

1998/99 Annual Report for



College of Pharmacy

University of Florida

Office of Research and Graduate Studies FY 98/99 Staff:

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Executive Associate Dean
Professor, Department of Pharmacodynamics

Marlene K. Hughes
Program Assistant

Lisa M. Muench
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Introduction

The Office for Research and Graduate Studies (ORGS) was established in the College of Pharmacy (COP) in 1989 as the major unit within the college responsible for the oversight of all aspects of the graduate programs (MS and Ph.D.) as well as research activities within the COP. Within the purview of these two major activities are a number of functions that are coordinated by ORGS personnel and make up the daily operations of the office.

The structure of the ORGS is outlined in **Figure 1**. Dr. William J. Millard, Professor in Pharmacodynamics is the Associate Dean for Research and Graduate Studies. Dr. Millard accepted this role on an acting basis in January, 1995 and then on a permanent basis in August 1997. On January 1, 1999 Dr. Millard accepted the permanent position as Executive Associate Dean. As part of this new position, Dr. Millard maintains oversight of the ORGS and reports all ORGS activities directly to the Dean of the College. The Executive Associate Dean is responsible for the monitoring of all graduate student applications, quality of graduate students and the progression of students through the graduate programs in the college. The Executive Associate Dean's role also includes the monitoring of the quality of the graduate programs and to seek ways to expand or improve graduate education within the COP. The Executive Associate Dean also acts as the major liaison between both the Graduate School and the Office of Research, Technology and Graduate Education (ORTGE) at the University of Florida and the COP faculty and graduate students.

Most of the information concerning graduate programs and education within the COP is communicated from the Executive Associate Dean to faculty or graduate students through the Departmental Chairs and Graduate Coordinators. To assist the Executive Associate Dean in the responsibility of governing graduate education in the COP is the Graduate Studies Committee and COP Graduate Student Organization (see below: **Graduate Education and Program Activities for FY 98/99**; **Graduate Studies Committee (GSC) Activities**; **College of Pharmacy Graduate Student Organization**).

FIGURE 1: Administrative Flow Chart for the ORGS



Related to research activities, the Executive Associate Dean has the major responsibility to see that faculty remain active in their individual research programs and to assist them in the grant or contract submission process. It is the Executive Associate Dean's responsibility that all grants are submitted and logged through UF in the proper manner. This includes that proper contractual arrangements and documentation are completed and that each contract or grant contains the proper faculty percent effort and salary offset dollars as well as correct indirect cost and graduate student support. The Executive Associate Dean also sees that information relevant to research or a given research topic is communicated to the proper faculty or personnel within the COP.

The Executive Associate Dean also acts as the college's principal liaison for the US-THAI Consortium. This initiative is a major international training agreement between all of the colleges of pharmacy in the country of Thailand and selected pharmacy schools in the United States (see: **US-THAI Consortium Activities FY 98/99**).

The Executive Associate Dean is assisted in the ORGS by two support staff; a Program Assistant and an Executive Secretary (see **Figure 1**). During FY 98/99 the ORGS Program Assistant was Ms. Marlene Hughes. Marlene assumed the ORGS Program Assistant's role in July of 1997. Erica Yahyavi, a student in the College of Business Administration assisted Ms. Hughes this year. The Program Assistant's role is to handle the daily operations of the ORGS related to graduate education. This would include the submission of needed reports to the COP, University and outside agencies. Communication of informational items to the faculty and graduate students related to issues of graduate education is also a responsibility of Ms. Hughes. The Program Assistant deals individually with graduate students assisting with various problems and graduate course registration. A major responsibility of the Program Assistant is to plan organize the various functions of the ORGS. The tracking and filing of new and ongoing research grants is also another major responsibility of the Program Assistant.

In assessing Marlene's performance this year, Marlene handled the interactions with graduate students and university personnel in the ORGS in a professional manner. Her organization and planning of the two major COP functions coordinated by the ORGS was expertly done. Marlene has also maintained and reorganized the files within the ORGS. As this is an ongoing process we are still trying to develop a filing system that can most efficiently handle the operations of the ORGS. Marlene spent the vast majority of her time dealing with graduate education issues in FY 98/99.

On January 1, 1999 when Dr. Millard assumed the role of Executive Associate Dean, Ms. Lisa M. Muench was also appointed his Executive Secretary. Among the many duties of Ms. Muench's, her role in the ORGS is now to assist in communicating any new funding opportunities to the faculty. Lisa also helps review grants for fiscal accuracy and signature approval prior to submission to external funding agencies. She will also assist in logging and tracking research grants and other aspects of the research component of the college. Some of these duties Lisa will be learning over the next several months.

Lisa has just assumed the role of a research grants liaison, thus making a full assessment of her capabilities in this regard a difficult task. Lisa is a very intelligent, personable and eager individual who will fill the role admirably. I know she will pick the research side of her duties very quickly and will be the integral component to monitoring research activities within the COP in the future.

The remainder of this report will deal with COP Graduate Programs, COP Research Activity, US-THAI Consortium Activities, ORGS-Coordinated Functions and Other Activities of the ORGS for FY 98/99.

Graduate Education and Program Activities for FY 98/99

Graduate Programs in the COP (overview):

There is one Ph.D. program administered through the College of Pharmacy: the *Ph.D. in Pharmaceutical Sciences*. Under the umbrella of the Ph.D. in Pharmaceutical Sciences (established in 1932) there are four *graduate specialty programs* that are recognized in the College of Pharmacy by the Graduate School. These graduate specialties are: Medicinal Chemistry (recognized in 1978), Pharmacodynamics (recognized in 1989), Pharmacy Health Care (recognized in 1996), and Pharmacy (department of Pharmaceutics, 1998).

Tied to each of the Ph.D. programs in the college is an associated Master of Science (M.S.) in Pharmacy Program. The M.S. in Pharmacy in all Departments in the COP requires that each student prepares and defends a thesis as part of their M.S. degree. Pharmacy Health Care also has the option of a non-thesis M.S. degree. In general, students are discouraged from entering directly into a M.S. in Pharmacy Program in the College. Instead, students are strongly encouraged to enter into one of the Ph.D. programs. However, students may opt for the M.S. degree in their discipline if they find that the Ph.D. degree is not what they desire.

During FY 91/92 all Graduate Studies/Programs were *decentralized* in the College from the ORGS and into each of the individual departments. With this decentralization the review or setting of graduate policies and graduate student recruitment is now in the hands of the separate departments.

Today both the graduate programs and graduate student recruitment and oversight remain decentralized with the ORGS acting as the coordinating unit for Graduate Studies in the College. To assist the ORGS in the management of Graduate Activities in the College, the Graduate Studies Committee (GSC) was established.

Graduate Studies Committee (GSC) Activities:

The primary goal for the GSC is to be a medium in which graduate and research programmatic goals are reviewed on a continual basis and aligned with the goals of the College and the University (*i.e.* continuous quality improvement, CQI). The primary charge of the GSC committee is to review and make recommendations of graduate programs in the College of Pharmacy. This would include both new and existing graduate programs. The GSC is also involved in considering how the College can attract/fund more graduate students with an emphasis on bringing in more US and undergraduate pharmacy students into the graduate program. This committee is also involved in reviewing any future major mandate(s) from the Graduate School that may impact on the functioning of the overall graduate program within the College. (*i.e.* stipends; tuition waivers). The committee continues to select finalists in the College's Spring Research Competition and also makes recommendations on how to improve this College function.

The makeup of the GSC includes the **graduate coordinator representatives** from each of the four degree granting departments and the **president of the COP graduate student** organization. The Executive Associate Dean serves as the non-voting chair, and the Dean as *ex-officio* member of the committee. The Program Assistant sits in on all committee meetings as the recording secretary. Representatives on the GSC for FY 98/99 were:

Non-voting Chair:	Dr. William J. Millard	Office of Research and Graduate Studies
Voting members:	Dr. Raymond Bergeron Dr. Ralph Dawson & Dr. Michael Katovich* Dr. Carole Kimberlin Dr. Laszlo Prokai Ms. Pattie Green	Medicinal Chemistry Pharmacodynamics Pharmacy Health Care Pharmaceutics President of COP graduate students
Ex-Officio Member:	Dr. William H. Riffiee	Dean

* Dr. Katovich filled in on the GSC and as graduate coordinator for Dr. Dawson while he was on sabbatical.

The GSC met nine times throughout FY 98/99. Issues that were deliberated by the GSC in FY 98/99 were:

- select the FY 1999/2000 Alumni Scholarship Awardees.
- review the use of Liberty Award monies for graduate students in each of the 4 Ph.D.-granting Departments.
- use of State Line OPS monies for Graduate Student stipends.
- establish TA Assignments for each of the semesters for FY 98/99.
- establishment of goals and objectives for each graduate program within the college.
- selection of finalists for the 12th Annual Research Showcase and Awards Recognition Day.

College of Pharmacy Graduate Student Organization:

The COP Graduate Student Organization (GSO) is an avenue by which graduate students can discuss common issues related to graduate education and bring their concerns to the attention of the Associate Dean for Research and Graduate Studies. The COP GSO elects a president and secretary on an annual basis. The president of the organization coordinates and runs the meetings (3-4 per year) and also sits on the Graduate Studies Committee as a voice of the graduate students. For FY 98/99 **Ms. Pattie Green** (Pharmacodynamics) and **Sriram Krishnaswami** (Pharmaceutics) served as co-president of the organization, while **Mr. Matthew Dellavecchia** (Medicinal Chemistry) served as secretary for a second term.

At the beginning of the Fall and Spring terms of an academic year, the ORGS sponsors a pizza party for COP graduate students to have them come together as a forum of exchange of information between each other and the ORGS.

Graduate Student, Postdoctoral Fellow and Visiting Scholar Demographics:

A listing of all graduate students according to their department with their date of entrance into the graduate program, degree sought and mentor is found in **Table 1**. Seventy one graduate students were engaged in studies leading to the Ph.D degree this year. During FY 98/99 the COP graduated 15 students Ph.D. students (see below: **Graduate Student Graduation Activities FY 98/99**) which is the largest graduating class in the history of the college. The COP accepted 16 new students into one of the COP Graduate Programs (**Tables 1 and 4**).

Table 2 outlines the overall demographics of the graduate student population within the COP for FY 98/99. Overall, there was an approximate 60:40 ratio of males to females. The number of US/Foreign students was 38/34 or a 53%/47% ratio.

US minority students comprised 8.5% (6 of 71) of the COP graduate student population; this percentage is up from 5.7% (4 of 70) in FY 97/98 and 3.0 % (2 of 66) in FY 96/97. Distribution of graduate students among the four degree-granting departments is illustrated in **Table 3**. With the exception of Pharmacodynamics the student population was distributed relatively evenly over the remaining three departments (17-20 students/unit).

GPA and graduate program entrance test scores for the COP students are shown in **Table 4**. For the sake of completeness, a listing of Postdoctoral Fellows and Visiting Scholars in the COP is illustrated in **Table 5** with their distribution among the departments outlined in **Table 3**.

Table 1: FY 98/99 Graduate Students in the COP

Department/Center	Name	Date Entered	Exp. Grad. Date	Degree Sought	Mentor
Medicinal Chemistry	Alicia Alley*	Aug 98	Aug 02	Ph.D.	Bergeron
	Michael Branham**	Jun-95	Dec-98	Ph.D.	Tebbett
	Rachel Cornet	Aug-95	Aug-99	Ph.D.	James
	Richard Davies**	Aug-87	Dec-98	Ph.D.	Rao/Perrin
	Matthew Dellavecchia	Jan-97	May-01	Ph.D.	Bergeron
	Qiao-Qing Di**	Aug-93	Dec-98	Ph.D.	Schulman
	James Johnson**	Aug-93	Dec 98	Ph.D.	Rao/Perrin
	John Juchum	Jan-94	May-99	Ph.D.	Rao/Schulman
	Zhen Lou	Aug-97	Aug-01	Ph.D.	James
	Azeela Mulaiya*	Aug 98	Aug 02	Ph.D.	Bergeron
	John Nguyen*	Aug 98	Aug 02	Ph.D.	Bergeron
	Ravi Orugunty**	Aug-92	Aug 98	Ph.D.	Rao/Perrin
	William Roberts	Aug-96	Aug-00	Ph.D.	Sloan
	Ningya Shi**	Jan-95	May-99	Ph.D.	Wielbo
	Jingshun Sun**	Jan-95	Aug-98	Ph.D.	Perrin
	Shawn Toffolo	Jan-96	May-00	Ph.D.	Tebbett
	Lucas Utley	Aug-96	Aug-00	Ph.D.	Tebbett
	Scott Wasdo*	Aug 98	Aug 02	Ph.D.	Bergeron
	Mei Guo Xin	Jan-95	May-99	Ph.D.	Bergeron
	Rong Yang*	Jan-99	Dec-03	Ph.D.	Bergeron
Pharmaceutics/Center For Drug Discovery	Vikram Arya*	Aug 98	Aug 02	Ph.D.	Prokai
	Suliman Al-Fayoumi**	Aug-94	Dec-98	Ph.D.	Hochhaus
	Vikram Arya*	Aug 98	Aug 02	Ph.D.	Prokai
	Annamaria Buchwald	Aug-96	Aug-00	Ph.D.	Bodor
	Intira Coowanitwong*	Aug 98	Aug 02	Ph.D.	Prokai
	Patravadee Chancham	Aug-97	Aug-01	Ph.D.	Hughes
	Amparo de la Pena	Aug-96	Aug-00	Ph.D.	Derendorf
	Hristina Dimova	Aug-97	Aug-01	Ph.D.	Hochhaus
	Brett Houk	Aug-96	Aug-00	Ph.D.	Hochhaus/Hughes
	Fenglei Huang	Jan-95	May-99	Ph.D.	Bodor
	Sriram Krishnaswami	Jan-97	Jan-01	Ph.D.	Derendorf
	Earvin Liang**	Aug-94	Aug-98	Ph.D.	Hughes
	Charles Randall Mills	Aug-97	Aug-01	Ph.D.	Brazeau
	Jintana Napaporn	Aug-97	Aug-01	Ph.D.	Brazeau
	Adam Persky*	Aug 98	Aug 02	Ph.D.	Brazeau
	Scott Poxon**	Aug-94	May-99	Ph.D.	Hughes
Jeffrey Stark	May-94	Dec-99	Ph.D.	Hochhaus	

* new students entering a COP graduate program during FY 98/99

** students who graduated with a MS or Ph.D. during FY 98/99

Table 1 (con't): FY 98/99 Graduate Students in the COP

Department/Center	Name	Date Entered	Exp. Grad. Date	Degree Sought	Mentor
Pharmaceutics/ Center for Drug Discovery (con't)	James Talton	Aug-95	May-99	Ph.D.	Hochhaus
	Fuxing Tang	Jan-97	Jan-01	Ph.D.	Hughes
	Qun Wei	Aug-94	May-99	Ph.D.	Bodor
	Wu Xiao*	Jan-99	Dec-03	Ph.D.	Hochhaus
Pharmacodynamics/Center Neurobiology of Aging	Neal Alcalay*	Aug 98	Aug 02	Ph.D.	Dawson
	Tranecia Clarke	Jun-97	Aug-01	Ph.D.	Dawson
	Barbel Eppler **	Aug-92	Aug-98	Ph.D.	Dawson
	Pattie Green**	Aug-95	May-99	Ph.D.	Simpkins
	Kelly Gridley	Aug-93	Dec-99	Ph.D.	Simpkins
	Ming Hu	Aug-95	Aug-99	Ph.D.	Peris
	Feng Li*	Aug 98	Aug 02	Ph.D.	Dawson
	Bruce Jung	Aug-94	Aug-99	Ph.D.	Peris
	Robin Martin	Aug-95	Aug-99	Ph.D.	Millard
	Alok Pachori	Aug-96	Aug-00	Ph.D.	Katovich
	Evelyn Perez*	Aug 98	Aug 02	Ph.D.	Dawson
	Anthony Smith*	Aug 98	Aug 02	Ph.D.	Dawson
	Jian Wang	Aug-97	Aug-01	Ph.D.	Simpkins
	Xiaofei Wang*	Aug 98	Aug 02	Ph.D.	Dawson
Pharmacy Health Care/ Dubow Center for Pharmaceutical Care	Ratanaporn Awiphan	Aug-95	Aug-99	Ph.D.	Lipowski/Segal
	Yajaira Bastardo	Aug-96	Aug-00	Ph.D.	Kimberlin
	Christine Bono	Aug-94	Aug-99	Ph.D.	Kimberlin
	Barbara Brice	Aug-94	Aug-99	Ph.D.	Lipowski
	Richard Faris	Aug-96	Aug-00	Ph.D.	Hepler
	William Garst	Jan-95	May-99	Ph.D.	Ried
	Susan Kernodle**	Aug-94	Aug-98	Ph.D.	Segal
	Henry Kolb*	Aug 98	Aug 02	Ph.D.	Ried
	Neil MacKinnon**	Aug-95	Spr-99	Ph.D.	Hepler
	Sam Moolasarn	Jan-96	Apr-99	Ph.D.	Ried
	Matt Morrow	Aug-85	Aug-01	Ph.D.	Hepler
	Rajesh Nayak**	Aug-92	May-99	Ph.D.	Kimberlin/Brushwood
	Brian Sauer*	Jan-99	Dec-03	Ph.D.	Kimberlin
	Lourdes Thornhill	Aug-95	Aug-99	Ph.D.	Kimberlin
	Feng Wang	Aug-96	Aug-99	Ph.D.	Segal
	Avin Yaldo	Aug-97	Aug-01	Ph.D.	Ried
	Henry Young	Aug-97	Aug-01	Ph.D.	Segal

* new students entering a COP graduate program during FY 98/99

** students who graduated with a Ph.D. during FY 98/99

TABLE 2: Graduate Student Demographics - FY 98/99												
GENDER			CITIZENSHIP				American MINORITY					
			United States		Foreign		Black		Hispanic		Asian	
	#	%	#	%	#	%	Black	%	Hispanic	%		
TOTAL	71		37	52.1%	34	47.9%	3	4.2%	2	2.8%	1	1.4%
Male	41	57.7%	26	70.3%	15	44.1%	2		0		1	
Female	30	42.3%	11	29.7%	19	55.9%	1		2		0	

TABLE 3: Graduate Students, Postdoctoral Fellows and Visiting Scholars - FY 98/99

Department/Center	Graduate Students	Postdoctoral Fellows	Visiting Scholars
<i>Medicinal Chemistry</i>	20	8	0
<i>Pharmaceutics/CDD</i>	20	7	5
<i>Pharmacodynamics/CNA</i>	14	4	0
<i>Pharmacy Health Care/DFCPC</i>	17	1	0
<i>Pharmacy Practice</i>	No Graduate Program	7	0
COLLEGE TOTAL	71	27	5

CDD = Center for Drug Discovery, CNA = Center for the Neurobiology of Aging, DFCPC = Dubow Family Center for Research in Pharmaceutical Care.

TABLE 4: GPA and Test scores of Graduate Students in the COP

CLASS	GPA	GRE			TOEFL	<i>TSE</i>
		Verbal	Quant	Total		
COLLEGE TOTAL (71)	3.37	517	680	1197	590	48
98/99 Class (16)	3.38	519	695	1214	560	45

numbers in parenthesis denote student population

Table 5: FY 98/99 Postdoctoral Fellows and Visiting Scholars

Department/Center	Name	Title	Preceptor
Medicinal Chemistry	James McManis	PD	Bergeron
	Jorge Bussenius	PD	Bergeron
	Ralf Mueller	PD	Bergeron
	William Weimer	PD	Bergeron
	Ziye Liu	PD	Bergeron
	Bernard Gadagbui	PD	James
	Chung-Li (Jason) Li	PD	James
	Peter Van Dan Hurk	PD	James
Pharmaceutics/ Center for Drug Discovery	Attila Jahaz	PD	Bodor
	Peter Buchwald	PD	Bodor
	Jiaxiang Wu	PD	Bodor
	Fu-Bao Ji	VS	Bodor
	Chu-kuok Wong	VS	Bodor
	Pascal Druzgala	VS	Bodor
	Sung-hwa Yoon	VS	Bodor
	Thorsteinn Lostsson	VS	Bodor
	Alevtina Zharikova	PD	Prokai
	Nelamangala Nagaraja	PD	Derendorf
	Cioli Rojas	PD	Derendorf
	Preeti Ajamni	PD	Hughes
Pharmacodynamics/Center for Neurobiology of Aging	Shao Hau Yang	PD	Simpkins/Day
	Jiong Shi	PD	Simpkins
	Leighann Stublely	PD	Simpkins
	Barbel Eppler	PD	Peris
Pharmacy Health Care/Dubow Center for Pharmaceutical Care	Almut Winterstein	PD	Hepler
Pharmacy Practice	Billie Nguyen	PD	Gums
	Sandra Baumstein	PD	Hendeles
	Joe Walker	PD	Karlix
	B. Nhi Nguyen	PD	Johnson
	Larisa Humma	PD	Johnson
	Elizabeth Little	PD	Taylor
	Jeffrey Hui	PD	Yee

Graduate Student Recruitment Activities:

Recruitment of graduate students was decentralized in 1991 and placed in the hands of the individual departments. As such, departments are now responsible for their own recruitment brochures and strategies for graduate student recruitment. This year 929 applications were sent out to prospective students by the college departments (**Table 6**). This is an increase of over 200 from the previous year clearly noting that the college is actively trying to recruit students into their graduate programs.

Whenever possible, requests for application materials that come through the ORGS are now sent to the departments. However, when applicants do not specify a graduate specialty in their letter of inquiry the ORGS handles these requests. To streamline the process, a letter (**see Appendix A**) describing the individual graduate programs/specialties and identifying the graduate coordinators of each graduate specialty is sent to each applicant.

In this letter applicants are encouraged to access information from the COP home page on the World Wide Web (WWW). Records of how many letters of this type were sent out from the ORGS were kept for FY 98/99. The ORGS sent out 317 letters over the entire year. This is 53 more from last year's 264 letters.

Graduate student application activity for FY 98/99 from each of the departments is illustrated in **Table 6**. Of the 132 completed applications received by the departments only 27 or 20.5% of the applicants were accepted. What is somewhat disappointing is that only 61% of those students accepted matriculated into one of the four graduate programs in the college.

Department	# requests sent out	# completed applications	# applications accepted	% accepted	# entered	% entered
Medicinal Chemistry	243	37	10	27%	5	50%
Pharmaceutics	494	45	7	16%	4	57%
Pharmacodynamics	289	20	7	35%	5	71%
Pharmacy Health Care	141	30	3	10%	2	67%
COLLEGE TOTAL	1167	132	27	22%	16	61%

Graduate Student Graduation Activities FY 98/99:

Over the 98/99 academic year the COP had **fifteen** students graduate with the Ph.D. degree. Each of the departmental graduate specialties was represented in the 98/99 graduating class. This is the largest graduating class of Ph.D. students in the history of the college. The graduates according to degree for FY 98/99 were:

Ph.D. in Pharmaceutical Science degrees conferred for FY 98/99.

August 1998 (Summer Commencement):

- Name:** **Dr. Barbel Eppler**
Dissertation Title: *Taurine and Aging: Biosynthesis, Antioxidation, and Dietary Manipulations.*
Faculty Mentor: Dr. Ralph Dawson, Associate Professor
Department: Pharmacodynamics
Previous Degrees: B.S. in Zoology, University of Florida

Dr. Eppler has stayed on in a postdoctoral position working in the laboratory of Dr. Joanna Peris, Department of Pharmacodynamics, College of Pharmacy, University of Florida.

2. **Name:** **Dr. Susan Kernodle**
Dissertation Title: *Predicting Physician Guideline Compliance.*
Faculty Mentor: Dr. Rich Segal, Professor and Chair
Department: Pharmacy Health Care
Previous Degrees: B.S. in Industrial Engineering from North Carolina State University

Dr. Kernodle has assumed a position at Applied Health Outcomes in Palm Harbor, FL.

3. **Name:** **Dr. Earvin Liang**
Dissertation Title: *Use of Biodegradable pH-Sensitive Surfactants in Liposome Mediated Oligonucleotide Delivery.*
Faculty Mentor: Dr. Jeff Hughes, Assistant Professor
Department: Pharmaceutics
Previous Degrees: B.S. in Pharmacy, Taipei Medical College, Taipei, Taiwan

Dr. Liang has assumed a research scientist position at Boehringer Ingelheim, Ltd., Richfield, Connecticut.

4. **Name:** **Dr. Ravi Orugunty**
Dissertation Title: *Simplified Isolation of Lignans from Saururus Cernuus and Various Biological Activities of Natural and Synthetic Lignans.*
Faculty Mentor: Dr. Koppaka Rao, Professor and Dr. John Perrin, Professor
Department: Medicinal Chemistry
Previous Degrees: B.S. in Pharmacy, Madras University, Madras, India

Dr. Orugunty has assumed a postdoctoral position in Veterinarian Medicine with Dr. Ian Tebbett.

5. **Name:** **Dr. Jinshun Sun**
Dissertation Title: *The Chemiluminescence and Degradation of Beta-Lactam Antibiotics After Oxidation by Potassium Superoxide.*
Faculty Mentor: Dr. John Perrin, Professor
Department: Medicinal Chemistry
Previous Degrees: B.S. of Chemistry and M.S. of Chemistry at Fuzhou University, PRC.

Dr. Sun is working for Barr Laboratories in New York, N.Y.

December 1998 (Fall Commencement):

6. **Name:** **Dr. Micheal Branham**
Dissertation Title: *Therapeutically Modified Hollow Fiber Dialyzers*
Faculty Mentor: Dr. Ian Tebbett
Department: Medicinal Chemistry
Previous Degrees: B.S. in Chemistry, Governors State University - Illinois

Dr. Branham has assumed a postdoctoral position at Michigan State University and is now working at NIST in Maryland.

7. **Name:** **Dr. Richard Davies**
Dissertation Title: *Isolation and Characterization of Taxanes and Other Compounds From Various Species of Taxus.*
Faculty Mentor: Dr. Koppaka V. Rao, Professor/ Dr. John Perrin, Professor
Department: Medicinal Chemistry
Previous Degrees: B.S. in Chemistry and B.S. in Pharmacy, University of Florida

Dr. Davies is currently working as a local pharmacist in the Gainesville, FL area with the hopes of finding future employment in the either academia or industry.

8. **Name:** **Dr. Qiao-Qing Di**
Dissertation Title: *A Novel Photodissociative Probe of Water in Serum Albumin Binding Sites.*
Faculty Mentor: Dr. Steven Schulman, Professor
Department: Medicinal Chemistry
Previous Degrees: B.S. in Medicinal Chemistry, Shanghai Medical University, PRC

Dr. Di is currently looking for a position.

9. **Name:** **Dr. James H. Johnson, Jr.**
Dissertation Title: *Chemistry of Taxanes and Taxus Species.*
Faculty Mentor: Dr. Koppaka V. Rao, Professor/ Dr. John Perrin, Professor
Department: Medicinal Chemistry
Previous Degrees: B.S. in Chemistry, Fayetteville State University

Dr. Johnson has accepted a position as a chemist with Natural Pharmaceuticals in Cambridge, MA.

May 1999 (Spring Commencement):

10. **Name:** **Dr. Suliman Al-Fayoumi**
Dissertation Title: *Pharmacokinetic and Pharmacodynamic Evaluation of Stable Dynorphin A(1-13) Derivatives.*
Faculty Mentor: Dr. Guenther Hochhaus, Associate Professor
Department: Pharmaceutics
Previous Degrees: B.S. in Pharmacy, Jordan University of Science and Technology, Irbid, Jordan

Dr. Al-Fayoumi has accepted a new drug application (NDA) reviewer position at the Food and Drug Administration, Rockville, MD.

11. **Name:** **Dr. Pattie S. Green**
Dissertation Title: *Structure Activity Relationship for the Neuroprotective Effects of Estrogens: Potential Involvement of cAMP Response Element Binding Protein & Nuclear Factor Kappa B.*
Faculty Mentor: Dr. Joanna Peris, Associate Professor
Department: Pharmacodynamics
Previous Degrees: B.S. in Microbiology and Cell Science, College of Liberal and Science University of Florida

Dr. Green has accepted a Post-Doctoral position with Dr. Christiaan L. Leeuwenburgh, in the College of Health and Human Performance.

12. **Name:** **Dr. Neil MacKinnon**
Dissertation Title: *Risk Assessment of Preventable Drug-Related Morbidity in Older Persons.*
Faculty Mentor: Dr. C. Douglas Hepler, Professor
Department: Pharmacy Health Care, Dubow Family Center for Research in Pharmaceutical Care
Previous Degrees: B.S. in Pharmacy, Dalhousie University, Canada; MS in Hospital Pharmacy, University of Wisconsin-Madison

Dr. MacKinnon has accepted an Assistant Professor of Pharmacy position at Dalhousie University, College of Pharmacy, Dalhousie, Nova Scotia.

13. **Name:** **Dr. Scott Poxon**
Dissertation Title: *The Pharmaceutical Stability of Plasmid DNA.*
Faculty Mentor: Dr. Jeff Hughes, Assistant Professor
Department: Pharmaceutics
Previous Degrees: B.S. in Molecular Biology

Dr. Poxon has assumed a Research Scientist position with Whitehall Robbins in Richmond Virginia.

14. **Name:** **Dr. Rajesh Nayak**
Dissertation Title: *Intention as a Function of Outcome Evaluations and Beliefs: Influence of Attitudes and Subjective Norms on Behavioral Intention to Acquire Oral Contraceptives Over-the-Counter.*
Faculty Mentors: Dr. Carole Kimberlin, Professor; and Dr. David Brushwood, Professor
Department: Pharmacy Health Care
Previous Degrees: B.S. in Pharmacy, Mangalore University, India. MS in Pharmaceutical Chemistry, Mangalore University, India

Dr. Nayak is looking for a position in academia.

15. **Name:** **Dr. Ningya Shi**
Dissertation Title: *Optimization of Hepatic Targeting for Antisense Inhibition of Hypertension in the Spontaneously Hypertensive Rats.*
Faculty Mentor: Donna Wielbo
Department: Medicinal Chemistry
Previous Degrees: M.D. in Medicine, Norman Bethune University of Medical Sciences

Dr. Shi will do a post-doctoral fellowship.

Graduate Student Funding and Awards:

The COP shared the major load of the funding of graduate student stipends for FY 98/99. Thirty two graduate student stipends (8 to each of the four graduate degree granting departments) were supported by COP OPS monies. Four students were supported by funds earmarked by Provost Capaldi to increase graduate student enrollment (see below; **Provost Scholarships**). The remainder of graduate student support came from extramural research grant support or graduate student fellowships/awards. In a few instances (7) students were self-funded. Four graduate students received funding from their home government of Thailand. Graduate stipends including stipend supplements ranged from \$10,849 to \$19,451 with an average overall stipend of \$13,085 for all graduate students.

Eleven graduate student fellowship proposals for a total of \$245,748 were submitted by faculty to extramural sources. Agencies in which proposals were submitted were the American Foundation for Pharmaceutical Education (AFPE), NIDA/NIH, PhRMA, and the American Heart Association – Florida Affiliate.

Five predoctoral graduate fellowship proposals were funded this year. **Mr. Bruce Jung**, a graduate student in Pharmacodynamics received a National Institute on Drug Abuse Predoctoral Fellowship (1F31DA05890) to continue his graduate studies with Dr. Joanna Peris, Associate Professor.

Mr. Richard Faris completed his second year predoctoral fellowship stipend of \$6,000 from the AFPE to help in his dissertation studies. Mr. Faris is a graduate student in the Department of Pharmacy Health Care under the direction of Dr. Rich Segal, Professor and Chair of the Department of Pharmacy Health Care. **Ms. Lourdes Thornhill** completed her first year of a predoctoral fellowship from the AFPE to help in her graduate studies entitled: “*A Model of Pharmacist Responsibility for Drug Therapy Outcomes.*” Ms Thornhill received a stipend of \$6,000 and is working under the direction of Dr. Carole Kimberlin, Professor Department of Pharmacy Health Care.

Two graduate students in the Department of Pharmacodynamics, **Ms. Robin Martin** and **Ms. Tranecia Clarke** both received two-year predoctoral fellowships from the American Heart Association-Florida Affiliate to help support their predoctoral studies. Each student received a \$14,000 stipend for FY 98/99 and a \$15,000 stipend for FY 99/00. Robin Martin is working on a dissertation entitled: “*Leptin Resistance Reduces GH Secretion and Contributes to the Pathogenesis of Obesity*”. Tranecia Clarke is working under the direction of Dr. Ralph Dawson on a topic entitled: “*Role of PKC and TGF-Beta in the Cardiovascular Protective Mechanisms of Taurine.*”

Ms. Robin Martin received additional funding from the Bryan W. Robinson Neurological Foundation, Inc. for her work entitled: “*Leptin Resistance Reduces GH Secretion and Contributes to the Pathogenesis of Obesity*”. Bryan W. Robinson Fellowship is a \$2,500 award that is to be utilized by Robin to support her graduate education.

Mr. Micheal Branham, a doctoral student in the Department of Medicinal Chemistry, working under the mentorship of Dr. Ian Tebbett, was the recipient of a Florida Minority Fellowship from the Office of Research Technology and Graduate Education at UF. The Florida Minority Fellowship Program supplements previous McKnight Doctoral Fellowship Awardees and provides support for minority students for a period of two additional years. Florida Minority Fellowship awardees receive an annual stipend plus tuition waiver and funds for books, supplies, major medical insurance and computer equipment.

During 98/99 academic year **Micheal Branham** also received a R.W. Johnson Pharmaceutical Research Institute (PRI) Grant. PRI provided monies to the COP to support a minority student in the Florida A&M University (FAMU)/University of Florida joint Ph.D. program in Pharmaceutics. The amount of support given by PRI was a total of \$45,000 or \$15,000/year for a three year period. This award has provided Micheal with an annual stipend supplementation with the remaining monies supporting his doctoral research.

Three graduate students received continued support from training grants centered within the Health Science Center at the University of Florida this year. **Mr. Bruce Jung**, working with Dr. Joanna Peris in Pharmacodynamics and **Mr. Adam Persky**, working with Dr. Gayle Brazeau in Pharmaceutics were supported by the NIH Alcohol Training Grant #T32AA07561. Another student in the Department of Pharmacodynamics, **Ms. Pattie Green** was supported by the Neurobiology of Aging Training Grant #T32AG00196. Pattie is working with Dr. James Simpkins.

In addition to the awards listed above, the COP and ORTGE have various awards that provide supplements to recruit outstanding graduate students into one of our graduate programs (**Provost Scholarships, Grinter and Florida Legislative Awards**). We also have an award to reward those students who have excelled both academically and in the laboratory during the first year of their graduate program (**Lippman Award**).

Awardees are recommended to the Graduate Studies Committee or the Associate Dean for Research and Graduate Studies by their respective graduate coordinator or departmental chair. Based on the student’s academic credentials and letters of support, individuals are selected by the Associate Dean for Research and Graduate Studies in discussions with the Graduate Studies Committee.

Provost Scholarships:

These **Provost Scholarships** are new for 1998/99 through deliberations with Dean Riffie and the Provost, Dr. Betty Capaldi. The intent of the **Provost Scholarships** was to serve as a mechanism to recruit graduate students with outstanding academic credentials into one of the college’s graduate programs. This year the college received 4 **Provost Scholarships** that were allocated to each of the departments with graduate programs. These awards came

from monies designated by Provost Capaldi and consist of an \$18,000 annual stipend plus tuition remuneration for a maximum of 4 years. The recipients of the *Provost Scholarships* in 98/99 are listed below:

Mr. John Nguyen	Medicinal Chemistry
Mr. Wu Xiao	Pharmaceutics
Ms. Evelyn Perez	Pharmacodynamics
Mr. John Seeland	Pharmacy Health Care

Grinter Awards:

Originated in 1988, the intent of the *Grinter Fellowship Program* was to serve as a mechanism to recruit graduate students with outstanding academic credentials into one of graduate programs. These awards come from monies allocated from ORTGE on a college by college basis and supplement our existing state stipends, an additional \$3,000 per year for a maximum of 3 years (\$9,000 total award). A statistical summary of the *Grinter* Program in the COP is illustrated in **Table 7**. Overall we have had a 63% acceptance of *Grinter* Scholarships by prospective students. Forty one percent of the COP *Grinter* Awardees have graduated from the COP program with either a Ph.D or M.S. degree. The overall average GPA for the *Grinter* Fellows is 3.53 with a GRE of 1267 and a TOEFL of 608.

TABLE 7: Statistical Summary of Grinter Program - 1988 to present.			
Statistic	Overall	%	98/99 class
Total number offered	47		5
Total number accepted	34	63%	3
Total number graduated	14	41%	
Total Number still enrolled: past & present	16	47%	
Number of active awardees - FY 98/99	9	56%	3
GPA	3.53		3.13
GRE (Verbal + Quant)	1267		1333
TOEFL	608		

In FY 98/99 the COP offered 5 *Grinter* Fellowships, of which 3 accepted (60%). This year the GPA scores were lower than in the past (**Table 7**), however, GRE scores were higher than the overall group mean. The recipients of *Grinter* awards in 98/99 are listed below:

Ms. Anzeela Schentrup	Medicinal Chemistry
Mr. Anthony Smith	Pharmacodynamics
Mr. Scott Wasdo	Medicinal Chemistry

Florida Legislative Awards:

This *Florida Legislative Awards* is a fellowship program initiated in the 1996 Fall semester by the Office of Research and Graduate Education (ORTGE) through a mandate from the State of Florida Legislature (thus, giving the awards their name, *Florida Legislative* Fellowships). The legislature decreed that a portion of the 1995/96 7% tuition increase monies be dedicated for graduate student fellowships. The intent of the *Florida Legislative* Fellowship Program is to serve as a mechanism to recruit top-quality graduate students with outstanding academic credentials into one or more of the graduate programs in the College of Pharmacy (COP). These awards will

supplement our existing state stipends an additional \$2,500 per year for a maximum of 4 years (\$10,000 total award).

The COP received sufficient funds to support two *Florida Legislative* Awardees for FY 98/99. Through deliberations within the Graduate Studies Committee it was decided that the *Florida Legislative Awards* would be utilized to recruit graduate minority students into graduate programs within the COP. For the FY 98/99 academic year two minority students have held *Florida Legislative Awards*. They are:

Ms. Tranecia Clarke	Pharmacodynamics
Mr. Henry Young	Pharmacy Health Care

Lippman Award:

To honor the commitment of the **Honorable Fred Lippman** for his efforts in getting state support for the College of Pharmacy, the college instituted the *Lippman Award* in 1991. The *Lippman Award* is designated to acknowledge and enhance the academic development of a graduate student entering the second year of their graduate Ph.D. program who has excelled in both classroom and research activities. This award consists of a stipend supplementation of \$3,000 per year for up to 3 years. *Lippman* Awardee during FY 98/99 was:

Mr. Bruce Jung	Pharmacodynamics
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College of Medicine - Section on Aging 1998-99 Geriatric Scholar Award:

Dr. Neil MacKinnon, a May 1999 Ph.D. graduate of our Pharmacy Health Care graduate program, received the Geriatric Scholar Award from the Section on Aging in the College of Medicine. Neil received a \$1,000 monetary award and a commemorative plaque at their annual meeting and dinner in April. Neil worked under the direction of Dr. C. Douglas Hepler for his graduate work and is currently an Assistant Professor at Dalhousie University College of Pharmacy, Nova Scotia.

College of Pharmacy 12th Annual Research Showcase and Awards Recognition Day:

A number of graduate students, postdoctoral fellows and undergraduate students received cash awards and commemorative plaques for participating in the COP "Annual Research Showcase and Awards Recognition Day". The specifics of this day-long event and the award winners is listed in: **ORGS Coordinated Events for the COP - FY 98/99; Annual Research Showcase and Awards Recognition Day**, section of this report.

Fifth Annual Research Day at UF Health Science Center/Jacksonville:

On May 14th 1999 the Jacksonville Research Day was held on the Jacksonville campus in which both oral (6) and poster (38) presentations were showcased. COP students/fellows were competing with fellows and residents at UMC/Jacksonville and were able to take home the top two prizes in each of the oral and poster categories as well as second place in the poster division. This is a testament to the quality of graduate students and fellows we have in our college.

Ms. Amparo de la Peña took first place in the oral competition category with her presentation: "*Plasma and Tissue Pharmacokinetics of Cefaclor in Humans*". Amparo received a \$300 check and a plaque for her efforts. Amparo is working on her Ph.D. degree with Dr. Hartmut Derendorf. **Dr. Preeti Ajmani** took first place in the poster category with her presentation: "*Transplantation Efficiency of a Disulfide-Containing Cationic Lipid in Primary and Immortalized Cells pre-treated with Amyloid B (AB) Peptide*." Dr Ajmani also received a \$300 check and plaque for her award. Dr. Ajmani is a post-doctoral fellow in Dr. Jeff Hughes' laboratory. **Mr. Brett**

Houk took second place in the poster competition with his work: "*Pharmacokinetics of Plasmid DNA in Isolated Rat Plasma and After IV Bolus Administration.*" Brett received \$200 and a plaque for his efforts. Brett is working on his Ph.D. degree with Drs. Jeff Hughes and Gunther Hochhaus.

UF Graduate Student Forum Awards:

At the 1998/99 Graduate Student Forum of the University of Florida held on April 2nd, 1999 the College of Pharmacy had nine graduate students compete for oral and poster competition prizes. This year the COP made an outstanding showing with three first-place awards, one second-place and two third-place awards.

In the oral competition the following students need recognized: In Paper Session I - Biological Sciences: **Ms. Amparo de la Peña**, in the Department of Pharmaceutics received first place honors for her presentation entitled: "*Measurement of unbound tissue concentrations of antibiotics in rats by microdialysis.*" **Mr. Sriram Krishnaswami**, also from the Department of Pharmaceutics took home third place honors for his paper: "*Development and Validation of an LC/MS assay for Fluticasone Propionate and Pharmacokinetics after single and multiple dosing.*"

In Paper Session II - Molecular Biology: **Mr. Fuxing Tang**, in the Department of Pharmaceutics won first place with his presentation: "*The use of dithiodiglycolic acid as a tether in cationic lipids decreases the cytotoxicity and increases transgene expression of plasmid DNA delivery in vitro and in vivo.*"

In Paper Session V - Pharmaceutical and Radiological Engineering: **Mr. Alvin Yaldo**, Department of Pharmacy Health Care Administration received first place for his paper entitled: "*An exploratory study of asthma patient characteristics on hospital costs and ICU admissions.*" **Mr. Henry Young**, also of the Department of Pharmacy Health Care Administration received second place honors for his paper: "*Professional or Nice Person: Patient Satisfaction and Perception of Pharmacist.*"

In the poster category **Mr. Alok Pachori**, a graduate student in the Department of Pharmacodynamics took third place in the Poster Session III - Health and Sport Science division with his poster title: "*Viral Vector mediated delivery of Angiotensin II receptor antisense to attenuate hypertension in Renin Transgenic rats.*"

International Student Academic Awards:

At the International Student Academic Awards Ceremonies held April 14, 1999 in the Rion Ballroom at the Reitz Union, **four** of the College of Pharmacy International Graduate Students received awards for outstanding academic accomplishment. Each received an award certificate for their performance. The students were: **Ms. Yajaira M Bastardo** (Pharmacy Health Care), **Mr. Ming Hu** (Pharmacodynamics), **Ms. Zhen Lou** (Medicinal Chemistry), and **Ms. Amparo de la Peña** (Pharmaceutics).

Graduate Minority Activities:

The ORGS has continued to work with the Graduate School's Office of Graduate Minority Programs (OGMP) and its Interim Director, Dr. Dovie J. Gamble, in recruiting minority students into the college's graduate programs. This year we submitted 40 complete application packages, along with individual departmental brochures to the OGMP to be distributed amongst the various minority schools in the nation. The ORGS continued to filter information down to the individual departments concerning funding opportunities for both graduate minority students as well as undergraduate minority students interested in a research career.

Names of interested minority students were passed on to the respective departmental chairs or graduate coordinators by Dr. Michael McKenzie, Associate Dean for Professional Affairs, following his various recruiting trips to colleges for our Professional Program Students. His report should identify all schools he visited so I will not reiterate them here. Each Department then followed up with a letter and application packet to the student(s) outlining their respective graduate program and its objectives.

Dr. Carole Kimberlin, professor and graduate coordinator of our Pharmacy Health Care Administration Program (PHCA) traveled to FAMU and made presentations to two classes for recruiting purposes. From this trip there is the possibility of three students applying to our PHCA program.

The Department of Pharmaceutics has maintained an official affiliation with the Pharmaceutics Department at FAMU College of Pharmacy. Dr. Hartmut Derendorf, Professor of Pharmaceutics, serves on two advisory boards at FAMU, thus, he visits FAMU routinely to talk about Pharmacy Graduate Programs at UF.

On April 1st and 2nd of this year, Dr. Homero Monsanto (Professor of Social Pharmacy) and Dr. Sonia Lugo (Associate Professor of Pharmaceutics) visited from the University of Puerto Rico College of Pharmacy. Drs. Monsanto and Lugo met with Dr. David Brushwood, Dr. William Millard and Dr. Gayle Brazeau to discuss possibilities of joint graduate programs in the two specialties. Follow-up proposals looking for joint funding of students will hopefully be developed.

Minority Awards are also highlighted in the COP by the success of **Mr. Michael Branham** with his McKnight Fellowship and RW Johnson PRI Grant, as well as **Ms. Tranecia Clarke** receiving her American Heart Association predoctoral fellowship (please see above: **Graduate Student Funding and Awards**).

Research Activities in the College of Pharmacy for FY 98/99

Grant and Contract Efforts and Funding:

Pharmaceutical Research continues to be a major effort within the College of Pharmacy at the University of Florida. The College experienced a moderate increase (11.4%) in NIH funding from FY 97/98. According to the American Association of Colleges of Pharmacy (AACP) annual listing of Colleges of Pharmacy and their placement with other Schools of Pharmacy engaged in active Pharmaceutical Research, the University of Florida increased from 15th place in 1997 to 13th place in 1998 (**Table 8**). The NIH support/FTE PhD also rose to 11th place or \$106,136/FTE. These placements are based solely on Fiscal year NIH funding (October to September of a given year).

TABLE 8: AACP Statistics for NIH Funding					
NIH Fiscal Year	NIH Support	Rank	FTE Ph.D.s	NIH Support/ FTE- Ph.D.	Rank
1997	\$2,819,731	15	31	\$90,955	14
1998	\$3,184,088	13	30	\$106.136	11

Our faculty members continue to be productive and are making efforts to obtain more extramural support for their individual research efforts. During the FY 98/99 the ORGS processed a total of 124 extramural grant or contract applications from the five Departments and our Administrative Office (**Table 9**) for a total of \$59,531,160 in **new** grant dollars. Although the total number of grant submissions did not change from FY 97/98, there was a modest (4.2%) increase in total dollars requested from FY 97/98 (see **Table 10**). The majority of new proposals within the COP are proposals in which the Principal Investigators (PI) are faculty within the COP (**Tables 9 and 10**).

Table 11 shows total extramural research dollars brought into the College over the last five academic years (from June to July of a given year). In FY 98/99 our research funding dollars totaled \$4,818,328 which is an 11.5% increase over FY 97/98. Interestingly, this increase in extramural funding was associated with a 13.9% decrease in the total number of projects funded from the previous year (101 for FY 97/98 versus 82 for FY 98/99).

Departmental comparisons show that Medicinal Chemistry continues to have the majority of research dollars within the COP (44.7%) and continues to show an outstanding increase (29.1%) in funding over FY 97/98. An excellent increase in extramural support over the previous year was observed in Pharmacodynamics (19.7%) with a modest rise of 5.5% noted in Pharmaceuticals. Pharmacy Practice and Pharmacy Health Care Departments each showed a reduction extramural funding from FY 97/98 with a 13.3% and 70.2% decrease respectively.

TOTAL EXTRAMURAL FUNDING to the COP is illustrated in **Table 12**. Total extramural support includes not only **RESEARCH** funds (also found in **Table 11**) but also those **ADMINISTRATIVE** funds which include professional service contract fees to support the clinical enterprises at Tacachale, the Veteran's Administration Hospital, University Medical Center in Jacksonville and the Poison Information Center. In FY 98/99 **ADMINISTRATIVE** funds showed a 15.9% decrease from the previous academic year. This decrease in **ADMINISTRATIVE** funding is the main reason why the college showed only a 1.1% increase in FY 98/99 from FY 97/98 when **Total Extramural Funding** is considered (**Tables 12 and 13**). Nevertheless, FY 98/99 **Total Extramural Funding** of \$7,042,676 was still the highest in the history of the COP.

Outlined below in **Table 13** is a breakdown of the COP extramural support by Sponsor type and number of awards for the last two fiscal years. The COP's main source of extramural support for FY 98/99 continues to be from federal dollars. Federal dollars are earmarked almost entirely for research purposes and showed an 8.7% rise in FY 98/99. State dollars which go to support our clinical enterprise was down by 13.8% over FY 97/98. Extramural research support from Corporations and Companies showed a 16.5% increase in FY 98/99 over the previous year while foundation monies was reduced by 13.9% over the same time period. A more complete

breakdown of Sponsor categories, numbers of awards and total dollars including indirect costs can be seen in **Tables 14-18**.

In **Appendix B**: a complete listing of all extramural support by Department and Faculty member can be found.

TABLE 9: Proposal Processing Summary - FY 98/99			
Dept.	Inside the College	Outside the College	Total
College Total			
# proposals	107	17	124
Total Amount	\$49,033,431	\$10,497,729	\$59,531,160
Administration			
# proposals	3	0	3
Total Amount	\$1,014,619	\$0	\$1,014,619
Medicinal Chemistry			
# proposals	22	3	25
Total Amount	\$24,877,644	\$3,241,394	\$28,119,038
Pharmaceutics			
# proposals	26	2	28
Total Amount	\$3,215,348	\$1,908,616	\$5,123,964
Pharmacodynamics			
# proposals	19	8	27
Total Amount	\$9,571,148	\$3,595,715	\$13,166,863
Pharmacy Health Care			
# proposals	14	2	16
Total Amount	\$3,758,832	\$354,405	\$4,113,237
Pharmacy Practice			
# proposals	23	2	25
Total Amount	\$6,595,840	\$1,397,599	\$7,993,439

Inside the College = PI was a COP faculty member.

Outside the College = PI was outside the COP; COP personnel were co-investigators.

TABLE 10: Proposal Processing Comparison			
Dept.	Inside the College	Outside the College	Total
FY 97/98			
# proposals	98	26	124
Total Amount	\$18,069,574	\$39,070,524	\$57,140,098
FY 98/99			
# proposals	107	17	124
Total Amount	\$49,033,431	\$10,497,729	\$59,531,160

Inside the College = PI was a COP faculty member.

Outside the College = PI was outside the COP; COP personnel were co-investigators.

TABLE 11: Extramural Research Dollars - FY94/95 to FY 98/99							
Faculty	94/95	95/96	96/97	97/98	98/99	94/98	% of total
COLLEGE TOTAL	\$4,507,741	\$4,539,237	\$3,978,780	\$4,322,697	\$4,818,328	\$4,433,357	100.0%
IDC	\$944,757	\$918,790	\$750,774	\$870,172	\$1,063,509	\$909,600	100.0%
# grants	92	94	84	101	87	92	
%IDC	26.5%	25.4%	23.3%	25.2%	28.3%	25.7%	
Medicinal Chemistry	\$2,040,967	\$1,632,649	\$1,999,956	\$1,843,495	\$2,380,677	\$1,979,549	44.7%
IDC	\$456,584	\$353,362	\$388,870	\$348,502	\$496,679	\$408,799	44.9%
# grants	15	18	24	19	18	19	
%IDC	28.8%	27.6%	24.1%	23.3%	26.4%	26.1%	
Pharmaceutics	\$1,051,375	\$1,411,202	\$963,616	\$602,026	\$635,289	\$932,702	21.0%
IDC	\$225,972	\$329,182	\$150,612	\$147,102	\$130,329	\$196,639	21.6%
# grants	32	33	20	14	18	23	
%IDC	27.4%	30.4%	18.5%	32.3%	25.8%	26.9%	
Pharmacodynamics	\$956,625	\$781,916	\$604,835	\$979,510	\$1,172,597	\$899,097	20.3%
IDC	\$211,377	\$158,358	\$165,505	\$253,578	\$338,923	\$225,548	24.8%
# grants	18	11	14	17	16	15	
%IDC	28.4%	25.4%	37.7%	34.9%	40.7%	33.4%	
Pharmacy Health Care	\$200,399	\$346,640	\$77,820	\$261,094	\$77,917	\$192,774	4.3%
IDC	\$23,944	\$43,500	\$13,078	\$39,858	\$7,983	\$25,673	2.8%
# grants	10	9	6	10	6	8	
%IDC	13.6%	14.3%	20.2%	18.0%	11.4%	15.5%	
Pharmacy Practice	\$258,375	\$366,830	\$332,553	\$636,572	\$551,848	\$429,236	9.7%
IDC	\$26,880	\$34,388	\$32,709	\$81,132	\$89,595	\$52,941	5.8%
# grants	17	23	20	41	29	26	
%IDC	11.6%	10.3%	10.9%	14.6%	19.4%	13.4%	

IDC = Indirect Costs

TABLE 12: Total Extramural Support - FY 94/95 to FY 98/99

Dept.	94/95	95/96	96/97	97/98	98/99	Average 94/98
COLLEGE TOTAL	\$6,573,494	\$6,742,359	\$6,332,574	\$6,967,173	\$7,042,676	\$6,731,655
IDC	\$947,383	\$918,894	\$750,774	\$870,172	\$1,063,509	\$910,146
# grants	105	103	91	113	94	101
%IDC	16.8%	15.8%	13.5%	14.3%	17.8%	15.6%
RESEARCH	\$4,507,741	\$4,539,237	\$3,978,780	\$4,322,697	\$4,818,328	\$4,433,357
IDC	\$944,757	\$918,790	\$750,774	\$870,172	\$1,063,509	\$909,600
# grants	92	94	82	101	87	91
%IDC	26.5%	25.4%	23.3%	25.2%	25.2%	25.1%
ADMINISTRATION	\$2,065,753	\$2,203,122	\$2,353,794	\$2,644,476	\$2,224,348	\$2,298,299
IDC	\$2,626	\$104	\$0	\$0	\$0	\$546
# grants	13	9	9	12	7	10
%IDC	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%

IDC= Indirect Costs

TABLE 13: Comparison by Sponsor FY 97/98 and FY 98/99

Sponsor Category	FY 97/98		FY 98/99		% change
	# of awards	total dollars	# of awards	total dollars	total dollars
Federal Agencies	20	\$2,478,645	23	\$2,693,237	8.7%
Florida State Agencies	8	\$2,001,066	7	\$1,724,073	-13.8%
Corporations and Companies	54	\$1,472,889	44	\$1,715,718	16.5%
Foundations & Societies	29	\$974,409	19	\$839,245	-13.9%
Other	2	\$40,164	1	\$70,403	75.3%
Total	113	\$6,967,173	94	\$7,042,676	1.1%

Table 14: Federal Agencies Comparison - FY 97/98 and FY 98/99

Sponsor	FY 97/98			FY 98/99			% change
	Count	Total	IDC	Count	Total	IDC	Total
U S Dept Hlth & Hm Ser	19	\$2,324,318	\$577,491	21	\$2,656,537	\$711,966	14.3%
NIH	18	\$2,265,608	\$577,491	20	\$2,597,827	\$711,966	14.7%
Hlth Res & Serv Adm	1	\$58,710	\$0	1	\$58,710	\$0	0.0%
EPA				1	\$11,700	\$1,901	
US Dept Vet Aff	1	\$154,327	\$0				
NSF				1	\$25,000	\$0	
Total Federal Agencies	20	\$2,478,645	\$577,491	23	\$2,693,237	\$713,867	8.7%

IDC = indirect costs

Table 15: State Agencies Comparison - FY 97/98 and FY 98/99							
Sponsor	FY 97/98			FY 98/99			% change
	Count	Total	IDC	Count	Total	IDC	Total
Agcy For Health Care Admin	1	\$15,680	\$1,286				
Dept Of Children & Families	4	\$682,594	\$0	1	\$17,099	\$0	-97.5%
Dept Of Health	3	\$1,302,792	\$0	5	\$1,696,974	\$0	30.3%
State University System				1	\$10,000	\$0	
Total Florida State Agencies	8	\$2,001,066	\$1,286	7	\$1,724,073	\$0	-13.8%

IDC = indirect costs

Table 16: Corporations and Companies Comparison - FY 97/98 and FY 98/99							
Sponsor	FY 97/98			FY 98/99			% change
	Count	Total	IDC	Count	Total	IDC	Total
Academic Press				1	\$2,854	\$0	
Amgen Inc.				1	\$35,000	\$0	
Apollo Biopharmaceutics Inc.	2	\$21,750	\$6,750	3	\$191,633	\$54,250	781.1%
Asta Medica				1	\$17,988	\$1,635	
Astra Merck Inc	3	\$75,000	\$8,035				
Berlex Laboratories				1	\$5,000	\$0	
Bio-Pharm Clinical Services	2	\$38,231	\$7,646				
Burroughs Wellcome Fund				2	\$144,668	\$0	
Covance Inc	9	\$30,122	\$5,322	7	\$75,742	\$15,146	151.5%
Curagen Corp	1	\$2,000	\$0				
Dupont Company	1	\$1,875	\$170				
Emisphere Technologies	2	\$28,156	\$4,693				
Facilitators Of Appl Clin Trls	1	\$842	\$168	1	\$4,006	\$801	375.8%
Glaxo Wellcome Inc	6	\$114,000	\$11,800	2	\$7,390	\$1,478	-93.5%
Health Education Resources	1	\$2,750	\$550				
Helene Curtis Inc	2	\$31,516	\$6,893				
Janssen Pharmaceutical Inc.				1	\$3,000	\$0	
Knoll Pharmaceutical Company	1	\$42,000	\$8,400	1	\$10,500	\$2,100	-75.0%
Merck & Company Inc	6	\$212,854	\$36,519	6	\$79,179	\$15,835	-62.8%
Merck Research Foundation	1	\$7,000	\$0				
MI Laboratories Plc	3	\$73,578	\$14,714	1	\$48,944	\$9,788	-33.5%
Multiple Companies				1	\$2,500	\$0	
Novartis				1	\$1,000	\$0	
Pfizer				2	\$93,334	\$13,013	
Pharmos Corp	1	\$6,000	\$0				
Respiratory Research Institute	6	\$65,000	\$13,000	3	\$47,379	\$9,474	-27.1%
Searle & Company, G D	1	\$56,940	\$11,388	1	\$1,500	\$0	-97.4%
Sunpharm Corp	3	\$656,250	\$131,250	5	\$886,979	\$177,395	35.2%
Taisho Pharmaceutical Co. Ltd.				1	\$38,041	\$11,806	
Vista Biomed Inc	1	\$1,875	\$170				
Warner-Lambert Company	1	\$5,150	\$1,030	2	\$19,081	\$3,816	270.5%
Total Corporations & Companies	54	\$1,472,889	\$268,498	44	\$1,715,718	\$316,537	16.5%

Table 17: Foundations & Societies Comparison - FY 97/98 and FY 98/99

Sponsor	FY 97/98			FY 98/99			% change Total
	Count	Total	IDC	Count	Total	IDC	
Am Fdtn for Pharm Ed	1	\$6,000	\$0	4	\$23,000	\$0	
Am Heart Assoc - Fl	4	\$208,066	\$8,365	5	\$142,920	\$10,447	-31.3%
Am Pharmaceutical Assn	1	\$21,500	\$1,955	1	\$10,750	\$0	-50.0%
Am Soc Cons Pharm	1	\$72,335	\$5,495				
Natl Kidney Fdtn	1	\$17,296	\$0				
Pda Fdtn For Pharm Sci	1	\$15,000	\$0	1	\$15,000	\$0	0.0%
Shands Hospital	1	\$14,615	\$0				
U F Foundation	13	\$104,004	\$0	6	\$135,100	\$0	29.9%
U F Res Fdtn	2	\$10,830	\$0				
Univ Med Cntr Inc	4	\$504,763	\$0	2	\$512,475	\$0	1.5%
Total Fdtns & Soc	29	\$974,409	\$15,815	19	\$839,245	\$10,447	-13.9%

IDC = indirect costs

Table 18: Other Comparison - FY 97/98 and FY 98/99

Sponsor	FY 97/98			FY 98/99			% change Total
	Count	Total	IDC	Count	Total	IDC	
Multiple Sources	1	\$4,700	\$940				
Univ British Columbia	1	\$35,464	\$7,092				
Case West. Res. Univ.				1	\$70,403	\$21,681	
Total Other	2	\$40,164	\$8,032	1	\$70,403	\$21,681	75.3%

IDC = indirect costs

Licensing and Royalty Income FY 98/99:

In FY 98/99 the COP felt a 36% reduction in total licensing and royalty income over FY 97/98 (Table 19). Three principal investigators within the college of Pharmacy have been central in generating the licensing and Royalty over the last two years. These faculty members are: Dr. Raymond Bergeron, Dr. Nicholas Bodor and Dr. James Simpkins.

Table 19: Licensing and Royalty Income - FY 97/98 and FY 98/99

Faculty	FY 97/98			FY 98/99			% change Total
	Total	Source	License(L)/ Royalty(R)	Total	Source	License(L)/ Royalty(R)	
Nicholas Bodor	\$499,980	Janssen Biotech*	L and R*	\$100,000	Precision Pharm.	L	
Raymond Bergeron	\$10,000	SunPharm Corp.	R				
James Simpkins				\$225,000	Apollo Genetics	L	
Total	\$509,980			\$325,000			-36.3%

* Represents a license fee of \$250,000 and a Royalty fee of \$249,980

Undergraduate Student Research Activities:

As the understanding for the development of new pharmaceutical agents and streamlining the drug use process is an integral part of a pharmacy student's education, the College of Pharmacy offers a series of "**Problems In Pharmacy**" courses that exposes students to various aspects of the research process. Each department in the college offers a "**Problems In Pharmacy**" course that is designed to specifically target their individual research areas.

In addition to the "**Problems In Pharmacy**" courses, undergraduate students interested in research have selected faculty mentors and have submitted grant or fellowship applications to outside funding agencies to support their research efforts. We had **9** undergraduate professional students secure extramural stipend and research supply funds from **4** different sources this year.

For FY 98/99 undergraduate professional students in the UF College of Pharmacy received one of the seven **AACP-Merck Research Scholarships for Professional Degree Pharmacy Students** given nationally. This program is coordinated by the AACP through a grant from the Merck Company Foundation. Individual recipients receive a \$6,000 stipend and a \$1,000 supply allowance to conduct their research activities. The students are required to present their research findings at the annual AACP meeting in which the AACP picks up travel, registration and housing costs for each awardee. The AACP recipient for this year was: **Mr. Yuan Lian**. Yuan worked with Dr. Jeff Hughes, Assistant Professor of Pharmaceutics and Dr. Jim Simpkins, Duckworth Professor of Drug Discovery in Pharmacodynamics and Chair, Pharmaceutics, on his project entitled: "*Estratrienes and Liposome Membrane Stabilization.*"

Undergraduate professional students in the UF College of Pharmacy received one of the fifteen **American Foundation for Pharmaceutical Education (AFPE) Gateway Scholarships for Professional Degree Pharmacy Students**. This prestigious **NATIONAL** program is coordinated by the AFPE through grants from Novartis, Schein, Schering-Plough, SmithKline Beecham, Amgen, Bristol-Myers Squibb, Glaxo Wellcome, National Association of Chain Drug Stores, American Association of College of Pharmacy, and Pharmacia & UpJohn. Individual recipients receive a \$5,000 stipend and/or supply allowance to conduct their research activities with a faculty mentor. The recipient of the AFPE-Gateway Scholarship for FY 98/99 was **Ms. Joyce Villamar**. Joyce worked with Dr. Maureen Keller-Wood, Associate Professor of Pharmacodynamics on her project entitled: "*Corticosteroid receptors in Fetal Ovine Lung.*" However, because of an illness, Joyce had to terminate her award during the Spring semester.

Ms. Cynthia Howell received one of nine **1999 Merck/American Federation for Aging Research (AFAR) - Research Scholarship in Geriatric Pharmacology for Medical and Pharmacy Students** given nationally. The American Federation for Aging Research (AFAR) in collaboration with Merck provides summer stipend support of \$4,000 for medical and pharmacy students to conduct independent research related to an aspect of geriatric pharmacology. Cynthia worked with Dr. Gayle Brazeau, Associate Professor of Pharmaceutics and Assistant Dean for Curricular Affairs, and Dr. Jim Simpkins, Professor of Pharmacodynamics, on her project entitled: "*The Effect of Estrogen Deprivation on Heat Shock Protein-70 Expression in Rat Skeletal Muscle.*"

Six pharmacy students also received summer research support (3 month) in the form of a \$3,060 stipend, compliments of the College of Medicine and their NIH training grant: "**Short-term training - Students in Health Professional Schools**". This training grant is earmarked to facilitate the exposure of students in health professional schools to the research process. This year's recipients and mentors are:

STUDENT	MENTOR	DEPARTMENT
Ms. Heather Richardson	Dr. Julie Johnson	Pharmacy Practice
Ms. Judy Cole	Dr. Keller-Wood	Pharmacodynamics
Ms. Catherine Fiola	Dr. Jim Simpkins	Pharmacodynamics
Ms. Tammy Calloway	Dr. Jim Simpkins	Pharmacodynamics
Ms. Byrdena Dugan	Dr. William Millard	Pharmacodynamics
Mr. Tony Martin	Dr. Janet Karlix	Pharmacy Practice

Ms. Cynthia Howell, working with Dr. Gayle Brazeau, Associate Professor of Pharmaceutics and Assistant Dean for Curricular Affairs, received \$100 and a commemorative plaque for winning the undergraduate poster

category of the college's 12th Annual Research and Awards Recognition Day. Please see **ORGS Coordinated Events for the COP - FY 98/99**, **Annual Research Showcase and Awards Recognition Day**, for details.

US-THAI Consortium Activities FY 98/99

History of the US-Thai Consortium:

In 1993 the University of Florida College of Pharmacy and nine other US Pharmacy Schools and the American Association of Colleges of Pharmacy entered into an international agreement with all nine (at that time) Thailand Colleges of Pharmacy, designated the US-THAI Consortium Agreement.

The mission of this US-THAI agreement is to provide Thai pharmacists (faculty at the various Thai pharmacy schools), that are selected by a Royal Thai Government Panel, the opportunity for advanced professional (PharmD) or graduate (Ph.D.) study in programs in the selected US pharmacy schools. In return, the Royal Thai government will pay all stipend and tuition costs for these students for a period of five years and provide return favors for both professional students and faculty to visit Thailand and become involved in post-graduate pharmacy education abroad. Furthermore, the initial agreement was for the Thai government to support and the US colleges to educate 100 Thai faculty (i.e. approximately 10 students/US college) over the ensuing 10 years.

As part of the original charter, it was agreed that all parties would meet once a year to discuss the progress of the US-THAI consortium. These annual meetings would be held in either Thailand or the US on alternating years... with the first meeting being held in Bangkok, Thailand in 1994; at Purdue University in 1995, at Phuket, Thailand in 1996, in Baltimore, MD in 1997 and this year in Chiang Mai, Thailand in 1998.

Current List of THAI and US Schools of Pharmacy in the Consortium

THAI

1. Chulalongkorn University
2. Mahidol University
3. Khon Kaen University
4. Srinakharinwirot University
5. Prince of Songkla University
6. Silpakorn University
7. Ubon Ratchathani University
8. Chiang Mai University
9. Naresuan University
10. Thammasat University

US

1. University of Florida
2. Purdue University
3. Ohio State University
4. University of Wisconsin
5. University of Arizona
6. University of Minnesota
7. University of Illinois at Chicago
8. University of Maryland at Baltimore
9. University of North Carolina
10. Rutgers University

Summary of 98/99 US-THAI Consortium Meeting in Chiang Mai (from the meeting minutes):

The 5th Annual US-Thai Pharmacy Education Consortium Conference was hosted by the Faculty of Pharmacy, Chiang Mai University at the Siam Commercial Bank Training Center in Chiang Mai, from June 24-26, 1998. There were 10 representatives from the US Schools and Colleges of Pharmacy, and 39 from the Thai Faculties of Pharmacy and Pharmaceutical Sciences, the Ministry of University Affairs (MUA) and the Office of Civil Service Commission (CSC). Moreover, 21 faculty members from Chiang Mai University also attended the Conference.

Dean Sunibhon Pummangura of Chulalongkorn University gave a summary of the Pharmacy Faculty Development Project that has been funded by the Thai Government since 1992 and due to end in 2001. The total of 260 million Baht had been allocated to the project with eight Schools of Pharmacy included, those being Chulalongkorn, Chiang Mai, Mahidol, Prince of Songkla, Khon Kaen, Silpakorn, Naresuan and Ubon Ratchathani Universities. The majority of the money has been spent on scholarships for higher degrees overseas. So far 90 faculty members from the Thai Schools of Pharmacy have benefited from this program. Most of the scholarship recipients were pursuing their study in the US (Ph.D. and Pharm.D. mostly in the US Consortium Universities) and the UK (e.g. University of London, University of Wales-Cardiff, Robert Gordon University, etc.). Thai Scholars in the first group of trainees have completed their studies and have returned to Thailand.

In addition, 100 million Baht was allocated to upgrade the research facilities of the Schools of Pharmacy at Chulalongkorn, Mahidol and Chiang Mai Universities. These three Schools have been considered as the major local suppliers for the new faculty members through their graduate programs.

Fifty-four million Baht was allocated for the short-term training or study visits overseas. Forty-five faculty have been supported by the short-term training program. Besides the administrative visit, the areas of study visit and training have been clinical pharmacy, pharmaceutical biotechnology, pharmaceutical technology and social and administrative pharmacy.

About 10 million Baht was for subsidizing the visits of distinguished professors and experts from overseas. Mostly the US professors had been invited to Thailand to give lecture in the workshops, conferences and to assist in establishing graduate curricula, especially the joint-degree programs. So far, workshops and conferences have been organized in various areas, such as clinical pharmacy, pharmacoepidemiology and pharmacoconomics, pharmaceutical bio-technology, pharmacotherapeutics and clinical pharmacokinetics.

The main issue of the Conference was defined by the presentation of Dr. Pavich Tongroach, President of Maharakham University, on the topic "How can the US Consortium support Thai Education under the Economic Crisis?" The discussions on various topics of the Conference were therefore confined to this theme. The Thai delegates were encouraged both by the concern and sympathy of their US counterparts. In principle, the US delegates were willing to help and assist in whatever way they could.

The following summarizes the points discussed and the proposed solutions:

1. **Encourage early completion of Ph.D. students.** Most US universities agree with this proposal and will encourage US professors to consider each student individually.
2. **Teaching Assistantship (TA) offered to Thai students.** The TA system has been available in all US Universities. The following points should be noted:
 - 2.1 English proficiency is very critical for the TA position. In some universities, the Test of Spoken English (TSE) is required.
 - 2.2 The students must plan ahead and make application to meet the deadline of each university, normally by October to December for the following Fall semester.
 - 2.3 The opportunity to be granted a TA is increased for those who are already enrolled at the universities and have proved their potential.
 - 2.4 Payment to the Thai government supported students should be notified to both the US coordinators and Thai sending universities so that the financial resources can be maximized. The students should be partner to this discussion. It is hoped that this information will avoid double payment so that additional funds can be made available to support other students.
3. **Research Assistantship (RA) offered to Thai students.** In most US universities, either professors or their home departments determine research assistantships available to Thai students. Postdoctoral fellows are often preferred to the graduate students due to their higher potential and the lower cost as there is no tuition fee for post-doctoral fellows. Nevertheless, it is known that several Thai students have been awarded RA. The best alternative is for those who have completed their Ph.D. and are either in the US or back in Thailand to apply for the RA.
4. **Tuition fee waiver or concession for Thai students.** This is not possible in general due to the policy of each individual university. There are other indirect ways, such as encouraging the students to finish their didactic courses and proceed to the dissertation phase faster. This will reduce the credits to be taken, and consequently lead to lower fees. In some universities, *e.g.* University of Maryland, there are no fees in the summer session. At Purdue University, fee remission for the Fall 1998 is offered to all Thai pharmacy students.
5. **Scholarships.** In general, very few scholarships are available. However, some universities may establish funds for such a purpose. A private foundation has been established offering funding for B.S. and M.S. (not PhD) students at all American universities. In some universities, an International office may assist in finding various funding sources. Students should explore this opportunity to further themselves.
6. **Joint/Collaborative-Degree Programs.** Under the present circumstances, these programs may be the most appropriate means for staff development. The US delegates are willing to support and assist with this

proposal. It is noted that for the joint-degree program both universities have to agree to the criteria governing the award of the degree. In a collaborative program, undergraduate or postgraduate, American Universities can collaborate in supporting a course which leads to the award of the degree by a Thai University. Two examples of collaborative degree programs are the PhD program in Pharmacy Administration at Mahidol University in collaboration with the University of Minnesota, the University of North Carolina at Chapel Hill and the University of Arizona, and second, the MS in Clinical Pharmacy of four regional Universities in Thailand in collaboration with American Universities. As recommended by the US delegates, the collaborative degree programs should be established and the appropriate model should be planned. One example could be that students take their didactic courses for the first 2 years in Thailand and then conduct research in the US.

7. **Joint-research programs.** The US delegates agree and are willing to support this proposal. The problem is how to implement these programs effectively. Research projects should be identified to match the expertise of the corresponding professors. It is suggested that information on research areas should be shared between Thai and US partners. For the US side such information can be accessed via the university's web-pages. Thai Universities should develop updated web-pages giving more relevant details. In addition, private sectors, such as industry could provide support for relevant research.
8. **PharmD Program in Thailand.**
 - 8.1 The US delegates confirmed their commitment to contribute to the workshops in clinical pharmacy, training preceptors in the US and training preceptors in Thailand.
 - 8.2 Sending Thai students for PharmD in the US may not be possible just now. A collaborative PharmD program, Thai degree conferred, is appropriate for the present situation.
 - 8.3 Sending Thai PharmD students to experience clinical rotations in the US could be entertained, for example at UIC. US students may consider undertaking some rotations in Thailand as well. However, it was noted that sending students or staff for short-term rotations in the US, e.g. 1-2 months does not work effectively due to language problems.
9. **Residency Training program.** The Pharmacy Council of Thailand will launch the residency and fellowship programs leading to the Diploma certifying specialization in various areas of pharmacy. Definitely, this initiative is challenging and needs a contribution from the US side. Several means of collaboration should be explored as follows: Consultation on critical issues, e.g. structures of the program, accreditation of preceptors, quality assurance are all urgently needed in the initial phase. Assistance in training Thai preceptors, evaluation of the residents after completion of all requirements prior to granting the diploma, and serving as the supervisor during the fellowship period as well as serving as the examination committee are all requested. It is suggested by the US side that the groups of Thai preceptors are matched with US preceptors. Mentoring and sharing of patient cases, questions, etc could occur via conference software over the internet. Synchronous chats could be scheduled if necessary. Contribution from the US side for the MS Clinical Pharmacy workshops will be continued, and it is hoped that these guest speakers will also organize the preceptor training when the workshops are taking place in order to maximize the resource utilization.
10. **The collaborations in various activities need to be discussed in detail.** It has been suggested that the universities concerned should assign a steering committee to work out the details. Dean Bill Riffiee (University of Florida) expressed his interest to collaborate with the Thai counterparts regarding the long-distance non-traditional PharmD program in Thailand. Dean Rosalie Sagraves (UIC) noted that other US Consortium schools might want to be involved in long-distance non-traditional PharmD education in Thailand. Asia Foundation has been suggested to be an agency by which text-books or journals can be sent from the US to Thailand.
11. **The 6th US-Thai Pharmacy Education Consortium Meeting.** It has been agreed that, the next US-Thai Consortium Meeting will be in April, 2000 hosted by the University of Florida.

Thai Students in the College of Pharmacy:

Listed below (**Table 20**) is the current total number of Thai students who have received Royal Thai scholarships from their government to study abroad for either their Ph.D. or PharmD degree. This year we did not accept any Royal Thai scholars into either program due to the economic crisis in Southeast Asia. The Thai government felt that it was more important to assure the training of the students already training abroad, than to put any of their limited resources into support for new Scholars for FY 98/99. However, we are pleased to announce that Ms. Intira Coowanitwong (BS from Rangsit University and MS from Chulalongkorn University) entered the Pharmaceutics Graduate Program this past fall and is actively involved in completing her graduate coursework. Intira will be working with Dr. Gunther Hochhaus.

TABLE 20: Thai Students in the College FY 98/99		
NAME	THAI PHARMACY COLLEGE	DATE ENTERED
Pharmacy Health Care Ph.D Program:		
1. Ms. Ratanaporn Awiphan (Ju)*	Chiang Mai	May, 1995
2. Mr. Summana Moolasarn (Sam)	Ubon Ratchathani	January, 1996
Pharmaceutics Ph.D. Program		
3. Ms. Jintana Napaporn (Ginny)	Ubon Ratchathani	August, 1997
4. Ms. Patravadee Chancham (Oh)	Khon Kaen	August, 1997
5. Ms. Intira Coowanitwong**	Rangsit	August, 1998
International PharmD Program:		
6. Mr. Surakit Nathisuwan (Kit)	Mahidol	August, 1997

* the names in parenthesis indicate the abbreviated name given to each student.

** not a Royal Thai Scholar

We are pleased to announce that Dr. Surakit Nathisuwan (Kit) graduated with highest honors from our International Working Professional PharmD Program in May, 1999. Kit is UF COP's second PharmD graduate under the US/THAI arrangement. Kit has accepted a fully-funded, one year residency in Pharmacy Practice at Florida Hospital in Orlando. Everyone at UF had nothing but high praises for Kit throughout his time here at UF. We all wish him the best in his career and hope to have him back sometime soon.

UF Faculty visiting Thailand FY 98/99:

As part of the College of Pharmacy's commitment to send training preceptors to conduct workshops in clinical pharmacy in Thailand, Dr. Bernadette (Bernie) Belgado, Clinical Assistant Professor and Project Manager of the Drug Information Service traveled to Thailand in May 1999 to participate in two drug information workshops. Dr. Belgado attended the Clinical Drug Information System Conference at Silpakorn University, Nakhon Pathom, Thailand, on May 17th to 22nd where she presented the following topics:

- Evaluation of Drug Information Resources
- Literature Evaluation Workshop
- Establishing a Drug Information Center

The following week Bernie attended the Literature Evaluation Conference at the Sofitel Raja Orchid in Khon Kaen, Thailand sponsored by the Faculty of Pharmacy of Khon Kaen University (May 22nd through May 29th). There she presented a variety of Drug Information topics that included the following:

- The Globalization of Drug Information
- Drug Information References
- Accessing, Retrieving, and Evaluating Drug Information Resources on the Internet.
- Clinical Trial Design
- Assessment of Pharmaceutical Advertising Media.
- Literature evaluation: Evidence-based medicine
- Evaluation of Electronic Drug Information Resources

Bernie noted that the Faculty members of both universities were extremely hospitable and made sure that their stay (she traveled with her mother) was comfortable. When Dr. Belgado had free time, they were able to show them many different areas of their country. She was able to spend some time in Chiang Mai, Ban Chian, Ayutthaya, and Bangkok. Bernie learned a great deal about the Thai Culture and their practice of pharmacy.

ORGS Coordinated Events for the COP - FY 98/99

Two major COP functions are coordinated by the ORGS (Post-baccalaureate Reception and the Annual Research Showcase and Awards Recognition Day). These events are described below.

Post-baccalaureate Reception:

The annual post-baccalaureate reception is held annually at the beginning of the Fall semester as an event to introduce all **new** faculty, graduate students, postdoctoral fellows and research associates to the COP community. This year the event was held on Tuesday, September 15, 1998 in the Rion Ballroom at the Reitz Student Union from 6:00 PM to 9:00 PM. One hundred and six people from the COP attended including guests. At the event 4 new faculty members, 13 graduate students, 7 new postdoctoral fellows and research associates and 2 visiting scientists were introduced to the audience.

Annual Research Showcase and Awards Recognition Day:

The 12th Annual Research Showcase and Awards Recognition Day was the kickoff for our college's 75th Anniversary Gala Celebration and took place on Thursday, April 8, 1999 at the University of Florida, College of Pharmacy. A program booklet is included in **Appendix C** that outlines the day's events, competitors for each of the divisions and the judges for each of the events.

This year's Showcase and Awards Recognition Day could not have taken place without the financial backing of three sponsors. **Barr Laboratories, Inc.** again was the major sponsor of the Annual Research Showcase and Awards Recognition Day with a \$6,000 donation. It was through Dr. Robert Bell, Vice President of New Drug Development, and Ph.D. Class of 1988 that we received this generous donation from Barr Labs. **IVAX Corporation** sponsored the poster competition with a \$1,000 donation. Our contact with IVAX was through Dr. Francisco Alvarez, Analytical Research and Development Director, Baker-Norton Pharmaceuticals, and Ph.D. Class of 1981. **Dr. Robert A. and Phyllis Levitt** of Boca Raton and Gainesville, FL sponsored the *Levitt division* of the Oral Competition with a \$1,000 gift. Dr. Levitt and his wife have sponsored this portion of the competition for the last five years.

The Showcase and Awards Recognition Day is full of excitement and discovery, as graduate students, undergraduate students and postdoctoral fellows from throughout the College compete (via posters and platform presentations) for the distinction of being the "*best*" in one of the following categories:

Oral Competition

- Senior graduate division
- Junior graduate division
- Levitt division

Poster Competition

- Graduate Student category
- Post-doctoral Fellow category
- Undergraduate Student category.

The finalists for the oral competition divisions submit competitive abstracts that are reviewed and selected by the Graduate Studies Committee in the college. The *senior graduate division* of the Oral Competition applies to those graduate students who are in the final stages of the graduate education. The *junior graduate category* pertains only to graduate students who are in the first two years of their graduate program. The *Levitt division* was established in 1993 to recognize those graduate students who are doing graduate work related to neuropharmacology.

The finalists in each of the oral divisions give a 10-15 minute presentation followed by a 3-5 minute question/answer period. Based on the students abstract and their presentation a winner in each division is selected by a panel of judges. Winners receive a \$500 cash prize and commemorative plaque. Each of the finalists receives a \$200 check and a commemorative plaque.

For the poster competition this year we had 17 posters from graduate students, post-doctoral fellows and undergraduate students on display in the atrium of the Academic Research Building (ARB). The posters were manned in the morning between 9:30 and 11:30 AM in which individual judging took place.

The winner for the graduate student category of the poster division received a \$200 check and a commemorative plaque. The winners of the post-doctoral fellow and undergraduate student categories each received a \$100 check and a commemorative plaque for their efforts.

The poster judges were: **Dr. Daniel A. Brazeau** (Assistant Scientist ICBR); **Dr. Brian Y. Cooper** (Professor of Oral & Maxillo-facial Surgery, College of Dentistry); **Dr. Julie A. Johnson** (Associate Professor of Pharmacy Practice College of Pharmacy); and **Ms. Catherine Stokes** (Project lead SLA's/Web Management CSX/Sea-Land Professional Services Jacksonville, FL).

The winners for this year's poster competition were:

Graduate Student - winner

Alok S. Pachori Pharmacodynamics \$200 cash award
Title: "*Viral Vector-mediated Delivery of Angiotensin II Receptor Antisense to Attenuate Hypertension in Renin-Transgenic Rats.*"

Post-Doctoral Fellow Division - winner

Preeti S. Ajamani Pharmaceutics \$100 cash award
Title: "*Transfection Efficiency of a Disulfide-containing Cationic Lipid in Primary and Immortalized Cells Pre-treated with Amyloid β Peptide ($A\beta$).*"

Pharmacy Student Division - winner (tie)

Cynthia Howell Pharmaceutics \$100 cash award
Title: "*The Effect of Estrogen Deprivation on HSP-70 Expression in Rat Skeletal Muscle*".

Pharmacy Student Division - winner (tie)

Sean Kearns Pharmacodynamics \$100 cash award
Title: "*Taurine Protects PC12 Cells from Hypochlorous Acid Toxicity*".

Other ORGS Activities for FY 98/99

In addition to the two major functions coordinated by the ORGS (Post-baccalaureate Reception and the Annual Research Showcase and Awards Recognition Day) other activities were performed or attended by ORGS personnel as outlined below.

Committee Assignments:

The Associate Dean for Research and Graduate Studies served on various College, Health Science Center and University Committees throughout the academic year.

College Committees:

- **Executive Council.** This committee met each month throughout the year to discuss relevant issues related to the daily operations of the college and long-range planning. Chaired by the Dean of the College, this committee is integral to assisting the Dean in making decisions on major initiatives in the college.
- **Graduate Studies Committee.** Please see **Graduate Education and Program Activities for FY 98/99; Graduate Studies Committee (GSC) Activities** for details and activities of this committee throughout the year.
- **New Building Committee.** This committee was established to make recommendations to the University Architects and Health Center Planning Office on both the design and utilization of space in the new Pharmacy building. This committee met four times in FY 98/99 and was chaired by Mike Brodeur, Assistant Dean for Administrative Affairs of the college.
- **Curriculum Coordinating Team.** This committee was established as a result of the AACP Institute for Pedagogical and Curricular Change conference in Leesburg, Virginia. The specific charge of this committee is to help facilitate the implementation of the new curriculum in the COP. This committee met on several occasions to review and make recommendations on goals, abilities based outcomes and assessment strategies for each of the courses in the first year of the new curriculum.

Health Science Center (HSC) Committees:

- **HSC Research Dean's Group.** This committee met the first Wednesday of each month throughout the year to discuss relevant issues related to both basic and clinical research within the HSC and University.

University Committees:

- **Council of Graduate Deans.** This committee met twice during the academic year and is entrusted with making recommendations on major initiatives related to graduate education. This committee is chaired by Dr. Jack. Ohanian, Interim Vice President for Research and Dean of the Graduate School. Policy issues considered during FY 98/99 were graduate student recruitment, and electronic application process for graduate admissions.
- **University of Florida Community Campaign Steering Committee.** This committee, chaired by Dr. Bill Riffie, Dean of the College of Pharmacy, is involved in coordinating activities associated with University's component of the annual United Way Campaign. Both the Executive Associate Dean, Program Assistant for the Office of Research and Graduate Studies and Executive Secretary served on this committee. Within the Health Center and COP the Executive Associate Dean, Program Assistant

and Executive Secretary also served as the faculty and staff coordinators for the COP's effort for this campaign. The duties included selecting departmental assistants as well as making sure information was distributed properly to all COP personnel.

Conferences Attended Related to ORGS activity:

- **COP National Advisory Board.** The Executive Associate Dean attended both the Fall 98 (September) and Spring 99 (April) National Advisory Board Meeting.
- **75th Anniversary Gala and Reception.** The Executive Associate Dean attended the 75th Anniversary celebration continuing education program and dinner on April 9th, 1999.
- **AACP Interim meeting.** Academic Management Symposium (AMS): The Art of Political Advocacy. The Executive Associate Dean attended the 1999 AACP-AMS to gain further insight on how to approach legislative personnel and lobby effectively on behalf of the profession of pharmacy. These meetings were held in Washington DC from February 25th to March 2nd, 1999.
- **American Pharmaceutical Association (APhA) Annual Meeting and Exposition.** The Executive Associate Dean attended the 1999 APhA annual meeting in San Antonio, Texas from March 5th to March 9th, 1999.

Other Activities Coordinated or Attended:

- **AAPS Visiting Scientist Program.** The Visiting Scientist Program sponsored by the American Association of Pharmaceutical Scientists, is designed to expose both undergraduate and graduate students to research and research careers in the pharmaceutical sciences and pharmaceutical industry. It is an avenue by which Colleges of Pharmacy can link with the pharmaceutical manufacturers and exchange ideas, concerns and future directions of pharmaceutical research.

Appendices

Appendix A: Applicant letter from the ORGS.

Appendix B: Complete listing of extramural support for FY 98/99 by department and faculty member.

Appendix C: Program flyer for the 12th Annual Research Showcase and Awards Recognition Day.