

1999/2000 Annual Report for



College of Pharmacy

University of Florida

Office of Research and Graduate Studies FY 99/00 Staff:

William J. Millard, Ph.D
Executive Associate Dean
Professor, Department of Pharmacodynamics

Marlene K. Hughes
Program Assistant

Lisa M. Muench
Senior Secretary

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Student Assistant

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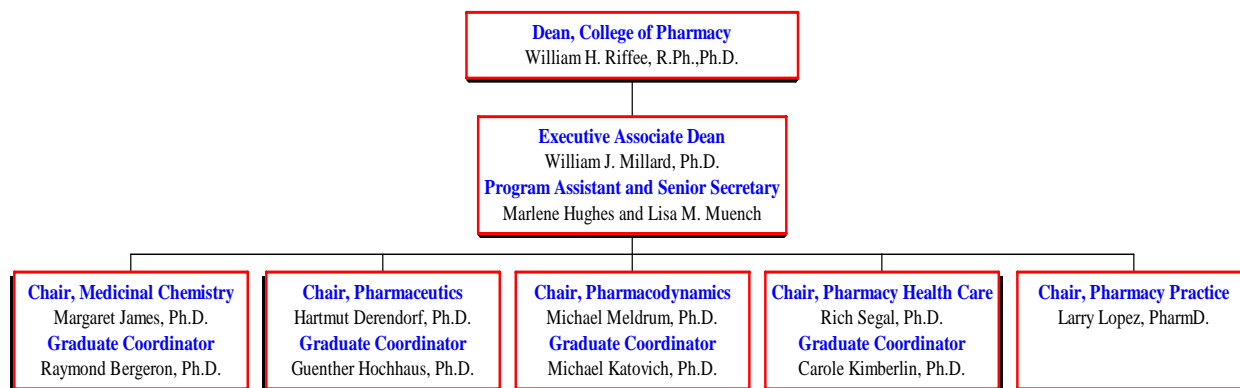
Introduction

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, is both Professor in Pharmacodynamics and 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 monitoring of the quality of the graduate programs and seeking 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. The Graduate Studies Committee and COP Graduate Student Organization are to assist the Executive Associate Dean in the responsibility of governing graduate education in the COP. (see below: **Graduate Education and Program Activities for FY 99/00**; **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 to ensure that all grants are submitted and logged through UF in the proper manner. This includes that proper contractual arrangements and documentation be completed and that each contract or grant contain 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 99/00**).

The Executive Associate Dean is assisted in the ORGS by two support staff; a Program Assistant and a Senior Secretary (see **Figure 1**). During FY 99/00 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 includes 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.

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 to assist in communicating any new funding opportunities to the faculty. Ms. Muench also helps review grants for fiscal accuracy and signature approval prior to submission to external funding agencies. She also assists in logging and tracking research grants and other aspects of the research component of the college.

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 99/00.

Graduate Education and Program Activities for FY 99/00

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 prepare and defend a thesis as part of their 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 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 **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 99/00 were:

Non-voting Chair:	Dr. William Millard	Office of Research and Graduate Studies
Voting members:	Dr. Raymond Bergeron	Medicinal Chemistry
	Dr. Michael Katovich	Pharmacodynamics
	Dr. Carole Kimberlin	Pharmacy Health Care
	Dr. Laszlo Prokai	Pharmaceutics
	Mr. Sriram Krishnaswami	President of COP graduate students
Ex-Officio Member:	Dr. William Riffie	Dean

The GSC met nine times throughout FY 99/00. Issues that were deliberated by the GSC in FY 99/00 included:

- Selection of the FY 2000/2001 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.
- Establishment of TA Assignments for each of the semesters for FY 99/00.
- Establishment of goals and objectives for each graduate program within the college.
- Selection of finalists for the 13th 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 99/00 **Mr. Sriram Krishnaswami** (Pharmaceutics) served as president of the organization, while **Mr. Matthew Dellavecchia** (Medicinal Chemistry) served as secretary for a third 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 promote 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**. Sixty-eight graduate students were engaged in studies leading to either the M.S. or Ph.D. degree this year. During FY 99/00 the COP graduated 11 Ph.D. students and one student with a M.S. degree (see below: **Graduate Student Graduation Activities FY 99/00**). The COP accepted 13 new students into various COP Graduate Programs (**Tables 1 and 4**).

Table 2 outlines the overall demographics of the graduate student population within the COP for FY 99/00. Interestingly, during FY 99/00 both numbers and the ratios of males to females and US/Foreign students were identical. The number of male students and US students was 36 compared to 32 female and foreign students for a ratio of 53%/47%.

US minority students comprised 10.3% (7 of 68) of the COP graduate student population. Our minority graduate student percentage has shown a continual rise over the last four academic years. The minority graduate student percentage was 8.5% (6 of 71) in FY 98/99; 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**. This year the Department of Pharmaceutics had the highest number of graduate students with 22. Medicinal Chemistry and Pharmacodynamics had 16 graduate students, while Pharmacy Health Care Administration had 14 students pursuing graduate degrees.

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 99/00 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.	James
	Rachel Cornett**	Aug-95	Dec-99	Ph.D.	James
	Matthew Dellavecchia	Jan-97	May-01	Ph.D.	Bergeron
	Vaishali Dixit*	Jan-00	Dec-04	Ph.D.	James
	Jerry (Ryan) Holder*	Aug-99	May-03	Ph.D.	Haskell-Luevano
	John Juchum**	Jan-94	Dec-99	Ph.D.	Rao/Schulman
	Tom Kukar*	Aug-99	May-03	Ph.D.	Wu
	Zhen Lou	Aug-97	Aug-01	Ph.D.	James
	John Nguyen	Aug 98	Aug 02	Ph.D.	Bergeron
	William Roberts	Aug-96	Aug-00	Ph.D.	Sloan
	Azeela Schentrup	Aug 98	Aug 02	Ph.D.	Haskell-Luevano
	Shawn Toffolo**	Jan-96	Dec-99	M.S.	Tebbett
	Lucas Utley	Aug-96	Aug-00	Ph.D.	Tebbett
	Scott Wasdo	Aug 98	Aug 02	Ph.D.	Perrin
	Mei Guo Xin	Jan-95	Dec-00	Ph.D.	Bergeron
Rong Yang	Jan-99	Dec-03	Ph.D.	Schulman	
Pharmaceutics/ Center for Drug Discovery	Vikram Arya	Aug 98	Aug 02	Ph.D.	Hochhaus
	Annamaria Buchwald	Aug-96	May-01	Ph.D.	Bodor
	Pattravadee Chancham	Aug-97	Aug-01	Ph.D.	Hughes
	Intira Coowanitwong	Aug 98	Aug 02	Ph.D.	Hochhaus
	Amparo de la Pena	Aug-96	Aug-00	Ph.D.	Derendorf
	Hristina Dimova	Aug-97	Aug-01	Ph.D.	Hochhaus
	Yan Gong*	Aug-99	May-03	Ph.D.	Hughes
	Brett Houk**	Aug-96	May-00	Ph.D.	Hochhaus/Hughes
	Fenglei Huang**	Jan-95	Dec-99	Ph.D.	Bodor
	Ariya Khunvichai*	Aug-99	May-03	Ph.D.	Derendorf
	Sriram Krishnaswami	Jan-97	Dec-00	Ph.D.	Derendorf
	Ping Liu*	Aug-99	May-03	Ph.D.	Derendorf
	Charles Randall Mills**	Aug-97	Dec-99	Ph.D.	Brazeau
	Jintana Napaporn	Aug-97	Aug-01	Ph.D.	Brazeau
	Vien Nguyen*	Aug-99	May-03	Ph.D.	Prokai
	Adam Persky	Aug 98	Aug 02	Ph.D.	Brazeau
	Jeffrey Stark	May-94	May-01	Ph.D.	Hochhaus
James Talton**	Aug-95	Aug-99	Ph.D.	Hochhaus	
Fuxing Tang	Jan-97	Aug-00	Ph.D.	Hughes	
Wu Xiao	Jan-99	Dec-03	Ph.D.	Hughes	

* new students entering a COP graduate program during FY 99/00

** students who graduated with a M.S. or Ph.D. during FY 99/00

Table 1 (con't): FY 99/00 Graduate Students in the COP

Department/Center	Name	Date Entered	Exp. Grad. Date	Degree Sought	Mentor
Pharmaceutics/ Center for Drug Discovery (con't)	Yaning Wang*	Aug-99	May-03	Ph.D.	Hochhaus
	Qun Wei	Aug-94	May-01	Ph.D.	Bodor
Pharmacodynamics/Cntr Neurobiology of Aging	Neal Alcalay	Aug 98	Aug 02	Ph.D.	Katovich
	Caren Beck*	Aug-99	May-03	Ph.D.	Katovich
	Tranecia Clarke	Jun-97	Aug-01	Ph.D.	Dawson
	Amanda Crews*	Aug-99	May-03	Ph.D.	Katovich
	Kelly Gridley**	Aug-93	Dec-99	Ph.D.	Keller-Wood
	Ming Hu**	Aug-95	Aug-99	Ph.D.	Peris
	Feng Li	Aug 98	Aug 02	Ph.D.	Keller-Wood
	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.	Simpkins
	Anthony Smith	Aug 98	Aug 02	Ph.D.	Peris
	Jian Wang	Aug-97	Aug-01	Ph.D.	Simpkins
	Xiaofei Wang	Aug 98	Aug 02	Ph.D.	Simpkins
	Yi Wen*	Aug-99	May-03	Ph.D.	Simpkins
	Zuan Yan*	Aug-99	May-03	Ph.D.	Katovich
Pharmacy Health Care/ Dubow Center for Pharmaceutical Care	Ratanaporn Awiphan	Aug-95	Aug-00	Ph.D.	Lipowski
	Yajaira Bastardo	Aug-96	May-01	Ph.D.	Kimberlin
	Christine Bono	Aug-94	Aug-02	Ph.D.	Kimberlin/Ried
	Barbara Brice**	Aug-94	Aug-99	Ph.D.	Lipowski
	Richard Faris	Aug-96	Aug-00	Ph.D.	Hepler
	William Garst	Jan-95	Aug-00	Ph.D.	Ried
	Sam Moolasarn	Jan-96	Dec-00	Ph.D.	Ried
	Matt Morrow	Aug-85	Aug-02	Ph.D.	Ried/Segal
	Brian Sauer	Jan-99	Dec-03	Ph.D.	Kimberlin
	Lourdes Thornhill	Aug-95	May-01	Ph.D.	Kimberlin
	Feng Wang	Aug-96	May-01	Ph.D.	Segal
	Debbie Wilson*	Aug-99	May-03	Ph.D.	Kimberlin
	Avin Yaldo	Aug-97	Aug-01	Ph.D.	Segal
Henry Young	Aug-97	Aug-01	Ph.D.	Lipowski	

* new students entering a COP graduate program during FY 99/00

** students who graduated with a M.S. or Ph.D. during FY 99/00

TABLE 2: Graduate Student Demographics - FY 99/00												
GENDER		CITIZENSHIP				American MINORITY						
		United States		Foreign		Black		Hispanic		Asian		
	#	%	#	%	#	%	%	%	%	%		
TOTAL	68		36	52.9%	32	47.1%	2	2.9%	2	2.9%	3	4.4%
Male	36	52.9%	25	69.4%	11	34.4%	1		0		3	
Female	32	47.1%	11	30.6%	21	65.6%	1		2		0	

TABLE 3: Graduate Students, Postdoctoral Fellows and Visiting Scholars - FY 99/00

Department/Center	Graduate Students	Postdoctoral Fellows	Visiting Scholars
Medicinal Chemistry	16	7	1
Pharmaceutics/CDD	22	8	1
Pharmacodynamics/CNA	16	3	0
Pharmacy Health Care/DFCPC	14	1	0
Pharmacy Practice	No Graduate Program	8	0
COLLEGE TOTAL	68	27	2

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	TSE
		Verbal	Quant	Total		
COLLEGE TOTAL (68)	3.39	518	683	1200	603	49
FY 99/00 Class (13)	3.50	532	655	1186	631	51

numbers in parenthesis denote student population

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 923 applications were sent out to prospective students by the college departments (Table 6). This is a reduction of over 240 from the previous year. The reason for this reduction in total applications sent out is not known at this time, but it likely relates to increased activity of our on-line submission process. Applicants do not need to request applications directly now, but can download them from our College's website.

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). For FY 99/00, the ORGS sent out 370 letters of this type over the entire year. This is 53 more from last year's 317 letters.

Graduate student application activity for FY 99/00 from each of the departments is illustrated in **Table 6**. Of the 197 completed applications received by the departments only 30 or 15% of the applicants were accepted. What is somewhat disappointing is that only 43% of those students accepted matriculated into one of the four graduate programs in the college.

Table 5: FY 99/00 Postdoctoral Fellows and Visiting Scholars

Department/Center	Name	Title	Preceptor
Medicinal Chemistry	James McManis	PD	Bergeron
	Guangfei Huang	PD	Bergeron
	Ralf Mueller	PD	Bergeron
	William Weimer	PD	Bergeron
	Bernard Gadagbui	PD	James
	Chung-Li (Jason) Li	PD	James
	Peter Van den Hurk	PD	James
	Narumi Sugihara	VS	James
Pharmaceutics/ Center for Drug Discovery	Attila Juhasz	PD	Bodor
	Peter Buchwald	PD	Bodor
	Nelamangala Nagaraja	PD	Derendorf
	Cioli Rojas	VS	Derendorf
	James Talton	PD	Hochhaus
	Preeti Ajamni	PD	Hughes
	Anupma Khanna	PD	Hughes
	Alevtina Zharikova	PD	Prokai
Pharmacodynamics/Center for Neurobiology of Aging	Phyllis Reaves	PD	Katovich
	Barbel Eppler	PD	Peris
	Shao Hau Yang	PD	Simpkins/Day
Pharmacy Health Care/Dubow Center for Pharmaceutical Care	Almut Winterstein	PD	Hepler
Pharmacy Practice	Richard Bartfield	PD	Belgado
	Christopher Terpening	PD	Gums
	Mei Zhi (Judy) Liang	PD	Hendeles/Asmus
	Brian Puckett	PD	Johnson
	Larisa Humma	PD	Johnson
	Joe Walker	PD	Karlix
	Jennifer Tan	PD	Levin
	Joy Evans	PD	Taylor

Table 6: Departmental Graduate Student Recruitment Activity - FY 99/00						
Department	# requests sent out	# completed applications	# applications accepted	% accepted	# entered	% entered
Medicinal Chemistry	153	36	12	33%	5	42%
Pharmaceutics	412	113	7	6%	4	57%
Pharmacodynamics	176	18	6	33%	0	0%
Pharmacy Health Care	182	30	5	17%	4	80%
COLLEGE TOTAL	923	197	30	15%	13	43%

Graduate Student Graduation Activities FY 99/00:

Over the FY 99/00 academic year the COP had **12** students finish their graduate program; 11 with a Ph.D. degree and one with a M.S. degree. Each of the departmental graduate specialties was represented in the FY 99/00 graduating class. The graduates according to degree for FY 99/00 were:

Ph.D. in Pharmaceutical Science degrees conferred for FY 99/00:

August 1999 (Summer Commencement):

- Name:** **Dr. Kelly E. Gridley**
Dissertation Title: *Identification of a Novel Synergistic Interaction between 17 β -Estradiol and Glutathione in Neuroprotection.*
Faculty Mentor: Dr. Maureen Keller-Wood, Associate Professor
Department: Pharmacodynamics
Previous Degrees: B.S. in Health Science, University of Florida

Dr. Gridley is currently working as a post-doctoral fellow with Dr. Charles Wood in the Department of Physiology at the University of Florida's College of Medicine.

- Name:** **Dr. James Talton**
Dissertation Title: *Pulmonary Targeting of Inhaled Glucocorticoid Dry Powders.*
Faculty Mentor: Dr. Gunther Hochhaus, Associate Professor
Department: Pharmaceutics
Previous Degrees: B.S. in Material Science and Engineering, University of Florida

Dr. Talton has assumed a post-doctoral position in Dr. Hochhaus' lab in the Department of Pharmaceutics and is the CEO of a newly formed company called Nanosphere, Inc.

December 1999 (Fall Commencement):

3. **Name:** **Dr. John Juchum**
Dissertation Title: Isolation, Characterization and Chemistry of Taxanes from Various Taxus Species.
Faculty Mentor: Dr. Koppaka A Rao, Professor/ Dr. Stephen Schulman, Professor
Department: Medicinal Chemistry
Previous Degrees: B.S. in Materials Science and Engineering, University of Florida

Dr. Juchum has assumed a senior chemist/scientist position at Natural Pharmaceuticals, Inc, in Cambridge, MA.

4. **Name:** **Dr. C. Randal Mills**
Dissertation Title: Integrating Biotechnology and Pharmaceuticals: Development of the Biocompatible Allograft as an Orthopedic Drug Delivery System.
Faculty Mentor: Dr. Gayle Brazeau, Associate Professor
Department: Pharmaceutics
Previous Degrees: B.S. in Microbiology and Cell Science, University of Florida

Dr. Mills has assumed a position as technical affairs manager at Regeneration Technologies in Alachua, Florida.

5. **Name:** **Dr. Ming Hu**
Dissertation Title: The Effects of Chronic Ethanol Exposure on Presynaptic Cholinergic Receptor Modulation of ³H-GABA Release in Rat Hippocampus.
Faculty Mentor: Dr. Joanna Peris, Associate Professor
Department: Pharmacodynamics
Previous Degrees: B.S. in Pharmacy, Shandong Medical University; M.S. in Pharmacology, Peking Union Medical College

Dr. Hu is currently seeking employment as a post-doctoral fellow or a research scientist in industry. He has moved to Ann Arbor, MI to be with his family.

6. **Name:** **Dr. Fenglei Huang**
Dissertation Title: Design, Pharmacokinetic and Pharmacodynamic Evaluation of a New Class of Soft Anticholinergics.
Faculty Mentor: Dr. Nicholas Bodor, Graduate Research Professor and Director
Department: Pharmaceutics/Center for Drug Discovery
Previous Degrees: B.S. in Microbiology, Sichuan University; M.S. in Environmental Virology, Wuhan Institute of Virology

Dr. Huang has assumed a postdoctoral position at the University of California at San Francisco College of Pharmacy, Department of Biopharmaceutics working under the direction of Dr. David Verotta.

7. **Name:** **Dr. Rachel Cornett**
Dissertation Title: Metabolism of Dichloroacetate in the Sprague-Dawley Rat and Humans, Involvement of the Tyrosine Catabolic Pathway.
Faculty Mentor: Dr. Joanna Peris, Professor
Department: Medicinal Chemistry
Previous Degrees: B.S. in Pharmacy, University of Florida

Dr. Cornett has assumed a forensic toxicologist position in the University of Florida's Diagnostic Referral Laboratories, working with Dr. Bruce Goldberger in the forensic toxicology lab.

May 2000 (Spring Commencement):

8. **Name:** **Dr. Barbara Brice**
Dissertation Title: Understanding Customer Expectations of Community Pharmacy Services.
Faculty Mentor: Dr. Earlene Lipowski, Associate Professor
Department: Pharmacy Health Care Administration
Previous Degrees: B.A. in Marketing, University of South Florida; Masters in Health Administration, University of North Florida.

Dr. Brice will be an independent consultant on health care policy and qualitative research.

9. **Name:** **Dr. Brett Houk**
Dissertation Title: Pharmacokinetics of Plasmid DNA.
Faculty Mentor: Dr. Jeffrey A. Hughes, Associate Professor
Department: Pharmaceutics
Previous Degrees: B.S. in Pharmacy and Allied Health Professions; B.S in Business Administration and Economics, Ohio State University.

Dr. Houk has accepted a Research Scientist position in the Department of Pharmacokinetics and Drug Metabolism at Amgen, Inc, Thousand Oaks, CA.

10. **Name:** **Dr. Bruce Jung**
Dissertation Title: The Effects of Repeated Cocaine on Striatal GABAergic Neurotransmission in Sprague-Dawley Rats.
Faculty Mentor: Dr. Joanna Peris, Associate Professor
Department: Pharmacodynamics
Previous Degrees: B.S. in Biology, University of California at Los Angeles

Dr. Jung has assumed a postdoctoral position at the Medical University of South Carolina, Institute of Psychiatry and Center for Drug and Alcohol Program. He is working under the supervision of Dr. Jacqueline McGinty.

11. **Name:** **Dr. Robin Martin**
Dissertation Title: Leptin Resistance Reduces Growth Hormone Secretion and Contributes to the Pathogenesis of Obesity.
Faculty Mentor: Dr. William Millard, Professor
Department: Pharmacodynamics
Previous Degrees: B.S. in Biology, Newberry College, SC.

Dr. Martin has assumed a scientist I position at MDS Tricon, Tampa, FL.

M.S. in Pharmaceutical Science degrees conferred for FY 99/00:

December 1999 (Fall Commencement):

1. **Name:** **Mr. Shawn Toffolo**
Dissertation Title: Induction of Heat Shock Proteins in the Cardiomyocyte Cell Line H9C2 by Cocaine.
Faculty Mentor: Dr. Ian Tebbett, Professor
Department: Medicinal Chemistry
Previous Degrees: B.S. in Biochemistry from North Carolina State University.

Mr. Toffolo has assumed a laboratory and computer information position in the Analytical Toxicology Core Lab/Racing Lab at the University of Florida Veterinary School, Gainesville, FL.

Graduate Student Funding and Awards:

The COP shared the major load of the funding of graduate student stipends for FY 99/00. Thirty-four graduate student stipends 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**). Two students received the prestigious **Alumni Scholarships** (see below) and 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 third 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 second 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 completed their second year of the two year fellowships from the American Heart Association-Florida Affiliate to help support their predoctoral studies. Each student received \$15,000 stipend for FY 99/00. Robin Martin completed her dissertation entitled: “*Leptin Resistance Reduces GH Secretion and Contributes to the Pathogenesis of Obesity*”. Tranecia Clarke continues to work under the direction of Dr. Ralph Dawson on the topic: “*Role of PKC and TGF-Beta in the Cardiovascular Protective Mechanisms of Taurine.*”

Three graduate students received continued support from training grants centered within the Health Science Center at the University of Florida this year. **Mr. Anthony Smith**, 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. Amanda Crews** was supported by the Neurobiology of Aging Training Grant #T32AG00196. Currently, Amanda is making her final decision on the mentor she will do her dissertation work with.

In addition to the awards listed above, the COP and University have various awards that provide supplements to recruit outstanding graduate students into one of our graduate programs (**Alumni Scholarships, Provost Scholarships, Grinter** and **Florida Legislative Awards**).

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.

Alumni Scholarships:

Beginning Fall Semester 1999 the University of Florida offered one hundred Alumni Fellowships with the express interest of increasing graduate enrollment and attracting high quality students to each graduate program at the University. The College of Pharmacy received two such Alumni Awards for FY 99/00. Alumni Graduate Fellows represent the highest graduate student award available at the University and are funded at nationally competitive levels (\$20,000/year) plus all tuition remuneration. To ensure that Alumni Fellows receive every opportunity to succeed, the Alumni Graduate Fellowships provide a full four years of support for qualifying students. The COP *Alumni Scholarship* Awardees for FY 99/00 were:

Mr. Yaning Wang	Pharmacodynamics
Mr. Thomas Kukar	Medicinal Chemistry

Provost Scholarships:

Provost Scholarships were initiated in 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 consisted 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. Brian Sauer	Pharmacy Health Care Administration

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 the 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	%	99/00 class
Total number offered	53		6
Total number accepted	39	74%	5
Total number graduated	18	34%	
Total Number still enrolled: past & present	16	30%	
Number of active awardees - FY 99/00	9	56%	5
GPA	3.53		3.61
GRE (Verbal + Quant)	1259		1214
TOEFL	611		630

In FY 99/00 the COP offered 6 *Grinter* Fellowships, of which 5 accepted (83%). This year the GPA and TOEFL scores were higher than in the past (**Table 7**), however, GRE scores were lower than the overall group mean. The recipients of *Grinter* awards in 99/00 are listed below:

Mr. Jerry (Ryan) Holder	Medicinal Chemistry
Ms. Ping Liu	Pharmaceutics
Mr. Yan Gong	Pharmaceutics
Ms. Caren Beck	Pharmacodynamics
Ms. Amanda Crews	Pharmacodynamics

Florida Legislative Awards:

The *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 99/00. 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 99/00 academic year two minority students have held *Florida Legislative* Awards. They are:

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

College of Pharmacy 13th 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 daylong event and the award winners are listed in: **ORGS Coordinated Events for the COP - FY 99/00; Annual Research Showcase and Awards Recognition Day**, section of this report.

UF Graduate Student Forum Awards:

At the 1999/2000 Graduate Student Forum of the University of Florida held on Friday April 14th, 2000 the College of Pharmacy had six graduate students compete for oral and poster competition prizes. The COP did very well with one first-place oral competition award and one second-place oral competition award.

In Paper Session V - Cellular and Developmental Science: **Ms. Amparo de la Peña**, in the Department of Pharmaceutics received first place honors for her presentation entitled: "*Microdialysis as a Tool to Measure Unbound Tissue Concentrations of Antibiotics in Humans*".

In Paper Session VI – Biological and Chemical Interactions: **Mr. Sriram Krishnaswami**, also from the Department of Pharmaceutics took home second place honors for his paper: "*PK/PD Modeling of Inhaled Fluticasone Propionate*".

UF Sigma Xi Graduate Research Award:

At the 1999/2000 UF Sigma Xi Banquet on March 10, 2000 **Mr. Fuxing Tang**, received the Graduate Research Award. Fuxing is a graduate student in Pharmaceutics working under the mentorship of Dr. Jeff Hughes.

Proctor and Gamble Professional Opportunity Award:

At the 1999/2000 American Physiological Society (APS) meeting **Mr. Alok Pachori**, graduate student in Pharmacodynamics was one of 17 students nationally to receive a Proctor and Gamble Professional Opportunity Award for their presentations at the meeting. Alok is working with Dr. Michael Katovich investigating the use of gene therapy to treat hypertension. Alok received a \$500 cash prize, certificate, complimentary registration to the meeting and a year’s membership in the APS.

International Student Academic Awards:

At the International Student Academic Awards Ceremony held April 19, 2000 in the Rion Ballroom at the Reitz Union, **eleven** 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. Ratanaporn (Ju) Awiphan	Pharmacy Health Care Administration
Ms. Zhen Lou	Medicinal Chemistry
Ms. Amparo de la Peña	Pharmaceutics
Mr. Yan Gong	Pharmaceutics
Ms. Ariya Khunvichai	Pharmaceutics
Mr. Yaning Wang	Pharmaceutics
Ms. Ping Liu	Pharmaceutics
Mr. Wu Xiao	Pharmaceutics
Ms. Feng Li	Pharmacodynamics
Ms. Jian Wang	Pharmacodynamics
Ms. Xiaofei Wang	Pharmacodynamics

Graduate Minority Activities - FY 99/00

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.

Minority Awards are also highlighted in the COP by **Ms. Tranecia Clarke** receiving her second year of her American Heart Association predoctoral fellowship (please see above: **Graduate Student Funding and Awards**). Also Ms. Clarke and Mr. Henry Young were in their third year of the **Florida legislative Award** (please see above.).

Research Activities in the College of Pharmacy for FY 99/00

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 98/99. 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 13th place in 1998 to 10th place in 1999 (**Table 8**). The NIH support/FTE PhD was maintained at 11th place or \$117,813/FTE for FY 99/00. 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
1998	\$3,184,088	13	30	\$106,136	11
1999	\$3,770,008	10	32	\$117,813	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 99/00 the ORGS processed a total of 101 extramural grant or contract applications from the five Departments and our Administrative Office (**Table 9**) for a total of \$33,772,318 in **new** grant dollars. However, there was a significant reduction in the total number of proposals submitted (18.5% reduction) and total dollars requested (43.3% reduction) in FY 99/00 when compared to FY 98/99 (see **Table 10**). The majority (85%) of new proposals within the COP are proposals in which the Principal Investigator (PI) is a faculty member 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 July to June of a given fiscal year). In FY 99/00 our research funding dollars totaled \$5,296,021. This is a 12.5% increase over FY 98/99. This increase in extramural funding was associated with a 9% increase in the total number of projects funded from the previous year (87 for FY 98/99 versus 94 for FY 99/00).

Departmental comparisons show that Medicinal Chemistry continues to have the majority of research dollars within the COP (51% for 99/00 and 46.2% for FY 95/99) and continued to show an excellent increase (13.2%) in funding over FY 98/99. In FY 99/00 Pharmacy Practice showed the highest improvement in both total dollars brought into the college and number of grants awarded over FY 98/99. Pharmacy Practice experienced a 75% increase in total funding (\$517,057 in FY 98/99 versus \$905,665 in FY 99/00) and a 35.7% increase in the number of awards. Extramural support over the previous year remained unchanged in both Pharmaceuticals and Pharmacy Health Care Administration. The Department of Pharmacodynamics showed a 12.6% reduction in extramural funding from FY 98/99.

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 that include professional service contract fees to support the clinical enterprises at Tacachale, the Veteran's Administration Hospital, and University Medical Center in Jacksonville. In FY 99/00 **ADMINISTRATIVE** funds showed a 66% decrease from the previous academic year. The major cause for this dramatic reduction clearly resides with the move of Mr. Peter Pevonka to the College of Medicine. Mr. Pevonka was the PI on the Poison Control Center in Jacksonville and these funds moved with him to Medicine. This resulted in a \$1.3 million dollar reduction in **ADMINISTRATIVE** funding and is the main reason why the college showed a 12.5% decrease in FY 99/00 from FY 98/99 when **Total Extramural Funding** is considered (**Tables 12 and 13**).

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 99/00 continues to be

from federal dollars. Federal dollars are earmarked almost entirely for research purposes and showed a 21.3% rise in FY 99/00. State dollars that, in the past included funding for the Poison Control Center (see above), were down by 95% over FY 98/99. Extramural research support from Corporations and Companies showed a 25.1% increase in FY 99/00 over the previous year while foundation monies were reduced by 16.8% 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 99/00			
Dept.	Inside the College	Outside the College	Total
College Total			
# proposals	86	15	101
Total Amount	\$19,184,763	\$14,587,555	\$33,772,318
Administration			
# proposals	2	0	2
Total Amount	\$975,355	\$0	\$975,355
Medicinal Chemistry			
# proposals	13	1	14
Total Amount	\$6,485,642	\$2,081,906	\$8,567,548
Pharmaceutics			
# proposals	21	3	24
Total Amount	\$6,016,811	\$441,695	\$6,458,506
Pharmacodynamics			
# proposals	9	9	18
Total Amount	\$3,280,295	\$9,906,654	\$13,186,949
Pharmacy Health Care			
# proposals	14	0	14
Total Amount	\$877,307	\$0	\$877,307
Pharmacy Practice			
# proposals	27	2	29
Total Amount	\$1,549,353	\$2,157,300	\$3,706,653

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			
Fiscal year	Inside the College	Outside the College	Total
FY 98/99			
# proposals	107	17	124
Total Amount	\$49,033,431	\$10,497,729	\$59,531,160
FY 99/00			
# proposals	86	15	101
Total Amount	\$19,184,763	\$14,587,555	\$33,772,318

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 – FY 95/96 to FY 99/00							
Dept/FY	95/96	96/97	97/98	98/99	99/00	95/99	% of total
COLLEGE TOTAL	\$4,539,237	\$3,978,780	\$4,322,697	\$4,706,606	\$5,296,021	\$4,568,668	100.0%
IDC	\$918,790	\$750,774	\$870,172	\$1,050,770	\$1,135,846	\$945,270	100.0%
# grants	94	83	101	87	95	92	
%IDC	25.4%	23.3%	25.2%	28.7%	27.3%	26.0%	
Medicinal Chemistry	\$1,632,649	\$1,999,956	\$1,843,495	\$2,380,677	\$2,696,079	\$2,110,571	46.2%
IDC	\$353,362	\$388,870	\$348,502	\$496,679	\$566,412	\$430,765	45.6%
# grants	18	24	19	18	12	18	
%IDC	27.6%	24.1%	23.3%	26.4%	26.6%	25.6%	
Pharmaceutics	\$1,411,202	\$963,616	\$602,026	\$635,289	\$654,111	\$853,249	18.7%
IDC	\$329,182	\$150,612	\$147,102	\$130,329	\$152,509	\$181,947	19.2%
# grants	33	20	14	18	27	22	
%IDC	30.4%	18.5%	32.3%	25.8%	30.4%	27.5%	
Pharmacodynamics	\$781,916	\$604,835	\$979,510	\$1,101,666	\$962,578	\$886,101	19.4%
IDC	\$158,358	\$165,505	\$253,578	\$336,898	\$259,084	\$234,685	24.8%
# grants	11	14	17	17	12	14	
%IDC	25.4%	37.7%	34.9%	44.1%	36.8%	35.8%	
Pharmacy Health Care	\$346,640	\$77,820	\$261,094	\$71,917	\$77,588	\$167,012	3.7%
IDC	\$43,500	\$13,078	\$39,858	\$7,983	\$1,625	\$21,209	2.2%
# grants	9	5	10	6	6	7	
%IDC	14.3%	20.2%	18.0%	12.5%	2.1%	13.4%	
Pharmacy Practice	\$366,830	\$332,553	\$636,572	\$517,057	\$905,665	\$551,735	12.1%
IDC	\$34,388	\$32,709	\$81,132	\$78,881	\$156,216	\$76,665	8.1%
# grants	23	20	41	28	38	30	
%IDC	10.3%	10.9%	14.6%	18.0%	20.8%	14.9%	

IDC = Indirect Costs

TABLE 12: Total Extramural Support - FY 95/96 to FY 99/00

Category	95/96	96/97	97/98	98/99	99/00	Average 95/99
COLLEGE TOTAL	\$6,742,359	\$6,332,574	\$6,967,173	\$6,911,607	\$6,047,027	\$6,600,148
IDC	\$918,894	\$750,774	\$870,172	\$1,050,770	\$1,135,846	\$945,291
# grants	103	91	113	94	102	101
%IDC	15.8%	13.5%	14.3%	17.9%	23.1%	16.9%
RESEARCH	\$4,539,237	\$3,978,780	\$4,322,697	\$4,706,606	\$5,296,021	\$4,568,668
IDC	\$918,790	\$750,774	\$870,172	\$1,050,770	\$1,135,846	\$945,270
# grants	94	82	101	87	95	92
%IDC	25.4%	23.3%	25.2%	28.7%	27.3%	26.0%
ADMINISTRATION	\$2,203,112	\$2,353,794	\$2,644,476	\$2,205,001	\$751,006	\$2,031,478
IDC	\$104	\$0	\$0	\$0	\$0	\$21
# grants	9	9	12	7	7	9
%IDC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

IDC= Indirect Costs

TABLE 13: Comparison by Sponsor FY 98/99 and FY 99/00

Sponsor Category	FY 98/99		FY 99/00		% change total dollars
	# of awards	total dollars	# of awards	total dollars	
Federal Agencies	23	\$2,651,921	18	\$3,216,201	21.3%
Florida State Agencies	7	\$1,704,726	4	\$86,679	-94.9%
Corporations and Companies	44	\$1,638,796	53	\$2,049,505	25.1%
Foundations & Societies	18	\$833,245	25	\$693,292	-16.8%
Other	2	\$82,919	2	\$1,350	-98.4%
Total	94	\$6,911,607	102	\$6,047,027	-12.5%

Table 14: Federal Agencies Comparison - FY 98/99 and FY 99/00							
Sponsor	FY 98/99			FY 99/00			% change
	Count	Total	IDC	Count	Total	IDC	Total
NIH	20	\$2,556,511	\$699,227	14	\$2,816,035	\$742,433	10.2%
Hlth. Res. & Serv. Adm.	1	\$58,710	\$0				
EPA	1	\$11,700	\$1,901				
NSF	1	\$25,000	\$0	1	\$25,000	\$0	0.0%
US Dept. Vet. Aff.				2	\$227,273	\$0	
US Army				1	\$147,893	\$42,882	
Total Federal Agencies	23	\$2,651,921	\$701,128	18	\$3,216,201	\$785,315	21.3%

IDC = indirect costs

Table 15: State Agencies Comparison - FY 98/99 and FY 99/00							
Sponsor	FY 98/99			FY 99/00			% change
	Count	Total	IDC	Count	Total	IDC	Total
Dept of Children & Families	1	\$17,099	\$0				
Dept of Health	5	\$1,677,627	\$0	4	\$86,679	\$0	-94.8%
State University System	1	\$10,000	\$0				
Total Florida State Agencies	7	\$1,704,726	\$0	4	\$86,679	\$0	-94.9%

IDC = indirect costs

Table 16: Corporations and Companies Comparison - FY 98/99 and FY 99/00							
Sponsor	FY 98/99			FY 99/00			% change
	Count	Total	IDC	Count	Total	IDC	Total
Academic Press	1	\$2,854	\$0				
Am Home Prdts Corp				1	\$337	\$0	
Amgen, Inc.	1	\$35,000	\$0				
Apollo Biopharmaceutics, Inc.	3	\$114,711	\$54,250				
Asta Medica	1	\$17,988	\$1,635				
AstraZeneca				3	\$23,000	\$4,100	
Berlex Laboratories	1	\$5,000	\$0				
Biogen Research Corp.				1	\$14,000	\$2,800	
Burroughs Wellcome Fund	2	\$144,668	\$0	1	\$115,500	\$0	-20.2%
Covance, Inc	7	\$75,742	\$15,146				
Cyclodextrin tech Development				1	\$1,000	\$0	
Dey Laboratories				1	\$75,000	\$15,000	
Eon Laboratories				8	\$54,644	\$5,713	
Facilitators Of Appl Clin Trls	1	\$4,006	\$801				
Fujisawa Healthcare, Inc.				2	\$11,000	\$1,800	
Geltex Pharmaceuticals Corp				1	\$28,864	\$0	
Glaxo Wellcome, Inc	2	\$7,390	\$1,478	3	\$31,200	\$5,040	322.2%
Hoffman-La Roche, Inc.				3	\$60,250	\$0	
Janssen Pharmaceutical, Inc.	1	\$3,000	\$0				
Knoll Pharmaceutical Company	1	\$10,500	\$2,100				
Merck & Company, Inc	6	\$79,179	\$15,835	7	\$89,430	\$17,319	12.9%
MI Laboratories Plc	1	\$48,944	\$9,788				
Multiple Companies	1	\$2,500	\$0				
Novartis - United States	1	\$1,000	\$0	7	\$327,683	\$64,236	32668.3%
Pfizer	2	\$93,334	\$13,013	1	\$45,000	\$0	-51.8%
Pharmacia & UpJohn Co.				1	\$8,125	\$1,625	
Proctor & Gamble Co.				1	\$250	\$0	
Respiratory Research Institute	3	\$47,379	\$9,474				
Sankyo Company, Ltd.				1	\$18,750	\$3,750	
Schwarz Pharma AG				1	\$11,500	\$0	
Searle & Company, G D	1	\$1,500	\$0	0			
Sunpharm Corp	5	\$886,979	\$177,395	4	\$1,093,750	\$218,750	23.3%
Taisho Pharmaceutical Co. Ltd.	1	\$38,041	\$11,806	0			
Warner-Lambert Company	2	\$19,081	\$3,816	3	\$31,202	\$8,800	63.5%
Wyle Laboratories				2	\$9,000	\$817	
Total Corporations & Companies	44	\$1,638,796	\$316,537	53	\$2,049,485	\$349,750	25.1%

IDC = indirect costs

Table 17: Foundations & Societies Comparison - FY 98/99 and FY 99/00							
Sponsor	FY 98/99			FY 99/00			% change Total
	Count	Total	IDC	Count	Total	IDC	
Am. Assoc. Pharm. Sci.				1	\$10,000	\$0	
Am. Coll. Clin. Pharm.				1	\$22,500	\$0	
Am Fdtn for Pharm Ed	3	\$17,000	\$0	4	\$44,500	\$0	161.8%
Am Heart Assoc - Fl	5	\$142,920	\$10,447	4	\$48,000	\$0	-66.4%
Am Pharmaceutical Assn	1	\$10,750	\$977				
Am. Soc. Law, Med. & Ethics				1	\$10,000	\$0	
PDA Fdtn for Pharm Sci	1	\$15,000	\$0				
Metropolitan Hospital				1	\$1,600	\$145	
Natl. Pharmaceutical Council				1	\$3,425	\$0	
U F Foundation	6	\$135,100	\$0	10	\$46,463	\$636	-65.6%
Univ Med Cntr Inc	2	\$512,475	\$0	2	\$506,804	\$0	-1.1%
Total Fdtns & Soc	18	\$833,245	\$11,424	25	\$693,292	\$781	-16.8%

IDC = indirect costs

Table 18: Other Comparison - FY 98/99 and FY 99/00							
Sponsor	FY 98/99			FY 99/00			% change Total
	Count	Total	IDC	Count	Total	IDC	
Case West. Res. Univ.	1	\$70,403	\$21,681				
Miscellaneous Donors	1	\$12,516	\$0	1	\$600	\$0	-95.2%
Multiple Sources				1	\$750	\$0	
Total Other	2	\$82,919	\$21,681	2	\$1,350	\$0	-98.4%

IDC = indirect costs

Licensing and Royalty Income FY 99/00:

In FY 99/00 the COP felt a 42% increase in total licensing and royalty income over FY 98/99 (**Table 19**). Three principal investigators within the College of Pharmacy have been central in generating the licensing income 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 98/99 and FY 99/00							
Faculty	FY 98/99			FY 99/00			% change Total
	Total	Source	License (L)/ Royalty (R)	Total	Source	License (L)/ Royalty (R)	
Raymond Bergeron				\$411,518	GelTex Pharm., Inc.	L	
Nicholas Bodor	\$100,000	Precision Pharm.	L	\$50,000	Supergen, Inc.	L	
James Simpkins	\$225,000	Apollo Biopharm.	L				
Total	\$325,000			\$461,518			42.0%

Undergraduate Student Research Activities:

As the understanding of 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 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 7 undergraduate professional students secure extramural stipend and research supply funds from 4 different sources this year.

Undergraduate professional students in the UF College of Pharmacy received one of the sixteen **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 99/00 was **Ms. Catherine Fiola**. Catherine worked with Dr. Jim Simpkins, Duckworth Professor of Drug Discovery in Pharmacodynamics and Professor of Pharmacodynamics on her project entitled: "**CREB and Estrogen Neuroprotection**."

Six pharmacy students also received summer research support (3 month) in the form of a \$3,137 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. Teresa Richter	Dr. Julie Johnson	Pharmacy Practice
Ms. Alison Massaro	Dr. Janet Karlix	Pharmacy Practice
Mr. Mikael Jones	Dr. Thomas Munyer	Pharmacy Practice
Ms. Dianne Shakinovsky	Dr. Jeff Hughes	Pharmaceutics
Ms. Shelley Alexander	Dr. Jeff Hughes	Pharmaceutics
Ms. Jennifer Darcy	Dr. Ian Phillips	Physiology (COM)

Mr. Tony Martin and Ms. Mina Salafranca, working independently but with advice and encouragement from the Department of Pharmacy Health Care Administration and funding from a Merck Award through the American Pharmaceutical Association (APhA), received \$100 and a commemorative plaque each for winning the undergraduate poster category of the college's 13th Annual Research and Awards Recognition Day. Please see **ORGS Coordinated Events for the COP - FY 99/00, Annual Research Showcase and Awards Recognition Day**, for details. The title of their winning work was: "*An Interdisciplinary Healthcare Competition: Teams of Healthcare Students Working Together to Care for a Patient and to Learn About Other Disciplines*".

US-THAI Consortium Activities FY 99/00

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. The first meeting was held in Bangkok, Thailand in 1994; at Purdue University in 1995, at Phuket, Thailand in 1996, in Baltimore, MD in 1997; in Chiang Mai, Thailand in 1998; and Orlando, Florida in 2000.

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 the 99/00 US-THAI Consortium Meeting in Orlando, FL (from the meeting minutes):

The 6th Annual US-Thai Pharmacy Education Consortium Conference was hosted by the College of Pharmacy, at the University of Florida. The meeting was held at the Embassy Suites Resort Lake Buena Vista in Orlando, Florida. There were 10 representatives from the US Schools and Colleges of Pharmacy, and 20 representatives from the Thai Faculties of Pharmacy and Pharmaceutical Sciences. The conference was also attended by the following guest speakers: Dr. Donald Letendre, Director of Accreditation Services, American Society of Health System Pharmacists, 2 faculty members (Dr. Bernie Belgado and Dr. Sven Normann) from the University of Florida and Dr. Robert Hatch, Associate Professor of Family Medicine, University of Florida, College of Medicine. Furthermore, six Thai students who are currently working towards their PhD and/or PharmD degrees at the University of Florida also attended the Conference.

The meeting was initiated with a welcoming reception in the Buena Vista Room of the Embassy Suites Hotel from 6:00 to 8:00pm on Tuesday, April 4th, 2000. The formal component of the meeting began the following morning Wednesday, April 5th, 2000 at 8:45am with opening remarks and introductions by Dr. William Millard. This was followed by an address by Dean Sunibhond Pummangura of Chulalongkorn University on the Outcome of Phase I of the Consortium Arrangement (**summary is in the business meeting minutes**).

Dr. Donald Letendre, Director of Accreditation Services, American Society of Health System Pharmacists

(ASHP) outlined for the audience the necessary steps to develop and accredit residency programs in the United States. Dr. Letendre noted that there are currently 500 residency training sites in the United States (300 pharmacy practice sites and 200 advanced or specialty training sites). Although the number of training sites is increasing at a rate of 10% per year, this is still insufficient to accommodate all students interested in residency training. Around 8000 students graduate from pharmacy schools/year, and of those graduating approximately 1000 students are looking for some residency training. Thus, residency training is very competitive in the US. Related to developing residency sites in Thailand, Dr. Letendre noted our Thai colleagues should start with a small number of sites that provide an excellent environment for post graduate clinical and specialty training and then expand slowly to meet the need of their country. Dr. Letendre closed his address by noting to the Thai colleagues that students and faculty that receive residency training should remain predominantly in the clinical setting and not migrate to an administrative position within the institution. This would be wasting a very valuable commodity in Thailand, a pharmacist with advanced clinical training.

Dr. Sumon Sakolchai, Dean, Faculty of Pharmaceutical Sciences, Khon Kaen University presented the **‘Direction of Pharmacy Education in Thailand in the Next Decade’**. He highlighted critical factors and changes during the past five years and in the next decades that altogether influence the systems, personnel, and the direction of Pharmacy education in Thailand presently and in the future.

- **The economic crisis and the National Education Act.** The government budget has been restricted since 1998 and many new policies have been implemented after the economic crisis in mid-1997 that severely affects the development of Pharmacy education in Thailand. The National Education Act of 1999 and the accreditation system for universities at the national and international levels will also change the administration system, structures and budget allocation for all Colleges of Pharmacy in Thailand.
- **The government administration reform.** The government set up a policy in 1997 to: decentralize the administration system, downsize and restructure the organization, change the budget allocation system to the block grant basis, and so on. The most important policy for higher education is the transformation of all governmental universities to be autonomous by the year 2002.
- **The changes in the health care system and the discontinuation of the ‘contract pharmacist’ system.** The hospital accreditation system and the transition of government-funded hospital to be the new type of public enterprise organization will also influence pharmacy practice in Thailand. The discontinuation of the contracted pharmacist will greatly affect the pharmacy curriculum, universities’ plan, the distribution of pharmacists in the country, the competitiveness in job finding and the impact of the pharmacy profession in Thailand.
- **The Pharmacy Council policy: the critical factor to changes in education and practice.** The Pharmacy Council, established in 1994, has introduced some policies, rules and regulations which lead to some changes in the Colleges of Pharmacy, *i.e.* the licensure system, accreditation of Colleges of Pharmacy, the 6-year curriculum in all Colleges of Pharmacy, continuing education and development of the standard guidelines for pharmacy practice in various sub-specialization.

Dr. Sumon Sakolchai then proposed the **Future Activities and Collaboration of the US-Thai Consortium for the Development of Pharmacy Education in Thailand**. He presented that all collaborative activities under the government-funded ‘Development of Academic Staff in Pharmacy Education Project’ were cancelled since 1998. However, there are some other schemes available. It is suggested that the Phase II collaboration of the US-Thai consortium be continued but should be reviewed and revised to suit those new programs.

Future Activities and Direction at Various Colleges of Pharmacy in Thailand

All Colleges of Pharmacy in Thailand must prepare themselves for the following directions:

1. **Expansion of Master degree and Ph.D. degree and development of International Ph.D. program in Thailand.** The Thai Ph.D. programs can be of the 'stand alone' type or the 'consortium' type initiated jointly among 7 universities in the upcountry of Thailand.
2. **The Doctor of Pharmacy Programs in Thailand and the policy of all 6-year curriculum** announced by the Pharmacy Council of Thailand which will be started no later than the year 2002.
3. **The Licensure System.** By the year 2003, all Pharmacy graduates from government or private universities are required by the Pharmacy Council to take the examination for their professional license. Therefore, each university should revise its curriculum, staffs, teaching methods and all inputs and processes necessary to ensure the quality of graduates.
4. **The Quality Assurance Scheme, Quality Audits and Accreditation by External Bodies.** Various internal and external quality assurance schemes have been introduced for implementation in all governmental universities. Accreditation of Colleges of Pharmacy in Thailand will soon be implemented. During the next decade, universities in Thailand are subjected to intensive review and audit by external bodies legally or informally. These factors force universities to improve themselves in every aspect.
5. **Board Certified in Pharmacy** in three areas of pharmacy specialization; *i.e.* Pharmaceutical care, Pharmaceutical technology and Pharmaco-informatics.
6. **Transformation to the Autonomous University** by the Year 2002.

Consequences to Pharmacy Education

All Colleges of Pharmacy in Thailand should revise their plans and curricula to suit the above-mentioned factors. They also should prepare themselves for competitiveness, audition and accreditation at the international and regional levels. In order to achieve academic excellence and the expectation of each university, a closer relationship and collaboration with foreign counterparts would be necessary.

Proposed Activities and Collaboration of the US-Thai Consortium

Seven categories of activities are proposed:

1. *Study in the U.S.A.* Some non-governmental-funded scholarships are available for Thai staff, but in a limited number. In addition, some Thai universities can provide partial financial support for their staff. Teaching and research assistantships are also available. Thai staff should prepare themselves for their English proficiency and research capability. The US universities should provide the information for the position available and may arrange the appropriate channels for Thai staff and students.
2. *Participation in Thai Ph.D. Program, PharmD Program and the Thai Board in Pharmacy Programs.* The participation of the US professors or specialists would be important for improvement of the quality of those programs initiated to substitute the previously cancelled staff development project. Various forms of activities are allowed according to each program e.g. major supervisor, co-supervisor, invited lecturers, or their academic activities. The US participation is expected and welcomed.
3. *Training in the U.S.A.* This will be reserved for those faculty members who graduated with a PharmD from Thailand, for those faculty members enrolling in the Master degree in Clinical Pharmacy in Thailand, and for those faculty members enrolling the residency program in Thailand. Most of the training needs are in the form of rotations at various clinical settings to acquire the designated clinical exposure.
4. *Research collaboration.* This can be via the Ph.D. student's research project. Funding sources for joint research are available. Those US and Thai faculty members who are interested in this collaboration should identify their mutual interest.
5. *Workshops and Seminars in Thailand.* This collaborative activity is probably the best way to transfer technologies from the US to Thailand. Areas of workshops are specified for the year 2000-2001.

6. *Visiting Professors to Thailand.* US professors are welcome to participate in the workshops or seminars, or can play roles in the Ph.D. program.
7. *Student exchange for both Thai and US Students.* This activity has been successful in past years. Thai students who take some courses at foreign universities as non-degree students (Thai government funded) can transfer the grading results on those courses to Thai universities according to the University Mobility for the Asia and Pacific (UMAP) program initiated in 1999.

Conclusion

The activities of the US-Thai Consortium for the development of Pharmacy Education in Thailand in the past 7 years have caused significant impact to the pharmacy education and practice in Thailand. In the next several years, Thai universities still need support and contribution from US partners. But the direction and trends of activities might change to meet the requirement of various funding and supporting resources.

The Consortium Business Meeting followed Dean Sakolchai's address.

The next day, Thursday, April 6th was dedicated to describing efforts at the University of Florida. Dr William Riffie, Dean of the College of Pharmacy, provided his view on where the practice of Pharmacy in the United States in the next millennium will be. In his review, Dr. Riffie focused on the cost of drug misadventures within the US at \$76.6 billion/year and the role that the pharmacy profession can play in minimizing these costs and get reimbursed for their efforts. He also outlined the current dilemma that is facing all pharmacists related to workload and the ever-increasing drug prescription rate. Dr. Riffie reviewed the role of prescription automation and how technology in the workplace will play in the profession. Dr. Riffie closed by noting each college of pharmacy will have to prepare their students to face the workload and technological challenges facing the profession.

Dr. Robert Hatch, Associate Professor of Community Health and Family Medicine, followed Dean Riffie. He related his experiences as a practicing physician and the critical role that pharmacists play in the health care environment in the United States. He addressed the audience because he is interested in pursuing a one or two year sabbatical in Thailand to promote Therapeutic Monitoring of patients and to strengthen the interaction between Pharmacists and Physicians.

Dr. Sven Normann reviewed key elements of the University of Florida, Working Professional Pharm.D. Program. He included the history, administrative structure, faculty, curriculum, and guiding tenets. The various models of program delivery were discussed, including the regional and remote models. The collaborative, interactive web-based virtual classroom, Placeware, was described. The program has grown from 20 students in one site (Tampa) in 1994 to over 475 students in over 21 sites throughout the country in April, 2000.

Dr. Bernadette Belgado presented information on the Virtual Drug Information Service (VDIS). She described to the group the history of Drug Information in the University of Florida, College of Pharmacy and how the VDIS came to be. She described the scope of the VDIS service and showed what the VDIS had to offer in terms of drug information resources on the website. She also showcased the Drug Information Management System, the custom designed database that the VDIS uses to document and search for requests.

The 6th US-Thai Pharmacy Education Consortium Meeting. It was agreed that the next US-Thai Consortium Meeting will be hosted by Khon Kaen University in January 7-8, 2002 at the Hua Hin resort area on the northern coast of the Bay of Thailand.

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 99/00. However, we are pleased to announce that Ms. Ariya Khunvichai (MS from Mahidol University) entered the Pharmaceutics Graduate Program this past

fall and is actively involved in completing her graduate coursework. Ariya will be working with Dr. Gunther Hochhaus.

TABLE 20: Thai Students in the College FY 99/00		
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 (Jin)	Ubon Ratchathani	August, 1997
4. Ms. Pattravadee Chancham (Oh)	Khon Kaen	August, 1997
5. Ms. Intira Coowanitwong**	Rangsit	August, 1998
6. Ms. Ariya Khunvichai**	Mahidol	August, 1999

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

** not a Royal Thai Scholar

Thai Faculty visiting UF FY 99/00:

Two students/faculty from Silpakorn University, Mayuree Soisrisawat and Vinida Srikusalanukul spent three months (April 15, 2000 to July 24, 2000) at the College of Pharmacy for Advanced Pharmacy Practice Experiences (APPE) in Drug Information and Ambulatory Care. These APPEs will serve as a part of the Master of Pharmacy in Clinical Pharmacy from Silpakorn University.

During their 6-week drug information experience, the students answered drug information questions from our regional Drug Information Center and Internet-based Virtual Drug Information Service. They also participated in Journal Club where they gained experience in biostatistics, study design and literature evaluation. Mayuree and Vinida were also exposed to many drug information resources, both print and electronic.

During the 6-week Ambulatory Care experience, Mayuree and Vinida observed many pharmacist-patient interactions. They assisted in the evaluation, management and adjustment of patients' drug therapy and disease states. They gained experience communicating with patients and healthcare professionals. In addition, they also gained experience in documentation by writing SOAP notes. They were also able to build their knowledge base in many therapeutics areas including: diabetes, hypertension, hyperlipidemia, asthma, osteoarthritis, migraine and anticoagulation therapy.

Ms. Wandee Imemsap, a faculty member at Ubon Ratchathani University visited Dr. Gayle Brazeau's laboratory as a part of a collaborative NATO grant. She was with Dr. Brazeau and Dr. Jim Simpkins between 11/1/99 and 1/31/00 where she developed and tested an *in situ* forming estrogen formulation that could deliver estrogen to rodents over a 28-day period. She also looked at the *in vitro* and *in vivo* myotoxicity of these types of parenteral formulations.

ORGS Coordinated Events for the COP - FY 99/00

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 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 to be held on Tuesday, September 14, 1999 in the Arredondo Room at the Reitz Student Union from 6:00 PM to 9:00 PM. However, owing to Hurricane Floyd and the closing of the University, the reception was cancelled and could not be booked for the remainder of the Fall Semester.

Annual Research Showcase and Awards Recognition Day:

The 13th Annual Research Showcase and Awards Recognition Day took place on Thursday, April 13, 2000 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. **Andrx Corporation** sponsored the poster competition with a \$1,000 donation. Our contact with Andrx was through Dr. Francisco Alvarez, Director of Analytical Research, and Ph.D. Class of 1981. **Dr. Robert A. and Phyllis Levitt** of Boca Raton and Gainesville, Florida 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 since 1993.

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/Pharmacy 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 12-15 minute presentation followed by a 3-5 minute question/answer period. Based on the student's 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.

Judges for the oral competition were: **Dr. Stephen E. Borst** (Assistant Professor, Department of Exercise and Sport Sciences, College of Health and Human Performance, University of Florida); **Dr. John Eyler** (Professor and Chair, Department of Chemistry, College of Liberal Arts and Sciences, University of Florida); **Dr. Shashank Rohatagi** (Senior Manager, Drug Metabolism and Pharmacokinetics, Aventis Pharmaceuticals, Collegeville, PA) and **Dr. Colin Sumners** (Professor and Associate Dean, Department of Physiology, College of Medicine, University of Florida).

This year's winners for the oral competition were:

Senior Division – winner

Sriram Krishnaswami Pharmaceutics \$500 cash award
Title: “*PK/PD Modeling of Inhaled Corticosteroids – Focus on Fluticasone Propionate*”.

Senior Division – finalist

Alok Pachori Pharmacodynamics \$200 cash award
Title: “*Effectiveness of AT₁ R-AS Gene Therapy in Tissue and Circulatory RAS Models of Hypertension*”.

Senior Division - finalist

Brett Houk Pharmaceutics \$200 cash award
Title: “*Pharmacokinetics of Plasmid DNA in the Rat*”.

Junior Division – co-winner

Wu Xiao Pharmaceutics \$350 cash award
Title: “*Mutational Analysis of the Adeno-Associated Virus Type 2 (AAV2) Capsid Gene and Construction of AAV2 Vectors with Altered Tropism*”.

Junior Division – co-winner

Caren Beck Pharmacodynamics \$350 cash award
Title: “*Vascular Responsiveness in Pregnancy*”.

Levitt Division - winner

Robin Leigh Martin Pharmacodynamics \$500 cash award
Title: “*Circulating Growth Hormone Levels are Elevated in Rats Fed a High-Fat Diet*”.

Levitt Division - finalist

Yi Wen Pharmacodynamics/Center for Neurobiology of Aging \$200 cash award
Title: “*Nitric Oxide May Mediate Estrogen’s Neuroprotection through a Receptor – Independent Mechanism*”.

For the poster competition this year we had 20 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 between 9:30 and 11:30 AM when 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. Susan Beltz** (Investigational Drug Coordinator, Pharmacy Services, Shands Hospital); **Dr. William G. Farmerie** (Assistant Scientist and Director, Genomics Core, ICBR, University of Florida); **Dr. Craig H. Gelband** (Assistant Professor, Department of Physiology, College of Medicine, University of Florida); and **Dr. Christaan Leeuwenburgh** (Assistant Professor and Director, Aging Biochemistry Laboratory, Department of Exercise and Sport Sciences, College of Health and Human Performance, University of Florida).

The winners for this year's poster competition were:

Graduate Student - winner

Fuxing Tang

Pharmaceutics

\$200 cash award

Title: "*Synthesis of a Single-tailed Cationic Lipid and Investigation of its Gene Transfection Mechanism*".

Post-Doctoral Fellow Division - winner

Nelamangala V. Nagaraja

Pharmaceutics

\$100 cash award

Title: "*A PK/PD Model for LH Suppression and LH Surge Delay by a LHRH Antagonist.*"

Undergraduate Student Division – co-winner

Jason Cutright

Pharmacodynamics/Center for Neurobiology of Aging \$100 cash award

Title: "*The Role of Testosterone in the Severity of Cerebral Ischemic Damage in an Animal Model*".

Pharmacy Student Division – co-winner

Tony Martin and Mina Salafranca

Pharmacy Health Care Administration

\$100 cash award

Title: "*An Interdisciplinary Healthcare Competition: Teams of Healthcare Students Working Together to Care for a Patient and to Learn About Other Disciplines*".

Other ORGS Activities for FY 99/00

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 99/00; 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 99/00 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 monthly 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 once during the academic year and was entrusted with making recommendations on major initiatives related to graduate education. The chair of this committee was Dr. Kenneth Gerhardt, Associate Dean for Graduate Programs. Policy issues considered during FY 99/00 were graduate student recruitment, and electronic application process for graduate admissions.
- **University of Florida Community Campaign.** The Executive Associate Dean, Program Assistant and Senior Secretary 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 and COP activity:

- **COP National Advisory Board.** The Executive Associate Dean attended both the Fall 99 (October) and Spring 00 (April) National Advisory Board Meeting.
- **AACP Annual Meeting.** The Executive Associate Dean attended the 2000 AACP annual meeting in Boston, MA from July 3rd to July 7th, 2000.
- **American Pharmaceutical Association (APhA) Annual Meeting and Exposition.** The Executive Associate Dean attended the 2000 APhA annual meeting in Washington, DC from March 10th to March 14th, 2000.
- **AACP Institute.** The Executive Associate Dean along with Drs. Michael McKenzie, Janet Karlix, Michael Meldrum and Doug Ried attended the AACP 4th Institute at Xerox Document University at Leesburg VA from May 19th through the 23rd, 2000.

APPENDICES

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