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- STRATEGIC PLAN
- GUIDELINES FOR GRADUATE PROGRAM
- INDIVIDUAL REPORTS FOR ALL PRIMARY AND SALARIED FACULTY MEMBERS
I. Executive Summary

1998 was a year of continued transition and program development for the Department of Pharmacology and Toxicology. The Department was deeply saddened by the unexpected death of Dr. Kee Chang Huang in November. Dr. Huang served on the Department faculty since 1953, and continued to be an active member of the Department as Professor Emeritus. A resolution in his honor was written and approved by the Department, the Medical Council, and the Faculty Senate. A copy is provided in the appendix. The Department initiated the Kee Chang Huang Outstanding Graduate Student Award and the Kee Chang Huang Memorial Lecture. The 1998 Kee Chang Huang Outstanding Graduate Student Award was awarded to Jian Cai. A second major event was the retirement of Dr. William J. Waddell as Professor on July 1. Dr. Waddell was appointed Professor Emeritus (he was appointed Chairman emeritus upon retirement as chair in 1997) and was honored with a reception and the initiation of a William J. Waddell seminar program. A third major event was the appointment of Joel A. Kaplan, M.D. as Vice President for Health Affairs/Dean for the School of Medicine/Senior Vice Provost for Academic Affairs effective July 1. Dr. Kaplan was previously Senior Vice-President for Clinical Affairs and Horace W. Goldsmith Professor and Chairman of the Department of Anesthesiology at Mount Sinai School of Medicine. Dr. Kaplan brought impressive credentials in research and an aggressive agenda for enhancement of research productivity in the School of Medicine and the Health Science Center.

The primary focus of the year was the recruitment of new faculty. A search committee consisting of Dr. David Hein (Chair), Dr. Fred Benz, Dr. Theresa Chen, Dr. Fred Hendler, Dr. James Kang, and Dr. Peter Rowell screened applications for two tenure track faculty positions. Over 100 applications were received and several candidates were invited for interviews. Three of the top candidates, Dr. Carrie Haskell-Leuvano, (Postdoctoral Fellow, Oregon Health Sciences University), Dr. Paul MacDonald, (Assistant Professor, Saint Louis University School of Medicine) and Dr. Donghai Wu (Assistant Professor, University of Kentucky College of Medicine) were offered a tenure track assistant or associate professor (Dr. MacDonald) position. Each declined, however, in order to accept new faculty positions at the University of Florida, Case-Western Reserve University, and the University of Florida, respectively. In addition to starting salary and lack of institutional research core facilities, a major stumbling block was the requirement for the new faculty to be placed in temporary research and office space prior to completion of the Baxter Biomedical Research Facility in 1999. Rather than continue on down the list of applicants, the Department initiated a new search in 1999 to coincide with the completion of the Baxter Biomedical Research Facility. The Department approved the joint appointment of Janice Sullivan, M.D. as assistant professor. Dr. Sullivan's primary appointment is in the Department of Pediatrics, and, prior to 1998, she had an associate faculty appointment in the Department of Pharmacology and Toxicology. Drs. Scott Gruber and Paul Epstein were appointed as adjunct faculty.

Highlights in program development included revision of the guidelines and curriculum for the graduate program in pharmacology and toxicology, which was approved by unanimous vote of the faculty. In addition, a Strategic Plan focusing on research and training strategies was initiated and approved by unanimous vote of the faculty. The research productivity of the Department increased significantly in 1998, and the Department contributed to the University of Louisville's transition to a premier metropolitan research University.
II. Mission Statement

The Department of Pharmacology and Toxicology is committed to academic excellence and to the attainment of regional, national, and international recognition for the quality of its educational, research, and service activities. Guided by the University of Louisville Challenge for Excellence to become a preeminent metropolitan research university, the Department Strategic Plan will focus on accomplishment of five broad objectives:

- Provide instruction in pharmacology and toxicology of the highest quality for the education and preparation of medical, dental, nursing, and other health care professional students. Emphasis will be placed on the fundamental principles necessary for life-long learning and the essential knowledge required for rational, effective, and safe use of drug therapy.

- Advance biomedical knowledge through active contribution to high quality research and other scholarly activities, particularly in pharmacology and toxicology and other areas of focus within the University of Louisville Challenge for Excellence.

- Provide high quality research and educational experiences in pharmacology and toxicology for the education and training of future biomedical scientists who can provide and advance biomedical education, research, and service.

- Provide instruction of the highest quality in pharmacology and toxicology that is appropriate for students at the undergraduate, graduate, and postgraduate levels.

- Provide high quality service to the School of Medicine, the Health Sciences Center, the University, the people of Louisville and the surrounding region, the Commonwealth of Kentucky, professional organizations, the nation, and the world.

III. Personnel Listing

A. Faculty with Primary Appointments

Benz, Frederick W., Professor; Ph.D., Pharmacology, University of Iowa (1970).

Carr, Laurence A., Professor; Ph.D., Pharmacology, Michigan State University (1969).

Chen, Theresa S., Professor; Ph.D., Pharmacology, University of Louisville (1971).

Hein, David W., Peter K. Knoefel Professor and Chair; Ph.D., Pharmacology, University of Michigan (1982).
Hurst, Harrell E., Professor; Ph.D., Toxicology, University of Kentucky (1978).

Myers, Steven R., Associate Professor; Ph.D., Pharmacology, University of Kentucky (1986).
Nerland, Donald E., Professor; Ph.D., Medicinal Chemistry, University of Kansas (1974).

Pierce, William M., Jr., Professor; Ph.D., Pharmacology and Toxicology, University of Louisville (1981).

Rowell, Peter P., Professor; Ph.D., Pharmacology and Therapeutics, University of Florida (1975).

Waite, Leonard C., Professor and Vice Chairman; Ph.D., Pharmacology, University of Missouri (1969).

Williams, Walter M., Professor; Ph.D., Pharmacology, University of Louisville (1970); M.D., University of Louisville (1974).

B. Faculty with Joint Appointments

Aronoff, George R., Professor of Medicine, and Pharmacology and Toxicology; M.D., Indiana University (1975).

Delamere, Nicholas A., Professor of Ophthalmology and Visual Sciences, and Pharmacology and Toxicology; Ph.D., Membrane Physiology and Biophysics, University of East Anglia, Norwich, England (1976).

Kang, Y. James, Associate Professor of Medicine, and Pharmacology and Toxicology; Ph.D., Cell Biology and Zoology, Iowa State University (1989).

Miller, Frederick N., Professor of Physiology and Biophysics, and Pharmacology and Toxicology; Ph.D., Pharmacology, University of Cincinnati (1971).

Rodgers, George C., Jr., Professor of Pediatrics, and Pharmacology and Toxicology; Ph.D., Organic Chemistry, Yale University (1964); M.D., State University of New York (1975).

Sullivan, Janice E., Assistant Professor of Pediatrics, and Pharmacology and Toxicology; M.D., University of Minnesota (1988).

Tamburro, Carlo H., Professor of Medicine, and Pharmacology and Toxicology, and Chief, Division of Occupational Toxicology; M.D., Seton Hall (1962); M.P.H., Columbia University (1985).

Wong, John L., Professor of Chemistry, and Pharmacology and Toxicology; Ph.D., Chemistry, University of California at Berkeley (1966).
Zimmerman, Thom J., Professor and Chairman of Ophthalmology and Visual Sciences, and Pharmacology and Toxicology; Ph.D., Pharmacology, University of Florida (1976); M.D., University of Illinois (1968).

C. Faculty with Associate Appointments

Brier, Michael E., Associate Professor of Medicine; Ph.D., Industrial and Physical Pharmacy, Purdue University (1986).

Edmonds, Harvey L., Professor of Anesthesiology; Ph.D., Pharmacology, University of California at Davis (1974).

Jumblatt, James E., Professor of Ophthalmology and Visual Sciences; Ph.D., Biological Sciences, Columbia University (1975).

Lang, Calvin A., Professor of Biochemistry and Molecular Biology; Sc.D., Biochemistry and Nutrition, Johns Hopkins University (1954).

Rigor, Benjamin, Professor and Chairman of Anesthesiology; M.D., University of the East Ramon Magsaysay Memorial Medical Center (1962).

Ross, Mitchell P., Assistant Professor of Pediatrics; M.D., Oregon Health Sciences University (1985).

Schurr, Avital, Professor of Anesthesiology; Ph.D., Biochemical Pharmacology, Ben Gurion University, Beer Sheva, Israel (1977).

D. Faculty with Emeritus Appointments

Dagirmanjian, Rose, Professor Emerita; Ph.D., University of Rochester (1960).

Huang, Kee Chang, Professor Emeritus; M.D. Columbia University (1953).

Jarboe, Charles H., Professor Emeritus; Ph.D., University of Louisville (1956).

Knoefel, Peter K., Emeritus Professor and Chairman; M.D., Harvard University (1931).

Scharff, Thomas G., Emeritus Professor; Ph.D., University of Rochester (1956).

Waddell, William J., Professor and Chair Emeritus; M.D., University of North Carolina (1955).

E. Faculty with Adjunct Appointments
Epstein, Paul N., Adjunct Associate Professor of Pharmacology and Toxicology; Ph.D., Baylor College of Medicine (1981).

Friedman, Marvin A., Adjunct Professor of Pharmacology and Toxicology; Ph.D., Massachusetts Institute of Technology (1967).

Gruber, Scott A., Adjunct Associate Professor of Pharmacology and Toxicology; M.D., SUNY Downstate Medical School (1983); Ph.D., University of Minnesota (1991).

Hayes, A. Wallace, Adjunct Professor of Pharmacology and Toxicology; Ph.D., Auburn University (1967).

Holthouser, Michael G., Adjunct Assistant Professor of Pharmacology and Toxicology; M.D., University of Kentucky (1971).

Lewis, Richard, Adjunct Assistant Professor of Pharmacology and Toxicology; M.D., Case Western Reserve University (1980).

Matyunas, Nancy, Adjunct Instructor of Pharmacology and Toxicology; Pharm.D., University of Utah (1983).

Nicholson, John A., Adjunct Assistant Professor of Pharmacology and Toxicology; D.M.D., University of Louisville (1979); Ph.D., University of Louisville (1968).

Woodcock, Thomas M., Adjunct Professor of Pharmacology and Toxicology; M.D., Columbia University (1970).

F. Faculty with Emeritus Adjunct Appointments

Csaky, Tihamer Z., Emeritus Adjunct Professor of Pharmacology and Toxicology; M.D., University of Budapest (1939).

Darby, Thomas D., Emeritus Adjunct Professor of Pharmacology and Toxicology; Ph.D., Medical College of South Carolina (1957).

Gordon, Helmut A., Emeritus Adjunct Professor of Pharmacology and Toxicology; M.D., University of Budapest (1932).

G. Staff

Carpenter, Sharon; Executive Secretary

Clark, Denny, Lab Tech III; Therapeutics and Toxicology Laboratory

Corbett, Donna; Lab Tech III
Doll, Mark; Research Associate

Duggan, Deborah; Lab Tech III

Emery, Nicole; Lab Tech III

Jamison, Andrea; Lab Tech II

Metaxas, John; Coordinator, Therapeutics and Toxicology Laboratory

Greca, Edie; Business Manager III

Rubin-Teitel, Heddy; Program Assistant III

Smith, Ned; Senior Research Technologist

Srinivasan, Chandrika, Ph.D., Student Assistant

VonderHaar, John, Laboratory Research Technician III

Wenger, Aaron; Student Assistant, Therapeutics and Toxicology Laboratory

H. Graduate Students

<table>
<thead>
<tr>
<th>Doctoral Program</th>
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<tbody>
<tr>
<td>Alimozhin, Talgat</td>
<td>Hasselbacher, David</td>
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<td>Brewer, Bradley G.</td>
<td>Melo, Nicolas</td>
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<td>Cai, Jian</td>
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<td>Fretland, Adrian</td>
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<td>Fu, Xin</td>
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<td>Hartford, April</td>
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<td>Hennion, John</td>
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<td>Jacobs, Al (Chip)</td>
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<td>Lambert, Jason</td>
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<td>Leff, Matthew</td>
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<td>Li, Junyu</td>
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<td>Nangju, Norma</td>
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<td>Neale, Jason</td>
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<td>Payne, Scot</td>
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<td>Spinnato, Joe</td>
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<tr>
<td>Sun, Xichun</td>
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I. Postdoctoral Fellows

Meng, Xianweng

Devanaboyina, Udaya-sankar

Wang, Guang-wu
Wang, Ju-Feng  
Wu, Huiyun  
Webb, Stephanie  
Xiao, Gong H.  
Zhou, Zhan-Xiang  

J. Division of Occupational Toxicology

Buchanan, Stephanie, B.S.N.; Clinical Research Coordinator

Canchis, Willie, M.D.; Research Fellow

Cho, Lori; Student Assistant

Crawford, Robert; Student Assistant

Deeb, Lililane, M.D.; Research Fellow

Fortwengler, Philip; Manager, Medical Surveillance

Hall, Carl, Ph.D.; Project Coordinator

Hiser, Melissa; Clerical Specialist III

Jarman, Susanna; Student Assistant

Kapoor, Sandeep, M.D.; Research Fellow

Matthews, Sherri; Executive Secretary

Miller, Barbara L., B.S.N., M.S.; Senior Clinical Research Coordinator

Morgenson, Melissa; Secretary

O’Connell, Kathleen, Ph.D.; Research Facilitator

Quiggins, Patricia, Ph.D.; Research Associate

Redferin, Lauren; Student Assistant

Reynolds, Eva; Receptionist

Reynolds, Lark; Program Assistant III

Richardson, Rita; Secretary II
Sherrill, Mike; Student Assistant

Sterry, Rachel; Student Assistant

Tamburro, Carlo H., M.D, M.P.H.; Division Chief

K. Faculty Appointments

Epstein, Paul N., Ph.D., Adjunct Associate Professor, November 1, 1998

Gruber, Scott A., M.D., Ph.D., Adjunct Associate Professor, October 1, 1998

Sullivan, Janice E., M.D., Assistant Professor (joint appointment), December 1, 1998

Waddell, William J., M.D., Professor Emeritus, July 1, 1998

L. Staff Promotions

Carpenter, Sharon, Promotion to Executive Secretary, effective August, 1998

Greca, Edie, Promotion to Business Manager III, effective August, 1998

M. New Graduate Student Appointments

Hartford, April
Lambert, Jason
Nangju, Norma
Neale, Jason
Sun, Xichun

N. Graduations

IV. Publications


A. Additional Publications of Faculty with Joint Appointments.


V. Abstracts


VI. Invited Scientific Presentations and Seminars

1. Benz, Frederick W.  Presentation to Chemistry Class at Jefferson Community College, at the invitation of Mr. Steve Pruett, Chemistry Instructor, 4/20/98.

2. Hein, David W.  Molecular Pharmacogenetics of Acetylation: Its Possible Role in Genetic Predisposition to Cancer from Aromatic and Heterocyclic Amine Carcinogens. Department of Pharmacology and Graduate Center for Toxicology, University of Kentucky, Lexington, Kentucky, February 1998.


9. Kang, Y.J.  Institute of Toxicology, National Taiwan University, Taiwan, “Transgenic approach to antioxidant function of catalase in the heart,” Apr. 24, 1998.


14. Kang, Y.J. The Keynote Speaker of the Toxicology Society of Taiwan, The Thirteenth Joint Annual Conference of Biomedical Sciences, National Taiwan University, Taipei, “Transgenic approaches to cardiac protection against oxidative injury,” Apr. 19, 1998.

15. Kang, Y.J. Department of Human Nutrition and Food Management, Ohio State University, Columbus, OH. “Cardiac specific overexpression of metallothionein protects against oxidative injury,” Mar. 11, 1998.


VII. Research Grants and Contracts

A. Research Grant and Contract Proposals Submitted

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<tr>
<td>NIH</td>
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<td>NIH-NCI</td>
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<td>NIH-NIEHS</td>
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<td>NIH/NIEHS</td>
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<tr>
<td>NIH</td>
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<td>UofL (CGeMM)</td>
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</tr>
<tr>
<td>NIH/NIEHS</td>
<td>$2,330,585</td>
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<tr>
<td>USEPA</td>
<td>$750,986</td>
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<tr>
<td>NIH/NICHD</td>
<td>$1,579,652</td>
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**Dr. Frederick W. Benz**

Vinyl Monomers: Detoxified by Glutathione S-Transferases (Co-I); D.E. Nerland (PI)
02/01/00 – 01/31/04

**Dr. Laurence A. Carr**

Tobacco Use and Attention Deficit Disorder (Co-I); C. Mitchell (PI) 10/01/98 – 09/30/02

**Dr. David W. Hein**

Pharmacogenetics of Drug and Carcinogen Metabolism (cont.) (P.I.) 07/01/98 – 06/30/99

Molecular Epidemiology of Colon and Stomach Cancers (PI) 09/01/98 – 06/30/00

Center for Children's Environmental Health (Co-I); S.R. Myers (PI) 08/01/98 – 06/31/02

Pharmacogenetics of Fetal Tobacco Smoke Exposure (Co-I); S.R. Myers (PI) 12/01/98 – 06/30/04

Role of Genetic Polymorphism In Liver Toxicity (Co-I); T.S. Chen (PI) 09/01/98 – 08/31/99

Pharmacogenetics of Fetal Tobacco Smoke Exposure (Co-I); S.R. Myers (PI) 07/01/99 – 06/30/04

Analysis of Environmental Carcinogens in Urine of Exposed Children and Adults (Co-I); S.R. Myers (PI) 10/01/99 – 09/30/02

Pediatric Pharmacology Research Unit (Co-I); J.E. Sullivan (PI) 01/01/99 – 12/31/03
<table>
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<tr>
<th><strong>Dr. Harrell E. Hurst</strong></th>
<th>Agency</th>
<th>Budget Requested</th>
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</thead>
<tbody>
<tr>
<td>The Effect of Ozone on the Production of Insect Repellant Compounds in Plants (Co-I); A. senGupta (PI) 08/01/98 – 07/31/01</td>
<td>US EPA</td>
<td>$250,756</td>
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<tr>
<td>Pharmacogenetics of Fetal Tobacco Smoke Exposure (Co-I); S.R. Myers (PI) 12/01/98 – 11/30/03</td>
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<td>$1,840,554</td>
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<tr>
<td>Pediatric Pharmacology Research Unit (Co-I); J.E. Sullivan (PI) 01/01/99 – 12/31/03</td>
<td>NIH/NICHD</td>
<td>$1,579,652</td>
</tr>
<tr>
<td>Analysis of Environmental Carcinogens in Urine of Exposed Children and Adults (Co-I); S.R. Myers (PI) 10/01/99 – 09/30/02</td>
<td>USEPA</td>
<td>$750,986</td>
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<th><strong>Dr. Y. James Kang</strong></th>
<th>Agency</th>
<th>Budget Requested</th>
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<tbody>
<tr>
<td>Butylated hydroxyanisole-mediated hypercholesterolemia (PI), submitted 02/01/98</td>
<td>NIH-NIDDK</td>
<td>$650,000</td>
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<td>Metallothionein and adriamycin cardiotoxicity, submitted 07/01/98</td>
<td>NIH-NHLBI</td>
<td>$623,000</td>
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<td>Metallothionein and adriamycin cardiomyopathy, submitted 07/15/98</td>
<td>Jewish Hospital Foundation</td>
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<tr>
<td>Pediatric Pharmacology Research Unit (Co-I); J.E. Sullivan (PI) 01/01/99 – 12/31/03</td>
<td>NIH-NICHD</td>
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<td>Children’s Health Center for Children’s Environmental Health and Disease Prevention (PI) 08/01/98 – 07/31/02</td>
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<td>Analysis of Environmental Carcinogens in Urine of Exposed Children and Adults (PI) 10/01/99-09/30/02</td>
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<tr>
<td>Pharmacogenetics of Fetal Tobacco Smoke Exposure (PI) 12/1/98 – 11/30/03</td>
<td>NIH</td>
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<td>Dr. Steven R. Myers (cont.)</td>
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<tr>
<td>Pharmacogenetics of Fetal Tobacco Smoke Exposure (P.I.) 7/1/99 – 6/30/04</td>
<td>NIH</td>
<td>$2,330,585</td>
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| Dr. Donald E. Nerland                                                                        |              |                  |
| Vinyl Monomers: Detoxified by Glutathione S-Transferases (PI) 02/01/00 – 01/31/04          | NIH          | $722,647         |

<p>| Dr. William M. Pierce, Jr.                                                                  |              |                  |
| Neutrophil Respiratory Burst in Azotemia (Co-I); R.Ward (PI) 1999 - 2002                   | NIH          | $300,000         |
| Estrogens: Bone Blood Flow and Bone Mechanical Properties (Co-I); J. Fleming (PI) 1999 - 2000 | NIH          | $50,000          |
| Regulation of Neutrophil Activation (Co-I); K. McLeish (PI) 1999-2002                      | VA RAGS      | $300,000         |
| Tyrosine Phosphorylation of Platelet Ca^{2+}-ATPase (Co-I); W. Dean (PI) 1998 – 2001      | American Heart| $200,000        |
| Aging Induced Renal Dysfunction: G Protein Activity (Co-I); J.C. Passmore (PI) February 1, 1999 – January 31, 2001 | NIH          | $268,731         |
| Glycosphingolipid Metabolism and Trafficking (Co-I); W.W. Young (PI) 1999-2002            | NIH          | $300,000         |
| CYP Isoforms and Cardiovascular Function (Co-I); A. Adeagbo (PI) 02/01/99-01/31/2001       | NIH          | $70,000          |
| Undergraduate Research Training (Mentor); R. Wittebort (PI) 1998-2001                      | Howard Hughes Medical Institute |
| Riverine Food Webs and their Roles in Contaminant Transport (Co-I); P. Bukaveckas (PI) 1998-1999 | EPA-EPSCoR   | $168,500         |</p>
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<tr>
<th>Name</th>
<th>Project Description</th>
<th>Agency</th>
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<tr>
<td>Dr. Peter P. Rowell</td>
<td>Functional Activity of Mesolimbic Nicotinic Receptors (PI)</td>
<td>NIH</td>
<td>$207,991</td>
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<td>07/01/99 – 06/30/99</td>
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<tr>
<td>Dr. Walter M. Williams</td>
<td>Role of Genetic Polymorphism in Liver Toxicity (Collaborator);</td>
<td>IDEA Pilot</td>
<td>$24,325</td>
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<td>T.S. Chen (PI) 09/01/98 – 08/31/99</td>
<td>Proposal</td>
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### B. Research Grants and Contracts in Force

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<tr>
<th>Dr. Frederick W. Benz</th>
<th>Agency</th>
<th>Project Award</th>
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<tbody>
<tr>
<td>Acute Acrylonitrile Intoxication: Antidotal Assessment (PI) 09/01/98 – 08/31/99</td>
<td>NIH-NIEHS</td>
<td>$108,088</td>
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<tr>
<td>Acute Acrylonitrile Intoxication: Antidotal Assessment (PI) 09/01/97 – 08/31/98</td>
<td>NIH-NIEHS</td>
<td>$103,930</td>
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<th>Dr. Laurence A. Carr</th>
<th>Agency</th>
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<tr>
<td>An Immunomodulatory Role for Brain Dopamine Systems (PI) 09/01/98-09/01/99</td>
<td>SOM Research Committee</td>
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<th>Dr. Theresa S. Chen</th>
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<tr>
<td>Acute Acrylonitrile Intoxication: Antidotal Assessment (Co-I); F.W. Benz (PI) 09/01/97 – 08/31/98</td>
<td>NIH-NIEHS</td>
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<td>Acute Acrylonitrile Intoxication: Antidotal Assessment (Co-I); F.W. Benz (PI) 09/01/98 – 08/31/99</td>
<td>NIH-NIEHS</td>
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<td>Glutathione Status and Lipid Peroxidation in Chronic Toxicity (P.I.) 06/01/96 – 03/31/98</td>
<td>ULCHES-NIEHS</td>
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<td>Role of Genetic Polymorphism in Liver Toxicity (P.I.) 09/01/98 – 08/31/99</td>
<td>IDEA Pilot Proposal</td>
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<th>Dr. David W. Hein</th>
<th>Agency</th>
<th>Project Award</th>
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<tr>
<td>Pharmacogenetics of Drug and Carcinogen Metabolism (P.I.) 09/01/97 – 06/30/02</td>
<td>NIH-NCI</td>
<td>$1,859,936</td>
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<tr>
<td>Metabolic Basis of Sulfonamide Toxicity in AIDS patients (P.I. on subproject) 09/01/97 – 05/31/00</td>
<td>NIH-Subcontract from Wayne State</td>
<td>$80,349</td>
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<tr>
<td>Dr. David W. Hein (cont.)</td>
<td>Agency</td>
<td>Project Award</td>
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<tr>
<td>Role of genetic polymorphism in liver toxicity (Co-I); T.S. Chen (Pl)</td>
<td>IDEA Pilot Proposal</td>
<td>$8,077</td>
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<table>
<thead>
<tr>
<th>Dr. Harrell E. Hurst</th>
<th>Agency</th>
<th>Project Award</th>
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<tbody>
<tr>
<td>The Center for the Study of Environmental Hazards to Reproductive Health (Co-I); F.J. Hendler (Pl) 01/01/97 - 12/31/99</td>
<td>Department of Veterans Affairs</td>
<td>$949,100</td>
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<tr>
<td>Acute Acrylonitrile Intoxication – Antidotal Assessment (Co-I); F.W. Benz (Pl) 09/01/98 - 08/31/99</td>
<td>NIEHS</td>
<td>$108,088</td>
</tr>
<tr>
<td>HPLC Electrospray Mass Spectrometer (Co-I); W.M. Pierce (Pl) 06/01/97 – 05/31/98</td>
<td>NIH/NCRR</td>
<td>$307,954</td>
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<td>Contract for Drug Screening, (Director) 07/01/97 – 06/30/98</td>
<td>UofL Athletics Association</td>
<td>$37,500</td>
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<td>Freshness Phase I: Odor &amp; Ethylene Removal (Co-I); C. Staff (Pl) 08/17/98 – 11/30/98</td>
<td>General Electric Company</td>
<td>$60,177</td>
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<th>Dr. Y. James Kang</th>
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<th>Project Award</th>
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<tr>
<td>Effect of Catalase on Adriamycin Cardiotoxicity (Pl) 08/01/95-07/31/00</td>
<td>NIH-NCI</td>
<td>$507,500</td>
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<tr>
<td>Suppression of Cardiac Ischemia-Reperfusion Injury by Overexpression of metallothionein (Pl) 01/01/97-12/31/00</td>
<td>American Heart Association</td>
<td>$300,000</td>
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<tr>
<td>The role of Catalase in Protection Against Copper Deficiency-Induced Heart Damage in Transgenic Mice (Pl) 09/01/95-10/31/98</td>
<td>USDA</td>
<td>$140,000</td>
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<td>Metallothionein and Alcoholic Liver Injury (Pl) 12/01/98-10/31/99</td>
<td>UofL Medical School</td>
<td>$15,000</td>
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<tr>
<td><strong>Dr. Donald E. Nerland</strong></td>
<td><strong>Agency</strong></td>
<td><strong>Project Award</strong></td>
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<tr>
<td>Acute Acrylonitrile Intoxication: Antidotal Assessment (Co-I); F.W. Benz (PI) 09/01/97-08/31/98</td>
<td>NIH-NIEHS</td>
<td>$103,930</td>
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<tr>
<td>Acute Acrylonitrile Intoxication: Antidotal Assessment (Co-I); F.W. Benz (PI) 09/01/98-08/31/99</td>
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<td>$108,088</td>
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<tr>
<th><strong>Dr. William M. Pierce, Jr.</strong></th>
<th><strong>Agency</strong></th>
<th><strong>Project Award</strong></th>
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<tbody>
<tr>
<td>Bone Targeting of Pharmaceutical Agents for Osteoporosis – Phase 2 (P.I.) 09/1/97 – 07/31/98</td>
<td>KOWA</td>
<td>$255,148</td>
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<tr>
<td>Bone Targeting of Pharmaceutical Agents for Osteoporosis – Phase 3 (P.I.) 08/01/98 – 09/30/98</td>
<td>KOWA</td>
<td>$32,692</td>
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<tr>
<td>Bone Targeting of Estrogens for Osteoporosis (P.I.) 10/1/98 – 9/30/00</td>
<td>KOWA</td>
<td>$316,708</td>
</tr>
<tr>
<td>HPLC Electrospray Mass Spectrometer (P.I.) 6/1/97 – 05/31/98</td>
<td>NIH SIG</td>
<td>$307,954</td>
</tr>
<tr>
<td>Blood Lead Monitoring (P.I.) 01/01/98 – 12/31/98</td>
<td>Service to Regional Practitioners</td>
<td>$20,113</td>
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<tr>
<td>Atomic Absorption Spectrophotometer (P.I.) 08/01/98 – 07/31/99</td>
<td>WHAS Crusade for Children</td>
<td>$50,000</td>
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<thead>
<tr>
<th><strong>Dr. Peter P. Rowell</strong></th>
<th><strong>Agency</strong></th>
<th><strong>Project Award</strong></th>
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<tr>
<td>Functional Activity of Presynaptic Nicotinic Receptors (PI) 06/01/95-05/31/99</td>
<td>NIH</td>
<td>$185,070</td>
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<tr>
<th><strong>Dr. Leonard C. Waite</strong></th>
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<tr>
<td>Bone Targeting of Pharmaceutical Agents for Osteoporosis – Phase 2 (Co-I); W.M. Pierce (PI) 09/01/97 – 07/31/98</td>
<td>KOWA</td>
<td>$255,148</td>
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**Dr. Leonard C. Waite (cont.)**

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<tr>
<th>Project Description</th>
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<td>KOWA</td>
<td>$316,708</td>
</tr>
</tbody>
</table>
VIII. Summary of Teaching Activities

A. School of Medicine

The Department team-taught the Medical Pharmacology course to second year medical students. Dr. Mike Williams served as course director. In addition, Dr. Laurence Carr served as co-director of the interdisciplinary Clinical Neuroscience course. Individual faculty contributions are identified in the Appendix.

B. School of Dentistry

The Department team-taught the Dental Pharmacology and Therapeutics course to second year dental students. Dr. Leonard Waite served as course director. Individual faculty contributions are identified in the Appendix.

C. School of Nursing

The Department team-taught a Basic Pharmacology for Nursing course to second year nursing students. Dr. William Pierce served as course director. Individual faculty contributions are identified in the Appendix.

The Department team-taught an Advanced Pharmacology course to graduate nursing students. Dr. Leonard Waite served as course director. Individual faculty contributions are identified in the Appendix.

D. School of Allied Health

The Department team-taught a Pharmacology course to second year students in the Dental Hygiene Program. Dr. Leonard Waite served as course director. Individual faculty contributions are identified in the Appendix.

E. Graduate School

The Department team-taught several courses for graduate students. The individual courses and course directors were as follows:

Principles of Drug Action (Dr. Frederick Benz)
Research Methods (Dr. William Pierce)
Pharmacology Seminar (Dr. Donald Nerland)

Individual faculty contributions to these courses are identified in the Appendix.

Individual faculty served on a number of graduate student committees as identified in the Appendix.
IX. Summary of Service Activities

Faculty provided service to the Department, the School of Medicine, the University of Louisville, the profession, the nation, and the community in many ways. Individual faculty service activities are identified in the Appendix.

X. Honors and Awards

Jian Cai received the Dr. Kee Chang Huang outstanding graduate student award, and received the Second Place Research Poster Award at the annual meeting of the Ohio Valley Society of Toxicology.

Adrian Fretland received a Travel Award to present his research at the annual meeting of the Society of Toxicology.

David Hein received the Second Place Research Award "Potential for Major Clinical Applications" from the Jewish Hospital Foundation at Research!Louisville.

James Kang was the keynote speaker of the Toxicology Society of Taiwan.

Matthew Leff received the First Place Research Poster Award, at the annual meeting of the Ohio Valley Society of Toxicology, received a Travel Award to present his research at the annual meeting of the Society of Toxicology, and received an Honorable Mention Research Poster Award at the University of Louisville Health Sciences Center Student Research Day.

William J. Waddell was appointed Professor and Chair Emeritus.

Mike Williams received the University of Louisville School of Medicine-Gender Equity Award from the American Medical Women’s Association and received the Golden Apple Award for Teaching from the University of Louisville School of Medicine Class of 2000.

XI. Standing Committee Membership

Graduate Program Committee

Dr. Len Waite (Chair)
Dr. Peter Rowell (2000)
Dr. Fred Benz (1999)
Dr. William Pierce (1998)
**PBSI/Grievance Committee**

Dr. Peter Rowell (Chair)  
Dr. Mike Williams (2000)  
Dr. Don Nerland (1999)  
Dr. Harrell Hurst (1998)  

**Teaching Evaluation Committee**

Dr. Larry Carr (Chair)  
Dr. Mike Williams (2000)  
Dr. Len Waite (1999)  
Dr. Fred Benz (1998)  

**Seminar Committee**

Dr. Don Nerland (Chair)  
Dr. Theresa Chen (2000)  
Dr. Harrell Hurst (1999)  
Dr. Steve Myers (1998)  

**Core Laboratories/Research Development Committee**

Dr. William Pierce (Chair)  
Dr. Steve Myers (2000)  
Dr. Larry Carr (1999)  
Dr. Theresa Chen (1998)