1. Department roster

a. Academic Staff

A. M. Thompson, Ph.D., Professor and Acting Chairman (and Associate Dean for Graduate Studies)
E. B. Brown, Jr., Ph.D., Professor (and Dean for Faculties and Academic Affairs)
D. C. Johnson, Ph.D., Professor (Joint appt. Ob-Gyn)
F. E. Samson, Ph.D., Professor (and Director of Ralph Smith Center for Mental Retardation Research)
L. P. Sullivan, Ph.D., Professor
R. L. Clancy, Ph.D., Associate Professor
G. N. Loofooburrow, Ph.D., Associate Professor
J. B. Rhodes, M.D., Associate Professor (Joint appt. Medicine)
C. M. Tarr, Ph.D., Associate Professor
J. W. Trank, Ph.D., Associate Professor
N. C. Gonzalez, M.D., Assistant Professor
P. A. Hensleigh, M.D., Ph.D., Assistant Professor (Joint appt. Ob-Gyn)
A. S. Hermreck, M.D., Ph.D., Assistant Professor (Joint appt. Surgery)
W. K. Legler, Ph.D., Assistant Professor
J. D. Wood, Ph.D., Assistant Professor
D. D. Bloxham, Ph.D., Lecturer
K. L. Goetz, M.D., Ph.D., Lecturer

b. Postdoctoral Fellows

J. A. Bettice, Ph.D., Johns Hopkins University
R. S. Mallampati, D.V.M., Ph.D. (left 10/73 to Univ. of Guelph, Canada)
H. C. Cheng, Ph.D. (left 12/73 to Univ. of Cincinnati)
T. Sashida, M.D., from Ford Foundation

C. Graduate Students

<table>
<thead>
<tr>
<th>Name</th>
<th>Prelims</th>
<th>Candidate For</th>
<th>Degree Granted</th>
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<tbody>
<tr>
<td>Lynn R. Brann (entered 8/73)</td>
<td></td>
<td></td>
<td>Ph.D.</td>
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<tr>
<td>Min-Chu Lee Chen (withdrew 2/28/74)</td>
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<td>Ph.D.</td>
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<tr>
<td>Kenneth L. Crawford (entered 8/73)</td>
<td>Special B - non-candidate</td>
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<tr>
<td>Donald G. Deeds</td>
<td>5/3/73</td>
<td></td>
<td>Ph.D.</td>
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<tr>
<td>Richard A. Fenton (entered 8/73)</td>
<td></td>
<td></td>
<td>Ph.D.</td>
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<tr>
<td>H. Edward Grotjan</td>
<td>7/19/73</td>
<td></td>
<td>Ph.D.</td>
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<tr>
<td>Lyman L. Lauver</td>
<td>Special A - non-candidate</td>
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<tr>
<td>Carl V. Migliazzio (entered 8/73 and withdrew 6/30)</td>
<td></td>
<td></td>
<td>Ph.D.</td>
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<tr>
<td>Michael E. Miner, M.D.</td>
<td>4/26/73</td>
<td></td>
<td>Ph.D. (on leave to V.A.)</td>
</tr>
<tr>
<td>Kyra M. Riegle</td>
<td>8/9/71</td>
<td></td>
<td>Ph.D.</td>
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<tr>
<td>Noel W. Stoutenburg (entered 6/74)</td>
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<td>Ph.D.</td>
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<tr>
<td>David R. Strome</td>
<td></td>
<td></td>
<td>Ph.D.</td>
</tr>
<tr>
<td>Bin-Ching Wang</td>
<td>3/28/74</td>
<td></td>
<td>Ph.D.</td>
</tr>
</tbody>
</table>
Notes concerning graduate students:

H. Edward Grotjan was elected to "Who's Who Among Students in American Universities and Colleges".

At Graduate Student Research Day, three of our students presented papers, two of which won awards. Lynn Brann presented a paper on "Relationship between Organ Weight and Body Weight in Mice with Hereditary Megacolon and Absence of Enteric Ganglion Cells". Don Deed's paper was "Renal K Transport in the Bullfrog: Effect of Acetazolamide and Ouabain". (Award of $50) Ed Grotjan's paper was "Some Gonadotropins and Testosterone in Immature Male Rats after Injection of Synthetic Luteinizing Hormone Releasing Hormone". (Award of $75)

d. Kaw Valley Heart Association Students (Summer of 1974)

Mary Whalen - Dr. Clancy
Lileah Harris - Dr. Gonzalez
Paul Neis - Dr. Hermreck
Virginia Rice - Dr. Johnson

2. COURSES TAUGHT

388 - Human Physiology, undergraduate physiology course, presently for physical therapists. Taught by Drs. Loofbourrow, Sullivan and Woods in Fall, and by Dr. Legler in Spring. Enrollments 23 and 22.

800 - (770 & 771 in Graduate School) - Medical Physiology. All medical students plus 10 graduate students.

801 - (779 in Graduate School) - Endocrinology. All medical students plus 3 graduate students.

818 - Gastroenterology. 2 hours (SE) Drs. Rhodes and Wood. Enrollment 4


825 - Biology of Sex. 2 hours (FO) Dr. Johnson. Enrollment 7 plus 2 visitors.

830 - Cardiovascular Physiology. 3 hours (FO) Drs. Clancy, Trank, Tarr and Gonzalez. Enrollment 5

3. ACTIVITIES OF STAFF (Grants and papers are shown in a later section)

Alan M. Thompson, Ph.D., Professor and Acting Chairman

KU Assignments

Associate Dean for Graduate Studies - in charge of graduate affairs at the Medical Center.

In charge of Biological Science Lecture Series and Area College Basic Science Seminars.
Member of Central Administrative Planning Committee for the new building programs with specific subcommittee responsibility for the new Basic Science Building.

Member of Faculty Promotion Committee.

November 5-7, 1973 - Attended meetings of the Association of Chairmen of Departments of Physiology and the Association of American Medical Colleges in Washington, D.C.

November 14, 1973 - Gave several presentations to Center High School students on careers in the health professions.


March, 1974 - Participated in postdoctoral selection panels for the National Research Council and NASA in Washington, D.C.

March 13, 1974 - Gave seminar at Lincoln University in Jefferson City on "The Blood Brain Barrier". Also did some career counselling there.

June 27-28, 1974 - Was on Panel Selection Committee for NASA Associates in Washington, D.C.

Helped organize a Kansas City Chapter of the Society for Neuroscience, and was elected Treasurer.

Gave presentations to a few groups of visiting high school students.

Reviewed papers for "Science".

Richard L. Clancy, Ph.D., Associate Professor


April, 1974 - Gave a lecture for the Biology Department of Bethany College at Lindsborg, Kansas.

Reviewed papers for the Kansas Heart Association and the Kaw Valley Heart Association.

Gave a presentation to groups of visiting high school students.

Was graduate advisor for Kyra Riegle.

Norberto C. Gonzalez, M.D., Assistant Professor

March 6, 1974 - Gave a seminar at the Division of Experimental Medicine, St. Luke's Hospital.

Directed research efforts of David Strome, Graduate Student.
Paul A. Hensleigh, M.D., Ph.D., Assistant Professor

October, 1973 - Was moderator and discussant of papers at meeting of District VII Junior Fellows American College of Obstetrics and Gynecology, and was a member of a panel on Recent Advances in Perinatology at a meeting of the Nurses Association of the American College of Obstetrics and Gynecology in New Orleans.

March, 1974 - Attended meeting of Society for Gynecologic Investigations in Los Angeles.

January, 1974 - Spoke on "Male Contraception" to the Kansas City Gynecological Society.

At the Postgraduate Symposium on Obstetrics and Gynecology in Rio de Janeiro lectured on "Reproductive Endocrine Changes of Pregnancy", "The Laboratory and High Risk Pregnancy", "Male Contraceptives", "Abnormal Corpus Luteum Function", and served as a program moderator and a panel participant.

February, 1974 - At UAF Grandrounds lectured on "Normal Intrauterine Growth and Development".

Served on: Clinical Systems Advisory Committee
Utilization Review Committee, October 1973 - March 1974
Human Experimentation Committee
Nursing School Dean Search Committee
Ralph Smith HRRC Committee

Arlo S. Hermreck, M.D., Ph.D., Assistant Professor

A. Invited Lectureships:


KUMC Department of Surgery Postgraduate Course, Mexico City, Mexico, February 17-24, 1974.

Emergency Medicine Seminar, Menorah Medical Center, Kansas City, Missouri, February 28, 1974.

Menorah Medical Center, Kansas City, Missouri, March 5, 1974.

West Central Missouri Medical Society, Harrisonville, Missouri, March 7, 1974.


Seminar, St. Luke's Hospital, Kansas City, Missouri, March 20, 1974.

The Association for Critical Care Nurses, St. Luke's Hospital, Kansas City, Missouri, April 2, 1974.
Symposium on Organ Harvesting and Perfusion, Crown Center Hotel, Kansas City, Missouri, April 26, 1974.

Critical Care Core Program, Kansas City, Kansas May 20, 1974.

Clinical Education Center, Chattanooga, Tennessee, May 22, 1974.

B. Participation in National and International Meetings:


Southwestern Surgical Congress, Monterey, California, April 29-May 2, 1974.

C. Other National Meetings Attended:


D. New Appointments to Societies:

Southwestern Surgical Congress, Vice Councillor for the State of Kansas, 1974.

Donald C. Johnson, Ph.D., Professor

June, 1973 - Attended and presented a research report at the 9th Acta Endocrinology Congress in Oslo, Norway.

June, 1973 - Presented paper at the meeting of the Endocrine Society, Chicago (presented by R. S. Hallamapi).

August, 1973 - Attended meeting of Society for Reproductive Biology, Athens, Georgia. Presentation of paper (by H. C. Cheng).

April, 1974 - Attended Federation meetings at Atlantic City, New Jersey, and presented paper.

Reviewed papers for "Science", "Life Sciences", and "Endocrinology".

Graduate advisor for H. Edward Grotjan, Ph.D. candidate.

Warren K. Legler, Ph.D., Assistant Professor

Taught Computer Programming to inmates of the federal penitentiary at Leavenworth as a part of the Continuing Education program of the University of Kansas.

April 2, 1974 - Gave a seminar, "Computerized Acquisition, Processing and Display of Medical Radioisotope Images", for the Chemical Physics Trilevel Computer Network of the University of Kansas.

Dr. Legler began his appointment to this department on October 1, 1973, transferring from the Department of Biometry. Dr. Legler received his B.S. degree in Physics in 1952 from the University of Kansas, his M.S. degree in Aero-Engineering from the Massachusetts Institute of Technology in 1960, and his Ph.D. degree in Bioengineering from the University of Kansas in 1969.
G. N. Loofbourrow, Ph.D., Associate Professor

January 6-10, 1974 - Attended a workshop on television in the medical environment at the National Medical Audiovisual Center in Atlanta, Georgia.

Department duties:

**Librarian.** Book and subscription orders; preparation of journals for bindery; correspondence and follow-up on orders to State Printer for binding; overseeing arrangement of books, etc.

**Teaching aids.** Arranging for previews of films, slides, tapes; coordination of department efforts for machine teaching, programmed teaching; selection and ordering of visual aid hardware and software; preparation of videotapes.

**Graduate Committee Chairman.** Correspondence and interviews with students inquiring about graduate work and with those applying for admission to the Graduate School. Revision of material for Peterson's Guide and correspondence with publisher.

Chairman of Temporary Committees and guidance of all new graduate students who have not yet selected an area of concentration; appointment of two members to serve on the temporary committee for each new student.

**Graduate Courses.** Getting information from staff members about the courses they will offer, preparing announcements of them and distributing them to department chairmen and administrative officers prior to enrollment time. This includes getting a statement as to days and hours offered, and places.

**Liaison with Department of Learning Resources;** mailing copies of handouts, examinations, exam scores, etc. Conferring as required.

**Preparation of Evaluation Form** for students to use in evaluating the medical course and the staff.

**Old Exam File.** Preparation of up-dated file for Clendening Library and arranging for its placement.

**Conference Folders.** Overseeing the preparation of these, and placing copies in Clendening Library and our office.

**Office Details.** Signing time sheets, change-of-status personnel forms, non-academic appointment and change of appointment forms, purchase orders, routine work orders, pharmacy requisitions, travel requests and vouchers, etc.

Fulfilling duties of Department Chairman when Acting Chairman is unavailable.

Serving as Departmental Representative on Graduate Committee.

Departmental Representative for Affirmative Action.

Arranging tours for visiting groups from high schools and colleges.
Medical Center Service:

Serves on Basic Science Internal Planning Subcommittee for new Basic Science Building.

James B. Rhodes, M.D., Associate Professor

March, 1974 - Attended the Thomas Gastrointestinal Symposium for three days.

April, 1974 - Attended the F.A.S.E.B. meetings in Atlantic City, New Jersey.

May, 1974 - Presented a paper on "Peptide Hydrolysis by Tissue Fractions in Hamster Intestinal Tissue Fractions" before the Midwest Gut Club.

June, 1974 - Attended the American Gastroenterological Association meetings in San Francisco, California.

Frederick E. Samson, Ph.D., Professor

March, 1974 - Attended a meeting of the Society for Neuro-Chemistry in New Orleans and participated in a Round Table discussion on the "Structure and Function of Central Nervous System Proteins".

April 27, 1974 - Was the lecturer for the annual Sigma Xi banquet at the University of Arkansas. Topic was "Research on Brain Function".

Dr. Samson is the Director of the Ralph Smith Center for Mental Retardation Research and Professor of Physiology and KUMC. This change from the Department of Physiology and Cell Biology at Lawrence became effective August 1, 1973.

Lawrence P. Sullivan, Ph.D., Professor

November 19-20, 1974 - Attended meetings of the American Society of Nephrology in Washington, D.C.

April 7-12, 1974 - Attended the meetings of the American Societies for Experimental Biology in Atlantic City.

May 9, 1974 - Visited the Department of Physiology at Yale University and conferred on research projects with Drs. G. Giebisch and G. Whittembury.

February 20, 1974 - Lectured at St. Luke's Hospital.

Member of Medical Advisory Board and the Greater Kansas and Western Missouri Kidney Foundation.


Directed research of Donald Deeds, Graduate Student.
C. Merrill Tarr, Ph.D., Associate Professor

December 5-6, 1973 - Went to Duke University with site visit team from NIH.

April 7-12, 1974 - Attended the meetings of the Federation of American Societies for Experimental Biology in Atlantic City, and presented a research report at this meeting.

Department representative to Education Committee.

Member of the Search Committee for the new Department Chairman of Physiology.

Was advisor to Graduate Student Min-Chu Chen.

John W. Trank, Ph.D., Associate Professor

February 25-27, 1974 - Visited Orange County Community College, Golden State College, and the University of Southern California at Los Angeles to evaluate TV systems for possible use in the new Basic Science teaching facility at KUMC.

March, 1974 - Attended the Great Plains Regional Review of the American Heart Association in Minneapolis.

April 7-14, 1974 - Attending the meetings of the Federation of American Societies for Experimental Biology in Atlantic City, New Jersey.

May 16, 1974 - Was guest speaker at the annual banquet of the Western Chapter of the Missouri Society of Professional Engineers. Topic was "Bioengineering of an Artificial Heart".

Supervisor of the Electronic Shop of the Department of Physiology.

J. D. Wood, Ph.D., Assistant Professor

Attended the Fourth International Symposium on Gastro-Intestinal Motility in Banff, Canada, and gave two lectures.

Visited and presented lectures on nervous control of gastro-intestinal motility for faculty and students of the Physiological Institute, University of Munich, West Germany and the Physiological Institute, Bulgarian Academy of Sciences, Sophia, Bulgaria. Subjects: 1) Electrical Discharge Patterns of Enteric Neurons of the Small Intestine of the Cat, Dog and Guinea Pig; 2) Hereditary Megacolon in the Mouse Model for Hirschsprung's Disease.

September 26, 1973 - Talked on gastrointestinal motility and Hirschsprung's disease at St. Luke's Hospital, Kansas City, Missouri.

December 26-28, 1973 - Participated in a symposium on simple nervous systems at meetings of the American Society of Zoologists in Houston; lectured on "Neuro-physiology of the Enteric Nervous System".
April 7-12, 1974 - Attended meetings of the Federation of American Societies for Experimental Biology in Atlantic City, was chairman of one session of the meetings and gave a lecture.

May, 1974 - Visited and gave a seminar at the Shell Oil Company's research laboratories in Modesto, California.

May, 1974 - Attended Digestive Diseases Week in San Francisco.

June, 1974 - Was awarded a Research Career Development Award from the Department of Health, Education and Welfare.

Advisor to Lynn Brann, Graduate Student.

E. B. Brown, Jr., Ph.D., Professor of Physiology and Dean for Faculties and Academic Affairs

July 9, 1973 - Attended meeting of the Finance Committee of the American Physiological Society, of which Dr. Brown is Chairman, in Washington, D.C.

July 22-24, 1973 - Attended conference on Independent study in the Medical Basic Sciences at Ohio State University.

August 11, 1973 - Attended the 19th annual meeting of the Rhinologic Society in Kansas City, Mo. and spoke on "Respiratory Physiology - Resistance to Air Flow of Upper and Lower Airways".


October 8-9, 1973 - Attended Fall meeting of Midwest-Great Plains Region of AAMC, Chicago, Illinois.

November 4-8, 1973 - Attended 84th annual meeting of AAMC (Council of Deans) and meeting of Association of Chairmen of Departments of Physiology, Washington, D.C.

December 8, 1973 & May 11, 1974 - Attended meetings of the Board of Directors of the Kansas Heart Association at Topeka, Kansas. Dr. Brown is vice president of the Association.

February 16, 1974 - Attended a joint meeting of the Executive Committee of the Kansas Heart Association and the Kaw Valley Heart Association in Topeka.

February 19-20, 1974 - Attended a meeting of the Finance Committee of the APS at Bethesda, Maryland.
April 5-12, 1974 - Attended meetings of the Council of the American Physiological Society, Atlantic City, New Jersey (FASEB).


May 21-25, 1974 - Participated in the Educational Planning Retreat of the Department of Anesthesiology, University of Kansas Medical Center, at Biloxi, Miss.

June 12-14, 1974 - Attended an Administrators meeting at the Lodge of the Four Seasons, Lake of the Ozarks, Missouri.

Directed the work in the Physiology laboratory of Graduate Student Bin-Ching Wang and Post-doctoral Fellow, John Bettice, Ph.D.

Kenneth L. Goetz, M.D., Ph.D. and Don D. Bloxham, Ph.D., Lecturers

November 8-11, 1973 - Attended the annual meeting of the American Heart Association in Atlantic City.

They donated their time to the department, in addition to fulfilling the duties of their work in the Department of Experimental Medicine at St. Luke's Hospital in Kansas City, Missouri.
4. Research Grants Active During the Year:

NIH HL 12231  10/1/71-9/30/74  - $60,125  - "Intracellular Response to Acid-Base Changes"  - Dr. E. B. Brown, Jr.  $21,170 for year.

Kansas Heart Assn. KR 73 9  7/1/73-6/30/74  - "pH Adjustment of Cardiac Tissue during Hypercapnia"  - Dr. E. B. Brown, Jr.  $8,000 for year.

Kansas Heart Assn. KR 72 2  7/1/72-6/30/74  - "Metabolic $H^+$ changes, $H^+$ flux and Cardiac Performance"  - Dr. N. C. Gonzalez.  $7,950 for year.

NIH PHS 574 185  9/1/73-8/31/76  - $81,752  - "Pulmonary Circulation and Gas Exchange"  - Dr. N. C. Gonzalez.  $44,621, first year.

Kansas Heart Assn. KR 73 8  7/1/73-6/30/74  - "Action Potential Duration and Tension Versus Heart Rate"  - Dr. C. N. Tarr.  $8,000.

NIH AM 15883  1/1/72-12/31/74  - $64,822  - "Effect of Acid-Base Changes on Renal K Transport"  - Dr. L. P. Sullivan.  $26,670 for year.

HL 12426  2/1/72-1/31/76  - $78,200  - "Voltage Clamp of Cardiac Muscle"  - Dr. C. M. Tarr.  $11,353 for year.

NSF GB-31292  10/15/71-9/30/75  - "Function of the Enteric Nervous System"  - Dr. J. D. Wood.  $27,000 for year.

NIH AM 16813  4/1/74-3/31/77  - "Congenital Megacolon"  - Dr. J. D. Wood.  $25,305 for year.

NIH AM 70726  6/1/74-5/31/75  - "Function of Enteric Neurons"  - Dr. J. D. Wood.  $21,000 for year.

Population Council, Inc.  "Gonadotropin patterns in male and female rats"  - Dr. D. C. Johnson - $20,000/year.

Co-investigator on training grants from the Ford Foundation and NIH (Ob-Gyn Dept.) HEW Multicategorical Training.

National Heart and Lung Institute.  $78,174  - "The Study of Acute Renal Failure"  - Dr. A. S. Hermreck.  $31576/year.

Smith Kline and French Laboratories.  $4,000  - "The Clinical Efficacy of Cefazolin in Adult Surgical Infections"  - Dr. A. S. Hermreck.  $4,000/year.

KUHC Institutional Research Grant.  $3,000  - "Studies in Acute Renal Failure"  - Dr. A. S. Hermreck.  $3,000/year.
5. Publications:


REVIEW OF THE YEAR AND COMMENTS BY THE ACTING CHAIRMAN

With the official transfer of Dr. E. B. Brown, Jr. to the position of Dean for Faculties and Academic Affairs on August 1 of last year, an important era in the history of the Physiology Department ended. The Department expressed their respect and appreciation of Dr. Brown's twelve years of leadership by placing a bronze plaque on the departmental library door identifying the room as the E. B. Brown, Jr. Library of Physiology. These twelve years were a period of growth in numbers which will certainly not be equalled again in the coming decade, combined with development of a reputation for better-than-average teaching, of a small, but stable, and good graduate program, and of several very good research programs.

Although teaching should, and will, continue to be the primary purpose of this department, it is to be hoped that the second decade will also see a continued increase and maturation of the scientific research abilities of the department. This statement is not meant to place teaching and research in opposing roles but to emphasize that each can and should reinforce the other with the size staff we now have, and with the expansion we anticipate. More vigorous research programs, more reliable and flexible sources of financial support, and more graduate and medical students of high quality interested in research will create an environment which will help, not hinder, the quality of our teaching and the enthusiasm of the staff. It is important that the people of the state be helped to understand this, and faculty members should probably do more than they have in this public relations effort. It is my personal opinion that we should reconsider the distribution of our teaching time in terms of less time spent on didactic graduate courses and more in clinical settings.
During the past year, departmental activities have continued with relatively few changes. As indicated in the Appendix, a number of interesting speakers and visitors have come to the department. A new undergraduate physiology course, taught both in the Fall and Spring semesters, was initiated and appears to be highly successful. This is being run at present for Physical Therapy students, but it is designed to fit the needs of a number of other undergraduate groups. The Medical Physiology course this year continued the policy introduced last year of optional laboratories. In general, the faculty felt it worked out quite well and the students like it. Interestingly, although laboratory attendance fell off somewhat during the course in 1972-73, it started off high again in 1973-74. It might be added that full laboratory attendance, with the present available space, would be impossible to handle. An innovation in the course this year was an honors program for students who were interested or who intended to try for a superior rating. This included seminars, extra examination questions, a small laboratory project, and a term paper. Student comments varied, most criticisms being of the fact that participation was required for a superior rating. The purpose of the faculty was to have more contact with, and give more attention to, the better students in the class.

In addition to the courses above, the department continued its graduate courses, gave lectures to medics here and at St. Luke's hospital, and did some supplementary teaching of minority students. In May this was done by the senior staff with two students on split load and in June a senior graduate student ran a full-scale course emphasizing cardiovascular physiology.

Perhaps the most exciting, and prospectively helpful, thing to happen this year was the announcement that Physiology is to share in the interest from the bequest of Dr. Fletcher. Although the amount of money involved is small compared to the overall departmental budget, it is that type of money that is most needed to stimulate new and vigorous research in the department by bringing in speakers and visitors, encouraging attendance at meetings and visits to other laboratories, buying key pieces of equipment, and encouraging student participation in research. A small departmental committee handles the distribution of these funds.

Some specific problems the department has faced this year, not all new, are the following: 1) The mere fact of being without a permanent chairman and the uncertainty as to how the new chairman will handle the staff has been unsettling this year, especially since no solution has been reached. However, I must say that the staff has cooperated superbly in seeing that departmental functions are carried out as well as possible. In particular, they gave even more time than usual to the teaching of the medical physiology course - adding a rather heavy load of honors program teaching and a weekly laboratory staff meeting to their schedules. It is my own opinion that in the future we should attempt to participate more in clinical conferences and clinical teaching within our own areas of specialization. 2) Much time has been spent on problems which are so common these days that they can be considered to be signs of the times - curriculum revision, special problems of minority students, and increased competition for grant funds. While these are legitimate problems and require sincere, flexible, and realistic effort on our part, it is to be hoped that fairly long-term solutions can be found soon and we can think about other things, for these problems are extremely time-consuming and hard on morale. 3) A temporary inconvenience, but a welcome one, is the construction that has proceeded since the first of the year. Noise, vibration, and occasional waterfalls in research laboratories have been the main problems so far.
APPENDIX

Outside Speakers and Visitors

September, 1973
Dr. Claus J. Mayer, Physiological Institute at the University of Munich, West Germany

October 15, 1973
Dr. Daniel C. Tosteson, Chairman, Department of Physiology and Pharmacology, Duke University Medical Center. "Membranes, Ions and Carriers."

January 3-4, 1974
Dr. George Sachs, Professor of Medicine, Associate Professor of Physiology and Biophysics, University of Alabama School of Medicine, Birmingham, Alabama. "Conductance Pathways in Epithelial Tissues."

January 22, 1974
Roderich W. Walter, Ph.D., Professor of Physiology and Biophysics, Mount Sinai School of Medicine of City University of New York. "Aspects of Conformation in Relation to the Biology of Neurohypophysial Hormones."

March 1, 1974
James Christensen, M.D., Department of Internal Medicine, University of Iowa School of Medicine. "Studies on Nervous Control of Smooth Muscle of the Esophagus."

May 17, 1974
Frederick F. Kao, M.D., Ph.D., Professor of Physiology, State University of New York. "The Respiratory System as a Regulation Machine - From Chemostat to Ergostat Touching on the Subject of Menace of Thin Air on the Hypoxic High Hill."

June 3, 1974
Dr. Maurice Burg, Deputy Chief, Laboratories of Kidney and Electrolyte Metabolism, National Institutes of Health, Bethesda, Maryland. "Studies on Isolated Renal Tubules."