1969

Scope: v. 2, no. 1-6
Muscle in Spasm.
The ability of Valium to help relieve skeletal muscle spasm—as well as psychic tension—demonstrates its clinical value and versatility. The muscle-relaxant effect obtained with Valium, used adjunctively with other drugs or physiotherapy, favorably affects the entire cluster of spasm-related symptoms...helps accelerate return to normal activity. When skeletal muscle spasm and psychic tension coexist, the calming effect of Valium is an added therapeutic benefit that contributes to the total management of the patient.

Before prescribing, please consult complete product information, a summary of which follows:

**Indications:** Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

**Contraindicated:** Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma.

**Warnings:** Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms have occurred following abrupt discontinuance. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

**Precautions:** If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

**Side Effects:** Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation, have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.
We concur with Oscar Wilde that “Laughter is not at all a bad beginning for a friendship.”

Geigy
makers of
Butazolidin® phenylbutazone
Tanđearil® oxyphenbutazone

Anturane® sulfipyrazone
Pertofrane® desipramine hydrochloride
Tofránil® imipramine hydrochloride
Preludin® phenmetrazine hydrochloride

Tegretol® carbamazepine
Hygroton® chlorthalidone
Dulcolax® bisacodyl
Persantine® dipyridamole

* UNDER LICENSE FROM BOEHRINGER INGELHEIM G.M.B.H. MI-6757
LURIDE PROPHY-PAK® PACKETS

3 Gm. each
a sufficient amount of paste for one fluoride-prophy

LURIDE PROPHY PASTE combines two procedures into one—a prophy and a topical fluoride application.
Recommended for use even when drinking water is fluoridated.

✓ fresh paste for each and every prophy
✓ uniform consistency—the proper amount of fluoride and the proper amount of abrasive for each and every prophy
✓ no mixing...no stirring...no waste
✓ economical...100 'prophy-pak' packets in an attractive plastic canister – $14.95

THE ONE AND ONLY FLUORIDE-PROPHY PASTE WITH PROVEN FLUORIDE UPTAKE BY THE ENAMEL

For reprints write Department MC.

LURIDE® PHOSPHATE PROPHYLAXIS PASTE
ACIDULATED FLUORIDE-PHOSPHATE WITH SILICON DIOXIDE

DAVI S ROSE HOYT
Pharmaceutical Division
The Kendall Company
Needham, Mass. 02194
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.
Contents

6 BUMC's Anti-Cancer Effort
   a fresh insight
   by Loretta McLaughlin

10 “Blue Building” Becomes
   The Housman Medical Research Center
   by Gerald A. Isenberg, D.D.S.

14 Periodontics
   Boston Public Health Service Hospital
   The Old Brighton Marine, 1799-1969
   by Richard H. Thurm, M.D.

18 Dedication — School of Graduate Dentistry

24 Henry M. Goldman, D.M.D.
   a profile

26 Biochemistry — Interface between
   Chemistry and Medicine
   by Marott F. Sinex, Ph.D.

30 Kaleidoscope
BUMC's Anti-Cancer Effort

a fresh insight

by Loretta McLaughlin

In the short span of five years Boston University Medical Center has influenced a whole new approach to the overall management of cancer.

The Center itself has taken the lead in this country and abroad in the formidable task of unifying cancer care with cancer research to the end that what is known is immediately applied and by a range of professionals, each of whom is expert in an essential component of anti-cancer therapy.

Of even greater moment in the long run, however, may be the extent to which the BUMC approach is rectifying the unreasonably dark view of the prognosis for cancer patients that is still held by medicine in the main.

Often of course, discoveries of important and wide usefulness are the fruit of seemingly small beginnings. And that appears to be the case in the story of BUMC's swift but sure stride to the front line in medicine's fight against the puzzling, multiple disease states familiarly called cancer.

The stimulus behind the change in direction of BUMC's anti-cancer effort was fresh insight: insight actually more logical than scientifically esoteric. The point of beginning was the Winter of 1962-63.

"We re-did our thinking about cancer at that time," recalls cancer specialist Peter Mozden, director of BUMC's cancer services and prime mover in the design and delivery of the radically re-vamped cancer program. "We thoroughly reassessed the relative importance of cancer as a disease entity, casting it against the place it occupied at the Center in terms of the amount of time and effort being given treatment, training and research," he notes. "And we found that in general, our approach to cancer had not changed for 20 to 25 years."

Regrettably, that's exactly as the matter stood medically at that time in the rest of the country, too. And tragically, if not inexcusably, the situation remains much the same nationally, today.

This state of affairs holds grim meaning for anyone afflicted by cancer; doubly so because during that quarter century period - the so-called "golden era" of the newer sciences of biochemistry and molecular biology - cancer research had moved deeply into the long mysterious realm of the sub-cellular world. There much had been learned of processes whereby viruses, genes, chemicals and radiation might trigger the blight in cells that leads to runaway cell growth, the essential nature of cancer. In response to such new knowledge, the array of available anti-cancer weapons had been markedly strengthened. The historic alternatives of "cut and/or cautery" in only a primitive way bear any resemblance to the modern medical techniques to combat malignant growth via individually tailored regimens of surgery, chemotherapy and radiation, used singly or in combinations.

Admittedly, there's still no single, sure-fire cure for cancer. But the tools at hand now "cure" one of every three patients of their cancer. And were the same expertise provided for all cancer patients one of every two persons today dying from cancer could be saved. Moreover, even in the case of the patient whose cancer eventually will claim his life, his survival time can be prolonged by months to years and his discomfort either completely dispelled or, at least, kept tolerable.

Yet an unwarranted pall continues to enshroud the diagnosis of cancer. Dr. Mozden knows only too well that "the very word evokes emotions of discouragement and despair. Too often in the mind of the physician as well as the patient, cancer carries a connotation of a death sentence about which little can be done."

He realizes that the physician's erroneous attitude toward cancer was (and often may still be) the by-product of his training, the reflection of older viewpoints and exposure during hospital internship to primarily, terminal cancer patients. The patient's hopelessness may derive from lay misinformation or from an intuitive sensing of his doctor's abjection.

"Usually," Dr. Mozden observes, "the cancer patient's care has been either insufficient, only surgical for example, or fragmented in that he's passed from one specialist to another, that is from surgeon to radiologist to endocrinologist and so on."

BUMC's turning point, cancer "re-think" took all these factors into consideration. It also gave proper weight to the little-appreciated fact that as other diseases have succumbed to preventive vaccines and curative drugs cancer has emerged as a common disease almost everywhere. "The cancer population in general hospitals now averages about 25 percent," Dr. Mozden points out.

What was needed was utter change in the entire ag-
gregate of help to be offered cancer patients: change that would encompass attitudes and capability and that would genuinely integrate comprehensive and continuous care. The bits and pieces of the medical elements that comprise good medical management had to be brought together — centralized, coordinated and expanded.

The first phase, supported by a United States Public Health Service grant, was the development of a clinical training program in cancer, per se. This was linked on one side with the specialty areas — radiotherapy, tumor pathology, endocrinology and so on — with which any practicing cancer specialist should be closely familiar. Simultaneously such training was to be involved with direct patient care. This was the first step toward amalgamating an increase in cancer-trained physicians with the delivery to BUMC patients of the most up-to-date cancer care possible.

Next, in 1966 with a $26,500 grant from the American Cancer Society, Massachusetts Division, Dr. Mozden created a geographically distinct cancer training unit. Though small in size, this 1,000 square foot unit, located in mezzanine floor space of University Hospital, has become the hub of the steadily growing multi-departmental anti-cancer endeavor.

The first of its kind in the country to be established within a teaching hospital, the BUMC cancer training unit has proved “strikingly successful” in attracting fourth year medical students for a one- to two-month fellowship; residents (board eligible in internal medicine or surgery) for one to three-year fellowships; and in pioneering an educationally exciting one- to six-month fellowship program for community physicians who desire a short, intensive course in current cancer management, specifically geared to the individual needs of the candidate.

To smooth out administrative arrangements, a full-scale cancer service was instituted: an autonomous entity to implement all cancer-related functions.

Meanwhile BUMC’s cancer faculty and staff had to expand and now has the following members in addition to Dr. Mozden:

Dr. Isamettin Aral, Radiotherapist-in-Chief; Dr. Ramzi Kattan and Dr. Ronald Messer, Radiotherapists; Drs. Edward Douglas and Samuel McPadden, Residents in Radiotherapy; Dr. Jack Evjy, internist; Dr. Albert Schilling, Cancer Chemotherapist; Dr. Alex Rutenburg, Cancer Research in Surgery; Dr. Al Handler, Experimental Pathologist; Dr. Charles Emerson, Hematologist; Dr. Edmond Charrette, Internist; Dr. Harvey Neitlich, Internist; Dr. Charles Reynolds, Surgeon and Dr. Edward Kondi, Surgeon.

Coordinator and co-director of the Regional Medical Program effort for the Medical Center is Dr. Albert Schilling, Associate Professor of Medicine. Dr. Jack Evjy, Assistant Director of the BUMC cancer program, works closely with Dr. Schilling and Dr. Mozden to integrate the teaching and training aspects of the cancer program with actual delivery of cancer care as focused in the Regional Medical Program.

Together with other professional staff, their skills reach across “the whole gamut from diagnosis to treatment planned for each cancer patient in a unified way and encompassing many different specialties necessary to the patient’s total care,” Dr. Mozden explains.

A measure of the confidence placed in the BUMC cancer service can be seen in the support given by the National Cancer Institute: NCI has just approved a $700,000 grant to be awarded in $130,000 per year amounts for the next five years. Cancer service director Mozden has been bolstered by the sum total of the experience to date, too. “It works, it really does,” he feels. “We have more ‘students’ wanting to learn about cancer than ever before and we have more requests for assistance with cancer patient management than we can handle.”

Not only has this cancer focus and stepped-up performance demonstrated its worth within the hospital, but it also has fostered a spontaneous and warm response from numerous doctors in the community in the large. They have welcomed the resource of BUMC’s sophistication when problemsome cancer management cases arise.

What seems like only a common-sense approach to optimal cancer care, nonetheless is in reality so marked a departure from practices elsewhere, that the BUMC venture continues to attract attention — and inquiries — all over New England, the United States, and many foreign countries.

“Our greatest technical stride, of course, was the revamping and updating of our radiation program,”
Dr. Mozden acknowledges, "wherein we were able to convert to supervoltage radiation therapy." Among the new additions are two cobalt units to bombard relatively deep or inaccessible tumors with powerful rays and with refined accuracy. Such supervoltage radiation is said to be as superior to conventional radiation as is a new Chrysler to a Model-T Ford. Also added was a Cesium unit, highly effective for certain superficial malignancies. "This Summer we completed installation and made operative a 42 million volt Betatron, the largest one in the country and one of but three in the world. This is the only instrument effective against some tumors that are resistant to all other radiation modalities, and against other deep, deep-rooted tumors in the brain or other highly delicate tissue, such as the esophagus," Dr. Mozden points out. One of the Betatron's greatest advantages is the extent to which this super ray can be localized into a focused beam, a mere centimeter in size. Its maximum force thus can be concentrated on the target tumor with a minimum of exposure to healthy tissue.

Acquisition of the Betatron was made possible by a generous grant of $500,000 from the Massachusetts Division of the American Cancer Society. The ACS has been greatly concerned about improving radiation therapy facilities in the United States and has encouraged and supported this venture at every step. Housing for the Betatron is special and expensive, and to meet this cost the Sherman family, George and Beatrice, came to the rescue with a substantial gift to establish the radiation center at the BUMC. The Radiotherapist-in-Chief, Dr. Isamettin Aral, with additional full-time X-ray therapists and supporting technical staff man the X-ray therapy services.

Along the way, the inadequacy as well as the obstructive qualities of the word cancer itself, were faced. Since the many forms of cancer affect all of the body organs and therapies involve virtually all of the medical specialties, the new BUMC program required a term broad enough to cover the full cancer undertaking. By degrees, the more embracing term, oncology (study of growth) which is the branch of science relating to all phenomena having to do with abnormal growth, has been adopted. Thereby an Oncology Section has come into being at the Boston University School of Medicine, designated as a distinct medical discipline, akin to allier-

Not surprisingly the BUMC cancer service recently was selected to operate the first Regional Medical Care Program in the field of cancer to be established in the Tri-State area of Massachusetts, New Hampshire and Rhode Island.

Here, too, the BUMC oncologists will advance the cancer effort along the same lines they have set for themselves. While continuing to preach and practice comprehensive, specialized care combined with training and research, the three-year $280,000 RMP program will add new dimensions of outreach into the community and feedback to the Center.

As a demonstration base, BUMC is creating a 22 patient Cancer Floor or Cancer Care Unit on Robinson-Collamore-5 in University Hospital. The Cancer Ward will occupy the entire fifth floor and will include areas for special training for doctors and nurses — "not only our own nurses," Dr. Mozden emphasized, "but nurses from the whole Tri-State area" — and research laboratories and administrative offices.

Although a few separate "institutes" exist solely serving cancer patients, BUMC's cancer floor will be the first ever "brought right into a general private hospital". Some concern that such grouping of cancer patients might be depressing to the patients and to the staff was dispelled when the experience of the cancer institutes was considered. Rather than a hindrance, it's been shown that patients gain greater trust from knowing they're in the care of specialized teams and further, give and take much comfort from one another.

The medical advantages in clustering cancer patients are, of course, obvious. Proximity of staff, equipment and patients lends itself to the stimulating and efficient exchange of services and studies as well as therapeutic efforts.

In another vein, the Cancer Ward at University Hospital is expected to serve as a mechanism for demonstrating both to the medical profession and the public the benefits in "bringing a disease out into the open where it can be freely discussed and treated more promptly and effectively."

To underwrite BUMC's share of the renovation, costs of about $130,000 must be raised through private contributions.
The impact of the Cancer Ward, however, is destined to reach far beyond the hospital confines. It is to function both as a demonstration center and a receiving center under another aspect of the RMP program. Since BUMC cannot care for all the region’s cancer victims, a major thrust of the RMP program is to set up a cooperative system for cancer control with seven other hospitals (four community hospitals, one municipal and two federal). They are: Boston City Hospital, B.U. Services; the U.S. Public Health Service Hospital, Boston; the U.S. Naval Hospital, Chelsea; the Framingham Union Hospital; the Melrose-Wakefield Hospital; the Malden Hospital; and the Portsmouth (New Hampshire) Hospital. In time, other hospitals are expected to join the RMP program.

Under present plans, each hospital will name a staff member to guide development of an appropriate cancer program at his facility. BUMC, in turn, will assign a staff oncologist to each of the participating hospitals. Additionally, a series of joint activities are scheduled to insure and upgrade patient care and expand opportunities for continued cancer training. Among the ventures planned are tumor clinics, a tumor registry, a referral system for consultation, tumor rounds on a rotating basis at each of the eight hospitals, daily rounds at BUMC’s cancer ward, and the previously mentioned short-term fellowships for community doctors to undertake specialized training in cancer management.

Moreover, whenever a participating community physician wishes to refer a cancer patient to BUMC, the patient will be admitted to the Cancer Unit and his physician invited to take part in the clinical management.

In essence, the guideline for the full RMP cancer program is to make maximum use of BUMC’s cancer service capability and then, to extend it into the community.

“The things we’re able to do for cancer patients at the Center should be available to cancer patients closer to their homes,” Dr. Mozden believes. “Therefore we’re trying to see to it that as many cancer patients as possible can get optimal care at their own community hospital—with our help.

“Clearly, if we’re going to be successful, the RMP program has to be a truly collaborative effort, a two-way street.

“Members of our cancer team at the Center will travel out into the community hospitals to conduct tumor conferences and seminars, to serve as consultants and to help work out good treatment programs at the community level.

“Conversely, the community physician then will need to refer only the most difficult cancer patients to the Center and to do so without red tape or confusion. But equally important, he’ll be able to come in to the Center to participate in the management of his patient and perhaps to work on a month-long cancer fellowship.”

Where too often the dismal side of cancer statistics are touted, Dr. Mozden can point to the same statistics for positive and encouraging aspects.

“If at present we ‘cure’ only one of every three patients,” he reasons, “then it follows that two return to the doctor and hospital for management. In this, they’re not unlike patients with other life-threatening or life-shortening or life-incapacitating diseases, such as heart disease.”

But, totally unjustifiably in cancer cases, Dr. Mozden contends, non-curability is too often still equated with non-treatability. This is neither sound nor sensible, he insists, since many cancers are curable and all cancers are treatable.

“We’ve simply got to make the public and the medical profession aware of this,” he maintains. “While there’s no certainty that recurrent cancer will lend itself to ‘cure’, there is absolute certainty that it is treatable. People with cancer can live longer—and better—than is generally believed.”

LORETTA McLAUGHLIN, Boston University School of Public Relations, 1949, is a well-known free lance medical writer, a contributing editor to national medical news magazines, and former medical and general news reporter for two major Boston newspapers.
The "Blue Building" Becomes

The Housman Medical Research Center

"O"ur parents have always had a special interest in helping others and we feel that this contribution to the Boston University Medical Center for a medical research facility, in their name, is particularly fitting. In a sense, it is simply an extension of their concern for all humanity."

With these words, Edward, Herbert, Frank and Charles Housman presented to Boston University their gift in honor of the golden wedding anniversary of their parents, Mr. and Mrs. David Housman of Winthrop, Massachusetts, and the 50th anniversary of the industrial firm their father founded.

Announcement of the Housman Medical Research Center was made, in September, by President Arland F. Christ-Janer of Boston University, in conjunction with the University's Centennial Celebration.

The four sons expressed a deep feeling of pleasure, "in doing our small part to further basic research on diseases which plague mankind."

David Housman said: "I am especially gratified that my sons have made this gift in the name of my wife and myself to the Boston University Medical Center. Surely it will benefit many people over many years. It is, I feel, truly a gift that will reap benefits for all mankind."

Mr. and Mrs. David Housman, seated center, admire a photograph of the research center which will bear their name. Standing, left to right, are Charles Housman, Frank Housman, University President Arland F. Christ-Janer, Dean Henry M. Goldman, Edward Housman, and Herbert Housman.

David Housman, glimpsed right in the picture above with Mr. and Mrs. Jerome Preston, Sr., is enjoying the close-packed gaiety of a cocktail party which preceded the September 8 Banquet, a highlight of the School of Graduate Dentistry's dedication celebration.
Periodontics

by Gerald A. Isenberg, D.D.S.

Periodontal disease is probably the most widespread disease of mankind, no area or populace of the world being free from it. In most populations it affects half of the children and nearly all of the adults: it has been estimated that 90% of the adult population over age 35 is afflicted with periodontal disease, in one form or another, with varying severity.

Because of the ubiquitous nature of periodontal disease, and the benign deceptiveness of its manifestations, its signs and symptoms have commonly and erroneously been ignored as being "normal".

It is still commonly believed that bleeding or receding gums, and loosening of teeth with their eventual loss are part of the normal aging process.

Gingival bleeding, which is related to ulceration of the epithelial surface adjacent to the tooth, is no more "normal" than is ulceration and bleeding from any other part of the gastro-intestinal tract. Retraction of the gingivae from the tooth, forming a periodontal pocket (trench), enclosing a sticky mucous substance laden with bacteria, calculus (or tartar), debris and often pus, cannot be considered a normal state of health. Nor can recession of the gingival tissues, causing exposure of the root surface, be normal. Nowhere else in the body is inflammatory or dystrophic loss of bone, without replacement, considered normal.

The periodontium, or tissues investing the tooth, are made up of the gingiva, the alveolar bone, which houses the tooth, and the periodontal ligament, which anchors the tooth to its socket.

Teeth must be able to cut, tear, crush, grind and shred an enormous variety of foods. They also play an important role in speech, deglutition, aesthetics and emotional well-being. For this, they must be firm, painless, and able to withstand repetitive shock. The roots of the teeth fit snugly into sockets in the jaw and are anchored there by the periodontal ligament. The gingiva covers and protects this intricate structure which houses, suspends, and sustains the tooth.

The gums must fit tightly around the teeth so that food and other debris are not jammed between them and into the roots of the teeth. Healthy gums are firm to the touch and pale pink in color, exhibiting thin margins free from inflammation.

The most common type of periodontal disease begins as an inflammation of the gums — gingivitis. The gingivae are discolored and often swollen. They may have a bulbus, irregular appearance and stand away from the teeth. They may bleed when brushed or touched or even spontaneously, but usually are not painful. BUT, redness, bleeding, or frank exudation may not be present; their absence does not indicate gingival health, but rather a deceptive fibrosis.

Acute inflammatory changes in the gingivae may be short-lived or never apparent to casual inspection. Fibrotic changes or chronic gingivitis may mask many of the signs and symptoms of periodontal disease.

Bacterial plaque has been demonstrated to be the most common cause of gingivitis. This plaque adheres to the teeth as well as to rough surfaces such as calculus or unpolished restorations. The toxins produced by the bacteria of the plaque are believed to initiate gingivitis. A recent study by Loe, et al, demonstrated that when dental students with clinically healthy gingiva allowed bacterial plaque to accumulate on their teeth, gingivitis resulted.

This condition was shown to be reversible when the plaque was removed.

Food impaction produces a medium whereby bacterial plaque may accumulate. A poor selection of soft or liquid foods — perhaps necessitated by sore mouth and gums — may create a further problem.

One of the most common causes of irritation is the steady development of calculus on the teeth. This hard substance, beginning as a soft accumulation of food debris, bacteria and mucus, hardens to a rough crust by the deposition of calcium salts within its substance.

Other causes of irritation which may lead to periodontal disease are worn out fillings and crowns and the sharp edges of cavities in decayed teeth. Injury can also be caused by food particles wedged between teeth and against the gums.

Improper articulation of the teeth may be a factor in periodontal disease. Trauma to the periodontal tissues often results from malocclusion, (an improper bite). This situation may be caused by many factors, but most often by the loss of one or more teeth due to caries or periodontal disease, especially when such loss is accompanied by drifting of adjacent teeth or extrusion of opposing teeth into the vacant space.

The shifting of the teeth causes a change in the manner in which the teeth occlude. When the trauma is severe enough to cause injury to the bone and periodontal ligament due to the unfavorable distribution of forces, it can become a significant cause of, or contributing factor to, periodontal disease.

The teeth may also be traumatized by clenching or gritting as a manifestation of tension, by clamping on pencils, pipes, eyeglass frames or any of many such pernicious habits.

Systemic contributing factors in
periodontal disease include pregnancy, puberty, diabetes, hormonal changes, blood dyscrasias, and improper diet. McMullen, et al, in their recent research conducted at Boston University School of Graduate Dentistry showed that in diabetes mellitus and even in the prediabetic, pathologic alterations can often be detected in the blood vessels of the gingiva even preceding the clinical expression of abnormal glucose tolerance manifested in overt diabetes. And in pregnancy, the augmented estrogen-progestive secretion may have a decided influence on the quality and severity of gingival disease, creating discomfort and annoyance and restricting the response to gingival treatment until parturition occurs.

The most frequent causes of periodontal disease, however, are local irritative factors — and these can usually be eliminated or controlled. Gingivitis is usually reversible upon the removal of the causative agents. Periodontitis is preceded by gingivitis and therefore an untreated or incompletely treated gingivitis may develop into a periodontitis with attending deleterious effects on the bone of the jaws.

When the inflammatory lesion is untreated, the inflammation spreads to affect the underlying periodontal ligament, bone and cemental surface of the root. The bone is resorbed and the ligamentous fibers are destroyed, thereby allowing the inflammatory process to travel to deeper structures. The result of this process is the loss of support for the tooth with its subsequent loosening and possible drifting. As support for the tooth is lost, biting forces which previously were physiologic, now become excessive and periodontal destruction may be accelerated.

The treatment of periodontal disease in its incipient stage is directed toward elimination of as many etiologic factors as possible. Systemic problems should be controlled, if possible, or at least recognized for the effect they may have on the treatment and prognosis of the disease process.

Crown and root surfaces are carefully scaled and planed in order to remove all calculus, plaque and debris, therapy eliminating a major cause of gingival inflammation. These surfaces are then polished to make it more difficult for debris and plaque to accumulate.

Probably the most important phase of periodontal therapy is the teaching of proper oral hygiene. Without proper instruction, the patient may brush his teeth haphazardly in such a manner as to miss completely the critical areas of the dentition: those adjacent to the gingival margin and between the teeth. Various adjuncts have been developed to implement the essential cleaning of the teeth and stimulation of the tissues.

During treatment, faulty margins of restorations are shaped to decrease their ability to trap debris and collect bacterial plaque. All carious lesions are restored. Malpositioned teeth are aligned and missing teeth replaced. Trauma from occlusion is minimized by occlusal adjustment, orthodontics, and splinting of loose teeth where indicated.

When all possible etiologic factors have been controlled, the defects that have been disease-produced in the periodontal tissues may have to be corrected surgically — to eliminate those areas of tissue detachment and malformation which could continue to serve as loci for renewed plaque and debris accumulations; to abort the progress of disease to the supporting tissues; to induce regeneration of the retaining and supportive bony housing of the tooth; and to permit the recreation of a functional and aesthetically pleasing dentition.

If surgical correction is needed in the incipient case, it may be limited to a plastic reshaping of the marginal tissues in order to recreate a physiologic form to the gingivae. In the more advanced stages of the disease, it may be necessary to remove hyperplastic, chronically inflamed tissue as well as to treat the defects that have been created in the supporting bone. While advanced plastic surgical techniques have enhanced the treatment of many more problems with relative ease, it is far better and easier to prevent the need for such procedures.

It is the responsibility of the health professions to educate the public as to the nature of periodontal disease — to stress the fact that it is not a part of the “normal” aging process and that its treatment during incipiency is usually simple and successful.

DR. GERALD A. ISENBERG, D.D.S. and M.Sc.D., is Associate Professor of the Department of Periodontics of the School of Graduate Dentistry.
RULES AND ORDERS
OF THE
United States Marine Hospital,
ESTABLISHED AT CHARLESTOWN.

ARTICLE I.

THE OVERSEER or STEWARD is to go through all the wards in the morning before the Physician visits them, to see that the men have washed their hands and faces, and that nothing offensive be left in the rooms; and he is to go again through the wards before bed time to see that all the patients be in the house; and that none remain in it that do not belong to it.

ARTICLE II.

Every patient is to retire to rest on or before nine o'clock in the winter months, and by ten in the summer; and no lights are to be allowed, or fire kept up, after that period, unless some special case should require it.

ARTICLE III.

Every patient is enjoined to pay strict obedience to the orders of the Steward or Overseer; and should any patient think himself at any time aggrieved, he has the liberty of appealing to the Physician.

ARTICLE IV.

Every patient is to be shaved every Sunday and Wednesday; and shifted every Sunday, and oftener, if convenient; and he is to wash his face and hands, and comb his head every day, if his case and circumstances will admit of it.

ARTICLE V.

Every patient is forbidden to spit on the floor or hearth, or write on the walls, or mark the woodwork, or drive nails in either.

ARTICLE VI.

If any man perniciously disobeys the orders of the Physicians or overseers, or gets drunk, or commits riot, or is found guilty of theft, he forfeits the privilege of the Hospital, and shall be dismissed.

ARTICLE VII.

If any man perniciously disobeys the orders of the Physicians or overseers, or gets drunk, or commits riot, or is found guilty of theft, he forfeits the privilege of the Hospital, and shall be dismissed.

ARTICLE VIII.

If any patient be found to throw away his medicine, or feign complaints; or who willfully does any thing to impede his cure, he shall, upon conviction thereof, be dismissed.

ARTICLE IX.

No person is allowed to play cards, or any other game of hazard for money, drink, or any other article. All games of amusement, accompanied with noise are forbidden, as they disturb the sick.

ARTICLE X.

Whatever patient be out of the house all night without permission, from the Physician or Overseer, is from that time dismissed.

ARTICLE XI.

All the patients shall be in their own wards, and places when the Physician is ready to visit them, of which they will be notified by the ringing of the bell.

ARTICLE XII.

NURSES—Are to see that the patients be neat and clean as the nature of their cases will admit. They are to see particularly as to the cleanliness of the bed and bedclothes. They are to see that the wards be kept extremely clean; and that they be aired, by keeping the windows and doors open in fair weather, a longer or shorter time, as the weather may admit. And they are to see that no nastiness of any kind be thrown out of the windows or doors.

ARTICLE XIII.

The nurses, male or female, are, upon no pretence, to alter the diet ordered by the Physician; nor to suffer the patients to use any other diet, than what is allowed by the hospital; nor are they to permit spirituous liquors of any kind to be brought into the wards, except what is directed by the Physician. They are to attend to the particular disgusts and cravings of the sick, and report them to the Physician.

ARTICLE XIV.

The hours for admission of patients are between 10 and 12; but should any that are lame or weak present themselves before or after that time, the house-pupil, or the overseer, or the head-nurse, may receive them; and give them such articles of food only as are allowed in the low diet, until the Physician see them.” No person can be admitted into the hospital with the itch, or any other infectious disorder, the venereal excepted.

ARTICLE XV.

No Seaman can be admitted into the hospital without a written certificate from the Custom-House, that he has paid hospital money.
In the waning years of the eighteenth century, only three hospitals were operating in the United States: the Philadelphia Hospital, founded in 1751; the Charity Hospital organized in 1784 at New Orleans; and the New York Hospital opened in 1791.

On July 16, 1798, an act for the relief of sick and disabled seamen was signed into law by President John Adams. This followed a petition from the Boston Marine Society in 1791, and intermittent action by Congress to create an organization of hospitals to care for merchant seamen, the first prepaid system of medical care in the country.

The concept of a formalized system of medical care for seamen can be traced to 1694 when, following the defeat of the French at LaHogue, an unfinished royal palace was converted to a home and hospital for "worn out and wounded seamen" at Greenwich, England. Construction of additional naval hospitals at Chatham, Plymouth, and Portsmouth, England, were started in 1745. These were partially supported by a deduction of six pence a month from the seamen's wages to a trust fund established in 1581, known as the Chatham Chest. The name came from the fact that the money collected was kept in a large iron bound chest at the Chatham Parish Church.

On October 12, 1790, a special meeting was called of the Boston Marine Society, an organization of captains, citizens, and merchants, founded in 1742 to "both promote interest in navigation and to assist and provide for needy and unfortunate mariners and their families."

In the immediate post-revolutionary period, Boston occupied a peninsula connected to the mainland by a narrow neck of land. It was the country's principal maritime city, benefiting as the nearest major port to Europe. The expanding foreign commerce was matched by the allied industries of shipbuilding and fishing. Many of the young men of New England looked to the sea for their livelihood. The whole economy of the area was tied to the welfare of the seamen. It was therefore quite fitting that the Boston Marine Society should direct its attention to providing for the health of the men involved in this dangerous trade. A seaman disabled in the line of duty or ill from exposure to disease in a foreign port, or the consequence of his inadequate diet, could expect very little in skilled attention. The captain of the ship usually attempted to provide some measure of relief. If basic first aid proved of no value, the injured or sick seaman was left at the nearest port where it was hoped a family would care for him.

The act of 1798 directed the master of every U.S. ship entering a U.S. port to render a true account of the number of seamen aboard since the vessel last entered a port of the United States and to pay to the Collector of Customs a sum equal to 20¢ a month for each member of the crew, to be deducted from the wages of the seaman. While these funds were accumulating, a temporary Marine Hospital was established at Castle Island in Boston Harbor. Dr. Thomas Welsh, a distinguished physician and patriot, was appointed as Physician in Charge and the Boston Marine Hospital
opened in 1799— the country's fourth oldest hospital.

Castle Island has a colorful history. A fort was established there in 1634 by the Puritans. The fort was subsequently rebuilt in 1701 and named Castle William in honor of King William III. Following the Boston massacre in 1770, the British troops were forced to withdraw from Boston to avoid further confrontation with the enraged citizens of the town. The soldiers were removed to Castle Island. The only documented actual engagement the fort was involved in occurred in March 1776 during the battle of Dorchester Heights. The British were defeated, retreating from Boston on March 20th, leaving the Castle ablaze. In 1799, the fort was renamed Fort Independence with President John Adams present at the rededication. As a part of the rebuilding program, a barracks was selected for the new Marine Hospital.

In 1802, Congress authorized the expenditure of $15,000 for the construction of a new Marine Hospital to the Port of Boston. A site for the hospital's first permanent home was purchased at the northern end of the Navy Yard in Charlestown. The building was opened in January of 1804 with Dr. Charles Jarvis appointed as Physician in Charge. He shared with his predecessor, Dr. Welsh, the distinction of being one of the incorporators of the Massachusetts Medical Society and was also a member of the American Academy of Arts and Sciences. Dr. Jarvis served for almost four years, dying at the hospital of "lung fever" on November 15, 1807.

Dr. Benjamin Waterhouse was then appointed as the third physician in Charge of the Marine Hospital at Boston. Dr. Waterhouse was 53 years of age at that time, with a distinguished career as the Professor of Theory and Practice of Physics at the Massachusetts Medical College of Harvard University since the age of 29. During 1799 and the early 1800's Waterhouse was instrumental in introducing vaccination into this country. Dr. Waterhouse's tour of duty lasted only two years, marked by the introduction of the clinical instruction of medical students, for the first time in New England, at the Marine Hospital and the reorganization of the hospital's rules of order, supplanting those originally prepared by Dr. Welsh while the institution was at Castle Island.

It is regretful that Dr. Waterhouse's service at the Marine Hospital was terminated on an unfortunate note. He was dismissed from his post allegedly for petty thievery and graft, although he attributed his removal to political expediency with the replacement of Jefferson by Madison as President.

Dr. Waterhouse's successor, Dr. David Townsend, served for twenty years assisted for the latter ten by his son, Dr. Solomon Townsend. The war of 1812 resulted in many wounded being treated at the Marine Hospital. Dr. Townsend continued to admit students from the Massachusetts Medical College of Harvard University to "attend the practice of that place." The daily record of patient admissions, diagnoses, and medication is preserved in the hospital prescription book. A copy is in the historical archives at the Public Health Service Hospital.

Twenty-one years after occupying the new hospital building at Charlestown, the Marine Hospital was evicted. The Navy Yard required the land. The patients were moved to temporary quarters in Charlestown for two years while a new building was erected across the Mystic River in Chelsea. This fourth site was occupied from 1827 to 1857 when the hospital moved to the grounds of the Naval Hospital, a short distance away. The original building at Chelsea was destroyed in the fire of 1908, having been used as the Shurtleff School during the interval.

With the passage of over three-fourths of a century, the Chelsea Marine Hospital building was outmoded and the facilities again inadequate for the needs. During 1936, a 13½-acre site in Brighton was selected. On
June 1, 1940 the new building, the sixth site of the Boston Marine Hospital, was dedicated. (The second Chelsea building is in use today as the enlisted men's quarters at the Naval Hospital.)

The location of the new building in Brighton, interestingly, was just below that at one time considered as the site for the Boston University Medical School. If fate had decreed otherwise, our two institutions might have been located on adjacent land.

From its beginning, 170 years ago, as the Marine Hospital Service under the Department of the Treasury, the Boston Marine Hospital has witnessed and participated in many changes with the broadening of the mission of the Public Health Service. In 1939 the Marine Hospitals were placed under the Federal Security Commission by executive order of President Franklin D. Roosevelt. The creation of the Department of Health, Education and Welfare in 1951 led to the inclusion of the Public Health Service in the new department, under the direct administration of the Bureau of Medical Services, Division of Hospitals. The name of the hospital was changed from Boston Marine to the U. S. Public Health Service Hospital at Boston in 1951. A major reorganization of the Public Health Service, initially in January 1957 and the Department of HEW in 1968, placed the hospital under the Federal Health Programs Service of the Health Services and Mental Health Administration. The current Director is Dr. Milo O. Blade, Medical Director USPHS.

In the post-war years, the residency programs in internal medicine and surgery were established and research initiated. In August 1965, the U. S. Public Health Service Hospital became affiliated with the Boston University Medical Center, the first of our hospitals to accomplish such an agreement. A feasibility study is currently underway regarding a possible move to the Boston University Medical School campus or modernization at our present location. Students receive instruction in physical diagnosis during the second year and in the newly revised third year curriculum on the medical and surgical wards and for electives during the fourth year.

The hospital has 210 general beds with patients drawn from American seamen (including fishermen), Coast Guard, dependents of all uniformed services, retired members of the uniform services, federal employees injured on duty and a group admitted in a special study category for inclusion in a research project or for teaching. Intramural training includes a mixed internship, dental internship program and residencies in medicine, pharmacy and surgery.

During June 1969, the 170th birthday of the U. S. Public Health Service Hospital was celebrated in conjunction with the Fourth Joint Meeting of the Clinical Society and Commissioned Officers Association of the Public Health Service in Boston. To mark this occasion, the wards were named in honor of distinguished past physicians and an historical marker was dedicated at Castle Island with the following inscription: "Fort Independence — dating from 1634, called Castle William in honor of King William III of England, prior to the Revolutionary War. Used as a garrison for British troops until 1776, rededicated by President John Adams in 1799 as 'Fort Independence.' The first home of the Boston Marine, (now U. S. Public Health Service) Hospital, (1799-1804) the fourth oldest hospital in the country, which was established through the efforts of the Boston Marine Society, founded in 1742."

DR. THURM, Medical Director, United States Public Health Service, is Chief of the Medical Department of the Boston Public Health Service Hospital of which he writes. He is Assistant Professor of Medicine of the Boston University School of Medicine, National President of the USPHS Clinical Society, and Editor, Proceedings Annual Conferences USPHS Cooperative Studies.
DEDICATION

SCHOOL OF GRADUATE DENTISTRY

THE

Lawrence J. and Anne Cable Rubenstein Building

SEPTEMBER 7, 8, 9, 1969
The scene of the special convocation which climaxed three days of dedication ceremonies for the new $3 million School of Graduate Dentistry building was one of academic dignity, splashed with the brilliant hues of scarlet, lavender and gold in the hoods of participating scholars.

Held in the handsome Law Auditorium of Boston University, the September 9th morning event will pass into history as a highlight of the University's Centennial Celebration. President Christ-Janer introduced the principal speaker, Sir Robert Bradlaw, who paid tribute to the influential world role of the School of Graduate Dentistry. Honorary degrees were conferred upon Sir Robert, who as Dean of the Royal College of Dentists and Director of the Eastman Dental Hospital, London, is a leader of the dental profession in England; to Dr. Harold Hillenbrand, Executive Director of the American Dental Association; to Maynard Kiplinger Hine, Chancellor of the Indiana University Medical Center and Past President of the American Dental Association; and to Seymour J. Kreshover, Director of the National Institute of Dental Research.
its specialty is pseudomonas

Coly-Mycin® M
Coly-Mycin® M Intramuscular (sodium colistimethate-dibucaine HCl for injection)

Introduction: Coly-Mycin® M Intramuscular (sodium colistimethate-dibucaine HCl for injection) is especially indicated for the treatment of severe acute and resistant chronic urinary tract infections due to sensitive strains of gram-negative bacilli. It is also indicated in respiratory tract infections; surgical, wound, and burn infections; and septicemias due to sensitive organisms. It is particularly indicated when any of these infections is caused by sensitive strains of Pseudomonas aeruginosa.

In vitro sensitivity of gram-negative bacilli to Coly-Mycin M Intramuscular (sodium colistimethate-dibucaine HCl for injection)

<table>
<thead>
<tr>
<th>Organism*</th>
<th>of strains</th>
<th>Total No.</th>
<th>MLC mg base/ml</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerobacter</td>
<td>0.2-1.0</td>
<td>1-6</td>
<td>24</td>
</tr>
<tr>
<td>Bordetella-Brucella</td>
<td>0.2</td>
<td>0.2-1.0</td>
<td>1-6</td>
</tr>
<tr>
<td>Escherichia</td>
<td>15</td>
<td>7-15</td>
<td>24</td>
</tr>
<tr>
<td>Klebsiella</td>
<td>25</td>
<td>1-2</td>
<td>1</td>
</tr>
<tr>
<td>Proteus</td>
<td>50</td>
<td>1-2</td>
<td>1</td>
</tr>
<tr>
<td>Pseudomonas</td>
<td>24</td>
<td>1-2</td>
<td>1</td>
</tr>
<tr>
<td>Salmonella</td>
<td>24</td>
<td>1-2</td>
<td>1</td>
</tr>
<tr>
<td>Shigella</td>
<td>75</td>
<td>1-2</td>
<td>1</td>
</tr>
</tbody>
</table>

*Alo shown to be effective against Hemophilus influenzae and Haemophilus paratuberculosis.

Eleven of these strains were resistant to one or more broad-spectrum antibiotics.

Contraindications: Coly-Mycin M Intramuscular (sodium colistimethate-dibucaine HCl for injection) is contraindicated in patients who have a history of sensitivity to the drug. Warning: Maximum daily dose should not exceed 5 mg/kg/day (2.3 mg/lb) with normal renal function. Transient neurological disturbances may occur. These include circumscribed paresthesias or numbness, tingling or formation of the sensitive strains of gram-negative bacilli. It is also indicated in respiratory tract infections; surgical, wound, and burn infections; and septicemias due to sensitive organisms. It is particularly indicated when any of these infections is caused by sensitive strains of Pseudomonas aeruginosa.

Antiemetic effects, vomiting, and anorexia are recognized signs indicating the possible occurrence, and should discontinue therapy if necessary. Permanent nerve damage, such as deafness, or vestibular damage, has not been reported with Coly-Mycin M Intramuscular (sodium colistimethate-dibucaine HCl for injection) used alone. Reports of such episodes generally reveal that another antibiotic with a potential for permanent neurotoxicity has been given concurrently. Drug fever has been described and, again, clinical judgment must prevail whether to continue therapy. Occasional cases of gastrointestinal upset and urticaria have been reported. Liver damage and agranulocytosis have not been attributed to Coly-Mycin M Intramuscular (sodium colistimethate-dibucaine HCl for injection). Local irritation and pain at the injection site have been minimal. Preparation and Dosage: Important: Coly-Mycin M Intramuscular (sodium colistimethate-dibucaine HCl for injection) has been offerd in vials containing 150 mg of colistin base activity. Each vial is to be reconstituted with 2 ml of Sterile Water for Injection USP, and administered by deep intramuscular injection only. To reconstitute, dissolve Coly-Mycin M Intramuscular (sodium colistimethate-dibucaine HCl for injection) powder in 2 ml of Sterile Water for Injection USP, swirl gently to hasten solution, but avoid vigorous shaking. The contents of each vial are adjusted to permit withdrawal and administration of the full 150 mg in 1 ml. Keep in a cool place and use within 7 days after preparation. Coly-Mycin M Intramuscular (sodium colistimethate-dibucaine HCl for injection) should be given by deep intramuscular injection only. In two to four divided doses ranging from 5 to 15 mg/kg/day (0.7 mg to 2.5 mg/lb/day). In most infections, an average dosage of 2.5 mg/kg/day (1.1 mg/lb/day), given in two to four divided doses (see table) has been effective; in the presence of bacteremia, septicemia, or other serious infections, greater than average doses may be required. However, maximum daily doses should not exceed 5 mg/kg/day (2.3 mg/lb). The drug should not be used intravenously.

Dosage Table for 150 mg Coly-Mycin M Intramuscular (sodium colistimethate-dibucaine HCl for injection)

<table>
<thead>
<tr>
<th>Body Weight (pounds)</th>
<th>Total mg (per day)</th>
<th>Total ml Solution (per day)</th>
<th>Total ml Reconstituted Solution Each Dose (for 2 doses/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>140</td>
<td>200 (per day)*</td>
<td>1.0*</td>
<td>0.35**</td>
</tr>
<tr>
<td>150 (1 vial)*</td>
<td>2.0 (1 vial)</td>
<td>1.0*</td>
<td>0.35**</td>
</tr>
<tr>
<td>175</td>
<td>250 (1 vial)*</td>
<td>1.5*</td>
<td>0.75</td>
</tr>
<tr>
<td>175</td>
<td>250 (1 vial)*</td>
<td>1.5*</td>
<td>0.75</td>
</tr>
<tr>
<td>175</td>
<td>250 (1 vial)*</td>
<td>1.5*</td>
<td>0.75</td>
</tr>
<tr>
<td>175</td>
<td>250 (1 vial)*</td>
<td>1.5*</td>
<td>0.75</td>
</tr>
<tr>
<td>175</td>
<td>250 (1 vial)*</td>
<td>1.5*</td>
<td>0.75</td>
</tr>
<tr>
<td>175</td>
<td>250 (1 vial)*</td>
<td>1.5*</td>
<td>0.75</td>
</tr>
<tr>
<td>175</td>
<td>250 (1 vial)*</td>
<td>1.5*</td>
<td>0.75</td>
</tr>
</tbody>
</table>

*See alternative dosage schedule above.

**For further accuracy, use two vials.

Supply: Coly-Mycin M Intramuscular (sodium colistimethate-dibucaine HCl for injection) is supplied in vials containing sodium colistimethate equivalent to 150 mg of colistin base activity. Each vial contains: sodium colistimethate, dibucaine hydrochloride, citric acid, sodium citrate, and thimerosal.


Full product information is available on request.

WARNER-CHILCOTT
Morris Plains, New Jersey 07950
The convocation was the climactic event of a three-day program. A scientific session on Transplants and Implants was held on Sunday, September 7th, and a day-long Symposium on The Present Crisis in Dental Care on Monday, September 8th. Among symposium participants were Massachusetts Governor Francis A. Sargent and Boston Mayor Kevin H. White. The Monday evening Banquet presented Dr. Abram L. Sachar, Chancellor of Brandeis University, as the featured speaker, and twelve citations were presented to individuals whose contributions to the dental profession have been outstanding.

The new building, located within the Medical Center complex, will unify at last the School's classrooms, laboratories and clinical areas, now scattered through the Center. Created to meet the unique needs of a unique school, the building, designed by The Architects Collaborative of Cambridge, will be known as the Lawrence J. and Anne Cable Rubenstein Building.
The conferring of Honorary Degrees was a significant aspect of the Convocation: at left, Dr. Harold Hillenbrand, and at right, Maynard Kiplinger Hine, at the moment of being honored. Below, left to right: Dean Goldman, President Christ-Janer, Sir Robert Bradlaw, Dr. Harold Hillenbrand, Maynard Kiplinger Hine and Seymour J. Kreshover.
Henry M. Goldman
D.M.D.

a profile

"Henry Goldman is one of the few!" said the distinguished British guest — about to be honored by Boston University for his own outstanding contributions to the dental profession — as he set the tone for the Convocation which marked the dedication of a new and fitting home for the Boston University School of Graduate Dentistry.

"Henry Goldman is a man," the speaker said, "who gives meaning to Goethe's pronouncement, 'it is given to few to translate words into action.' With him an ideal has come to fruition."

For a man whose name and works are known throughout the world of dental scientists, Dean Goldman is remarkably low-key in speech and manner. His force and drive belong in the category described by the old bromide: "actions speak louder than words." A quiet confident amiability and a to-the-point verbal approach mark his vigor, which while not on display, is quickly sensed by even the casual interviewer.

Behind the desk of his temporary office in Building A of the Medical Center, Dr. Goldman looked fit and relaxed. The hectic period of dedication ceremonies immediately behind him, the move to the handsome and functional new School of Graduate Dentistry (the Lawrence J. and Anne Cable Rubenstein Building) just ahead, he took his biography in stride.

Born?
"1911, in the Dorchester section of Boston. I was the younger of two brothers. There was no tradition of medicine in my family. I finished Boston Latin School the year the bottom fell out of Wall Street, went on to Brown University, where I majored in chemistry."

When did dentistry become the goal?
"Not until after my first years at college. I met a dentist just back from Labrador where he had worked with the Grenfell mission. His experiences fired me. I left Brown and entered the Harvard Dental School. Graduated in 1935 with my D.M.D. and stayed on as a Research Fellow — and then an instructor in Oral Pathology — until 1946."

And at what time did your professional interests begin to center on Periodontology?
"From the first years at Harvard. I was fortunate to work with Dr. Kurt Thoma, already internationally renowned for his contributions to the field of oral pathology and surgery, and I myself embarked on a specialization in periodontal structure and disease . . . My first major written work, Periodontia, was published in 1942."

But, meanwhile, were you not involved with the war effort?
"Yes, it was in 1943 that I was summoned to Washington to head up the Dental Pathologic Section of the Armed Forces Institute of Pathology." Dr. Goldman's voice took on an edge of eagerness. It was a marvellous experience!"

The United States Government more than returned the compliment when, in 1945, at the conclusion of the war, Dr. Goldman was recognized for his outstanding leadership by two honors: the Army Commendation Medal and a Presidential Citation.

In 1946 Dr. Goldman left the Harvard Dental School to join Monroe Schlesinger, then Chief of Pathology at the Beth Israel Hospital, Boston, and to set up a fellowship program in periodontology at the Riesman Dental Clinic of the Hospital. This marked the beginning of his lifelong constructive interest and dynamic achievement in education — and a departure from the limited and limiting dental education of the day towards a new concept of advanced graduate training.

"Boone Gross of the Gillette Company, who was a personal friend of mine, made the original funds available for setting up the Riesman Dental Clinic. I remained as head of the Clinic, through its affiliation in 1953 with the University of Pennsylvania until 1958. My appointment with the University of Pennsylvania was as Professor of Periodontology and Chairman of the Department of Periodontology."

"It was twelve years ago that another friend, Dr. Henry Balst, interested me in the Boston University School of Medicine and, at the invitation of Dr. Ches-
ter S. Keefer, then Dean, I became Professor and Chairman of the Department of Stomatology here. For four or five years I served the Boston University School of Medicine on a half-time basis. Then, with the formation of the Medical Center, my concept of a unique kind of school for dentists, devoted solely and entirely to graduate education began to take shape. I was named Dean of the School of Graduate Dentistry, which, with the School of Medicine and the Hospital, formed the three components of the Boston University Medical Center."

The development of the School of Graduate Dentistry under Dean Goldman's leadership is a success story known to SCOPE readers and to those who witnessed the culmination of a dream from September 7 to September 9. For three action-packed days impressive ceremonies of dedication celebrated the completion of a new and (finally!) fitting physical setting for the school whose influence is felt throughout the world of dental medicine.

Even as he was emerging from the round of dedication events, the Dean's desk was stacked high with evidences of his remarkable contributions to dental literature. The list of his publications is long, and his first definitive work on *Periodontia* — a dental school standard — has appeared in four editions, the last, in 1957, with Dr. Walter Cohen. The impressive stack in front of the Dean represented page proofs of one book and galleys for another. He envisions a whole series, in atlas form, with step-by-step photographs amplifying the text.

Dean Goldman has also served, since 1962, as Editor of the *Journal of Periodontology*. His many consultant- ships and his unique authority within his field of specialization take him to near and far countries of the globe. Most recently he has returned from Russia . . . "with my wife, of course."

"Dottie" who accompanies her husband on all his trips became Mrs. Goldman in the summer of 1936.

"I had known her since high school days," says Dr. Goldman, "and we were married the year following my graduation from Harvard Dental School. When we went to Washington we already had one son, Richard, and our second son Gerald was born in the Capital. Richard, a businessman, now has four children of his own. Gerald, an attorney, is also married."

"Mrs. Goldman and I moved from Brookline to Newton Center two years ago. What time I have for 'fun and games' is mostly spent in my lifelong hobby of Photography. I play golf at the Belmont Country Club."

"How do you feel about the series of academic and social events that marked the Dedication of the new School building?"

"Good! But there was too much of me in the Monday night Banquet. Our achievements are group achievements. And I hope I made it clear as I spoke at the end of the evening, that it is the voices and the wills in unison that have resulted in the fulfillment of our concept."

"The success of the School of Graduate Dentistry is completely dependent on the strong and constructive relationships with the School of Medicine and the Hospital. A Dental School as such cannot function without the other two component parts. In my view, the dental student does not get a truly effective education in a school which functions alone within a University. And I feel strongly that dental care for patients is best provided in a medical center environment amidst a total health program, freely utilizing communication and consultation between the student and the affiliated medical departments. The care of the oral cavity is part and parcel of the general health service; dental and medical teaching and practice find unification in a medical center environment."

It is typical of Dean Goldman and his astounding drive and direction, that his last words during our interview — when asked about future plans and growth for the School of Graduate Dentistry — were:

"Our new building is already too small!"

JOSEPHINE BRAYTON
Within a medical center a department of biochemistry represents the interface between chemistry and medicine. Biochemists are concerned with the chemical processes responsible for life, and most advances in modern medicine result from the application of these principles to practice.

The entering medical student is introduced to biochemistry in the first semester of medical school, in a course which serves as introduction to much that is to come. To be completely successful in introducing biochemistry requires the gift of prophecy: to determine just which features of the subject will be most relevant to a physician in the decades ahead.

The educational activities of the Biochemistry Department extend throughout the training in the Medical Center. Many students spend their summers and elective time doing research within the laboratories of the Department. Resident doctors in various training programs in Medicine, Surgery and other specialties work in the Department laboratories, and members of the Department participate in residency training when their specialized skills are needed and are appropriate. Some Department members hold joint appointments in clinical departments—for example, Dermatology, Neurology, Gastroenterology, Medicine, and Psychiatry.

The Department has its own residents: the graduate students, who are pursuing Ph.D.'s in Biochemistry. There are usually about thirty such students in any one year within the Department.

The members of the Department of Biochemistry are not directly involved in the delivery of Health Service. The faculty is thus free to pursue research on various disease problems not related to any immediate clinical responsibility. Indeed, they are free to pursue research in biochemistry “for the sake of biochemistry.”

Almost any significant advance in biochemistry, however, has clinical interest and application. This is apparent in a consideration of individual faculty members and their research interests. My own studies in the biochemistry of aging center on the nucleus, and the interaction of DNA with the other constituents of the mammalian chromosome: the protein and RNA which are responsible for the reading of the genetic message. The tissues which I study are the brain, and the walls of blood.
Professor Carl Franzblau in action. No one ever sleeps when the dynamic Dr. Franzblau conducts a class.

vessels. The properties of chromatin change from birth to old age, and this is reflected in the capacity of the cell to adapt itself to stress and injury — and, ultimately, to survive.

Our Department has a National Institutes of Health training grant on the biochemistry of aging, and has thus been selected as an institution to train Ph.D. candidates and post-doctorates for research on aging. Sharing my interest in aging research within the Department, are Dr. Robert Herrmann and Dr. George Stidworthy.

Dr. Herrmann is interested in DNA protein interaction and particularly in DNA repair mechanism. He believes that DNA continuously sustains a certain amount of injury during life and that one of the reasons the aging animal deteriorates is its inability to correct these metabolic errors.

Dr. Stidworthy is studying an interesting phenomenon, (the observation was initially made by Dr. Leonard Hayflick) that fibroblasts, one of the major cell types of the body, when cultured outside the body can only undergo a limited number of divisions before they die. In Dr. Stidworthy’s tissue cultures, the ability of these cells — as they age — to make collagen, hyaluronic acid, and chondroitin sulphuric acid is being followed, as well as the properties of the DNA and nuclear protein generation after generation, in an effort to understand their ultimate failure. A part of this aging research is carried out in the Department’s laboratories at the Veteran’s Administration Hospital in Bedford, Mass.

The physical grouping of our laboratories on the upper three floors of the Research Building — whose components are Biochemistry, Anatomy, Surgery, and Obstetrics — constitutes an Institute for Developmental Biology and Aging. With a common interest in development and aging this laboratory complex is unique in the United States. It has great potential, particularly for studies of the brain, of population control and of cardiovascular disease.

A major unit of the department is the elastin research group under Dr. Carl Franzblau. Elastin is the polymer responsible for the elastic properties of blood vessels. The protein chains of elastin are cross-linked in an unusual manner. One of the cross-links, lysinonorleucine, was discovered by Dr. Franzblau. He and Dr. Kagan are studying how these cross-links are formed.
The ability to form them is essential for the mature animal to maintain the integrity of the blood vessel wall, particularly if the vessel becomes subject to atherosclerotic disease. Dr. Franzblau works closely at these investigations with Dr. William Hollander and Dr. Dieter Kramsch of the Department of Medicine.

Dr. Karl Schmid is concerned with the proteins of the blood, particularly those which are complexed with carbohydrate and are known as glycoproteins. These glycoproteins have a variety of functions. Some are hormones. For many, the function is unknown. Dr. Schmid's laboratory has done outstanding work on the structure of these proteins. He is actively engaged with Dr. John Mannick of the Department of Surgery and Dr. Sidney Cooperband of the Department of Medicine in research on a fraction of plasma which extends the survival of tissue transplants. He is studying with Dr. Hollander the relationship between plasma protein, and the soluble and insoluble glycoproteins of blood vessels.

Dr. Tom Yu is studying the control of protein biosynthesis in normal and malignant tissue. Much that is known about protein biosynthesis has been developed in studies of the bacterium Escherichia coli. The situation in mammalian tissue is different. It would seem that the control system is more elaborate. For example, it is influenced by hormones and it may proceed more independently of the DNA of chromatin. The redundancy of the genetic code permits a good deal of variation between tissues in respect to the property of their transfer RNA and the proteins which mediate protein synthesis. Dr. Yu is studying how the mammalian system differs from that of bacteria and how cancer cells differ from normal tissue.

Dr. Edgar Smith has a joint appointment in the Department of Surgery. He is studying the biochemical basis of contact inhibition between normal cells and cancer cells. His approach is to determine how the membrane of cancer cells may differ from those of normal cells.

The activities of Dr. Herman Wotiz's laboratory (covered in the last issue of SCOPE) range all the way from studies of fertility and the control of conception to the methods of detection of sources of water pollution. A major interest is the role of the steroid hormones in predisposition to breast cancer. Dr.
Wotiz was a pioneer in the application of gas chromatographic methods to steroid analysis. Through the methods which he and his associate Dr. Stanley Clark have developed, it is now possible to follow many aspects of endocrine therapy rapidly and with minimal expense to the patient.

Dr. Donald Downing has a joint appointment in the Department of Dermatology. He is concerned with the role which the lipids of the skin play in conditions such as acne and other disorders.

Dr. Isaac Asimov is one of the world’s leading interpreters of science for laymen: His breadth of knowledge and enthusiasm make him one of the most stimulating members of the Center.

Dr. Louis Fillios is our Professor of Nutrition. He works on the origin of atherosclerosis. He seeks to understand how particular diets produce disease of blood vessels, and is particularly interested in the response of the liver to diets high in cholesterol and the effects that such diets have on the synthesis of plasma protein.

One of the most important new areas now being developed is in the biochemistry of behavior. The biochemical basis of learning, memory and emotion is gradually evolving. The Department now has four graduate students engaged in interdisciplinary programs with the Departments of Psychology, Anatomy, Psychiatry, and Neurology. Environmental biochemistry is being developed first through the Gerontology Program, and also in relation to the behavioral sciences. Biochemical studies of the reactions of individuals to favorable and unfavorable environments are under consideration for fish, rats and men in their communities.

These examples demonstrate the breadth of a modern department of biochemistry, which plays many roles. It teaches, it provides advanced technological know-how, it attempts to generate new approaches to disease and the maintenance of health.

The Department of Biochemistry offers the Medical Center an important resource: competent investigators, well grounded in chemistry and physics, with a special interest in medical problems. Such investigators are necessary to train both the physicians and laboratory investigators of the future.
The construction program, which suffered a serious setback in the spring, has once again regained its initial momentum, and a rhythm has been established for all construction projects on the Medical Center site. The contractors found some difficulty in getting their teams back in shape; and this of course has had its effect on getting each project back to its original tempo. The six weeks work stoppage has altered completion dates which are now far in excess of a six weeks extension. The tremendous logistics problems in getting equipment and materials to the site on correct schedule is part and parcel of running a successful construction program. When labor left, all materials that were to flow to the job had to be halted and stored, sometimes at remote locations. Once the strike was over and the workers returned all these programs had to be reactivated. Since every project in the entire city of Boston was calling for its materials at once it is obvious that not all received the same attention! Additional delays therefore were encountered by all our construction projects here on the Medical Center site.

Block #1

In the last issue I reported that trees and grass had been planted around the Instructional Building. Additional plantings have now been installed which have made the front entrance of this building even more attractive.

The electronic mural in the main lobby of the Instructional Building has been completed and installed and is an unusual sight to behold. It is at its most effective in the twilight and darkness when there is no reflected light from the front entrance of the building.

The BU business offices have moved into their new home, the former library on the second floor of Building A and have finally found enough space to spread their wings with adequate working room for a change. Their various functions, which include purchasing, general accounting, personnel, payroll, etc. all occupy separate sections of this floor, custom designed to suit their needs. The suite has been attractively decorated and is fully air conditioned.

The exterior walls of the original seven floors of the Research Building have been repaired where leaks occurred over the last ten years, and appear now to be tight and in good shape for many years to come.

What little outdoor "living room" is
available on the Medical Center site is being taken advantage of by patients and employees alike. Several barbeque cookouts have been held on the “football” field between Building A and Talbot.

Block #2

The New Evans project has received its “hammerhead” crane which will be here for the life of the project. This crane can reach to all parts of the building to raise materials as the building grows. Erected during the summer, the crane has been hard at work handling the buckets which pour concrete for the framework of the building.

The new target date for the completion of the New Evans has been set and is now considered to be February 1, 1971. Barring unforeseen weather and labor stoppages there is no reason why this goal cannot be achieved.

Work has started on the installation of the new air conditioning systems for the operating rooms. The obsolete air conditioning system is being replaced by a modern steam absorption unit of fifty-ton capacity which will supply chilled water to a new air handling device housed on the Collamore roof. The air from this handler will then go directly to the six operating rooms and will handle them only. The old systems still in operation supplied air not only for operating rooms but for the former observation galleries and other work areas of the O.R. suite. These older systems will be diverted to handle spaces not now air-conditioned and those that do not require sophisticated controls. By next summer the operating rooms will be on a system exclusively their own.

The renovations of Robinson 3 continue. When patient use permits, all rooms on this floor will be modified to match the “sample” room.

The renovation of the three-car elevator system in the Evans Building (the most heavily used in the hospital) has proved to be very successful with the installation of a modern control system. This project took two years, but two cars were maintained in operation at all times.

Block #3

The School of Graduate Dentistry will welcome its first occupants on September 5, when the second floor of this building will be opened for clinical use. Progress on this job indicates that before the end of October we shall be able to occupy the building in its entirety — and then go through a similar type of shake-down period that we experienced with the Instructional Building and Research Building addition.

Block #4

Moving-in day for the Doctors Building is now destined to be on or about November 1, when this building will receive its first occupants. By the end of the month the majority of suites will be ready for their owners. The sixth floor, which will be occupied by a branch of the Public Health Service, should be ready on or about November 17. At the moment, there is no schedule for occupancy of the commercial spaces. However, they should certainly be ready by the first of the year.

Dr. Daniel B. Stone

A New Dean

Boston University School of Medicine has a new Dean.

Dr. Daniel B. Stone, now Executive Associate Dean and Professor of Internal Medicine at the University of Iowa's College of Medicine will assume his post on January 1, 1970.

Born and educated in England, and a naturalized American citizen, Dr. Stone received his undergraduate and medical degrees from the University of London where he also earned a Doctor of Preventive Medicine degree. Following internship, residency training and a year of private practice in England, he came to the United States in 1957 as a National Institutes of Health Trainee at the University of Iowa.

Dr. Stone's academic rise at Iowa was rapid. He became an Assistant Professor in 1959, an Associate Professor in 1961 and a full Professor in 1967. Prior to his appointment as executive Associate Dean in 1967, he served for five months as Associate Dean for Academic Affairs.

A man of many honors, our new Dean won first prizes in Medicine, Surgery and Pathology in 1946 while still a medical student; first prizes in Medicine and Surgery in 1947; and first prizes in Ophthalmology, Gynecology and Midwifery in 1948. In this same year he won the David Llewellyn Scholar award for "highest distinction throughout clinical course of studies."

Dr. Stone's honors also include the coveted John and Mary R. Markle Scholarship in Academic Medicine which he received here in the United States in 1960. He is a member of many professional societies. A Fellow of the Royal Society of Medicine, he is a member of the British Medical Association, the American Medical Association, the Association of American Colleges, American Diabetes Association, New York Academy of Sciences, American College of Physicians, Endocrine Society, American Medical Writers Association — among others.

Dr. Stone has distinguished himself both as teacher and administrator. At Iowa's College of Medicine he taught students in all four years of their medical education and presently serves on key committees. He lists more than 70 published articles since 1948.

With his wife, the former Joan Hooper and their two sons, Dr. Stone will move to the greater Boston area at the end of the year.

Letters

Editor's note: The following letter was sent to Nelson Evans by a former University Hospital patient under the care of Dr. Robert Feldman.

Dear Sir,

I wish I could adequately express my appreciation to your hospital. Perhaps this poem will help.

[31]
THIS IS A HOSPITAL
(author unknown)

It's another building you hardly noticed before —
Until one day you find yourself inside
Lying there helplessly —
Or sitting and standing and pacing and waiting and hoping.

You know now it's not just another building —
it's more like a church
Where no one, except death, is ever turned away.
There life enters timidly, and is coaxed to remain
There men and women spend their lives saving lives of people they never saw before.

Where who you are and what you are seem rather unimportant,
Where forgotten things like the miracle of opening and closing your hand becomes new and exciting.
Where the starched whiteness, the gentle touch, the selfless devotion
Take you back to when you were a child and you looked up to see
Your Mother and Father smiling over you.

This poem sounds like University Hospital — except your hospital has something more that I can't define other than saying there's a 'happy joy' there too.

Everyone I met had a happy smile, a cheery voice and an exciting joyful pride in their work.
It is rather unusual to keep opening doors and always finding someone that would make a nice friend. If there is any way you can retrace my steps in the hospital — please give an extra smile of thanks from me to all the dear people.

PAT MARCH

Hard Times for Medical Schools
(Reprinted from Massachusetts Physician, Vol. XXVIII, No. 9, September 1969, page 38)

The fiscal problems that many medical schools face are unrecognized by the general public, legislators, or even the medical profession itself. Publicizing the dire straits into which many of our best medical schools have fallen may arouse sufficient awareness of the problem and get something done.

Congressmen are quick to criticize organized medicine for not having provided enough new MDs to keep up with the demand for medical care. This demand has been greatly increased by the population explosion and the higher percentage of medically needy people. Legislators are less inclined to recognize the high cost of medical education and the need for federal, state and local governments to furnish funds for expansion and operation of existing schools.

On June 13, 1969, a feature article appeared in the Washington (D.C.) Star entitled “Ailing Medical Schools Face Budget Cut Coup de Grace.” Presumably the members of Congress read the Washington papers and thus had an opportunity to become familiar with the financial plight of medical education in this country. The lead sentence—“About a dozen medical schools are in danger of having to close because of a shortage of funds”—might cause the congressmen to become concerned. The article emphasized the difficult situation in which 15 privately supported medical schools found themselves.

Necessity Not Luxury

Several important considerations in the financial support of the medical schools were stressed. In spite of extensive grant support, especially for research, higher tuitions than the other schools in the university, and the donation of services by many clinical teachers, essentially all medical schools must ask for additional financial aid from their university administrations. Compared to other branches of the university, this support is disproportionately high per student. The concept that certain church-sponsored universities could rely on financial aid from their respective religious organizations was shown to be false. The practice by Congress or the Administration of withholding funds already authorized to assist medical schools was vigorously criticized.

Support of medical education is a necessity not a luxury — this is a fact that congressmen and political leaders must accept. If no one gets to Mars in the next ten years (or 100 years for that matter), it is unlikely that anyone will suffer. The closing of the doors of even one medical school in this country, however, would be a calamity that we can ill afford. Even with current estimates of 8,000 medical students entering U. S. schools, we have to accept another 8,000 graduates of foreign medical schools to keep pace with our current need for physicians.

Increased governmental aid to private medical schools is essential if they are to survive. We hope that other newspapers will follow the lead of the Washington Star in making people aware of the need for continued financial support of medical education.

Dr. Relman
Cover Story

Dr. Arnold S. Relman, until last fall Conrad Wesselhoeft Professor of Medicine at Boston University School of Medicine, and now chairman of the Department of Medicine at the University of Pennsylvania Medical School, was the cover story subject for the August 11th issue of Modern Medicine, which selects an eminent "contemporary" for each issue.

A specialist in internal medicine, Dr. Relman is president of the American Society for Clinical Investigation and past president of the American Federation for Clinical Research. From 1962-67 he served as editor of the Journal of Clinical Investigation.

News in Capsule

Dr. Murray Freed, Chief of Rehabilitation Medicine for the Medical Center has informed SCOPE that Janet Verner, a member of the occupational
Little, Brown and Company Presents: a series of authoritative texts

hardcover

- **TEXTBOOK OF ORAL SURGERY.** By 26 Authors. Edited by Walter C. Guralnick, D.M.D.
  Ranging from the extraction of a single tooth to the complicated surgical correction of jaw deformation, this textbook clearly and concisely explains virtually all the procedures and practices of oral surgery. Practitioners, as well as dental students and teachers, will find it invaluable.
  567 pages, illustrated. #332186, $15.00

- **A TEXTBOOK OF GENERAL PHYSIOLOGY, 3rd Edition.** Edited by Hugh Davson, D.Sc.
  "The appearance of the expanded third edition of Davson's TEXTBOOK OF GENERAL PHYSIOLOGY undoubtedly places in the hands of the physiologist and clinician a classic compendium in the area of general physiology."—The Annals of Internal Medicine
  1166 pages, illustrated. #177091, $19.75

- **ELECTROCARDIOGRAPHY AND VECTORCARDIOGRAPHY, 4th Edition.** By E. Grey Dimond, M.D.
  "The objectives of this book, as stated by the author, are to teach the 'uninitiated' student or physician the basic principles of electrocardiography and vectorcardiography and to show how these disciplines may be applied usefully. These objectives are admirably fulfilled."—Archives of Internal Medicine
  152 pages, illustrated. #185728, $7.50

- **NEUROANATOMY: A Programmed Text, Volume I.** By Richard L. Sidman, M.D., and Murray Sidman, Ph.D.
  "The authors are to be congratulated on their pioneering innovation in neuroanatomic teaching procedures. For the presentation of fundamental material via the do-it-yourself route, this text fills a deep educational need."—Archives of Internal Medicine
  645 pages, 1318 items, spiral bound. #789852, $11.50

- **ELECTROCARDIOGRAPHY: A Programmed Text.** By S. G. Owen, M.D.
  "This excellent programmed text is highly recommended to many audiences. . . . The author is to be congratulated on making a significant new contribution to the vast number of books dealing with clinical electrocardiography."—J.A.M.A.
  180 pages, 191 illustrations. #677221, $9.00

paperback

- **PLASTIC SURGERY: A Concise Guide to Clinical Practice.** By 43 Authors. Edited by William C. Grabb, M.D., and James W. Smith, M.D.
  "A fresh, straightforward concentration of the major principles in plastic surgery. It emphasizes the broad spectrum of modern plastic surgery. Excellent illustrations."—Milton Edgerton, M.D., Professor of Plastic Surgery, The Johns Hopkins University School of Medicine
  850 pages, illustrated. #322644, $11.50

  "There are few good books that cover the areas of orthopedic diseases, tumors, and neuromuscular pathology, and probably none that manage to cover so extensive an area so definitively as has been accomplished in this text."—Surgery, Gynecology & Obstetrics
  330 pages, illustrated. #541725, $7.50

- **EMERGENCY-ROOM CARE.** By 24 Authors. Edited by Charles Eckert, M.D.
  "A copy of this book should be chained to the desks of all emergency rooms where all physicians working there could benefit by reading it. The price is good for students and house staff. Hospital and regional care administrators will also find it useful."—Archives of Internal Medicine
  373 pages, illustrated. #208654, $19.50

- **PHYSIOLOGY, 2nd Edition.** By 8 Authors. Edited by Ewald E. Seikurt, Ph.D.
  "This terse text is remarkably complete and lucid."—Irving L. Schwartz, University of Cincinnati College of Medicine
  795 pages, illustrated. #780456, $18.50

- **PATHOLOGY: A Dynamic Introduction to Medicine and Surgery.** By Thomas M. Peery, M.D., and Frank K. Miller, Jr., M.D.
  "This is an excellent textbook of pathology and being a paperbound edition it should be a boon to medical students and graduates alike."—American Journal of Medical Sciences
  625 pages. #697470, $19.00

- **GYNECOLOGY: Essentials of Clinical Practice.** By Thomas H. Green, Jr., M.D., Ph.D., D.P.H.
  "The book is beautifully organized, well written, and well indexed."—Obstetrics and Gynecology
  478 pages, illustrated. #326240, $7.00

- **PREVENTIVE MEDICINE.** By 39 Authors. Edited by Duncan W. Clark, M.D., and Brian MacMahon, M.D., Ph.D., D.P.H.
  "Delighted to see a new text which gives sensible balance between infectious disease and other areas, rather than a rewrite of older texts. For the first time I can truly recommend purchase of a text to students."—Robert E. Carroll, M.D., Albany Medical College
  397 pages, illustrated. #145556, $9.95

- **SURGERY: A Concise Guide to Clinical Practice, 2nd Edition.** By 37 Authors. Edited by George L. Nardi, M.D., and George D. Zuidema, M.D.
  "As an introduction to clinical surgery, this volume is superb."—Journal of the American Medical Association
  1038 pages, illustrated. #579956, $9.75

- **PHYSICAL DIAGNOSIS: A PHYSIOLOGIC APPROACH TO THE CLINICAL EXAMINATION, 2nd Edition.** By 15 Authors. Edited by Richard D. Judge, M.D., and George D. Zuidema, M.D.
  "A good book on history-taking and physical examination is always welcome, and this is likely to be judged one of the best of its kind. . . . The techniques of examination are carefully and clearly outlined and skilfully illustrated by well-chosen line drawings."—The Lancet on the 1st Edition
  492 pages, illustrated. #475531, $7.50

- **NEUROLOGY.** By Simeon Locke, M.D.
  "The author has written an excellent primer which covers much of neurology and correlates it with the facts of anatomy and physiology without the usual watering down. . . . Those teaching medical students should read this book with a view to recommending it to their class."—Archives of Neurology
  277 pages, illustrated. #530042, $9.75

---

to order

Check books on list and mail to:
LITTLE, BROWN AND COMPANY
34 Beacon Street, Box S.J.F.
Boston, Massachusetts 02108

please check here

- For course adoption
- For 30-day approval

[Form fields for name, address, city, state, zip]

Little, Brown and Company
therapy section, has been elected to active membership in the Allied Health Professions Section of the Medical Council of the Arthritis Foundation.

Miss Vemer was elected at the Fourth Annual Business Meeting of the Section, held in Boston on June 20, 1969.

Dr. Ernest J. Ferris has been appointed Chief of Diagnostic Radiology at University Hospital. He assumed his post on July 1, 1969.

Leigh Houseman assumed the responsibilities of Assistant Plant Superintendent of the Medical Center on September 2. Mr. Houseman will work with Herbert Klein on the complex job of “building and rebuilding” the Boston University Medical Center.

Dr. John S. Strauss, Professor of Dermatology of the School of Medicine, has been named a member of the new Council for the National Program for Dermatology of the American Academy of Dermatology.

The Council, composed of fifteen members, represents medical schools, private practice, health agencies, and the public, and is responsible for studying and implementing the Academy’s comprehensive National Program Report aimed at controlling skin diseases which cost the nation an estimated $1.5 billion a year. The Program’s proposals cover patient service, education and research.

Dr. Strauss will represent the Society for Investigative Dermatology on the Council.

Mrs. Estelle Davidoff became the new Director of Volunteer Services of University Hospital as of August 23, 1969.

The widow of a surgeon at Beth Israel Hospital, Boston, Mrs. Davidoff brings to us many years of successful and innovative service in the development of volunteer programs. A consultant for the Family Care Program at Boston State Hospital from 1964 to 1965, she has most recently served as Director of Volunteer Services at the Norwood Hospital, a post she held for 3½ years.

Dr. Hamburg discussed “The Evolution of Aggressive Behavior” on Wednesday, October 1, followed on Thursday by a presentation of “Experimental Studies of the Development of Aggressive Behavior.”

Early in August Jon Gould, Administrator of MediCenter, Boston, now an essential adjunct to the Center’s delivery of health care, received word from the Joint Commission on Accreditation of Hospitals that its Board of Commissioners had approved our MediCenter as an extended care facility for a period of three years.

The survey, conducted in June, gave its “seal of approval”; and following a minor recommendation, the comment was made: “Facility is to be commended for outstanding program of patient care evidenced in survey.”

John F. Mullett Active in ’69-’70 United Fund
Bumc Regional Cancer Program

Editor’s Note. Excerpts from a recent Newsletter from the BUMC Oncology staff to cooperating hospitals. See story on page 6.

Cancer Conferences have been held at all of the eight cooperating hospitals and are off to a fine start. In July, a total of 16 conferences and tumor rounds have been conducted, and 13 are planned for August. These figures are good, since the number of conferences are generally curtailed at most hospitals during the summer months. Twenty-five conferences and rounds are projected for September and 26 are planned for October. It seems that this number of clinical conferences and rounds are feasible and optimal for the goals of our Regional Cancer Program and the wishes of the Medical Staffs at the eight cooperating hospitals.

Gratifying results have already been noted in terms of the number of conferences as well as in their quality and reception at each hospital. The format is somewhat different at each hospital, fitting in with local needs and desires. However, basically the conferences and rounds are oriented toward specific case presentations of current problem patients. This affords the Medical Staff and the BUMC Consultants the opportunity to discuss practical problems in diagnosis and management. Over the course of a year, it is likely that the numbers and types of cancer problems discussed will cover a wide-range of current knowledge and controversy in cancer. These conferences have thus served to initiate group discussions by Medical Staffs, focusing on diagnosis and management of specific problems of their patients at crucial times in their course. The participants are agreed that this affords a more practical background which is better retained than a series of prepared lectures.

In many instances, the discussors have had the opportunity to describe clinical research that is applicable to the patients discussed. The membership of BUMC in the Eastern Cooperative Oncology Group affords our Oncology Staff access to ongoing studies in the Eastern Group and the other cooperative chemotherapy groups. This has already been applied to several patients discussed, including recent advances in the diagnosis and management of patients with Hodgkin’s Disease, malignant lymphomas and multiple myeloma. A regimen of administering 5-fluorouracil has been recommended for several patients which involves less risk than the conventional method of 5-FU loading doses.

Nursing conferences, workshops, demonstrations
Dr. Schilling has been meeting with the Directors of Nursing at the cooperating hospitals to acquaint them with the Regional Cancer Program and to enlist their interest and participation. A meeting of the Directors of Nursing will be held on September 11 to discuss some general concepts of the goals of the Program and the types of educational programs that might be undertaken by and for the nurses in our cooperating hospitals and their communities.

Nurse specialist appointed
Miss Trudy Harris, RN has been appointed Nurse Specialist for our Regional Cancer Program. Miss Harris received her BSN from Gustavus Adolphus College, and her M.S. from Boston University School of Nursing. Miss Harris will work with the Directors of Nursing at our cooperating hospitals in coordinating a nursing educational program for the care of cancer patients. Preliminary discussions with the Directors of Nursing have elicited interest in this aspect of our Regional Cancer Program. The future Cancer Floor at University Hospital will serve as a demonstration unit. Plans will be worked out for conferences, workshops and demonstrations on this unit, as well as at the cooperating hospitals.
Pre-Banquet Party, September 8
Dental Dedication Ceremonies

It was a lively and distinguished group of guests who assembled before the Monday evening Banquet, September 8, to toast the impressive achievement of a new home for the School of Graduate Dentistry. Dental School faculty, University officials, Medical Center trustees, proud wives and well-wishers, crowded a meeting room of the Boston Sheraton for a gala stand-up party which enabled all those most closely concerned with the Dedication to exchange congratulations on the event and its significance to Boston University and the Medical Center. At left, Dr. Shields Warren and Mrs. Warren are seen chatting with John Perkins, right. Other photographs on these pages were taken in candid-camera fashion to present a glimpse of the guests in a mood of well-justified celebration.
Neurology Reorganizes

The Department of Neurology, Boston University School of Medicine, has undergone the following reorganization.

Robert G. Feldman, M.D. succeeded Norman Geschwind, M.D. as Chairman of the Department and Neurologist-in-Chief, Boston Veterans Administration Hospital effective January 1, 1969. Dr. Feldman received his neurology training at the Yale-New Haven Medical Center and was Clinical Associate in Neurology, Harvard Medical School, at the Neurological Unit, Boston City Hospital before joining the Boston University faculty. Also effective January 1, 1969 was the appointment of N. Paul Rosman, M.D., formerly of the Massachusetts General Hospital and Harvard Medical School, as Associate Professor of Pediatrics and Neurology and Chief of the Child Neurology Section of the department.

Additions to the faculty as of July 1, 1969 include Daniel S. Sax, M.D. as Associate Professor of Neurology, Associate Chief of the Neurology Service at Boston Veterans Administration Hospital, and coordinator of the Residency Training Program at the Boston University Affiliated Hospitals. Dr. Sax was formerly Assistant Professor of Neurology at Albert Einstein Medical School and received training in Neurology at Boston City Hospital.

William J. McEntee, M.D., M.P.H., is Associate Professor of Neurology and is responsible for development of regional medical programs for the department. Dr. McEntee trained in Neurology at the Yale-New Haven Medical Center and previously held appointments on the faculties of Yale University School of Medicine and Hahnemann Medical College.

Remedios Rosales, M.D. has been made Associate Professor of Neurology and Neuropathology and is Associate Chief of Neuropathology at the Boston Veterans Administration Hospital. Before joining the department Dr. Rosales was associated with Massachusetts General Hospital, and Warren Museum of the Harvard Medical School, and the Hahnemann Medical College.

Philip A. Wolf, M.D. received training in Neurology at the Massachusetts General Hospital and in Epidemiology at the University of Pennsylvania. He was previously Instructor in Preventive Medicine at Harvard Medical School and he joins the department as Assistant Professor.

Michael C. Trachtenberg, Ph.D. has been appointed Instructor in Neurology and Anatomy. He comes to Boston University from the Harvard Medical School and the University of California at Los Angeles and will continue his work in Neurophysiology in the new research laboratories at the School of Medicine. Sidney Sament, M.D., following his training at the New England Medical Center and advanced work in Electromyography and Encephalography at Massachusetts General Hospital has joined the department as Instructor in Neurology.

Miss Malootian to Moscow

Ida Malootian, Supervisor of the Blood Bank and Clinical Hematology Laboratories of University Hospital, has returned from Russia where she participated in the 12th Congress of the International Society of Blood Transfusion, held in Moscow in late August.

Miss Malootian, who has delivered papers in Japan, Latin America, Sweden and Italy, was the only technologist from our area to present a paper at the Russian meeting. Her subject was "The Emergency Cross-match Requisition" which dealt with the techniques involved in handling emergency calls for blood.
Summer Student Enrichment Program

A student enrichment program at the Medical Center this summer, whose purpose was to provide stimulating summer jobs to high school graduates from core city schools as they prepared to enter college in the fall, came through with heartwarming success according to second-year medical student preceptor Allen Ott. Students in the program, funded by a special General Research Grant of $5,000 which enabled the School of Medicine to pay them $2.02 an hour for their afternoon work in our laboratories, and to supply textbooks, came from Roxbury, North Dorchester and Cambridge. They also had two morning sessions each week at Health Careers, Inc. where they studied mathematics, remedial reading and other individually-needed subjects, and heard a Boston University School of Medicine faculty member deliver a lecture on a particular aspect of medicine.

Jennifer Prescott of Cambridge, seated, will enter Pembroke College, Brown University, where she plans to major in Biology. With her is Pamela Luacau, Roxbury, who will attend Northeastern University and study Medical Technology. Looking on is Allen Ott, preceptor of the Student Enrichment Program.

Beverly Leslie, Dorchester, will enter Emmanuel College and major in Biology.

Charlene Green of Cambridge, shown here in Dr. Carl Franzblau's laboratory, will go to Simmons as a Biology major.

Calvert Whitworth of Dorchester will enter the University of Massachusetts to study Microbiology.

Courtney Russell from Mattapan enters Northeastern as a pre-med student majoring in Biology. The scene is Dr. Marott Sinex' lab.
Wine Tasting Party: Faculty-Student Mixer

A fashionable "first" in student-faculty get-togethers was held in the J. Mark Hiebert Student Lounge on the evening of Friday, September 12th.

Planned by its chairman, second-year student Jude Smith, as a lively and enjoyable social occasion for students to meet the faculty of the School of Medicine, the California Wine Tasting proved to be just that ... and then some.

A knowledgeable representative of the California Wine Institute (which supplied the excellent red, white and rosé wines for judicious sampling by guests) prefaced the sniff-sip-and-swallow routine with a dissertation on American wines, their characteristics and particular merits. White-coated students performed the pouring honors with considerable aplomb. A profusion of cheddar cheese cubes was provided to clear the palate between the chablis and the semillon, the burgundy and the pinot noir. Mini-skirted women students and guests enlivened the scene as they raised their glasses to fellow students or faculty.

With every passing moment until its almost-midnight close, the talk grew freer, the atmosphere of conviviality warmed a degree or two. It was quite a party.

---

NEW YORK CITY is fun from the

SHELTON TOWERS HOTEL

Lexington Ave., 48th to 49th Street
TEL: (212) Plaza 3-4000

We'll tell you why:
Choice East side location, 1,000 rooms and suites with air-conditioning and TV at reasonable rates from $12 single, $16 double.
YEAR"ROUND
OLYMPIC SWIMMING POOL FREE TO GUESTS

T - 4
(Murphy - Pattee)
PLASMA CORTISOL
VITAMIN B₂ AND FOLIC ACID
LIPID ANALYSES
LABORATORY MEDICINE
DIAGNOSTIC & RESEARCH CHEMISTRY

LEARY LABORATORY

PHYSICIAN DIRECTED SINCE FOUNDING IN 1929
43 BAY STATE ROAD
BOSTON, MASSACHUSETTS 02215

(617) 536-2121

I saw ad in: ____________________________
No. in party: ____________________________
"coughing is not a harmless privilege"

if cough serves no useful purpose

**Tussionex**
(Resin complexes of Hydrocodone and Phenyltoloxamine)

...it works
(usually for 10 to 12 hours*)

*TUSSIONEX SUSPENSION/TABLETS: Each teaspoonful (5 cc.) or tablet of TUSSIONEX contains 5 mg. hydrocodone (Warning: May be habit-forming) and 10 mg. phenyltoloxamine, both as cation exchange resin complexes of sulfonated polystyrene.
Class B narcotic — oral Rx where state laws permit.

**INDICATIONS:** Coughs associated with respiratory infections including chronic sinusitis, colds, influenza, bronchitis, and cough resulting from measles, pulmonary tuberculosis, bronchiectasis, and bronchogenic carcinoma.

**DOSAGE:** *Adults:* 1 teaspoonful (5 cc.) or tablet every 8-12 hours.
*Children:* Under 1 year: 1/4 teaspoonful every 12 hours.
From 1-5 years: 1/2 teaspoonful every 12 hours. Over 5 years: 1 teaspoonful every 12 hours.

**SIDE EFFECTS:** May include mild constipation, nausea, facial pruritus, or drowsiness.

For complete detailed information, refer to package insert or official brochure.

**Strasenburgh**
Strasenburgh Laboratories Division
Wallace & Tiernan Inc., Rochester, N.Y. 14623
from the discord of anxiety... to emotional harmony

Before prescribing, please consult complete product information, a summary of which follows:

INDICATIONS: Indicated when anxiety, tension and apprehension are significant components of the clinical profile.

CONTRAINDICATIONS: Patients with known hypersensitivity to the drug.

WARNINGS: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

PRECAUTIONS: in the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

ADVERSE REACTIONS: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

with the aid of antianxiety

**Librium®**
(chlordiazepoxide HCl)
5-mg, 10-mg and 25-mg capsules

In an age of swift change and challenge, susceptible individuals may experience varying degrees of excessive anxiety. The resulting emotional stress may precipitate significant functional disorders or complicate existing organic disease. In properly individualized maintenance dosage, Librium (chlordiazepoxide HCl) quickly helps relieve anxiety and apprehension, provides useful adjunctive therapy in psychophysiologic disorders. In long clinical experience, Librium has demonstrated a wide margin of safety.

Also available:

**Libritabs®**
(chlordiazepoxide)

Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110