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Heart Surgery Breakthrough
In late April, 1978, BUSM surgeons used an artificial heart pump to save a patient with severe coronary insufficiency; four and a half days later, they removed the pump, and his heart resumed its full burden of work. Two weeks later, they repeated the achievement in another patient, a man who had had a massive heart attack. This important surgical advance is discussed in several articles by Owen J. McNamara.

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Countersuits:
What chance does suit against 'frivolous' malpractice have?
by George J. Annas, J.D., M.P.H.

Suits by physicians against lawyers who bring unsuccessful malpractice charges against them have become increasingly popular. While still occurring in perhaps fewer than one in every 1,000 malpractice cases decided in favor of a physician, they have been hailed by the American Medical Association as a new weapon that could "discourage the filing of frivolous or nonmeritorious cases." (American Medical News, July 14, 1976)

Such lawsuits usually allege one of the following causes of action: defamation of character, malicious prosecution, abuse of process, or negligence. Prospects for success. Defamation suits are generally unsuccessful because the lawyer enjoys an absolute privilege regarding his statements so long as they are part of the judicial proceeding. Malicious prosecution requires, as the name implies, a showing of actual malice toward the defendant in bringing the suit. It also requires that the original suit be terminated in favor of the defendant and a showing that it was initiated without probable cause. Abuse of process does not require either a conclusion of the litigation in favor of the defendant or lack of probable cause, but does require a finding that the lawyer "abused" the judicial system by bringing a lawsuit for some improper ulterior purpose or motive — such as attempting to coerce a physician into waiving his fees for a medical or surgical service.

While a lengthy article could be written on each of these types of actions (see, e.g., Note, Malicious Prosecution: An Effective Attack on Spurious Medical Malpractice Claims?, 26 Case Western L. Rev. 655-666, 1976), the newest and most interesting charge is that of professional negligence. Specifically, the physician alleges that the lawyer owes both a legal and ethical duty to the physician not to bring a malpractice suit when he should know that it is "frivolous." One physician involved in this type of litigation characterized such malpractice suits as "unnecessary," making the analogy to unnecessary surgery. Another, Dr. Leonard Berlin, whose recent trial court victory in such a countersuit is currently on appeal, put his rationale less politely:

The school bully who harasses innocent children in the playground isn't stopped by reporting to his parents [the bar association or licensing].

George J. Annas is an assistant professor of law and medicine in the School of Medicine's Department of Socio-Medical Sciences and Community Medicine. "Legal Signs" is a continuing feature of CenterScope.

Legal Signs

authority — he's only stopped by a punch in the face. Lawyers who abuse the court system similarly can only be stopped through the same system.

Review of appellate decisions. This article will review the only appellate decisions on the question of attorney negligence in the "frivolous" medical-malpractice suit area. These suggest that while extremely appealing to physicians on the surface, this line of attack is not likely to prove effective in reducing the incidence of "frivolous" suits.

In a Texas case a physician was granted summary judgment in his favor in a suit for failure to properly treat and diagnose injuries sustained by the plaintiff in an accident. The physician then sued both the plaintiff and his lawyer saying they should have known that the suit was groundless and unfounded, and that the allegations made were untrue. He sought $750,000, alleging mental trauma requiring psychiatric treatment, increases in his malpractice premiums, public ridicule and loss of earnings. The lower court granted summary judgment in favor of the attorney and his client, and the appeals court affirmed. In a very brief opinion, the court made it clear that under Texas law attorneys simply could not be sued on the basis of the facts alleged by the physician, noting that he failed to properly allege a case for abuse of process, malicious prosecution, contempt of court or invasion of privacy — the only actions the court seemed to consider as plausible under the circumstances. Wolfe v. Arroyo, 543 S.W.2d 11 (Tex. Ct. App. 1976)

An even more recent New York case involved a physician who was sued for negligent treatment of a patient even though he did not see the patient at all during the course of the illness in question. The physician sought $200,000 from the lawyer for (among other things) failing to properly investigate the case, filing a frivolous lawsuit, and practicing law in "a malicious and unethical fashion with a reckless disregard for the truth or falsity of the allegations." The court quickly disposed of the notion that the attorney had any duty toward the defendant-physician in a malpractice suit.

The courts of this State have consistently held that an attorney is not liable to third parties for the negligent performance of his obligations to a client, even where such negligence results in damage to third parties . . . for to hold an attorney personally responsible for instituting a frivolous action on behalf of a client would operate to discourage free resort to the courts for the resolution of controversies, contrary to public policy. Drago v. Buonaguro, 391 N.Y.S.2d 61 (Sup. Ct., Schenectady Co. 1977)

A surgeon's suit. The final case involved a surgeon who had performed an emergency hernia repair operation on a three-month-old boy. The parents alleged she had damaged one of the infant's testicles in the operation and filed suit on this basis. At trial all expert witnesses, including the two called by the plaintiff, testified on behalf of the surgeon. All said there was no evidence of damage. The plaintiff's lawyer had not spoken to his witnesses prior to trial about their testimony. The surgeon accordingly sued the lawyer for $6,000 alleging he "owed an affirmative duty to her and to the public at large to refrain from filing groundless litigation," and that he would have known the suit was groundless with a minimum of investigation.

The court found that the lawyer's client could certainly sue the lawyer for "negligence or inequity" causing the loss of the case. In examining the Canons of legal ethics, however, the court was unable to find a clear duty on the part of lawyers to the defendants in the suits they prosecute. The court noted that the Canons permitted a lawyer "who discovers his client has no case" to withdraw from the case, but did not require it, if the client was determined to continue. The court concluded its discussion by noting (similar to the New York court) that the courts must be open to all persons for "redress of wrongs," and that permitting such a lawsuit against an attorney would have a "chilling effect . . . on the basic right of a citizen to seek redress in courts for what he considers to be a wrong." Spencer v. Burglass, 337 So.2d 596 (La. Ct. App., 4th Cir. 1976)

Now a counter-counter-suit. As if these cases should not be discouraging enough in their own right, the attorney in the last case has recently filed what is believed to be the first "counter-counter-suit" in this country. Harry Burglass is seeking $902,500 from Dr. Rowena Spencer and her lawyers for malpractice, defamation of character, and "experimenting" with a new point of law at the expense of his reputation. (American Medical News, August 1, 1977)

While this suit is unlikely to be any more successful than Dr. Spencer's (or than the initial suit filed against Dr. Spencer), it could breed yet another countersuit by the doctor. This case thus demonstrates that countersuits have all the problems of malpractice suits in general. They are difficult to prove, expensive to prosecute, take the physician away from his practice and make him spend much of his time in judicial proceedings, and the likelihood of ultimate success is very slim. (See Tillotson & Sagall, "The Physician Counter-suits: More Than Having to Say You're Sorry," Medicolegal News, Summer, 1977)

The treatment which was the basis for the initial suit against Dr. Spencer was provided in 1967, and this litigation could drag on for a second decade before being finally settled. These cases illustrate that courts are likely to permit countersuits only in cases where the motivations involved are questionable enough to support an action for either malicious prosecution or abuse.
Study indicts smoking as key risk factor for heart attacks in healthy women

Cigarette smoking alone accounted for approximately three-quarters of all heart attacks in a group of otherwise healthy women under the age of 50 and not taking birth control pills, according to researchers at the Drug Epidemiology Unit of the School of Medicine.

The researchers, reporting in the *New England Journal of Medicine* June 8, said heavy smokers — those smoking 35 or more cigarettes a day — had about 20 times the risk of heart attack as women who had never smoked. The risk was related to the number of cigarettes smoked, diminishing to 14 times that of non-smokers for those who smoked 25-34 cigarettes a day, and dropping to about 4 times for those smoking less than 25 cigarettes a day.

**Limited to healthy women.** The study is the first to be limited to apparently healthy women, who had no reason before their heart attack to suspect they ran a higher risk of heart attack than other women. Previous studies, which have also strongly linked smoking to premature heart attack in women, have included women with such conditions predisposing to heart attack as high blood pressure, diabetes, obesity, and known high cholesterol levels. Women with such conditions were excluded from the BUSM study, as were those taking oral contraceptives.

Researchers compared 55 women under 50 who had had heart attacks with a control group of 220 women matched for age and area of residence. The two groups were similar in terms of ethnic group, religion, marital status, number of children, menopausal status, and number of years of education. Of those who had had heart attacks, 89 percent were smokers; among the controls, only 55 percent were smokers.

The report points out that heart attack is currently a rare disease in young women, but notes that statistics reveal a marked increase in smoking among teenage women in recent years. "Unless this pattern changes, the contribution of cigarette smoking to the etiology of premature MI in apparently healthy women will probably increase," the report concludes.

**Trend in girls' smoking.** National figures show that while smoking among teenage boys has remained at about the same level over the last 10 years, smoking among teen-age girls has approximately doubled, making the percentage of girls who smoke regularly about equal to that of boys.

Dennis Slone, M.D., co-director of the Drug Epidemiology Unit and a co-author of the *New England Journal* article, called the trend in smoking among young girls "a matter of great concern, especially since smoking is a risk factor that is completely amenable to correction — unlike something like diabetes, for example, that is harder to remedy."

According to Samuel Shapiro, M.D., F.R.C.P. (E), co-director with Slone of the Drug Epidemiology Unit and also a co-author of the report, women under 50 generally tend to be healthy. "What these findings mean," Shapiro said, "is that if, by some miracle, we could prevent these healthy women under 50 from smoking, we might conceivably reduce their incidence of myocardial infarction by 75 percent."

The year-and-a-half-long Boston University study was conducted at 152 hospitals with coronary care units. The hospitals were located in Massachusetts, Rhode Island, New York, Connecticut, Pennsylvania, New Jersey, and Delaware. Results were similar to those in studies of smoking and heart attack in men. In one such study in England, the relative risks for men who were light smokers (1 to 14 cigarettes per day), intermediate (15 to 24) and heavy smokers (25 or more) were 7, 9 and 15, respectively.
Risk for ex-smokers small. The study team found the risk for ex-smokers to be nearly as small as that for non-smokers, suggesting that the risk from smoking drops off sharply as soon as a woman stops smoking. Because of this finding, the authors suggest that "cigarette smoking may exert a precipitating effect" on heart attack.

The myocardial infarction-smoking study received support from the National Institute of Child Health and Human Development and from the Food and Drug Administration. It is one of a series of research projects being conducted by the Drug Epidemiology Unit as part of a broad-scale public health surveillance system designed to identify the role of medications and other substances as potential causes of disease.

Authors of the report with Slone and Shapiro were Lynn Rosenberg, M.S., Stuart C. Hartz, Sc.D., David Kaufman, B.A., and Allen C. Rossi, D.D.S. — all of the Drug Epidemiology Unit of the School of Medicine; Paul D. Stolley, M.D., of the University of Pennsylvania School of Medicine; and Olli S. Miettinen, M.D., of Harvard School of Public Health.

‘Bakke decision won’t change BUSM policy on minorities’ — Swartz

When the U. S. Supreme Court handed down its long-awaited decision in the Bakke case June 28, calls from the press immediately began to pour in to the office of Jacob Swartz, M.D., associate dean for admissions of BUSM, as well as to the Office of Informational Services. The Court had found that Bakke’s exclusion from the University of California at Davis medical school under a rigid quota system was illegal, but that universities may consider race and ethnic background as a factor in making admissions decisions. On the basis of early press reports about the decision, Swartz released the following statement:

On the basis of early reports of the Supreme Court decision today on the case of Bakke vs. the University of California, it is our understanding that the Court has ruled illegal rigid affirmative action programs that reserve specific numbers of places for members of racial minorities. We understand, however, that the decision would not affect affirmative action programs, such as the one here at Boston University School of Medicine, that recognize an obligation to expand the number of minority and women members in the medical profession, without the application of quotas.

Thus, it does not appear at the present time that there is anything in the Supreme Court’s decision that would require us to change our own admissions policy with respect to minorities. We will continue to attempt to attract, admit and successfully educate members of minority groups and women. We will continue to attempt to help increase the pool of minority applicants, and to take minority status into consideration in admissions as one factor among many to be weighed. In admitting minority candidates, we will continue to pursue goals, not fill quotas.

The School is proud of having admitted increasing numbers of minority students in recent years, and of the record of academic excellence and professional accomplishment of the students admitted and graduated under its current admissions program.

GSGD fund drive gets promising kickoff at Goldman tribute

A three-year, $3-million fund drive for the Henry M. Goldman School of Graduate Dentistry has been given an encouraging send-off.

At a May 10 dinner honoring GSGD Dean Emeritus Goldman, Dean Spencer N. Frankl announced that the drive had raised at the outset more than $750,000. “Through the generosity of those attending this dinner and many other loyal friends and alumni, we have had an auspicious beginning,” he said. “We must continue to build upon Henry’s great achievements. With the support you have demonstrated this evening, the Henry M. Goldman School of Graduate Dentistry will maintain its preeminent position in dental education.”

Among the 300 guests who attended the black-tie affair at the Case Center were President John R. Silber, members of the University Board of Trustees, senior faculty and administration from the School and many of Dean Emeritus and Mrs. Goldman’s personal friends.

Silber, Frank and Arthur Metcalf, chairman of the University Board of Trustees, paid tribute to Goldman, who, they pointed out, almost single-handedly developed the School while simultaneously advancing the state of dental education.

‘Redefined his profession.’ "Henry has redefined his profession," Silber said. “He has developed an institution to educate the oral physician. He has recruited a superb faculty. He has raised the money and guided the construction of a major building of seven stories, and he is now pursuing the creation of an endowment that will support that institution in years to come.”

Dorothy Goldman received a scroll from Sydeli Shaw, D.D.S., an assistant clinical professor of endodontics, on behalf of the Goldman School’s Women’s Group for the support she has given her husband throughout his career.

Dean Goldman treated his guests to a nostalgic account of the School’s earliest days when he convinced the dean of the School of Medicine to allow him to establish a department for postgraduate training in the eight dental specialties. This Department of Stomatology evolved into the School of Graduate Dentistry.

“I know down deep that the goals that I set for this School are not completely finished,” Goldman said. “I know, however, that many of the goals will be attained, and I am confident that the School of Graduate Dentistry, which now bears the name of Goldman, will live in the forefront of my profession.”
The afternoon session began with a group presentation on Boston City Hospital by David Rosenbloom, Ph.D., director of Boston City Hospital and commissioner of Boston’s Department of Health and Hospitals; Alan S. Cohen, M.D., BCH chief of medicine, and Lester F. Williams, Jr., M.D., BCH chairman of surgery.

Later in the afternoon the Board of Visitors held its executive session with Chairman Mortimer Zuckerman presiding.

The text of Dean Sandson’s keynote address follows:

Ten-year report. “Ten years ago this year, the main, 14-story medical school building opened. Prior to that the School of Medicine was housed in four small buildings. The opening of the new medical school building heralded a decade of growth that is truly remarkable.

“The number of students has markedly increased. Our entering class has increased from 72 to 133. M.A. and Ph.D. students at BUSM have increased from about 45 to 150. A new part-time, evening master of public health program will have about 175 students this fall. We now have more than 500 interns and residents in programs at our affiliated hospitals.

“In the past ten years we have become a research institute with federally supported research; much of this research at Boston University occurs at the School of Medicine. Our medical school ranks among the top medical schools in the country in research support per faculty member.

“Our clinical relationships are extensive and afford our students a diversity and quality of experience that is exceptional. Our main relationships are with University Hospital, Boston City Hospital and the Boston Veterans Administration Hospital. We also have affiliations with suburban community hospitals, including Cape Cod, Brockton, Carney, Framingham Union, Kennedy Memorial, Malden and Central Maine Medical Center.

“The School of Medicine also recently affiliated with the Bedford Veterans Administration Hospital and the Boston VA Court street Outpatient Clinic.

Recent developments. “This past year there were a number of important new developments:

- The first MPH students graduated.
- The first Modular Medical Integrated Curriculum (MMEDIC) students were enrolled.
- The section of Family Medicine was formed.
- A section of Geriatrics was formed in the Department of Medicine at University Hospital.
- A new floor for the New England Regional Spinal Cord Injury Center opened at University Hospital.
- A new $34-million Ambulatory Care Center opened at Boston City Hospital.
- A certificate of need was approved for renovating more than half of the inpatient facility at Boston City Hospital.
- An Arthritis Center (one of 15 in the country) was established at BUSM.
- An effective new antihypertensive drug was successfully tested by Harry Gavras, M.D., Aram V. Chobanian, M.D., and their coworkers.
- The first two successful uses of a partial artificial heart — the left ventricular assist device — were
For the first time, BUSM has a director of development, Ms. Catharine Cook.

"The admissions process to medical schools continues to be a matter of considerable concern. This past year there were 37,000 applicants nationwide for 16,000 places. About one-sixth, or 6,000, applied to BUSM. From this group, our admissions committee picked the 85 to 90 students they think will make the best physicians.

'Dealing with the very best.' "Our admissions committee interviews about 900 applicants and selects those they feel are best qualified. This committee gives appropriate attention to all aspects of each applicant; grades and aptitude scores are important, but are not the only determinants. The interview is very important, as are the letters of recommendation. We are dealing with the very best of the applicant pool, and many students that we accept are also accepted elsewhere. We ultimately accept about 170 students to obtain the 85 students that finally enroll. In view of the press coverage this spring, it is important to emphasize that the committee does not know the financial background of the candidates at any time in this complex process. (For a full discussion of this issue, see CenterScope, Spring, 1978 — Editor).

"I am pleased with our progress, but it is far from perfect. Our tools for ascertaining motivation and compas-

Joel J. Alpert, M.D., addresses the Board on "Primary Care—State of the Art."

A financial mystery. "One of the mysteries of BUSM is what it has accomplished with almost no endowment. Our endowment is only $3 million, and annual giving, in addition to alumni giving, is less than $100,000. I worry that this miracle will not long continue and feel there is a critical need to increase the endowment.

"Another major issue is the increasing tuition, which will be $6,400 next year. Our tuition is competitive with other independent schools in the Northeast. Tuition will almost certainly continue to increase, and at some point will begin to lead to a change in the socio-economic mix of our student body. Long-term loan programs similar to home mortgages are needed for medical students, but are currently not available.

"At our meetings, you will learn much more about all these issues. If you have any questions or suggestions in any of these areas, I would be happy to respond."

Thomas J. Ryan, M.D., shown chatting with a member of the Board of Visitors, addressed the meeting on "Advances in Cardiology."
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30-mg and 15-mg capsules

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- effective for short-, intermediate- and longer-term administration

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Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).

Usage in Pregnancy: Several studies of minor tranquilizers (chloralhydrate, diazepam, and meprobamate) suggest increased risk of congenital malformations during the first trimester of pregnancy. Dalmane, a benzodiazepine, has not been studied adequately to determine if it may be associated with such an increased risk. Because use of these drugs is rarely a matter of urgency, their use during pregnancy is almost always avoided. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Precautions: In elderly and debilitated, limit initial dosage to 15 mg to preclude oversedation, dizziness and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, tachycardia, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, paradoxical reactions, e.g., excitement, stimulation and hyperactivity, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase.

Dosage: Individualize for maximum beneficial effect. Adults: 30 mg usual dosage; 15 mg may suffice in some patients. Elderly or debilitated patients: 15 mg initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

REFERENCES:
Commencement theme: the widening gap in doctor-patient relationship

A "host of intermediaries" is widening the gap between doctor and patient, contributing to the rapid disappearance of "this cherished relationship," John J. Byrne, M.D., president of the Massachusetts Medical Society, told the BUSM graduating class at commencement exercises May 21.

Byrne also cited the earlier remark by President Carter that the American Medical Association has been a stumbling block to medical progress as evidence that "government threats against an organized profession are not idle ones."

Blocking socialized medicine.
Speaking to the 137 members of the School's 104th graduating class, Byrne said, "It is obvious that what we are blocking is socialized medicine, not medical progress. Otherwise, we would not now have the best health care and the most creative and effective medical technology in the world."

This year's Commencement, held at Boston University's Case Center gymnasium, included the awarding of the first three master of public health degrees under the part-time, evening degree program inaugurated at the School in 1976 (see story, page 14).

Byrne, who is also a professor of surgery and of socio-medical sciences and community medicine at BUSM, said the doctor-patient relationship is undergoing a change as a result of a number of social and political forces that have come between doctor and patient. Among these he listed state and federal regulatory agencies, the insurance industry, medical paraprofessionals, other doctors, hospitals, and the press.

To combat this widening gap, the profession must be organized, Byrne said, and the doctor-patient relationship must be strengthened through compassionate care. Byrne, who completed a one-year term as president of the medical society in

Stephen G. Porter of the graduating class was the student speaker. In an enthusiastically received speech, he discussed the frustrations already encountered by members of his class during their medical education, and the frustrations likely awaiting them in medical practice, partly owing to a loss of confidence in medicine among the public and, to some extent, physicians themselves (see excerpts, page 10).

Approximately 400 graduates and guests earlier attended the second annual BUSM commencement breakfast, held at both the Hiebert Lounge and the cafeteria of the adjacent Fuller Mental Health Center to accommodate the large turnout.

100 men, 37 women. Among the 100 men and 37 women who received their M.D. degrees from Dean John I. Sandson, M.D., were two married couples. The graduates came from 20 states and the District of Columbia, and from seven foreign countries, with 42 from Massachusetts. Fifty-two were graduates of the Boston University Six-Year Program, which leads to the B.A. and M.D. degrees after six years of intensive study.

Two students graduated magna cum laude; they were Eric L. Logijian, of Marblehead, Mass., and Daniel W. Gottlieb of Elmhurst, N.Y.
Among the nine cum laude graduates was Larry P. Berstein, of Providence, R.I., whose father, Bernard, graduated from Boston University School of Medicine six years ago, in the class of 1972, at the age of 45. The other cum laude graduates were Carola A. Arndt, of Worcester, Mass.; A. Scott Connally, of Brookline, Mass.; Jonathan P. Harding, of Kingston, N.Y.; Hardy Kornfeld, of Fort Worth, Tex.; Steven M. Matloff, of Newton, Mass.; Michael T. Rosenbaum, of Omaha, Neb.; Charles W. Schertz, of Claremont, Calif.; and Lois E. H. Smith, of Cambridge, Mass.

BUSM Class of 1978 Prizewinners

The School's prizes were awarded to members of the Class of 1978 as follows:

- Dean Eleanor Tyler Memorial Award: Jonathan P. Harding
- Bertha Curtis Award: Patricia A. Donahue
- Elizabeth K. Moyer Memorial Prize: Michelle R. Dudzinski
- Pediatrics Award: Jean R. Brodnax and Kenneth A. Berg
- Internal Medicine Awards: Neal Shadoff, Boston City Hospital; Jonathan M. Stein, Veterans Administration Hospital; and Michael T. Rosenbaum, University Hospital
- Alumni Association Awards: Stephen P. Murphy, Daniel W. Gottlieb, and Hardy Kornfeld
- Solomon Carter Fuller Award: Daphne L. Blackburn
- University Hospital Prize: Stephen M. Matloff
- Upjohn Award: Glen K. Goodman Malamud Prize in Psychiatry: James L. Skydell
- John M. Murray Prize: Stephen G. Porter
- Henry Bakst Award in Community Medicine: Carolyn J. Borow
- Phi Delta Epsilon Women's Club Award: Eric L. Logigian
- Louis Weinstein Award in Infectious Disease: Bruce S. Klein
- Dr. Samuel Poplack Award: Steven M. Matloff

If they remain unrecognized and misunderstood, they have a potential for becoming terribly disruptive forces in our lives. . . . We have found frustration, both individually and as a class, in many situations. Nothing was ever quite as we had anticipated. Exam questions tested areas we had considered unworthy of study. And study itself placed a terrible stress upon our personal lives and closest relationships.

Changes came slowly. "We arrived at BU during a difficult period. One dean (Ephraim Friedman, M.D.-editor) had just left, and Dean Sandson was arriving. . . . Our frustrations with some of our first basic science courses inspired attempts to secure flexibility and quality in the curriculum. (The results were) often discouraging. The faculty was willing to listen, but changes were slow and came too late for our own benefit."

"But much has changed at BU. . . . Both Deans Sandson and (John) McCahan have brought a sense of compassion and leadership to their administrative responsibilities. . . . Many of our own well-articulated criticisms have been translated into much-needed improvements in the curriculum of the first two years. Although we have not reaped the benefits, it was our efforts that helped to bring them about. This administration has demonstrated that changes can be made. . . . when people are willing to care. We cannot let our past frustrations interfere with our continuing concern for the educational experience of future students. I believe that this is one of our most important responsibilities as new alumni. Perhaps we can help minimize the frustrations of future classes. . . .

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"But much has changed at BU. . . . Both Deans Sandson and (John) McCahan have brought a sense of compassion and leadership to their administrative responsibilities. . . . Many of our own well-articulated criticisms have been translated into much-needed improvements in the curriculum of the first two years. Although we have not reaped the benefits, it was our efforts that helped to bring them about. This administration has demonstrated that changes can be made. . . . when people are willing to care. We cannot let our past frustrations interfere with our continuing concern for the educational experience of future students. I believe that this is one of our most important responsibilities as new alumni. Perhaps we can help minimize the frustrations of future classes. . . .

Medicine is challenged. "One of the most important lessons of the clinical years has been the realization that there are many problems for which the modern scientific training of the physicians is inadequate. . . . The recent expansion of the many non-medical health-related specialties has made it easier for us to ignore the existence of many social and economic problems. . . . Our day-
to-day process of professionalism...too often keeps us at a distance from the people we treat...

Medicine’s desire to secure its professional integrity and its position of power in the field of health has led physicians far away from the everyday concerns of the people it serves.

“For the first time...the legitimacy of medicine’s expanding universe of diagnosis, treatment and cost has been challenged. There is a new suspicion and distrust for physicians and hospitals—alarmingly accompanied by a growing resentment...Many people distrust both our motives for providing health care and our therapies.

“The frustrations of science have been especially evident in medicine. Instead of simplifying and easing our struggle against death, our advances have raised serious and complex moral questions...Our profession’s optimism has dimmed with the realization that scientific advances have not always meant greater comfort and happiness for the patient. A tremendous opportunity. “Despite these...complexities, there is much that we can do as physicians to address (the) problems...As physicians, we will be in a unique position to effect changes from within the confusing corporate structure of our profession. We stand as the basic link between the patient and the services that medicine offers. Nothing should soon change this most essential relationship. We have a tremendous opportunity to develop caring relationships and to explore the therapeutic magic of communication and compassion...

“We cannot afford to hide behind our science and technology...We must remember that our primary responsibility is to treat people, not their diseases.

“If we do not bring these qualitative changes about by our own efforts, the public will find some way of restructuring our profession to force our hand. But a morass of new regulations will not make up for what is missing. The real changes must come from us.”

School of Medicine
Class of 1978

The following is a listing of all 1978 BUSM graduates, with their residency placements and residency categories. The key for honors is as follows:

*** summa cum laude
** magna cum laude
* cum laude

Marcia Adelson; Veterans Administration Hospital, Long Beach, Calif.; internal medicine.
Sheila A. L. Alexander; Montefiore Hospital, Pittsburgh, Pa.; Internal medicine.
James E. Andrews; Boston University Affiliated Hospitals-Mass. General Hospital; Boston, Mass.; internal medicine.
Heather A. Argyle; Medical College of Virginia Hospitals, Richmond, Va.; obstetrics-gynecology.
*Carola A. S. Arndt; San Diego Regional Naval Medical Center, San Diego, Calif.; pediatrics.
Manuel A. Aull; New York Infirmary, New York, N.Y.; internal medicine.
Larry P. Berstein; Montefiore Hospital and Medical Center, New York, N.Y.; internal medicine.
*Carola A. S. Arndt; San Diego Regional Naval Medical Center, San Diego, Calif.; pediatrics.
Brenda G. Bass; Children's Hospital of Los Angeles, Los Angeles, Calif.; obstetrics-gynecology.
Carlos Beharie; Boston City Hospital, Boston, Mass.; obstetrics-gynecology.

Steven J. Bellin; Carney Hospital, Boston, Mass.; internal medicine.
Rita B. Benzara-Obeiter; Veterans Administration Hospital, Boston, Mass.; internal medicine.
Kenneth A. Berg; Children's Hospital, San Francisco, Calif.; pediatrics.
Alan D. Berkenwald; Veterans Administration Hospital, Boston, Mass.; internal medicine.
*Larry P. Berstein; Montefiore Hospital and Medical Center, New York, N.Y.; internal medicine.
Daphne L. Blackburn; Cambridge Hospital, Cambridge, Mass.; internal medicine.
Johan G. Blickman; Pacific Medical Center-Presbyterian, San Francisco, Calif.; internal medicine.
Carolyn J. Borow; University of Minnesota Hospitals, Minneapolis, Minn.; family practice.
Edith E. Braun; Pacific Medical Center-Presbyterian, San Francisco, Calif.; flexible.
Richard H. Brent; Yale-New Haven Medical Center, New Haven, Conn.; psychiatry.
Jean R. Brodnax; Children's Hospital Medical Center, Boston, Mass.; pediatrics.
Larry Berstein, a 1978 cum laude graduate, is congratulated by his father, Bernard Berstein, M.D., BUSM '72, as his mother, Dorothy Berstein, his wife, Mindy Berstein (a third-year BUSM student), and his brother, Jason, look on.

Hugo J. M. Cerri; Rhode Island Hospital, Providence, R.I.; internal medicine.
Marvin A. Chinitz; Boston City Hospital, Boston, Mass.; internal medicine.
Gail S. Chorney; Baylor College of Medicine Affiliated Hospital, Houston, Texas; surgery.
Fawn Cohen; Northwestern University Medical School, Chicago, Ill.; internal medicine.
Lillian E. Cohn; Pennsylvania Hospital, Philadelphia, Penn.; internal medicine.
*A. Scott Connelly; University of California (Irvine) Affiliated Hospitals, Irvine, Calif.; internal medicine.
Alda I. Cuascut; Regional Hospital of Caguas, Caguas, Puerto Rico; family practice.
Andrew P. Davis; San Francisco General Hospital, San Francisco, Calif.; flexible.
Frank S. Davis; Dartmouth Medical School Affiliated Hospitals, Hanover, N.H.; pediatrics.
Michael A. Diaz; Georgetown University Affiliated Hospitals, Washington, D.C.; psychiatry.
Patricia A. Donahue; Veterans Administration Hospital, Boston Mass.; internal medicine.
Michelle R. Dudzinski; Duke University Medical Center, Durham, N.C.; obstetrics-gynecology.

Herman M. Ellis; Harlem Hospital, New York, N.Y.; flexible.
Mitchell S. Engler; St. Luke's Hospital Center, New York, N.Y.; internal medicine.
Masha Etkin; Massachusetts General Hospital, Boston, Mass.; psychiatry.
Anthony J. Fassi, Jr.; New England Medical Center Hospital, Boston, Mass.; anesthesiology.
Barbara A. Fivush; Johns Hopkins Hospital, Baltimore, Md.; pediatrics.
John E. Franklin; Veterans Administration Hospital, Boston, Mass.; internal medicine.
Luis E. Fundora; Jamaica Hospital, Jamaica, N.Y.; internal medicine.
Arthur L. Gendron, Jr.; University of Miami Affiliated Hospitals, Miami, Fla.; family practice.
Kenneth J. Glazier; Cincinnati General Hospital, Cincinnati, Ohio; orthopedic surgery.
Richard I. Goldberger; Jacksonville Hospitals Education Program, Jacksonville, Fla.; flexible.
Glen K. Goodman; Nassau Hospital, Mineola, N.Y.; flexible.
**Daniel W. Gottlieb; University Hospital, Boston, Mass.; internal medicine.
Leon C. Haas; Berkshire Medical Center, Pittsfield, Mass.; internal medicine.
*Jonathan P. Harding; University of California (Irvine) Affiliated Hospitals, Irvine, Calif.; internal medicine.
Merdia C. Harris-Stone; Boston University Affiliated Hospitals-Malden Hospital, Boston, Mass.; flexible.
Paul C. Helfgott; Boston University Affiliated Hospitals-Brockton Hospital, Boston, Mass.; flexible.
Marcia E. Herrmann; New England Medical Center Hospital, Boston, Mass.; pediatrics.
Jacqueline E. Hess; Memorial Hospital, Worcester, Mass.; internal medicine.
Thomas L. Higgins; Cleveland Clinic Hospital, Cleveland, Ohio; internal medicine.
Janel R. Jacob; Faulkner Hospital, Boston, Mass.; internal medicine.
Jon R. Jolles; Boston City Hospital, Boston, Mass.; pediatrics.
Harry R. Karp; University of California Hospitals, San Francisco, Calif.; orthopedic surgery.
Lowell H. Keppel; University of Oregon Medical School Hospitals and Clinics, Portland, Ore.; family practice.
Bruce S. Klein; Johns Hopkins Hospital, Baltimore, Md.; pediatrics.
Michael J. Koretz; Medical College of Virginia Hospitals, Richmond, Va.; surgery.
*Hardy Kornfeld; University Hospital, Boston, Mass.; internal medicine.
Robert F. Krachman; Boston City Hospital, Boston, Mass.; pediatrics.
Mitchell J. Kresch; Cincinnati General Hospital, Cincinnati, Ohio; pediatrics.
Paul B. Krivitsky; University of California (Irvine) Affiliated Hospitals, Irvine, Calif.; surgery.
George R. Kunhardt; Central Maine General Hospital, Lewiston, Maine; family practice.
Max S. Laguerre; Faulkner Hospital, Boston, Mass.; internal medicine.
David C. Leiman; Boston University Affiliated Hospitals-Brockton Hospital, Boston, Mass.; flexible.
Frederick M. Levin; Martin Luther King, Jr. General Hospital, Los Angeles, Calif.; internal medicine.
Robert E. Levitz; Hartford Hospital, Hartford, Conn.; internal medicine.
Todd J. Lewis; Boston University
Edward J. O'Rourke; Children's Hospital Medical Center, Boston, Mass.; pediatrics.
Gloria R. Paoli; Roosevelt Hospital, New York, N.Y.; pediatrics.
Francis R. Porter; Veterans Administration Hospital, Boston, Mass.; internal medicine.
Stephen G. Porter; University of Chicago Hospitals and Clinics, Chicago, Ill.; psychiatry.
Jennifer M. Prescott; Boston City Hospital, Boston, Mass.; internal medicine.
Thomas E. Quinn; St. Elizabeth's Hospital, Boston, Mass.; internal medicine.
Elvin R. Ramey; St. Luke's Hospital, Milwaukee, Wis.; family practice.
Sterling S. Reese; University of California at Los Angeles-San Fernando Valley, Los Angeles, Calif.; internal medicine.
Stephen M. Rich; Kaiser Foundation, San Francisco, Calif.; internal medicine.
Vanessa Richardson; St. Francis General Hospital, Pittsburgh, Pa.; internal medicine.

Amy J. Robbins; New York Medical College-Metropolitan Hospital Center, New York, N.Y.; internal medicine.
Brad E. Robinson; Kaiser Foundation, Santa Clara, Calif.; internal medicine.
Guy M. Rochman; Beth Israel Hospital, Boston, Mass., surgery.
*Michael T. Rosenbaum; University Hospital, Boston, Mass.; internal medicine.
Daniel Rotrosen; Los Angeles County Harbor General Hospital, Torrance, Calif.; internal medicine.
David M. Saltzberg; Medical College of Virginia Hospitals, Richmond, Va.; internal medicine.
Maureen A. Sayres; Cambridge Hospital, Cambridge, Mass.; internal medicine.
Alan L. Schechter; Montefiore Hospital and Medical Center, New York, N.Y.; internal medicine.
*Charles W. Schertz; University of Washington Affiliated Hospitals, Seattle, Wash.; surgery.
Melissa J. Schiff; Syracuse Medical Center, Syracuse, N.Y.; internal medicine.
Ronald E. Schott; Los Angeles County-U.S.C. Medical Center, Los Angeles, Calif.; internal medicine.
Sheryl F. Schott; University of California Hospitals, Los Angeles, Calif.; internal medicine.
Francis Schwiep; State University-Kings County Medical Center, New York, N.Y.; internal medicine.
Joseph F. Seber; U.S. Public Health Service Hospital, Baltimore, Md.; internal medicine.
Marc M. Sedwitz; New York Hospital, New York, N.Y.; surgery.
Neal Shadoff; University of Colorado Affiliated Hospitals, Denver, Colo.; internal medicine.
William H. Shalen; Boston City Hospital, Boston, Mass.; internal medicine.
James C. Shaw; Good Samaritan Hospital and Medical Center, Portland, Ore.; internal medicine.
Dwight Y. Shen; Baystate Medical Center, Springfield, Mass.; internal medicine.
Robert D. Sigadel; Long Island Jewish-Hillside Medical Center, New York, N.Y.; internal medicine.

Kamilah Shani accompanies her father, Herman M. Ellis, as he receives his academic hood.
Commencement 1978

Hyde Park, N.Y.; psychiatry.

Carol J. Singer-Granich; University of Massachusetts Coordinated Program, Worcester, Mass.; pediatrics.

James L. Skydell; Yale-New Haven Medical Center, New Haven, Conn.; surgery.

Miles T. Slater; Carney Hospital, Boston, Mass.; internal medicine.

David B. Smith; Cincinnati General Hospital, Cincinnati, Ohio; internal medicine.

Lee E. Smith; Boston University Affiliated Hospitals, Boston, Mass.; internal medicine.

Dennis L. Sprecher; Michael Reese Hospital and Medical Center, Chicago, Ill.; internal medicine.

Surgery.

Stephen B. Sulkes; Syracuse Medical Center, Syracuse, N.Y.; pediatrics.

John S. Sullivan; University of Virginia Hospital, Charlottesville, Va.; pediatrics.

Richard D. Tanner; Tucson Hospitals Medical Education Program, Tucson, Ariz.; internal medicine.

Derrick D. Taylor; St. Luke's Hospital Center, New York, N.Y.; surgery.

James P. Varner; Carney Hospital, Boston, Mass.; internal medicine.

Lewis J. Weinstein; Veterans Administration Hospital, Boston, Mass.; internal medicine.

Fred W. Williams; Harlem Hospital, New York, N.Y.; obstetrics-gynecology.

Eileen L. Winston; Boston City Hospital, Boston, Mass.; internal medicine.

Peak Woo; Hospital of the University of Pennsylvania, Philadelphia, Pa.; surgery.

Kathy A. Woodward; Children's Hospital of the District of Columbia, Washington, D.C.; pediatrics.

Richard A. Zirin; George Washington University Hospital, Washington, D.C.; internal medicine.

Warren S. Zwecker; University of Miami Affiliated Hospitals, Miami, Fla.; internal medicine.

Receiving the M.P.H. degree were Susan L. Wilner, M.S., William Segal, D.M.D., and Stephen J. Sepe, B.A. Wilner graduated magna cum laude, and Segal, cum laude.

Wilner, who also has a master's degree in audiology from Boston University's Sargent College of Allied Health Professions, is currently a research associate at the Harvard Community Health Plan. She plans to study for a doctorate and to teach public health at a university. "Health is heading in a preventive direction," Wilner said a few days after Commencement. "There is a growing demand for health professionals, and for people to teach others and to explore ways to approach preventive methods in health."

Dentist for handicapped. Segal, a 53-year-old dentist whose Somerville (Mass.) practice consists largely of handicapped children and adults, wants eventually to go into institutional administration for handicapped children. "I want to go on to help some of these institutionalized people who haven't had a fair shake. They have rights, too—to education, to jobs, and to good medical and dental treatment."

Segal travels to remote missionary outposts around the world every year to give dental care to the inhabitants; last year he went to Guatemala. Two days before Commencement, he flew to San Diego to accept a fellowship from the American Academy of Dentists for the Handicapped, one of 14 dentists to be so honored.

In an impromptu speech at the Commencement breakfast, Segal thanked officials of the M.P.H. program and the School and announced that he was presenting two scholarships to BUSM—one in memory of his mother and father and the other as a memorial to his wife's father, who died of cancer.

Sepe, a research biochemist at the State Laboratory Institute, has been accepted into a doctoral program in epidemiology at the University of Michigan. He hopes to teach public health in a university setting and to do research in genetic services evaluation. He received his B.A. degree in biochemistry from Boston University.

School presents M.P.H. degrees for first time

The first three graduates of the BUSM Master of Public Health degree program, introduced in 1976, received their M.P.H. degrees at Commencement in May. It was the first time in its 105-year history that the School of Medicine awarded a degree other than the M.D.

Steven M. Matloff, a cum laude graduate, stands with his mother, Evelyn Matloff, and his father, J. Jay Matloff, M.D., BUSM '43, while a friend, Lisa Stone, takes a photo.
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Commencement 1978

Full-time students next fall. The Master in Public Health degree program was introduced as a part-time, evening program for practicing health professionals in the fall of 1976. Next fall, a few full-time students will be accepted, as well. The program is administered by the Department of Socio-Medical Sciences and Community Medicine, whose chairman, Norman A. Scotch, Ph.D., is the program’s director. Associate director and director of admissions for the M.P.H. program is Douglas K. Decker, Ph.D.

Goldman School confers degrees on its largest class of predoctoral students

The Goldman School of Graduate Dentistry conferred the D.M.D. degree to its largest predoctoral class May 21 at the University’s Law School auditorium. The 33 D.M.D. recipients were among the School’s 119 graduating students.

GSGD Dean Spencer N. Frankl, D.D.S., told the graduates in his commencement address, “This diploma represents a commitment to your profession, your society, but most of all, to yourself. It can be priceless only if you apply it to the other dimensions of your life, utilizing it to the best of your ability in the society in which you live.”

Postdoctoral degrees. Eighty-six students in the postdoctoral specialty programs for dentists received either the master of science in dentistry degree or the certificate of advanced graduate study, or both. Thirteen dental hygienists received the master of science degree in public health dentistry, and one student received the doctor of science degree in nutritional science.

The graduating students come from 17 states, 10 foreign countries, and Puerto Rico.

BUGSGD Prizewinners

The following D.M.D. recipients received awards for outstanding achievement:

- Steven Gordon, B.S.: Alpha Omega Award; Omicron Kappa Upsilon Award;
- Ban Vu, B.S.E., M.S.: American Academy of Gold Foil Operators Award;
- Michael Imberman, B.A.: American Academy of Periodontology Award;
- Gail Demko, B.A.: American Dental Society of Anesthesiology Award, Omicron Kappa Upsilon Award;
- Valdemar Welz, B.A.: Fixed Prosthetics Award;
- Gordon Honig, A.B.: International College of Dentists Award;
- Paula Gutlove, B.S.: Omicron Kappa Upsilon Award;
- Steven Seigars, B.A.: Omicron Kappa Upsilon Award, Removable Prosthetics Award.

Goldman School of Graduate Dentistry degree recipients

Following are the 1978 graduates of the Goldman School of Graduate Dentistry:

Predoctoral Degrees


Postdoctoral Degrees

Endodontics

Operative Dentistry
Paul M. Ponte, D.D.S.

Surgical Dentistry
Joel L. Rosenlicht, D.M.D.; John L. Sexton, D.M.D.

Orthodontics

Pedodontics

Periodontology

Prosthetic Dentistry

Public Health Dentistry
Fereidoun Attarzadeh, D.D.S.

Graduate Degrees

Nutritional Sciences
Weldon S. Lloyd, B.A., M.A.

Public Health

Registered Dental Hygienists

October 15, 1978

Operative Dentistry
LVAD in place just before surgeons removed it, with the patient's heart able to resume its full workload.

Moving toward the artificial heart

by Owen J. McNamara

The human heart, that remarkable organ known to poets as the seat of the soul, is a simple but magnificently perfect pump. This muscular bag, an unmatched energy producer that pumps nearly 100 gallons of blood an hour — day after day, year after year — is made up of valves, partitions, arteries, and muscle.

Advances of two decades. When damaged, valves can be replaced; when defective, partitions can be repaired; when obstructed, arteries can be bypassed. Spectacular advances in cardiac surgery over the past two decades have made all of this possible.

The frontier that holds the great challenge in cardiac surgery today is presented by the heart muscle itself. When the heart muscle is injured, it cannot be simply repaired by surgery. The only hope is to allow healing of the damaged heart muscle by placing it at rest, or to replace the entire heart with a transplant or with an artificial heart. And heart transplantation, although it is being done in some cases, is increasingly thought not to be the answer, because of the problems presented by rejection, logistics, and an inadequate supply.

Since an artificial heart, when it is perfected, will have the same components as any system that can put the heart at rest for a lengthy period, a major effort has been under way for a number of years to develop the left ventricular assist device (LVAD), a system that would provide that rest for the heart and that would ultimately pave the way for total heart replacement with an artificial device.

A key first step. The mechanical heart may become a reality, although surgeons say the completely implantable heart is a long way off. The research and development required to create a totally implantable heart has to go through many stages. However, the LVAD is a major first step, since it can take over the function of the left heart, and put that vital muscle at rest.

Although the LVAD is not totally implantable at this point, it is obviously the forerunner of the total artificial heart.

A major breakthrough in the ten-year-old LVAD effort took place in recent weeks at University Hospital, and is reported on in the following articles.■

Owen J. McNamara is managing editor of Centerscope.
Robert Bernstein, 61, shown as he prepared to return to his suburban Boston home after breakthrough surgery at University Hospital.

Desperate surgical move succeeds, showing potential of heart pump

Two University Hospital patients, one in late April and one in early May, became the first and second Americans with severe coronary disease to be saved by an artificial heart pump in clinical trials sponsored by the National Heart, Lung, and Blood Institute.

The two successful procedures carried out by School of Medicine surgeons, backed by cardiology and research specialists, are considered to have given a major boost to the ultimate development of a totally implantable artificial heart. The University Hospital cases have already been acknowledged as key factors in the NHLBI decision in early June to reverse its intent to stop funding and to extend the clinical trials of the pump, the left ventricular assist device (LVAD). Further, the cases offered insights that may lead to new ways of coping with massive heart attacks in the future.

Both patients have since recovered and have been discharged from University Hospital, returning only for exercise and rehabilitation sessions. 

One last chance. The patients — a 61-year-old man who had had three myocardial infarctions, and a 42-year-old man who had been admitted for a single bypass operation — were both on the verge of dying when the decisions were made to implant the LVADs. The pump allowed UH surgeons one last chance by giving the patients' hearts an opportunity to rest and recover from the severe damage.

Robert L. Berger, M.D., a professor of surgery at the School of Medicine and UH chief of cardiothoracic surgery, headed the surgical team in both cases. Berger, BUSM ’56, says the successful outcome of the cases presents two important implications: “First, the cases show that a mechanical device can maintain life in man; second — and equally important, in my mind — they present the first convincing evidence in man that, with early intervention, the damage from massive heart attacks can be reversed, and some of the so-called dead or injured heart muscle can recover.”

University Hospital surgeons have been involved in collaborative clinical trials of the LVAD with physicians and other researchers from Children’s Hospital Medical Center in Boston. The LVAD project has been led by William F. Bernhard, M.D., of Children’s Hospital, and funding has been provided by the NHLBI. The LVAD has been used successfully in research involving calves over the past decade. Its use in
One patient’s clinical course: record of a challenge to cardiothoracic surgery

MAY 5, 1978

7 A.M.
A 42-year old man is wheeled into a University Hospital operating room for open-heart surgery, a coronary artery bypass graft.

8 A.M.
Skin incision is made. Operation begins.

11 A.M.
The operation is completed without complications; the patient is transferred to the surgical intensive care unit.

3 P.M.
All is well with the patient.

3:15 P.M.
Blood pressure falls, but returns to normal in response to small doses of medication.

3:30 P.M.
Suddenly, the blood pressure falls once again. This time, the heart does not respond to intravenous medications and direct injections. Electrocardiogram shows massive heart attack.

3:45 P.M.
The heart stops. Surgeons and SICU personnel begin heart massage through the closed chest in an attempt to revive the heart. In spite of the massage, the heart does not return. Several electric shocks are applied. Still no spontaneous heartbeat.

4 P.M.
The patient’s chest is opened, and direct massage of the heart is started to maintain life and resuscitate the heart. The brain seems to be alive, but the heart does not resume its spontaneous beat.

4:20 P.M.
Patient is wheeled in his bed to the operating room while direct heart massage is continued.

4:30 P.M.
As the heart massage continues, an operation is carried out to connect the patient to the conventional heart and lung machine as a temporary support measure.

4:50 P.M.
Patient is connected to the heart and lung machine, which begins to supply the body with oxygenated blood. Heart massage is stopped. The heart and lung machine can safely maintain life for up to three or four hours.

5:10 P.M.
Vital signs are stable. Attempts to wean the patient from the heart and lung machine continue.

Heart pump’s potential shown

(Continued from preceding page)

humans has been limited to approximately 26 persons in the national clinical trial conducted simultaneously in Boston and Houston. Until the University Hospital cases, none of the patients had survived the critical point at which they are “weaned” back to their own heart from the LVAD.

The first of the two UH patients was Robert Bernstein, 61, a painting contractor until he suffered the first of his three heart attacks in March, 1976. He suffered severe chest pain, even at rest, and was unable to perform his normal daily activities. Bernstein had undergone a multiple coronary bypass procedure to correct severe insufficiency in the arteries supplying blood to his heart. In Bernstein’s case, as in all other human trials of the LVAD to date, the procedure was undertaken only when it represented the only possible way to keep him alive.

First procedure April 21. Bernstein had the LVAD in-
5:30 P.M.
A balloon pump is inserted into the aorta to help the feebly contracting heart.

6 P.M.
The patient's heart cannot take over from the heart and lung machine. So, despite the overwhelming odds against success, surgeons decide to insert the experimental left ventricular assist device. It is the only alternative to turning off the heart and lung machine and pronouncing the man dead.

6:10 P.M.
The LVAD insertion procedure begins.

7 P.M.
The LVAD procedure is completed. Attempts to wean the patient away from the heart and lung machine and turn over his circulation function to the LVAD begins.

8:30 P.M.
The LVAD has completely taken over the patient's circulatory function: the total blood flow to the body is identical to the flow from the LVAD. The left side of the heart is at complete rest; the LVAD performs its total work.

Now begins the long process of weaning the patient's heart away from the LVAD:

Day 1 on the LVAD
Heart has no ability to pump. LVAD continues to perform the work of the left heart efficiently. The patient is stable.

Day 2
Heart begins to resume some work, but it is minimal. Attempt to wean the patient from the LVAD fails. The heart is still unable to function.

Day 3
Heart shows more signs of life and begins to pump. For 30 minutes, it shares the workload with the LVAD. Cardiologists bring a scanning device to the patient's bedside and are able to confirm that the heart is working. After 30 minutes, it begins to tire. The LVAD is turned on to nearly the full workload.

Day 4
Scanner shows heart is contracting well. Blood flow through the LVAD system is cut back, the heart keeps working, and helps to maintain vital functions of the body.

Day 5
Blood-flow through the LVAD is gradually decreased, and the heart takes over the pumping. The patient is returned to the operating room, and the LVAD is removed. The heart beats on, functioning fully after a five-day "rest."

After a six-week recovery period, patient goes home, with the prospect of returning to his job within several months.

Thus, on May 5, University Hospital surgeons utilized practically every technological resource developed over the past three decades of advances in cardiothoracic surgery, including the experimental artificial heart pump, and were able to save the life of a 42-year-old father of four who had suffered a massive heart attack.

O.J.M.

inserted on April 21. The device was removed on April 25. After six weeks of recovery in the UH surgical intensive care unit, the coronary care unit and a general patient unit, he was discharged to his suburban Boston home. He has been admitted twice since for rehabilitation sessions.

Only two weeks after they had implanted the LVAD in Bernstein, the UH surgical team was called on to repeat the procedure when the 42-year-old man, who is the subject of the chronological report in the box above, had a massive heart attack after his bypass surgery. The patient was on the pump for four days, had it removed, and, like Bernstein, survived the critical transition back to his own heart. He, too, had a lengthy recovery period, and has been discharged. It is expected that he will be able to return to work.

In a small percentage of heart operations, such as the two UH cases, the patient's heart is unable to resume adequate pumping after surgery to sustain life. The aim of physicians and researchers in developing the

The LVAD sits on the chest wall and pumps blood from the heart's left ventricle to the aorta, allowing the patient's own heart to mend.
LVAD over the past 10 years has been to provide a way to give sufficient circulatory support to such patients, thus allowing a “rest period” long enough to enable the patient’s natural heart to recover its pumping function. The LVAD is designed to provide this temporary support for up to two or three weeks.

The second case can be regarded as a massive potentially fatal heart attack in a man who fortuitously was in the Hospital on the surgical service with all facilities available for resuscitation. An additional fortunate circumstance was the availability of the LVAD.

26 cases to date. The two University Hospital cases represent the first successful transitions from the artificial heart pump back to the patients’ own heart in the 26 cases recorded so far in the national clinical trial conducted in Boston and Houston. One patient in Houston was kept alive for six days by the pump until he received a heart transplant, only to die 15 days later from a variety of other causes, news reports say. A patient in Hershey, Pa., who suffered from a heart valve defect, had a device similar to the LVAD implanted last summer. Reports from Europe indicate that two patients there have had the pump implanted with success. These patients also had valvular defects.

The importance of the UH cases lies in the fact that the patients represent two large groups: those who have coronary artery disease and those who have had massive heart attacks. Those in the latter group have had so much of their heart muscle killed that their hearts would have failed without an opportunity to rest for a lengthy period.

However, the long-range implication of the successful use of the LVAD is its importance as a possible forerunner to a total and permanently implanted artificial heart, which is considered by many physicians and researchers to be preferable to a human heart transplant.

Developed in Waltham, Mass. The pump was developed by engineers and scientists at Thermo Electron Corp. of Waltham, Mass., under a contract from the NHLBI. The LVAD is housed in a metallic cylinder that contains a flexible plastic pumping chamber. The unit is mounted outside of the body on the chest wall and is connected to the heart by two tubes, each containing a pig heart valve. One of the tubes leaves the heart at the apex of the left ventricle, and the other enters the circulatory system at the aorta. The pumping action is delivered to the LVAD’s inner chamber by an external air supply.

Berger was assisted in both LVAD cases by University Hospital physicians John R. McCormick, M.D., BUSM ’65, an assistant professor of surgery and a cardiothoracic surgeon, Joseph Stetz, M.D., chief cardiothoracic resident, several other UH residents and the open heart technical team, as well as a large team of nurse specialists. Support in both LVAD cases was provided by University Hospital cardiologists under Thomas J. Ryan, M.D., a professor of medicine and chief of cardiology, as well as by Bernhard and his staff from Children’s Hospital.
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Drug addiction and the brain’s ‘pleasure areas’

Kornetsky group seeks key to sensual-reward processes

by Lorraine W. Loviglio

HEROIN, cocaine, "Angel Dust," barbiturates, amphetamines—all drugs that are obviously very different from each other, with widely disparate pharmacological effects, yet all widely abused and potentially addictive.

The promise of intense feelings of euphoria leads people to abuse such drugs, but what is the mechanism in the brain that accounts for these feelings? What makes a reformed addict return again and again to a drug, when he knows only too well the effects of addiction’s tyranny, and the suffering of withdrawal?

What happens in the brain? Conan Kornetsky, Ph.D., a BUSM professor of psychiatry (psychology) and pharmacology, is intrigued by these and several related questions posed by the facts of drug abuse and addiction. He and his associates are attempting to understand what happens in the brain to reinforce drug-taking. Specifically, they are examining, in animals, the relationship between behavior and what goes on in the brain when certain drugs are given, including morphine and other narcotic analgesics, narcotic antagonists, amphetamines, cocaine, and other abused drugs. The researchers are on the lookout for similarities and differences in the reinforcing properties and mechanisms of these drugs.

Their work, however, has implications that go well beyond the area of drug abuse; it could contribute to our understanding of such diverse phenomena as eating patterns, sexual preference, the regulation of emotion, the mechanisms of mental illness—and even how and why people learn and remember.

In the early 1950s it was discovered that, when certain areas of the brain of an animal are stimulated, the animal will work to receive more stimulation. The implication was that the stimulation was pleasurable. These “pleasure areas” of the brain are centered around the lateral hypothalamic area, and, according to Kornetsky, probably play an important role in the survival of species by contributing to certain necessary behaviors, such as eating and sex. Researchers have found that stimulating these areas of an animal’s brain with an implanted electrode acts as a reward for the animal, much as giving food does, and that laboratory animals can be induced to perform specific tasks in order to receive this rewarding stimulation. The euphoric effect in humans has been confirmed by people undergoing brain surgery, who report a pleasurable feeling when corresponding areas of their brains are stimulated by the surgeon. Conversely, there are parts of the brain that, when stimulated, cause unpleasant feelings.

Kornetsky is looking at these aversive, or “negatively reinforcing” areas, as well.

Finding the threshold. The BUSM scientist’s method is first, to determine the threshold for “intracranial self-stimulation” (ICSS)—that is, the minimal amount of electric current that needs to be sent to the brain of a rat to induce him to perform a certain chore. This is done by surgically placing an electrode in the animal’s brain under anesthesia. After he recovers from surgery, low levels of electric current are applied to the rat’s brain by way of the electrode, and in increasing amounts, until a level is reached at which the rat is willing to turn a wheel to get repeated electric shocks. As Kornetsky explains it, the pleasure, or reinforcement, is sufficient at this threshold level to make it “worth it” to the rat to perform the desired action. The researchers then give the animal one of the abuse drugs they are testing—morphine, amphetamine, cocaine, PCP, or some other—and measure the threshold again.

Kornetsky has discovered that, whenever an abuse drug is administered, the threshold goes down—that is, the animal performs the task for a lower intensity of current. It seems reasonable to conclude that the amount of pleasure the rat experiences at the lower level of current has somehow been increased. What is going on biochemically in the brain to produce this effect, Kornetsky explains, is extremely complicated and not very well understood. “But we do know these drugs lower the threshold for pleasure,” he explains.

So far, Kornetsky and his fellow researchers have completed studies on cocaine and morphine, and have done some preliminary work with amphetamines and PCP (phencyclidine, also known as “Angel Dust”). All lowered the threshold. On the other hand, the group has tested several drugs that are not abused, including, for example, Haloperidol, a tranquilizing, antipsychotic drug, which raised the threshold. Naloxone, a narcotic antagonist (that is, a drug that completely blocks the action of a narcotic drug), also raised the threshold. But mixed agonist-antagonists (drugs like cyclazocine, pentazocine and nalorphine, which, when
given by themselves, act like analgesics, but when
given in combination with another analgesic drug,
block the action of the other drug), caused little or no
lowering of the threshold.

Affected addicted as well as nonaddicted. In Kor­
netsky’s experiments, administration of abuse drugs
has lowered the ICSS threshold in addicted as well as
in nonaddicted animals. These results appear to chal­
lenge a commonly held belief that once a drug-user is
addicted, he becomes tolerant to the euphoric effects of
the drug, and continues to use it only to avoid the
agonies of withdrawal. This assumption has been made
partly because addicted persons do become tolerant to
the analgesic effects, as well as many of the depressant
effects, of narcotic drugs. “But,” according to Kor­
netsky, “our work suggests that there is still a signifi­
cant amount of pleasurable effect remaining, even
though the individual may become tolerant to other ef­
effects.” This finding would go a long way to explain
why reformed addicts typically go back to drug use af­
after they have been “cured,” although they know that
doing so may involve extremely unpleasant conse­
quences.

The Kornetsky group is planning to extend its inves­
tigations to alcohol and nicotine, and anticipates that
these drugs of abuse will also lower the ICSS
threshold. “What we think at this point is that one
aspect of the pleasurable effect is identical for all of
these drugs,” Kornetsky said. “The common factor is
something that seems to ‘turn on’ that area of the brain
that has to do with reinforcement and reward.”

Kornetsky’s aim is to learn more about these
pleasure centers in the brain, which, he believes, have a
purpose, like any other part of the body. “They are in­
timately involved with the whole area of the regulation
of emotion,” he points out. “They probably relate to
how we learn that certain things that are good for us—
like food, or sex—will feel good, and thus, to how we
learn to do what we have to do to survive.”

Already, former and current workers in Kornetsky’s
laboratory, like Judith Nelsen, Richard Marcus, and
Ralph Esposito, have done provocative work fur­
thering the understanding of these centers. Marcus, for ex­
ample, found that morphine lowered the ICSS
threshold in the reinforcement areas of the brain, while
also raising the threshold in the aversive, or negatively
reinforcing areas. This would correspond to
morphine’s double-barreled effect in increasing
euphoria while it decreases pain. Esposito showed that
tolerance does not develop to this rewarding aspect of
morphine.

Implications for treatment. By shedding light on how
abuse drugs act in the brain, Kornetsky hopes to con­
tribute to the understanding of how drugs produce ad­
diction, and why addicts become readdicted repeatedly.
His work—especially the finding that, contrary to what
had been believed, the pleasurable effects of drugs per­
sist despite dependence—may have important implica­
tions for treatment of drug addiction. More important
in the long run, Kornetsky speculates, may be the con­
tribution of his research in the understanding and
treatment of mental illness.

“Many of these drugs, besides being abuse drugs,
have effects that are reasonable models for psychosis,”
Kornetsky points out. “They all seem to have actions
in similar areas of the brain.” Cocaine, amphetamine,
PCP—all will produce a psychosis-like reaction.

But of greatest interest to Kornetsky and his
colleagues is understanding the reward areas of the
brain—how they affect our appreciation of other
rewarding activities, and how they are involved in the
various effects of drugs, whether euphoric, analgesic,
or tranquilizing. After they complete the current phase
of their research, Kornetsky and his colleagues look
forward to determining the role of specific natural
chemicals in the brain in the phenomenon of reinforce­
ment.

Kornetsky points out that the reward areas of the
brain are significant not only for reinforcing sensually
pleasurable activities, but almost certainly for reinforc­
ing such processes as learning and memory. When you
add this to their importance in mental illness, and in
the regulation of the entire emotional spectrum, from
euphoria to depression, it is clear that the possible im­
lications of Kornetsky’s research are far-reaching
indeed.
Matters of Record

Faculty Actions

School of Medicine Appointments

(Effective March 2, 1978)

Amelia A. Blackwell: Assistant Professor of Psychology.

Jorge J. Borrelli: Clinical Instructor in Psychiatry.

Michael Brawler: Clinical Instructor in Neurology.

Barry J. Claycomb: Clinical Instructor in Psychiatry.

Michael W. Egan: Instructor in Medicine.

Mark J. Engler: Assistant Professor of Radiology.

Jerzy Gajewski: Assistant Clinical Professor of Medicine.

Peter S. Hedstrom: Instructor in Medicine.

Walid K. Idriss: Assistant Professor of Obstetrics and Gynecology.

Michael W. Marcus: Assistant Clinical Professor of Psychiatry.

Edgar Y. Oppenheimer: Assistant Professor of Pediatrics and Neurology.

Reva Oren: Instructor in Radiology.

Donald Stangler: Instructor in Medicine.

Raji R. Subramanyam: Assistant Professor of Radiology.

William M. Vanneman: Instructor in Medicine.

Margaret K. Hayes: To Assistant Professor of Neurology.

Marilyn R. Kassirer: To Assistant Professor of Pediatrics.

Kalidas Nandy: To Research Professor of Medicine.

Marianne N. Prout: To Assistant Professor of Medicine.

Gordon B. Robbins: To Assistant Professor of Pathology.

Alan Rubinow: To Assistant Professor of Medicine.

Maya B. Shahani: To Instructor in Rehabilitation Medicine and Pediatrics.

C. Robert Valeri: To Adjunct Research Professor of Medicine.

Grants and Contracts

School of Medicine


Research training in nephrology. N. Levinsky. NIH. $83,483. 1/1/78-12/31/78.

Cognitive deficits related to chronic alcoholism. N. Butters. NIH. $74,029. 1/1/78-12/31/78.

Synovial membrane and related connective tissues. A. Cohen. NIH. $134,397. 1/1/78-12/31/78.

Life problems and alcohol use in an urban population. N. Scotch. NIH. $97,240. 8/1/77-7/31/78.

Acute and long-term clinical toxicity of drugs. H. Jick. NIH. $284,283. 1/1/78-12/31/78.


Established investigatorship award. J. Saide. American Heart Association. $17,700. 7/1/77-6/30/78.

Pathogenesis and complications of hypertension. A. Chobanian. NIH. $1,009,926. 12/1/77-11/30/78.


Pathophysiology of myocardial ischemia. W. Hood. NIH. $55,112. 1/1/78-12/31/78.

Study of twins to ascertain possible factors for SIDS. J. Gould. NIH. $114,817. 1/1/78-6/30/78.

Autonomic nervous system function in bronchial asthma. A. Mathe. NIH. $22,514. 1/1/78-12/31/78.

Arterial metabolism, diabetes and atherosclerosis. A. Chobanian. NIH. $69,504. 1/1/78-12/31/78.


Indirect cost awards. NIH. $34,888.

Training program in endocrine and metabolic research. J. Melby. NIH. $56,188. 1/1/78-12/31/78.

Molecular mechanisms of platinum and ruthenium drugs. A. Kelman. NIH. $51,687. 12/1/77-11/30/78.

Sugar intake and disease: the Framingham study. T. Dawber. Sugar Association, Inc. $19,503. 1/1/78-7/1/78.

Response of the lung to injury. C. Franzblau. NIH. $731,396. 12/1/77-11/30/78.

New approaches to tumor immunotherapy. S. Cooperband. NIH. $22,490. 2/1/77-3/31/78.

Avoidance of intervention in political crisis. R. Batson. NIH. $147,136. 2/1/78-1/31/79.

Adrenergic receptor-cyclase system in sensitized lung. R. Sohn. NIH. $2,940. 2/1/78-1/31/79.


Indirect cost awards. NIH. $35,898.


Acute and long-term clinical toxicity of drugs. H. Jick. FDA. $132,936. 2/1/78-1/31/79.


Post-doctoral fellowship. F. Benson. NIH. $18,500. One year.

Anti-tumor activity of phagocytic cells. R. Clark. NIH. $35,046. 3/1/78-1/31/79.

Vitamin E fatty acids and membrane function. L. Corwin. NIH. $41,405. 5/1/78-4/30/79.

Roxbury Court alcoholism treatment referral project. N. Ammarell. NIH. $89,793. 3/1/78-2/28/79.

Purification, structure and function of factor VIII. M. Weinstein. NIH. $454,044. 12/1/77-11/30/78.


Indirect cost awards. NIH. $53,342.

Role of the arterial wall in atherosclerosis. W. Hollander. NIH. $13,334. 4/1/78-8/31/78.

Bioassay of possible protective effect of prostaglandins on damaged myocardial tissue. C. Apstein. ONR. $34,996. 2/15/78-2/14/79.


Minority hypertension training program. A. Chobanian. NIH. $33,939. 5/1/78-4/30/79.


Biomedical research support grant. J. Sandson. NIH. $200,462. 4/1/78-3/31/79.

Experimental optic neuropathies. S. Lessen. NIH. $59,041. 4/1/78-3/31/79.


Multidisciplinary respiratory diseases. C. Franzblau. NIH. $71,523. 7/1/78-6/30/79.

Pulmonary biochemistry and cell biology. J. Brody. NIH. $156,493. 7/1/78-6/30/79.

Hearing assessment of subjects in the Framingham Heart Study. T. Dawson. NIH. $50,000. 4/1/78-9/30/79.

Basic science cardiovascular training program. W. Hood. NIH. $115,606. 7/1/78-6/30/79.


Anatomy. A. Peters. NIH. $47,086. 7/1/78-6/30/79.

Goldman School of Graduate Dentistry


Alumni News

University President John R. Silber and Dean John L. Sandson, right, greet BUSM Alumni Association members at the annual dinner in May at Boston's Copley Plaza Hotel. From left, Mrs. Alicia Orlandi-Gomez and her husband, Radamee Orlandi-Gomez, '53, of Rio Piedras, P.P., and (back to camera) Armando Barreto, '53, of San Juan, P.R.

Silber urges BUSM alumni to support proposal to create Tuition Advance Fund

A record turnout of 360 BUSM alumni, faculty members, students and their spouses and guests attending the 1978 Alumni Association dinner in May at Boston's Copley Plaza heard a briefing by University President John R. Silber, Ph.D., on current legislation that would create a federal Tuition Advance Fund (TAF).

Silber, who is cosponsor of the proposal with U.S. Rep. Michael J. Harrington (D-Mass.), urged members of the audience to support the legislation through letters and calls to their representatives in Congress and to their governors.

Up to $5,000 a year. The proposal, House bill 12268, would allow college students who have completed their freshman year to apply for an advance on their total tuition costs, including $1,000 a year in room and board expenses, up to $5,000 a year. A student would have no payback obligation until he or she began earning an income. At that point, the funds would be paid back through direct deduction as part of the person's income tax, at a rate of 2 percent of his gross income. A person who had a gross income of $100,000 would repay the loan at the rate of $2,000 per year, while someone who earned $10,000 would repay $200 per year.

Silber said the federal advance fund would become financially self-sustaining after 18 to 20 years through a 50-percent surcharge on all loans.

The surcharge, Silber explained, would ensure the TAF against the death, disability or unemployment of some recipients. "There would be no possibility of default through bankruptcy, because the funds would be collected by the Internal Revenue Service as a tax," Silber said.

A burden shifted. "The Tuition Advance Fund," he said, "would transfer the burden of financing higher education from the backs of the parents to the shoulders of the children."

The cost of the program, he said, would be approximately $4.5 billion to $8.2 billion per year, depending upon whether every eligible student participates in the program or only twice the number of students participating in current loan programs take part.

"If that appears to be a great amount of money to you—and, using $8 billion as a maximum figure, it certainly is a great deal—consider that it is only a little more than 1 percent of the total annual federal budget; it is about 3 percent of the Health, Education, and Welfare budget; it is less than the annual cost of candy and ice cream in the United States; it is less than half the amount paid for..."
tobacco; and it is only a third or a quarter of what is spent annually on alcohol."

If the United States cannot create such a fund, Silber said, "we are going to participate in the destruction of hundreds of independent colleges, and force students into a state educational system that in turn will create such a burden of taxation that it will force a taxpayers' revolt, the beginning of which can already be seen in California."

Chances for passage. The chances for passage of the legislation are quite high, Silber said. Some 45 newspapers have already carried favorable editorials on the proposal, and news articles on it have appeared in some 1,500 newspapers.

Summing up, Silber said TAF is based upon two fundamental American principles: that no citizen should be denied equal access to higher education, and that the person who receives an educational benefit should be the one who pays for it.
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R. Peter Wittmann ’72
Gary J. Wolff ’74

Members of the 50-year Class gather at annual dinner; at left, Jacob Feldman, with his wife, Rose; at center is Morris Katcher, whose wife, Phyllis, stands to his right; at right is Irving Swartz, whose wife, Ruth, stands to his right. The Feldmans and the Katchers live in Brooklyn, N.Y., while the Swartzes live in Syracuse, N.Y. On hand for the dinner but not in the picture were ’28ers Hector Bladwell, San Juan, P.R.; Kenneth Christophe, W. Chatham, Mass.; Samuel Segal, Brockline, Mass., and Carl DeSimone, Brighton, Mass.

Several members of the Class of ’68 in attendance at the annual meeting chat with Dean Sandson at a reception prior to the dinner. From left to right are James Rosenberg, Brockline, Mass.; Steven F. Cogan, Rockville Center, N.Y., with his wife, Louise, and James Brust, San Pedro, Calif.
Alumni Notes

BUSM

1925
JAMES E. CARROLL of West Hartford, Conn., reports: "A classmate, ANTHONY J. SCALISE, died August 28, 1977, from a massive myocardial infarction. Twice he served in the U.S. Army. In World War II he served in the Mediterranean and was honorably discharged as a captain. He was a bachelor, a native of Brooklyn, and an internist. Along with his office practice in Brooklyn, he was involved each day from 4 p.m. to 11 p.m. in a rehabilitation program in a Catholic hospital. Twice in coming out of the subway, two blocks from his home, he was mugged and robbed. In spite of the attacks he routinely kept fearlessly at his dual role. A Christian gentleman, an excellent student, and a loyal BUSM alumnus."

1927
IRVING H. UVITSKY of Bridgeport, Conn., retired from practice as of November, 1976.

1928
JACOB FELDMAN writes from Brooklyn, N.Y., "Happy to have participated in the 50th Reunion."

1929
ANGELO L. GENTILE writes from New Haven, Conn., "Still involved with proctology. Hope to see classmates for our 50th."

1930
ALBERT V. SARADARIAN writes from Jersey City, N.J., "Plan to be there on the 50th. If not, will smile down from Cloud 9."

1931
EUGENE J. NICGORSKI is on the medical faculty with the Student Health Center at the University of South Florida in Tampa, Fla.

1932
FRANCIS E. CLARKE reports from Valley Stream, N.Y., "Retired from the police department of Nassau County on April 1, 1977, after 30.5 years of service as police surgeon. Have been appointed to emeritus staff of South Nassau Communities Hospital. Am honorary surgeon to Valley Stream Fire Department, after serving them since 1933. Served 20 years in U.S. Naval Reserve, including active duty in World War II. Was president of Valley Stream Kiwanis Club in 1948 and was elected their Man-of-Year in 1970."

1933
EVA S. VANDOW, in private practice (psychiatry) in Riverdale, N.Y., and on the faculty of the Albert Einstein College of Medicine, made a contribution this year among the speakers paying tribute to Frost was supposed to have been the former dean of BUSM, Charles F. Branch, under whom Frost trained while at BUSM. Branch, former pathologist at CMCC and recently retired Maine chief medical examiner, was prevented from attending the party by a minor health problem. Branch himself writes that the recent marriage 'attests to Dr. Frost's continuing interest in life. I understand he is going to set up a small rural clinic at 'the Forks' (as the local people call that area) and will attend to the medical needs of the natives. The hunting and fishing are particularly good in that area!'

1934
ROBERT E. BLOCK has moved to Stockton, Calif., and is semiretired now, doing only office gynecology. His son, STEVEN (BUSM '71) is now a cardiologist in California; son Lawrence is a writer in Los Angeles; and daughter Deborah, a registered nurse, just received her master's degree in maternal and child health.

1936
WILLIAM W. WAINER is in emergency medicine at Holy Cross Hospital in Fort Lauderdale, Fla.

1937
STANLEY T. BLOOMFIELD notes from Stamford, Conn., "As of August 1, 1977, at the age of 65, I retired from my position as director of professional services at Burroughs Wellcome Co. at Research Triangle Park, N.C. . . . I am trying to get adjusted to the situation of being unemployed and battling with inflation. My son, Robert, received his M.D. degree this past June from Duke Medical School and is now doing a residency in internal medicine, and my daughter, Joan, is struggling in the business world in Manhattan."

1938
In January ROBERT A. FROST and Norma R. Webb, town clerk of West Forks, Me., and a retired storekeeper, were married in West Forks, Me. A staff member at Central Maine Medical Center and a resident of Auburn, Me., since 1941, Frost retired from active practice on Jan. 1. He was honored at a meeting of the CMCC medical staff in Dec., prior to his retirement. Among the speakers paying tribute to Frost was supposed to have been the former dean of BUSM, Charles F. Branch, under whom Frost trained while at BUSM. Branch, former pathologist at CMCC and recently retired Maine chief medical examiner, was prevented from attending the party by a minor health problem. Branch himself writes that the recent marriage attests to Dr. Frost's continuing interest in life. I understand he is going to set up a small rural clinic at 'the Forks' (as the local people call that area) and will attend to the medical needs of the natives. The hunting and fishing are particularly good in that area!"

1940
ROBERT A. FROST, a colonel in the Medical Corps, writes, "Am now on active duty with the U.S. Army at Triplex Army Medical Center, Hawaii. We're in the process of setting up a community mental health activity covering Hawaii and also developing a psychiatric residency program. Greetings from Hawaii and best wishes to all our wonderful classmates. Wish I could be with you at the Reunion!"

1943-A
SAUL C. HOLTZMAN, a colonel in the Medical Corps, writes, "Am now on active duty with the U.S. Army at Triplex Army Medical Center, Hawaii. We're in the process of setting up a community mental health activity covering Hawaii and also developing a psychiatric residency program. Greetings from Hawaii and best wishes to all our wonderful classmates. Wish I could be with you at the Reunion!"

1943-B
Senior physician J. JAY MATLOFF has been elected president of the Newton-Wellesley Hospital medical staff for 1978. A member of the hospital's medical staff since 1956, Matloff was a medical resident there in 1947. A clinical instructor at Tufts University School of Medicine and Harvard Medical School, Matloff is also a member of the staffs of Boston City, Beth Israel, Faulkner, and University hospitals.

1944
After two years in American Samoa, FRANKLIN A. MUNSEY is back in Williamsburg, Va., with the Virginia Public Health Service.

1945
SANFORD W. UDIS was awarded a certificate of fellowship by the American College of Radiology during its annual
Alumni Notes

meeting and convocation in San Diego April 11. A resident of Fall River, Mass., Udus is affiliated with Union-Trowsdale Hospital there.

1947
DAVID C. KELSEY married Jean Koernig Shaw June 25, 1977. His first wife, Miriam, died in June, 1975. Jean is administrative assistant for personnel, Bond Department, Aetna Life and Casualty. David is associate medical director, Claim Department, Medical Division, Aetna Life and Casualty, and is responsible for hospital medical malpractice risk-management programs for Aetna-insured health-care facilities. The Kellseys are now living at 8 Chestnut Drive, Farmington Woods, Avon, Conn.

1950
NADYA KONIKOV BLEISCH reports from St. Louis, Mo., "I am working with a large private laboratory here, International Clinical Laboratories. Virgil is still at Deaconess Hospital in Pathology. My son Bill is at Rockefeller University on a NSF fellowship, working toward a Ph. D. in sociobiology. Barbara is at Yale (79) in Slavic studies. Pamela graduates from high school next year; she is having problems picking a college. Bill was at Harvard, Barb at Yale; the pressure is on."

1951
MAX G. SHERER of Bethesda, Md., writes, "Daughter Debby at Hebrew University, Jerusalem, in Arabic, Islamic Studies, Son David, Jr., at Emory University; pre-med, music major. Son Daniel, admitted to Johns Hopkins Gifted Class. Daughter Lisa in Charleston, S.C., in health work."

1952
A. B. CLACHKO writes from Teaneck, N.J., "Son MARC A. CLACHKO (BUSM '71) now in practice with me. I have just completed term as chairman, medical board, Hackensack Hospital, Hackensack, N.J."

1953
LEON R. JELLERSON recently moved from chief of Special Medical Operations (Aviation and Diving Medicine) to chief of the Division of Operational Medicine, U.S. Coast Guard, at Coast Guard Headquarters, Washington, D.C.

1954
JOSEPH E. BEBRY writes from Oyster Bay, N.Y., "Third of four sons has graduated from Colgate College. Two are in restaurant and hotel management — the oldest in a restaurant in Palm Beach, Fla., and number two son at the Hyatt Regency in Chicago. Joan and I finally plan to take time off this summer."

1955
GERALD E. GAULL of New York City won the 1968 Borden Award of the American Academy of Pediatrics for research in child development and nutrition.

1957
JAY R. SHAPIRO was recently appointed associate director of the Clinical Center, National Institutes of Health, Bethesda, Md. In addition to administrative responsibilities in the 500-bed hospital-research complex, he will supervise the educational programs at the Clinical Center, including the Associate Programs, and will participate in clinical research.

1958
EDMOND M. KOURY has been elected to the executive committee by the medical staff of Worcester (Mass.) Hahmemann Hospital. A member of the Hahmemann medical staff since 1963, he had served as its secretary-treasurer. An incorporator of the hospital, he is secretary of the Worcester District Medical Society, a counselor of the Massachusetts Medical Society, and a member of the American Medical Association. He maintains a private practice in internal medicine at 266 Lincoln St., Worcester.

1960
WALTER LEO McLEAN was elected to fellowship in the American Academy of Allergy during the academy's 34th annual meeting held this past spring in Phoenix, Ariz. A member of the academy since 1969, he was honored for proficiency in the practice of allergy. McLean is a captain in the U.S. Navy, the director of the Allergy and Immunology Training Program at the National Naval Medical Center, Bethesda, Md.; assistant chairman of the Department of Pediatrics, NNMC; assistant professor of Child Health and Development, George Washington University Medical School in Washington, D.C.; and associate professor of Pediatrics, Uniformed Services University of the Health Sciences in Bethesda. Upon his retirement in 1979, after completing 20 years of service in the Navy, McLean will be in private practice in Falmouth, Mass. He is a resident of Rockville, Md. and Falmouth Heights, Mass.

Listening to the Dean's update on School of Medicine affairs during alumni weekend are two members of the Class of 1933, Michael J. Kannan, left, of Lawrence, Mass., and Norbert F. Lough, of Boynton Beach, Fla.

1962
DAVID S. BABIN was appointed to a second term as chief of surgery at Falmouth (Mass.) Hospital in January.

1967
PAUL D. ALLEN of Boston writes, "I will finally finish being a student this July and will start on the staff at Peter Bent Brigham Hospital (Boston, Mass.) in anesthesia — much to the surprise of my wife and family, who thought I would never end."

1968
CAPT. WALTER L. MCLEAN, M.C., formerly a member of the Class of 1968, writes from Oyster Bay, N.Y., "A fierce editorial travel schedule has prevented my attending our class reunion. Best regards to all."

1970
JOSEPH E. BEBRY writes from Oyster Bay, N.Y., "Third of four sons has graduated from Colgate College. Two are in restaurant and hotel management — the oldest in a restaurant in Palm Beach, Fla., and number two son at the Hyatt Regency in Chicago. Joan and I finally plan to take time off this summer."

1975
MARSHALL BEDINE and his wife, Joyce, announce the birth of their third son, Jeremy Evan, on Dec. 9, 1977. Jeremy's brothers are Geoffrey Scott, age 9, and Matthew David, age 7. Marshall practices gastroenterology at the Johns Hopkins Hospital.
Alumni Notes

Hospital in Baltimore, Md.


1969

JACK FERLINZ is currently assistant director of cardiology at the Veterans Administration Hospital, Long Beach, University of California, Irvine. He recently returned from a lecture tour in Kenya, East Africa.


LEONARD J. ZWERLING writes, "I am alive and well and practicing medicine in Coral Gables, Fla. I just passed my boards in cardiovascular disease and was elected to fellowship in the American College of Cardiology. I am also clinical assistant professor of medicine at the University of Miami School of Medicine. My wife, Holly, and 'children' (two dogs and two cats) extend warm greetings to my classmates and would love to say hello if they are in our area."

1970

PAUL J. HAYDU writes, "I'm living in San Diego's North County, Calif., and welcome all correspondence and visits from BUSM classmates and alumni."

1971

BARRY R. ALTER of San Antonio, Tex., has been board-certified in cardiology. He joined the staff of the cardiology service, University of Miami, as director of Cardiovascular Laboratories, Miami Veterans Administration Hospital, in July, 1972.

BARRY J. BENJAMIN writes, "Susan and I are now living in Needham, Mass., with our two-year-old son, Robert. Susan is working on a postgraduate degree in educational administration while I am practicing otorhinolaryngology in Dedham."

JAMES BRASCIC is now assistant clinical professor of psychiatry at Wright State University School of Medicine, Dayton, Ohio. On May 25, he presented a paper, "Hysteria: Diagnosis and Treatment," at the Behavioral Sciences Symposium at Brooks Air Force Base, School of Aerospace Medicine, San Antonio, Texas.

GREG CHEUNG finished a family practice residency at the University of California at Davis, Merced Community Medical Center, in August, 1977. He is now on the active staff of Contra Costa County Medical Services and on the part-time staff of Northeast Medical Services in San Francisco.

BRUCE K. SHAPIRO writes from Baltimore, Md., "I'm (School of Nursing '72) and I became parents of a girl, Rachel Lynn, on Feb. 11. I continue on the attending staff of the John F. Kennedy Institute as director of the Child Development Clinic."

A. DAVID SYDNEY of Lafayette Hill, Pa., writes, "Have finished my residency in psychiatry at the University of Pennsylvania and joined the Northern Psychiatric Associates. Am also a candidate at the Philadelphia Psychoanalytic Institute, now in the third year."

1973

ANDREW BESEN has just entered private practice of internal medicine in Philadelphia. LYNNNE GRADINGER BESEN has finished a fellowship in hematology-oncology and also entered private practice. The Besens now reside in Maple Shade, N.J.

JAMES A. KOUFMAN of Newton, Mass., completed his otorhinolaryngology residency at Boston University. He and his family then moved to Winston-Salem, N.C., where he joined the staff of the Bowman Gray School of Medicine.


MAJOR EVAN E. MORTIMER, Medical Corps, is now chief of obstetrics and gynecology at Supreme Headquarters Allied Powers Europe (S.H.A.P.E.) Medical Center in Casteau, Belgium.

STEPHEN T. OLIN and wife, Laura Sadler Olin, announce the birth of their daughter, Hillary Manchester, on March 14, 1978. Olin is on the staff of the Department of Family and Community Medicine at Lancaster (Pa.) General Hospital.

BARBARA WILKINSON, currently a fellow and instructor in pathology at the University of Rochester Medical Center, N.Y., stopped in Boston for Reunion Weekend in May on her way home to Maine for a visit with her family.

1974

GARY WOLF and his wife, who live in New York City announce the birth of their second child, Laura Beth, on March 17, 1978. Brother Kenneth is now two.

1975

ARNOLD M. BASKIES of Gaithersburg, Md., is currently clinical associate, Surgery Branch, National Cancer Institute, N.I.H. On April 6, he made a presentation at the American Association for Cancer Research concerning humoral factors in patients with cancer.

STEPHEN R. PREBLUD writes, "Margaret Rose Kelley and I were married on March 25, 1978, in Atlanta, Ga., where we have been living since July, 1977."

LINDSEY ('75) and NEIL ('76) GROSSMAN of Baltimore, Md., announce the birth of their daughter, Kathryn Dena Grossman, on March 16.

BUGSGD

62 Endodontics

JOEL L. DUNSTEDT of Boston was elected chairman of the Endodontic Section of the American Association of Dental Schools at their annual meeting in Washington, D.C., March 12-15. Dunstedt is currently director of predoctoral endodontics at Harvard School of Dental Medicine.

65 Periodontics

FREDRICK I. MURPHY whose practice is based in Montreal, Que., was recently named president-elect of the Canadian Academy of Periodontology.

74 Orthodontics


74 Periodontics

ROBERT E. PIZZURRO is teaching part-time at Loyola Dental School, Maywood, Ill.

77 Periodontics

GERALD M. STRASSBERGER has opened his office for the practice of periodontics at the River View Plaza, 16 River St., Norwalk, Conn. He is a member of the Greater Norwalk Dental Society, the Connecticut Society of Periodontists, the Connecticut Dental Society, the American Academy of Periodontology, and the American Dental Association.

Legal Signs

(Continued from page 2)

of process. They are unlikely to expand the lawyer's duty to include due care for the individuals he brings suit against because of their view that permitting such suits based on an allegation of negligence alone could significantly weaken the public's access to the courts.

View not unassailable. While this view is understandable, it is not unassailable. The California Supreme Court has fashioned an affirmative duty on the part of a psychologist to warn a third party of his patient's violent intentions toward her. The relationship between a plaintiff's attorney and defendant is certainly closer than that between the psychologist and the named intended victim, and the policy arguments against the imposition of such a duty are no more compelling.

Again, the question of the limits of professional loyalty is raised. How far can a lawyer go in representing his client before he is obligated to consider the effects of his actions on both society in general and specific third parties? The final answer is not yet in, but the courts are likely to continue to give plaintiffs' attorneys the benefit of the doubt. Bar associations and the public, however, need not be so lenient.
Since 1812, The New England Journal of Medicine has played its role in medical circles—reporting the progress of medicine to physicians and medical students throughout the world.
Course Announcement: Fall 1978–Spring 1979

1. Pediatric Radiology in the General Hospital/October 4–6, 1978/Dunfrey’s Hyannis Resort Hotel, Hyannis, Cape Cod, MA


3. Recognition and Management of Medical Emergencies/October 19–20, 1978/Howard Johnson’s 57, Boston, MA

4. Clinical Neuropharmacology/October 21, 1978/Boston University Medical Center, Boston, MA

5. Cast Bracing/November 11, 1978/Boston University Medical Center, Boston, MA

6. Use of the Laboratory in Clinical Medicine/November 9–10, 1978/Howard Johnson’s, Cambridge, MA


8. Board Review in Internal Medicine/Tuesday evenings, January–June, 1979/Boston University Medical Center, Boston, MA


10. Controversies in Urology/January 21–25, 1979/The Village at Smugglers’ Notch, Jeffersonville, VT

11. Controversies in Law and Medicine/January 28–February 1, 1979/The Village at Smugglers’ Notch, Jeffersonville, VT

12. Controversies in Internal Medicine/February 4–8, 1979/The Village at Smugglers’ Notch, Jeffersonville, VT

13. Pediatric Infectious Diseases/March 3, 1979/Sonesta Hotel, Cambridge, MA


15. Cardiology Conference/April 5–10, 1979/Sonesta Beach Hotel, Bermuda

16. Language and Communication in the Elderly/May 5, 1979/Colonnade Hotel, Boston, MA

All courses are fully accredited by the American Medical Association for Category 1 credits towards the Physician’s Recognition Award (hour-for-hour). AAFP accreditation granted where applicable.

For further information, please contact: Donna Marcy, Department of Continuing Medical Education, Boston University School of Medicine, 80 East Concord St., Boston, MA 02118. Phone 617/247-5602.

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I am interested in Boston University School of Medicine Department of Continuing Medical Education programs (circle number below):
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Detach and mail to Ms. Donna Marcy at the above address.