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 Vice-Chancellor 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
N. C. Gonzalez, M.D., Associate Professor
G. N. Loofbourrow, 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
J. D. Wood, Ph.D., Associate 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
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 (to Case Western Reserve University 11/1/74)
Tatsuro Sashida, M.D., Tokyo Medical College (Supported by Ford Foundation training grant to Ob-Gyn)
Research Associate - H. C. Cheng, Ph.D.

c. Graduate Students

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Lynn R. Brann
Victor Chen (entered 8/74 & withdrew 3/75)
Donald G. Deeds
Richard A. Fenton
H. Edward Grotjan
Michael E. Hiner, M.D.
Lorraine Rome (Entered 8/74 & withdrew 5/75)
Kyra H. Riegel
Noel W. Stoutenburg
David R. Strome
Bin-Ching Wang
Dan F. Watson (entered 8/19/74)
Notes concerning graduate students:

After completing the Ph.D. requirements, Donald Deeds is now an assistant professor at Southwestern College, Georgetown, Texas; Edward Grotjan is working in the Program in Reproductive Biology and Endocrinology and Michael Minier in the Program in Surgery, Section of Neurosurgery, at the University of Texas Medical School at Houston; Kyra Riegel is an assistant professor in Nursing and a research associate in Physiology at Pennsylvania State University (Hershey Medical Center) and on June 28 changed her name to Dr. Kyra Whitmer; Bin Wang is doing postdoctoral work in the Department of Experimental Medicine at St. Luke's Hospital, Kansas City.

Dan Watson presented a paper on "Comparison of proteins transported in central and peripheral processes of unipolar neurons" at the Sixth Meeting of the American Society for Neurochemistry in Mexico City in March. Lynn Brann presented a paper on "Motility of the large intestine of mice with hereditary megacolon" and David Strome presented one on "HCO₃⁻ transfer as a mechanism of "in vivo" myocardial buffering" at the Federation Meetings in Atlantic City in April.

Lynn Brann is vice-president of the Graduate Student Council, a member of the ad hoc Library Committee, and secretary-treasurer of the Student Union board of directors. Richard Fenton taught Physiology in the Summer Enrichment Program in 1974, and Dan Watson in June of 1975.

d. Kaw Valley Heart Association Students (Summer of 1975)

Marcia Grundahl - Dr. Clancy
John Long - Dr. Gonzalez

2. COURSES TAUGHT

Emergency Mobile Intensive Care, 1/20-2/28, part of a 1,000 hour course for Emergency Care. Taught by Dr. Thompson, Ms. Betti Rieber and graduate students. Enrollment 17.

388 - (Fall and Spring) Human Physiology, undergraduate physiology course, presently for physical therapists. Taught by Dr. Legler and graduate students. Enrollments 30 and 28.

800 - (770 & 771) - Medical Physiology. All medical students, plus 14 graduate students. Taught by staff.

810 - Transport, Permeability and Membranes. 2 hours (FE) Drs. Thompson, Sullivan, Tarr, and Welling. Enrollment 5.


827 - Physiological Instrumentation I. 2 hours (FE) Dr. Trank. Enrollment 6.

828 - Physiological Instrumentation II. 1-2 hours (SO) Dr. Trank. Enrollment 2.
3. **ACTIVITIES OF STAFF** (Grants and papers are shown in a later section)

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

Associate Dean for Graduate Studies - in charge of graduate school 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.

**October 14-15, 1974 - Attended meetings of the Association of Graduate Schools in Denver.**

**October 30-November 1, 1974 - Participated in final selection panel for NASA Research Associateships for the National Research Council in Washington, D.C.**

**November 5-8, 1974 - Attended meetings of the AAMC and the Association of Chairmen of Departments of Physiology in Washington, D.C.**

**December 3-6, 1974 - Attended meetings of the Council of Graduate Schools and Task Force for Biomedical Graduate Studies in Phoenix, Arizona.**

**February 26-28, 1975 - Chaired the Life Sciences Panel of the National Research Council screening applicants for Federal Research Associateships in Washington, D.C.**

**April 13-18, 1975 - Attended meetings of the Federation of American Societies for Experimental Biology in Atlantic City and also the meeting of Chairmen of Departments of Physiology.**

Hosted various high school and college student groups visiting the department.

**E. B. Brown, Jr., Ph.D., Professor**

Promotion to Vice-Chancellor for Faculties and Academic Affairs became effective November 1, 1974.

**April 13-18, 1975 - Attended meetings of the Federation of American Societies for Experimental Biology in Atlantic City.**

**Donald C. Johnson, Ph.D., Professor**

**August, 1974 - Attended meeting of the Society for Study of Reproduction in Ottawa, Canada and, with H. E. Grotjan, presented a paper on "Androgen production after release of endogenous gonadotropins in the immature male rat".**

**April 13-18, 1975 - Attended meetings of the Federation of the American Societies for Experimental Biology in Atlantic City and, with T. Sashida, presented a paper on "Time relationships in hormone responses in rat ovary".**

Member of Editorial Board; Biology of Reproduction.

Edited papers for SCIENCE and ENDOCRINOLOGY.


Graduate advisor for H. E. Grotjan, Jr.
Frederick E. Samson, Ph.D., Professor

Was chosen to participate in the six-weeks summer session of the Neurosciences Research Program in Boston June 15 - July 31, 1974 -- and again June 6 - July 19, 1975.

October 16-18, 1974 - Attended Conference of Directors of Centers for Mental Retardation Research in Madison, Wisconsin.

October 20-24, 1974 - Attended meeting of Society for Neurosciences in St. Louis.

February 19-20, 1975 - Sigma Xi regional lecturer. "Physical Basis of Brain Function". Wichita State University.

March 6, 1975 - Sigma Xi regional lecturer. "Physical Basis of Brain Function". Oklahoma State University, Stillwater.

March 10-14, 1975 - Attended annual meeting of the Society for Neurochemistry in Mexico City with Dan Watson who presented a paper on work done in Dr. Samson's lab with J. A. Donoso, a graduate student in pharmacology.

May 19-23, 1975 - Attended annual meeting of the American Society of Mental Deficiency in Portland, Oregon.

Member of the Department Committee on Guest Lecturers.

Lawrence P. Sullivan, Ph.D., Professor

November 25-26, 1974 - Attended meeting of the American Society of Nephrology in Washington, D.C.

April 13-18, 1975 - Attended meetings of the Federation of American Societies for Experimental Biology in Atlantic City.

June 8-12, 1975 - Attended the International Congress of Nephrology in Florence, Italy.

Member of the Academic Committee.

Member of the Appeals Committee for Faculty Promotions.

Member of the Department Fletcher Fund Committee.

Member of the Department Admissions Committee to screen graduate student applications.

Graduate advisor to Donald Deeds.

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

September 13-14, 1974 - Attended a meeting of the Kansas Heart Association in Great Bend.

November 18-21, 1974 - Attended meetings of the American Heart Association in Dallas.

April 13-18, 1975 - Attended meetings of the Federation of American Societies for Experimental Biology in Atlantic City and presented a paper on "The effect of β blockade on cardiac and skeletal muscle pH".

Member of the Department Committee on Guest Lecturers.

Overseer of the student lab and lab manual preparation.

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

Gave presentations to groups of visiting high school students.

Directed research of Richard Fenton, graduate student.
Norberto C. Gonzalez, M.D., Associate Professor

His promotion to Associate Professor became effective July 1, 1974.

September 13-14, 1974 - Attended meeting of the Kansas Heart Association in Great Bend.

November 18-21, 1974 - Attended American Heart Association meetings in Dallas, Texas.

April 13-18, 1975 - Attended meetings of the Federation of the American Societies for Experimental Biology in Atlantic City and presented a paper.

Director of departmental seminars for the second year.
Chairman of Department Committee on Guest Lecturers.
Directed research of David Strome, graduate student.
Graduate advisor for Michael E. Miner, M.D.

G. N. Loofbourrow, Ph.D., Associate Professor

Medical Center Service:

October 15, 1974 - Gave lecture on "Physiological Aspects of Aging" at the Pre-Retirement and Planning Program session for KUMC employees nearing retirement age.

Served on Search Committee for a new Director of Physical Therapy Education.
Served on Basic Science Internal Planning Subcommittee for new Basic Science Building.

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 Admissions Committee Chairman (Committee for recruiting and evaluating applicants for graduate study in PHSL). 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.

Temporary Advisory Committees. Appointing and chairing a committee to advise each new graduate student.

Graduate Course Announcements. Preparation and distribution of announcements of graduate courses offered each semester.

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, vouchers, etc.
G. N. Loofbourrow, Ph.D. - Continued

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.

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

Was awarded the Dr. C. Lyford first prize ($250) for the best paper on House Staff day. The title of the paper: "A controlled clinical trial of bran in irritable colon syndrome".

Special lectures at KUHC:
10/14 and 10/17/74 - "Digestion and Absorption" - Dept. of Dietetics & Nutrition
11/4/74 - "Advanced Topics" - Dept. of Pharmacology
11/19/74 - "Clinical Aspects of Enzymes" - Dept. of Biochemistry
3/4/75 - Clinical Pathological Conference
4/26/75 - "Approach to Malabsorption" - Clinical Pathology

Lectures for Postgraduate courses
11/13 and 11/15/74 - Medicine postgraduate course
3/13/75 - "Malabsorption" - Menorah Hospital, Kansas City, Mo.
4/12/75 - "Cleansing the colon" - Bethany Hospital, Kansas City, Kans.

Visiting Professor and Grand Rounds
8/28/74 - "Clinical Trials in Irritable Colon Syndrome" - KUHC
9/26/74 - "GI Bleeding" - Crawford County Medical Society, Pittsburg, Kans.
12/19/74 - Wichita State University - St. Francis & St. Joseph Hospital and Wesley and VA Hospital
2/27/75 - "Dietary Fiber" - Bethany Hospital, Kansas City, Kans.
4/26/75 - "Digestion and Absorption" - Univ. of Missouri at Kansas City
5/21/75 - "Dietary Fiber" - Stormont Vail Hospital, Topeka, Kansas

October 29-30, 1974 - Attended the meetings of the American Association to Study Liver Disease in Chicago, Illinois.

March 1, 1975 - Attended the meeting of the Midwest Gut Club in Cincinnati and presented a paper.

May 19-21, 1975 - Attended the American Gastroenterological Association meeting in San Antonio, Texas.


March 18, 1975 - Consultant - Ostomy Association of Mid-America, Kansas City, Mo.

October 4-5, 1974 and April 7-8, 1975 - Attended the AAMC Council of Faculties in Chicago.

Member of the KUHC Animal Care Committee.
Member of the Vice-Chancellor's Advisory Committee.
In Spring 1975 was appointed to Vice-Chancellor's Review Committee.

June 1, 1975 - Was appointed Temporary Director of the GI Division.

Graduate Student Advisor to Beth Buess and Sarah McCall, both of the Dept. of Dietetics and Nutrition.
C. Merrill Tarr, Ph.D., Associate Professor

August 12-19, 1974 - Attended the Gordon Research Conference on "Activation of Striated Muscle" in Plymouth, New Hampshire and presented two papers on work done jointly with Dr. Trank. These were entitled "Adequacy of Voltage Control in Frog Atrial Muscle" and Excitation-Contraction Coupling in Frog Atrial Muscle".

February 18-21, 1975 - Attended meeting of Biophysical Society in Philadelphia and presented paper on "Assessment of Tension-Voltage Relationship in Frog Atrial Muscle".

Spent week of March 17 at Duke University in Durham, North Carolina doing collaborative research with Dr. E. A. Johnson.

April 13-18, 1975 - Attended meetings of the Federation of American Societies for Experimental Biology in Atlantic City and presented a paper on "Preparation of isolated cardiac cells from adult frog atrial tissue".

Department representative to the Education Committee.

Member of Search Committee for Department Chairman of Physiology.

Member of Department Fletcher Fund Committee.

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


September 13-14, 1974 - Attended meeting of the Kansas Heart Association in Great Bend.

November 8, 1974 - Presented lectures on "Electrical Safety in the Hospital and Electrical Hazards in the Critical Care Unit" at a workshop of the St. Joseph Chapter of the American Association of Critical Care Nurses in St. Joseph, Missouri.

February 27-29, 1975 - Attended a meeting of the Great Plains Regional Research Review Committee of the American Heart Association in St. Louis.

April 13-18, 1975 - Attended meetings of the Federation of American Societies for Experimental Biology in Atlantic City and presented a paper.

Spent the week of March 17 at Duke University in Durham, North Carolina in collaborative research with Dr. E. A. Johnson.

Member of the Board of Directors of the Kansas Heart Association (was appointed in September, 1974).

Member of the Great Plains Regional Research Review Committee of the American Heart Association.

Chairman of the University of Kansas Medical Center Biomedical Engineering Study Committee.

Member of Human Ecology Chairman Search Committee.

Member of the Clinical Process Advisory Committee.

Member of the Intercampus Liaison Committee.

Director of the Department Electronics Shop.
Jack D. Wood, Ph.D., Associate Professor

Promotion to Associate Professor became effective July 1, 1974.

August 10-18, 1974 - Attended Fall meeting of the American Physiological Society and presented paper on "Effects of nicotinic agents on rebound excitation of guinea-pig small intestine".

September 26, 1974 - Left Kansas City and spent two weeks in Munich visiting the laboratory of Dr. Claus Mayer and the Physiological Institute at the University of Munich. Traveled then to Kiev, U.S.S.R. to present a paper on "Neurophysiology of the Myenteric Plexus" at the Symposium of the XXVI International Congress of Physiological Sciences on Physiology of Smooth Muscles October 15-17. Also visited Moscow and Dr. A. D. Nozdrachev at Pavlov Institute of Autonomic Nervous System Physiology in Leningrad. Presented a seminar at the Pavlov Institute on "Techniques of electrical recording from the enteric nervous system".

December 27-30, 1974 - Attended the annual meeting of the American Society of Zoologists in Tucson, Arizona.

April 13-17, 1975 - Attended meetings of the American Societies for Experimental Biology in Atlantic City and presented a paper on "Effects of elevated magnesium on electrical discharge of single myenteric neurons of cat small intestine".

May 16-17, 1975 - Attended and gave lecture on "Neurophysiology of Auerbach's Plexus" at symposium commemorating the retirement of C. Ladd Prosser at the University of Illinois, Urbana.

Received a University of Kansas award - a citation and a check for $1,000 - for excellence in teaching at the 103rd annual commencement exercises on May 19, 1975.

Member of the Search Committee for Chairman of the Department of Physical Medicine.

Directed schedule preparation for the Medical Physiology course.

Member of the Department Committee on Guest Lecturers.

Member of the Department Admissions Committee to screen graduate student applications.

Directed research of Michael Jackson, medical student.

Directed research of Lynn Brann, graduate student.

Paul A. Hensleigh, M.D., Ph.D., Assistant Professor

Addresses presented at national, regional and state meetings:

10/13-16/74 - "Endocrine Review" - Junior Fellow Section, District VII, ACOG, Tulsa, Okla.

11/9/74 - "Diabetes in Pregnancy" - Workshop of Advisory Committee on Perinatal Care, Hayes, Kansas.

11/26-27/74 - "Endocrine aspects of early abortion" - Wesley Medical Center, Visiting Professorship, Wichita, Kansas.

1/14/75 - "Evaluation and Treatment of the Infertile Couple" - Kansas City NAACOG, KUHC.
Dr. Hensleigh - continued

1/16/75 - "Evaluation and Treatment of the Inadequate Corpus Luteum" - Kansas City Gynecologic Society, KUMC.

1/22/75 - "Endocrinology of Pregnancy" - Guest physiology lecturer, St. Luke's Hospital, Kansas City, Missouri.

2/8-9/75 - "Sex and Marriage" - Kansas City Bridal Fair, Glenwood Manor, Overland Park, Kansas.

3/13-14/75 - "Biochemical assessment of high risk pregnancy" - Symposium on High Risk Pregnancy, Orlando, Florida.

3/20/75 - "Endocrinology of non-pregnancy" - Kansas City Gynecological Society, St. Mary's Hospital, Kansas City, Missouri.

"Practical Aspects of Obstetrics and Newborn Management" - Workshops in Perinatal Medicine:

3/27/75 - Mt. Carmel Medical Center, Pittsburg, Kansas
3/19/75 - Mercy Hospital, Independence, Kansas
5/16/75 - Mercy Hospital, Ft. Scott, Kansas

4/3/75 - "Identification and treatment of corpus luteum failure" - Postgraduate Educational Conference, Lawrence Memorial Hospital, Lawrence, Kansas.

4/27/75 - "Regional Perinatal Planning in Kansas and Metro Kansas City" - Southwest Clinical Pediatrics Society, Mercy Hospital, Kansas City, Mo.


5/5-8/75 - "Enzymes in assessment of the fetal placental unit" - Special Interest Meetings, ACOG, 23rd General Meeting, Boston, Mass.

5/15/75 - "Health care needs, Regionalization in Obstetrics and Gynecology" - 10th Southeast Kansas Workshop in Primary Care, Independence, Kansas.


Committees:

KUMC Human Ethics Committee
KUMC Ad Hoc Committee on Clinical Systems
KUMC Radiation Safety Committee
KUMC Nursing School Dean, Search Committee
KUMC Pediatrics Departmental Review Committee
KUMC Utilization Review Committee
KUMC Perinatal Obstetric Advisory Board
Advisory Committee for Regionalization of Perinatal Care in Kansas

Weekend workshop and advisory visits:

8/17/74 - Wesley Medical Center, Wichita
11/9/74 - St. Anthony's Hospital, Hayes
2/1/75 - Stormont Vail Hospital, Topeka
5/17/75 - Mt. Carmel Hospital, Pittsburg

Committee to establish the Mid-America Perinatal Association (MA-PA)
Research Committee, Ralph Smith Mental Retardation Research Center
Steering Committee, Medical Faculty and Faculty Assembly
KUMC Animal Care Committee
Dr. Hensleigh - Continued

Service Functions:

Established back-up laboratory facility for Mid-America Trophoblastic Disease Center.

Established laboratory referral center for special tests in high risk pregnancy evaluation, including personal telephone contact with every referring physician.

Established amniocentesis service and genetic counseling service for fetal karotyping studies.

Established and equipped facility for referrals for Oxytocin Challenge Tests on high risk gravidas.

Provided endocrine lab services not available by hospital clinical lab for patients with infertility and threatened miscarriage (Serum B-hcg, estradiol and progesterone by RIA).

Editorial Reviewer for Gynecologic Investigation.

Consultant Reviewer for The United States Pharmacopeia.

Departmental Responsibilities:

Medical Physiology Tutorial Group (1/2 time - shared with Dr. J. B. Rhodes)

Consultant Ob-Gyn Perinatal Conference (weekly) and Advisory Board (bi-weekly)

Rotating Clinical Services, Dept. of Obstetrics and Gynecology

Analysis and dictation of all intrapartum fetal monitoring and oxytocin challenge tests - (shared with Drs. Whitson and Haswell)

Weekly case conference review (Ob-Gyn)

Weekly Resident Education Conference (Ob-Gyn)

Surveillance and review of fetal maturity evaluations: Shake test, L/S & cortical assays on amniotic fluid

Bimonthly medical student lectures:
   1. Lab testing in admitting and emergency obstetrics
   2. Primary amenorrhea
   3. Hirsutism in women
   4. Precocious puberty

Educational materials prepared:

Physiology students seminar on pulmonary surfactant and hyaline membrane disease of the newborn.

Obstetrics and Gynecology student outlines and correlated lecture on:
   1) primary amenorrhea
   2) precocious puberty
   3) hirsutism in women
   4) laboratory testing in admitting and emergency obstetrics
   5) RH isoimmunization
   6) infertility evaluation
Dr. Hensleigh - continued

American College of Obstetricians and Gynecologists, 1975 Postgraduate Education outline. "Perinatal Medicine; Evaluation of the fetus in high risk pregnancy"
Curriculum, organization and implementation for perinatal obstetrical nurse clinicians.
Audiovisual "Evaluation and Management of Potential Fetal Sulfa Toxicity from Acyclovir Therapy" - 15 minute cassette

Faculty organizer and consultant for Ob-Gyn weekly Journal Club.

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

His promotion to Associate Professor of Surgery became effective July 1, 1974. Because of lack of adequate time to participate with the Department of Physiology he resigned effective June 30, 1975.

Invited Lectureships:
KUHC Department of Surgery Postgraduate Course, March 24-26, 1975.
October 22-25, 1974 - Attended meeting of the American College of Surgeons in Miami Beach, Florida.
November 6-9, 1974 - Participated in meetings of the Association for Academic Surgery, Los Angeles, California.
February 28-March 1, 1975 - Participated in meetings of the Central Surgical Association, Chicago, Illinois.
March 5-8, 1975 - Site visit to Cornell University, New York, New York.
April 20-24, 1975 - Participated in meetings of the Southwestern Surgical Congress, Las Vegas, Nevada.
Fellow of American College of Surgeons.
Member, Central Surgical Association.

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

Gave a series of lectures in biomechanics both semesters as part of a course in functional anatomy for physical therapy students.
December 2, 1974 - Gave special guest lecture for Dr. H. W. Shirer's biological instrumentation class, given in Electrical Engineering Department on the Lawrence campus.
Served as computer hardware consultant to Ralph L. Smith Mental Retardation Research Center.
Kenneth L. Goetz, M.D., Ph.D., Lecturer

October 21-26, 1974 - Presented a paper at the 26th International Congress of Physiological Sciences in New Delhi, India.

November, 1974 - Attended meetings of the American Heart Association in Dallas.


April 13-17, 1975 - Attended meetings of the American Societies for Experimental Biology in Atlantic City.

He and his postdoctoral associate, Don D. Bloxham, Ph.D., donated 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.

Dr. Bloxham has completed his two years of postdoctoral work and is going to Case Western Reserve in Cleveland, Ohio.

4. Research Grants active during the year:

HEW HL 12231 - 10/1/73-9/30/74 (extended to 6/30/75) - $21,170 - "Intracellular response to acid-base changes" - Dr. E. B. Brown, Jr.

KR-74-18, Kansas Heart Association - 7/1/74-6/30/75 - $8,000 - "Effect of acidosis, alkalosis, NE on muscle pH_i and K_i" - Dr. R. L. Clancy.

Kaw Valley Heart Association (KUHC #9234) - 7/1/74-6/30/75 - $2,450 - "Intracellular cardiac and skeletal muscle pH of cardiomyopathic hamsters" - Dr. R. L. Clancy.

KR-74-19, Kansas Heart Association - 7/1/74-6/30/75 - $7,980 - "Intracellular pH and myocardial contractility" - Dr. N. C. Gonzalez.

Kaw Valley Heart Association (KUHC #9235) - 7/1/74-6/30/75 - $2,300 - "Regulation of myocardial cell pH during acute hypercapnia" - Dr. N. C. Gonzalez.

NIH - 7/1/74-May, 1977 - $100,000 - "Endocrinology of experimental ovarian tumors" - Dr. D. C. Johnson.

National Science Foundation - 10/1/74-9/30/76 - $49,000 - "Biorhythm induced gradients in reproductive function" - Dr. D. C. Johnson.

NIH AI 15883 - 1/1/74-12/31/74 - $26,670 - "Study of Factors Affecting Renal Potassium Transport" - Dr. L. P. Sullivan.

NIH AI 15883 - 1/1/75-12/31/75 - $26,852 - competitive renewal of above grant - Dr. L. P. Sullivan.

NIH HD 02 528 - 1/1/75-12/31/75 - $130,445 - "Communications research with retarded children" - Dr. F. E. Samson.
ERRATUM -- Department of Physiology Annual Report, 1974-1975

Please add the following research grants to Item 4, pages 12 and 13:

Kansas Heart Association. "Action potential, duration and tension versus heart rate" - 7/1/74-6/30/75 - $7,500 - Dr. C. Merrill Tarr.

NIH HE 12426 - "Voltage clamp of cardiac muscle" - $48,366 for 4 years, 2/1/72-1/31/76 - current year, $12,091 - Dr. C. Merrill Tarr.
Research Grants - continued

American Cancer Research (KUHIC #9138) - 10/1/74-9/30/75 - $10,700 - "Vinca alkaloid neuropathies: role of axoplasmic transport" - Dr. F. E. Samson.

HEW 1 RO1 AI 16813 - 4/1/74-3/31/75 - $25,305 - "Congenital megacolon" - Dr. J. D. Wood.

NSF GB-31292 - 10/1/73-9/30/74 - $22,157 - "Function of the enteric nervous system" - Dr. J. D. Wood.

NIH 1 KO4 AI 70726 - 6/1/74-5/31/75 - $21,000 - "Function of enteric neurons" - Dr. J. D. Wood.

KUHIC Research Committee (KUHIC #1528) - 9/1/74-6/30/75 - $200 - "The effect of nicotonic blocking agents on rebound excitation of guinea pig small intestine" - Dr. J. D. Wood.

Research Award - J. B. Reynolds $15,000 - continuing - Dr. J. B. Rhodes.

National Heart and Lung Institute - "The Study of Acute Renal Failure" - Current allocation $22,216 - Dr. A. S. Hermreck.

Dow Chemical Company. "Effectiveness of Reduced Dose Rho (D) Immune Globulin (Human) in Rh Negative Women Who Undergo Induced Abortion" - $14,500 - Dr. P. A. Hensleigh.


Associates in Gynecology and Obstetrics, KUHIC - General lab support, approx. $5,000 - Dr. P. A. Hensleigh.

5. Publications:


REVIEW OF THE YEAR AND COMMENTS BY THE ACTING CHAIRMAN

The Physiology Department has run relatively smoothly in spite of being in more or less of a holding pattern for the second year while the chairman search continues. Hopefully the search is near an end and we can proceed with some of the growth and changes that are needed.

With the addition of teaching responsibilities in Allied Health and Nursing and the realization that our present organization of some didactic graduate courses is quite expensive in staff time, we need to extensively reexamine the organization of our teaching time. This may have to be delayed until the medical class curriculum is settled, however. During this year, on rather short notice, a new short course for emergency mobile intensive care technicians was taught. This is now incorporated as Physiology 101 into our regular catalog of courses to be taught in the Fall. An intermediate undergraduate level course (388), taught both semesters, has grown from a course for physical therapists to a large one including also nurses, nurse anesthetists, and respiration therapists.

Research has continued at a high level of activity and quality for most members of the department although it is my impression that considerably more time is being spent in getting smaller amounts of money. Locating new sources of research funds and exploiting them are high on the docket for the coming year in my opinion. Also important is getting more post-docs. I quote from my report last year: "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 rather 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."
As anticipated, the availability of relatively unrestricted money from Dr. Fletcher's bequest has been a great help. This year it has been used primarily for bringing in guest lecturers and consultants and for sending staff members and graduate students to scientific meetings. We believe that it will be of great benefit to the graduate students to see scientists in action at these meetings before they have papers to present themselves.

This year has been extremely productive with respect to graduate students. We have put out five new Ph.D.s, all of whom are well placed. This is about half of our normal 5 year production. We also have at least four new graduate students, all of whom have been selected with greater care than sometimes occurred previously.

Growth in staff size has been seriously affected by the chairman search. Two existing positions, although they were available all year, have not been filled with permanent appointees. For the coming year, in order to prepare for an expanded teaching load, one of the positions is filled by a post-doctoral Instructor on a one-year temporary appointment. In the meantime, we regret that we have lost Dr. Arlo Hermreck, who had a joint appointment in this department, because of the crush of responsibilities in Surgery. We were pleased that a member of our department, Dr. Jack Wood, received one of the few All-University Awards for excellence of teaching at the May Commencement.

To quote again from my previous report: "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 often hard on morale."

APPENDIX

Outside Speakers and Visitors

October 14-16, 1974
Dr. Andre B. Borle, Associate Professor of Physiology, University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania.
"Cellular Calcium Homeostasis"

October 25, 1974
Dr. J. V. Luco, Professor, Department of Neurobiology, Catholic University of Chili, Santiago, Chili. "The Neuron and its Habitat"

November 22, 1974
Philip A. Poole Wilson, M.B., M.R.C.P., Cardiovascular Research Laboratory, Department of Medicine, University of California, Los Angeles, California. "The effect of pH on myocardial function and ionic exchange"
February 10, 1975
Ann Kammer, Ph.D., Division of Biology, Kansas State University, Manhattan, Kansas. "Generation of rhythmic motor patterns by the nervous system of insects"

March 3, 1975
Barry M. Brenner, M.D., Chief, Nephrology Section, Veterans Administration Hospital, San Francisco, California. "The dynamics of glomerular ultrafiltration"

April 9, 1975
Dr. Emile Boulpaep, Physiology Department, Yale University. "Mechanisms and models of isotonic transport in renal tubules"

April 23, 1975
Dr. Oscar Hechter, Chairman, Department of Physiology, Northwestern Medical School, Chicago, Illinois. "Role of the peptide backbone in hormone action"

April 28, 1975
Dr. Roger Fedde, Department of Physiological Sciences, College of Veterinary Medicine, Kansas State University, Manhattan, Kansas. "Intrapulmonary CO₂ receptors: possible importance in the control of breathing"

May 12, 1975
Louis Sokoloff, M.D., Chief, Laboratory of Cerebral Metabolism, National Institute of Mental Health, Bethesda, Maryland. "Measurement of local glucose utilization and its use in mapping local functional activity in the central nervous system"

May 28, 1975
Dr. Donna Kropp, Department of Physiology, Yale University, New Haven, Connecticut. "Stimulation by an antibody of the Na-K pump in low-K goat RBCs"

June 6, 1975
David N. Erwin, Department of Physiology & Biophysics, University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma. "Effects of neuroaminidase plus ETA upon serotonin receptors of retzius cells in the leech"

June 12, 1975
James R. Neely, Ph.D., The Milton S. Hershey Medical Center, Hershey, Pennsylvania. "Investigations on cardiac metabolism"

June 23, 1975
Dr. Charles Michel, University of Laboratories of Physiology, Oxford, England. "The measurement of osmotic reflection coefficients in single perfused capillaries: evidence for two types of filtration"