ANNUAL REPORT
July 1, 1986 - June 30, 1987
DEPARTMENT OF PHYSIOLOGY
UNIVERSITY OF KANSAS MEDICAL CENTER
COLLEGE OF HEALTH SCIENCES AND HOSPITAL
DEPARTMENT ROSTER

a. Academic Staff

Gilbert S. Greenwald, Ph.D., Distinguished Professor and Chairman
Richard L. Clancy, Ph.D., Professor
Sudhansu K. Dey, Ph.D., Professor (Joint appt. Ob-Gyn)
Russell T. Dowell, Ph.D., Professor (Resigned December, 1986)
Hugo L. Fernandez, Ph.D., Professor (Director, Neurosciences Research Lab., Kansas City VA Hosp.)
Kenneth L. Goetz, M.D., Ph.D., Adjunct Professor (Director of Research and Head, Div. of Experimental Med., St. Luke's Hosp.)
Norberto C. Gonzalez, M.D., Professor
Eugene D. Jacobson, M.D., Professor (Dean of the School of Medicine)
Donald C. Johnson, Ph.D., Professor (Joint appt., Ob-Gyn)
Theodore Lawwill, M.D., Adjunct Professor (Chairman, Department of Ophthalmology)
Werner K. Noell, M.D., Adjunct Professor (Joint appt., Ophthalmology)
Fred E. Samson, Ph.D., Professor (Director of Ralph L. Smith Center for Mental Retardation)
Travis Soloman, M.D., Ph.D., Professor of Physiology and Medicine (Associate Chief of Staff, Kansas City VA Hospital)
Lawrence P. Sullivan, Ph.D., Professor
Merrill Tarr, Ph.D., Professor
Paul F. Terranova, Ph.D., Professor (Assoc. Dean Graduate Studies and Research)
John W. Trank, Ph.D., Professor
James L. Voogt, Ph.D., Professor
Daniel J. Welling, Ph.D., Research Professor (Kansas City VA Hospital)
Larry Welling, M.D., Ph.D., Professor of Physiology and Pathology (Kansas City VA Hospital)
Paul D. Cheney, Ph.D., Associate Professor
Thomas J. Imig, Ph.D., Associate Professor
Bin Ching Wang, Ph.D., Adjunct Associate Professor (St. Luke's Hospital)
Dennis P. Valenzeno, Ph.D., Associate Professor
Michael J. Soares, Ph.D., Assistant Professor
Richard McCabe, Ph.D., Research Assistant Professor (Resigned June, 1986)
Anne Morel, Ph.D., Research Assistant Professor (Resigned October, 1986)
Shyamal K. Roy, Ph.D., Research Assistant Professor
Michael J. Rutten, Ph.D., Research Assistant Professor (Kansas City VA Hosp.)
Paul Stein, Ph.D., Research Assistant Professor

b. Postdoctoral Fellows

Thomas Albrecht, M.D.
Javier X. Busquets, Ph.D.
Chandan Chakraborty, Ph.D.
Mamata De, Ph.D.
Swapan Kumar De, Ph.D.
B. K. Gangrade, Ph.D.
Raul Huet, M.D.
Hiroshi Kogo, Ph.D.
Sherri Lane, Ph.D.
P. V. Malathy, Ph.D.
Yasu Nakamura, M.D.
Zsuzsanna Rozsa, M.D.
Rosa Sanchis, Ph.D.
Maria Sancho-Tello, Ph.D.
Mitra Sen, Ph.D.
Frank Siri, Ph.D.
Ossama Tawfiq, M.D., Ph.D.
Shiow-Ching Wang, Ph.D.
### c. Graduate Students

<table>
<thead>
<tr>
<th>Name</th>
<th>Prelims</th>
<th>Candidate for</th>
<th>Degree Requirements Fulfilled</th>
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</thead>
<tbody>
<tr>
<td>Joseph Bauer</td>
<td></td>
<td>M.S. (M.D.)</td>
<td></td>
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<tr>
<td>John Brannian</td>
<td></td>
<td>Ph.D.</td>
<td></td>
</tr>
<tr>
<td>Virginia Cassmeyer</td>
<td>4/85</td>
<td>Ph.D.</td>
<td></td>
</tr>
<tr>
<td>Sandy Elliott</td>
<td></td>
<td>Ph.D.</td>
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<tr>
<td>Timothy Griswold</td>
<td>3/85</td>
<td>Ph.D.</td>
<td></td>
</tr>
<tr>
<td>Jean Heibert</td>
<td></td>
<td>Ph.D.</td>
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<tr>
<td>Yvette Huet</td>
<td></td>
<td>Ph.D.</td>
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<tr>
<td>Andrew Irons</td>
<td>9/86</td>
<td>Ph.D.</td>
<td></td>
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<tr>
<td>Curtis Kauer</td>
<td>3/84</td>
<td>Ph.D. (M.D.)</td>
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<tr>
<td>Robert Leadley</td>
<td></td>
<td>Ph.D.</td>
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<tr>
<td>Mike McMaster</td>
<td></td>
<td>Ph.D.</td>
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<tr>
<td>Klaus Mewes</td>
<td>7/85</td>
<td>Ph.D.</td>
<td></td>
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<tr>
<td>Katherine Roby</td>
<td></td>
<td>Ph.D.</td>
<td></td>
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<tr>
<td>Sue Rummel</td>
<td>8/86</td>
<td>Ph.D.</td>
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<tr>
<td>Cathleen Sagrillo</td>
<td></td>
<td>Ph.D.</td>
<td></td>
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<tr>
<td>Frank Samson</td>
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<td>Ph.D.</td>
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<tr>
<td>Mark Saville</td>
<td>7/86</td>
<td>Ph.D.</td>
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<tr>
<td>Joel Stiles</td>
<td>1/86</td>
<td>Ph.D. (M.D.)</td>
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<tr>
<td>Steve Sullivan</td>
<td>7/86</td>
<td>Ph.D.</td>
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<tr>
<td>Robert Whitman</td>
<td></td>
<td>Ph.D.</td>
<td></td>
</tr>
<tr>
<td>Gail Widener</td>
<td>9/86</td>
<td>Ph.D.</td>
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</tbody>
</table>
Notes concerning graduate students:

Sandy Elliott was awarded a two year NIH Grant in September to study the effects of exercise during pregnancy on fetal and neonatal neurodevelopment.

Yvette Huet attended the Gordon Research Conference on Mammalian Genital Tract in New Hampshire in July, 1986. While at the conference she presented a poster entitled "Antiestrogen Induced Implantation in the Mouse". In March she participated in the KUMC Student Research Forum with a presentation entitled "The Mechanism of Estrogen Action in Implantation: An Address to an Unresolved Question" and received first place in the Graduate Student Division. She has co-authored the following publications: Andrews, G.K., Huet, Y.M., Lehman, L. and Dey, S.K. Metallothionein Gene Expression in the Pre-implantation Rabbit Blastocyst. (in press) and Huet, Y.M. and Dey, S.K. Role of Early and Late Oestrogenic Effects on Implantation in the Mouse. Journal of Reproduction and Fertility (in press). Yvette was also awarded a three year (6/1/86-5/31/89) National Science Foundation Graduate Fellowship in the amount of $49,000.

Andrew Irons participated in the Student Research Forum in March with a presentation entitled "Projections Patterns Among Three Auditory Fields in the Cat" and submitted an abstract with the same title for the November Society of Neuroscience meeting. He also coauthored an abstract entitled "Azimuth and Intensity Selectivity of Single Neurons in Field AI of Cat Auditory Cortex" for the same meeting.

Michael McMaster received a March of Dimes Birth Defects Foundation Predoctoral Fellowship.

Klaus Mewes coauthored an abstract with Dr. Paul Cheney entitled "Properties of rubromotoneuronal cells studied in the awake monkey" for the satellite meeting of the 30th International Physiology Congress entitled "Neural Control of Limb Movement" held in Seattle, Washington from July 9-11, 1986. He attended the CNRS-INSERM Symposium entitled "Hodology and Function of the Red Nucleus" held at Bendor Island, France from September 12-13, 1986 and the European Neuroscience Association Meeting Symposium on "Coordination of Movement" held in Marseilles, France from September 14-18, 1986. For both meetings he co-authored two abstracts with Dr. Cheney entitled "Organization and functional properties of rubromoto-neuronal cells identified by spike-triggered averaging of EMG activity" and "Rubromotoneuronal cells: Identification in the awake monkey and comparison with corticomotoneuronal cells". He also coauthored a paper with Dr. Cheney for one of the meetings entitled "Encoding of motor parameters by corticomotoneuronal (CM) and rubromotoneuronal (RM) cells producing postspike facilitation of forelimb muscles in the behaving monkey", Beh. Brain Research, in press. Klaus also attended the 16th annual meeting of the Society for Neuroscience held in Washington, D.C. from Nov. 9-14, 1986 and presented presented a poster. For this meeting he co-authored two abstracts with Dr. Cheney entitled "Characteristics of rubromotoneuronal postspike effects in EMG activity of wrist and hand muscles in the behaving monkey" and "Encoding of Movement parameters by rubromotoneuronal cells".

Cathy Sagrillo attended the annual meeting of The Society for the Study of Reproduction (SSR) in July at Cornell University, New York. She has co-authored a paper entitled "Decidualization in the Rat: The Role of Leukotrienes and Prostaglandins" which will soon be published in the Journal of Prostaglandins, Leukotrienes and Medicine. She will present the abstract of this paper as a slide presentation at the 1987 annual meeting of SSR in July at the University of Illinois, Champaign.
Frank Samson coauthored an abstract entitled "Azimuth and Intensity Selectivity of Single Neurons in Field AI of Cat Auditory Cortex" along with T.J. Imig and W.A. Irons. The abstract has been sent to the Society for Neuroscience for a meeting to be held in November, 1987.

Gail Widener attended the 16th annual meeting of the Society for Neuroscience held in Washington, D.C. in November. She participated in the 1987 Student Research Forum with a presentation entitled "Effects on Muscle Activity Elicited from Primary Somatosensory Cortex". During the past year Gail served as Vice President of the Graduate Student Council and as a member of the Student/Police Liaison Committee. In addition, she assisted in the Organization of the Symposium on "Oxygen Transfer from Atmosphere to Tissues" held in Kansas City in March.
COURSES TAUGHT


398 - Neurophysiology. 3 credits. Taught by physiology graduate students. Enrollment 50. Dr. Imig organizer. Gail Widener coordinator.


800 - Medical Physiology. 9 credits. Taught by entire staff. Enrollment 185. Drs. Gonzalez and Greenwald coordinators.


820 - Renal Physiology, 2 credits. Fall 1986. Taught by Dr. Sullivan. Enrollment 3 students.

827 - Physiological Instrumentation I. 2 credits. Fall 1986. Taught by Dr. Trank. Enrollment 3.


940 - Gas Exchange, transport and acid-base balance. 3 credits. Fall 1986. Taught by Dr. Gonzalez. Enrollment 5 students.
## Department Seminars

**7/8/86**  
Dr. Wolfgang Wuttke  
Dept. of Obstetrics & Gynecology  
Univ. of Gottingen, W. Germany  
- Hypothalamic, Pituitary and Ovarian Secretions in the Conscious Rat - Application of Push Pull Perfusion and Dialysis Techniques

**8/8/86**  
Dr. Robert O. Banks  
Dept. of Physiology and Biophysics  
Univ. of Cincinnati, Cincinnati, Ohio  
- Histamine and Renal Autoregulation

**9/25/86**  
Dr. John B. West  
Dept. of Medicine and Physiology  
Univ. of California, San Diego  
- High Living: The American Medical Research Expedition to Everest

**9/29/86**  
Dr. R. L. Clancy  
Dept. of Physiology, KUMC  
- Intracellular pH

**10/6/86**  
Dr. Michael Soares  
Department of Physiology, KUMC  
- Differentiation vs. Tumorigenesis in the Rodent Chorioallantotic Placenta

**10/20/86**  
Dr. Kenneth L. Goetz  
Director of Research  
St. Lukes Hospital  
- Atrial Peptide Function: A Contrary View

**10/27/86**  
Dr. Larry Cook  
Dept. of Diagnostic Radiology, KUMC  
- Three-Dimensional Reconstruction of Anatomic Data from Serial Sections

**10/29/86**  
Dr. Gerald R. Cunha  
Dept. of Anatomy  
Univ. of California, San Francisco  
- Hormone-Induced Morphogenesis and Growth: Role of Epithelial-Mesenchymal Interactions

**11/3/86**  
Dr. Bin Wang  
Director of Experimental Medicine  
St. Lukes Hospital  
- Do Ventricular Receptors Play a Role in Vasopressin Secretion during Hemorrhage in the Conscious Dog?

**11/10/86**  
Dr. Vincent Gattone  
Department of Anatomy, KUMC  
- Ontogeny of Atrial Natriuretic Peptide in the Rat

**11/17/86**  
Dr. S. K. Dey  
Dept. of Physiology and Obstetrics and Gynecology, KUMC  
- Mechanism of Estrogen Action in Embryo Implantation

**11/24/86**  
Dr. Thomas Imig  
Department of Physiology, KUMC  
- Organization of the Cat's Auditory Forebrain

**12/1/86**  
Dr. Susan Norton  
Dept. of Hearing & Speech, KUMC  

**12/10/86**  
Dr. Phyllis Wise  
Department of Physiology  
University of Maryland  
- The Aging Female Reproductive System: The Role of Changing Diurnal Rhythms in Hypothalamic Function
12/12/86  Stephen K. Sullivan  
Department of Physiology, KUMC

12/15/86  Dr. Paul Cheney  
Department of Physiology, KUMC

1/5/87   Tim Griswold  
Department of Physiology, KUMC

1/12/87  Dr. Sally Frost  
Dept. of Physiology and Cell Biology  
Univ. of Kansas, Lawrence

1/19/87  Dr. Lawrence P. Sullivan  
Dept. of Physiology, KUMC

1/26/87  Dr. Roger O'Neil  
Dept. of Physiology and Cell Biology  
Univ. Texas Health Sci. Ctr., Houston

1/29/87  Dr. Kenneth P. Roos  
Department of Physiology  
UCLA

2/2/87   Dr. Dennis Valenzano  
Department of Physiology, KUMC

2/9/87   Dr. Roger Brannian  
Veterinarian, Kansas City Zoo

2/11/87  Dr. Peter Smith  
Department of Pharmacology  
Duke University Medical Center

2/16/87  Dr. James Voogt  
Department of Physiology

2/18/87  Dr. Steven Driska  
Department of Physiology  
Medical College of Virginia

2/23/87  Dr. Paul Stein  
Department of Physiology, KUMC

3/2/87   Dr. Norberto Gonzalez  
Department of Physiology, KUMC

3/9/87   Dr. Fred Samson  
Department of Physiology, KUMC

3/16/87  Dr. Richard Alper  
Department of Pharmacology, KUMC

Electrolyte Transport by Rabbit Proximal Colon

Brain Control of Hand Movement

Ovarian Hydroxylase and Lyase Activities: Past, Present and Future

To Migrate or Differentiate - Problems Faced by Embryonic Neural Crest Cells

Potassium Channels in Renal Proximal Tubule

Cellular Actions of Aldosterone on Ion Transport in the Mammalian Collecting Tubule

Structural and Mechanical Characteristics of the Isolated Cardiac Myocyte

Membrane Modification by Excited Oxygen Species

Physiology and the Modern Zoo

Trophic Influences of the Sympathetic Nervous System on Smooth Muscle Maturation

Monitoring Dopamine Release from the Hypothalamus In Vivo

Regulation of Arterial Smooth Muscle Contraction: Do We Need Another Mechanism Besides Myosin Phosphorylation?

Autoregulatory Components of Pressor Responses

Acid-Base Regulation in Prolonged Hypoxia

Brain Regional Glucose Use Associated with Chemically Induced Seizures

Interactions Between the Brain and Kidney to Control Blood Pressure and Renin Secretion
<table>
<thead>
<tr>
<th>Date</th>
<th>Speaker</th>
<th>Affiliation</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/23/87</td>
<td>Dr. Eli Adashi</td>
<td>Dept. of Obstetrics and Gynecology University of Maryland</td>
<td>Potential Relevance of IGF-I to Granulosa Cell Physiology</td>
</tr>
<tr>
<td>4/6/87</td>
<td>Dr. Jimmy D. Neill</td>
<td>Department of Physiology Univ. of Alabama, Birmingham</td>
<td>Neuroendocrine Control of Pituitary Function</td>
</tr>
<tr>
<td>4/13/87</td>
<td>Dr. Shyamal Roy</td>
<td>Department of Physiology, KUMC</td>
<td>Gonadotropic Regulation of Follicular Function</td>
</tr>
<tr>
<td>4/20/87</td>
<td>Dr. Travis Solomon</td>
<td>Assoc. Chief of Staff V.A. Hospital &amp; Depts. of Medicine &amp; Physiology, KUMC</td>
<td>The Role of Cholecystokinin as a Circulating Hormone</td>
</tr>
<tr>
<td>4/27/87</td>
<td>Dr. Deborah Kipp</td>
<td>Dept. of Dietetics &amp; Nutrition, KUMC</td>
<td>Ascorbic Acid and Calcium Homeostasis</td>
</tr>
<tr>
<td>5/4/87</td>
<td>Dr. Chrostoph E. Schreiner</td>
<td>Dept. of Otolaryngology Univ. of California, San Francisco</td>
<td>Pitch and Frequency Representation in the Inferior Colliculus of the Cat</td>
</tr>
<tr>
<td>5/11/87</td>
<td>Dr. Tom Thach</td>
<td>Dept. of Anatomy and Neurobiology</td>
<td>Cerebellum, Basal Ganglia and What They Tell the Moving Hand</td>
</tr>
<tr>
<td>5/13/87</td>
<td>Dr. Andrzej Bartke</td>
<td>Southern Illinois University Carbondale, Illinois</td>
<td>Effect of Hyperprolactinemia on Male Reproductive Function</td>
</tr>
<tr>
<td>5/18/87</td>
<td>Dr. Gilbert Greenwald</td>
<td>Department of Physiology, KUMC</td>
<td>Biomedical Science and Animal Welfare</td>
</tr>
</tbody>
</table>

**Notes:**
- KUMC: University of Kansas Medical Center
PUBLICATIONS

a. Published during year - July 1, 1986 - June 30, 1987


b. In press


Cheney, P.D., Mewes, K. and Fetz, E.E. Encoding of motor parameters by corticomotoneuronal (CM) and ru bromotoneuronal (RM) cells producing postspike facilitation of forelimb muscles in the behaving monkey. Beh. Brain Res.


Greenwald, G.S. Normal structure and function, ovary, hamster. In ILSI Monograph on Pathology of Laboratory Animals Genital System, Springer-Verlag, 19-4C (T.C. Jones, Ed).


Greenwald, G.S. Possible animal models of follicular development relevant to reproductive toxicology. Reproductive Toxicology.

Greenwald, G.S. Normal structure and function, ovary, hamster. In ILSI Monograph on Pathology of Laboratory Animals Genital System, Springer-Verlag, 19-4C (T.C. Jones, Ed).


Greenwald, G.S. Possible animal models of follicular development relevant to reproductive toxicology. Reproductive Toxicology.


Kasser, R.J. and Cheney, P.D. DFP action on rat superior colliculus: localization and role of cholinergic receptors. Neurotoxicology.

Khan, I., R. Sridaran, D.C. Johnson and G. Gibori. Selective stimulation of luteal androgen biosynthesis by LH: Comparison of hormonal regulation of P450/17alpha activity in corpora lutea and follicles. Endocrinology
Kim, I. and Greenwald, G.S. Estrogen receptors in ovary and uterus of the immature hamster and rat: effect of estrogens related to species differences in follicular growth patterns. Endocrinologia Japonica.


Roy, S.K. and Greenwald, G.S. In vitro steroidogenesis by primary to antral follicles in the hamster during the periovulatory period: effects of follicle stimulating hormone, luteinizing hormone and prolactin. Biol. Reprod.


C. Abstracts


Cheney, P.D. and Mewes, K. Properties of rubromotoneuronal cells studied in the awake monkey. Satellite Symposium entitled "Neural Control of Limb Movement" held July, 1986, Seattle, Washington in conjunction with the 30th International Physiology Congress.


Samson, F., Cross, R., Pazdernik, T.L. and Nelson, S.R. 2-Deoxyglucose-6-PO	extsubscript{4} accumulation in rat brain is reduced in rats pretreated with scopolamine and exposed to soman. J. Neurochemistry 48, suppl. 1987, S95B.


**RESEARCH SUPPORT**


BRSG (KUMC) - Shared instrumentation. Neural basis of sensory and motor control. $4,968.


The Rockefeller Foundation - $20,000 Fellowship award for postdoctoral fellow, P.V. Malathy.

NSF Graduate Fellowship - 3 year award for Y.M. Huet, 6/1/86-5/31/89, $49,000 direct costs.


NIH-HL06622 - NRSA post doctoral Fellowship to Dr. F.M. Siri: R.T. Dowell preceptor - $34,776.


ALS-KUMC-Research Center - Acetylcholinesterase molecular forms in amyotrophic lateral sclerosis. June 1, 1987 through June 30, 1989. Fifth year direct costs $15,000 (Total $96,000).


G. S. Greenwald: NICHD - Follicular and Luteal Regulation in the Mammalian Ovary, January 1, 1987 through December 1987, 25th year: Direct costs $18,664; Indirect costs $33,611. Total award $112,275.

KUMC BRSG Shared Equipment Proposal - Direct costs $5,274.77


U.S. Army Medical Research and Development Command - Action of Cholinergic Poisons on the Central Nervous System and Effectiveness of Potential Antidotes. November 1, 1985 through August 31, 1986 direct costs $130,149; indirect costs $50,238. Principal Investigator.

U.S. Army Medical Research and Development Command. "Basic Research on Neurotoxins". Program project October 1986 - September, 1988. Direct and indirect costs $1,000,000. (This program has 12 investigators at KUMC. Dr. Samson is P.I. Coordinator for KUMC site.)

BRSG - Shared instrumentation-replacing and maintaining dark room equipment, BRSG No. SO7 RR05373 NIH (for R.L. Smith Research Center Investigators), February 1987, $10,226.


KUMC BRSG shared equipment funds for fluorescence microscopy with J. Grantham, R. Clancy, N. Gonzalez and D. Valenzeno, $14,400.

KUMC Visiting Scientist Program. Kidney and Urology Research Center. $2,000.


NIH - Mast Cells and Ovarian Function. Total period of grant 4/1/86 through 3/31/90. Total award $235,375. Direct costs $50,434; $20,000 indirect.


D. J. Welling: Public Health Service Grant AM33003, Rate of Cyst Development in Renal Cystic Disease Models. Principal Investigator. Three year grant, December 1, 1983 to November 31, 1986; current year $27,850.


National Institutes of Health, Senior Health Fellowship - $30,000 salary support for sabbatical in the Department of Physiology at the University of Southern California with Dr. Donald Marsh, 1987.
Paul D. Cheney, Ph.D., Associate Professor

Meetings Attended:

July 9-11, 1986 presented a paper entitled "Properties of rubromotoneuronal cells studied in the awake monkey" at the satellite meeting of the 30th International Physiology Congress entitled "Neural Control of Limb Movement" held in Seattle, Washington.

September 12-13, 1986 presented a paper entitled "Organization and functional properties of rubromotoneuronal cells identified by spike-triggered averaging of EMG activity" at the CNRS-INSERM Symposium entitled "Hodology and Function of the Red Nucleus" held at Bendor Island, France.

September 14-18, 1986 presented a paper entitled "Rubromotoneuronal cells: identification in the awake monkey and comparison with corticomotoneuronal cells" at the European Neuroscience Association Meeting Symposium on "Coordination of Movement" held in Marseilles, France.

Nov. 9-14, 1986 attended the annual meeting of the Society for Neuroscience in Washington, D.C. and presented two papers.


Committees:

Chairman, KUMC Institutional Animal Care and Use Committee
Chairman, Departmental Ad Hoc Committee on Neuroscience Course
Judge, KUMC Student Research Day
Member, Search Committee for Director of Animal Care Unit
Member, KUMC Medical School Research Committee
Member, KUMC Biological Lecture Series Committee
Member, Comprehensive Exam Committee for Steve Sullivan
Member, Comprehensive Exam Committee for Gail Widener
Member, Comprehensive Exam Committee for Mark Saville

Editorial and Grant Reviews:

ad hoc reviewer - NSF (Neurobiology)
ad hoc reviewer - Journal of Neurophysiology
ad hoc reviewer - Neuroscience Lett.
ad hoc reviewer - Beh. Brain Res.
KUMC - ALS Grant Review Committee
NIH Neurology A Study Section (June 10-12, 1987)

Seminars Presented:

December 15, 1986 presented departmental seminar entitled "Neural Control of Hand Movement"

Teaching activities:

Medical Physiology
11 hours lecture, Neurophysiology
12 conferences (prepared one)
5 laboratories
1 demonstration

National Board Reviews for second year Med Students
1 hour lecture

Trainees:

Klaus Mewes - Thesis advisor, Ph.D. Candidate
Gail Widener - Thesis advisor, Ph.D. Candidate
Gregory Botteron - Medical Student, Academic Track
Melissa Stapp - Summer student, Drury College
Richard L. Clancy, Ph.D., Professor

Meetings attended:
July 20-25, 1986 - Attended the IUPS Satellite Symposium on "Membrane Transport and Control: Comparative Mechanisms, Membrane Transport and Regulation" held in Banff and presented a poster entitled "Effect of Ethanol on Intracellular pH regulation".
April 1987 - Participated in the Symposium on Oxygen Transfer from Atmosphere to Tissues held in Kansas City, KS.
April 1987 - Attended meetings of the Federation of American Societies for Experimental Biology held in Washington, D.C.

Committees:
Departmental:
Chairman, Physiology Department Graduate Student Admissions Committee
Member, Physiology Dept. Search Committee for C.V. Physiologist

Local:
member, Department of Biometry Review Committee
member, college Steering Committee
member, college Graduate Committee
member, University Graduate Student Honors Scholarship Committee
member, University Graduate School Task Force - Revision of Graduate School Requirements.

Seminars presented:
September 29, 1986 - Presented a departmental seminar entitled "Intracellular pH"

Teaching Activities:
Medical Physiology 770-771
13 hours lecture - Cardiovascular
4 hours demonstration
12 hours laboratory
24 hours conferences

Physiology 705, Advanced Human Physiology
10 hours lecture - Cardiovascular

National Board Review
2 hours

Physiology 851 - Seminar Reading Course - 1 student
12 hours

Trainees:
Robert Whitman - Graduate Student
Crosby Gernon - Summer Medical Student

Sudhansu K. Dey, Ph.D., Professor

Meetings attended:
November, 1986 - Attended the annual meeting of the American Society of Cell Biology, Washington, D.C.
Committees:

Local
Member, KUMC Research Committee
President, Sigma Xi, KUMC Chapter

Editorial and Grant Reviews:
Editorial Board Member, Biology of Reproduction
ad hoc reviewer - NIH
- NSF
- Journal Reproduction and Fertility
- Endocrinology
- Prostaglandins

Honors
Invited to speak at the Symposium on Development of pre-implantation embryos and their Environment: A Satellite Symposium of the 8th International Congress of Endocrinology, to be held at Kyoto, Japan on July 14-16, 1988.


Seminars presented:
November 17, 1986 - Presented a departmental seminar entitled "Mechanisms of Estrogen Action in Embryo Implantation"
February 17, 1987 - Presented a seminar at the KUMC Environmental Health Sciences Center.
May 16, 1987 - Invited speaker to Southern Illinois University, Carbondale, Illinois.
Presented seminar to the KUMC Biochemistry Department.

Teaching Activities:
Medical Physiology
20 hours laboratory
26 hours conference

Physiology 809 - Pregnancy, Growth and Development and Aging
20 hours lecture

Trainees:
Dr. P.V. Malathy, Post Doctoral Fellow
Dr. C. Chakraborty - Post Doctoral Fellow
Dr. O.W. Tawfik - Post Doctoral Fellow
Yvette Huet - Graduate Student
Cathleen Sagrillo - Graduate Student
Sami Long - Undergraduate Summer Student

Russell T. Dowell, Ph.D., Professor

Meetings attended:
October 15-17, 1986 - NIH Study Section, Bethesda, MD

Committees:
Member, departmental Graduate Student Committee
Member/Chairperson, Graduate Travel Committee, KUMC
Member, Academic Committee School of Med. (special programs committee), KUMC
Member, Five-Year Graduate Review Committee for Department of Anatomy, KUMC
Editorial Reviews
ad hoc reviewer - American Journal of Physiology
ad hoc reviewer - Journal of Applied Physiology
ad hoc reviewer - Medicine and Science in Sports and Exercise

Other Academic Activities
Abstract referee, Annual Scientific Meeting - American College of Sports Medicine
NIH ad hoc reviewer
site visit, program project, Southwestern Medical Center, Dallas, Texas, October 12-14, 1986.

Trainees:
Curtis Kauer - Graduate Student
Mark Saville - Graduate student

Hugo L. Fernandez, Ph.D., Professor

Meetings Attended:
November 9-14, 1986 - Attended the 16th Annual Meeting of the Society for Neurosciences, Washington, D.C.

Committees:
Local:
Chairman, Safety committee, VA Medical Center
Member, Equipment committee, VA Medical Center
Member, Animal Care Committee, VA Medical Center
Chairman, Research & Development Committee, VA Medical Center
Member, Sarah Morrison Bequest Review Committee, Univ. of Missouri-K.C.
Member, ALS Regional Research Center Advisory Committee, KUMC
Secretary, Sigma Xi, KUMC Chapter

National:
Member, NIH Behavioral & Neurosciences Study Section, Division of Research Grants

International:
Member, Organizing Committee, 5th International Tri-Annual Meeting on "Acetylcholinesterases" to be held in Cambridge, England, September, 1988.

Editorial and Grant Reviews:
ad hoc reviewer - Muscle & Nerve
- J. Neurochemistry
- Neurochemistry International
- Experimental Neurology
Member, Health Facility Planning Committee, KUMC
- NSF (Minority Program)
- NIH (Neurology B)
- Research Div. Catholic Univ. of Chile

Academic Honors:
Seminars presented:
October 1986 - Presented a seminar entitled "Polymorphism of Acetylcholinesterases in the Nervous System" to the Department of Biochemistry, KUMC

Teaching Activities:
Medical Physiology
  9 hours lecture, Neurophysiology
  12 conferences (in charge Myasthenia Gravis Conference)
  5 laboratory sessions

Trainees:
Cynthia Nyquist-Battle, Ph.D., Assistant Professor of Anatomy, KUMC, Visiting Scientist. 1984-present.
Xavier Busquets, Ph.D., Postdoctoral Fellow, Autonoma University of Madrid
Joel Stiles, M.D.-Ph.D. program, Graduate Student, Physiology
Chery Hodges-Savola, Ph.D. Graduate Student, Anatomy
Sue A. Rummel, Ph.D. Graduate Student, Physiology

Norberto C. Gonzalez, M.D., Professor

Meetings Attended:
July 13-19, 1986 - Attended the XXX Congress of the International Union of Physiological Societies, Vancouver, British Columbia and presented a poster on "Renal Compensation of Hypercapnia in Prolonged Hypoxia".
July 20-25, 1986 - Invited speaker at IUPS Satellite Symposium on "Membrane Transport and Control: Comparative Mechanisms, Membrane Transport and Regulation". Gave a lecture on "Intracellular pH regulation during prolonged hypoxia".
March 27-28, 1987 - Organized and attended a symposium on "Oxygen Transfer from Atmosphere to Tissues" in collaboration with Dr. Roger Fedde, Department of Anatomy and Physiology, Kansas State University. The symposium took place on this campus and consisted of four half-day sessions. In addition to fifteen invited lectures, the meeting featured 22 poster presentations. A total of 62 scientists attended.
March 29-April 3. Attended FASEB meeting held in Washington, D.C. and presented a paper entitled "Acid-base Regulation in Prolonged Hypoxia: Effect of Metabolic Acidosis".

Committees:
Co-coordinator, Medical Physiology Course; responsible for grading for the Medical Physiology Course.
Chairman of the Student Promotions Subcommittee of the School of Medicine
Member of the Academic Committee, School of Medicine
Department representative to the School of Medicine Curriculum Review Task Force

Editorial and Grant Reviews:
  ad hoc reviewer - Pflugers Archives
  ad hoc reviewer - Journal of Experimental Biology

Seminars presented:
March 2, 1987 - Presented a departmental seminar entitled "Acid-Base Regulation in Prolonged Hypoxia"
Teaching activities:
Medial Physiology
12 hours lecture - Respiratory Physiology
2 hour long review sessions
1 respiratory physiology demonstration
12 conferences
4 laboratory sessions
Physiology 388
6 hours lecture - Physiology of Respiration
Physiology 940
Three credit graduate course on "Gas Exchange, transport and acid-base balance". Five Students

Trainees:
Thomas Albrecht, M.D., from the Department of Anesthesiology, University of Tubingen, Federal Republic of Germany, September 1986 to present.
Janet Pauley, Medical Student

Gilbert S. Greenwald, Ph.D., Distinguished Professor and Chairman

Meetings Attended:
July, 1986 - Attended the 6th Ovarian Workshop held at Cornell University.
October 16-17, 1986 - Invited speaker at Scientists Center for Animal Welfare, held in Houston, Texas. Topic: "Welfare of Laboratory Animals: Current Issues".

Committees:
KUMC:
Chairman, Search Committee for Director, University Laboratory Resources
Chairman, Nominating Committee Sigma Xi
Member, Editorial Advisory Board Explore (U. Kansas Research Magazine)

National:
Associate Editor, Physiology of Reproduction, Raven Press
Member, Regulatory Biology Panel, NSF (completed 3 year term Nov. 1986)
Member, Standing Committee on Animal Welfare, Association of Chairman of Departments of Physiology
Member, Long Range Planning Committee, Society Study Reproduction
Member, Federal Contact Network, FASEB

Editorial and Grant Reviews:
ad hoc reviewer - Biology of Reproduction
- J. Reproduction and Fertility
- Endocrinology
- Cell and Tissue Research
- Fertility and Sterility
- Gamete Research
- Chronobiologica

Seminars presented:
May 18, 1987 - Presented a departmental seminar entitled "Biomedical Research and Animal Welfare"

Teaching activities:
Medical Physiology (Co-coordinator)
  7 hours lecture - G.I. Physiology
  20 hours Conferences
Physiology 705
  8 hours lecture - G.I. Physiology
Physiology 808 - Reproductive Physiology
  5 hours lecture
Physiology 809 - Pregnancy, Growth, Development & Aging
  5 hours lecture

Trainees:
  Shiow-Ching Wang, Ph.D. - Postdoctoral Fellow

Thomas J. Imig, Ph.D., Associate Professor

Meetings Attended:
  November 9-14, 1986 - Attended the Society for Neuroscience meeting held in Washington, D.C.

Committees:
  Departmental
    Librarian
    Member, Graduate Affairs Committee
  Local
    Member, KUMC Library Committee
  National
    Ad hoc member of NIH site visit team to University of California Irvine, April 1987.

Editorial and Grant Reviews:
  ad hoc reviewer - Journal of Neurophysiology
  - Journal of Comparative Neurology

Academic Honors
  Invited speaker to symposium on Auditory Pathway Structure and Function at the Second World Congress of Neuroscience to be held in Prague, Czechoslovakia in August 1987.

Seminars presented:
  November 24, 1986 - Presented a departmental seminar entitled "Organization of the Cat's Auditory Forebrain"

Teaching Activities:
  Medical Physiology
    8 hours lecture
    12 conference sessions
    4 laboratory sessions
  Physiology 388
    8 lectures
  Physiology 398
    Course Organizer (taught by Graduate Students)

Trainees and Associates:
  Andrew Irons - Graduate Student
  Frank Samson - Graduate Student
Donald C. Johnson, Ph.D., Professor

Meetings Attended:
February, 1987 - Attended the NIH-Reproductive Physiology Workshop held in Augusta, GA.
March, 1987 - Attended the Society for Gynecologic Investigation meetings held in Atlanta, GA.

Committees:
KUMC
Member, Radiation Safety Committee
Member, Animal Care Committee (Elected)
National
Member, Reproductive Endocrinology Study Section, NIH

Editorial and Grant Reviews:
ad hoc reviewer - Journal of Reproduction and Fertility
Proceedings Society Biology & Medicine
Biology of Reproduction
Life Sciences
Endocrinology

Teaching Activities:
Medical Physiology
8 Lectures
12 conferences
4 laboratory sessions
Physiology 808 - Graduate Course
4 lectures
Physiology 809 - Graduate Course
4 lectures

Trainees:
Virginia Cassmeyer - Graduate Student
Stuart Gaynes - Summer Medical Student
Mitra Sen, Ph.D. - Postdoctoral Fellow
Hiroshi Kogo, Ph.D. - Postdoctoral Fellow

Fred E. Samson, Ph.D., Professor

Meetings Attended:
November 8-10, 1986 - Attended meeting of the NICHD Staff and Directors of MRRC held in Boston, MA
November 11-13, 1986 - Attended the Society for Neuroscience meeting held in Washington, D.C.
February 14-17, 1987 - Attended the AAAS Meeting "Frontiers in Neuroscience" held in Chicago.
May 28, 1987 - Attended meeting of NICHD Staff and Directors of MRRC held in Los Angeles, CA
May 29- June 4 - Attended the International Society of Neurochemistry/ American Society of Neurochemistry held in La Guaira, Venezuela
Visiting Consultants
November 18, 1986 - U.S. Army Research Institute Infectious Diseases (3 scientists)
November 18, 1986 - Walter Reed Army Research Institute (3 scientists)
December 4-5, 1986 - John Clement, Ph.D., Scientist, Canadian Defense Research Institute
December 4-5, 1986 - Frank Davis, Ph.D., Research Vice-President, Enzon Co.
December 17-18, 1986 - Louis Irwin, Ph.D., Scientist and Writer, Simmons College, Boston, MA
May 4-5, 1987 - Harold Goldman, Ph.D., Professor, Pharmacology, Wayne State University, Detroit, MI

Committees:
KUMC:
Director, Ralph L. Smith Research Center
Coordinator, Neurotoxin Research Group
Member, Advisory Committee, amyotrophic lateral sclerosis research
Member, Department of Physiology Faculty Search Committee
Member, International Cell Biology Program (KU-Valencia) Committee
Chairman, Alan M. Thompson Medical Stud. Recognition Award in Physiology
Member, Biochemistry Graduate Program Review Committee
Member, Environmental Health Center Scientific Advisory Committee
Scrivener-Scribe, Department of Physiology

Local:
Advisor, Science Pioneers, Kansas City, MO
The University of Chicago Alumni Fund, Greater Kansas City Area
Member, The University of Chicago Club of Kansas City
Member, Decision-making in the Treatment of Newborns with Disabilities Advisory Committee

National:
American Society for Neurochemistry (Standing Rules Committee, 1982-85)
Member, Conferences on Developmental Disabilities Research for NICHD Committee
Scientists' Institute for Public Information (Media Resource Service, New York, NY)
Member, Advisory Committee for Professor F.O. Schmitt autobiography (M.I.T.)

Editorial and Grant Reviews:
member, Scientific Advisory Board of the Encyclopedia of Neuroscience (published by Birkhauser Verlag).
member, Scientific Advisory Board of the Encyclopedia of Neuroscience Year Book (published by Birkhauser Verlag).

Honors:
Mid America State Universities Honor Lecturer (University of Missouri, Iowa State University, University of Oklahoma, and University of Nebraska)
Invitation to M.I.T. to assist Professor F.O. Schmitt in writing his autobiography (expenses paid). Consultant on Neuroscience.

Seminars Presented:
March 9, 1987 - Presented departmental seminar entitled "Brain Regional Glucose Use Associated with Chemically Induced Seizures"
Mid-America State Universities Association Honor Lecturer (Formal lecture on "Brain Regional Glucose Use Associated with Chemically Induced Seizures" and consultations. Seminars presented:
February 5, 1987 - University of Missouri, Kansas City

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April 7-8, 1987 - University of Oklahoma, Oklahoma City
April 16-17, 1987 - Iowa State University
April 27-28, 1987 - University of Nebraska, Omaha

Teaching activities:
- Physiology 388
  4 hours lecture - Muscle Physiology
- Medical Physiology - Physiology 800
  12 - 2 hour Conferences
- M.S. Thesis Committees
  Tina Erickson, K.U. Lawrence Biochemistry Dept.
- Ph.D. Thesis Committees
  James Chastain, Department of Pharmacology
  Kai Savolainen, Department of Pharmacology
  Joel Stiles, Department of Physiology

Trainees:
- James Chastain - Pharmacology Graduate Student (with Dr. Pazdernik)
- John Olson - Anatomy Graduate student (with Dr. Nelson)
- John Wade - Pharmacology Graduate Student (with Dr. Pazdernik)
- Kai Savolainen - Pharmacology (with Dr. Pazdernik) Fogarty Fellow, Finland
- John Terry - Medical Student (with Dr. Pazdernik)
- Darrin Frye

Michael J. Soares, Ph.D., Assistant Professor

Committees:
- Member, Graduate Student Advisory Committee
- Member, Oral Examination Committee for Li Chen, Biochemistry Graduate Student
- Member, Oral Examination Committee for Carla Green, Biochemistry Graduate Student
- University of Kansas Medical Center Faculty Coordinator for Minority Access to Research Careers (MARC) Summer Research Training Program.

Editorial Reviews:
- ad hoc reviewer for - Endocrinology
  - In Vitro: Cellular and Developmental Biology

Seminars presented:
- October, 1986 - Presented a departmental seminar entitled "Development of the rat chorioallantoic placenta: Differentiation vs. Tumorigenesis".
- November, 1986 - Presented a seminar entitled "Development of a pluripotent and tumorigenic cell line from the normal rat chorioallantoic placenta" to the Missouri-Kansas Reproductive Biology Workshop.
- December, 1986 - Presented a seminar entitled "Cell differentiation in extra-embryonic membranes of the rat" to the Midwest Society for Cellular and Developmental Biology in Kansas City, Kansas.

Teaching activities:
- Medical Physiology
  8 hours lecture
  13 conferences
  4 laboratory sessions
- Physiology 705
  10 hours lecture - Endocrinology
Physiology 808
4 hours lecture
Physiology 809
7 hours lecture

Trainees:
Dr. Mamata De, Postdoctoral Fellow
Dr. Swapan K. De, Postdoctoral Fellow
Dr. Santanu Deb, Postdoctoral Fellow
Michael McMaster - Graduate Student (recipient of a March of Dimes Birth Defects Foundation Predoctoral Fellowship)
Teresa Farla - Graduate Student (recipient of a Fulbright Foundation Predoctoral Fellowship)
Kathleen Schaberg - Undergraduate Student (Drury College), summer 1986
Catherine Pinal - (MARC Student, University of California, Santa Cruz, summer 1986)
Gary Podschun (Southwestern College, summer 1987)
Sarvepalli Jokhai (MARC student, Medgar Evers College, summer 1987)
Michael Chang - High School Student, summer 1987

Lawrence P. Sullivan, Ph.D., Professor

Meetings Attended:
October, 1986 - Attended the American Physiological Society meetings in New Orleans, Louisiana
December 8-10, 1986 - Attended American Society of Nephrology meeting in Washington, D.C.
March 28-April 2, 1987 - Attended the Federation of American Societies for Experimental Biology meetings held in Washington, D.C.

Committees:
Internal
Member, Renal Dialysis and Transplantation Committee
Member, VA Hospital Research and Development Committee
Vice-President, Kidney and Urology Research Center
Member, Pathology Graduate Program Review Committee
Member, Graduate School Scholarship Committee
Scheduler, Renal Journal Club
Member, Departmental Graduate Committee
External:
Chairman, Renal Section, American Physiological Society
Member, Section Advisory Committee, American Physiological Society

Editorial and Grant Reviews:
ad hoc reviewer - Journal Pharmacol. and Exp. Therap.
- Am. J. Physiology
- J. Oral Biology
Reviewed abstracts for presentation at meeting of Am. Nephrol. Soc.
Reviewed NSF grant application

Teaching Activities:
Medical Physiology
10 hours lecture - Renal Physiology
12 hours problem sessions
12 conferences
6 laboratory sessions
Physiology 705
8 hours lecture
Physiology 820 Renal Physiology - Graduate Course, 3 students
32 hours lecture
National Board Review
2 hours lecture

Trainees:
Gaylen Howell - Summer Student (from Drury College)
Lynn Ruhle - Summer Student (from Drury College)

Merrill Tarr, Ph.D., Professor

Committees:
Peer Research Review Committee of the American Heart Association, Kansas Affiliate

Teaching Activities:
Medical Physiology
10 hours lecture
4 review sessions approx. 2 hours each
12 conference sessions approx. 2 hours each
5 laboratories
Physiology 705 - Course Director
8 hours lecture
1 hour review
National Board Review
1 hour lecture

Trainees:
Rob Johnson - Medical Student, Summer 1986

Paul F. Terranova, Ph.D., Professor

Meetings Attended:
July, 1986 - Attended the 6th Biennial Ovarian Workshop held at Cornell University.
July, 1986 - Attended the 19th annual meeting of the Society for the Study of Reproduction held at Cornell University
June, 1987 - Attended the Symposium on Angiogenesis, NHLBI, in Bethesda, MD.

Committees:
Departmental:
Member, Graduate Affairs Committee
Coordinator for student evaluation in Medical Physiology

Local:
Member, Faculty Assembly Animal Care Committee
Member, Faculty Travel Awards Committee
Member, Faculty-Student Affairs Committee, College of Health Sciences
Coordinator, Summer Medical Student Research Traineeship Program.
Advisory Committee on MRRC Center to Executive Vice Chancellor
Coordinator, Faculty Research Directory
Member, Ph.D. Committee for Gail Widener, Physiology Graduate Student
Member, Ph.D. Committee for Sue Rummel, Physiology Graduate Student
Member, Ph.D. Committee for Gary Bond, Pharmacology Graduate Student
Member, Ph.D. Committee for Joel Gorski, Pharmacology Graduate Student
Consultant, Kansas City Zoo
Consultant, Mobay Chemical Co, Kansas City, MO

National:
Member, Board of Directors (1987-90), Soc. for the Study of Reproduction
Member, Awards Committee (1987-88), Soc. for the Study of Reproduction

Editorial and Grant Reviews:
Biology of Reproduction
Endocrinology
Journal of Reproduction and Fertility
Neuroendocrinology
American Journal of Anatomy
NSF - Regulatory Biology
USDA Competitive Research Grants Program in Reproductive Biology

Seminars presented:
April 2-3, 1987 - Visited North Dakota State University and presented a seminar entitled "Mast Cells and Ovarian Function"
April 21-22, 1987 - Presented two seminars at Cornell University entitled "Role of LH in Follicular Development" and "Mast Cells and Ovarian Function".

Honors:
Principal speaker at the Symposium on The Endocrine Regulation of Reproduction, held at the University of Maryland, January 7-10, 1987.
Elected to the Board of Directors of the Society for the Study of Reproduction for a 3 year term (1987-1990)
Appointed Associate Dean of Graduate Studies and Research.

Teaching Activities:
Medical Physiology
12 conferences approx. 2 hours each
4 laboratories, 2-4 hours each
Physiology 808
7 hours lecture
Physiology 809
7 hours lecture
Responsible for student evaluation for Medical Physiology course.

Trainees:
John Brannian - Graduate Student; Ph.D. candidate
Katherine Roby - Graduate Student; Ph.D. candidate
B.K. Grangrade, Ph.D. - Postdoctoral Fellow of Rockefeller Foundation
Yasu Nakamura, M.D. - Postdoctoral Fellow
Katherine Wynne-Edwards, Ph.D. - Postdoctoral Fellow, Lalor Foundation
Lance Saville, undergraduate research project (Senior Thesis, Southwestern College)
John W. Trank, Ph.D., Professor

Committees:
Departmental:
- Electronic shop supervisory committee
- Department Seminar Coordinator
- Chairman, Telephone Co-ordinating Committee

KUMC:
- Chairman, Computer Committee

Local:
- Member, Biomedical Engineering Technician Advisory Committee, Johnson County Community College
- Member, Board of Directors Greater Kansas City Div., American Heart Assoc.
- Member, Nutrition Task Force Greater Kansas City Div., American Heart Assoc.

State:
- Immediate Past President, American Heart Association, Kansas Affiliate
- Member, Kansas Affiliate Board of Directors, American Heart Association

Other:
- Collaborator-Consultant, research project dealing with the electrophysiology of transport in intestinal epithelium with Dr. P. T. Beall of Ciba-Geigy.

Teaching Activities:
Medical Physiology
- 7 hours lecture - Optics, Electrocardiography, Hemodynamics, Blood Pressure Regulation
- 12 conferences (24 hours)
- 4 lab sessions (20 hours)
- Laboratory supervision for all Medical Physiology Laboratories

Physiology 388
- 7 hours lecture - Cardiovascular Physiology

Physiology 827 - Instrumentation I
- 30 contact hours

Physiology 828 - Instrumentation II
- 30 contact hours

Trainees:
- Rob Johnson - 2nd year Medical Student, worked in my lab during the summer of 1986. He was involved in the design of a realtime video analyzer.

Dennis P. Valenzano, Ph.D., Associate Professor

Meetings Attended:
- September 7-12, 1986 - Attended the 192nd National Meeting of the American Chemical Society held in Anaheim, CA.
- June 21-25, 1987 - Attended the 15th annual scientific meeting of the American Society for Photobiology held in Bal Harbour, FL

Committees:
Departmental:
- Member, Graduate Committee

National:
- Member, Education Committee American Society for Photobiology
- Director, 1989 International Training Course in Photobiology of the American Society for Photobiology
Editorial Reviews:
ad hoc reviewer - American Chemical Society Books

Honors:
Editor designate of the American Society for Photobiology Newsletter.

Seminars presented:
September 10, 1986 - Symposium presentation entitled "Photomodification and Singlet Oxygen Generation in Membranes" given at the 192nd National Meeting of the American Chemical Society held in Anaheim, CA
February 2, 1987 - Presented departmental seminar entitled "Membrane modification by excited oxygen species"
June 22, 1987 - Slide presentation entitled "Singlet oxygen mediation of membrane photomodification sensitized by merocyanine-540 or rose bengal" at the Fifteenth Annual Scientific Meeting of the American Society for Photobiology, Bal Harbour, FL

Teaching Activities:
Medical Physiology
6 hours lecture
12 conferences
4 laboratories
Physiology 388
8 hours lecture
National Board Review
1 hour lecture

Trainees:
Angela Hutzenbuhler, summer medical student, 1986
Mark Milne - undergraduate summer research student, 1986 (Drury College)
Crosby Gernon - summer medical student, 1986 (co-advised with Drs. Clancy and Gonzalez)
Nancy Becker - Dept. of Medicine Fellow - advised on project using UV light in lupus erythematosus (Sponsor: Nabih Abdou), April, 1986 - present.

James L. Voogt, Ph.D., Professor

Meetings Attended:
July 9-11, 1986 - Attended the 1st International Congress of Neuroendocrinology in San Francisco and presented a paper entitled "Effect of placental lactogen on circulating prolactin and hypophysial stalk plasma dopamine levels"

Committees:
Departmental:
Member, Graduate Committee
Local:
Member, KUMC Steering Committee, Medical School
Secretary/Treasurer, Local Chapter of Neuroscience Society
National:
Member, Public Affairs Advisory Committee of the American Physiological Society

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Editorial and Grant Reviews:
Editorial Board - American Journal of Physiology
Editorial Board - Endocrinology
- Neuroendocrinology

Seminars Presented:
November 8, 1986 - presented seminar to the MO-KAN Reproductive Workshop entitled "Prolactin and Placental Feedback in the Hypothalamus"
February 2, 1987 - presented a seminar to the Department of Anatomy at the University of Kentucky
February 4, 1987 - presented a seminar to the Department of Physiology at the University of Louisville
February 16, 1987 - gave a departmental seminar entitled "Monitoring Dopamine Release from the Hypothalamus In Vivo"
April 28, 1987 - presented a seminar to the Department of Pharmacology, KUMC, entitled "Prolactin - Dopamine - Prolactin"

Teaching Activities:
Medical Physiology
12 conferences
4 laboratories
Physiology 388 (Course director)
8 hours lecture
Physiology 808 (Course director)
8 lectures
Physiology 809 (Course director)
8 lectures

Trainees:
Susan Turkington - summer medical student, 1987
Mark Scott - undergraduate student (Avila College)
Sandy Elliott - graduate student

Daniel J. Welling, Ph.D., Research Professor

Invited talks:
Presented a talk entitled "The heteroporous membrane as a model for cell volume regulation" to the Biological Engineering Society at the FASEB meetings held in Washington, D.C. in April, 1987.

Editorial and Grant Reviews:
Assoc. Editor for Modern Methodology for the American Journal of Physiology
Reviewed articles for Biophysical Journal