# TABLE OF CONTENTS

Comments from the Chair ................................................. 1  
Department Roster .......................................................... 4  
Graduate Student Notes .................................................... 7  
Courses Taught ............................................................... 9  
Department Seminars ....................................................... 10  
Publications
  a. Published (7/1/94-6/30/95) ........................................ 14  
  b. In Press ................................................................. 17  
  c. Abstracts ............................................................... 19  
Research Support ............................................................ 22  
Staff Activities ............................................................. 26
COMMENTS FROM THE CHAIR

This past year has been an excellent one for the department in many respects. It began with the addition of Michael Wolfe as an Assistant Professor. Michael received his Ph.D. from the University of Nebraska and did postdoctoral work with Dr. John Nilson at Case Western Reserve University. He is an excellent molecular biologist who adds an important dimension to our research endeavors. He is studying the equine gonadotropin gene regulatory elements and their trans-acting factors. Dr. S.K. Dey also officially joined the department on July 1, and continues to make excellent contributions in research and teaching. The other significant addition in the department was that of Linda Simons, who has filled the position of financial grant manager in a manner that surpasses anything we have experienced in the past. Research funding has reached new levels, which is a tribute to the dedication of our faculty, students, research assistants, and postdoctoral fellows. Innovations occurred in the Medical Physiology course and Medical Neuroscience course. New developments are underway in graduate programs that should make the combined departmental programs much more effective in attracting outstanding students.

Dr. John Trank took advantage of the new Regents’ policy that allows phased retirement. He decreased his time to 25%, which will continue until June 30, 1997, at which time he will retire. However, we are keeping his effort as close to 100% as possible so we can still benefit from his unique abilities. Our Executive Dean, Dr. Hollander, has generously agreed to allow us to begin recruitment of a cardiovascular physiologist. The search is already well underway and we hope to fill the position in the next few weeks.

At the administration level, several critical changes are in progress. Both a new Chancellor and Executive Vice Chancellor have been hired. Dr. Robert Hemenway began his tenure as Chancellor on June 1, 1995, and Dr. Donald Hagen will begin September 1, 1995. There is a strong feeling amongst the faculty that these are very capable and qualified leaders that will help us chart a course through the uncertain waters that face academic medical centers for the remainder of this century and into the next. Dr. Hollander has wisely begun development of a Strategic Plan for the School of Medicine and many of the faculty in Physiology are on committees dedicated to drawing a blueprint for the school for the next 2-3 years and beyond.

Research

Research efforts by the faculty and their laboratory personnel are composed of at least three major components: obtaining grants, doing the research, and reporting the results. In the era of tight money and extreme competition, some of us feel that writing the proposals takes more time than any other aspect of research and is usually the least enjoyable. However, it is still true that money does not arrive tied to a carrier pigeon, but only comes if we ask for it. I do not know the exact number of grant applications that left the department this year, but it seemed as though I signed them weekly. A total of 51 papers were published in FY 95, and 33 are currently in press. The KUMC Research Administration summary report for the Department of Physiology shows that during FY 95 principal investigators in the department received $2,087,489 in direct costs from extramural sources and $945,085 in indirect costs for a total of $3,032,574. Of this, $2,893,821 are NIH funds. This is a 35% increase (due in part to the addition of S.K. Dey) over last year and is by far the most ever received by the department. The NIH report for FY 94 (10/1/93-9/30/94) showed that the department received a total of $2,414,468 in NIH research monies, ranking us 42nd out of 106 physiology departments that received grants from NIH. This also was the most any department
at the KU School of Medicine received from NIH for FY 94. New or competing renewals from NIH were awarded to Drs. Terranova (RO1+minority supplement), Smith (2 RO1s), Sullivan, Voogt, and Imig, and a two-year award from the American Heart Association (Kansas affiliate) to Dr. Tarr. Drs. Arbogast and LeVine each received an award from the KU Research Institute based on high scores of nonfunded NIH RO1 grants. Already in this new year several preliminary green slips indicate more grants will be awarded. Truly the faculty are to be congratulated for their diligent effort and success.

We continue to have faculty who are recognized both internally and externally for their achievements in research. Dr. Soares received the Adriana and Louisa Castellucci Award for 1995 and will give a lecture this fall in Spa, Belgium at the awards ceremony. Dr. Terranova received the Senior Investigator Research Award at the KUMC Faculty Research Day. Drs. Soares, Smith, Voogt and Dey served as regular members of NIH Study Sections and several others were ad hoc members. It gives me great pleasure to see the research careers of faculty in the department flourish.

Teaching and Training

We currently have fourteen doctoral students on the roster, including one M.D./Ph.D. student, Michael Parks. Toni Clinton and Gary Hamlin received their doctoral degrees during the year. Several students expect to finish their requirements this year and move on to new positions. We were well represented in the Student Research Forum, which was co-directed by Kelly Humpherys. Dr. Clancy finished his long and distinguished stint as Chair of the Graduate Program and Dr. Smith began a phase-in period which became 100% this July 1, 1995. The department has greatly stepped up its advertising, including a page in Peterson’s Guide and mailing of numerous brochures. Four new students, Young Soo Lee, Hyunjung Lim, Ying Cheng and Marcella Foti are beginning this summer.

A major development in graduate education began this year. Recognizing that it is very difficult to have competitive programs for outstanding graduate students by individual departments, the Basic Science Chairs called a committee together to study the feasibility of forming an interdisciplinary graduate program that would utilize a common recruitment scheme and first year core courses for all students. Three consultants from schools with interdisciplinary programs spent time here, and following their visits the committee, chaired by Dr. Glen Andrews, submitted a report to the Chairs. This now awaits action by the Chairs, with the hope that some or all of this program can be initiated within the year.

Postdoctoral trainees and visiting scientists numbered twenty-three this past year. Needless to say, they form an invaluable research group in the department.

During a faculty retreat last fall in Lawrence, the department decided to reduce its lecture number by 25% and to turn more of the student learning into an active rather than passive experience. This was accomplished by the development of medical case studies in which major diseases were the focus of student discussions. This allowed students to learn on their own, based on lectures and discussion questions, and then participate in a free-running discussion with a faculty member and a group of fifteen students. There was a lot of enthusiasm for this new approach from both the students and faculty, and in general, was very successful. Quizzes caused some anxiety with some students, but statistics revealed there was no basis for their perceptions. We will continue to refine this part of the course. Dr. Levine and Dr. Gonzalez, who was director of the Medical Physiology course, received awards from the students for their excellent teaching. The Medical Neuroscience course continues to be taught by the Departments of Anatomy & Cell Biology and Physiology, with Dr. Imig the
director. Given the problems that interdepartmental teaching inherently have, this course went quite well.

The School of Medicine faculty passed a broad, non-specific resolution to participate in curriculum renewal. This is beginning with the recent assignment of committees. However, prior to this time the Basic Science Chairs appointed a committee chaired by Dr. Michael Gordon to begin development of curricular change. The first outcome is the design and implementation of several interdisciplinary case studies that will be used throughout the first two years of medical school. These are based on major diseases and cross several departmental lines, thus exposing the students to the various aspects of the disease and treatment over time. This committee also is looking at ways to develop interrelated material taught in the various departments. The awarding of the PCPE grant to the school and Dr. Hollander will help give us the resources needed to make significant changes in the educational experience of our medical students, especially in their last two years.

**Finances and Facilities**

The department expended a total of $237,000 from internal sources for faculty, including equipment, supplies, service contracts, start-up expenses for new faculty, and renovation. This excludes any salary money and OOE funds from the state. Several laboratory renovations were completed and a number of multi-user equipment items were purchased. The return on research overhead was $64,202 this past year, but with the reduction in percentage allotted to the department, this figure will likely shrink in the coming year. Approximately 25% of faculty salaries comes from grant sources, with the remaining coming from the state budget. This is very similar to the national average for Departments of Physiology at all medical schools. The average increase in faculty salaries at the beginning of FY 95 was 4.5%. We continue to receive excellent support from the Office of the Executive Dean, the higher administration and the State of Kansas, and will continue to do our best to give the residents of the state value for their money.

**Social Activities**

We had several departmental meetings at Fog's Court, a picnic at Shawnee Mission Park and a festive holiday celebration at the Chair's digs. However, the highlight was the Don Johnson celebration held this spring. Led by Joe Bast, a committee designed a combination symposium/party to honor the selfless, dedicated spirit that D.C. Johnson has given us for these many years. It began at noon with a luncheon in the atrium of the new Biomedical Research Building and concluded about 1:00 a.m. the next day at the Chair's house (which fortunately did not slide down the muddy hillside in spite of the presence of 80 people, all who stood in the garage watching a slide presentation). In between were many tributes, roasts, remembrances, humorous pictures, conversations, fine food and wine (partly thanks to DCJ himself, who provided some outstanding French reds). Don, thanks for giving us so many wonderful reasons to hold a celebration.

**Summary**

All in all, it has been a vintage year. Innovations in teaching were begun. Solid performances in research continued. The office staff, Linda Carr, Joella Judd, and Linda Simons performed with great efficiency. Ted Gleason helped keep many laboratories running smoothly. I am blessed with a great group of people with which to work and look forward to this next year with a great deal of optimism.
a. Faculty

Primary Appointment in Physiology
Paul D. Cheney, Ph.D., Professor (Director of Ralph L. Smith Center for Mental Retardation)
Richard L. Clancy, Ph.D., Professor
Sudhansu K. Dey, Ph.D., Professor
Norberto C. Gonzalez, M.D., Professor
Gilbert S. Greenwald, Ph.D., Distinguished Professor
Thomas J. Imig, Ph.D., Professor
Steven M. LeVine, Ph.D., Assistant Professor
Fred E. Samson, Ph.D., Professor Emeritus
Peter G. Smith, Ph.D., Professor
Michael J. Soares, Ph.D., Professor
Lawrence P. Sullivan, Ph.D., Professor
Merrill Tarr, Ph.D., Professor
Joseph S. Tash, Ph.D., Associate Professor
Paul F. Terranova, Ph.D., Professor
John W. Trank, Ph.D., Professor
Dennis P. Valenzeno, Ph.D., Associate Professor
James L. Voogt, Ph.D., Professor and Chairman
Michael W. Wolfe, Ph.D., Assistant Professor

Joint Appointment in Physiology
Donald C. Johnson, Ph.D., Professor (Joint Appt., Ob-Gyn)
Girish Shah, Ph.D. Associate Professor (Joint Appt., Urology)
Travis Solomon, M.D., Ph.D., Professor (Joint Appt., Medicine, Kansas City VA Hosp.)

Modified Title
Lydia Arbogast, Ph.D., Research Assistant Professor
Geracimo Bracho, Ph.D., Research Assistant Professor
Sanjoy K. Das, Ph.D., Research Assistant Professor
B. C. Paria, Ph.D., Research Assistant Professor
Jeffrey Radel, Ph.D., Research Assistant Professor (Joint Appt., Occupational Therapy Ed.)
John G. Wood, Ph.D., Research Assistant Professor (Joint Appt., Surgery)
Daniel J. Welling, Ph.D., Research Professor (Kansas City VA Hospital)
Deborah Kipp, Ph.D., Adjunct Associate Professor (Joint Appt., Dietetics & Nutrition)
### DEPARTMENT ROSTER (continued)

**b. Postdoctoral Fellows**
- Indrani Chakraborty
- Guoli Dai
- Nirajan Das
- Takayuki Kamei
- Jennifer Karrer
- Da-Kai Lin
- Joanne Marcario
- Jennifer Marcinkiewicz
- Farshid Marzban
- Puliyur Mohan Kumar
- Yoshihiro Moue
- Kyle Orwig
- Vadim Pedchenko
- Pierre Poirier
- Raouf Belhaj-Saif
- Frank Samson
- Chris Taylor
- Tetsuya Urano
- Xiang-Ming Wang
- Xiao-Ning Wang
- Toshiya Yamamoto
- MeiWei Xian
- M. Zubin

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### c. Graduate Students

<table>
<thead>
<tr>
<th>Student</th>
<th>Prelims</th>
<th>Candidate for</th>
<th>Degree Requirements Fulfilled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hualin Chen</td>
<td>9/94</td>
<td>Ph.D.</td>
<td></td>
</tr>
<tr>
<td>Jeremy Chien</td>
<td>9/94</td>
<td>Ph.D.</td>
<td></td>
</tr>
<tr>
<td>Toni Clinton</td>
<td>9/91</td>
<td>Ph.D.</td>
<td>9/94</td>
</tr>
<tr>
<td>Sandra Elliott</td>
<td>9/89</td>
<td>Ph.D.</td>
<td></td>
</tr>
<tr>
<td>Rebecca Flietstra</td>
<td>9/93</td>
<td>Ph.D.</td>
<td></td>
</tr>
<tr>
<td>Gary Hamlin</td>
<td>10/93</td>
<td>Ph.D.</td>
<td></td>
</tr>
<tr>
<td>Jean Hiebert</td>
<td>8/91</td>
<td>Ph.D.</td>
<td></td>
</tr>
<tr>
<td>Kelly Humpherys</td>
<td>8/92</td>
<td>Ph.D.</td>
<td></td>
</tr>
<tr>
<td>Karen Kover</td>
<td>3/88</td>
<td>Ph.D.</td>
<td></td>
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<tr>
<td>Brian McKiernan</td>
<td>4/93</td>
<td>Ph.D.</td>
<td></td>
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<tr>
<td>Michael Park</td>
<td>9/94</td>
<td>Ph.D.</td>
<td></td>
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<tr>
<td>Tom Peters</td>
<td>9/94</td>
<td>Ph.D.</td>
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<tr>
<td>Christine Rasmussen</td>
<td></td>
<td>Ph.D.</td>
<td></td>
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<tr>
<td>Leigh Raymond</td>
<td>9/94</td>
<td>Ph.D.</td>
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<tr>
<td>Darren Wallace</td>
<td>9/94</td>
<td>Ph.D.</td>
<td></td>
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<tr>
<td>James Warn, Jr.</td>
<td>9/94</td>
<td>Ph.D.</td>
<td></td>
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<tr>
<td>Robert Whitman</td>
<td>9/94</td>
<td>Ph.D.</td>
<td></td>
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<tr>
<td>Elena Zoubina</td>
<td>9/94</td>
<td>Ph.D.</td>
<td></td>
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</tbody>
</table>

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d. **Summer Students**

Joseph Burris  
Gregory Erb  
Bret Gordon  
Chris Glattes  
Richard Heck  
Bertha Henderson  
Jamie Jones  
Jonathan Kenton  
Christopher Milford  
Chris Rejana  
Michael Riley  
Beverly Tong  
Sean Vellucci  
Valerie Williams
NOTES CONCERNING GRADUATE STUDENTS

Rebecca Flietstra presented a seminar entitled "Regulation of Sucking-induced Prolactin Release" at Calvin College in Grand Rapids, Michigan on November 11, 1994. Also in November Rebecca attended the annual Neuroscience Meetings held in Miami, Florida. In the spring of 1995 Rebecca tutored several medical students enrolled in the Medical Physiology course. On April 5, 1995 she gave a slide presentation at the Student Research Forum entitled "Rat Choriocarcinoma Cells are Capable of Initiating Lactation in Virgin Rats Exposed to Pups". Rebecca also served as a student representative on the Graduate Student Affairs Committee during the past year.

Jean Hiebert submitted a paper as co-author with Dr. Peter Smith entitled "Reinnervation of Denervated Iris by Transplanted Sympathetic Ganglia: Effect of Neuronal Age" which was accepted for publication in the International Journal of Developmental Neuroscience.

Kelly Humphrys attended the annual Society for Neuroscience meeting held in Miami, Florida in November, 1994. In the spring she tutored Medical Physiology students and was a Teaching Assistant for the Neuroscience Laboratories as well as two Medical Physiology conferences. She served as President of the Student Governing Council 1995-1996 and was the KUMC representative to the Student Advisory Council for the Kansas Board of Regents. She also monitored a high school student’s science project. Kelly served as co-chair for the Student Research Forum at which she gave a presentation entitled "Vasoactive Intestinal Peptide Antagonist Attenuates the Nocturnal Prolactin Surge of Pregnancy".

Brian McKiernan returned to a full-time faculty position in the Department of Physical Therapy Education in July 1994. In November 1994 he attended the annual Society for Neuroscience annual meeting held in Miami, Florida and presented a poster entitled "Corticomotoneuronal (CM) Post-Spike Effects on Shoulder, Elbow, Wrist, Digit and Intrinsic Hand Muscles During a Reaching Task in the Monkey".

Darren Wallace gave a slide presentation at the Student Research Forum in April entitled "The Role of the NA/K/Cl Cotransporter in Fluid Secretion in Autosomal Dominant Polycystic Kidney Disease (ADPKD)". Darren was first author on an abstract entitled "Cultured Human Polycystic Kidney Cells" which was published in the September issue of the Journal of the American Society of Nephrology and he also attended the Society’s annual meeting held in Orlando, Florida in October. He is co-author of a paper entitled "Anion Secretion Drives Fluid Secretion by Monolayers of Cultured Human Polycystic Cells" which is currently in press in the American Journal of Physiology.

New students who joined our graduate program during the past year include:

- Jeremy Chien - Emporia, Kansas
- Michael Park - Overland Park, Kansas
- Tom Peters - Algonquin, Illinois
- Leigh Raymond - Albuquerque, New Mexico
- Elena Zoubina - St. Petersburg, Russia
COURSES TAUGHT

Major Service Courses


Departmental Graduate Courses


DEPARTMENT SEMINARS

The Departmental Seminar program was directed by Dr. Joseph Tash. Thirty-seven speakers made presentations, twelve of which were from outside the university. In addition to support from the department, the Office of the Dean of the School of Medicine and the MRRC made important financial contributions to our program. The Kathleen M. Osborn Lecture Series sponsored Dr. Barry Bavister from the University of Wisconsin.

9/12/94 James L. Voogt, Ph.D. Department of Physiology, KUMC Lactogenic Hormones are Inhibitors to Prolactin Secretion

9/19/94 Michael Werle, Ph.D. Dept. of Anatomy & Cell Biology, KUMC The Role of Basal Lamina Molecules in Synapse Formation, Stabilization and Elimination

9/26/94 Virginia Rider, Ph.D. Dept. of Molecular Biology & Biochemistry University of Missouri - Kansas City Hormonal Control of Gene Expression in the Uterus

9/28/94 Toni-Annette Kurz Clinton Department of Physiology, KUMC The Granulosa-Lutein Cell as a Model for the Evaluation of Human Ovarian Function: Effects of Human Chorionic Gonadotropin & Tumor Necrosis Factor-α

10/10/94 Bob Palazzo, Ph.D. Department of Physiology University of Kansas - Lawrence Reactivation of the Isolated Mitotic Apparatus

10/17/94 Bryan Livingston, Ph.D. Department of Cell Biology and Biophysics University of Missouri - Kansas City Cell Signalling and Cell Fate Determination during Sea Urchin Development

10/21/94 Karen Kover Department of Physiology, KUMC Differential Regulation of Mouse Uterine Genes In Vivo and In Vitro

10/24/94 Gary Hamlin Department of Physiology, KUMC Trophoblast Differentiation

10/31/94 B. C. Paria, Ph.D. Department of Physiology, KUMC Cannabinoid Receptor Expression in Preimplantation Mouse Embryos

11/7/94 Sanjoy Das, Ph.D. Department of Physiology, KUMC Expression of Cannabinoid Receptors in the Mouse Uterus: Modulation of Uterine Genes by Tetrahydrocannabinol

11/14/94 Joan Hunt, Ph.D. Dept. of Anatomy & Cell Biology, KUMC The Human Leukocyte Associated Antigens
<table>
<thead>
<tr>
<th>Date</th>
<th>Name</th>
<th>Department/Institution</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/21/94</td>
<td>Pascal Barone, Ph.D.</td>
<td>Department of Physiology, KUMC</td>
<td>Development of Visual Cortical Connections in Monkeys</td>
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<tr>
<td>11/28/94</td>
<td>Hideake Nagase, Ph.D.</td>
<td>Department of Biochemistry, KUMC</td>
<td>Role of Matrix Metalloproteinases in Connective Tissue Breakdown</td>
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<td>12/5/94</td>
<td>Lawrence Sullivan, Ph.D.</td>
<td>Department of Physiology, KUMC</td>
<td>Chloride Secretion Drives Fluid Secretion in Cultured Polycystic Cells</td>
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<td>12/12/94</td>
<td>Kim Fechtel, Ph.D.</td>
<td>Department of Biochemistry, KUMC</td>
<td>Molecular Control of Neural Development - Analysis of Genes that Regulate Development in <em>Drosophila</em> and Vertebrate Models</td>
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<td>12/19/94</td>
<td>Terry Johnson, Ph.D.</td>
<td>Director, Cancer Center, Kansas State University</td>
<td>Cell Growth Regulation and Tumorigenesis</td>
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<td>1/9/95</td>
<td>Nancy Berman, Ph.D.</td>
<td>Dept. of Anatomy &amp; Cell Biology, KUMC</td>
<td>Functions of Microglial Cells in Brain Injury and Disease</td>
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<td>1/23/95</td>
<td>Kathy Suprenant, Ph.D.</td>
<td>Department of Physiology, University of Kansas, Lawrence</td>
<td>Polyribosome Targeting to Microtubules</td>
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<td>1/30/95</td>
<td>Sri Melethil, Ph.D.</td>
<td>Pharmaceutical Sciences, University of Missouri, Kansas City</td>
<td>Aging Decreases the Blood-Brain Barrier Transport of Tryptophan in Rats Cats with Restricted Cochlear Lesions</td>
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<td>2/6/95</td>
<td>James Orr, Ph.D.</td>
<td>Department of Biology, University of Kansas - Lawrence</td>
<td>Thromboxin A2: Physiology and Mechanism of Action in the Lung</td>
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<td>2/13/95</td>
<td>Joseph S. Tash, Ph.D.</td>
<td>Department of Physiology, KUMC</td>
<td>Phosphorylation Pathways in the Regulation of Sperm Flagellar Motility</td>
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<tr>
<td>2/20/95</td>
<td>Mark Hawthorne, Ph.D.</td>
<td>Department of Pharmacology, University of Missouri - Kansas City</td>
<td>The Pharmacological Regulation of Voltage-Dependent Calcium Channel Expression</td>
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<td>2/27/95</td>
<td>Gary Wood, Ph.D.</td>
<td>Department of Pathology, KUMC</td>
<td>Role of Macrophages and Cytokines in the Preimplantation Uterus</td>
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<td>2/28/95</td>
<td>Kazuhiko Imakawa, Ph.D.</td>
<td>Department of Obstetrics &amp; Gynecology, Univ. of Kansas Med. Ctr. - Wichita</td>
<td>Regulation of Interferon Expression in Early Pregnancy</td>
</tr>
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</table>
3/13/95  Bob Cohen, Ph.D.
Department of Biochemistry
University of Kansas - Lawrence
A Single Small Stem-loop Structure Mediates Oocyte Localization of Drosophila K10 mRNA

3/20/95  Jeffrey Gorski, Ph.D.
Div. of Molecular Biology & Biochem.
University of Missouri - Kansas City
Bone Acidic Glycoprotein-75 Forms Self-Aggregates In Vivo and In Vitro

3/27/95  William Millington, Ph.D.
Div. of Molecular Biology & Biochem.
University of Missouri - Kansas City
Cardiovascular Regulation by Non-opioid β-endorphin Peptides

4/3/95  Mary L. Michaelis, Ph.D.
Dept. of Pharmacology/Toxicology
University of Kansas - Lawrence
The Sodium/Calcium Exchanger in Excitable Cells: Biochemical and Molecular Perspectives

4/10/95  Richard Tessel, Ph.D.
Dept. of Pharmacology/Toxicology
University of Kansas - Lawrence
Can Operant Training Induce Recovery From Perinatal Brain Damage? Implications for Mental Retardation

4/10/95  Michael Klagsbrun, Ph.D.
Dept. of Surgical Research, Biological Chemistry and Molecular Pharmacology Children's Hosp. & Harvard Medical School
Heparin-binding EGF-like Growth Factor (HB-EGF), a Multifunctional Protein with Growth Factor, Adhesion and Receptor Properties

4/17/95  Bibie M. Chronwall, Ph.D.
Div. of Cell Biology & Biophysics
University of Missouri - Kansas City
D2 Dopamine Receptor Regulation of Pituitary Melanotrope Protein Synthesis

4/24/95  Barry Bavister, Ph.D.
Animal Health and Biomedical Sciences
University of Wisconsin
Studies on Preimplantation Embryo Development: Facts and Artifacts

5/1/95  Dean A. Stetler, Ph.D.
Div. of Biological Sciences/Biochemistry
University of Kansas - Lawrence
cDNA Cloning and Identification of Alternative Forms of the Largest Subunit of RNA Polymerase I, A Target Antigen of SLE Patient Auto-antibodies

5/8/95  Merrill Tarr, Ph.D.
Department of Physiology, KUMC
Membrane Permeabilization by Reactive Oxygen and Strong Electric Fields: Mechanistic Considerations

5/15/95  Fritz Rottman, Ph.D.
Dept. of Molecular Biology Microbiology
Case Western Reserve University
Regulation of Growth Hormone pre-mRNA Alternative Splicing
Expression and Characterization of Decidual Prolactin-Related Protein

Mammals without Estrogen Receptor: Phenotypes Associated with \textit{In Vivo} Disruptions at the Estrogen Receptor Gene
PUBLICATIONS

a. Published during year: July 1, 1994-June 30, 1995


b. In press


Beauregard, C.L. and Smith, P.G. Parasympathetic excitation of sympathetic neurotransmission following cholinesterase inhibition. British Journal of Pharmacology


Johnson, D.C., Chatterjee, S., and Banerjee, S. Estradiol and chlordecone(Kepone) decrease adenosine 3'5'-cyclic monophosphate concentrations in the ovariectomized immature rat uterus. Proceedings Society for Experimental Biology & Medicine.
Li, X-L, Johnson, D.C., and Rozman, K.K. Effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) on cyclicity and ovulation in female Sprague Dawley rats. Toxicology Letters.


Paria, B.C., Das, S.K. and Dey, S.K. The preimplantation mouse embryo is a target for cannabinoid ligand-receptor signaling. Proc Natl Acad Sci USA.


Smith, P.G. and Fan, Q. Trajectory of sympathetic innervation to rat orbital targets: role of connective tissue pathways. Journal of Comparative Neurology.


Wang, X-N, Kole, A.R. and Greenwald, G.S. In Vitro and In Vivo evidence on the site of neutralization of equine chorionic gonadotropin (eCG) by an eCG antiserum. J. Reprod. Fert.

c. Abstracts


Orwig, K.E. and Soares, M.J. (1995) Establishment and characterization of a rat primary decidual cell culture system that expresses and secretes the decidual prolactin related protein. 28th Annual Meeting of the Society for the Study of Reproduction, Davis, CA


RESEARCH SUPPORT

The total grant awards, direct and indirect, that were active during FY '95 for principal investigators whose direct costs are credited to the department, was $3,032,574.


NIH - Direct Measurement of Diaphragm Fatigue. September 1, 1993 to August 31, 1996. Consultant - 10% effort. (Principal Investigator - Janet Pierce, School of Nursing). Direct costs $70,000/yr; Indirect costs: $4,965/year.


The Rockefeller Foundation - Postdoctoral Fellowship. July 1, 1993 through June 30, 1995. $50,000 direct costs.


NSF - Japan Cooperative Research. Mechanisms Regulating Specific Ovulation Rates (hamster, guinea pig). Direct costs $10,200; Indirect costs $250.


NSF/EPSCoR - Chemical Microstructure by Molecular Microscopy. Co-Investigator. Clifton E. Meloan, P.I. October 18, 1992 through February 17, 1996. Total Award $300,000 direct costs; this year LeVine laboratory received $8,889 direct costs and $1,111 indirect costs.


NSF - Graduate Fellowship Award to Rebecca Flietstra. August 1, 1993 - July 31, 1994. $21,500.
ACTIVITIES OF STAFF

Paul D. Cheney, Ph.D., Professor (Director, MRRC)

Meetings Attended:
  October 13-15, 1994 - Attended the Fall MRRC Center Director's meeting in conjunction with the American Association of University Affiliated Programs (AAUAP) for People with Developmental Disabilities, held in Washington, D.C.
  November 12-18, 1994 - Attended the Society for Neuroscience Meeting held in Miami, Florida
  December 1-3, 1994 - Attended the 74th annual meeting of the Association for Research in Nervous and Mental Disease entitled "Alzheimer's Disease" held in New York City.
  June 1-3, 1995 - Attended the spring meeting of the Mental Retardation Research Center Directors held in San Francisco, CA

Committees:
  National:
    Member, Research Center Site Visit team at the Scripps Institute, La Jolla, CA, March 1995.
  Local:
    Member, Institutional Priorities Task Force Committee, School of Medicine
    Vice Chairman, Medical Sub-specialties subgroup of the Institutional Priorities Task Force Committee
    Member, School of Medicine Promotions and Tenure Committee
    Member, Search Committee for Chair of Anesthesiology
    Member, School of Medicine, Dean's Research Advisory Committee
    Member, Center on Aging-Neuroscience Liaison Committee
    Member, Don Johnson Tribute Committee
    Member, Howard Hughes Institutional Research Grant Proposal Committee
    President, KUMC Sigma Xi Scientific Research Organization, 1993-1994
    President, Kansas City Chapter, Society for Neuroscience.
    Alzheimer's Disease Research Committee (Neurology Dept.)
    Member, Midwest Research Institute Liaison Committee
    Member, KUMC Neurology Department Research Committee
    Member, Kansas MRRC Internal Scientific Advisory Committee
    Member, Kansas MRRC Statistics support group committee
    Member, Comprehensive Exam Committee for Don Warn
    Member, Comprehensive Exam Committee for Lynette Sheffield
    Member, Thesis Committee for Jean Hiebert

Editorial and Grant Reviews:
  Ad hoc reviewer Journal of Neurophysiology
  Ad hoc reviewer Experimental Brain Research
  Ad hoc reviewer Journal of Physiology
  P50 Center grant review for NIH Special Study Section
Seminars Presented:
December 7, 1994 - Presented a seminar entitled "How the brain controls coordinated, multi-joint limb movements" to the Department of Pharmacology and Toxicology, KUMC
June 8, 1994 - Presented an OJT seminar for employees of the Animal Resource Facility, KUMC.

Teaching Activities:
Medical Neuroscience
  6 lectures
Organizer of continuing effort to develop a comprehensive graduate level course in Neuroscience

Trainees:
Joanne Marcario - Postdoctoral Fellow
Jennifer Karrer - Postdoctoral Fellow
Raouf Belhaj-Saif - Postdoctoral Fellow
Jon Kenton - summer student
Brian McKiernan - graduate student
Leigh Raymond - graduate student
Michael Park - graduate student
Chris Rejana - student volunteer
Richard L. Clancy, Ph.D., Professor

Meetings Attended:
April 9-13, 1995 - Attended Experimental Biology meeting held in Atlanta, Georgia

Committees:
Departmental:
Chairman, Graduate Student Affairs Committee
Member, Search Committee for cardiovascular physiologist

KUMC:
Chairman, Faculty Assembly Council
Chairman, Faculty Assembly Steering Committee
Member, Graduate Student Council
Member, Faculty and Unclassified Personnel Handbook Revision Committee
Member, Academic Committee - Student Promotions Subcommittee

Teaching Activities:
Medical Physiology 800/801
8 hours lecture - cardiovascular
25 hours - laboratories, conferences, and demonstrations
Physiology 822 - Advanced Human Physiology
10 hours lecture
Prematriculation Course (Minority Students)
6 hours lecture

Trainees:
Robert Whitman - Graduate Student
Joe Burris - Summer Medical Student
Sudhansu K. Dey, Ph.D., Professor

Meetings Attended:
July 9-15, 1994 - attended the Gordon Conference on Reproductive Tract Biology held in New Hampshire as an invited speaker.
July 15-18, 1994 - attended the Serono Symposium on Molecular and Cellular Aspects of Preimplantation Processes, held in Boston, Massachusetts as an invited speaker.
September 19-22, 1994 - attended the 16th International Congress of Biochemistry and Molecular Biology held in New Delhi, India as an invited speaker.

Committees:
Departmental:
Member, Promotion Committee
Member, Ph.D. Committee, Chris Rasmussen, Physiology Graduate Student
Member, Ph.D. Committee, Gary Hamlin, Physiology Graduate Student
Member, Ph.D. Committee, Karen Kover, Physiology Graduate Student

KUMC:
Chairman, Dean’s Advisory Committee on Research
Member, Advisory Committee for MRRC
Member, Executive Committee of Society of Research Scholars
Member, MRRC Space Committee
Member, Howard Hughes' Grant Application Committee
Member, Ph.D. Committee, Lou Chuan, Biochemistry graduate student

National:
Chair, Serono Symposium on Implantation, Boston, July 1994.
Member, Population Research Committee, NICHD, NIH.

Editorial and Grant Reviews:
Biology of Reproduction
Journal Reproduction and Fertility (U.K.)
J. Histochemistry and Cytochemistry
Development Biology
Endocrinology
Molecular Endocrinology
Molecular Reproduction & Development
Human Reproduction (UK)
Development
PNAS
Molecular and Cellular Biology
J. Cell Physiology
J. Comp. Endo
Science
NICHD
NIH

Seminars Presented:
February 17, 1995 - presented a seminar at the University of California, San Francisco.
May 4, 1995 - presented a seminar at Brigham and Women's Hospital, Harvard Medical School, Boston, MA
Honors:
Invited by the Council of Scientific & Industrial Research of India to advise on the future course of Research in Reproduction in India.
Invited speaker, Department of Biology, University of Idaho, Moscow, Idaho, September 1-3, 1995

Teaching Activities:
Medical Physiology
14 hours conference
Developmental Biology Course
2 hours lecture

Trainees:
Indrani Chakraborty, Ph.D. - Postdoctoral Fellow
M. Zubin, Ph.D. - Postdoctoral Fellow
MeiWei Xian, Ph.D. - Postdoctoral Fellow
Xiao-Ning Wang, Ph.D. - Postdoctoral Fellow
Nirajan Das, Ph.D. - Postdoctoral Fellow
Xiang-Ming Wang, Ph.D. - Postdoctoral Fellow
Karen Kover - Graduate Student
Beverly Tong - Medical Student
Norberto C. Gonzalez, M.D., Professor

Meetings Attended:
February 14-18, 1995 - Attended the Ninth International Symposium on Hypoxia and Mountain Medicine at Lake Louise, Alberta, Canada and presented a poster.
April 9-13, 1995 - Attended the Experimental Biology 95 meeting held in Atlanta, GA and presented a paper in a slide session.

Committees:
Departmental
Chairman, Search Committee for cardiovascular physiologist
KUMC
Member, Education Council, School of Medicine
Member, Committee on Interdepartmental Coordination (CIC)
Member, Space Allocation Advisory Committee
Local
President, American Heart Association - Kansas Affiliate
Vice-Chairman, Research Committee, AHA-Kansas Affiliate
National
Member, Respiratory and Applied Physiology Study Section, DRG, NIH, February, 1995

Editorial and Grant Reviews:
Respiration Physiology
Journal of Applied Physiology
American Journal of Physiology: Regulatory, Integrative and Comparative Physiology
Pflügers Archiv, European Journal of Physiology
Ad-hoc reviewer, National Science Foundation
Ad-hoc reviewer, Health Research Council of New Zealand

Honors:
Honors in Education, Student Voice, 1995

Teaching Activities:
Medical Physiology (Course Coordinator)
9 lectures - Respiratory Physiology
2 review sessions on Respiratory Physiology
Facilitator in 3 conferences
2 Demonstrations on Respiratory Physiology
National Board review Session on Respiratory Physiology

Trainees:
Yoshihiro Moue, M.D., Post Doctoral Fellow
Tetsuya Urano, M.D., Post Doctoral Fellow
Gilbert S. Greenwald, Ph.D., Distinguished Professor

Meetings Attended:
July 24-27, 1994 - Attended the 27th annual meeting of the Society for the Study of Reproduction held at the University of Michigan, Ann Arbor
September 13-14, 1994 - Attended the Japan Society of Animal Reproduction held in Towada City, Japan and gave the principal address.
June 2-3, 1995 - Attended the retreat in Reproductive Biology held at the Allenton Conference Center at the University of Illinois in Monticello, IL

Committees:
Departmental:
Member, Thesis Committee for Karen Kover
Member, Thesis Committee for Toni Clinton

Local:
Member, Search Committee for Hall Distinguished Prof. in Molecular Medicine
Member, Search Committee for Chairman of History of Medicine

National:
Member, Society for Experimental Biology and Medicine Finance Committee
Chairman, Society for Experimental Biology and Medicine Status Committee
Consultant, Ligand Pharmaceuticals
Consultant, Chapman Hall, London, publishers
Consultant, Finnegan, Henderson, Farebore, Washington, D.C. (patent attorneys)

Editorial and Grant Reviews:
Biology of Reproduction
Endocrinology
Human Reproduction
Proceedings of the Society of Experimental Biology
National Science Foundation

Seminars Presented:
September 6, 1994 - Presented a seminar entitled "Ovarian Follicular Development and its Control in Mammals" to the Department of Obstetrics & Gynecology at Yamaguchi University in Japan
September 10, 1994 - Presented a seminar entitled "Ovarian Follicular Development and its Control in Mammals" to the Department of Obstetrics & Gynecology at Tokyo Medical College in Japan
September 12, 1994 - Presented a seminar entitled "Ovarian Follicular Development and its Control in Mammals" to the Laboratory of Veterinary Physiology at Tokyo University of Agriculture and Technology in Japan
January, 1995 - Presented a seminar entitled "Luteal Apoptosis Palininary Findings" at the Reproductive Workshop held at KUMC
May 18, 1995 - Presented a seminar entitled "Luteal Apoptosis Palininary Findings" at Ligand Pharmaceuticals
June 2, 1995 - Presented the after dinner address at the IV Annual retreat in Reproductive Biology held at the University of Illinois
Dr. Greenwald (continued)

Academic Honors:
Invited speaker in the workshop "Current Status and Perspectives in Reproduction and Lactofin in Domestic Animals" to be held in October, 1995 in Morioka, Japan.

Teaching Activities:
Physiology 800 - Medical Physiology
  9 hours lecture - G.I. Physiology
  12 hours conference sessions
G.I. Physiology Tape Preparation
  8 hours

Trainees:
Hisashi Kishi, D.V.M. - Visiting Professor
Kazuyoshi Taya, D.V.M., Ph.D. - Visiting Professor
Gen Watanabe, D.V.M., Ph.D. - Visiting Professor
Mariko Otsuka, D.V.M. - Visiting Professor
Kofi Arai, D.V.M. - Visiting Professor
Thomas J. Imig, Ph.D., Professor

Meetings Attended:
- November 6-12, 1994 - attended the annual Society for Neuroscience meeting held in Miami, Florida
- June 2-4, 1995 - attended the Acoustical Society of American meeting held in Washington DC

Committees:
Departmental:
- Librarian
- Member, Graduate Affairs Committee
- Member, Dissertation Committee for Brian McKiernan
- Member, Dissertation Committee for Jean Hiebert
- Member, Dissertation Committee for Rebecca Flietstra

KUMC:
- Member, Faculty Assembly Informatics Committee
- Member, Curricular Reform Committee (CIC)
- Member, IACUC Committee
- Member, Research Committee, School of Medicine
- Member, Search Committee for Chair of Anesthesiology
- Member, Review Committee for Medical Student Summer Research Awards

National:
- Member, NIDCD site visit team, Johns Hopkins University, Baltimore, February 15-17, 1995

Editorial and Grant Reviews:
- Journal of Neurophysiology
- Journal of Neuroscience
- Journal of Comparative Neurology
- Hearing Research

Seminars Presented:
- April 5, 1995 - Presented a seminar entitled "Directional Hearing" to the ENT Department, KUMC

Honors:
- Invited speaker, Cortical Representation and Processing of Auditory Stimuli, Annual Meeting of the Acoustical Society of American held on June 2, 1995

Teaching Activities:
- PHYS/ANAT 840 - Medical Neuroscience (Course Director)
  7 hours lecture

Trainees:
- Frank Samson - Postdoctoral Fellow
- Pierre Poirier - Postdoctoral Fellow
Donald C. Johnson, Ph.D., Professor

Committees:
  Departmental:
    Ph.D. Thesis committee for Toni Clinton
    Ph.D. Thesis committee for Rebecca Flietstra
  KUMC:
    Ph.D. Thesis committee for Alison Draper, Pharm-Toxicology student
    Ph.D. Thesis committee for Xuelin Li, Pharm-Toxicology student
    Ph.D. Thesis committee for Peter Bullock, Pharm-Toxicology student
  National:
    Member, Special grant review group for 'Defense Women's Health Research Program' of the Department of Defense

Editorial and Grant Reviews:
  Biology of Reproduction
  Prostaglandins

Seminars Presented:
  April 10, 1995 - Presented a seminar entitled "Evolution of a Scientific Solution" to the Department of Anatomy & Physiology, Kansas State University, Manhattan, KS

Teaching Activities:
  Medical Physiology
    8 conference sessions
  Ob/Gyn Clerkship - Basic Concepts Session
    2 hour sessions weekly for 12 weeks

Trainees:
  Xuelin Li - Pharmacology graduate student
Meetings Attended:
July 6-10, 1994 - Attended the United Leukodystrophy Foundation, Twelfth
Leukodystrophy National Conference held in Northern Illinois University in
Dekalb, Illinois.
July 17-21, 1994 - Attended the 46th meeting of the American Association of Clinical
Chemistry held in New Orleans, LA as an invited speaker
March 6-10, 1995 - Attended the 26th annual meeting of the American Society for
Neurochemistry held in Santa Monica, CA

Committees:
Departmental:
Member, Graduate Student Advisory Committee
Member, Thesis Advisory Committee for Don Warn
University:
Member, M.D./Ph.D. Advisory Committee
Chairman, M.D./Ph.D. Academic Review Subcommittee
Member, Mental Retardation Research Center Advisory Committee

Seminars Presented:
November 9, 1994 - Presented a seminar entitled "Fourier Transform Infrared
Microspectroscopy: Applications in Neuropathology" to Sigma Xi, KUMC
February 13, 1995 - Presented a seminar entitled "I R Microscopy of Biological
Samples" to the Department of Chemistry, University of Kansas, Lawrence
campus
April 7, 1995 - Presented 'Neurohistology' at the Info '95 Computer Fair (a computer
based demonstration) at KUMC

Honors:
Invited speaker at the 14th Leukodystrophy National Conference to be held in July
1995 at Northern Illinois University in DeKalb, Illinois.
Recipient 'Excellence in Education (Neuroscience), 1994-1995, School of Medicine,
University of Kansas Medical Center - Student Voice
Travel Award Recipient, University of Kansas Medical Center

Teaching Activities:
PHSL 840 (Medical Neuroscience)
6 hours lecture
2 hours laboratory
PHSL 822 - Advanced Human Physiology
5 lectures
PHSL 810 (Cell Structure and Function)
3 hours lecture
PHSL 784 (Faculty Research Forum)
1.5 hours

Trainees:
Gregory Erb - Medical Student
Christopher Milford - Medical Student
Fred E. Samson, Ph.D., Professor Emeritus

Meetings Attended:
July 10-13, 1994 - attended the NASA Research Proposal Review held in Reston, VA
September 23, 1994 - attended the EPSCoR Program held in Kansas City, MO
September 29 - October 1, 1994 - attended the Therapeutic Potential of Biological Antioxidants meeting held in Tiburon, CA
February 21, 1995 - attended the EPSCoR Directors with KTEC meeting held in Topeka, KS
June 8, 1995 - attended the Kansas Strategic Technology Study held in Topeka, KS

Committees:
Departmental:
    Scrivener-Scribe
University:
    Coordinator, Free Radical Research Group (KU-KUMC Intercampus)
    Coordinator, KUMC proposal to NIH for Institutional Development Award
    Consultant, KUMC proposal for Howard Hughes Medical Institute Award
    Coordinator, Seizure Research Group, weekly discussion group
    Member, Advisory Committee, Center for Biobehavioral Studies of Fatigue Management (School of Nursing, KUMC)
    Member, Advisory Committee, Alzheimers Disease Center
    Member, Advisory Committee, Program Project "Free Radical in Aging"
    Member, Advisory Committee, Program Project "L-Glutamate Decarboxylase and Type I Diabetes"
    Member, Thesis Committee for Maria Romanas, Pharmacology Ph.D. candidate
    Member, Thesis Committee for Sung-K Jung, Chemistry Dept. Ph.D. candidate
Local:
    Member, Kansas EPSCoR Project Directors
    Consultant, Kansas City Star Science Editor
National:
    Executive Secretary, NASA Research Proposals in Neuroscience and Behavior Review Panel
    Member, Scientific Advisory Board, Encyclopedia of Neuroscience, Birkhauser Verlag
    Member, Scientific Advisory Board, Encyclopedia of Neuroscience Year Book

Editorial and Grant Reviews:
    Ad hoc reviewer, V.A. Medical Centers Research Applications

Trainees:
    Maria Romanas - M.D./Ph.D. candidate with T.L. Pazdernik
    Matthew Emerson - Ph.D. candidate with T.L. Pazdernik
    Ulrich Schmitt - Ph.D. Candidate, Univ. of Magdeburg Germany, with T.L. Pazdernik
    Philip Khoury - 1st year Medical Student
    Ifran Handoo - Blue Valley North High School Student

37
Girish Shah, Ph.D., Associate Professor

Meetings Attended:
June, 1994 - Attended the annual meeting of the Endocrine Society held in Washington, D.C.

Committee Activities:
Member, Space Allocation Committee

Editorial and Grant Reviews:
American Journal of Physiology: Endocrinology & Metabolism section
Life Sciences

Seminars Presented:
September, 1994 - Presented a seminar entitled "Regulation of Prolactin Secretion" to the Reproductive Biology Group, KUMC

Teaching Activities:
PHSL 822 - Advanced Human Physiology
8 hours lecture
3 review sessions
Medical Physiology
2 conference sessions

Trainees:
Vadim Pedchenko - Post-doctoral Fellow
Walter Rayford - Resident
Jeremy Chien - Graduate Student
Meetings Attended:

- October 24-26, 1994 - Attended and chaired the Neurology B Study Section Subcommittee 2 meeting held in Bethesda, MD
- November 14-18, 1994 - Attended the annual meeting of the Society for Neuroscience in Miami, Florida
- February 21-23, 1995 - Attended and chaired the Neurology B Study Section Subcommittee 2 Meeting held in Bethesda, MD
- April 10-14, 1995 - Attended the annual meeting for Experimental Biology held in Atlanta, Georgia and presented a poster.
- June 19-21, 1995 - Attended and chaired the Neurology B Study Section Subcommittee 2 Meeting held in Bethesda, MD

Committees:

**Departmental:**
Member, Graduate Student Advisory Committee
Member, Search Committee for Cardiovascular Physiologist
Chairman, Dissertation Committee for Jean Hiebert, Physiology Ph.D. candidate
Chairman, Dissertation Committee, Don Warn, Physiology Ph.D. candidate
Chairman, Dissertation Committee, Elena Zoubina, Physiology Ph.D. candidate
Member, Dissertation Committee, Chris Rasmussen, Physiology Ph.D. candidate
Member, Dissertation Committee, Brian McKiernan, Physiology Ph.D. candidate
Member, Dissertation Committee, Kelly Humpherys, Physiology Ph.D. candidate
Member, Dissertation Committee, Jeremy Chien, Physiology Ph.D. candidate

**KUMC:**
Chair, Faculty Assembly Research Committee
Member, Core Curriculum Committee for Integrated Graduate Studies (CIC)
Member, Core Curriculum subcommittee on Biochemistry
Member, Microbiology Department Chair Search Committee
Member, Dissertation Committee, Lawrence Davidow, Pharmacology Ph.D. Candidate
Member, Nominations Committee for Faculty Council
Member, Research Committee, School of Medicine
Member, Ad Hoc Committee on Faculty Appointments
Member, Graduate Council
Member, M.D./Ph.D. Program Review Subcommittee
Judge, Student Research Forum

**Local:**
Member, Research Committee, American Heart Assoc., Kansas Affiliate
Member, Center on Aging Faculty Search Committee
Director, Histology and Image Analysis Core Facility of the Smith MRRC.
Member, MRRC Advisory Committee
Member, MRRC Space Advisory Committee

**National:**
Chairperson, Neurology B2 Study Section
Dr. Smith (continued)

Editorial and Grant Reviews:
Ad hoc reviewer, Journal of the Autonomic Nervous System

Seminars presented:
July 20, 1994 - Presented a seminar entitled "Peripheral nervous system plasticity after injury" at the KUMC Medical Student Summer Research Program
October 3, 1994 - Presented a seminar entitled "Neuronal plasticity as a mechanism for recovery of target function after injury" to the Department of Anatomy & Physiology at Kansas State University, Manhattan, Kansas
October 12, 1994 - Presented a seminar entitled "Neuronal plasticity and the recovery of target function after injury" to the Department of Pharmacology & Toxicology at the University of Kansas, Lawrence, Kansas
November 3, 1994 - Presented a seminar entitled "Neuroplasticity as a mechanism of functional recovery after injury" to the Department of Anatomy and Cell Biology, KUMC
March 8, 1995 - Presented a seminar entitled "Neuroeffector mechanisms in aging" to the Board of Directors, KUMC Research Institute

Teaching activities:
Medical Physiology
  2 hours lecture
  4 hours laboratory
  2 conference sessions
Medical Neuroscience
  3 hours lecture
Physiology 822 (Advanced Human Physiology)
  11 hours lecture
  3 review sessions

Trainees:
Jean Hiebert, Physiology Ph.D. Candidate
Don Warn, Physiology Ph.D. Candidate
Elena Zoubina, Physiology Ph.D. Candidate
Bertha Henderson, Medical Student
Curtis Beauregard, M.D./Ph.D. student
Farshid Marzban, Ph.D., Post-doctoral Fellow
Meetings Attended:

November, 1994 - Attended the Sixth Annual Lake Shirakaba Conference on the Biology of Pregnancy held in Chino, Japan

June, 1995 - Attended the Annual Meeting of the Endocrine Society held in Washington, D.C. and served as moderator for an oral session on "Fetal-Placental Unit"

June, 1995 - Attended the Fifth Biennial Symposium at the Center for Studies in Reproduction at the University of Maryland in Baltimore, Maryland entitled "The Continuation of Development in the Adult: Regulation of Cell Growth, Death, and Differentiation in the Reproductive System"

June, 1995 - Keynote speaker at the annual Teratology Society Meeting held in Newport Beach California

Committees:

Departmental:
Member, Graduate Student Advisory Committee
Member, Medical Physiology Conference Teaching Guidelines Committee
Member, Dissertation Committee for Jean Hiebert
Member, Dissertation Committee for Rebecca Flietstra
Member, Dissertation Committee for Karen Kover
Member, Dissertation Committee for Hua-Lin Chen
Member, Dissertation Committee for Jeremy Chien

KUMC:
Member, Biological Lecture Series Seminar Program Committee
Member, Advisory Committee for the KUMC Mental Retardation and Human Development Research Center
Member, Search Committee for the Hall Distinguished Professor in Molecular Medicine
Member, Radiation Safety Committee
Member, Basic Sciences Graduate Student Core Curriculum and Interdisciplinary Program Committee
Member, Dissertation Committee for Danhua Wang (Anatomy)

National:
Member, Human Embryology and Development Study Section-II
Member, Biology of Reproduction Editorial Board
Member, Organizing Committee for an international symposium sponsored by the Science & Technology Agency of Japan entitled: "The Maternal-Placental-Fetal Dialogue" to be held in Maui, Hawaii

Editorial and Grant Reviews:

ad hoc reviewer for - Endocrinology
    - Cancer Research
    - Molecular Endocrinology
    - Placenta
    - Development
    - Laboratory Investigation
    - Proceedings of National Academy of Sciences
Dr. Soares (continued)

- Development, Growth & Differentiation
- Medical Research Council of Canada
- USDA

Seminars Presented:
November, 1994 - Presented a seminar entitled "The Placental and Uterine Prolactin Gene Family/Control of Trophoblast Cell Differentiation" to the Laboratory of Cellular Biochemistry, Veterinary Medical Sciences, The University of Tokyo, Japan.
November, 1994 - Presented a seminar entitled "Control of Trophoblast Cell Differentiation" at The Sixth Annual Lake Shirakaba Conference on the Biology of Pregnancy, Chino, Japan.
November, 1994 - Presented a seminar entitled "Control of Trophoblast and Decidual Cell Signaling Systems" to the Department of Obstetrics & Gynecology, Kobe University, Kobe, Japan.
November, 1994 - Presented a seminar entitled "The Extrapatitary Prolactin Family" to the Department of Reproductive and Developmental Toxicology, Shionogi and Co., Ltd., Osaka, Japan.
April, 1995 - Presented a seminar entitled "Trophoblast Cell Differentiation: an in vitro model" to the Division of Reproductive Biology, Department of Obstetrics & Gynecology, University of Pennsylvania Medical Center, Philadelphia, PA.
June, 1995 - Presented a seminar entitled "Trophoblast Cell Differentiation: in vitro models and regulatory circuits" at the Fifth Biennial Symposium, Center for Studies in Reproduction, University of Maryland, Baltimore, Maryland, entitled: "The Continuation of Development in the Adult: Regulation of Cell Growth, Death, and Differentiation in the Reproductive System"
June, 1995 - Presented a seminar entitled "Trophoblast cells: mediators of maternal-embryonic communication" as the Keynote address at the Annual Teratology Society Meeting, held in Newport Beach, California.

Honors:
Invited Distinguished Visiting Scientist, University of Tokyo, Tokyo, Japan, November, 1994
Adriana & Luisa Castellucci Award Lecture 1995 in Recognition for Outstanding Achievement Related to Placenta Research

Teaching activities:
Medical Physiology
6 conferences
4 lectures
Physiology 810 - Cell Structure and Function
2 - 90 minute sessions
Dr. Soares (continued)

Trainees:

Toshiya Yamamoto - Postdoctoral Fellow
Takayuki Kamei - Postdoctoral Fellow
Guoli Dai - Postdoctoral Fellow
Kyle Orwig - Postdoctoral Fellow
Gary Hamlin - Graduate Student
Christine Rasmussen - Graduate Student
Thomas J. Peters - Graduate Student
Willie L. Collins - Graduate Student
Sean Vellucci - Summer Student (summer of 1993)
Richard Heck - Summer Student (summer of 1994)
Michael Riley - Summer Student (summer of 1994)
Lawrence P. Sullivan, Ph.D., Professor

Meetings Attended:
October 26-29, 1994 - Attended American Society of Nephrology annual meeting held in Orlando, Florida

Committees:
Departmental:
Chairman, Alan Thompson Award Committee
Representative, Faculty Council, School of Medicine

University:
Member, Committee on Chair Review Process, School of Medicine
Vice-Chairman, Faculty Council, School of Medicine
Member, Graduate Travel Committee, Graduate School
Member, Steering Committee, Kirmeyer Fitness Center
Coordinator, Renal Journal Club

National:
State Network Chair, American Society of Nephrology
Deputy Editor, Journal American Society of Nephrology
Member, Study Section for review of Program Project Application, University of Arizona

Editorial and Grant Reviews:
Journal of the American Society of Nephrology
ad hoc reviewer, American Journal Physiology
Children’s Mercy Hospital research grant reviewer

Seminars Presented:
December 5, 1994 - Presented a Departmental seminar entitled "Anion Secretion Drives Fluid Secretion by Polycystic Kidney Cells"

Teaching Activities:
Medical Physiology
8 hours lecture - Renal Physiology
12 hours problem sessions
5 conference sessions
1 laboratory session

Physiology 784 (Faculty Research Program)
2 hours lecture

Physiology 800 (Cell Physiology)
6 hours lecture

Trainees:
Darren Wallace, Graduate Student
Dr. Roberto Mangoo-Karim, Nephrology Fellow
Jamie Jones, Undergraduate Student
Merrill Tarr, Ph.D., Professor

Committees:
   Departmental:
      Member, Cardiovascular Physiologist Search Committee

Editorial and Grant Reviews:
   ad hoc reviewer American Journal of Physiology
   ad hoc reviewer Journal of Molecular and Cellular Cardiology

Seminars Presented:
   May 8, 1995 - Presented a departmental seminar entitled "Membrane Permeabilization by Reactive Oxygen and Strong Electric Fields: Mechanistic Considerations"

Teaching Activities:
   Medical Physiology
      9 hours lecture
      10 conference sessions
      3 laboratory sessions
      1 Review session
   Physiology 860 (Cell Structure and Function)
      3 hours lecture
Joseph S. Tash, Ph.D., Associate Professor

Meetings Attended:
October, 1994 - Attended the American Society for Gravitation and Space Biology held in San Francisco, California

Committees:
Department:
Member, Graduate Student Affairs Committee
Representative, Faculty Council
Director, Departmental graduate subprogram: Molecular and Cellular Physiology

KUMC:
Chairman, Cell Biology Subcommittee to Review Graduate Core Curriculum
Coordinator, Reproductive Biology Workshop
Coordinator, Visiting Scientists in Reproduction Seminar Series
Member, Confocal Microscope project committee
Member, Organizing team to develop Cellular Physiology course into a joint departmental graduate core course with Anatomy Department
Member, Organizing Committee for the GCG/Sibyl-Silicon Graphics Molecular Analysis computer system
Consultant, Ob/Gyn for Development of Digital Imaging Services for the new IVF/GIFT Program

University:
Member, Thesis Committee for Jackie Vogel, KU Lawrence Physiology student

Editorial and Grant Reviews:
Biology of Reproduction
Journal of Cell Biology
Journal of Andrology
Journal of Reproduction and Fertility

Seminars presented:
November, 1994 - Presented a seminar to the Midwest Sea Urchin Group entitled "Recent Progress on Purification and Characterization of a Novel Protein Phosphatase from Sea Urchin Testis"
February 13, 1995 - Presented a departmental seminar entitled "Phosphorylation Pathways in the Regulation of Sperm Flagellar Motility"

Teaching activities:
Medical Physiology
24 contact hours (lab and conference sessions)

Cell Structure and Function (PHSL 860)
Course Coordinator
7 - 1.5 hr lectures
1 session exam proctoring

Physiology 784 (Faculty Research Forum)
2 contact hours

Reproductive Biology (PHSL 808)
1.5 contact hours

Grand Rounds
Ob/Gyn Department, KUMC (Feb. 1994)
Paul F. Terranova, Ph.D., Professor

Meetings Attended:
July 21-23, 1994 - Attended the Xth Ovarian Workshop: Frontiers in Ovarian Research held at the University of Michigan, Ann Arbor
July 24-27, 1994 - Attended the 27th annual meeting of the Society for the Study of Reproduction held at the University of Michigan, Ann Arbor
June 14-17, 1995 - Attended the 77th Annual Meeting of the Endocrine Society held in Washington, D.C.

Committees:
Departmental:
Chairman, Physiology Curriculum Change Committee
Chair, Ph.D. Dissertation Committee for Toni Clinton
Co-Chair, Ph.D. Dissertation Committee for Hua-Lin Chen
Member, Ph.D. Dissertation Committee for Gary Hamlin

KUMC:
Member, Search Committee for Associate Dean of Research
Member, MRRC Space Committee
Member, MRRC Internal Advisory Committee
Member, Strategic Planning Committee, School of Medicine
Member, Advisory Committee for International Studies Program
Member, Bohan Teaching Award Selection Committee
Member, Biotechnology Center Oversight Committee
Member, Executive Committee (subcommittee of Strategic Planning Committee, School of Medicine)
Judge, Student Research Forum
Consultant, Miles Laboratories, Kansas City, MO
Member, Ph.D. Dissertation Committee for Al Hood, Pharmacology Graduate Student
Member, Ph.D. Dissertation Committee for Xeulin Li, Pharmacology Graduate Student
Member, Ph.D. Dissertation Committee for Yaping Yang, Pathology Graduate Student
Member, Ph.D. Dissertation Committee for Jim Boles, Pharmacology Graduate Student

National:
Secretary, Society for the Study of Reproduction
Member, Study Section Superfund for Biohazards, Research Triangle Park, NC

Editorial and Grant Reviews:
Endocrinology
Biology of Reproduction
Journal of Reproduction and Fertility
Growth Factors
Endocrine
Developmental Biology
Allegheny Singer Research Institute (Pittsburgh, PA)
Dr. Terranova  (continued)

Seminars Presented:
July 4, 1994 - Presented a seminar entitled "Ovarian Tumor Necrosis Factor" to the Department of Ob/Gyn at Shanxi Medical College, Taiyuan, China
July 4, 1994 - Presented a seminar entitled "Granulosa Cells and Growth Factors" to the Department of Ob/Gyn at Shanxi Medical College, Taiyuan, China
July 5, 1994 - Presented a seminar entitled "Endotoxin Disruption of Ovarian Function" to the Dept. of Ob/Gyn at Shanxi Medical College, Taiyuan, China
July 5, 1994 - Presented a seminar entitled "Ovarian Cancer: A Tumor Necrosis Factor Propelled Disease" to the Department of Ob/Gyn at Shanxi Medical College, Taiyuan, China
November 2, 1994 - Presented a seminar entitled "Postnatal Developmental Effects of Delayed Ovulation" to the Environmental Protection Agency, Research Triangle Park, NC
November 21, 1994 - Presented a seminar entitled "Ovarian Tumor Necrosis Factor" to the Dept. of Physiology, East Tennessee State University, Johnson City, TN
November 23, 1994 - Presented a seminar entitled "Ovarian Cancer: a Tumor Necrosis Factor Propelled Disease" to the Department of Ob/Gyn, East Tennessee State University, Johnson City, TN
December 1, 1994 - Presented a seminar entitled "Ovarian Tumor Necrosis Factor" to the Department of Physiology, Ottawa University, Ottawa, Canada
December 2, 1994 - Presented a seminar entitled "Ovarian Cancer: a Tumor Necrosis Factor Propelled Disease" to the Department of Ob/Gyn, Ottawa University, Ottawa, Canada
June 17, 1995 - Presented a seminar on Cytokines and Reproductive Function at the Endocrine Meeting Symposium in Washington, D.C. as an invited speaker

Academic Honors:
Elected President-elect of KUMC Sigma Xi
Invited Keynote Speaker at the Endocrine Meetings held in June in Washington, D.C.
Appointed to Editorial Board for Endocrine
Appointed to Editorial Board for 'Frontiers in Bioscience'

Teaching Activities:
Medical Physiology
4 lectures - Metabolic Endocrinology
8 conferences
Physiology 860 (Cell Structure and Function)
2 lectures
Prematriculation Course
3 lectures
Basic Principles of Ob/Gyn
8 conferences
Trainees:
Jennifer Marcinkiewicz, Ph.D., post-doctoral fellow
Christopher Taylor, Ph.D., post-doctoral fellow
Da-Kai Lin, M.D., post-doctoral fellow
Toni Clinton, graduate student
Chris Glattes, Medical Student
Valerie Williams, Medical Student
Bret Gordon, Undergraduate Student
Meetings Attended:
September 9-11, 1994 - Attended the 'Computers in Physiology Teaching' meeting held in Newport, Oregon. Invited participant in development of Physiology teaching software, "Cardiovascular Function Laboratories" and its application to medical physiology.

Committees:
Departmental:
- Electronic shop supervisory committee
- Photographer Pro-Tempore
- Departmental computer consultant/authority

KUMC:
- Member, Advanced Information Management Systems Committee

Local:
- Member, Biomedical Electronics Technician Advisory Committee, Johnson County Community College
- Member, Board of Directors Greater Kansas City Div., American Heart Association

State:
- Member, Board of Directors, American Heart Association, Kansas Affiliate
- Consultant, Marion Merrel Dow, Inc., Kansas City, MO

Seminars Presented:
April 7, 1995 - Presented Cardiac Excitation software at Info 95, at KUMC

Teaching Activities:
Physiology 800 (Medical Physiology)
- 6 hours lecture - Electrocardiography, Hemodynamics & Blood Pressure Regulation
- 7 conferences (14 hours)
- 12 hours laboratory teaching and supervision
- Laboratory management for all Medical Physiology Laboratories

Physiology 822 - Advanced Human Physiology
- 9 hours lecture - Respiration
Meetings Attended:
November 19, 1994 - Attended the Council Meeting for the American Society for Photobiology held in Chicago, IL
April 2-6, 1995 - Attended the 209th American Chemical Society National Meeting held in Anaheim, CA and gave a presentation entitled "Mechanisms of Cellular Photosensitization"
May 6 - 9, 1995 - Attended the Council of Biological Editors Meeting held in Kansas City, KS
June 16-21, 1995 - Attended the 23rd Annual Meeting of the American Society for Photobiology held in Washington, DC

Committees:
Departmental:
Member, Medical Physiology Curriculum Committee
Local:
Member, Pre-Matriculation Program Steering Committee
National:
Chair, Finance Committee, American Society for Photobiology
Member, MAPS Performance Committee, American Society for Photobiology
Member, Publication Contract Negotiation Committee, Photochemistry and Photobiology
Member, Site Visit Team for the American Society for Photobiology. Review of performance and operations of Meeting and Professional Services, November 7, 1994 in Augusta, GA

Editorial and Grant Reviews:
ad hoc reviewer - Journal of Photochemistry and Photobiology
ad hoc reviewer - Biochimica et Biophysica Acta
ad hoc reviewer - Photochemistry and Photobiology
ad hoc reviewer - grant proposal, VA Merit Review

Seminars Presented:
September 30, 1994 - Presented a seminar entitled "Membrane Permeabilization by Reactive Oxygen Species" to the Department of Biochemistry, KUMC

Honors:
Elected Treasurer, American Society for Photobiology

Teaching Activities:
Medical Physiology
5 hours lecture
5 conferences
National Board Review, videotape presentation
PHSL 822 - Advanced Human Physiology
10 hours lecture
3 hour question and answer session
Health Careers Pathways Program
7 hours lecture
Meetings Attended:
July 3-7, 1994 - Attended the Third Congress of Neuroendocrinology held in Budapest, Hungary.
November 13-18, 1994 - Attended the annual meeting of the Society for Neurosciences held in Miami, Florida.
December 1-4, 1994 - Attended the annual meeting of the Association of Chairmen of Physiology Departments held in Los Cabos, Mexico.
June 14-17, 1995 - Attended the annual meeting of the Endocrine Society held in Washington, D.C.

Committees:
Departmental:
Chairman, Dissertation Committee, Rebecca Flietstra
Chairman, Dissertation Committee, Kelly Humpherys
Member, Graduate Committee, Brian McKiernan
Member, Graduate Committee, Karen Kover
Member, Graduate Committee, Christine Rasmussen

KUMC:
Member, Radiology Chair Search Committee
Member, Neuroscience/Aging Faculty Search Committee
Member, Strategic Planning Committee, School of Medicine
Chair, Strategic Relationships Subcommittee
Member, Council of Chairs, School of Medicine
Member, Microbiology Chair Search Committee
Member, Smoking Advisory Committee, campus-wide
Co-ordinator, Basic Science Chairs

Local:
Member, VAH Task Force for Research

National:
Member, Reproductive Endocrinology Study Section - NIH
Member, Program Committee of Gordon Research Conference

Editorial and Grant Reviews:
Editorial Review Group Chair - Doody Publishing, Inc.
ad hoc reviewer - Endocrinology
ad hoc reviewer - Neuroendocrinology
ad hoc reviewer - Molecular and Cellular Neurosciences
ad hoc reviewer - Journal of Pharmacology and Experimental Therapeutics
ad hoc reviewer - Pharmacological Research
Rhodes and Tanner Medical Physiology textbook

Seminars Presented:
September 12, 1994 - Presented a departmental seminar entitled "Lactogenic Hormones are Inhibitors to Prolactin Secretion".
Dr. Voogt (continued)

Teaching Activities:
- Physiology 800 - Medical Physiology
  4 lectures
  6 conferences
- Physiology 840 - Medical Neuroscience
  1 lecture

Trainees:
- Rebecca Flietstra - doctoral student
- Kelly Humpherys - doctoral student
- P.S. MohanKumar - postdoctoral fellow

- Presented a scientific abstract entitled "Expression of equine LH/CG in primates and patients" to the Reproduction Group at KUMC.
- May, 1993 - Gave a presentation on molecular biological techniques to students in a freshman honors biology class at Blue Valley High School.

Teaching Activities:
- Physiology 800 - Medical Physiology
  2 conference sessions