautiful, smart, Protestant and the daughter of Thomas Watson, who with his friend Alexander Graham Bell had invented and developed the telephone. Overcoming formidable obstacles, Helen Watson and Milton Winternitz were married in 1913.

Winternitz had hoped to remain at Johns Hopkins and eventually succeed Welch as chair of pathology. But this was not to be. Several authors have attributed Winternitz's ultimate lack of success at Hopkins to anti-Semitism. Welch told Thomas Watson at a chance meeting that Winternitz was entirely capable of succeeding him but that his scientific contributions, although of high quality, were not yet voluminous enough. Watson relayed Welch's comments: “Age he intimated was the only objection against your election.” Being Jewish would not have helped his chances, but there were clearly other reasons why Winternitz was not chosen to succeed Welch. Nevertheless he became the first Jewish professor at the Yale School of Medicine.

It was almost certainly on Welch's recommendation that Winternitz was appointed professor of pathology at Yale in 1917. He was scheduled to start at Yale just as America entered the Great War. Welch attempted unsuccessfully to delay Winternitz's departure in order to have him work with the Hopkins medical unit. Winternitz arrived at Yale as chair of a pathology department in a medical school that was deeply involved in the war effort. Yandell Henderson, the professor of physiology, who had been a consultant on gases for the Bureau of Mines, enlisted Winternitz's aid in the war gas project. With a flair for organization that was to serve him well, Winternitz established a center for the biological study of war gases as well as an army training school for laboratory medicine. In 1920 he published a monograph on the results of these studies, *Collected Studies on the Pathology of War Gas Poisoning*. That same year he published *The Pathology of Influenza*, which he had co-written in the wake of the postwar pandemic. Although he had been at Yale for

only three years and had been heavily involved in the war effort, the faculty elected him the fifth dean of the medical school in 1920.

When Milton Winternitz succeeded George Blumer as dean of the School of Medicine, academic control of the beds in the hospital had been achieved and a full-time clinical program had been organized, although not yet fully implemented. The General Education Board's criteria had been fulfilled, ensuring solvency of the hospital, at least in the short term. But academic control of the hospital was complicated by the profusion of health care organizations involved in patient care. There was ongoing opposition to the full-time clinical system from both the community and long-term members of the faculty, and the hospital board was making decisions that were not in the interest of medical academia.

Yale University President James Rowland Angell commented that Winternitz became dean at a time when the medical school faced its most disheartening prospects. There was a perception that the "outlook was as unpromising and depressing as could be imagined." Yet the saga of the School of Medicine had contained many equally bleak periods before. All of the goals which the faculty had fought to achieve in the school and in the hospital had been reached, but Camelot remained elusive. After having worked so hard for so long, the clinical faculty still did not have academic control.

When Winternitz took over the deanship, his first priority was to fill the ranks of the senior faculty. Blumer had resigned as chair of medicine, exchanging the John Slade Ely Professorship for the David Paige Smith Professorship, and had immediately taken sabbatical leave. Morris L. Slemons, founder of the first full-time clinical Department of Obstetrics and Gynecology in the United



Winternitz (front left) worked under the founding dean of the Johns Hopkins School of Medicine, Yale College alumnus William Henry Welch (center), in the pathology department at Hopkins after earning his medical degree in 1907. It was almost certainly on Welch's recommendation that Winternitz was appointed a professor at Yale in 1917.

States, had left to return to California. Joseph Marshall Flint, the professor of surgery, who had experienced persistent pulmonary problems since the war, had retired.

Yandell Henderson, who had been professor of physiology for 10 years, had long been dissatisfied with conditions in the department and had actually announced his resignation in 1917. He did not resign, however, but continued through the years to complain to the president. Finally, President Angell sent him a letter saying that he was impossible—in effect firing him. Henderson tried to explain that it was all a misunderstanding, but he was ultimately transferred to the graduate school and given an appointment in applied physiology. These departures left only seven members of professorial rank to constitute the entire medical school faculty.

In contrast to the somewhat muted George Blumer, Winternitz—whether liked or disliked—was a "steam engine in pants" and incapable of floating in a sea of uncertainty. A number of events occurred within the university that helped Winternitz navigate that sea. In 1921, President Arthur Twining Hadley, a Yale man and a traditionalist, was succeeded by Angell, a psychologist and the first Yale president from "elsewhere" since Abraham Pierson. It was the era of the postwar boom, and funds to build facilities were becoming increasingly available. In addition, the Yale Corporation had yet again examined the future of the medical school and had issued a ringing statement of affirmation. Meanwhile the central university administration had been thrown into a state of turmoil in 1919, fomented by the extraordinary recommendations of an alumni committee, advocating a common course for all undergraduate instruction, consolidation of the college and Sheffield Scientific School and emphasis on teaching rather than research in the undergraduate college.

Most of the committee's recommendations were accepted. Despite the cataclysmic nature of the reorganization that resulted, it did solve the problem of the college and the Sheffield Scientific School as two separate schools. In addition, professors with similar interests were brought together. The professional schools were given new status, and the graduate school increased in stature. As a result of the reorganization, Yale had been converted into a better-balanced institution with a strengthened administration and a broader university focus.

Winternitz used the university reorganization plan to place all the available resources in the "fundamental" sections of the medical school while eliminating sections that were not crucial. The plan was supposed to unite the various schools with the university, thereby furthering the development of an increasingly unified university with a coordinated scheme of instruction that would eliminate duplication of courses. The members of the faculty were to be Yale University faculty, designated to teach where their talents were most needed, rather than individuals owing primary allegiance to distinct schools

Winternitz indicated that "radical changes" in the curriculum had to be made. He wanted to give students more free time, to allow individuals to develop at their own pace, faster or slower. The hope was to "teach the student less but learn him more."

within the university. One of the chief duties of the newly created office of provost was to partake in discussions concerned with the educational development of the university, in an attempt to foster this integration.

Using the university plan as a shield, Winternitz avoided the major confrontations that occur when medical school departments are reorganized. He committed the school's support to anatomy, physiology (including chemical, physical and biological physiology), pharmacology and toxicology, pathology and bacteriology, public health, medicine, surgery, pediatrics and diseases of women (including obstetrics and gynecology). He planned to establish a section of psychiatry and to develop some of the medical and surgical subspecialties, but he felt it unlikely that any of them would develop to the importance of major sections. The issue of what constitutes an academic department continues to be debated. Often the determining factor is not academic principle but a powerful section chief who threatens to leave unless his or her section is made into a department, with no assurance that a replacement can be recruited.

Winternitz immediately began to strengthen his faculty, recruiting Francis G. Blake as chair of medicine, who brought with him John Punnett Peters, a Yale '08 and Columbia medical graduate. Peters and William T. Stadie constituted the chemical, or metabolic, division of the Department of Medicine. James D. Trask, a pediatrician, and Arthur B. Dayton were appointed to the biological division of the department. Harold M. Marvin was recruited to direct the work in electrocardiography, which resulted in less emphasis on the stethoscope and "heart murmurs," a trend that has continued to this day. These recruitments marked the beginning of specialization in the medical school.

Joseph Marshall Flint, the professor of surgery, retired in 1921 due to ill health incurred during his military service. Samuel Clark Harvey, who had received both his undergraduate and medical degrees from Yale, succeeded him as chair. Graduating from the medical school in 1911, he spent two years in pathology in New York, followed by four years as a resident with Harvey Cushing in Boston. In 1917 he returned to Yale as an instructor. Harvey was appointed an assistant professor of surgery at Yale in 1920 and was promoted to associate professor and acting chair a year later, a meteoric rise. His rapid promotion to the chair of surgery must have raised some eyebrows, but Winternitz empha-

sized that he was a good candidate: "For the past two years, Dr. Harvey has been associated as first assistant with Dr. Flint and had been carefully trained to assume responsibility as chief of the clinic." Winternitz himself retained his position as chair of pathology.

When Morris L. Slemmons resigned as chair of obstetrics and gynecology in 1920, Arthur Morse, who had been a Yale faculty member since 1915, was appointed to the post. Morse was said to be one of the very few men in the country capable of conducting a women's clinic. Indeed, George Blumer had mentioned the Women's Clinic as one of the high points of his deanship.

A full-time pediatrics section had been one of the conditions for the grant from the General Education Board. Edward Park, a 1900 Yale College graduate, was recruited from Johns Hopkins as professor of pediatrics. Park and his assistant, Grover Powers, had done outstanding work on dietary deficiencies in children. After six years at Yale, Park confided to Angell that he was not pleased with some of the appointments and was not confident about the future of the school. James Gamble from Harvard urged Park to return to Johns Hopkins, where he would "find much better students to teach and proper men to lead into research presenting much more frequently."

Park did indeed return to Johns Hopkins but during his stay in New Haven had recruited Martha Eliot, a former Johns Hopkins student, to be his chief resident and an instructor in pediatrics. Ethel Dunham, who had arrived a year before Eliot in 1919, was the first female house officer at the New Haven Hospital. When Eliot subsequently left Yale for a full-time post at the Children's Bureau, Dunham became head of the bureau's research division in child development. During Yale's search for a chair of pediatrics, the ever-intrusive [Abraham] Flexner pushed his family physician very hard for the position, disparaging Powers' abilities in the process. Angell commented to Fred Murphy, an influential physician alumnus of Yale College, that although Powers was good clinically, "nobody has any illusions about Dr. Powers' qualifications, least of all Powers himself." As it turned out, both Flexner and Angell were wrong. Powers went on to have a brilliant career as professor of pediatrics at Yale. He was an autocratic, controlling individual who was determined that every child should be well cared for and that all his staff, including the medical students, should consider this a top priority.

In the midst of making appointments to strengthen the school, Winternitz had, as always, to consider ways to attract funds. He sent Flexner a cartoon in 1920 showing submarines from the university, faculty, hospital and community firing torpedoes at one another. The medical school was portrayed as a small boat containing two rowers going in opposite directions, with a life preserver marked "\$5,000,000" and "G.E.B.," a clear message that Flexner and the General Education Board were capable of bringing Winternitz's dreams to fruition. The cartoon was effective. Flexner replied: "You have certainly devised the most poignant and appealing form of application that was ever presented to our Board."

In his report to the president of 1921-1922, Winternitz stated that medical education in the United States was in a "state of flux." Several systems of clinical teaching had evolved, and controversy raged over the relative merits of the various systems, particularly the full-time clinical system, which Yale had adopted in 1915. At Yale, "now more of the major clinical divisions are on a solid and comprehensive full-time basis than in any other school of the world. ... Indeed, a small medical school as a part of a great university like Yale is particularly well adapted to pedagogical experiment, and it is to be hoped that such experiments, judiciously carried out, will be one of the means by which this school will aid medical education and give character to itself."

Winternitz also indicated in his report that "radical changes" in the curriculum had to be made, because of the overloaded course schedules. He wanted to give students more free time, to allow individuals to develop at their own pace, faster or slower. As someone on the Curriculum Committee said, the hope was to "teach the student less but learn him more." By "judicious pruning" the medical course could be cut by a quarter, and the candidate for the degree of doctor of medicine would still receive a broad, well-grounded training in the fundamentals of medicine. The extra time would give the challenged student more of a chance to review, while the gifted student could elect to do research or special work. With less teaching time available, the instructor would in theory concentrate on basics rather than simply talk faster. With more free time, medical students would develop a particular interest and expertise in a particular area of medicine. Winternitz concluded that the equivalent of one year's work had been salvaged from the required courses—a major accomplishment, as anyone who has been involved in curriculum reform can attest. The student was expected to use a third of this time for electives, and he could pursue research or other interests during the rest of the time.

In his annual report on the pathology section, Winternitz commented that group teaching along interdepartmental lines would be advantageous. He cited as an example that the physiology, anatomy and histology of the heart and lungs, as well as their pathology and bacteriology,

This article is adapted from a chapter in Gerard N. Burrow's *A History of Yale's School of Medicine: Passing Torches to Others*, published by Yale University Press. Reproduced by permission.

To read the entire chapter online, please visit our website, info.med.yale.edu/yymm.

could all be studied together. In his role as chair of pathology, Winternitz was particularly interested in improving the curriculum in pathology by emphasizing the gross pathology and eliminating the "busy work" for students of routine staining and preparation of histological specimens. Emphasis would be placed also on clinical-pathological correlations throughout the clinical years.

Curriculum revision reversed the sequence of the clinical years, so in the third year students concentrated on ward medicine, which entailed acute illness and intensive therapy. On the other hand, fourth-year students, who had more clinical maturity, concentrated their efforts in the dispensary, which allowed the more mature students to acquire knowledge of disease in an outpatient setting, gain an appreciation of epidemiology and develop an interest in preventive medicine. Dispensary patients were to be encouraged to come for consultations even when they did not have a problem, so that the dispensary would be a "health clinic" as well as a "disease clinic."

continued on page 64



Winternitz used a cartoon to appeal to Flexner and the General Education Board for funds. It worked.

Everyone loves the **Yale System**. So why can't they all agree?

The debate over exams this spring centered on two key questions: how should medicine be taught in the 21st century, and how should a student's progress be measured?

By John Curtis

Photographs by Terry Dagradi

When Dean David A. Kessler, M.D., first came to Yale in 1997, he made an observation that seemed remarkable. The medical school had a deputy dean for research responsible for \$211 million in grants and contracts, a deputy dean for clinical affairs overseeing 650 academic physicians, but no deputy dean for education. Whose job was it to think about the teaching of the 485 medical students who were beginning their careers as doctors and scientists at Yale?

This administrative gap was emblematic of a disparity in American medical education that began with large-scale investment in research following World War II, continued with the passage of Medicare in the 1960s and the resulting clinical expansion, and became pronounced with the advent of managed care in the 1990s: teaching at medical schools often took a back seat to research and patient care, with time and resources frequently cobbled from the other two missions. For a faculty member, it was fine to be a gifted educator but it was prowess in the lab and clinic that earned promotions and tenure at Yale and elsewhere.

The school's world-class professors and top students aside, Kessler and others on the faculty felt that teaching could be improved and that it deserved more attention. The dean wrote to alumni in March 1999, announcing the formation of an ad hoc committee on medical education that would "examine not only what we are teaching now, but also

what we should be teaching to prepare physicians for the 21st century." Kessler went on to note that other medical schools had undertaken similar programs, raising important questions about the best ways to educate doctors. "Few schools, however, have tackled the larger questions related to the academic content of the curriculum," he added. "We intend to do just that, and to reaffirm and fortify the Yale System in the process."

Within a year, the dean had a set of recommendations from the committee's faculty and student members, and by the year 2000 most of those suggestions had been, or were in the process of being, implemented. A deputy dean for education was appointed. Basic science courses were consolidated and streamlined where appropriate. Increasingly, courses combined material from the basic and clinical sciences. And, in an effort to reinforce one of the elements of the core educational philosophy that has been in place at Yale since the 1920s, the new deputy dean had tried to build more free time into the first two years, a period traditionally reserved in the curriculum for basic science instruction and one which had become increasingly cluttered over the decades as new knowledge was added to the canon and old assumptions became obsolete.

While these efforts pleased many, an unintended consequence of the changes that ensued provoked an uproar



Deputy Dean for Education Herbert Chase was attracted to Yale by its graduate school environment and emphasis on critical thinking. But, he told an alumni audience in June, “I didn’t realize how far the actual practice of the Yale System deviated from its philosophy. ... The students were in class from nine to five almost every day.”

The letter that begins at right and continues through page 37 made the students' case for limits on exams, which seemed to be proliferating. The letter was signed "Yale System Preservation Initiative."



JERRY DOMIAN

David Kessler found it remarkable that the medical school had deputy deans for research and clinical affairs in 1997 but not a deputy dean for education. He subsequently hired Chase for the post and has provided additional resources for teaching.

among students and alumni. The debate echoed a controversy that surfaced in the mid-1980s, when for the first time in the history of the Yale System of medical education, students had been required to take final exams in the basic science courses.

Exams were again the issue. Since they were introduced in the 1980s, exams have been anonymous and, except for qualifiers, optional. And they have in recent years been available online, so students can take them at home and on their own schedule. The revamped curriculum of 2001-2002 concentrated many of the basic science courses in the first year, rather than the first two years as they had been. That meant more exams in the first year, and a perception among students that they faced one test after another. At the same time, second-year students grew concerned about a faculty decision, since rescinded, to require attendance and mandatory self-assessment exams in the second-year "modules"—interdisciplinary courses that integrate key concepts in the clinical and basic sciences. Some students saw these changes as a threat to the Yale System, which follows a graduate school model for medical education and considers students mature and independent scholars capable of learning on their own.

Under the banner of the "Yale System Preservation Initiative," nine students wrote to nearly 5,000 medical school alumni, asking their endorsement of a petition that all self-assessment exams remain optional. More than 500 alumni wrote back (See "The Yale System Lives! Long Live the Yale System," page 38), most in favor of the student position. And exams were a major topic of discussion when the Association of Yale Alumni in Medicine (AYAM) executive committee gathered in June. The mood around the table was sympathetic to the petition and skeptical of too many changes. "Are our people being rejected [from top residency programs] because they weren't assessed properly?" asked Arthur C. Crovatto, M.D. '54, HS '61. The question was a rhetorical one, given the school's record of consistently impressive Match Day placements.

As the debate over exams has unfolded at Yale, medical educators around the country continue to rethink the model that has ruled since the time of Abraham Flexner almost a century ago—two years of basic science followed by two years of clinical instruction. In the mid-1980s Harvard introduced its New Pathways curriculum, which interwove

Dear Colleague,

As you know, for the last eighty years, the Yale System has afforded students the freedoms, responsibilities, and benefits of self-directed learning. However, impending changes to our curriculum seem inconsistent with the tenets of this model of medical education. As a group of students and alumni, we are concerned.

the clinical and basic sciences, combined basic science courses and defined a core of knowledge to be mastered to avoid information overload. In 1997 the University of Pennsylvania announced Curriculum 2000, which integrated the basic sciences and clinical medicine and encouraged self-directed and lifelong learning. And at medical schools across the country and beyond, innovative teachers have sought a way to help medical education keep pace with a revolution in medicine.

In class from 9 to 5

Although he's a graduate of Brown and has spent most of his teaching career at Columbia University's College of Physicians and Surgeons, Herbert S. Chase Jr., M.D., considers the Yale System, with its emphasis on critical thinking as well as core knowledge, essential to his vision of medical education. Nevertheless, when he arrived at Yale in 2000 as the newly appointed deputy dean for education, he was surprised. "I didn't realize how far the actual practice of the Yale System deviated from the philosophy," he told alumni at the June meeting of the AYAM executive committee. "The first thing I found was that there was no free time. The students were in class from nine to five almost every day."

The biggest threats to the Yale System, Chase said, came from an ever-expanding curriculum trying to keep up with advances in medical knowledge. Chase saw his first task as freeing time in the preclinical years that could be devoted to thesis preparation, the pursuit of individual interests or simply the unstructured exploration of medicine and science.

Since his arrival, classroom time has been reduced by 25 percent, the ratio of small-group sessions to lectures has increased and exams have been placed on the Web so students can take them on their own schedule. The old model—learning how the body works in the first year and studying disease in the second—has changed. "Now, in April of the first year you start learning about abnormal human physiology," Chase said. "I think it has been a spectacular success. Students end the year not only knowing how the entire body works, but they also have a pretty good foundation in the mechanisms of disease, pathology, immunology and genetics."

Chase has encouraged the use of concise study guides, identified educational resources on the Internet and consolidated redundant course material. Cell biology, physiology and biochemistry—formerly three distinct courses—

are taught together as Molecules to Cells to Tissues to Systems, known as MCTS. "Now students have two free afternoons every week to do what their hearts desire," he said. Despite this, there are still problems to be ironed out. "Even though class time is less, the content is the same," said Christoph Lee, now in his second year. "We see lecturers, more often than not, running over because they are trying to cover the same amount of material in a shorter period of time." Most students spend their free time studying for exams, added classmate Brenda Ritson, and at least a few are wondering whether the Yale medical school they applied to is the same one they're attending. Nicholas Countryman, a third-year student whose grandfather graduated with the Class of 1944, had heard about the Yale System's merits for years before arriving as a student in 2000. If the Yale System is allowed to erode, he asked, "What is going to be unique about Yale next year or 60 years in the future?"

An age-old question

The discussion on how best to teach—and how to assess learning—is not a new one. In its earliest days, the Yale System under Dean Milton C. Winternitz, M.D., rejected the traditional yardsticks of student achievement. Examinations and grades would undermine the very educational atmosphere the Yale System was meant to create—a collaborative, almost intimate world in which leading clinicians and scientists engaged and inspired a select group of bright, motivated students. But the system depended on a social contract. If students were to have the independence to design their own medical studies in the preclinical years, they would also be expected to rise to an unprecedented level of responsibility. Faculty, in turn, would have to spend the time necessary to follow and evaluate the students' progress. "The Yale System is predicated on teachers wanting to teach and students wanting to study—and being mature enough to seek help," said former Dean Gerard N. Burrow, M.D. '58, HS '66, whose history of the medical school was published in October by Yale University Press (See page 22).

In the early days, the only required tests were qualifying exams administered at the end of the second and fourth years; the only debate was whether these qualifiers would be developed in-house or replaced by the boards, officially known as the United States Medical Licensing Examination, or USMLE. According to the minutes of the school's curricu-

We feel our system is what has set this program apart from other top medical institutions for years. Any major changes to the Yale System threaten its spirit, strength, and integrity. Thus, we feel current amendments to our curriculum must be brought to the attention of the entire Yale medical community.

lum committee, the faculty tried both methods before settling on the boards in 1942.

The boards appear to have been the only required exams until the mid-1980s, when in a single year, 17 students failed Step 1 of the USMLE. “That provoked a great deal of concern among the basic science faculty,” former Dean Leon E. Rosenberg, M.D., HS ’63, said in a recent interview. As a result, Rosenberg said, he and Robert H. Gifford, M.D., HS ’67, who was then the associate dean for student affairs, decided to implement qualifying exams in the basic science courses. The basic science faculty, he said, were as solidly behind this decision as alumni and students were opposed to it.

“There was quite a lot of unhappiness,” Rosenberg said when contacted at his office in the Department of Molecular Biology at Princeton. “The alumni felt that this was an attempt to demolish the Yale System, which, of course, it was not. The students felt that they were being punished for the performance of their predecessors. They also were concerned that because Bob Gifford and I were not products of the Yale System, we did not find

the matter of the Yale System as hallowed as they did, which was not true.”

To preserve the independent spirit of the Yale System, the new exams would be anonymous. They would not be graded. Students would only come to the attention of faculty if they failed more than two of the so-called minimal competency exams.

“The rule was that if you failed, it was your obligation to make yourself known to the director of the course and find a way, in collaboration with the director, to pass,” said Nancy R. Angoff, M.P.H. ’81, M.D. ’90, HS ’93, associate dean for student affairs, and a student in one of the first classes subject to the new requirements. “It could be by taking the exam again or taking an oral exam or writing a paper or analyzing articles. You had to find a way to show you were competent in that area.”

A perceived change

Since then students have been required to take qualifying exams in basic science courses and, as before, have had the option of taking periodic self-assessments to gauge their own

RIGHT Michele Flagge noticed changes in the curriculum last year and sent an e-mail to classmates raising the issue of exams. “It was never our intention to be rabble-rousers,” she said. But, she added, “We opened up the dialogue, which was great.”

MIDDLE Second-year student Christoph Lee saw problems in the reorganized curriculum and fewer class hours to cover the same amount of material.

FAR RIGHT Classmate Brenda Ritson said most students were spending their free time studying for exams.



Enclosed is a statement that outlines the history of the Yale System and voices our position. We hope you will read it and express your support.

progress in those courses. (Mandatory evaluations have always been part of clinical instruction in the third and fourth years.)

Under the 2001-2002 curriculum, however, students found required exams demanding more of their attention. Although the number of basic science exams had dropped from 18 to 13 (and fell to 10 this academic year), the interdisciplinary nature of the new courses meant that the exams mixed questions from various fields. A single test might require a review of topics in physiology, biochemistry and cell biology. And, with more classes concentrated in the first year, the scheduling of exams left students with the impression that there was always another test for which to prepare.

Students were also concerned about exams in the second-year interdisciplinary modules, which were in conflict with the national boards. According to Margaret J. Bia, M.D., professor of medicine, who directed the second-year clinical modules for four years and is now director of clinical training, "board fever" typically has struck early in the second semester as students abandoned the classroom to prepare for Step 1 of the USMLE. By semester's end, attendance in the

modules was down to about a third of the class. Bia considers the modules the most important courses in the first two years of medical school; they integrate the clinical and basic sciences, offer a case-based overview of organ systems and are taught, at least half the time, in interactive workshops with practicing clinicians as instructors. "It's the time when students are encouraged to think about disease in a pattern they will use over and over again in their medical lives. These are the courses in which the pathophysiology of important diseases is explored and discussed," she said. Faculty members also were putting in hours of preparation for students who never benefited because they didn't come to class.

Bia said a crisis was mounting because "with so many students not attending lectures or workshops, the faculty had no way of knowing whether they were learning this important material. So we created a series of self-assessment exams. These exams were also a learning tool, as students were given annotated explanations to all the questions after they submitted their answers." About a quarter of the class either refused to take the self-assessment exams for the modules in the winter of 2002 or scored in the 20s out of 100, she said.



If you have any questions or concerns, please feel free to contact us at the following address or e-mail:

Bia made the ungraded exams mandatory, which she now regrets. “I made an absolutely strategic error in making these changes without including a representative group of students to advise us,” she said. “It would have been better for them, for the faculty and for the curriculum had we had their input on these changes from the beginning. That being said, I hope this doesn’t preclude module self-assessment exams in the future, as they’re a great learning tool for the students and provide an opportunity for the faculty to see if students are learning the material.”

Her colleague Frank J. Bia, M.D., FW ’79, felt that a clash was inevitable as the curriculum began to interweave the clinical and basic sciences. “In the 25 years I have been here, this represents a major shift, putting real emphasis on clinical medicine during the first and second years,” said Bia, professor of medicine and laboratory medicine. “Once you start doing that, however, you must deal with perceptions of the Yale System. The modules are the point where the clinical and basic sciences meet. Now you’re learning information that is directly applicable to the wards. Self-assessment becomes critical. How can you

argue that doing a good history and physical exam, being observed doing it and being critiqued are a violation of the Yale System because they’re mandatory?

“There is this misguided notion that you can translate the Yale System into clinical medicine when it comes to the clinical skills that are involved. You cannot learn clinical skills in isolation. Faculty and students have to be held responsible and accountable for both teaching and learning these skills.”

Assessing assessment

Around the country medical schools are looking at ways of assessing students, including peer review, the use of “standardized patients” in mock clinical situations, direct observation and written exams. The Liaison Committee on Medical Education (LCME), the accrediting body for medical schools, requires “formative and summative evaluation of student achievement in each course and clerkship” but discourages tests that condition students to memorize facts for the short term. Evaluations should measure students’ knowledge and the development of the skills, behaviors and attitudes essential to the practice of medicine.

RIGHT Margaret Bia felt some form of testing was essential during the new second-year courses to assess the progress of the participants. “With so many students not attending lectures or workshops, the faculty had no way of knowing whether they were learning this important material.”

FAR RIGHT As the curriculum began to interweave the clinical and basic sciences, Frank Bia realized a clash was inevitable. “You cannot learn clinical skills in isolation,” he said. “Faculty and students have to be held responsible and accountable for both teaching and learning these skills.”



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Enclosures: statement, support form

“The emphasis here is on providing the means for students to measure their own progress in learning,” said David P. Stevens, M.D., vice president for standards and assessment at the Association of American Medical Colleges and secretary of the LCME. “There are many ways to do this that allow for anonymity but do not necessarily call for an official, identified letter or numerical grade.”

A number of things have happened since the debate began in March.

First, Chase rescinded the requirement that module exams be mandatory. He has also taken steps to remove the conflict between the modules and the boards. This academic year, modules began in September instead of October and will end earlier, creating a seven-week break so students can study for the boards.

The challenge of assessing students without resorting to exams remains, however. “We still need a means by which to evaluate our students,” said Stuart D. Flynn, M.D., professor of pathology and surgery and the new director of the second-year modules. “How do you evaluate individual students in the preclinical years without the mindset of giving examinations? I think there are ways to do it, and this represents a wonderful challenge for the school. It would require faculty or some kind of small group to assess individual students periodically, with the goal being to assure a certain level of competency to allow advancement to the next level of training. That results in a lot of one-on-one time between students and faculty.” Finding a solution, he added, will require serious discussions among faculty, administrators and students.

The main vehicle for the ongoing conversation is a rejuvenated committee on educational policy and curriculum, which dates to 1989. In its original format, said Emile L. Boulpaep, M.D., professor of cellular and molecular physiology, it was made up of course directors and had only two subcommittees, for the basic and clinical sciences. “Now we have a third area, curriculum design—how the teaching is being delivered and all the things that have to do with evaluation of students and the educational process,” he said. Those three subcommittees oversee a dozen “education working groups,” in which students elected this spring serve alongside faculty.

In May, Kessler, Chase and the students leading the Yale System Preservation Initiative wrote to alumni to bring them up-to-date on the recent events. Both Kessler and Chase

strongly reaffirmed their support of the Yale System and their commitment to preserving it. As Chase subsequently told alumni leaders at the June AYAM meeting, “The philosophy is safe. We all believe in it. That’s why we’re all here.” In their letter, students welcomed the administration’s decision to delay the evaluation format pending further discussions and to include students in decision-making committees.

“It’s nice to know that what we think matters,” said Michele Flagge, a second-year student who was the first to notice the curricular changes in 2001-2002. “It was never our intention to be rabble-rousers who wanted to change the establishment. Our main purpose was to heighten awareness of what the traditions of the Yale System were. We opened up the dialogue, which was great.”

Kessler, who came to Yale five years ago with the intention of bolstering the educational mission, agrees. “The debate about the Yale System is important for the institution,” he said. “I think it’s healthy for the institution. I think we have all learned from it.” **YM**

John Curtis is the associate editor of *Yale Medicine*. Terry Dagradi is a photographer with Med Media Group at the School of Medicine.



The **Yale System** lives! Long live the **Yale System**.

When nine Yale medical students wrote to alumni last winter about changes in the curriculum, they triggered a flood of reminiscences about the experience of becoming a doctor at Yale.

From 1945 to 1979, I experienced the Yale System.
 Since then, I have been praising the Yale System!
 Please keep it that way! - G.S.G. (age - 95 years)

George S. Goldman, M.D. '29

In February, a group of medical students sat down with a copy of the alumni directory and addressed letters to some 5,000 men and women who had studied medicine before them at Yale. The letters contained a statement of concern about what the students perceived as a shift in educational philosophy and a threat to the Yale System, along with a request for support. The students asked alumni to contact administrators and urge them to place limits on the number of required exams (See “Everyone Loves the Yale System,” page 30).

One result of the letter-writing campaign has been the culling of a rich assortment of memories of what it was like to study medicine at Yale in recent years and as long ago as the mid-1920s. More than any other facet of the medical school experience, the Yale System seems to touch an emotional chord.

It has become clear from the events since February that the Yale System is alive and well. When Deputy Dean for Education Herbert S. Chase Jr., M.D., spoke to alumni leaders about the issue in June, he detailed the efforts to strengthen medical education and mentoring at Yale and ended his presentation by affirming, “Long live the Yale System!” It is a sentiment echoed in many of the letters sent to the student committee. Here, with the permission of the authors, is a selection of those comments.

I agree completely that it would be a sad thing to change the Yale System.

Here is how it was during the years 1937 to 1941. At first, we students did not quite understand the examination system. The professors said take them if you want to, take them home if you want to, return them if you want to. It was a nice surprise, and after taking a few, we learned to use them in various ways to make sure we were learning how to be physicians.

How did the faculty find out whether we were learning what we were supposed to?

Personal attention: All, or most, of the faculty knew us by name. Dr. Winternitz greeted me by name at our first meeting, and most of the others did the same.

Face-to-face conversations: Every afternoon those who were free to do so gathered in the large salon at 333 Cedar Street. We were treated by the faculty ladies to coffee, tea, cookies, cigarettes (!) and, in season, fruits. Here we met the faculty, both senior and junior, in small groups, one faculty member and four to six students. We had an hour to an hour and a half of “man-to-man” talks, discussions, even arguments. This happened with such people as Drs. Goodman, Gilman, Blake, Winternitz and most of the others. These get-togethers were at the core of my Yale education. There is no way I can exaggerate their importance in gathering solid knowledge of and feeling for medicine.

Clinical rounds: On rounds in the clinical years, we were with the senior faculty most of the time, again with free discussions of diagnosis and treatments.

I still think of my four years at Yale with gratitude and amazement that so many wonderful people were there to guide me. They were the best four years of my life.

Bjorn Lih, M.D. '41

The Yale System is a good system that helps establish self-responsibility early. Preceptorships and frequent counseling are probably much more useful than exams, though I think exams should be offered, too. They are a good learning experience and help to emphasize what the faculty feels is important. Grading without counting the grade is tedious for faculty but useful for students. Require taking the exam and grade it, but don't count the grade.

Henry H. Jones, M.D. '43 December

As a member of the Class of 1943, I am shocked by the medical education you have described at Yale since my day. Self-assessments, working “at your own pace,” taking time off for “community service” and spending “quality time with family” have no place in medical education!

The school's responsibility is to teach you the scientific facts you must know to diagnose and treat the sick. It has

nothing to do with “community service” unless you work in the ER and go out with the interns to see sick people and bring them back to the hospital or deliver babies, as we did.

In my day we had exams and took them—no self-evaluations (they are obviously prejudiced). We had to complete a research project approved by the head of the department in which we did it, and have it published.

What you are taught, learn and retain in medical school will make the difference between life and death for some patient of yours in the future. It's a great responsibility, and one of which you will have to face and bear the consequences.

There is “no quality time for family” while you're in med school nor when you are out practicing. Your patient comes first.

If I were in charge, I would see to it that you graduate knowing what you should, with periodic exams, class attendance taken, final exams and a research project with published paper.

That's the way it was and should be as far as I'm concerned.

Sophie Trent Stevens, M.D. '43

The most important piece of information that I learned in medical school, I learned on my first day when Dean Winternitz welcomed us and outlined the next four years for us. He stated that if we were going to succeed in medicine, we should not close our books upon graduation, but should remain students for the rest of our lives. This advice made the practice of medicine for 53 years very enjoyable for me.

A. Reese Matteson, M.D. '44

My father, John P. Peters, M.D., moved my mother, pregnant with me, to take a position at Yale as professor of medicine in 1921. He was one of the founders of the Yale System and an ardent supporter of it. I first learned of it as a child. For a number of evenings each spring he would close himself into his study to read the written exams given at the end of the second year and read by the Yale faculty. The only marks were pass and fail.

I entered medical school at Yale in June of 1942 under this system. In June of 1943, all but 10 of the students in our class were inducted into the armed services. The faculty stood firm in its protection of the Yale System for the students, privates first class or midshipmen in the Navy. We had the freedom, even under the military, to learn the fundamental lesson that we were responsible for our own education and should

continue so for the rest of our lives. We did OK—I got the highest mark in the country in anatomy on the national boards but missed a significant number of lectures and decided not to do any dissection below the knee. We could make sensible judgments, as have now at least 80 classes of Yale medical students.

I had the opportunity to serve on the faculty of two medical schools at their inceptions—the University of North Carolina in 1952 and the University of California, San Diego, in 1969. In both of these schools, a significant number of the early faculty were Yale graduates, and we took segments of the Yale System with us. It is hard for faculty who have not had the privilege of working the system to accept the fact that students can take significant responsibility for their own education. More importantly, if marks and silly tests are not imposed, they will work collegially to educate one another.

Richard M. Peters, M.D. '45

Northwestern has a modified Yale System and it works well. However, I strongly support the traditional Yale System established in 1921. It not only sets Yale apart—as a graduate school—from other medical schools that act like trade schools but affords freedom of expression and development of lifetime learning habits that are essential to the practice of good medicine.

B. Herold Griffith, M.D. '48

The Yale System is all right for some students, but there is a significant number of poor students who slip through the cracks and make poor physicians. I think the Yale System should be abandoned. I think that the mandatory thesis requirement should also be abandoned, although I won the Keese Prize for the best thesis in 1948. The sum of the world's medical knowledge is so great that the students should spend all their time on their medical studies unless they are in the M.D./PH.D. program.

David E. Morton, M.D. '48

I am voting for the Yale System as it was in 1950. It was good for me and seemed to be for my classmates. I've enjoyed a 36-year career in academic medicine—been the head of two departments, president of my professional society, written a lot of papers—so what's to change?

Malcolm A. Bagshaw, M.D. '50

The Yale University School of Medicine formed a model for our development of the new School of Medicine at the University of California, San Diego, from 1964 to 1968. All educational systems need constant surveillance and updating but maintenance of the outstanding and unique qualities is equally important.

Robert N. Hamburger, M.D. '51 March

Your letter addressed to my late husband, Henry M. Williams, M.D., arrived here today and I read its contents with great interest. One line in particular piqued my attention and aroused a memory. The line is in the second paragraph: "Instead, students have been expected to make responsible decisions about the best use of their own time."

In his very early days as a medical student at Yale, my husband found that his poor eyesight caused him to take unconscionable amounts of time getting through *Gray's Anatomy*. He soon saw that if he were ever to graduate, let alone finish reading the book, something drastic would have to be done.

Here is what he came up with: he sat down and copied—in his own handwriting—the entire *Gray's Anatomy*. Then using his own copy, able to read it swiftly and easily, looking back and forth between sections, he was able to read and comprehend the whole thing. I don't believe he ever forgot a word of it.

I would call this action "responsible and self-driven," and would place it above "optional self-assessments throughout their body system modules" any time.

I believe my husband would have signed the petition.

Eileen M. Williams, widow of Henry M. Williams, M.D. '52

At the time I went to medical school, Yale was known as and truly was the only *adult* medical school in the country. When a large number of students failed Step I of the USMLE 15 years ago, I suspect the deficit was in the faculty or curriculum, not the students or the system. Through the years there have been initiatives to change the system, in many cases coming from faculty members who were threatened by the failure of students to come to their lectures. Instead of looking to themselves to make their lectures worth going to, they blamed the system. In my day, the worthwhile lectures were crowded; the poor lectures were met with near-empty halls, the students choosing the library instead. I suspect the same is true today.

In the real world Yale medical school graduates have always excelled. Please preserve Yale as the truly adult medical school.

Edward J. Gerety, M.D. '54

Abandoning or even eroding the Yale System will result in Yale graduates being as devoid of curiosity and as boring as most physicians.

Jack Peter Green, M.D. '57

American education has tended toward narrower, more nearly vocational goals for decades, and that narrowing of focus has always characterized most medical education. You have only to go onto the wards of any hospital to hear discussions of disease management and treatment that seem wholly ignorant of the underlying pathophysiology and unconcerned about the broader context of the symptom under discussion.

Yale has been the blessed exception, and as residency programs—even Yale's own—seek standardization around some national standard that essentially commodifies physicians and their knowledge and services, the tradition of medicine as broad and unending, self-directed learning is all that promises a worthwhile future to an embattled profession.

David A. Carlson, M.D. '58

I credit the Yale System with molding the most crucial part of my medical training and fostering the independence of spirit, curiosity and investigatory instincts that are integral to my professional functioning as an academic clinician, investigator, teacher, writer and thinker. Had I been forced to take tests, I would never have graduated; I was too busy absorbing and learning. Yale is a wonderful place to begin a medical career.

Robert N. Taub, M.D. '61, PH.D.

I found the Yale System without exams to be more stressful than the pre-med school at Johns Hopkins with frequent exams. There at least you knew where you stood. I strongly favor the old Yale System with its emphasis on original research and the need to write a paper on the topic.

Charles B. Anderson, M.D. '62

The traditional Yale System is an invaluable asset. Please protect it!

Richard L. Heppner, M.D. '67

Having mandatory exams will destroy our great traditions. I chose Yale in 1968 over many “cut-throat” institutions, including Harvard and Columbia P&S, because of educational freedom. I flourished in this environment. Yale is at the top because of this educational freedom. Please keep it going!

Joseph L. Renda, M.D. '68

The Yale System was made for me. I have been greatly influenced by the learning patterns and intellectual disciplines I developed in my four years at Yale, and I am the physician I am largely because of this system. I felt I got a “Swiss cheese” education. It was full of holes and there were many things I hadn't learned, but I spent most of my days there actively learning, stimulated by whatever I encountered on my serendipitous path that day.

I am a clinical cardiologist, in private practice in one town for my entire 27 years of practice. I follow my patients long term, because the biggest impact I have on their lives is not in the procedures I do but in the care of their chronic diseases. I have chosen to ignore the wishes of our HMOs and of the current generation of family practitioners in this regard, and I have an exceptionally large practice of patients, for whom I often have been the only constant in their care. What I bring to them is largely a product of this Yale System. I read all of the major cardiology journals cover to cover each issue. I know I am the only practicing cardiologist in my state who attends the national meetings in my field every year without exception. I think about the puzzles of cardiac disease and its treatment, I challenge presenters at meetings, I debate the issues with my peers and I bring the day's harvest of these endeavors to each of my patients every day. I love what I do. I doubt all this would be so were it not for my having attended Yale. I was a good student in college, but Yale medical school, and particularly the trust and freedom of its system, opened doors in my brain I never dreamed existed, and I have inhabited them every day of my life since.

Michael Toren, M.D. '69

The Yale System worked very well for me. I am eternally grateful!

Jerome H. Meyer, M.D. '72

Medical education is not winning the battle for humanism, intellectual curiosity and honesty in its medical students, and the medical profession is suffering for it. Preserving student enthusiasm and encouraging self-education are the strengths of a system which has allowed me the ability to “think better” than most of the colleagues I have worked with since I left Yale

in 1977. Ruining it in the name of conformity and standards will land Yale in the middle of the deplorable medical educational system that widely exists today and will ensure that its graduates will be indistinguishable from everyone else.

Robert A Sirota, M.D. '73

When I was in medical school, I studied constantly; never having the assurance of a passing grade on a test caused a lot of anxiety because I would look at the textbook and see only how much I hadn't learned. It was impossible to learn all, or even half, of the information in most textbooks. The anxiety was productive and led to actual learning and not cramming before an exam. I don't think I would have studied as hard if there had been exams. Even now, I find I often study, regardless of whether CME credits are available.

Marie Kelly, M.D. '74

The Yale System comes with a heavy responsibility for the admissions committee and the teaching faculty.

Not everyone belongs at Yale. It takes a highly self-directed, self-motivated, organized person to be successful there. Thus, the admissions interview is more important than MCAT scores. It is far easier for the faculty to hand out a written test than to truly assess a student through first-hand discussion. I do not believe the Yale System excludes student assessment just because there are no tests or grades. I think the faculty knew very well how we students were doing because they made teaching their priority. Teaching was an end in itself; it was not a part-time inconvenience for the teacher. Many students appreciated optional tests, and self-assessment was quite honest.

Medical students are by nature very competitive. The Yale System tempers the negative aspect of that kind of competitiveness, and fosters a camaraderie which grows into the collegial relationships that doctors maintain throughout their stressful careers. The Yale System prepares students in a manner which more directly relates to the realities, the rigors, the values inherent in the practice of medicine. When I see a patient in my office or in the hospital, it is not a written test that I am taking—I must adhere to the high standard that I set for myself when I am entrusted with the health care of another human being. This is what the Yale System has taught me.

I am proud to be a graduate of Yale, and I know I could not have gotten the same quality medical education anywhere else.

Alan B. Silken, M.D. '74

I recommend anonymous, coded, periodic self-assessments to help students assess their progress in learning the minimum. Additional independent study should be encouraged and mentoring should begin early. Not all exams need to be mandatory—but the final, anonymous one should be.

Pamela Zeitlin, M.D. '83

To this day it has served me well. Don't kill the system!

Alan M. Reznik, M.D. '83

Dean Berliner called me into his office in my first year at Yale medical school. He told me that if I had merely wanted to become a doctor, I should have gone to school elsewhere. Yale was interested in producing leaders in medicine, not just good doctors. The 15 minutes he spent with me explaining his rationale for the Yale System were among the most influential in my career and life.

Emphasis at Yale has been on self-directed learning, driven by excitement and love of medicine. The de-emphasis of competition allowed the blossoming of personal social skills and a personal sense of mission separate from one's personal success. Now middle-aged, I realize that these lessons were the most important in building successful, happy health care delivery teams. Dean Berliner was right. The place of Yale medical school is to produce leaders, not merely doctors.

Calixto Dimas, M.D. '85

Becoming a physician means making a commitment to life-long learning. The dates of graduation from medical school or residency are arbitrary points in a career, useful in marking passage from one stage of training to another. However, they in no way represent the completion of an education. Even if you were able to absorb all of the world's accumulated knowledge in any one field, your knowledge would be shortly out-of-date as our understanding of human physiology and disease rapidly advances.

The Yale System acknowledges the fact that Yale medical students are intelligent, intellectually curious and self-motivated. I have no examiner sitting above me now, making sure that I achieve a passing grade, but I owe it to every patient to continue to learn and to be the best physician that I can be. I feel that the Yale System helped me to incorporate learning into my everyday clinical activities, as a lifelong process and not just as a means to the end of passing a test.

Please do not let one anomalous year bring down a tradition that has been proven worthy over the decades.

Michael Rothschild, M.D. '88

New leaders announced in four disciplines

Chairs appointed in Obstetrics and Gynecology, Therapeutic Radiology, Pediatrics and History of Medicine.

Dean David A. Kessler, M.D., has announced the appointments of four new departmental and section leaders.

Charles J. Lockwood, M.D., FW '89, a specialist in high-risk obstetrics, became professor and chair of the Department of Obstetrics and Gynecology on July 1.



Lockwood came to Yale from New York University, where he was the Stanley H. Kaplan Professor of Obstetrics and Gynecology and chair of the department since 1995. Lockwood is a 1981 medical graduate of the University of Pennsylvania who trained as a resident at Pennsylvania Hospital before coming to Yale as a fellow in maternal-fetal medicine in 1985. He succeeds interim chair Peter E. Schwartz, M.D., HS '70, who heads the section of gynecologic oncology, and Frederick Naftolin, M.D., PH.D., who stepped down as chair in 2000.

Cancer researcher and clinician **Peter**



M. Glazer, M.D. '87, PH.D. '87, became chair of the Department of Therapeutic Radiology on August 12, succeeding James J. Fischer, M.D., who had led the department since 1972. Glazer did his residency at Yale and joined the faculty in 1991. His research

focuses on the cellular processes of DNA repair and mutagenesis and the phenomenon of radioresistance. Glazer, who has a secondary appointment in the Department of Genetics, is also interested in gene targeting and gene therapy strategies for cancer, viral infections and genetic diseases. He pioneered methods for *in vivo* measurements of mutagenesis and applied these to experiments demonstrating fundamental pathways of genetic instability in cancer. Glazer is co-director of the molecular oncology program in the Yale Cancer Center and a member of the Cancer Center executive committee.

Margaret K. Hostetter, M.D., became chair of the Department of Pediatrics on September 1. Hostetter came to Yale four years ago from the University of Minnesota,



where she co-founded the nation's first international adoption clinic in 1986. She was recruited to Yale to head the section of pediatric immunology and serve as director of the Yale Child Health Research Center. She was elected to the Institute of Medicine in 2001.

An alumna of Baylor College of Medicine, Hostetter did her postgraduate training at Children's Hospital in Boston and taught at Harvard before joining the Minnesota faculty in 1982. Her research on the molecular pathogenesis of pneumococcal and candida infections has received NIH funding for two decades. She is also the principal investigator of the Pediatric Scientist Development Program, a \$13 million initiative of the National Institute of Child Health and Human Development.

She succeeds Norman J. Siegel, M.D., HS '70, who served as the interim chair since 2000 when his predecessor, Joseph B. Warshaw, M.D., left Yale to become dean of the University of Vermont College of Medicine.

John Harley Warner, PH.D., became chair of the Section of the History of Medicine on July 1, succeeding Frederic L. Holmes, PH.D., who stepped down after 23 years.



Warner has also been appointed by the university provost to the newly created position of chair of the Program in the History of Medicine and Science.

Warner received his doctoral degree in the history of science from Harvard in 1984 and spent two years as a post-doctoral fellow in London at the Wellcome Institute for the History of Medicine. He joined the Yale faculty in 1986. His research includes wide-ranging explorations of medical institutions, practitioners, ideas and practices, especially in the United States and the United Kingdom.

Since becoming dean in 1997, Kessler has appointed new chairs in 11 departments and free-standing academic sections, including Cell Biology, Genetics, Pharmacology, Molecular and Cellular Physiology, Surgery, the Child Study Center and Microbial Pathogenesis. Searches are under way for successors to M. Bruce Shields, M.D., who has announced his intention to step down as chair of Ophthalmology and Visual Science; Albert B. Deisseroth, M.D., PH.D., the former chief of the section of medical oncology who became president and CEO of the Sidney Kimmel Cancer Center in San Diego last year; and Yale Cancer Center Director Vincent T. DeVita Jr., M.D., HS '66, who is planning to step down at the end of this academic year.

SEND FACULTY NEWS TO

Claire Bessinger, *Yale Medicine*, P.O. Box 7612, New Haven, CT 06519-0612, or via e-mail to claire.bessinger@yale.edu.

The National Academy of Sciences announced in April the election of its new members and foreign associates in recognition of their distinguished and continuing achievements in original research. Among the honorees was **Richard A. Flavell**, PH.D., professor and chair of immunobiology and a Howard Hughes Medical Institute investigator. Flavell is known for his work on the structure and expression of eukaryotic genes, his studies of critical genes of the immune system and the application of genetic approaches to the study of immune function *in vivo*.

Paula A. Armbruster, M.A., M.S.W., associate clinical professor and director of outpatient services in the Child Study Center, was a facilitator at the 17th Annual Rosalynn Carter Symposium on Mental Health Policy in Atlanta in November 2001. Armbruster was also appointed to the national steering council of A Partnership to Open Doors, a collaborative effort between Habitat for Humanity International, the National Mental Health Association and the National Alliance for the Mentally Ill.

Jonathan B. Borak, M.D., associate clinical professor of medicine (industrial) and epidemiology, received a President's

Award from the American College of Occupational and Environmental Medicine (ACOEM) in April at its 87th annual membership meeting in Chicago. The award, presented

by Dean A. Grove, M.D., president of the ACOEM, honored his service to the college as a member of the board of directors and as chair of the council on scientific affairs. Borak was also cited for his contributions to the growth and future of the college through his expertise in the field of toxicology and his commitment to the role of science in public policy.

R. Todd Constable, PH.D., associate professor of diagnostic radiology and neurosurgery, was awarded a \$1 million, 5-year grant from the NIH to develop and validate functional magnetic resonance imaging methodology for the study of language processing for neurosurgical planning. This work will not only lead to improved techniques for functional mapping but also improve the understanding of the neuronal circuits associated with language processing and characterize the impact of diseases such as epilepsy on cortical reorganization. Constable is the director of Magnetic Resonance Imaging at Yale and co-director, along with Douglas Rothman, PH.D. '87, of the Magnetic Resonance Research Center.

Vincent T. DeVita Jr., M.D., HS '66, professor of medicine and of epidemiology and public health and director of the Yale Cancer Center, was elected to the European Academy of Sciences and Arts in September for his "outstanding and lasting contributions to cancer research and medical education." DeVita, a member of the National Academy of Sciences and Institute of Medicine, joins two other Yale School of Medicine professors previously elected to the European Academy: Gerhard Giebisch, M.D., and Patricia Goldman-Rakic, PH.D.

Michael P. DiGiovanna, M.D. '90, PH.D. '90, associate professor of medicine (oncology) and pharmacology and co-director of the Breast Cancer Research Program at the Yale Cancer Center, received a \$200,000 grant from the Breast Cancer Research Foundation to investigate the gene HER2, which can be predictive of the prognosis of breast cancer. DiGiovanna was also awarded a four-year grant of almost \$1 million to study drugs that target HER2 in connection with anti-estrogen treatments.

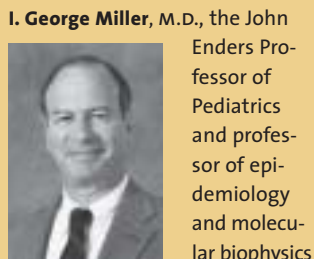
Bruce C. Fichandler, PA, lecturer in plastic surgery and director of admissions for the Yale Physician Associate Program, was elected to his eighth term as treasurer of the American Academy of Physician Assistants (AAPA). He has also served as AAPA president and vice president/speaker of the House of Delegates.

Gerald H. Friedland, M.D., professor of medicine and epidemiology and director of the AIDS Program at Yale-New Haven Hospital, has returned from a four-month sabbatical at the Nelson R. Mandela School of Medicine in Durban, South Africa. Friedland and colleagues worked on several projects to provide antiretroviral therapy for the treatment of HIV/AIDS and participated in educational programs throughout the region for health care workers, medical students and physicians.

Margaret K. Hostetter, M.D., professor of pediatrics and microbial pathogenesis, was named the 30th annual Maxwell Finland Lecturer of the Infectious Diseases Society of America, its highest honor for a career in the field of microbial pathogenesis. The lecture, titled *Why Candida Kills You*, and the award were presented in San Francisco. Dorothy M. Horstmann, M.D., a former Yale faculty member, was the 1977 award winner. Hostetter is chair of the Department of Pediatrics.

Jeanette R. Ickovics, PH.D., associate professor of epidemiology and psychology and director of the Connecticut Women's Health Project, was honored with a Seton Ivy Award. The presentation was part of the 23rd annual Seton Elm-Ivy Award ceremony in April recognizing individual efforts to strengthen ties between Yale University and the city of New Haven.

Ilona S. Kickbusch, PH.D., professor of public health (global health) and political science, served as Distinguished Scholar Leader in the inaugural year of the New Century Scholars Program of the Fulbright Scholar Program. This year's program focused on *Challenges of Health in a Borderless World*. The program offers participants an international exchange opportunity of two to six months to further their research and investigate comparative approaches by interacting with colleagues abroad or in the United States.



I. George Miller, M.D., the John Enders Professor of Pediatrics and professor of epidemiology and molecular biophysics and biochemistry, was elected to a fellowship in the American Academy of Microbiology for achievement in virology. Miller's research discoveries have advanced the understanding and treatment of the human gamma herpes virus, Epstein-Barr virus and Kaposi's sarcoma herpes virus.

Irvin M. Modlin, M.D., professor of surgery, was appointed to the King James IV Professorship of the Royal College of Surgeons of Edinburgh for 2002. Modlin was to deliver the graduation oration for the College in October on the 497th anniversary of the award of the Seal of Cause to the College by James IV. His topic was *The Use of Laser Capture Microscopy and Gene Analysis in Defining Neuro-Endocrine Cell Transformation and Autonomy*.

Kitt Mia Falk Petersen, M.D., assistant professor of medicine (endocrinology) and assistant director of the General Clinical Research Center, received the Young Investigator Award, a 2002 Novartis Award in Diabetes, for her studies of the mechanism of insulin action in the liver, the pathogenesis of insulin resistance in obesity and type 2 diabetes, and the mechanisms of action of thiazolidinediones in patients with type 2 diabetes and leptin in patients with lipodystrophy. The award was presented in June by Novartis Pharmaceuticals.

Fredrick C. Redlich, M.D., professor emeritus, former chair of psychiatry and dean of the School of Medicine from 1967 to

1972, received the Gold Medal of Distinction in January from the University of Vienna and the community for past services and teaching. Redlich spent a week visiting his native city of Vienna.

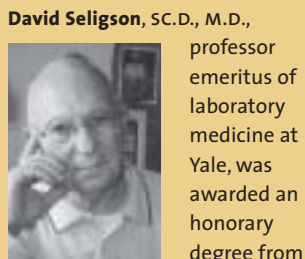
Karin M. Reinisch, PH.D., assistant professor of cell biology, was named the 2002 Pew Scholar in the Biomedical Sciences by the Pew Charitable Trusts in June. Her research focuses on the macromolecular complexes involved in transport within the cell and structure/function studies of the macromolecules involved in nuclear transport.

After a fellowship in pulmonary, critical care and sleep medicine at Yale, **Francoise J. Roux, M.D., PH.D.**, has joined the

Yale Medical Group as an assistant professor of medicine (pulmonary and critical care). Her areas of clinical interest are asthma, sleep medicine and interstitial lung disease.

Vion Pharmaceuticals announced in April that the chair of its Scientific Advisory Board, **Alan C. Sartorelli, PH.D.**, received

the 2002 Otto Kraye Award in recognition of his contributions to the field of pharmacology. Sartorelli, the Alfred Gilman Professor of Pharmacology at Yale, has designed, synthesized and evaluated numerous potential anti-cancer agents.



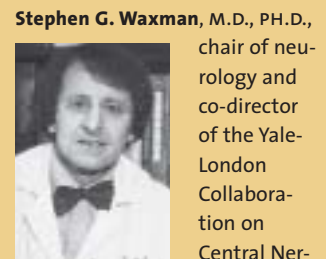
David Seligson, SC.D., M.D., professor emeritus of laboratory medicine at Yale, was awarded an honorary degree from Quinnipiac University at Commencement exercises in May. Seligson, emeritus trustee at Quinnipiac, has been a member of the board of trustees since 1964 and served as vice chair from 1971 through 1977.

Sally E. Shaywitz, M.D., professor of pediatrics and a faculty member in the Child Study Center, was one of six new members

appointed to the National Advisory Neurological Disorders and Stroke Council, the major advisory panel of the National Institute of Neurological Disorders and Stroke. The council, the nation's primary supporter of research on the brain and nervous system, meets three times each year to review grant applications.

Peter A. Takizawa, PH.D., assistant professor of cell biology, was named a Searle Scholar earlier this year. The Searle

Scholars Program, one of the most competitive and prestigious award programs for junior faculty, typically selects 15 of the most promising young faculty members in biomedical science and chemistry each year at universities and research institutes throughout the United States. Takizawa was recognized for his research on how specific mRNAs are transported to defined regions of a cell and the role that mRNA localization plays in cell-fate determination.



Stephen G. Waxman, M.D., PH.D., chair of neurology and co-director of the Yale-London Collaboration on Central Nervous System Repair, received the John Dystel Prize for Multiple Sclerosis Research from the American Academy of Neurology and the National Multiple Sclerosis (MS) Society in April. He received the prize for research in two areas: molecular changes that occur within nerve cells in MS and new therapeutic approaches that have the goal of restoring functions, such as vision or the ability to walk, in people with MS.

Joseph L. Woolston, M.D. '70, professor of pediatrics and a member of the Child Study Center faculty, was appointed

chief of child psychiatry at the center and at Yale-New Haven Hospital (YNHH) in July. Woolston is the medical director and founder of the Yale Intensive In-Home Child and Adolescent Services at the center, medical director of HUSKY Behavioral Plus and medical director of Child Psychiatric Services at YNHH, where he founded the inpatient service.

Barry J. Wu, M.D., associate clinical professor of medicine, received the Award for Excellence in Teaching from the National

Association of Inpatient Physicians (NAIP). The award, for his exemplary service as a teacher, academician, mentor and role model in hospital medicine, was presented at NAIP's annual meeting in April.



JOHN CURTIS



CHILD STUDY CENTER

A quilt by Deirdre Stowe was unveiled at the dedication of the Donald J. Cohen Auditorium, honoring the late director of the Child Study Center.

With a new name, auditorium honors late director of Yale's Child Study Center

Before he died, Donald J. Cohen, M.D. '66, the director of the Child Study Center, found warmth and comfort in a quilt made of patches that carried messages from friends, family and colleagues. A gold band runs through the quilt, connecting all the individual squares. "Donald is the gold band that continues to bring so many people together," said Deirdre Stowe, a friend who made the quilt, as it was unveiled at the dedication of the Donald J. Cohen Auditorium at the Child Study Center.

Cohen, who died last October 2 of cancer at age 61, was honored at the June 19 dedication by several people who knew, loved and worked with him during his 18 years as director of the center. Yale President Richard C. Levin recalled giving a speech in the same room three years earlier at the dedication of the Irving and Neison Harris Building. "I was not the least bit surprised as we planned the dedication that he went about it with his meticulous attention to detail. He left absolutely nothing to chance," Levin said. To laughter from the audience, he added, "He insisted on writing my speech. I took no risk. I delivered it as written."

Levin and others remembered Cohen as a pre-eminent scientist and clinician, a man of broad interests and one who cared about others. "We have all benefited, especially children," said Rev. Frederick J. Streets, the

university chaplain, "from the depth of his intellect and the breadth of his spirit and kindness."

The dedication came just a few days before the death of Cohen's mentor and predecessor, Albert J. Solnit, M.D., HS '52, following an automobile accident on June 21 (See *In Memoriam*, p. 63). Solnit was director of the center from 1966 to 1983, when Cohen was appointed to succeed him.

When the Child Study Center's new building opened three years ago, it and the auditorium were named in honor of Irving and Neison Harris, longtime supporters of the center. Neison Harris died earlier this year and his brother Irving suggested that the auditorium bear Cohen's name. "Donald really made a huge contribution to Yale and I would like to see him recognized in any way possible," Harris said in a telephone interview.

Dean David A. Kessler, M.D., recalled that Cohen saw the auditorium as a place where people would meet and pass on knowledge to the next generation. "In this auditorium," Kessler said, "we shall hold close our memories of Donald, sustain his values for learning and service and carry out his vision for children and their families."

Seeking balance when it comes to power

As third-year medical and nursing students head for the wards, a day is devoted to art of communication.

For a health care provider, real empathy boils down to whether he or she has genuine curiosity about individual patients, according to Jodi Halpern, M.D. '89, PH.D. '94. Clinicians who adopt a listening stance discover the distinct experiences of the individual patient, and the empathy that follows empowers both the provider and the patient. It also enables clinicians to remain passionate about their work.

Halpern, assistant professor of bioethics and medical humanities at the University of California, Berkeley, was the keynote speaker for Power Day, when rising third-year medical students met with 60 advanced-practice nursing students to analyze how collaboration enhances patient care. Power Day concluded a weeklong program that introduces the students to the hospital wards, with lessons on charting notes, cardiac life support and mastering other essential skills. Years ago, the students had one day, known as Survival Day, to prepare for the wards.

Often, misunderstandings develop because clinicians don't recognize their own power, said Nancy R. Angoff, M.P.H. '81, M.D. '90, HS '93, associate dean for student affairs, adding that attending physicians, residents, nurses and students need to be aware of their interactions. Halpern urged the students to reflect on their own roles while analyzing their vulnerabilities.

She questioned notions in the medical "culture" such as the assumption that patient autonomy means establishing a distance between caregiver and patient, the failure to be open to alternative approaches to treatment and the reluctance to feel or express emotions. Halpern said her own interest in empathy began after being criticized during her third year as a medical student for "feeling too much."

Empathy requires little extra time and can result in more efficient care, said Halpern. Providers can practice empathy by keeping journals and occasionally writing narratives from the patient's point of view. Such notes contributed anecdotes for her book, *From Detached Concern to Empathy: Humanizing Medical Practice*, which argues that the detached, seemingly objective approach does not always lead to the best care. "The goal of empathy is not to share the same feelings, but to allow the patient to regain her autonomy and feel socially effective," Halpern said.

After six months, the medical students will meet again to analyze their experiences and decisions. "In order to change the culture, we have to change the stories of the culture," Angoff noted. "The stories of success must be stories of good use of power."



TERRY DAGRADI

Jodi Halpern spoke about the meaning of empathy during a program preparing medical and nursing students for their education on the hospital wards.



JOHN CURTIS

Charlotte Wu, who decided to come to Yale, talks with Ameya Kulkarni, a second-year student and president of the Medical Student Council.

Back to New Haven, for a second look

Over the course of two days in early May, scores of accepted applicants returned for another look at the medical school, but without the dark suits, interviews or anxiety. "Second Look Weekend" was launched several years ago as a means of recruiting top students who had not yet decided among several offers of admission. Throughout the weekend students and faculty waxed enthusiastic, in a relaxed, informal setting, about the School of Medicine. The not-yet-committed students met with faculty in labs and offices for informal conversations on specific topic such as the clinical years, research opportunities and student diversity, and dined in small groups in local restaurants. In addition to campus and city tours, applicants were treated to a series of skits presented by first-year students. This year's Second Look Weekend also coincided with Student Research Day.

One of the last activities of the two-day visit was a student activity fair. Students and applicants met on the third floor of the Jane Ellen Hope Building to discuss student volunteer opportunities.

Reunion 2002

Up and down Cedar Street, the buzz centers on the state of the Yale System.

When hundreds of alumni and their guests came to the medical school for this year's reunion, the Yale System of medical education appeared to be as much on their minds as getting reacquainted with classmates. The topic took up most of the meeting of the executive committee of the Association of Yale Alumni in Medicine on the afternoon of Friday, June 7. And it was the first thing **Dean David A. Kessler**, M.D., mentioned at the alumni meeting the following morning.

"There is nothing more central to the Yale medical school than the Yale System," Kessler told alumni. "For generation after generation the Yale System has demonstrated that it works and has produced leaders in American medicine."

Reunion began with the traditional dean's welcome in the Cushing/Whitney Historical Library, followed by a clambake on Harkness Lawn. This year's symposium in the recently dedicated Leon E. Rosenberg, M.D., Lecture Room was devoted to women's health. The School of Public Health focused its reunion discussions, held at the New Haven Lawn Club, on disaster management.

At this year's reunion, a focus on women's health and hormone replacement

Perhaps the most talked-about topic in women's health this summer was hormone replacement therapy (HRT), given the news from the Women's Health Initiative (WHI) study in early July that taking estrogen and progestin does not protect the heart but in fact slightly increases the risk of heart attack. A month earlier, HRT had been a central topic at this year's reunion.

Those attending the reunion week-end program heard that research at Yale on the usefulness of HRT in preventing heart disease had also led to unexpected results. Although Yale researcher **Teresa L. Caulin-Glaser**, M.D., found that hormone replacement provided some beneficial effect for postmenopausal women in her study, the benefit was much less dramatic than had been anticipated from her basic laboratory studies. In her talk, Caulin-Glaser illustrated how results that look robust in the laboratory are not always borne out in clinical trials.

Caulin-Glaser's presentation was part of a symposium titled "The Growth of Women in Medicine: Progress That Benefits Us All." Also on the program were **Sonja V. Batten**, PH.D., newly arrived associate director of Women's Health Research at Yale (co-sponsor of the panel with the Office for Women in Medicine). Batten provided an overview of the program, and **Susan J. Baserga**, M.D. '88, PH.D. '88, detailed the history of the admission of women to the School of Medicine in 1916 (See *The Last Barrier*, Summer 1998).

Like the researchers in the multisite WHI study, Caulin-Glaser had been intrigued by studies showing that HRT for postmenopausal women might help prevent heart disease. Observational data had suggested—but not proven—that if postmenopausal women with heart disease took hormones, they cut their risk of a cardiac event in half. The promise of signifi-

cant reductions in vascular inflammation was suggested by Caulin-Glaser's laboratory studies, in which she treated human endothelial cells in culture with estrogen. But hormones did not prove nearly as effective when she tested them on human subjects.

Caulin-Glaser went on to study the effects of exercise, dietary changes and stress reduction techniques on patients in cardiac rehabilitation. Her findings that exercise and stress management do reduce vascular inflammation suggest that the current failure of HRT to reduce heart disease does not leave physicians empty-handed. "If we can demonstrate the effectiveness of lifestyle interventions in modulating inflammation, we will have very powerful and safe therapies to offer our patients." She is frustrated that physicians recommend cardiac rehabilitation for only 30 percent of their patients, for twice as many men as women and for very few minority-group members.

She was not surprised by the recent acknowledgement by the Women's Health Initiative that HRT is no "magic bullet." "It is important to appreciate that, although the study has finally given us some solid clinical information to use when treating our patients, many questions still remain," Caulin-Glaser said in August. "From a research and clinical perspective, it addressed only the use of a combination HRT, estrogen and Provera. Issues not addressed by the study include the effects of estrogen alone, estrogen in combination with less-potent progestins, the use of different delivery routes and determining the safe length of therapy."

"Nature's way of producing the exact combination of sex hormones may be protective, but the way we are replacing them artificially may be incorrect in dose, combination, delivery route and length of treatment," she added. "There is much to learn, and that is why the field is so exciting."

Two honored for service to alumni association

Two alumni who graduated 10 years apart were honored at reunion this year for their service to the School of Medicine. **Daniel L. Arons, M.D. '67**, an instructor at the Harvard Medical School and an attending physician at Massachusetts General Hospital, and **Gilbert F. Hogan, M.D. '57**, a retired New Haven internist and cardiologist, each received the Distinguished Alumni Service Award.

In announcing the awards, Francis R. Coughlin Jr., M.D. '52, president of the Association of Yale Alumni in Medicine, cited Hogan's service as past president. Hogan, who celebrated his 45th reunion, was accompanied by 20 members of his immediate family: his wife, five sons, four daughters-in-law and 10 grandchildren. "I do feel a little guilty taking it," Hogan said of the award. "I didn't realize I was working. I just thought I was having a lot of fun."

Coughlin also took note of Arons' service to the school. "While your medical career is based in Boston," he said, "you were never too busy or too far away to answer a call from your alma mater. You have been a tireless fund-raiser for the school both as a class agent and as chair of the School of Medicine Alumni Fund."

Arons credited the Yale System with steering his medical education and, quoting one of his patients, took a humorous swipe at a medical school on the Charles River. "Anybody can go to Harvard," the patient told him. "You went to Yale. You're special."



JERRY DOMIAN (2)



TOP AND ABOVE Gilbert Hogan, M.D. '57, and his wife, Carol, are surrounded by sons, daughters-in-law and grandchildren at reunion. Like Daniel Arons, M.D. '67, who was joined on the dais by his wife, Elissa Beron Arons, M.D. '70, and Dean David Kessler, Hogan was honored with the Distinguished Alumni Service Award.

Catching up with classmates

Have you wondered what old 50-and-so is up to these days? We did.

More than 214 medical and 150 public health graduates returned to New Haven in early June for Alumni Reunion Weekend, and many of them picked up where old friendships left off half a lifetime ago. Jobs had changed, and in some cases specialties did too. Children were born. Children grew up. People moved. Marriages began and a few ended.

Contributing Editor Cathy Shufro spent part of the weekend talking to alumni about where they have been since graduation 5 or 50 years ago, and what they are doing now. Snapshots of a half-dozen of those conversations follow. For more class news, see the reunion reports that begin on page 52.

A life in surgery, a new role in anatomy

Robert Chase, M.D. '47, emeritus chair of the department of surgery at Stanford, has devoted himself to teaching human gross



anatomy since retiring from active surgery 10 years ago. "I love first-year medical students," said Chase. "They are unspoiled, bright as hell and wonderful people. The spectrum of students is so much broader than when I was here at Yale and it was 95 percent white males."

He said the presence of women, who compose more than half the class at Stanford, has changed the atmosphere in the human anatomy laboratory. "In the old days, it was sort of a macho experience," he recalls. "If you were disturbed by dissecting a human being, maybe you didn't belong in medicine." Now the human dissection is prefaced by discussions about the people who donated their bodies, and the conversations continue as the dissection progresses. Chase said the dissection teams bridge cultural and ethnic differences, each group of four becoming "a little family" that reduces "balkanization" of people with differences.

Stanford students conduct an end-of-the-course ceremony, reading poetry, performing music and even hearing from the families of those who donated their bodies. "They appreciate seeing the gift that it's been to students."

Besides teaching, Chase is also working to develop computer-assisted instruction for learning gross anatomy and surgery. Chase feels confident that nothing will replace the experience of doing hands-on dissection. Chase lives in Stanford with his wife, Ann. They have three children, nine grandchildren and three great-grandchildren.

Like father, like daughter, for two New York doctors

Doris Wethers, M.D. '52, recalls that when she was a child growing up in the Sugar Hill district of Harlem, her dolls quite



often had one sort of medical crisis or another. She also remembers sitting in the family car as early as age 8 waiting for her father, a 1923 graduate of Howard University Medical School, to complete a house call. Those experiences and others led to her own career in medicine, which began when she enrolled in medical school at Yale in the late 1940s.

Wethers was inspired by her father but was not pressured by him to become a physician. It was "a calling" that led her to enroll at Yale in a class of 65 students that included only eight other women—among whom she was the only African-American. None of her three children chose to study medicine: one is a lawyer, one is developmentally disabled and one is a session musician with a large teaching practice. Wethers recalls that her musician son worried that his parents would disapprove when he announced his decision to pursue a career in music instead of science. "I told him, 'The only thing I can do in music is turn on the radio, and you think I would discourage you? You've got this God-given gift.'"

She retired from general pediatrics in New York in 1995 and from sickle cell anemia research two years ago. She saw progress during her career in the diagnosis and treatment of sickle cell anemia, but "no final answers." Among the advances: the illness is increasingly diagnosed at birth, 44 states now require newborn screening, chil-

dren affected are given prophylactic penicillin until they are at least 5 years old, and infants with sickle cell anemia are now routinely given a new vaccine to guard against pneumococcal infections—particularly those of the blood and brain—potential killers of children with the disease.

Her husband, Garvall H. Booker, D.D.S. (also a Howard graduate), died in 1996. Wethers lives near The Cloisters museum in upper Manhattan, where she has a "minuscule" vegetable garden. She enjoys traveling (she recently visited southern Africa), visiting museums, attending the theater and reading. She highly recommends *The Poisonwood Bible* by Barbara Kingsolver.

At the FDA, seeking a more perfect union

Organizing and running a labor union isn't exactly what he trained for, but **Robert Young, M.D.** '67, Ph.D. '69, clearly



enjoys the job. For the past four years, Young has served as president of a newly formed chapter of the National Treasury Employees Union representing 3,800 employees at the Food and Drug Administration's Washington headquarters (nearly a third of whom have doctoral-level degrees). "It goes to show that your career can take turns that you might never have imagined," said Young, who jokes that he runs the employee "complaint department" at the FDA. The researchers in Washington are among 5,000 FDA employees represented by the union nationally. Young's colleagues have elected him union president twice in a row.

Young says that union representation for the researchers provides a safeguard in the same way that guarantees of academic freedom protect pro-

fessors. The union helps to ensure that researchers get to “call the shots about the quality of the research being submitted” by shielding them from political, economic and bureaucratic pressures. Before taking on the union job, Young had worked as a researcher himself, first reviewing applications to market new drugs or to test them on human subjects and subsequently evaluating the reliability of drug data. His tenure at the FDA overlapped with that of **David A. Kessler, M.D.**, who was the agency’s commissioner from 1990 to 1997, but by the time Young began his union duties, Kessler had moved to Yale as dean.

Young originally envisioned himself as a clinician. After an enjoyable summer working in the lab of Frank Ruddle, PH.D., he decided to augment his medical degree with a doctorate in pharmacology, then spent two postgraduate years in internal medicine at Mount Sinai Hospital in New York. It was when he worked at the National Cancer Institute that he discovered that as much as he enjoyed the doctor-patient relationship, he found research more compelling. Young also earned a master’s degree and a J.D. in labor law at Georgetown during the 1980s, collecting so many acronyms after his name that he does not use them all. A resident of Bethesda, Young is married to concert pianist and Department of Justice trial lawyer Virginia Lum. Their children are Justin, 9, Marielle, 11, and Colette, 13.

His career turn says much about the value of the Yale System, Young believes. “I do hope the students learn that a graduate and medical education can be used for medical careers in addition to clinical practice, research and teaching,” he says. “The values embodied in the Yale System can lead one into

disciplines somewhat remote from where one started, and it can be a lot of fun. In my years on Cedar Street, I would have never thought I would be involved in the kinds of things I have done. It’s been quite an adventure.”

For EPH grad, a goal that is universal

As a child, **Kevin Nelson, M.P.H.**



’92, didn’t dream of growing up to be a health care administrator; in fact, he envi-

sioned himself as a doctor. But 18 years out of college, he loves his job running a managed-care plan that provides government-subsidized health insurance for 40,000 New Yorkers who would otherwise probably go without insurance. As COO of HealthSource/Hudson Health Plan, which has members in Westchester, Rockland, Orange and Sullivan counties, he sees one of his company’s roles as nudging the United States closer to universal health coverage.

In part because he had a sister with cerebral palsy, Nelson began college intent on going to medical school and becoming a neurologist. He enrolled in science courses, worked in a hospital and played a role in the premed society and student government at the University of Pittsburgh. Nelson gradually realized that he liked running organizations more than he liked medicine, and he decided to wed his interests in health care and business. He worked in a community health center in New Jersey and then a large public hospital in Atlanta before going to Yale to study health policy and management.

During his 10 years at HealthSource, Nelson has watched the company grow from 19 to 200 employees. One of his company’s goals has been to advocate for legislation that would

streamline the state-mandated enrollment and re-enrollment process for uninsured individuals. Re-enrollment, or “recertification,” is required annually for individuals and families who obtain their health insurance through Medicaid and other government-subsidized programs. He calls the application process “a nightmare ... If you’re missing a piece of paper, you’re terminated.” HealthSource joined with similar organizations, successfully backing legislation that will simplify the certification process. “All the advocacy we’re doing is with an eye toward universal health insurance. It’s the only way,” he said. Nelson lives in Westchester County with his 1-year-old daughter, Cherie, and 7-year-old son, Adam Philip.

How managed care stacks up

Tracey Thomas, M.P.H. ’94, works



as a research associate at Yale’s School of Public Health. “I never actually left,” jokes Thomas,

who is contributing to a study of the variations in managed-care regulations from state to state. Working with faculty members Mark J. Schlesinger, PH.D., and Karl S. Kronebusch, PH.D., Thomas is helping to analyze and quantify how a state’s managed-care rules affect physicians’ satisfaction with the managed-care system in that state.

Thomas, who worked as the office manager for U.S. Rep. Bruce Morrison of Connecticut before earning her degree at Yale, says her work fits well with the job of raising three young children, but she misses politics. “I love politics,” says Thomas, who lives in Hamden with her husband, lawyer Marvin Bellis, and children, Morgan, 8, Jack, 5, and Ronan, 2.

A new derm professor, an interest in research

This summer **Maryam Asgari,**



M.D. ’97, joined the faculty of the University of Washington, where she recently

completed her residency in dermatology. Concurrently, she has been working toward a master’s in public health in epidemiology, for which she was awarded a fellowship by the Carl J. Herzog Foundation. She plans to continue research on the epidemiology of skin cancers along with clinical-outcomes research.

Asgari lives with her husband, Marc Marchiel, a lawyer, and their son Arman, who turns 1 this fall, in Seattle. By the way, Asgari thinks using Botox for cosmetic reasons is fine. “There are not a lot of things in our armamentarium that are effective and don’t have side effects, so I think it’s a good way to help people feel good about themselves. The patients are happy.”

Familiar Faces

Do you have a colleague who is making a difference in medicine or public health or has followed an unusual path since leaving Yale? We’d like to hear about alumni of the School of Medicine, School of Public Health, Physician Associate Program and the medical school’s doctoral, fellowship and residency training programs. Drop us a line at yymm@yale.edu or write to Faces, Yale Medicine, P.O. Box 7612, New Haven, CT 06519-0612, and tell us why this person’s story would interest fellow readers.

The names of class members appear in bold.

1942

60th Reunion Report

At the dean's reception I was heartily greeted by **Ludmil Chotkowski**. Since retiring from practice **Chot** has been living on the 100-acre family farm in Kensington, Conn., established by his father, an immigrant from Poland. Each summer **Chot** invites classes from local schools, as he did us, to share his harvest of blueberries, apples, pears and peaches. One child wrote, "Thank you for the apples. I'll be sorry when you are dead!" **Chot** has written and privately published a book debunking chiropractic (See *Books*, p. 18). His book was a resource for a current PBS documentary on the subject. **Carter Stilson** was the only other classmate at the reception. He was saddened by the disbanding of The Compleat Pediatrician, a group of pediatricians who have been meeting monthly with Al Solnit and John Schowalter at the Child Study Center for more than 40 years, focusing on developmental, psychodynamic and family relations issues as they occur in pediatric practice. The work of this dedicated group has contributed greatly to the quality of pediatric care in the New Haven area. **Carter** seemed to be consoling himself with a feast in which the main course was, would you believe, zucchini! Zucchini is also one of my favorites so we traded recipes. He also told me of a resource for natural foods in New Haven. After the reception came the fabulous New England clam-bake, which we enjoyed heartily, but no other classmates showed up so we joined my daughter Rachel and her classmates of '77.

Leo and Elizabeth **Kellerman** were at the Graduate Club dinner Saturday. They had attended the behind-the-scenes tour of the Woolsey Hall organ. I learned that **Leo** had been an alternate on the American



Olympic fencing team. Along with the **Kellermans**, the only other representatives of our class, we dined with the Class of '47. **Leo** had brought news of **Irv Wolfson's** recent bypass surgery, his second. **Moe** and **Miriam Tulin** had retired to Lexington, Mass., near their son. Having married senior year **Lucille** and I celebrated our 60th anniversary last September with seven grandchildren to show for it. I am still seeing patients. For the second year I have received the Yale Child Study Center Group Teaching Award for Outstanding Training of Child and Adolescent Psychiatry Residents.

Samuel Ritvo

1947

55th Reunion Report

The Class of 1947 experienced another successful reunion at Yale, with more classmates returning than most of the groups of our vintage, and we seemed to be the liveliest and possibly the most vocal. The programs, diurnally, were informative and exciting, especially the dean's explanation as to the building programs. If one has not recently visited Cedar Street, the expanse of buildings can be a shock almost leading to disbelief. The magnitude of the change is immense.

Friday evening's clam-bake had everything, including a Dixieland band called The Clam Diggers. They played toe-tappers, including requests from the audience, and seemed to enjoy the music as much as the alums. **Jack Cannon** and **Marie Ziegler** couldn't sit still, got up and danced, looked great. **Bill McClelland** was there with his brother **Harry**, a YSM grad now practicing in California. **Bill's** wife, **Betty**, was at home in Greenfield, Mass., sidelined by a cervical vertebral fracture. She's recovering nicely. The class had special reserved tables and **Bob**

Chase was having a field day with his camera. We seemed to be the last to leave the courtyard. The following day there was a delightful luncheon in the same spot attended by the same seemingly tireless gang, supplemented by **Betsy Due Sullivan** of the YSN Class '46W, a pleasant surprise.

Saturday night the older classes joined the 50th to welcome the most recent five-year group at dinner at the Graduate Club. The affair was well-planned, moved along just right, and again, our '47 tables were reserved. The food was exceptional and the wine perfect. Of course, we were not the most important group in attendance (some would argue that point). The 50th group was the primary honoree and managed the action well, but we did miss **Vic Machcinski's** music and **Brock Lynch's** dancing. The Class of '47 was not invited to offer words, probably a stroke of genius on the part of the organizers.

Among those attending our 55th were the **Barnes, George** and **Ellie**, from Tucson. He's retired but still teaches a few classes a week. **Roy** and **Margaret Breg** were there. **Roy**, who is still working actively, notes that retirement doesn't seem around the bend. Retiree **Jack Cannon** and his wife **Doris** came down from West Simsbury, enjoying the break from the GP load. **Bob** and **Anne Chase** are enjoying his retirement, splitting their time between Keene, N.H., and Stanford, Calif. Present also were **Bob** and **Sue Darrow**, living the good life after his adios to a busy practice. **Frank** and **Sherrie Epstein**—he is still working and recently journeyed to Eastern Europe to consult and advise at renal disease and therapy centers. **Bob** and **Claire Kerin**—now retired, **Bob** is an AYA representative. **Brock Lynch** has retired and loves it. He gave a dance exhibition in Europe recently. **Vic** and **Barbara Machcinski** are well into retirement life on Cape Cod. **Bob** and **Martha Newton**—he puts in fewer hours, but has no thoughts

of quitting. **Phil** and **Jo Philbin** spend the winter in Vero Beach, Fla., and the summer in Maryland. He is retired but busy with reading, golf, computer and family. **Ellis** and **Annalea Van Slyck** were in from Michigan. **Van's** the same, smooth as ever and no big problems. **Root Ziegler** and **Marie** are loving retirement in Essex, Conn., and Nova Scotia, but he's been experiencing rather severe low-back troubles, which have restricted some of their activities. You couldn't tell it from looking at them.

Jo Philbin, Margaret Breg, Jane Frame and Martha Newton, all YSN alums, attended their alumnae dinner on Friday as well as the YSM '47 activities on Saturday.

We hope all '47 grads will plan to be in New Haven for our 60th. Many are not too far away and their presence would add so much to this pleasant event.

Phil Philbin

1952

50th Reunion Report

*Fifty years as docs have past
And we've returned to Yale at last
To celebrate with mirth and levity
Our lives, our work and our longevity*

Of our 42 known survivors, 13 of us and our significant others gathered from the four corners of the country. From Washington state **Phil Deane**, from California **Bob Nolan** and **Janiece**, from Florida **John Wolff** and from Vermont **Bob Gerety** and **Maggie**. Also with us were **Mo Bogdonoff** and **Diana**, **Frank** and **Barbara Coughlin**, **Dick Floyd** and **Mary**, **Jim Luce** and **Candace Myers**, **Bob Owen** and **Edith**, **Jack Roberts** and **Louise Regan**, **Mary Wheatland Schley**, **Doris Wethers** and our long-lost classmate **Bob Winters** and **Nete**. **Bob** came all the way from New York City.

I bring greetings to the class from **Karel Absolon**, **John Arnold**, **Max** and **Frances Bloom**, **Bill Centerwall**, **Art Husted**, **Bill**

Johnson, **Tom Kelly**, **Charlie Lester**, **Bill Letsch**, **Mo Morrison**, **Virgilio Peralta** and **Bob Schultz**.

Over the course of the reunion we had a great chance to revisit, reflect and talk about the past 50 years of our lives and renew those friendships formed at Yale.

We thank the alumni office for its wonderful work at hosting us. The weather was perfect and the luncheons, breakfasts and Friday evening clambake, as well as the final dinner at the Graduate Club, were all enjoyable gatherings.

The discussions for the reunion centered on the very important topics of women in medicine and women's health, particularly in regard to heart disease. Dean Kessler's discussion of the direction the medical school is taking was very informative. The building program adding 700,000 new square feet to the medical school campus illustrated to us the vitality generated and supported by the university.

As a surgeon I was also pleased to hear the plans for the rejuvenation of the surgical department under the leadership of Dr. Robert Udelsman. This should create a world-class department.

As medicine evolves so do medical curricula, and the faculty and student body have participated in discussions about the direction that change should take at Yale. There is, I think, a consensus that the Yale System, which makes a Yale medical education unique, will survive and flourish in the future.

Since our graduation in 1952 the class demographics have changed considerably. Women last year made up more than 50 percent of the entering class (we had 15 percent), with a much higher percentage of minority students.

To those graduates of 2002 in this rapidly changing environment both medically and economically, we pass the torch. Keep it burning! Best wishes

for as enjoyable and as rewarding a time in medicine as we have had.

Finally, as fund-raiser for the class (thanks to **Frank Coughlin**, now head of the Association of Yale Alumni in Medicine), I wish to thank all of my classmates who participated and made it a great year.

Jack Roberts

1957

45th Reunion Report

The Class of 1957 enjoyed the now customary Friday evening clambake, which was held in the courtyard of the renovated Harkness Hall, and an excellent luncheon on Saturday also in the courtyard. An important event occurred on Saturday morning, when **Gil Hogan**, until recently the president of the AYAM, received the Distinguished Alumni Service Award. We had our traditional class meeting on Saturday afternoon in the Boyer Center on Congress Avenue. We opened the meeting by remembering the 16 members of our class who have passed away. Then, sharing their professional experiences with us, **Vince Andriole** spoke on the characteristics of Yale medical students, **Hal Fallon** on life as a dean and **Gil Hogan** on the Association of Yale Alumni in Medicine.

The following classmates were present: **Vince Andriole**, **Jane Battaglia**, **Jack** and **Barbara Blechner**, **Harry** and **JoAnn Briggs**, **Jack** and **Anne Carey**, **Louis** and **Mady Cooper**, **Tom** and **Nancy Danaher**, **Jim** and **Coleen Dorr**, **Hal** and **Jo Ann Fallon**, **Bob** and **Joan Fishbein**, **Tony** and **Mary Fons**, **Liz** and **Ben Forsyth**, **Al** and **Vivian Fried**, **Gil** and **Carol Hogan**, **Stan** and **Carol Kilty**, **Bill** and **Priscilla Kissick**, **Ed** and **Naomi Levin**, **Jack Levin**, **Herb Newman**, **Howie** and **Gretchen Minners**, **Ray Phillips**, **Stan Simbonis** and **Ann Faulk**, **Gil**



and Marlene **Solitare**, **Don Stahl**, **Arthur Taub**, **Bill** and Barbara **Waskowitz** and **Herb Winston**. The 27 members of '57 appeared to make up the largest class contingent present on this reunion weekend. Approximately 30 percent are in practice and half of those in attendance indicated that they were fully retired. (At the time of our 40th reunion, one-third of the attendees had retired.)

Dinner was held at the home of Priscilla and **Bill Kissick** on Johnson's Point in Branford. As usual, the food was superior, and had been planned by Carol and **Gil Hogan**. The wonderful atmosphere that pervaded the entire evening reflected the genuine warmth of the relationships between the members of our class.

Gil Hogan compiled a wonderful classbook that included responses to questionnaires that he had mailed out earlier this year as well as pictures that many members of the class had provided. This was given to all who attended and also will be distributed to those who could not attend.

Jack Levin

1962

40th Reunion Report

The most frequently asked question this reunion was "Are you still practicing or have you retired?" The responses were "yes," "no" and "halfway"! The assembled group laughed, remembered, observed the present and looked forward. Gathering in New Haven were Nancy and **Arnold Eisenfeld**, **Bruce Elfenbein** (Bruce was with us for Friday; he was involved in a bike race Saturday in Philadelphia), Carol and **John German** (who retired to New Harbor, Maine), Kate and **Steve Fricker**, Jane and **Fred Cantor**, Joyce and **Jim Spencer** (heading toward a move to Cape Cod), **David Seil** (looking toward retirement next year in Sarasota), Maureen and **Stan Matyszewski**, Rhonda and **Al**

Lieberson, Ann and **Joe Ross**, Trudy and **John Harrington**, Pat and **Joe Ferrone**, Flo and **Walt Karney** (now in Rockville, Md., after 32 years in the Navy), Peggy and **Dick Pschirrer**, Anita and **Fred Anderson**, Darlene and **John Foreman**, Norma Davenport and **Carter Marshall** (who came the farthest—from Tucson, Ariz.), Ann and **Bill Miller** (now dedicated to roses and fishing, not necessarily in that order!), Dianne and **Charlie Carl** (also celebrating a Yale College reunion), Carol and **David Nicholas** (still working in quality assurance for international health care), and Marcia and **Manuel J. Lipson** (who recently received a lifetime achievement award from the Massachusetts Medical Society for his work in rehabilitative medicine).

Dick Collins was called into emergency service for the month of June at the U.S. Embassy in Moscow. He sent his greetings to all. **Mickey Alderman** also sent his best regards; **Mickey** is involved in research projects lasting at least four or five more years. **Glenn Kelly** is retired and spends time in Colorado and Florida. **Spencer Brody** is still in Laconia, N.H., **Jon Aase** still consults in Albuquerque and **Rod Haft** is in San Antonio. **Woody Waldron** practices in Manhattan and **Bill Porter** (who dropped back a year) has retired to Laguna Miguel, Calif.

The New Haven skies were bright, the medical complex is growing, your classmates are getting grayer and we missed seeing the rest of you. Let us hear from you and plan to come join us in five years.

Richard Pschirrer

1967

35th Reunion Report

We reconvened as we have six times before, slipping at once into the old familiar comfort and confidence of friendships that have now lasted more than

half a lifetime. Those attending were **Dan** and Elissa **Arons**, **Mary Williams Clark** and Jerry King, **Alex** and Trina **Dora**, **John Drews** and daughter Kate, **Peter** and Marian **Egbert**, **Dick** and Carol **Heppner**, **Peter** and Maureen **Herbert**, **Bob Kirkwood**, **Tony Lovell**, **Steve** and Chris **Miller**, **John** and Marilyn **Pastore**, **Bill Perkins**, **Brian Rigney** and Jessica Covello, **Dick** and Caroline **Swett**, **Martin** and Karen **Wand**, **Redford** and Virginia **Williams**, **Ihor Zachary** and **Peter Zeman**.

The mood was relaxed and a mixture of the playful and serious. Most of the group are around 60 now, and since our last meeting there have been some prostate and heart surgeries and the placement of a few stents. But in general these are men and women at their peak, and most are still working full blast. One level below day-to-day, however, everyone is now thinking about retirement and how to approach it. **Dora**, **Drews**, **Heppner** and **Dowaliby** have already left active practice—**Dora** and **Drews** were forced by physical problems, **Heppner** and **Dowaliby** made the choice. Trina Dora recently retired from her job as a pilot for United Airlines. **Drews** went to law school, as you probably know. **Heppner** is teaching at the medical school at Pittsburgh. **Dowaliby** is doing a lot of photography again, after a lapse of 30 years or so, and is teaching black and white dark-room photography at Paier College of Art, a small institution in Hamden, Conn. He remains on the clinical faculty at Yale and usually takes part in the clinical diagnosis course each year.

On Saturday morning at the Association of Yale Alumni in Medicine meeting, **Dan Arons** was honored for his long and outstanding service to the school. He received a standing ovation, vigorously supported of course by enthusiastic classmates.

For me, the second highest point of the weekend was watching **Redford Williams** and



Dick Swett at the Saturday lunch. Very intently, they were comparing their HDLs and LDLs and discussing the implications while eating strawberry shortcake that was just barely visible under mountains of whipped cream.

As always, we clustered together where we could, talking. We had hours at the clambake, hours at Saturday lunch and hours at our Saturday night dinner at Adriana's, which started at about 6 and broke up spontaneously about 11. Somehow I had the feeling that this time we were less pressed, less urgent, about having so little time together. People seemed relaxed, at ease with themselves and as always very much at ease with each other. **Zachary** and others mentioned that we must all put out some effort next time to get more of us to come. That should be easier now, with the new online Yale alumni directory. Aside from the numbers, everyone felt that it was an excellent meeting. I thought that we pretty much had time to say what we wanted to say and hear what we wanted to hear—that is, we are mostly OK.

James Dowaliby

1972

30th Reunion Report

Reunion this year provided a wonderful opportunity to visit with friends that we hadn't seen since the 25th and, in some cases, since graduating three decades ago. Everyone attending looked hale, hearty and, if anything, improved by benefit of years and experience.

Two class members arrived on Thursday, **Felix Freshwater** to attend the Plastic Surgery's grand rounds and **Bob DeBlasi** to visit with his son, Greg '03. Our crowd began to gain force of numbers by Friday evening's

dean's reception and clambake. Those in attendance included **Bob** and Louise **Glassman**, **Bob** and Chay **DeBlasi**, **Gary** and Meda **Strauss**, **Phil Cohen**, **Ed** and Barbara **Olinger**, **Dick** and Helen **Robbins**, **Jesse** and Beryl **Jupiter**, as well as **Phil** and Susan **Lebowitz**. Although everyone at the clambake gave good effort, it was clearly **Bob DeBlasi's** vendetta against crustaceans that led to the lobster shortage now facing the Northeast.

Saturday evening the Class of '72 gathered at the Graduate Club on the Green for cocktails and dinner. An influx of classmates who had not made it to the clambake rekindled our excitement. Those making the scene included **Bruce** and Valerie **Haak**, **Tom Horn** and Sue Sciaraffa, **Tony** and Marci **Jackson**, **Felix Freshwater** and Melody Stokes, **Mike** and Sally **Buckley**, **Charlie** and Susan **Scholhamer**, **Frank Kahr**, **Steve** and Roberta **Zeldis**, as well as **Phil** and Barbara **Rothfeld**. Joining them were the **Lebowitzes**, the **Glassmans**, the **DeBlasis**, the **Strausses**, the **Olingers**, the **Robbinses** and **Phil Cohen**.

Phil Lebowitz, the 30th reunion class gift chair, in thanking everyone for their pledges and contributions, described the Society of Distinguished Teachers, which our class and the Class of '67 have combined their efforts to help fund. Dr. Herb Chase, the school's deputy dean for education, hopes to inaugurate a program to support the salaries of outstanding clinician-teachers, who in turn would dedicate a substantial portion of their work effort to teach Yale medical students. Alumni with a special interest in underwriting this society should contact Eric Schonewald in the Medical Development office at (203) 737-2691 for more information.

Harry Malech, our class's social chair, who had planned the reunion dinner, had an acute herniated disk in his lower back and was not able to travel to the

reunion. **Phil** told those gathered at the dinner that **Harry** had phoned him to express his regrets, and that **Harry** had asked him to let everyone know that he was with them in spirit, encouraging all to e-mail him at hmalech@nih.gov. Showing the stuff of which our class is made, **Tom Horn** immediately produced his cell phone, found **Harry** recovering at home in Bethesda, and passed **Harry** (at least his voice) around the room for all to share. On to the 35th in 2007!

Phil Lebowitz

1977

25th Reunion Report

Observing their first quarter-century in medicine, members of the Class of 1977 met for their own celebration on Saturday evening at the Union League Café in New Haven. Over a quarter of the class was in town for a very busy and wonderfully sunny weekend.

During cocktails and hors d'oeuvres, Dean Kessler stopped in to extend his congratulations to the class. **Attilio Granata** and **Ricky Schneider**, co-chairs of the class's reunion planning activity, welcomed the class, first remembering during a moment of silence our two departed classmates, **David Kreis Jr.** and **Lawrence Biris**. **Ricky** then introduced **Howard Koh**, Massachusetts Commissioner of Health. Through **Howie's** initiative and leadership over the past several months, the class undertook a special effort to honor Dr. Morris Dillard, whom we were fortunate to have as our special guest at this reunion dinner.

Dr. Dillard was a favorite mentor to a number of classmates and was instrumental in setting up and continuing to support the Wednesday Evening Clinic over the past 25 years. Several members of the class have made special contributions to a fund honoring the Morris

Dillard Lectureship. (Others wishing to contribute should contact the medical school's development office.) The class heard from Dr. Dillard, as well as from several students reminiscing about the friendship, clinical acumen and support that he consistently bestowed upon this and many other classes. After a strong round of applause for our honoree, "the Commish" sang a wonderful a cappella tribute, "Wind Beneath My Wings."

During dinner, various stars from our 1974 Second-Year Show, *MephistoFollies*, reenacted their most memorable roles, thanks to the script that was lovingly kept and provided by **Julia Frank** and the director's score supplied by **Gail Sullivan**. Remember: "We're in the brotherhood of docs / The medicinal brotherhood of docs / The group that cures your ills / And sends you monstrous bills / That great, big brotherhood of docs!"

Led by **Alan Penziner**, members of the class recalled what they last heard from other classmates who could not attend these reunion activities. Current YSM political issues were roundly debated over dessert. As a special memento, those attending were given a bound copy of 41 recent biographies and e-mails, some with family photos, assembled by the alumni affairs staff. After the last cup of coffee, many stayed on to continue remembering and reliving a time of profound and sentimental impact upon each of us.

Attending for all or part of the weekend were: Larry and **Marcia Clark Arem**, **Harvey Berger**, **George Bolen**, **Jerry Brody**, **Artie** and **Sybil Duchin**, **Jim Fox**, **Julia Frank**, **Attilio Granata** and Claudia Dinan '80, **Karen Kelly** and Bill Levy '76, **Howie Koh** and Claudia Arrigg, **Wilma Korevaar** and Bob Pearson, Pat and **Rex Mahnensmith**, **Margie McKenna**, **Bob Mitchell**, Carolyn and **Mike Owens**, **Alan Penziner**, **Lenny Rappaport** and Betsy Weaver, **Rachel Ritvo**, **Steve Scheinman**, **Ricky Schneider**, **Simeon Schwartz**

and Ellen Greenebaum, **Gail Sullivan** and Mark Demers, **Polly Thomas**, Amy and **Ron Vender**, **Steve Warsof**, **Didi Wasserman** and **Sharon Weinstein**. **John Whitcomb**, whose family plans were altered by the threat of war in India, sent last-minute, heartfelt regrets.

Attilio V. Granata and **Ricky M. Schneider**

1982

20th Reunion Report

Greetings to the Class of 1982! Fourteen of us gathered in New Haven to celebrate our 20 years since graduation, catch up on what has happened in our families and careers and share memories of medical school days. We ate lobster and steak on Friday night at the clambake and lots of eclectic hors d'oeuvres at dinner on Saturday, but the food paled in comparison to the truly terrific time we had with each other. **Bob Rohrbaugh** and his wife, Ellen Quinn, in a stroke of sentimental genius, brought our class face sheet (the mug shots from the first day of school, remember?), and we all had a hilarious time looking at our old selves and wondering where everyone is. **Bob** is an associate professor of psychiatry at Yale and co-director of the psychiatry residency program. **Bob** brought news of **Augusta Simpson Roth**, a psychiatrist in Arizona, and also of **Steve Resnick**, who is practicing dermatology in Cooperstown, N.Y. **Paula Braverman** came from Philadelphia, where she is chief of the section of adolescent medicine at St. Christopher's Hospital for Children. **David Goldstein** attended reunion all the way from New Mexico, accompanied by his children, Amanda, 13, and Isaac, 19 months. We send regards to his wife, Marsha, who was unable to attend. **David** tells us that **Joyce O'Shaughnessy** is an oncol-

ogist in Dallas and that **Bob Pierattini** is practicing psychiatry in Burlington, Vt. **David** shared the "who traveled the farthest to reunion" award with **Bert Ungricht**, who came from Salt Lake City with his wife, Yvette, and their four children, Andrew, 15, Mary, 13, Emilie, 9, and Amy, 7. **Bert** does general ophthalmology with a retina specialty, enthusiastically enjoyed the winter Olympics and tells us that **Don Stromquist** is also in Salt Lake City practicing rheumatology. **Henry Stern** also traveled a distance with his wife, Cheryl, and their sons, Everett, 18, and Gavin, 16. **Henry** is head of MRI and nuclear medicine at the West Palm Beach VA Hospital. **Michael Katz** flew in from Virginia just for the clambake; he didn't want to miss reunion but needed to go back to attend the Stanley Cup finals in North Carolina on Saturday night! He is about to move to Florida to a new practice in pediatric and adult radiology. **Michael** and his wife, Cheryl, have three daughters, Elizabeth, 17, and twins Alexis and Shoshana, 14. He has visited **Fred Drennan** (gastroenterology) and **Terry Massagli** (rehab medicine), who live in Seattle, and also brought word of **Paula Chandler**, who is living in Houston. **Patty Kellner** arrived with her husband, Jim Heflich, from Ohio, where she is a family practitioner and avid birdwatcher and participates in the Case Western Medical School ambulatory teaching program. **Katalin Roth** traveled to reunion from Washington, D.C., where she is program director in primary care internal medicine at George Washington University. She and her husband, Phillip Singerman, have two sons, David, 18, and Adam, 15. **Katalin** brings news of **Sylvia Beck**, who is an ophthalmologist in Philadelphia and has two children, Sarah and Eric. **Jessica Herzstein** came down from the Boston area to attend reunion with her husband, John Ryan. **Jessica** has a busy occupational and environmental consulting practice, juggling that

with raising two daughters, Diana, 13, and Julia, 12. **Daphne Hsu** is head of clinical research in the division of pediatric cardiology at Columbia, where she did her residency in pediatrics. She and her husband, Jeff Rosen, have two sons, Bobby, 14, and Michael, 11. **Daphne** tells us that **Muriel Cyrus** is in Dallas with her three sons, and **Jeff Tepler** is practicing hematology/oncology at the New York Hospital Cornell Medical Center. **Patrick Toth** is also living in Manhattan. He practices interventional radiology at Hackensack Hospital in New Jersey. His wife, Hildegard, is also a radiologist and they have two sons, ages 8 and 10. **Pat** tells us that **Ron Voit** is practicing ob/gyn in Hilo, Hawaii, and that **Victor Perez** is a psychiatrist in Guam. There are several of us besides **Bob Rohrbaugh** who have stayed in or come back to New Haven and didn't have to travel at all to get to reunion. **Sandy Wolin** is associate professor of cell biology and molecular biophysics and biochemistry at Yale. She and her husband, Carl Hashimoto, have a 6-year-old child. **Carrie Redlich** is associate professor in the section of occupational and environmental medicine here. She has two children, Mara, 15, and Josh, 11. **Carrie** has been the pillar of the New Haven youth soccer league, having recruited and trained many Yale faculty to participate as coaches. **Stephanie Wolf-Rosenblum** sends greetings via **Carrie**. **Stephanie** is in New Hampshire, practicing pulmonary medicine. **Lynn Tanoue** is an associate professor of medicine at Yale (pulmonary/critical care). **Lynn** attended reunion with her husband, Larry Young '80; they have three children, Robert, 10, Marissa, 7, and Grant, 4, and wonder like everyone else who has children what we used to do on the weekends before there were soccer, baseball, ballet and music lessons. **Lynn** brought



news of **Stuart Gardner**, who is also in New Haven practicing pediatrics, and **Colin Lee**, who when last sighted was practicing interventional cardiology in Idaho.

So, where have 20 years gone? From what we hear, careers have been productive, children are growing and life gets busier and more complicated. Fortunately, e-mail, Palm Pilots and memories keep us all organized and connected. I have e-mail addresses for all of those who attended reunion and would be happy to share the list with any of you who did not. You can find me at lynn.tanoue@yale.edu. Those of us who attended the reunion had a great time and agreed that we should put some effort into getting more of the class to come to the 25th!

Lynn Tanoue

1987

15th Reunion Report

The Class of 1987 arrived back at Yale and met up at the clam-bake in front of Harkness Hall—barely recognizable compared to its '87 incarnation. Interestingly, there was almost no overlap in who attended the 15th and who attended the 10th reunion. Many of us arrived with children in tow and spent the slightly wet day Friday touring the campus, including museums, libraries, classrooms and, of course, some favorite spots like Sally's for pizza or Louis' Lunch for a burger sandwich. At the clambake, I ran into **John Keaney** with his wife, Donna. Alas, their kids, Christopher, 10, and Jake, 8, didn't make the trip. **John** is associate chief of cardiology at Boston Medical Center and is doing extensive basic science research while maintaining a busy interventional cardiology practice as well. He has time for golf but, as yet, no Harley Davidson (so he can't ride with me!). **John** relates that **Mike Gaziano** continues to do well at the Brigham and is now leading the well-known Physician's

Health Study. Word is that **Matt Miller** is also floating around Beantown, last seen in the public health field. **Jonathan Friedes** attended the reunion with his wife, Ippolita, and their 10-month-old daughter, Emilia. **Jon** is practicing obstetrics and gynecology and Baroque violin (check out www.sohip.org) in Boston. According to **Jon, Subba Gollamudi** is in Memphis reshaping corneas and enjoying life with his wife and two sons. **Thea Kappahn** is practicing adolescent medicine at Stanford, is married and has a son, Jasper (aka "Bob the Builder"). Two M.D./PH.D.s who started off with our class are no doubt remembered: both **Susanna Lee** (radiology) and **Lee Goldstein** are at MGH—**Lee** just became a father in the last couple of weeks! I bumped into **Bob Malison** and **Gene Vining**, who remain in the New Haven area, but they vanished before I had much of a chance to chat. **Donna Klimowicz** also joined us at Scoozzi; she continues to work with difficult patients with mental illness as well as substance abuse problems. Her husband, Rick, is the director of occupational therapy at Ancora Hospital. They are planning on moving back to Connecticut next summer with their children, David, 8, working on his karate black belt!, and Abby, 2½, working on dealing with her brother. Several classmates couldn't make the reunion but updated me by e-mail. **Doug Nelson** and **Roxanne Bartel** are happily living with their two children, Rose, 8, and Isaac, 5, in Salt Lake City. **Doug** is in pediatric emergency medicine and **Roxanne** is practicing inpatient psychiatry. They all love to ski and spend time in their mountain yurt. (Yes, their yurt.) **Charlie Brackett** is married to Joanne Hayes and working as a general internist in the Boston area—they're expecting their first child

in December. (Get ready for a major lifestyle change, **Charlie**!) **Leslie Vogel** and her husband, Luciano Rossetti, are living in Westchester, where **Leslie** is director of geriatric psychiatry at Westchester Medical Center/New York Medical College. **Leslie** is writing articles for the lay press when not being kept too busy with their children, Paola, 11, and Gabriele, 4. **Leslie** reports that **Lisa Cairns** is working in Atlanta at the CDC—same for **Kristen Mertz**. **Amy Justice** reports that she and hubby **Joe King** have been working at the Pittsburgh VA and at the University of Pittsburgh, concentrating on outcomes research—**Joe** in neurosurgery and **Amy** in HIV. Their two children, Daniel, 5, and Erin, 2½, are doing beautifully. **Eric Jankelovits** is director of obstetric anesthesia and living happily in Stamford with his wife, Monica, and three daughters, Lauren, 9, Amanda, 6, and Carly, 3¾. **Bob Urban** is director of the glaucoma service at St. Luke's Cataract and Laser Institute, not too far from me, in Tarpon Springs, Fla. **Bob** and his wife, Jeannie, have two daughters, Victoria, 4, and Olivia, 2. **Jay Horowitz** was last sighted practicing ENT in East Brunswick, N.J., while **Mark Widmann** has relocated to the Morristown, N.J., area, where he is practicing thoracic surgery. **Elliott Levy** is living in Princeton with wife Nina and sons Tom, 5, and Cyrus, 2. He is working in the pharmaceutical industry doing cardiovascular clinical research and development; "No time for hobbies!" he reports. As for me, I'm practicing interventional cardiology and living with my wife, Jodi, in St. Petersburg, Fla. I spend what little time there is away from work riding my Harley, relaxing with Zachary, 10, and Andrew, 6, in the pool and occasionally chasing a little white ball through green grass fields. To better stay in touch, drop me an e-mail at barryw@tampabay.rr.com. See you in New Haven in 2007!

Barry Weinstock



1992

10th Reunion Report

Our 10th reunion was a fantastic event! Twenty-five classmates returned to Yale from locations around the country—some from as close as New Haven and others from as far as California. Friday evening we met at Harkness to begin reminiscing over a bountiful feast. The tree we planted as a memorial to classmate **Lauren Weinstein** (who died in our second year) flourishes next to Harkness, and provides a lovely place for contemplation. On Saturday, thanks to **Karen Antell** and **Robin Perlmutter Goldenson's** efforts, a group of us, many with children, enjoyed time together at the Trolley Museum. Others toured the newly renovated Harkness dorm. Saturday night we reunited at Zinc for our class photo and dinner.

We have many personal and professional accomplishments, which I cannot describe adequately in the space provided. As such, here are brief updates of classmates attending the reunion. **Ahmed Abou-Zamzam** (vascular surgery in Calif.) and wife Sharon Lum (surgery) have three young children. **Rick Alaimo** (neurology) and wife Sarah have two sons. **Karen Antell** (family practice) and **Mitch Saltzberg** (cardiology) have two sons; together they are ready for any medical emergency! **Jim Chang** (hand surgery) and **Harriet Roeder** (psychiatry) from California have two daughters. **Tom Davenport** (plastic surgery) is moving from Boston to join a practice in New York. Reunion gift chairs (thanks!) **Michael Girardi** (dermatology at Yale) and **Nancy Dingott Girardi** (pediatrics) have four young sons. **Robin Perlmutter Goldenson** (radiology) and hus-

band Richard from Boston attended with almost-one-year-old daughter Samantha.

Stephanie Goodman (anesthesia in NYC) and husband Beau brought their two sons. **Nancy Harthun** (vascular surgery at UVA) attended with friend Sue Lubn. **Chai Kulsakdinun** (orthopaedics in NYC) is married to Julie Wang. **Laura Drabkin Marks** (pediatrics) and husband David live in Connecticut and have three children. **Julie Lund Sharpless** (endocrinology) and husband Ned, presently in Boston, have two children. **Matt Massicotte** (urology) and wife Emma, ophthalmology resident, live in Andover, Mass. **Tobenna Okezie** (orthopaedics) and new bride Christine are building a home in New Jersey. **Sean Roddy** (vascular surgery in New York) and wife Veronica brought their son and seven-week-old daughter. **Ken Rosenzweig** (therapeutic radiology) and **Stacey (Berg) Rosenzweig** (pediatrics) came with their three lovely girls. **Nate Schmiechen** (ER) and wife Malinda, now in law school, attended. **Nate** built a fabulous elephant slide for his two daughters! **Margaret Wallen-Friedman** (neurosurgery) and husband Leny brought Silas and Asher, both born during medical school, back to Yale! **Ping Wang** (internist) and husband Tom Sullivan settled in NYC. **Anne Wolf** (pediatric GI) and husband Richard Wehby continue renovation of their home in Boston. **Ross Zbar** (plastic surgery in New Jersey) frequently interacts with **Evan Fischer** (recently married!) and **Tobenna** in the OR! Thank you all for making our reunion a great success! Please update the alumni website (info.med.yale.edu/ayam/) as you make life and career changes.

It is with great sadness that I report the death of our classmate **Yuly Kipervarg**. As some of you may know, **Yuly** had a long and heroic battle with colon cancer and passed away March 14, 2001. After leaving Yale, **Yuly** trained at UCSF in dermatology, and then had a successful prac-

tice in Marin County, Calif. He was a charming individual, a gentle and kind friend and a compassionate physician. He touched many lives and will be greatly missed.

Anne Wolf

1997

5th Reunion Report

Our fifth-year reunion brought people back from a distance—from as far as California, Washington and Montana! The clambake on Friday night was a cozy group. **Dana Meinke Nehring** has completed her internal medicine residency in Seattle, and she married Jon Nehring last August. They have moved to Helena, Mont., where **Dana** is working as a hospitalist at the VA Hospital. **Jason Gold** is starting his fourth year of general surgery residency at Yale, and has also gotten married to Ann Rich. They are expecting their first child this winter. **Jaimie Nathan** is in the midst of his general surgery residency at Duke after spending the last two years in a research lab. **Amy Taylor Nathan** has just finished a year as pediatric chief resident at UNC, and will stay on as a neonatology fellow. They have an adorable 18-month-old (I'm a little biased) named Christopher. **Peter Siekmeier** has completed his psychiatry residency in Boston, and continues at McLean Hospital doing a research fellowship in neural networking (similar to his Yale thesis work!). **Maryam Asgari** has finished her dermatology residency and is in Seattle doing an M.P.H., funded by an NIH grant. She was there with her husband, Marc, and their charming little boy, Arman, 10 months old. **Helena Nolesco** (who began with the class ahead of ours but graduated with us in '97) is a

rheumatology fellow at Yale after completing her medicine residency there.

The Saturday night dinner honoring the Class of '52 was a great success. **Michele Baker** was there with her husband, Jim Morgan, and their very cute, red-headed son, Samson, who is 11 months old. Michele is now a psychiatrist attending at Beth Israel Deaconess. **Dan Wolf** was there with his wife, Leslie. They are in the process of moving from Philadelphia to Boston, where **Dan** will do his psychiatry residency at McLean/Mass General. **Pieter Pil** has finished his general surgery residency at the Brigham in Boston, and has taken a sweet job as one of two surgeons on Martha's Vineyard. Joining him will be his wife, Karen, and their 13-month-old son, Gideon. **Chrys Delling Schmults** and Rob came from NYC, where **Chrys** is completing a dermatology residency at NYU and then will go on to do a Mohs Surgery fellowship. **Pieter Cohen** is on faculty at Cambridge Hospital after finishing his primary care medicine residency there. He is the director of the ambulatory education program for the residents, and he and Lauren are expecting their second child (their first, Austin, is 11 months old). **Kristina Crothers** and **Mark Skirgaudas** traveled all the way from San Francisco. **Kristina** finished her medicine residency at Stanford, and is now doing a pulmonary/critical care fellowship at UCSF. **Mark** is in a radiology residency and will do a musculoskeletal fellowship, also at UCSF. **Tony Aizer** made an appearance (although he was also busy with his 10th-year Yale College reunion). He is in the midst of a cardiology fellowship in NYC, and then has signed on for more punishment as an EP fellow.

Whew! That's a lot of news. For all of you who couldn't make it, we hope to see you at the 10th reunion!

Amy Taylor Nathan

Disasters, natural and other, top the agenda for returning public health alumni

Disaster management was the topic of the day as public health alumni gathered on June 7 for their annual reunion. **Gilbert M. Burnham, M.D., PH.D.**, an expert in relief operations at the Johns Hopkins Bloomberg School of Public Health, led a morning workshop in which he framed the issues surrounding responses to disasters, whether natural or man-made, with a single question: “How do we put things back together?”

The United Nations, he said, defines disaster as a situation that “affects the community’s ability to cope.” The most vulnerable societies, he continued, are plagued by poverty, inequality and highly centralized governments. Human rights are often at risk when countries are in trouble, he said, and women and children are the most vulnerable. “Protection of women is a major, major issue,” he said, noting that a quarter of Sudanese refugee women report having been raped or sexually abused. In Kenya, collecting firewood is a major risk factor for rape among Somali refugees.

While Burnham’s talk focused on developing countries in strife, other speakers at an afternoon panel described the lessons learned on September 11.

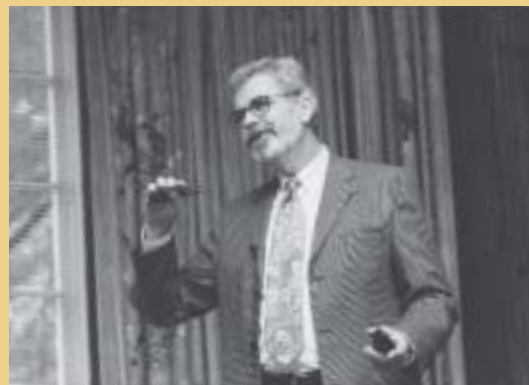
Kelly Close, M.D., M.P.H. ’92, national coordinator of disaster volunteers for the American Red Cross Disaster program, saw problems firsthand at ground zero in Manhattan. She reported that unneeded volunteers showed up at the site, where there was no system for checking credentials. And families flocking to hospitals looking for loved ones needed some sort of “compassion center.”

Michael D. Israel, M.P.H. ’80, former CEO of the Duke Medical Center, believed his staff was well prepared for a disaster—until September 11. “As good as we thought our plan was, it

wasn’t anywhere near what it needs to be,” Israel told public health alumni.

Duke’s plan had many strengths, said Israel, now COO for North Shore-Long Island Jewish Health System in New York. It established a clear chain of command, included a system for documenting care, set priorities for crisis response and created a common language for communicating during a disaster. But watching the events of September 11 and the disaster response made him aware of the Duke plan’s deficiencies. Duke had previously planned for the potential of mass casualties in the tens or hundreds, not thousands. With that many casualties, the planning would have to take into account mass hysteria and triaging patients in numbers well beyond anything ever conceived of in the past. “In addition, these potential numbers made us realize that we would have to work with local government to make sure the streets and highways leading to the medical center were kept open for essential vehicles,” Israel said after the panel discussion.

Long before September 11, **Scot Phelps, J.D., M.P.H. ’95**, was already looking into disaster preparedness. Phelps, a paramedic and the manager of emergency life support programs at Phelps Memorial Hospital Center in Sleepy Hollow, N.Y., 12 miles from the Indian Point Nuclear Power plant and 20 miles north of Manhattan, was alarmed by the March 1995 nerve gas attack in Tokyo. A cult released the nerve agent sarin in the subway system, injuring 3,800 people and killing 12. Phelps said the Tokyo attack should alert hospitals that they need a plan for decontaminating large groups of people and for protecting health care workers in case of a chemical attack or spill. He said hospitals should recognize that most local ambulance crews are not trained in decontamination and that firefighters, who may have such training, will be at the site of an assault or attack and unavailable to help at the hospital.



JOHN CURTIS



TERRY DAGRADI

Gilbert Burnham (top) and Kelly Close, M.P.H. ’92 (above), spoke about disaster management in the wake of September 11 at the public health reunion program.

A public health alumna looks back on the difference her mentor made



At a time when faculty wives “literally poured tea,” earning a master’s degree in public health changed **Sheila Wellington’s** life profoundly. The key

was finding a mentor, said Wellington, M.P.H. ’68, whose roles have evolved from that of faculty wife to director of two mental health centers to the first female Secretary of Yale. Wellington, the author of *Be Your Own Mentor: Strategies From Top Women on the Secrets of Success* and the president of Catalyst, a Manhattan nonprofit devoted to the advancement of women in business, received the EPH Distinguished Alumni Award for 2002.

When the director of the West Haven Mental Health Clinic left in the late 1970s for a new job, Wellington did not even consider that she might be promoted from assistant director—although she was actually running the place while her boss did research. A mentor advised her to tell the hiring committee that she would orient the new director and move on. In this way, the committee would be required to consider her value to the clinic. It did, and the committee quickly hired Wellington as director.

“That mentor changed me,” Wellington said at the reunion. She urged public health graduates “to be that person for someone else, preferably for someone who doesn’t look like you. Who knows what all of us will gain?”

Four other alumni were honored. **Raúl R. Cuadrado**, M.P.H. ’63, D.R.P.H., professor in the public health program at Nova Southeastern University in Florida, was given the 2002 Award for Excellence in Public Health Education. Inducted into the Alumni Public Service Honor Roll were **Linda K. Contreras**, M.P.H. ’83; **Adrian J. Pinsince**, M.P.H. ’85; and **Alan J. Siniscalchi**, M.P.H. ’78.

Spotlight on surgery

The Yale Surgical Society sponsored a well-attended grand rounds on the Thursday afternoon of reunion weekend, with a talk by **Martin C. Robson, M.D., HS ’73**, (below) the first chief resident in Yale’s plastic surgery section. Robson, professor emeritus at the University of South Florida, described how surgeons came to recognize the significance of bacteria counts in the success rate of human skin grafts and in the healing of delayed wound closures. Also at grand rounds, the society presented its Sam Harvey Award to José Roberto Borromeo, a post-doctoral fellow in vascular surgery.



TERRY DAGRADI

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1940s



Paul W. Hoffert, M.D. '45, (above right) of Mamaroneck, N.Y., notes that his granddaughter Rachel Light (left), a member of the Class of 2006, represents the family's third generation at the School of Medicine. Rachel Light's uncle, **Marvin J. Hoffert**, M.D., graduated with the Class of 1972.

1970s

Edward C. Halperin, M.D. '79, the



L.R. Prosnitz Professor and chair of the Department of Radiation Oncology at Duke Uni-

versity, has been named vice dean of the Duke University School of Medicine and associate vice chancellor for academic affairs at the Duke University Medical Center.

George L. Kelley, M.P.H. '74, of Albany, Ga., will be profiled in the 56th edition of *Marquis Who's Who in America*. Kelley is also the subject of a notice in *Volume VIII, Dictionary of International Biography*, for distinguished service in international mental health and education.

H. Steven Moffic, M.D. '71, a pro-



fessor at the Medical College of Wisconsin (MCW), recently received two awards. The

Golden Apple Teaching Award was presented in June by the residents in the department of psychiatry and behavioral medicine at MCW. The Hero of Public Psy-

chiatry Special Speakers Award was presented to Moffic in May by the American Psychiatric Association. Moffic is also director of Luminous, a managed behavioral health care system developed by the department and comprising a network of 238 clinics and 1,742 providers.

Daniel W. Rahn, M.D. '78, HS '80,



FW '81, professor of medicine and vice dean of the Medical College of Georgia

(MCG) School of Medicine and senior vice president for medical affairs and chief medical officer for MCG Health, was installed in April as the seventh president of MCG, Georgia's health sciences university in Augusta. Rahn was on the faculty at Yale until 1991.

Barbara S. Webster, R.P.T., PA-C



'78, received the 2002 Alice Hamilton Award from the American Industrial Hygiene

Association (AIHA) in June. Webster is a researcher with the Liberty Mutual Research Center for Safety and Health in Hopkinton, Mass. She received the award for her work in the areas of cost and disability burdens of musculoskeletal disorders and the diagnosis and treatment of low-back pain in the workplace.

1980s

Patricia Hellman Gibbs, M.D. '87, HS '90, received one of six Bicentennial Medals for Distinguished Achievement from Williams College in Williamstown, Mass. The presentation was made at the college's 200th anniversary celebration in April. Gibbs and her husband, **Richard D. Gibbs**, M.D. '86, are the founders and directors of the San Francisco Free Clinic, which serves the uninsured.

E. John Kuhnley, M.D., FW '81, has



relocated from Winchester, Va., to Lynchburg, Va., to serve as medical director for

the Child and Adolescent Unit of Virginia Baptist Hospital. Kuhnley also notes that his daughter Lisa graduated from Shenandoah University in May; his daughter Sheila graduated from Penn State University in August. Lisa has a one-year-old son, Christopher.

David L. Mork Jr., M.P.H. '82, former vice president of operations at South Jersey Health Systems, was appointed vice president of operations for the South Georgia Health System in Valdosta, Ga., in January.

1990s

Benhur Lee, M.D. '95, an assis-



tant professor at the University of California, Los Angeles, School of Medicine, was named

a recipient of the Rockefeller Brothers Fund Charles E. Cullpepper Scholarship in Medical Science for the year 2002. Lee will receive \$100,000 a year for up to three years to fund his research on how HIV attaches itself to dendritic cells.

Tori Williams Reid, PH.D. '99,



writes with this news: "I have departed from the laboratory and work for Accenture, a technol-

ogy consulting firm. I am quite happy to have returned to my home state of North Carolina. My best news is my new husband, Marc V. Reid. We were married on April 13."

A bid to fight hunger

Among the more interesting items at the medical school's annual Hunger and Homelessness Auction have been an evening at the Met with an operating medical student, a weekend at a faculty member's vacation home on Martha's Vineyard and dinner for eight lovingly prepared by an accomplished biochemist. Last year the auction raised more than \$30,000 for New Haven shelters and soup kitchens. This year student organizers are hoping to get alumni involved in the auction, which has been a student and faculty event throughout its 10-year history. "We'd love to have alumni attend the event, and we welcome their donations," said Brenda Ritson, a second-year student and the auction's co-chair. The event will take place on November 21 from 4 to 6 p.m. in Harkness Auditorium.

For information send an e-mail to: hhauction@yale.edu or contact Ritson directly at: brenda.ritson@yale.edu or by phone at: 203-507-4663. Donations may be made online at: info.med.yale.edu/yaxis/auction

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Calling all alumni who may be contemplating an attic-cleaning: we'd like your back issues of *Yale Medicine*. Of particular interest are copies of the *Alumni Bulletin* from the 1950s and 1960s. If you have copies to donate, please drop us a line at the address on the masthead on page 3 or phone 203-785-5824.

SEND ALUMNI NEWS TO

Claire Bessinger, *Yale Medicine*, P.O. Box 7612, New Haven, CT 06519-0612, or via e-mail to claire.bessinger@yale.edu.

Philip B. Chase, M.D. '43, of Farmington, Conn., died March 24 at Central Maine Medical Center in Lewiston at the age of 86.

After graduating from Yale, Chase served his internship at Albany Hospital in New York. He then entered the Army Medical Corps during World War II and was stationed at the Aspinwall Veterans Hospital in Pittsburgh. He retired as a captain in 1946 and moved to Strong, Pa., where he worked for two years as a family practitioner. In 1948 he had a year of postgraduate training in internal medicine at the University of Pennsylvania. In 1949 he married Kathleen Knippel of West Bend, Wis., and then moved to Farmington, where he had a general practice of medicine. In 1963 he became a physician at the Student Health Service of Tufts University in Medford, Mass.

Richard J. Cleveland, M.D., HS '61, of Wellesley, Mass., died June 11 at Tufts-New England Medical Center after a long battle with brain cancer. He was 70.

Cleveland received his bachelor's degree from Tufts University and his medical degree from the Medical College of Virginia (MCV). He completed his postgraduate training at Yale and MCV. During his career, Cleveland was chief of cardiovascular surgery at the University of California, Los Angeles, chair of surgery at Tufts and surgeon-in-chief at the New England Medical Center. He also served on the Tufts faculty as professor of surgery and was chair of cardiothoracic surgery at St. Elizabeth's Medical Center of Boston. Cleveland served as a member of the Tufts Office of International Health Affairs and was a health care consultant.

Jack W. Cole, M.D. '66, of Camden, Maine, died June 17. He was 81.

Cole earned his bachelor's degree from the University of Oregon in 1939 and his medical degree in 1944 from Washington University in St. Louis, Mo. After completing his surgical residency at the University Hospital of Cleveland, he taught at Western Reserve University. Cole then served as captain in the Army Medical Corps and as chief of surgery of the 120th Station in Bayreuth, Germany. In 1963 he became professor and chair of the department of surgery.

Cole joined the faculty at Yale in 1966 as ensign professor and chair of the department of surgery. He then served as director of the division of oncology and of the Yale Comprehensive Cancer Center from 1975 until 1984, when he became vice chair for the department of surgery under William F. Collins Jr., M.D. Cole was also a professor at the Institution for Social and Policy Studies.

During the late 1960s, Cole was awarded a \$3 million grant for improvement in the area of trauma care. As part of the endeavor, the Yale Physician Associate Program (YPAP) was conceived to train medical personnel to assist in surgical and medical management. In 2001, on the 30th anniversary of the YPAP, Cole was honored as its founder.

J. Russell Elkinton, M.D., former professor of medicine at the University of Pennsylvania, died April 6 in Concord, Mass., at the age of 91.

Born in Moylan, Pa., Elkinton earned his medical degree from Harvard in 1937. He came to Yale in 1940 as a research and visiting fellow in medicine, where he focused on the study of body fluids and electrolyte physiology. In 1942 he became an instructor in medicine and in 1945 was named assistant professor. Elkinton was recruited in 1948 by Penn to develop its chemical section into a top research center in blood chemistry and kidney disease. In 1962 he was named a full professor.

Elkinton, editor emeritus of the *Annals of Internal Medicine*, edited the twice-monthly publication of the American College of Physicians from 1960 to 1971. Circulation more than doubled during his term. He also published a number of books and scientific papers, the last in 1985 on migraine headaches, from which he suffered.

Carl Gagliardi, M.D. '50, a pediatrician from La Plata, Md., died at his home on February 19 of liver disease. He was 81.

After receiving a bachelor's degree from Yale, Gagliardi was a captain in the Army Air Corps during World War II, serving as director of the School of Tropical Meteorology in the Panama Canal Zone. He earned his medical degree at Yale and went on to teach at Wayne State University and the University of Michigan. Gagliardi practiced at the Downriver Pediatric Associates in Lincoln Park, Mich., for 27 years before moving to Maryland upon his retirement in 1990.

He was a president of the Wayne County and Michigan medical societies and a delegate to the American Medical Association for six years.

John H. Killough, M.D. '45, of Granbury, Texas, died at the age of 83 on April 12 in Weatherford, Texas.

Born in Dallas, Killough served in the Navy during World War II. He was a graduate of Southern Methodist and Johns Hopkins universities and attended Yale and the University of Pennsylvania medical schools. During his career Killough worked at the Naval Medical Research Center in Cairo for eight years.

Knowles B. Lawrence, M.D. '34, of Needham, Mass., died May 10 at Beth Israel Deaconess Medical Center from complications following surgery. He was 93.

Lawrence, a graduate of Yale College and the School of Medicine, served in the Army with the Sixth General Hospital during World War II. During his medical career he was an associate professor of surgery at Boston University School of Medicine and chief of surgery at Glover Memorial Hospital in Needham.

Gustaf E. Lindskog, M.D., former chair of the Department of Surgery, died August 4. He was 99.

Born in Boston, Lindskog graduated from the Massachusetts Agricultural College (now University of Massachusetts) and spent a year at Princeton pursuing a graduate degree in botany. He changed his field of interest to pediatric medicine and earned his medical degree from Harvard in 1928. Lindskog did his residency training in surgery at Yale from 1929 until 1932. After a year as a National Research Council Fellow at the

Massachusetts General Hospital, he returned to Yale. In 1936 he became an assistant professor of surgery (gastroenterology). He was an associate professor of surgery (gastroenterology) from 1942 until 1948 when he attained full professorship. Lindskog was named the William H. Carmalt Professor Emeritus of Surgery in 1971. During his tenure at Yale he was also chair of the department of surgery from 1960 until 1966.

During World War II, Lindskog served for four years as a commander in the Navy Medical Corps and was stationed at the Philadelphia Naval Yard.

In 1943 the field of chemotherapy developed at Yale with the work of Drs. Louis S. Goodman, Alfred Gilman and Lindskog, when they used nitrogen mustard in the treatment of a patient with lymphosarcoma.

Joseph Massaro, M.D. '44, died at Manchester Memorial Hospital in Connecticut on March 6 at the age of 89.

Massaro earned his bachelor's degree in chemical engineering from the University of Maine in 1934. He was employed by the Dupont Chemical Company and the State of Connecticut Health Department before pursuing a medical degree at Yale. He interned and was on the staff at St. Francis Hospital in Hartford. In 1946 Massaro established a practice in Manchester; he also was on the staff at Manchester Memorial Hospital and a past president of the medical staff. He was president of the Manchester Medical Association, the Hartford County Academy of General Practice and the Connecticut Academy of General Practice. He retired in 1977.

Harry D. Patton, PH.D. '43, M.D. '46, former chair of the University of Washington (UW) department of physiology and biophysics, died of cancer on May 26 at the age of 84.

Patton graduated from the University of Arkansas and earned his doctoral and medical degrees from Yale. In 1948 he joined the newly established department of physiology and biophysics at UW and served as chair from 1966 to 1983. During his years as a teacher and researcher, Patton was known for his editing and major contributions to a basic textbook, *Physiology and Biophysics*. He was also co-author of *Introduction to Basic Neurology*. Patton and his colleagues were among the first in the world to record the electrical activity of individual cells in the spinal cord. He also contributed to research on the spinal-nerve pathways responsible for muscle control.

Among his life's pleasures, Patton built furniture, a harpsichord and a clavichord in his basement wood shop in his Madrona, Wash., home. He and his family also loved cruising on their boat in Puget Sound, and to Alaska and the San Juan Islands in Washington.

Henry A. Riedel, M.D. '43, a retired pediatrician, died June 7 at his home in Dana Point, Calif. He was 86.

Riedel earned a degree in economics at Northwestern University before going on to Yale for his medical degree. He interned at Johns Hopkins Hospital and completed his residency at Los Angeles Children's

Hospital, serving as chief resident in his last year. From 1945 to 1947, Riedel was a medical officer in the Army. He set up a practice in Beverly Hills, Calif., and in 1954 he moved to Newport Beach, Calif., to establish one of the area's first medical practices. He remained a solo practitioner, making house calls until his retirement in 1974, then working as a school physician for the Los Angeles Unified School District until 1981.

Riedel was a founding member of the Orange County Pediatric Society (since renamed California Chapter 4, American Academy of Pediatrics), and served on the staffs of Hoag Memorial and St. Joseph's hospitals, Children's Hospital of Orange County and the University of Southern California and University of California at Irvine medical schools.

Albert J. Solnit, M.D., HS '52, former Connecticut commissioner of mental health and addiction services and a pioneering force in child psychiatry, died June 21 following an auto accident in Litchfield County, Conn. He was 82.

A native of Los Angeles, Solnit came to Yale in 1948 as a psychiatric resident. In 1949 he joined the faculty as an instructor in psychiatry and in 1952 he was also appointed an instructor in pediatrics. From 1953 to 1960 he held the title of assistant professor of pediatrics and psychiatry and in 1960 advanced to associate professor. In 1963 he joined the Child Study Center, and in 1966 was named director, a position he held until 1983. From 1964 to 1970 Solnit was a professor in the departments of pediatrics and psychiatry and in the Child Study Center. In 1970

he was named a Sterling Professor, attaining emeritus status in 1990.

Solnit served as commissioner of the Department of Mental Health and Addiction Services (DMHAS) from 1991 until 2000. He also headed Gov. John G. Rowland's Blue Ribbon Commission on Mental Health.

Solnit was "an absolute champion of the child," said Benjamin S. Bunney, M.D., chair of psychiatry. "No matter what position he held, whether it was at the Child Study Center or with the DMHAS, he was as great a champion as there will ever be for that cause."

Frank B. Wisner, M.D. '32, died February 7 at Knapp Memorial Hospital in Weslaco, Texas, at the age of 95.

Born and raised in Montana, Wisner practiced medicine in Springfield, Mass., after receiving his medical degree from Yale. He then enlisted in the Navy during World War II and served as a lieutenant commander aboard the USS Cossatot from 1942 to 1945. After the war he practiced for five years in Mercedes, Texas, before moving to San Diego, where he was in practice for 30 years.

SEND OBITUARY NOTICES TO Claire Bessinger, *Yale Medicine*, P.O. Box 7612, New Haven, CT 06519-0612, or via e-mail to claire.bessinger@yale.edu.

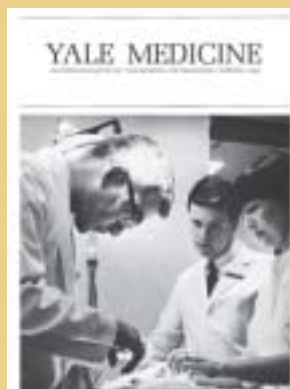
“A steam engine in pants” *continued from page 29*

It was hoped that the time made available by curriculum revision would also result in research theses of higher quality. The research thesis had been a requirement for the doctorate of medicine at Yale almost continuously since the inception of the school. The first thesis found in the school's historical library was written by Charles Hooker, later dean of the School of Medicine, in 1823. In spite of this long history, no time had ever been allotted in the curriculum to do the necessary research. Now more advanced research could be undertaken.

Winternitz indicated in his report for 1924-1925 that by allowing time for the student to pursue his particular interests, the opportunity for study in selected fields would be expanded, compatible with a true graduate education. Winternitz's vision was imaginative and exciting, and although it was not completely realized, it formed the basis of the Yale System of medical education. Winternitz stated that the annual grading system would be abolished and that the student would be allowed to select the sequence of studies from the courses offered in the school. The number of courses and the time taken to complete them would depend on the student, who would require the instructor's permission. Group examinations and the research thesis would be used to monitor the student's accomplishments. Closer cooperation with the graduate programs in the biomedical sciences would occur. During the preliminary part of the medical curriculum, students could be enrolled in both the graduate school and the medical school. Winternitz's plan would have allowed graduate students to switch to the medical school if their interests became more clinical.

The medical faculty adopted many of these components as educational policy at the beginning of the 1926-1927 academic year, including elimination of the traditional annual “class” system, elimination of “final” examinations and greater educational freedom for students, which would place greater responsibility on them. Instead of final examinations, there would be a comprehensive, weeklong examination twice a year, qualifying students to pursue clinical medicine. The third and fourth years of medical school would remain unchanged, with emphasis in the fourth year on the natural treatment and study of disease. Although the “university” aspects of a joint medical school/graduate school venture were not included in his 1924-1925 report, Winternitz had outlined the Yale System of medical education as we know it today. **YM**

Archives



SPRING 1966

“If I understand the Yale System correctly, its aim is to minimize compulsion and maximize diversity in the experience of the student, to minimize conformity in medical thought and maximize independent critical thinking by the student, to provide each student with a personal experience in scientific medicine by providing the stimulus and facilities for a scholarly inquiry by all. Systems possess little intrinsic merit in themselves; their merit lies in what they attempt to accomplish and the magnitude of their accomplishment. By seeking the expression of the best independent critical thought of its students, in my opinion the Yale System provides its students with the best preparation for medicine of the future. True, occasionally an errant student may adopt positions distasteful to his mentors. But quickly we, who are the faculty, learn that this is in reality the best consequence of the educational system. Unless the young seek to improve and change they are not worthy. Without conflict, there is no progress. No doubt it is impossible to express in quantitative terms the accomplishments of the Yale System of medical education. Nonetheless, many of us who have experienced it are deeply grateful.”

—Halsted R. Holman, M.D. '49,
chair of the Department of
Medicine at Stanford, speaking at
the dedication of the Laboratory
of Clinical Investigation.



WINTER 1985

“Plans are finalized and construction will begin soon of an ambulatory care facility that will consolidate clinics and offices of the Faculty Practice Plan [precursor of the Yale Medical Group] which are currently scattered in 17 locations throughout the Medical Center. ... The four-story glass, concrete and brick building will be located on the southeast corner of Howard and Davenport avenues. With adjacent parking and a pedestrian bridge to the hospital, the new facility will include specialty and consultative services, X-ray and laboratory services, and a pharmacy. It will not include hospital beds or one-day surgery facilities.

The Yale Faculty Practice Plan was established in 1981 to bring together administrative, management and billing and collection activities of the existing clinical practice of the full-time faculty. ... The building [known today as the Yale Physician's Building] of about 90,000 square feet will be constructed at an estimated cost of \$9 million on land presently owned by the Hospital and used as part of a parking lot.”

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Had I been forced to take tests, I never would have graduated --- I WAS TOO busy absorbing and learning. Yale is a wonderful place to begin a medical career.

I was a good student in college, but Yale medical school, and particularly the trust and freedom of its system, opened doors in my brain I never dreamed existed.

Medical education is not winning the battle for humanism, intellectual curiosity and honesty in its medical students, and the medical profession is suffering for it.

I suspect the deficit was in the faculty or curriculum, not among the students or the system.