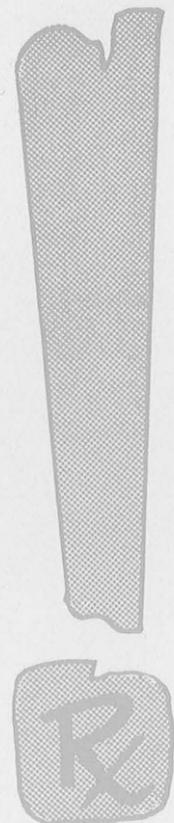


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The WAYNE PHARMIC

VOLUME 14 1970 NUMBER 2

The *Wayne Pharmic* is the official publication of W.S.U. College of Pharmacy, written by, for, and about Pharmacy students and graduates.

THANK YOU:

The *Wayne Pharmic* staff wishes to extend their appreciation to Dr. Dunker for his invaluable assistance in forming this publication.

CONTENTS

From the Dean	3
Drug Abuse Committee	3
A Social Awareness	3
Graduating Seniors	6-10
Pharmaceutics	12
Pharmaceutical Chemistry	13
Pharmacy Administration	14
Goodby, Dr. Fox	14
Pharmacology	15
Pharmacognosy	17
Pharmacy Stockroom	18
Distinguished Alumni	18
Student A.Ph.A.	19
Stephen Wilson Seminar	20
Alumni Awards	24

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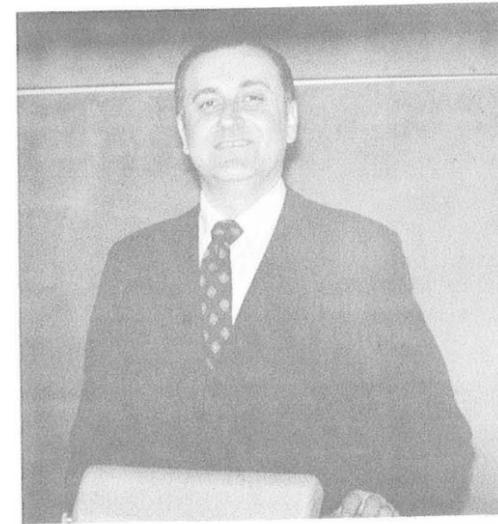
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From the Dean's Desk

As part of a self-study in preparation for a regular quinquennial re-accreditation visit by the American Council on Pharmaceutical Education, the faculty of the College of Pharmacy prepared a program statement concerning the aims and objectives of the College. I am pleased to list these for the student body so that they may be better informed on the program objectives of the College.

1. The preparation of pharmaceutical practitioners who through an undergraduate program consisting of two years of liberal education and three years of professional education in humanistic, scientific, and clinical areas leading to the degree of Bachelor of Science in Pharmacy will be prepared to practice a multifaceted profession in one of its numerous settings, including the community, medical complex, other health-care facilities, government and educational agencies, and research and industrial establishments.
2. The preparation of clinical pharmacy specialists, through a graduate professional program leading to the degree of Doctor of Pharmacy, who, as integral members of the health-care team in both community and institutional pharmacy practice, will fill the vitally needed role of drug therapy consultant on the health-care team, and who will serve as members of the clinical faculty of colleges of pharmacy.
3. The preparation of individuals for administrative, scientific, professional, and educational careers in private and public agencies and institutions concerned with health care through graduate scientific and professional educational programs and individual research opportunities in the various areas of pharmacy leading to the degrees of Master of Science and Doctor of Philosophy.
4. The development of both basic and applied research programs in the pharmaceutical sciences and professional practice.
5. Increasing pharmaceutical manpower supply by designing effective recruiting programs for students, including special programs for disadvantaged students, and by increasing professional efficiency by providing contemporary professional instruction to practicing pharmacists through continuing education programs.
6. Participation in community service programs by providing educational and consultative services to the public and public agencies on matters pertaining to drug use and abuse and by cooperating with pharmaceutical organizations and agencies in programs concerning professional matters including those of internship and licensure.

A Social Awareness

HARVEY RUBIN

It is extremely important for each of us within the atmosphere of freedom available at this university to be aware of our social responsibility. The unrest which is apparent throughout the university community cannot be forgotten in the College of Pharmacy merely because we concentrate our study in the natural sciences as opposed to the social sciences.

Pharmacy has continually avoided its duty to serve the community with more than its knowledge of drugs. Today, each time university students decide to work together for a cause pharmacy students are discouraged in their efforts to work with the university community. It is important that the door of the pharmacy school is opened to the university community so that we can work together in building an orderly and just society. If this does not happen the profession of pharmacy will be left behind in the social and political unrest of the past decade.

Although it may not be your desire to work for social progress in the manner chosen by some students, let us all work together in efforts to create a better world where drugs will be used to treat diseases rather than gunshot wounds.

The Drug Abuse Committee

JOHN LOUGHNER, CHAIRMAN

An idea was germinated approximately three years ago by a small group of Pharmacy students. This idea involved volunteer work in informing students and parent organizations about the danger of drugs which are abused.

It would be difficult to describe all the goals that the committee has tried to achieve during its brief existence. The one goal which it has definitely achieved is "pride." Pride in pharmacy, pride in the fact that we as pharmacy students could relate relevant information to our friends, our peers, and the public.

It has been difficult in the past for the pharmacy student to see any relevancy in his four or five years of study. Yet, close to 35 percent of the fifth year class have volunteered their time to participate in this program. For the pharmacy student is becoming more aware of educational potential, and the need for a more meaningful education that can relate to the problems in pharmaceuticals, and pharmacology and can also relate to his community and health care practice.

We as fifth year students hope this committee will never end, for this committee has an enormous amount of potential. Funds have been made available for the possible production of a movie or a set of slides. Also the undertaking of a series of lectures in a high school is being planned. During the past two years approximately 90,000 students have received our committee, and we see a larger number in the future. We hope that the public will see the total picture of medicine and learn to respect it as we have during our education.

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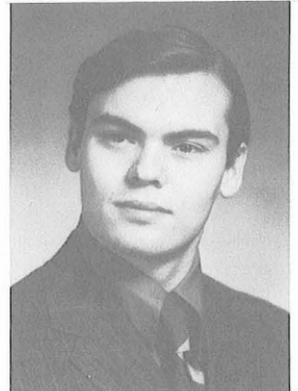
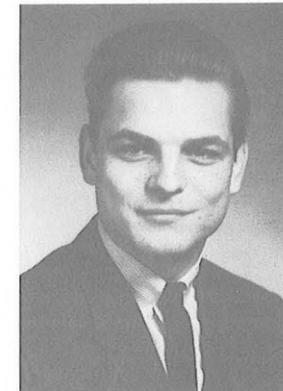
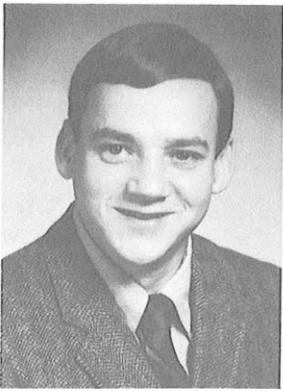
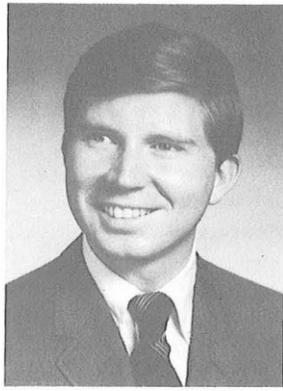
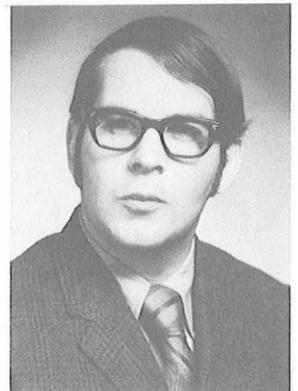
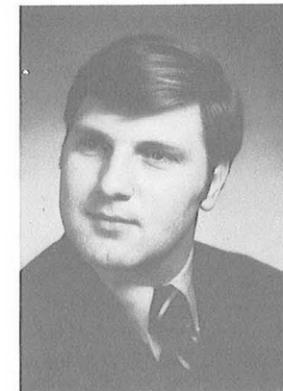
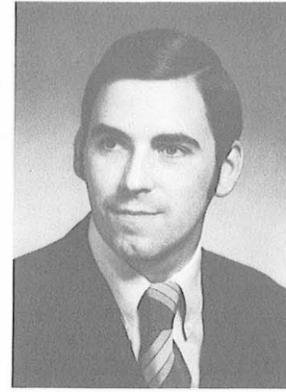
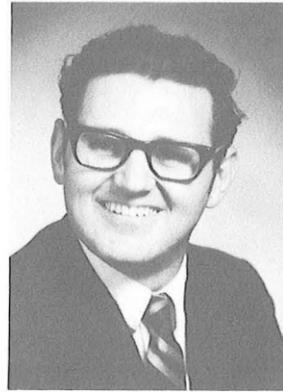
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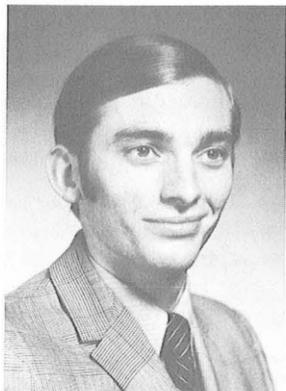
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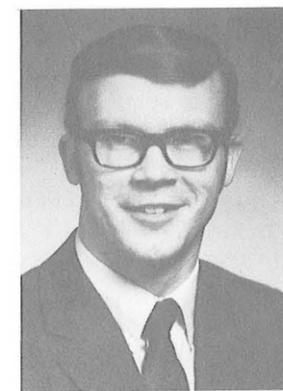
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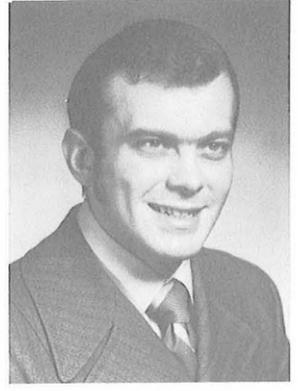
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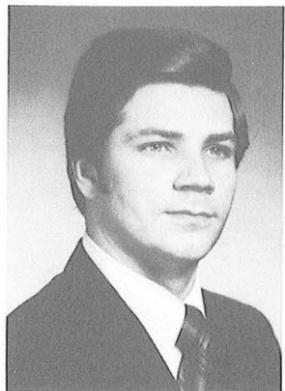
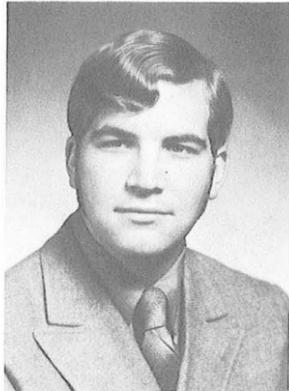




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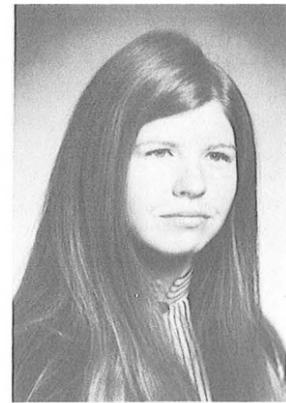
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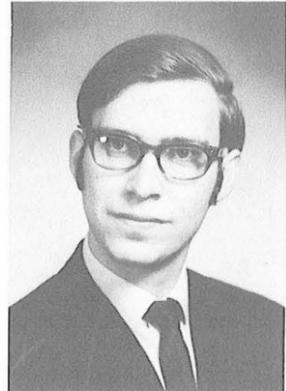
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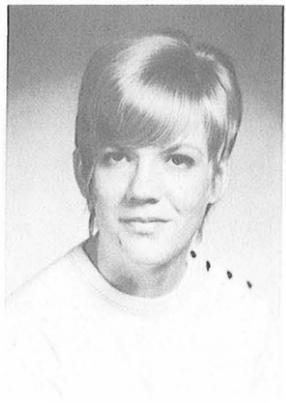
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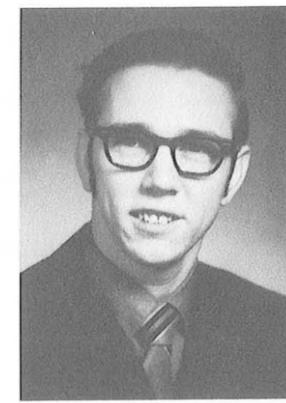
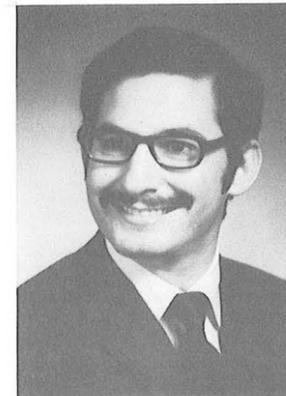


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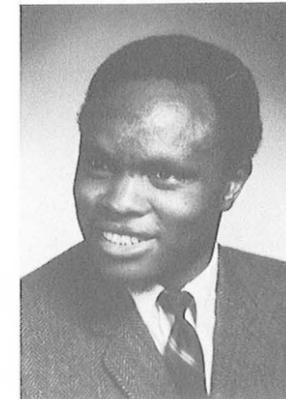
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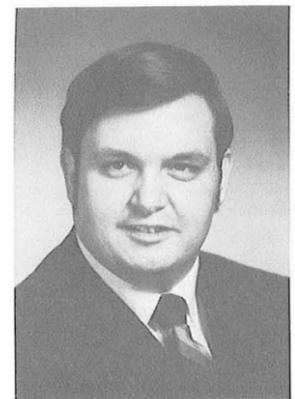
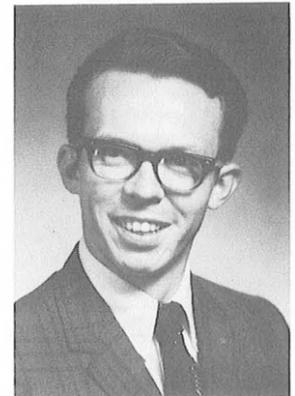
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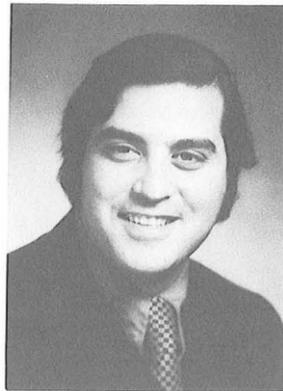
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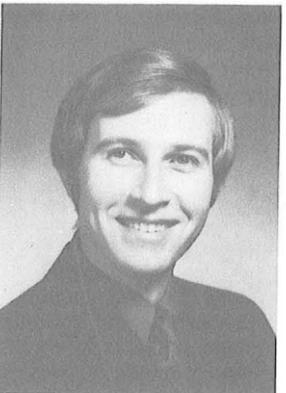
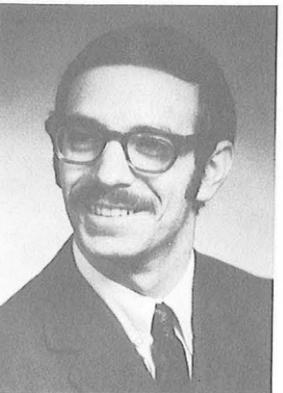
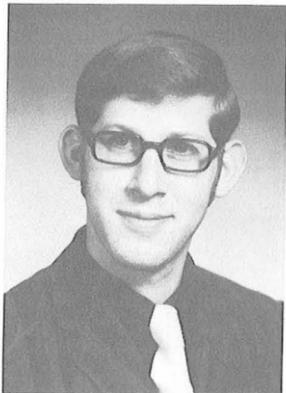
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Pharmaceutics

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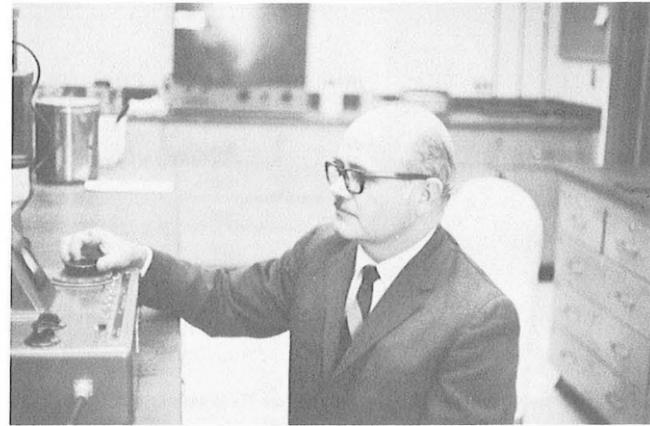
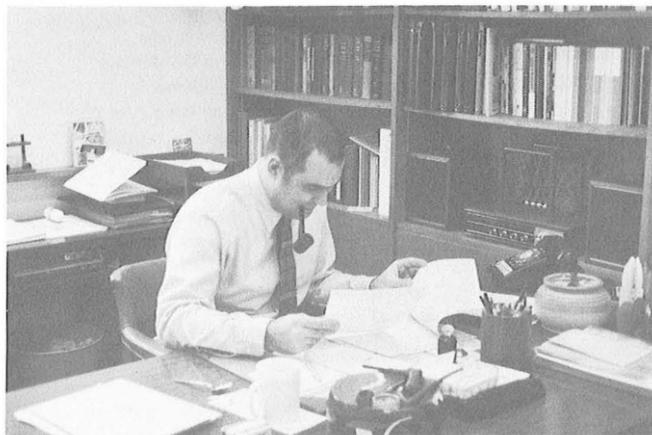
As students, we tend to define pharmaceutics as a field which does not relate to the other four fields of pharmacy. More precisely, pharmaceutics deals with the study of the physical aspects of drugs.

A new approach to pharmaceutics was instituted about 1950 when pharmacists realized that the art of preparing elegant pharmaceutical dosage forms was directly related to chemical, physical, and kinetic laws. More detailed studies followed involving shelf life of drugs, emulsion stability, and other related aspects of preparing and stabilizing drug products. Between 1960-65 the area of biopharmaceutics was defined because scientists realized that a potent, stable product did not always result in therapeutic benefit to the patient. Biological half-life, protein-binding rate relationships, excretion rates and dissolution rates became the topics for increased investigations. These advances in pharmaceutics are the basis for the present course work offered in the department, including courses in clinical pharmacy.

In Shapero Hall the pharmaceutics classes are taught by Drs. Fenn, Moore, and Nagwekar, Sister Emmanuel Schott, Mrs. Turczynski and Dean Barr.

Dr. Willis Moore and his graduate students are interested in the product stability of dipyrone and improving dissolution rates of the capsule. Dipyrone is a mild analgesic, like aspirin. Similarly it is expected to have a pH at which it is optimally stable. It appears in products listed under twenty-five trade names, which range from strongly acid to strongly alkaline. It is hoped that the optimum range of stability can be determined through the studies now being conducted.

Dr. Moore is also interested in improving the dissolution rates of capsules, once they enter the body. While in product development he



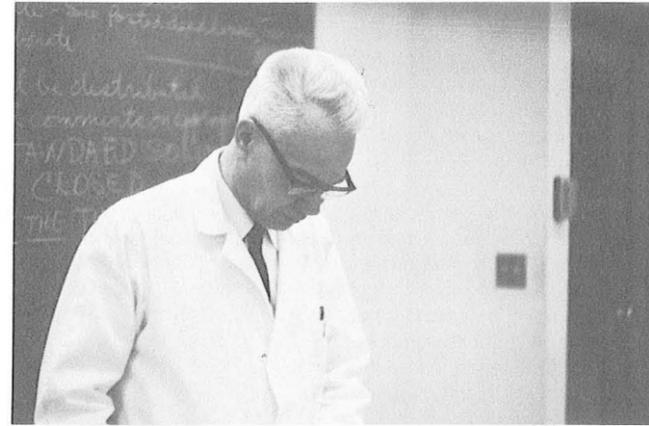
noted that meprobamate tablets, when reduced to a powder and encapsulated, hardly dissolved in the body. Contrary to the popular belief that capsules contain loose powder that should "fall apart" in the stomach, he found that an additional agent was needed to release the powder from the partially dissolved gelatin cover. It was discovered that certain chemicals had this ability, although not all were suitable for universal use due to their own drug action. Lyophilized glycine rapidly absorbs water, expands, and bursts apart.

The rates at which a drug is distributed, metabolized, and excreted can determine the potential usefulness or the increased toxicity of a drug. Dr. Janardan Nagwekar and his graduate students are working upon the structure of the molecule as related to excretion rates. Mandelic acid is excreted specifically by the kidney nephron into the urine. The mandelic acid molecule passes through the kidney tubule by active transport which is related to protein carriers within the tubule. The ionic or lipid character of the drug molecule affects the rate of excretion. It appears that each protein carrier will either be lipid or



ionic in character, but not both. If this is the case, it will be possible to control the rates of excretion. Drug molecules could then be designed which take advantage of either increased or decreased excretion depending on the nature of the protein carrier. In a similar fashion, toxic and therapeutic effects could hopefully also be altered.

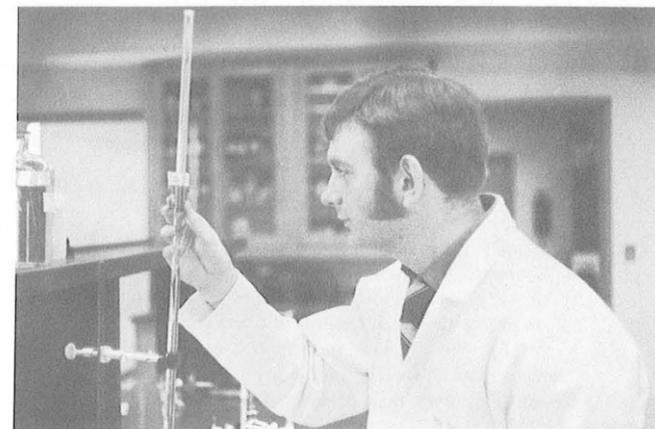
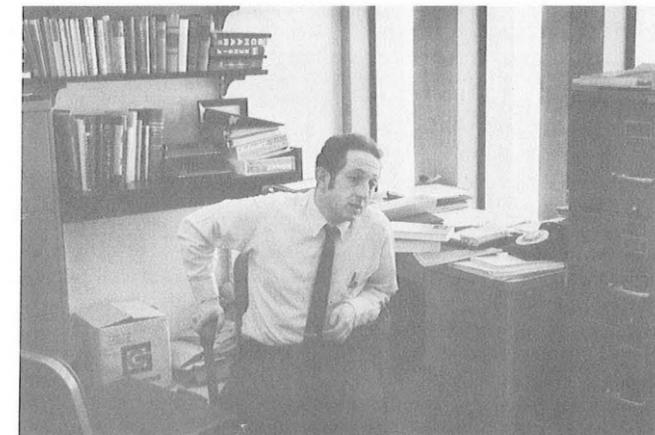
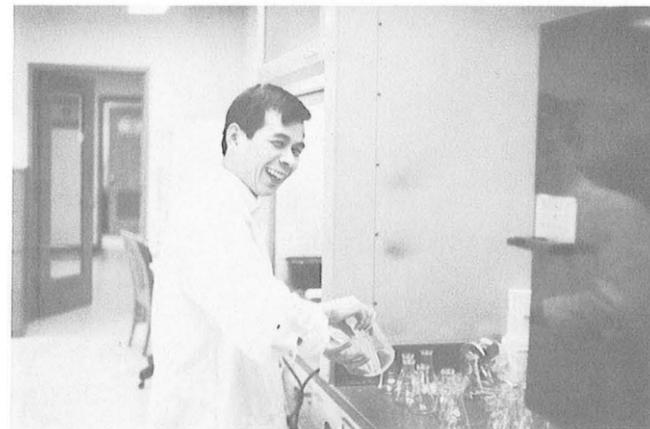
The impact of the study of pharmaceutics can be seen in each of the other areas of the pharmaceutical sciences. The chemist designs molecules which can be more readily excreted. The pharmacologist may then have to revise dosage schedules due to changes in the half-life. The pharmacognosists discovery which could not previously be used because of lack of suitable dosage form may become a life saving drug. And the pharmaceutical administrator must be sure that both the cost and usefulness of the product make it practical for manufacture and distribution, as well as for the intended patient. Pharmaceutics is an expanding area of interest and educational opportunity.



Pharmaceutical chemistry is the area responsible for the instruction of students in the chemical nature and properties of drugs. This includes the relation certain chemical structures have to the pharmacological actions of drugs. This area within the pharmacy curriculum also has the duty of instructing students in the procedures used to assay both crude and synthetic drugs. Dr. Melvin Dunker is in charge of the two drug assay courses and it is his intention to have students understand the basics behind the chemical tests and analysis procedures in the official compendia. Dr. Dunker's course material is also designed to give students an appreciation of the structure-activity relationships of drugs and how a slight alteration in the drug molecule will affect its action.

The courses in biochemistry are also integrated into the pharmaceutical chemistry scheme and are designed to serve as an introduction to fundamental biochemistry necessary to understand the function of drugs on a chemical level. Dr. Hanley Abramson teaches the sequence of biochemistry courses complete with wall charts. Dr. Abramson's expertise is steroid chemistry and naturally students receive a thorough exposure to adrenal hormones, androgens, estrogens, progestins and, of course, cholesterol. Dr. Abramson also gives some detail to certain disease states which occur if there is any aberrant function in the biochemistry of the body.

Dr. Henry Wormser is the third faculty member whose specialty is pharmaceutical chemistry. Dr. Wormser does not teach any formal course in chemistry, but reserves his duties in the instruction of pharmacotherapeutics which utilizes all aspects of pharmaceutical sciences gathered into one course designed to study the drug armamentarium utilized in the treatment of disease. The fourth year class is occasionally honored to have Dr. Wormser as a "guest lecturer" in their biochemistry courses when the topic of drug abuse is approached, but to be sure Dr. Wormser does have a working proficiency in biochemistry.



Pharmaceutical Chemistry

WILLIAM CORNELIS

Goodby, Dr. Fox

CHRISTINE THOMAS

In a close, cluttered office, Dr. Sereck Fox sat comfortably, enjoying the thoughts of retirement. When I asked about his intentions for the future, he replied, "I have a book on ethics to complete." In the course of the interview, I learned that he may be somewhat busier than he is now. After finishing his book on ethics, he proposes to start another book.

In his spare time, Dr. Fox occupies himself with photography, his vegetable and flower gardens, and his faithful dog, Archie.

Looking back into his past, Dr. Fox disclosed many rewarding experiences in his field. He was educated at the Philadelphia College of Pharmacy and Science, where he received his Ph.G. and D.Sc. At the University of Pennsylvania as a part-time student he received a very broad liberal arts background majoring in chemistry.

His first duties as a pharmacist were performed during Prohibition days in the Kensington and West Philadelphia areas of Philadelphia.

As the years passed, Sereck Fox progressed through increasing responsibilities and opportunities. In 1919, he worked for Powers, Weightman, and Rosengarten, in Philadelphia, on the production of heavy chemicals.

1921-1929 - at H. K. Mulford Company in Philadelphia, he held many positions in production, control and research in the fields of biologicals and pharmaceuticals.

In 1929-1937, at Sharp and Dohme Inc. in Philadelphia, he was assistant to the superintendent of the plant on production and label control and, as Director of Pharmaceutical Research, planned and built the first Pharmaceutical Research Laboratories in the Sharp and Dohme complex.

From 1937-1957, at R. P. Scherer Corporation in Detroit, he was Vice President of Pharmaceutical Research and Control and Technical Director of R. P. Scherer Limited, in Windsor, Ontario; in Slough, England; and of R. P. Scherer, g.m.b.h. in Eberbach, Germany.

It was in 1957, that Dr. Sereck Fox became Professor of Industrial Pharmacy at Wayne State University College of Pharmacy.

Dr. Fox, during the course of his career, has served in other positions in connection with industrial pharmacy. He is one of the early organizers of the Gordon Research Conferences; a founding member of the Board of Directors of Kresge Science Library of which he was President; in 1958, a founding member of the Council for Basic Education of which he is now President; a LIFE member of the American Pharmaceutical Association, and member of the American Chemical Association, and a Fellow of the American Institute of Chemists. He belongs to the Society of Sigma Xi (past president of the WSU Chapter), Rho Chi, and Phi Delta Chi. Dr. Fox is also an elected Fellow of the New York Academy of Sciences.

His work in the revision of the national compendia has been tremendous. He spent 30 years in helping revise the USP and NF. In the USP, his committees were responsible for the monographs on Natural Vitamin A and the Vitamin A assay. This was the first time a physio-chemical assay for Vitamin A was accepted in an official compendium in the United States. His Advisory Committee on Tocopherols introduced all the original Tocopherol monographs in the National Formulary. Numerous scientific papers carry his name in a variety of publications.

With much knowledge and experience backing him, Dr. Fox feels strongly that we each must do our own thing in the sense of accepting personal responsibility in saying, doing, and thinking. Our opinions must reflect competent studies and disclosures of fact and not the irrationality of an emotional outburst. We must consider our steps carefully before proceeding in all matters of science and life.

Those of us who are just starting out in our professions are envious of such a man now on the horizon of his retirement; but one day we, too, will look back on a pleasurable and rewarding career and smile.

The purpose of pharmacy administration is to integrate records and laws so that they are pertinent to the profession of pharmacy. The two faculty members responsible for the presentation of pharmacy administration courses at the College of Pharmacy are Professor Dauphinais and Mr. J. D. Mills. Previously Mr. Delbert Konnor was also a member of the faculty who instructed courses in accounting and management but presently he is serving as assistant to the executive secretary of the N.A.R.D. in Chicago.

Professor Dauphinais is responsible for the majority of course work and as a result of his dual professional experience as a pharmacist and an attorney, he is more than qualified to relate judicial principles to the practice of pharmacy. Professor Dauphinais has had varied experiences in both professions since he is a registered pharmacist in the state of Illinois and for a number of years served as legal counsel for the A.Ph.A. in Washington. His ability to articulate promptly shows any student his unlimited background.

Pharmacy Administration

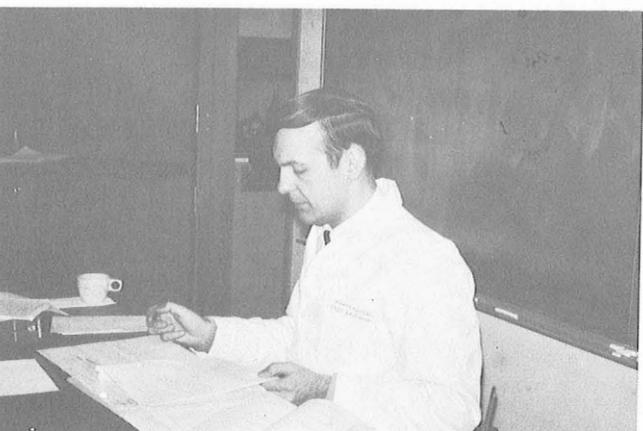
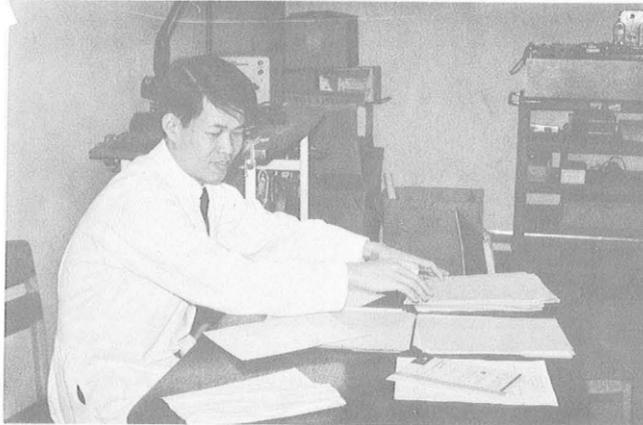
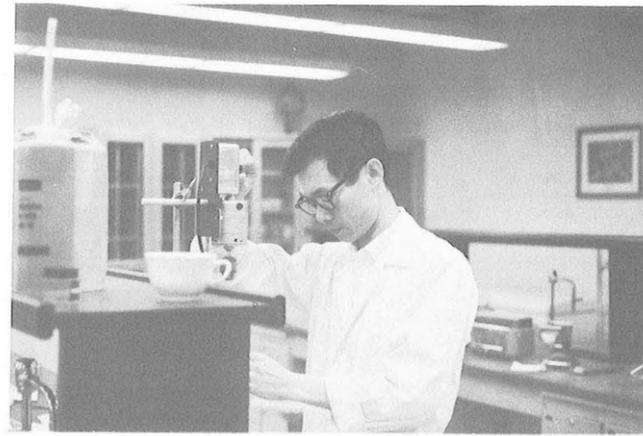
HARVEY RUBIN

J.D. Mills is part-time faculty and is currently listed as an instructor in pharmaceutical administration. Mr. Mills is also a registered pharmacist and is presently associated with Mills' Pharmacy. Mr. Mills' teaching responsibilities are limited to instruction in Drug Marketing and in the future will include instruction in the Records and Accounting courses. His experience in community practice will give Mr. Mills insight into the problems and relevance of record keeping as taught in the classroom.

The course work offered in pharmaceutical administration is primarily concerned with a classroom approach to the problems, business and professional, which a practicing pharmacist would encounter. The course entitled "Health-Care Industry Economics and Marketing" introduces the student to the routes of distribution of drug products from the manufacturer to the retailer. The course in professional management studies the principles of business law and stresses the important aspects of contracts and the origins of law. The last course rounds out the series is the course dealing with jurisprudence and ethics. The work here approaches the principles of positive law and legal relations of particular concern in pharmacy, the moral or political policies, and the resulting practices or procedure.



The Wayne Pharmic



The Wayne Pharmic

Pharmacology

QUEEN MARSH

Pharmacology is the scientific discipline which studies the effects and response of drugs in living animals and tissue. However, an expanding new field within the science of pharmacology is the study of drug effects on the behavioral patterns of animals. This new pharmacological science is termed psychopharmacology.

Dr. Richard K. Mulvey, a graduate of Purdue University, has been involved in psychopharmacological research for some four years and has been a leading investigator in this field. His research in psychopharmacology makes use of an automated platform box which tests an animal's ability to recall a learned response. This box contains a raised platform, a light source, and an electrified floor. When the light flashes the animal experiences a shock and is expected to jump on the elevated platform thereby escaping the shock. Through this procedure the test animals learn a conditioned response and associate the flashing light with the shock. Dr. Mulvey and his colleagues are studying certain drugs which alter this conditioned response so that the test animal cannot associate the flashing light with the electric shock. These studies involve an enormous accumulation of data and the results of these studies are recorded on equipment within the College as well as on records at the University's Computing and Data Processing Center. This particular work is unique in another way in that it is being conducted in conjunction with Dr. Caldwell, a psychologist at the Lafayette Clinic.

The pharmacology department is currently also conducting research with the alkaloid kokusaginine. The groundwork for this research was done by Dr. Harold Bailey and his wife when they first isolated this alkaloid from the plant *Ptelia trifoliata* and subsequently studied the geographical distribution of this plant. The alkaloid was again later isolated by Dr. Mulvey and his two graduate students, Casmir Zalewski and Abdul Ageel. Dr. Mulvey and Mr. Zalewski published their extraction procedures and later Mr. Zalewski and Dr. Loh elucidated the structure of the alkaloid and found it to be of a furoquinoline nature. Kokusaginine has been studied on animal preparations which includes pre- and postganglionic fibers, isolated ganglia, carotid arteries, and a cat's nictitating membrane, but, unfortunately, no therapeutic use as yet can be proposed for the alkaloid. The pharmacology researchers at the College are pioneers in the United States for research on kokusaginine. Research is also being conducted in the Soviet Union, Poland, Japan, and Australia on this alkaloid but to a limited extent. This is probably due to the difficulty encountered in the isolation procedure. The researchers at the College of Pharmacy with the cooperation of Parke-Davis and Co. were able to isolate only 37mg. of kokusaginine from 20 pounds of crude bark.



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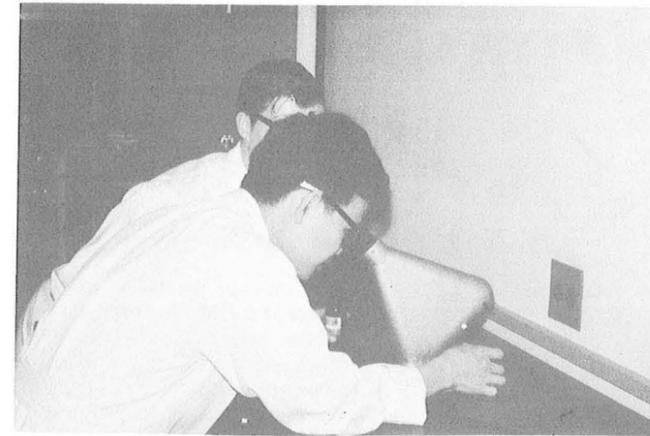
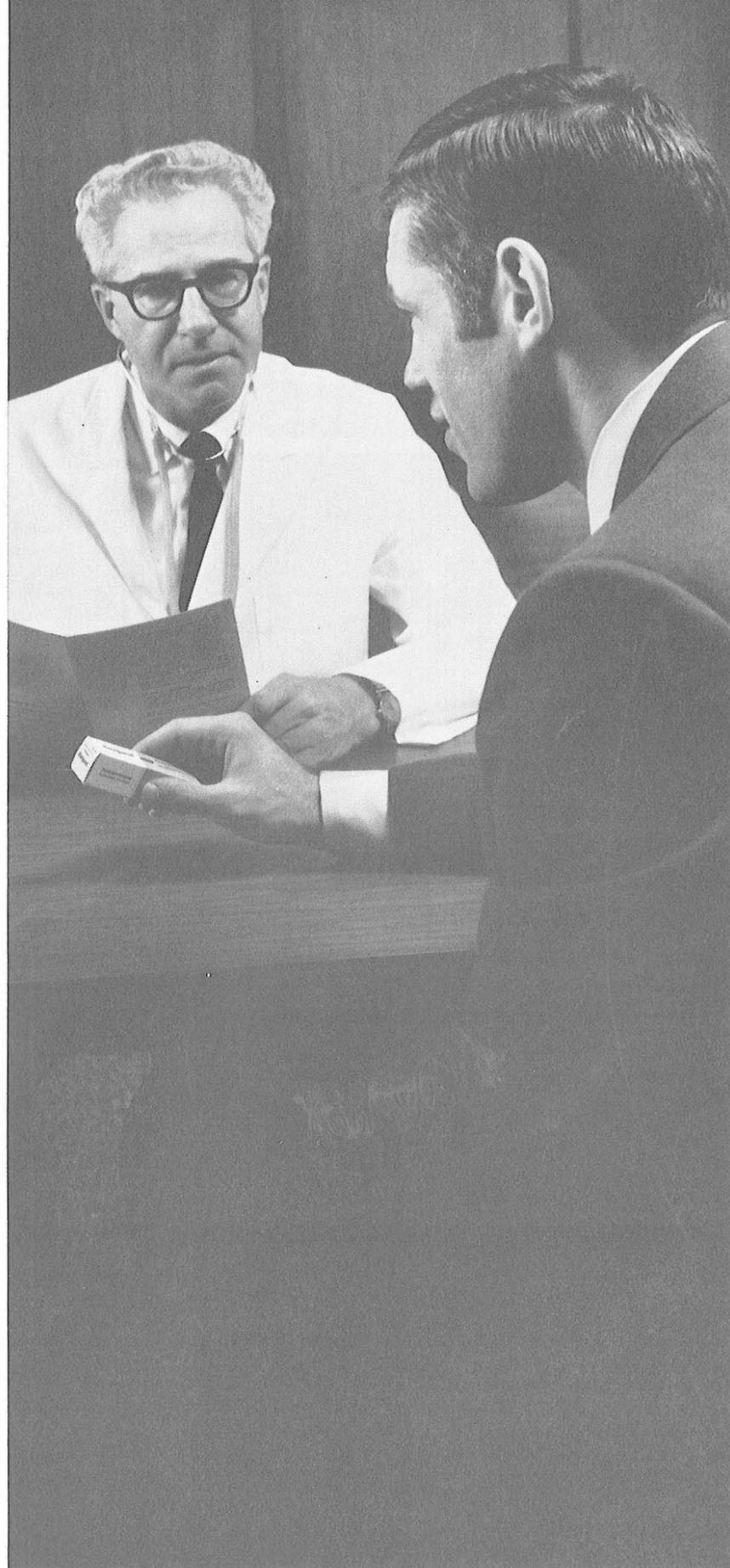
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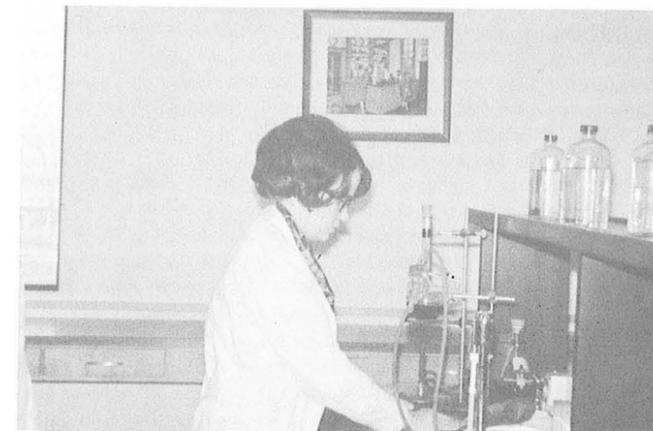
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Education has become increasingly more important in the dynamic and rapidly changing times of the past decade. This institution has had to become flexible and upon occasion change its major directives to produce professionals who are qualified in their chosen fields.

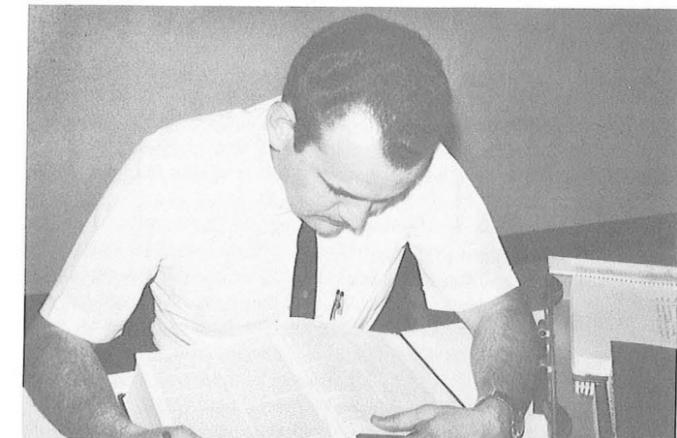
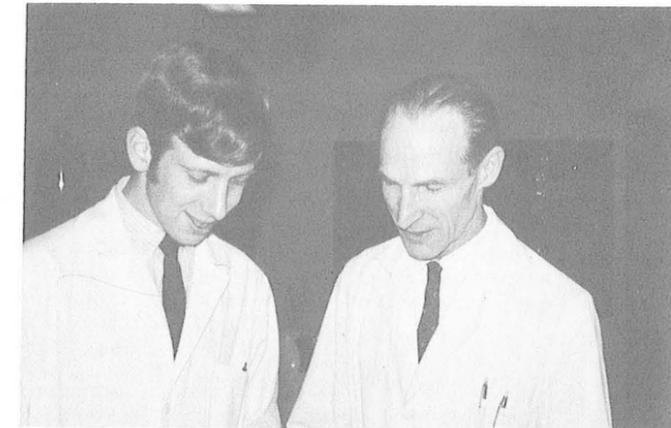
Pharmacy is one such profession. Within its framework, the Pharmacognosy Department has developed new priorities to meet the new demands. In earlier times, Pharmacognosy was concerned with the properties, uses, morphological and systematic aspects of crude animal and vegetable drugs. Now the emphasis has shifted to the chemical and physical aspects with incorporations of the biosynthetic schemes of each individual drug. In addition, the storehouse of natural products has also increased, including drugs from not only animal and vegetable origins, but also bacteria and molds. It can easily be surmised that Dr. Bailey, the head of the Pharmacognosy Department, has had to keep abreast of these changes. He has incorporated these facets into his courses.

Dr. Bailey is a graduate of the University of California where he received his Doctorate in Botany. In 1942 he then began work with Parke-Davis and Company. At Parke-Davis he worked in biologicals. After about five years, he came to Wayne, as first an assistant and then associate professor of pharmacognosy, until 1959 when he assumed a full professorship. From the beginning, he has been teaching and doing research in the field of pharmacognosy. Dr. Bailey has added a great deal to his field, becoming involved with eleven professional organizations such as the American Society of Pharmacognosists, the Michigan Branch of the Society of Microbiologists and the American Association for the Advancement of Science to name a few. In addition, Dr. Bailey's interests include the Michigan Botanical Society and various fraternal organizations. He enthusiastically pursues a knowledge of plants and the practical applications involved in the drugs acquired from them.



Pharmacognosy

GEORGE JACOBS



At the present time, Dr. Bailey's research has centered on the flavonoids contained within plants. Specifically, he is utilizing the plant group *Rutaceae* and the flavonoids within this group in establishing a new approach to plant and drug classifications. The graduate students working with Dr. Bailey, Vincent Matthew and Jose Mookan each have a research problem in addition to assisting Dr. Bailey in his endeavor. Mr. Matthew has isolated a new antibiotic and has found it successful against plate cultures of various mycobacteria and other gram positive organisms. Mr. Matthew, a student from India, hopes to receive his master's degree in Pharmacognosy. Mr. Mookan has been productive in his work isolating and differentiating at least three new alkaloids from various plants. He is also working on his master's thesis. Research in the Department is progressing quite actively.

Dr. Bailey enthusiastically reflected the fine progress in pharmaceutical education made at the College of Pharmacy and predicts a great and rewarding career for its graduates. Once the building is completed, he hopes for additional research grants and additional studies in Pharmacognosy. Dr. Bailey feels that the new environmental problems we are now encountering will initiate intensive studies in this area. These studies will hopefully lead to the development of new natural products and an increasing demand for pharmacognosists.

One of the few places where pharmacy students can blow their bread on a hot deal without paying sales tax is in the pharmacy storeroom managed by the chief man there, Ellis C. Bates. Contrary to popular belief, the stockroom is not a cultural center, but the central supply room housing the drugs, chemicals, and glassware required by all the graduate and undergraduate labs. The chap behind the counter is not faculty or grad student but only everyday Ellis, the student's friend, who can offer a sympathetic smile when the instructor in drug assay won't give a shoulder to cry on after a separatory funnel has borne its last partition coefficient.

A native of Richmond, Virginia, Ellis has been the stockroom attendant since September of 1965. After a four year sojourn in the Air Force, Ellis was persuaded by his sister to move to Detroit, seek employment, and eventually started working for the University. His stay in the Air Force led him to take up the vocation of diesel mechanic and allowed Ellis to travel the United States and has been stationed for a period of time at Thule Air Force Base in Greenland. Ellis admits he was enlightened by the service for he realized an education was essential toward success, so in 1966 he enrolled in U. of M. extension service under the G.I. Bill. Since 1968 Ellis has been an undergraduate student at Wayne, and is pursuing a B.A. degree in economics which he hopes to receive within two years. Eventually, Ellis would also like to obtain his Master's in urban planning and then move farther west, possibly to Denver, where life is a bit more appealing to him. Meanwhile, Ellis is working at the College of Pharmacy to support his wife and son of 10 months, Ellis III.

Pharmacy Stockroom

WILLIAM CORNELIS

One of the first changes Ellis made as stockroom attendant was the institution of Pharmacy breakage cards and script. This allowed the College of Pharmacy to have a separate fund apart from the Chemistry department for the purchase of supplies. A second change will take effect this September when locker registration will be mandatory and will be controlled by the stockroom.

Ellis describes his duties as a general stockroom attendant responsible for supplying equipment and other incidentals necessary for the proper functioning of the laboratories. This also includes taking an inventory during the summer months and preparing an annual order in January. Ellis admits there is no difficulty in keeping the stockroom well supplied but states that fallopian tubes, as once requested by fraternity pledges, is an item not usually carried and are somewhat difficult to obtain from conventional suppliers.

During the past several years Ellis has noted a dramatic change in pharmacy students. "Students were previously more conservative and formal in their manners and dress," he says. "But now students think more freely, express themselves to a greater degree, and dress less conventionally, and to me that's great." Ellis believes he has always experienced great rapport with students and has had delightful experiences with them. Speaking for all students, we too have had a great rapport with Ellis and will always envision him as the fellow in the white lab coat who never missed saying "hello" and who was ever willing to help a student in need or distress.



Distinguished Alumni

Maison Gabriel de Navarre

On March 16, 1970, a visiting speaker to the class in Industrial Pharmacy gave a most interesting series of fundamental concepts in the operation of the industrial facet of cosmetology. This was a delightful presentation of hard-won fact in an area rarely described so generously. Maison Gabriel de Navarre is no stranger to this college, having earned his Ph.C., B.Sc., and M.Sc. all at Wayne. Registration as a pharmacist followed in due course.

But an interest in cosmetics, demonstrated earlier, claimed further attention. De Navarre founded his own consulting laboratory in Detroit, becoming widely known among cosmetologists, and publishing his two volume work of considerable acquaintance among technologists, *The Chemistry and Manufacture of Cosmetics*, along the way.

Industrial opportunity was difficult to resist and it was no great surprise to find him in the presidency of Beauty Counselors, Inc. some years ago. Today he is still president of the firm which is now known as Vanda Beauty Counselor, a division of Dart Industries, Inc.

De Navarre is a member of the principal cosmetic societies of Europe, including those of Denmark, Italy, France, Germany and Great Britain. He is a member of the American Pharmaceutical Association and the American Chemical Society as well as member and past president of the Society of Cosmetic Chemists.

De Navarre has been designated "Fellow" by the American Institute of Chemists and the New York Academy of Sciences.

In 1960 this college honored him with the Alumni Award.

It is a privilege to add this note to the *Pharmic* concerning an outstanding graduate of this college.

Blaze T. Palermo

It is with particular pleasure that I bring news to the *Pharmic* and to this college of the fact that B. T. Palermo has been promoted to Vice President, Pharmacy Research & Development, Miles Laboratories, Inc., Elkhart, Indiana.

I say, "particular pleasure" since Blaze was one of my "boys" when he was Assistant Chief, Research & Development Laboratory, R. P. Scherer Corporation, Detroit, Michigan. His was a most difficult position in that he was responsible for the definitive specifications for the proper production and chemical and physical stabilization of all our finished products. For some eleven years he carried out this assignment with excellence.

After a five year stint as Manager Technical Services, Merck & Co., Rathway, N. J., he became Director, Pharmaceutical Research & Development, Miles Laboratories, Inc., with the responsibility for the development of proprietary products from the original idea through large scale manufacturing, the development of non-topical new drugs through the IND and NDA stages, the improvement of existing products and processes, and of most significant importance, basic research in the science of Pharmacy.

But there are other reasons for my pleasure and certainly for yours. Palermo is a graduate of this college, your college, earning the B.Sc. in Pharmacy. After graduation he spent considerable time in graduate study in the area of biochemistry here at Wayne. With the help of several colleagues he was instrumental in the re-activation of Phi Delta Chi which had been moribund for several years. When a senior at Wayne, he was elected to the Mackenzie Honor Society and thus became the first pharmacy student to receive this honor.

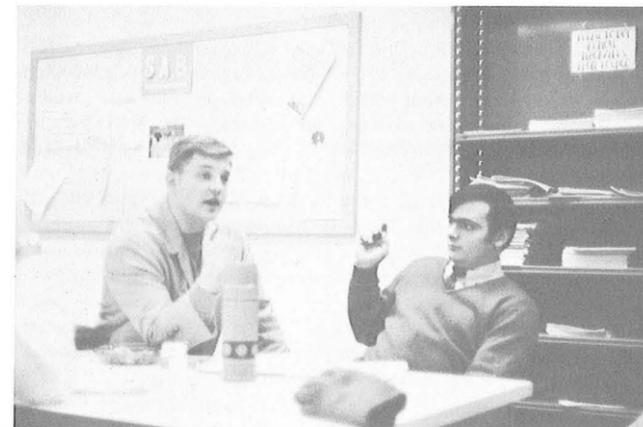
It is my privilege and my honor to salute Blaze T. Palermo, a graduate of Wayne State.

SERECK FOX, D.Sc.

The Wayne Pharmic

Student APhA -- Washington Report

WILLIAM CORNELIS



The American Pharmaceutical Association convened its 117th annual meeting in Washington, D.C. this year with a gathering of about 4,000 pharmacists and 400 students from the entire United States. The College of Pharmacy was exceptionally well represented as a total of eleven students from both the 4th and 5th year attended, in addition to five faculty members including Dean Barr, Professor Dauphinais, Sister Emmanuel, Dr. Moore, and Dr. Wormser. The 5th year students present were Elaine Marshall, James Kuczma, and William Cornelis; while those of the 4th year were Queen Marsh, Julianne Dudzinski, Christine Thomas, Walter Palmer, Paul Desmet, Mike Francis, Al Bommarito, and Ed Peszko.

The student section of A.Ph.A. met the weekend prior to the assembly of the parent organization to decide such matters as election of new student officers, resolutions, and new roles student A.Ph.A. must assume. The general sessions were mainly reserved to the student delegates who represented their individual colleges of pharmacy, but intermittent discussion from the floor was encouraged and often the debate became quite heated during these periods. The majority of business was completed in numerous committees where participation of all students was requested. In reflection, it seems a miracle that anything at all was accomplished in these reference committees and workshops because of the ever present verbosity and parliamentary procedure; however, some very meaningful resolutions were made. These resolutions were to be presented before the parent A.Ph.A. for consideration and included statements such as the recruitment of pharmacy students from minority groups, the role of pharmacy students in Appalachia working to combat poverty, the establishment of a coalition of students in health and social professions, and a statement which was the highlight of the student convention — an opposition to antisubstitution laws. The student chapter also discussed means of increasing student membership in the professional association and methods which could be employed to combat student apathy; problems not unique to Wayne but common to all pharmacy schools. Our College of Pharmacy was instrumental in the sale of buttons proclaiming student A.Ph.A. as the "new breed of pharmacy power." These buttons were quite popular at the convention and at least showed other delegations that some people were concerned about student indifference. A point which was distinctly clarified was that student A.Ph.A. is an entity separate from the A.Ph.A. and should not be considered the little brother to the large A.Ph.A.; the student A.Ph.A.

The Wayne Pharmic

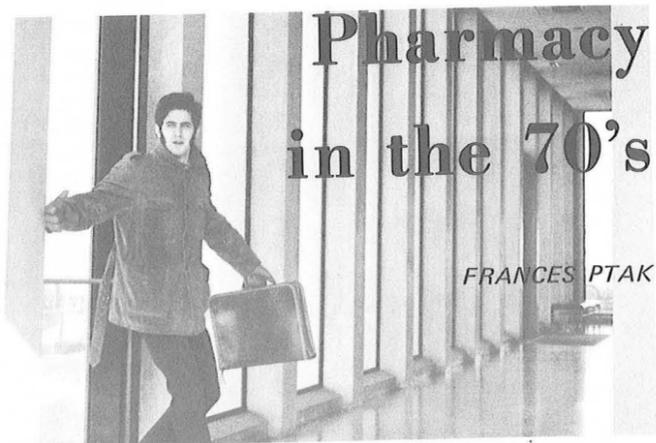
is, therefore, referred to as the National Professional Association of Pharmacy Students.

After an initial, demanding day of conventioning, the host chapter, Howard University (an all black campus), provided a social mixer in the evening replete with soul band. While we students jammed to the popcorn and funky chicken, there was a chance to have some discourse with other students. It was quite surprising to learn that WSU College of Pharmacy has quite a reputation among other students and is considered one of the higher echelon schools in the nation. The presence at Wayne of a clinical pharmacy course, curriculum revision committee consisting of students and faculty, and a progressive Pharm.D. program led the list of questions other students had about Wayne. It was certainly an experience to have some interaction with students from other schools for it provided a chance to hear the situations at other schools, and to listen to critiques from other students with regard to course work in pharmacy.

In addition to providing an opportunity to meet new people, the A.Ph.A. convention also permitted the viewing of numerous displays by pharmaceutical manufacturers. New systems of drug distribution, patient profiles, medical electronics, reference texts, and pharmaceutical literature were also exhibited. The presence of the Phillips Roxane hospitality suite with free "refreshments" was a congregation point for all pharmacists (even those not thirsty) and did provide students with a favorable occasion to converse with A.S.H.P. members, N.A.B.P. members, and other pharmacy practitioners. In retrospect, the convention provided students with an insight as to what pharmacy is like the nation over, and gave the students who participated an additional incentive to do something for their profession. Pharmacy today is practiced in a microcosm, on an isolated basis with minimal communication between practitioners. This communication gap is often the cause of controversy when a new role for pharmacy is suggested. It is quite apparent that students can interact with each other more freely and be more receptive to changes. Hopefully this ability to communicate acquired as a student would continue on into later life and benefit the profession. This is why I feel students are depriving themselves of a unique opportunity by not attending a student A.Ph.A. convention. With this year's convention an event of the past, there is the convention next year in San Francisco and I would urge any student with the least bit of interest to attend and enjoy what the students at this year's convention enjoyed, not as practitioners but as students.



Page 19



As time moves on into a new decade, the profession of pharmacy is given an invitation as well as a challenge to improve its pharmaceutical services. With the opening remarks given by Dean Barr, the Seventeenth Annual Steven Wilson Seminar convened on February 24, 1970 in Room 100 Shapero Hall. Merrill E. Gowman, R.Ph., served as General Chairman for the meeting, while Lynn H. Cook, R.Ph., President, Michigan State Pharmaceutical Association; Carl Maness, R.Ph., President of the Pharmacy Alumni Association; and Joseph Wolf, R.Ph., President of the Metropolitan Detroit Pharmaceutical Association, presided at the various sessions.

"Government's Influence on Pharmacy Services" was presented by Allen J. Brands, R.Ph. Pharmaceutical services are not only affected by public policies and legislative action but by Task Force reports, grants, and health service projects. Legislative regulation is needed to protect the public.

At the present time, the nation is faced with a breakdown of health care provisions unless government aid becomes available. Cooperation must exist between the government and the public. The promotion and the assurance that the highest level of health care is obtainable for every person should be a national goal.

Besides government intervention, it becomes essential that education must keep abreast of scientific as well as social changes. Thus, motivation, commitment, and conviction are needed for the renewal of pharmacy.

Robert C. Johnson, M.S., R.Ph., questioned whether or not the demand for a new role will be met by pharmacists. Because pharmacists should not be content with the status quo, they must prepare for a change. It is important to recognize and to accept the fact that the corner drugstore is disappearing from the scene. The question arises, "What will replace the drugstore?"

Medicaid does not meet all the needs of the citizen. Within five to seven years, seventy-five percent of the prescriptions filled will be paid by a third party.

Change is inevitable. Pharmacists, in their future role, may be called upon to consult with the patient on the effects of a drug, may have to establish a drug regimen, evaluate drug effectiveness, and note any side effects. The pharmacist will become a drug specialist. He will no longer be product-oriented but patient-oriented.

In order to meet the above situation, the curriculum must change from the traditional to the contemporary. We must update and upgrade the college of pharmacy as well as the internship program. A practical education must be made an integral part of the curriculum. Lack of direction must be overcome. The 70's can only become more demanding and frustrating.

The last speaker before the luncheon was Lawrence Weaver, Ph.D., R.Ph. "Achieving a Humanistic Approach in Providing Pharmaceutical Services" was the title of his presentation. Dr. Weaver feels that success will come only if we recognize that education has a major role in the future of pharmacy. The role of the teacher must be revised. The professor must be a synthesizer not a fact-builder. It is his responsibility not to duplicate textbooks in the classroom but it is his duty to make

students aware of problems of everyday life. This can be effectively achieved by exposing patients' frustrations and by revealing his own personal experiences.

A new role for the educator has been modeled. It will be his duty to give the student a sense of pharmacy's place in the center of things. It will employ integrated teaching. However, the student must become responsible for the type of education he receives. "To be fond of learning is to be at the gate of knowledge."

A luncheon followed the morning session at the McGregor Memorial Conference Center. After the luncheon, William H. Hennessy, R.Ph., spoke of "Students - Their Impact on the Future of Pharmacy."

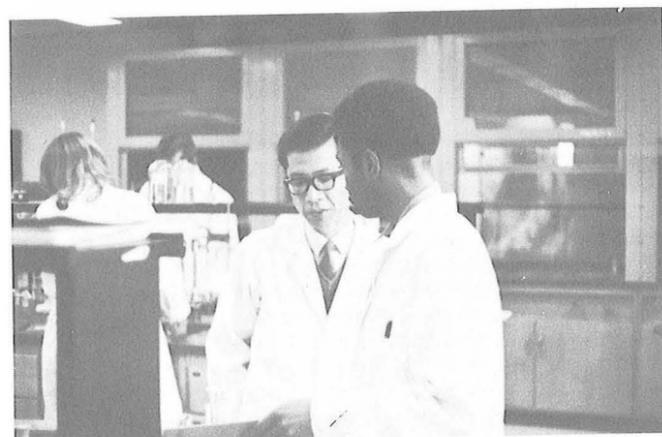
"Pharmacy Technicians - Are They Professionally Necessary?" was the topic of the afternoon session.

The first speaker was Rupert Salisbury. Would the health safety factor be jeopardized by the use of sub-professionals was a problem posed to the audience. What will the technician do is the controversial issue. Because some pharmacists are not up-dated, they themselves are performing the duties of a technician. The role that will be assigned to a technician is a professional consideration. The pharmacist must recognize that his frustration results from a lack of contact with individual patients and that he must avoid turning over his duties to sub-professionals to have more free time. His position as a professional must not be turned over to sub-professional until an absolute need exists.

A brief review of the progress made by the pharmaceutical profession served as opening remarks for Mr. Carlin's address. However, Mr. Carlin, M.Sc., R.Ph., impressed upon us that, in the hospital, more pharmacy is practiced in the nursing unit than in the pharmacy itself. In addition, we have looked at individuals as horizontal patients for too long. The nursing unit is where the action is. In order to remedy this situation. Mr. Carlin suggests that we simplify paperwork, use only essential facts, purchase as many items as possible in ready-made form, buy drugs in most frequently used dosage forms, and use mechanical devices for data processing. Technicians are becoming professionally necessary for hospital pharmacies. If they will not be properly trained and available, both the pharmacist and the public will suffer.

The last speaker was Nicholas Avellone, R.Ph., "A Community Pharmacist Should Enjoy Doing His Thing." Mr. Avellone discussed patient profiles, geographic distribution of pharmacies, the need for checks because of human nature, and the role to be performed by technicians.

In conclusion, pharmacy should look upon its mistakes as lessons of wisdom. The mistakes that were made yesterday are responsible for our worries today. The purpose of pharmacy must be re-evaluated to give the profession new meaning. Our progress will be marked by what we do for ourselves. And, as a final ingredient, the pharmacist as a man must recognize the fact that he cannot learn truths which are too complicated nor forget truths which are too simple. Pharmacy will not be able to face the 70's until the pharmacist takes a good look at himself and decides what he will do to face the 70's.



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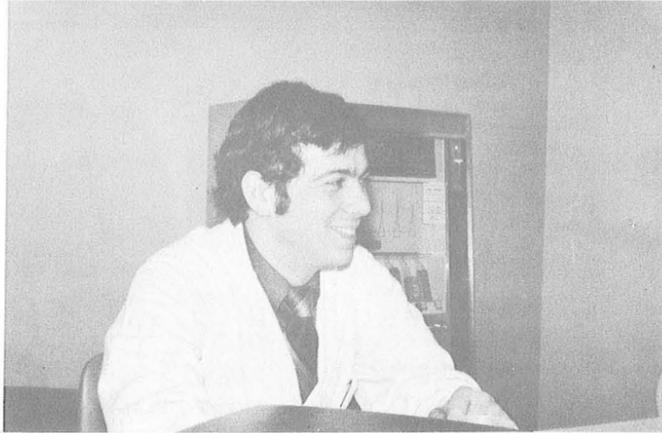
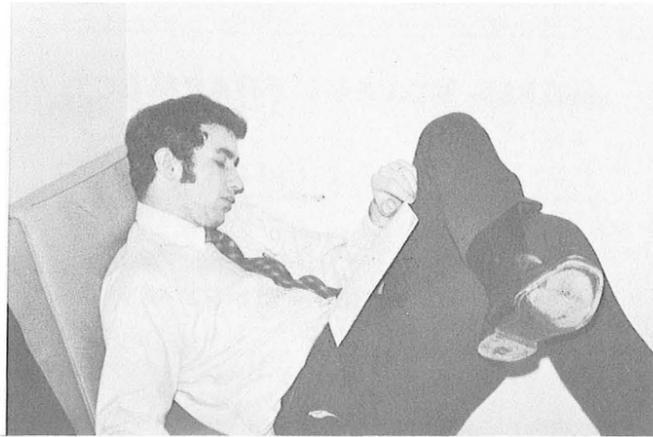
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The Pharmacy Alumni Association will present three distinguished pharmacists who have made outstanding contributions to the profession with awards in three award classifications at the annual pharmacy dinner dance scheduled for Saturday, June 6, 1970, at the Carousel.

Nominated to receive the "Meritorious Award for Significant Contribution to Pharmacy" is William L. Blockstein, Ph.D., Chairman, Health Science Unit, of University Extension, and Professor of Pharmacy, the University of Wisconsin.

The "Pharmacy Award for Distinguished Service in Pharmacy" will be presented to Delbert D. Konnor, M.S., assistant to the Executive Secretary of the National Association of Retail Druggists.

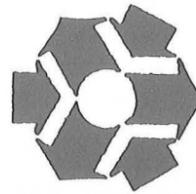
Eugene L. Dembicki, B.S., Chief of Pharmacy Service at the Lafayette Clinic, is the nominee for the "Pharmacy Service Award for Distinguished Service to the Alumni Association."



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