

Office of Research and Graduate Studies

2003



2004

Annual Report

**College of Pharmacy
University of Florida**

Office of Research and Graduate Studies Staff

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Executive Associate Dean

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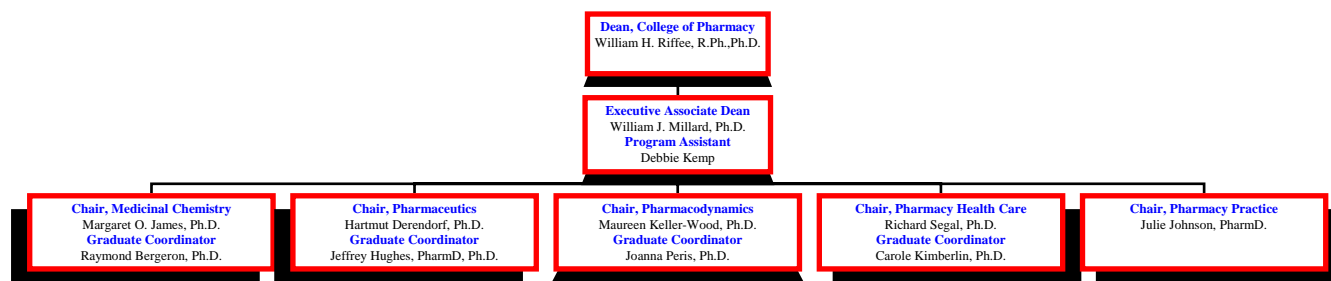
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Introduction

The Office of 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 (M.S. and Ph.D.) as well as research activities. 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 the Department of 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.

FIGURE 1: Administrative Flow Chart for the ORGS



The Executive Associate Dean is responsible for monitoring 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 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 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, Graduate Studies Committee (GSC) Activities, College of Pharmacy Graduate Student Organization**).

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 U.S.-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: **U.S.-Thai Consortium Activities**).

The Executive Associate Dean is assisted in the ORGS by a Program Assistant (see **Figure 1**). During FY 03/04 the ORGS Program Assistant was Ms. Debbie Kemp. Debbie assumed the ORGS Program Assistant's role in June of 2001. 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 the Program Assistant. 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.

The remainder of this report will deal with COP Graduate Programs, COP Research Activity, U.S.-Thai Consortium Activities, ORGS-Coordinated Functions and Other Activities of the ORGS for FY 03/04.

Graduate Education and Program Activities

Graduate Programs in the COP (overview)

There is one Ph.D. program administered through the College of Pharmacy: *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 Administration (recognized in 1996), and Pharmaceutics (recognized in 1998).

Because of the growing need to have clinically-trained individuals who also have sufficient research training to conduct bench-to-bedside (translational) research, the Departments of Pharmaceutics and Pharmacy Practice developed a collaborative Clinical PhD track within the Pharmaceutics graduate program this academic year. This new Clinical Pharmaceutical Sciences Program is geared to prepare motivated individuals to pursue independent clinical research careers in academia, industry or government.

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 each student to prepare and defend a thesis as part of their degree. Pharmacy Health Care Administration also has the option of a non-thesis M.S. degree. In general, students are discouraged from entering directly into an M.S. in Pharmacy; 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 individual departments. Today both 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 through 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 is to review and make recommendations on graduate programs in the College of Pharmacy. This would include both new and existing graduate programs. The GSC is involved in considering how the College can attract/fund more graduate students with an emphasis on bringing in more U.S. students and professional (pharmacy) students. 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 03/04 were:

Non-voting Chair:	Dr. William Millard	Office of Research and Graduate Studies
Voting Members:	Dr. Raymond Bergeron	Medicinal Chemistry
	Dr. Joanna Peris	Pharmacodynamics
	Dr. Carole Kimberlin	Pharmacy Health Care Administration
	Dr. Jeffrey Hughes	Pharmaceutics
	Mr. James Sacco	President of COP Graduate Student Organization
Ex-officio Member:	Dr. William Riffie	Dean

The GSC met nine times throughout FY 03/04. Issues that were deliberated included:

- Selection of the FY 04/05 Alumni Scholarship Awardees.
- Review of 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.
- Establishment of goals and objectives for each graduate program within the College.
- Selection of finalists for the 17th 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 Executive Associate Dean for Research and Graduate Studies. The COP GSO elects a president on an annual basis. The president of the organization coordinates and runs the meetings (3-4 per year) and also sits in on the Graduate Studies Committee as a voice for the graduate students. For FY 03/04 **Mr. James Sacco** (Medicinal Chemistry) served as president of the organization.

At the beginning of each Fall and Spring term, the ORGS sponsors a luncheon for COP graduate students to promote a forum for exchange of information between each other and the ORGS.

Graduate Student, Post-doctoral Fellow, Visiting Scholar and Exchange Student Demographics

The College has 36 graduate faculty members who are closely involved in the training of all graduate students, postdoctoral fellows and visiting students and scholars. A complete listing of the college graduate faculty, by department, can be found in **Table 1**. 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 2**. Seventy-nine graduate students were engaged in studies leading to either the M.S. or Ph.D. degree this year. The COP graduated twelve Ph.D. students (see below: **Graduate Student Graduation Activities**). The COP accepted 12 new students into the various COP Graduate Programs (**Tables 2 and 5**).

Table 3 outlines the overall demographics of the graduate student population within the COP. During FY 03/04 the number of male students was 37 compared to 42 female students for a ratio of 47/53 percent. The college has a 43/57 percent American/Foreign student ratio.

U.S. minority students comprised 13.9% (11 of 79) of the COP graduate student population (**Table 3**). This has remained about the same over this past fiscal year but overall our minority graduate student percentage has shown a continual rise over the last five academic years. The minority graduate student percentage was 13.2% (10 of 76) in FY 02/03; 14.5% (11 of 76) in FY 01/02; 13.9% (10 of 72) in FY 00/01; 10.3% (7 of 68) in FY 99/00; and 8.5% (6 of 71) in FY 98/99. Distribution of graduate students among the four degree-granting departments is illustrated in **Table 4**. This year the Department of Pharmaceutics had the highest number of graduate students with 28. Medicinal Chemistry had 23 students, Pharmacy Health Care Administration had 21 students and Pharmacodynamics had 7 students pursuing graduate degrees. GPA and graduate program entrance test scores for both the entire population of COP graduate students and the class of 2003/2004 are shown in **Table 5**.

For the sake of completeness, a listing by department of Post-doctoral Fellows and Visiting Scholars in the COP is illustrated in **Table 6** and Exchange Students in **Table 8**.

Table 1: Graduate Faculty

Department/Center	Name
Medicinal Chemistry	Raymond Bergeron
	Carrie Haskell-Luevano
	Margaret James
	Laszlo Prokai
	Stephen Schulman
	Kenneth Sloan
	Dong Hai Wu
Pharmaceutics/ Center for Drug Discovery & Center for Drug Interaction Research and Education	Veronika Butterweck
	Hartmut Derendorf
	Guenther Hochhaus
	Jeff Hughes
	Sihong Song
	Sean Sullivan
Pharmacodynamics	Dorette Ellis
	Jason Frazier
	Michael Katovich
	Maureen Keller-Wood
	Bin Liu
	Michael Meldrum
	William Millard
	Joanna Peris
	William Riffie
Pharmacy Health Care Administration/ Center for Research in Pharmaceutical Care	Donna Berardo
	David Brushwood
	Abraham Hartzema
	Charles D. Hepler
	Carole Kimberlin
	Earlene Lipowski
	L. Douglas Ried
	Richard Segal
	Almut Winterstein
Pharmacy Practice/ Center for Pharmacogenomics	Paul Doering
	Reginald Frye
	Leslie Hendeles
	Julie Johnson
	Larry Lopez
	Michael McKenzie
	J. Daniel Robinson

Table 2: Graduate Students

Department/Center	Name	Date Entered	Expected Grad Date	Degree Sought	Mentor
Medicinal Chemistry	Choi, Yohan	Aug-01	Aug-04	M.S.	Wu
	Dixit, Vaishali	Jan-00	Dec-04	Ph.D.	James
	Holder, Jerry (Ryan)**	Aug-99	Dec-03	Ph.D.	Haskell-Luevano
	Irani, Boman	Aug-00	Dec-04	Ph.D.	Haskell-Luevano
	Joseph, Christine	Aug-00	Dec-04	Ph.D.	Haskell-Luevano
	Kukar, Thomas **	Aug-99	Aug-03	Ph.D.	Wu
	Majumdar, Susruta *	Aug-02	Aug-06	Ph.D.	Sloan
	Merritt, Kristen	Aug-02	Aug-06	Ph.D.	James
	Nguyen, John	Aug-98	Dec-04	Ph.D.	Bergeron
	Nyagode, Betty	Aug-04	Aug-06	Ph.D.	James
	Pedersen, Brenda	Aug-00	Aug-04	Ph.D.	Wu
	Portalatin, Nilka Rivera	Jan-03	Dec-06	Ph.D.	Prokai
	Proneth, Bettina *	Jan-04	May-08	Ph.D.	Haskell-Luevano
	Roberts, William	Aug-96	Dec-04	Ph.D.	Sloan
	Sacco, James	Aug-01	Aug-05	Ph.D.	James
	Stuchal, Leah	Aug-00	Dec-04	Ph.D.	James
	Thomas, Joshua	Aug-01	Aug-05	Ph.D.	Sloan
	Todorovic, Aleksandar	Aug-01	Aug-05	Ph.D.	Haskell-Luevano
	Wang, Xiaoli	Aug-02	Aug-06	Ph.D.	Wu
	Wasdo, Scott	Aug-98	Dec-04	Ph.D.	Perrin/Sloan
Wilson, Krista *	Aug-03	May-07	Ph.D.	Haskell-Luevano	
Yang, Shuo	Aug-02	May-06	Ph.D.	Schulman	
Yao, Hua	Aug-01	Aug-05	Ph.D.	Bergeron	
Pharmaceutics/ Center for Drug Discovery & Center for Drug Interaction Research and Education	Arya, Vikram **	Aug-98	Dec-03	Ph.D.	Hochhaus
	Braddy, April	Aug-00	Dec-04	Ph.D.	Prokai
	Castro, Whocely	Aug-02	May-06	Ph.D.	Derendorf
	Coowanitwong, Intira **	Aug-98	Dec-03	Ph.D.	Hochhaus
	Driessen, Wouter *	Aug-03	Aug-07	Ph.D.	Sullivan
	Gong, Yan **	Aug-99	May-04	Ph.D.	Hughes
	Hirko, Aaron	Aug-01	May-05	Ph.D.	Bodor/Hughes
	Iyengar, Adarsh	Aug-01	May-05	Ph.D.	Sullivan
	Khunvichai, Ariya **	Aug-99	Dec-03	Ph.D.	Derendorf
	Liu, Qi **	Aug-00	May-04	Ph.D.	Derendorf
	Mundunuri, Keerti	Jan-04	Aug-08	Ph.D.	Hughes
	Nguyen, Vien	Aug-99	Dec-04	Ph.D.	Prokai
	Pinto, Elanor *	Aug-03	Aug-07	Ph.D.	Hochhaus
	Ren, Ke	Jan-02	Aug-06	Ph.D.	Hughes
	Sahasranaman, Srikumar	Aug-00	Aug-04	Ph.D.	Hochhaus
	Sarawek, Sasiporn	Jan-03	May-07	Ph.D.	Butterweck
	Schuck, Edgar	Aug-00	Aug-04	Ph.D.	Derendorf
	Schuck, Virna	Aug-00	Aug-04	Ph.D.	Derendorf
Tang, Mei	Aug-02	May-06	Ph.D.	Song	
Tayab, Zia *	Aug-03	Aug-07	Ph.D.	Hochhaus	
Toussaint, Nathalie	Aug-02	May-06	Ph.D.	Sullivan	
Villegas, Leah	Aug-02	May-06	Ph.D.	Sullivan	

* new students entering a COP graduate program during FY 02/03

** students who graduated with an M.S. or Ph.D. during FY 03/04

Table 2: Graduate Students (con't)

Department/Center	Name	Date Entered	Expected Grad Date	Degree Sought	Mentor
Pharmaceutics/ Center for Drug Discovery & Center for Drug Interaction Research and Education (con't)	Wang, Yaning **	Aug-99	Dec-03	Ph.D.	Hochhaus
	Winkler, Julia	Jan-01	Dec-04	Ph.D.	Bodor/Derendorf
	Wu, Kai	Aug-02	May-06	Ph.D.	Hochhaus
	Yadava, Preeti	Aug-02	May-06	Ph.D.	Hochhaus
	Zdrojewski, Immo *	Aug-03	May-07	Ph.D.	Derendorf
	Zhu, Hao	Jan-01	Aug-04	Ph.D.	Sullivan
Pharmacodynamics	Beck, Caren	Aug-99	Dec-04	Ph.D.	Katovich
	Grobe, Justin	Aug-01	May-05	Ph.D.	Katovich
	Li, Feng**	Aug-98	Dec-03	Ph.D.	Keller-Wood
	Perez, Evelyn **	Aug-98	May-04	Ph.D.	Simpkins/Meldrum
	Shaw, Amanda	Aug-99	Dec-04	Ph.D.	Millard
	Smith, Anthony	Aug-98	Dec-04	Ph.D.	Peris
	Wang, Xiaofei**	Aug-98	Dec-03	Ph.D.	Simpkins/Meldrum
Pharmacy Health Care Admin/ Center for Research in Pharmaceutical Care	Ballentine, Amanda	Aug-02	May-07	Ph.D.	Lipowski
	Chatterjee, Nilanjan (Neil) *	Aug-03	May-08	Ph.D.	Kimberlin
	Gerhard, Tobias	Aug-02	May-07	Ph.D.	Hartzema
	Graham, Stephen	Jan-01	Dec-04	Ph.D.	Hartzema
	Hwang, Jae-Min *	Aug-03	May-08	Ph.D.	Winterstein
	Kanjanarat, Penkarn	Aug-00	Dec-04	Ph.D.	Winterstein
	Kwon, Sooyeon **	Jan-01	May-04	Ph.D.	Hartzema
	Mayhew, Dionne	Aug-01	May-05	Ph.D.	Hartzema
	McMullen, Diane	Aug-00	Dec-04	Ph.D.	Ried
	Mitchell, Karen *	Aug-03	May-08	Ph.D.	Segal
	Mueller, Michael	Aug-01	May-05	Ph.D.	Kimberlin/Brushwood
	Nyanteh, Harry	Aug-02	May-07	Ph.D.	Hartzema
	Onyenwenyi, Ahunna *	Aug-03	May-08	Ph.D.	Segal
	Pinto, Sharrel	Aug-01	May-05	Ph.D.	Lipowski
	Sauer, Brian	Jan-99	Aug-04	Ph.D.	Hepler
	Schiller, Karl (Cameron)	Aug-02	May-07	Ph.D.	Segal
	Taylor, Michael	Jun-01	May-05	Ph.D.	Hartzema
	Telfair, Tamara	Aug-02	May-07	Ph.D.	Hartzema
	Watcharathanakij, Sawaeng	Aug-02	May-07	Ph.D.	Segal
	White, Annesha *	Aug-03	May-08	Ph.D.	Segal
Wilson, Debbie	Aug-99	Dec-04	Ph.D.	Kimberlin	

* new students entering a COP graduate program during FY 02/03

** students who graduated with an M.S. or Ph.D. during FY 03/04

Table 3: Graduate Student Demographics												
Gender			Citizenship				American Minority					
			United States		Foreign							
	#	%	#	%	#	%	Black	%	Hispanic	%	Asian	%
TOTAL	79		34	43.0%	45	56.9%	7	8.9%	3	3.8%	1	1.3%
Male	37	46.8%	15	40.5%	22	59.5%	1	2.7%	0	0.0%	1	2.7%
Female	42	53.1%	19	45.2%	23	54.8%	6	14.3%	3	7.1%	0	0.0%

Table 4: Graduate Students, Fellows, Visiting Scholars and Exchange Students				
Department/Center	Graduate Students	Post-doctoral Fellows	Visiting Scholars	Exchange Students
Medicinal Chemistry	23	10	1	2
Pharmaceutics/CDD&CDIR&E	28	8	5	36
Pharmacodynamics	7	3	0	0
Pharmacy Health Care Administration/ CRPC	21	1	4	15
Pharmacy Practice/CPG	No Grad. Prog.	14	0	0
COLLEGE TOTAL	79	36	10	53

CDD = Center for Drug Discovery; CDIR&E = Center for Drug Interaction Research & Education
 CRPC = Center for Research in Pharmaceutical Care, CPG = Center for Pharmacogenomics

Table 5: GPA and Test Scores of Graduate Students						
Class	GPA	GRE			TOEFL	TSE
		Verbal	Quant.	Total		
COLLEGE TOTAL (79)*	3.46	511	678	1188	610	50
FY 03/04 Class (12)	3.52	508	689	1197	637	45

* numbers in parenthesis denote student population

Table 6: Post-doctoral Fellows and Visiting Scholars

Department/Center	Name	Title	Preceptor
Medicinal Chemistry	Gu, Yunrong	PD	Wu
	Bharti, Neelam	PD	Bergeron
	McManis, James	PD	Bergeron
	Wang, Li-Quan	PD	James
	Wilczynski, Andrzej	PD	Haskell-Luevano
	Park, Jeong Hyun	PD	Bergeron
	Stevens, Stanley	PD	Prokai
	Zharikova, Altevina	PD	Prokai
	Perjesi, Pal	PD	Prokai
	Gridley, Kelly	PD	Haskell-Luevano
	Diaz, Beatriz	VS	Schulman
	Pharmaceutics/ Center for Drug Discovery & Center for Drug Interaction Research and Education	Zhang, Bin	PD
Lu, Yuanqing		PD	Song
Issar, Manish		PD	Hochhaus
Zhang, Chun		PD	Hughes
Choi, Young-kook		PD	Song
Madabushi, Rajanikanth		PD	Derendorf
Brugos, Boglarka		PD	Hochhaus
Rao, Gururaj Ananda		PD	Hughes
Kiman, Kim		VS	Derendorf
Liu, Yanhong		VS	Derendorf
Ji, Fubao		VS	Bodor
Mori, Nobuhiro		VS	Bodor
Wu, Jiaxiang	VS	Bodor	
Pharmacodynamics	Hebert, Nicole	PD	Peris
	von Reitzenstein, Marcela	PD	Keller-Wood
	Fang, Xi (Jessie)	PD	Liu
Pharmacy Health Care Administration/ Center for Research in Pharmaceutical Care	Snedecor, Sonya	PD	Hartzema
	Mattenklotz, Anna	VS	Winterstein
	Nantavitayaporn, Arpapat	VS	Lipowski
	Ratchina, Svetlana	VS	Hartzema
	Chowwanapoonpohn, Hathaikan	VS	Lipowski
Pharmacy Practice/ Center for Pharmacogenomics	Aquilante, Christine	PD	Johnson
	Beitelshees, Amber	PD	Johnson
	Brum, Lauren	PD	Johnson
	Dugan, Byrdena	PD	Weitzel
	Formea, Christine	PD	Karlix
	Showalter, Marjorie	PD	Taylor

Department/Center	Name	Title	Preceptor
Pharmacy Practice/ Center for Pharmacogenomics (con't)	Sicard, Devin	PD	Taylor
	Skipper, Alexandra	PD	Annis
	Terra, Steve	PD	Johnson
	Tovar, John	PD	Gums
	Vuong, April	PD	Annis
	Ward, Michael	PD	Weitzel
	Weaver, Sherman Jay	PD	Doering
	Zineh, Issam	PD	Johnson

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 the College received 414 inquiries regarding the 4 different programs (**Table 7**). This is a decrease of 302 (42.2%) from FY 02/03. 394 of the 414 inquiries (95.2%) came in from e-mail. In this case we send an e-mail reply informing the applicant that they can obtain information regarding the programs and download application materials from the College and UF websites on the World Wide Web (WWW).

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 Web. For FY 03/04 the ORGS sent out 37 letters of this type.

Graduate student application activity for FY 03/04 for each of the departments is illustrated in **Table 7**. The College received 182 completed applications in FY 03/04. This is 60 less than FY 02/03 (242 applications) and translates to a 24.8% decrease in completed applications from the previous year. Of the 182 completed applications received by the departments, only 25 (or 13.7%) of the applicants were accepted. However, of the 25 students accepted, 18 students (or 72% of the potential students) will enter our graduate programs for FY 04/05.

Department	# Requests Sent Out	# Completed Applications	# Applications Accepted	% Accepted	# Entered	% Entered
Medicinal Chemistry	86	38	2	5.2%	2	100%
Pharmaceutics	169	98	9	9.2%	6	66.7%
Pharmacodynamics	50	21	6	28.6%	4	66.7%
Pharmacy Health Care Administration	109	25	8	32%	6	75.0%
COLLEGE TOTAL	414	182	25	13.7%	18	72.0%

Exchange Students in the College of Pharmacy

Each year many exchange students visit the COP for a 3-4 month period to help them develop in their research as part of the core curriculum from their home country. This fiscal year we had 53 students with more than half of them (62.3%) coming from Germany (**Table 8**).

Table 8: Exchange Students			
Department	Student Name	Preceptor	Home Country
Medicinal Chemistry	Kuester, Katharina	James	Germany
	Tura, Meritxell	Prokai	Spain
Pharmaceutics/ Center for Drug Discovery & Center for Drug Interaction Research and Education	Broos, Michel	Hochhaus	The Netherlands
	Bruns, Nina	Derendorf	Germany
	Burkhardt, Christina	Hughes	Germany
	Eckart, Kerstin	Derendorf	Germany
	Foerster, Niclas	Song	Germany
	Galler, Stephan	Derendorf	Germany
	Grimstein, Christian	Derendorf	Germany
	Guse, Kilian	Derendorf	Germany
	Hampp, Christian	Derendorf	Germany
	Heib, Melanie	Sullivan	Germany
	Hempesch, Birgit	Derendorf	Germany
	Holl, Ralph	Derendorf	Germany
	Krane, Dirk	Derendorf	Germany
	Krebs, Anika	Derendorf	Germany
	Lobmeyer, Maximillian	Derendorf	Germany
	Lucchesi, Maria Beatriz	Derendorf	Brazil
	Manzer, Katharina	Derendorf	Germany
	Marchand, Mathilde	Derendorf	France
	Paessens, Bernadette	Derendorf	Germany
	Patel, Gina	Hochhaus	England
Piekuth, Holger	Derendorf	Germany	
Reidenbach, Christian	Derendorf	Germany	
Rinas, Irene	Derendorf	Germany	
Scheerans, Christian	Derendorf	Germany	
Schnelle, Katja	Derendorf	Germany	
Schorr, Barbara	Derendorf	Germany	
Schulte-Herweling, Kristina	Derendorf	Germany	
Schulte-Lobbert, Nina	Derendorf	Germany	
Stober, Maritz	Derendorf	Germany	
Thum, Sarah	Derendorf	Germany	

Table 8: Exchange Students (con't)			
Department	Student Name	Preceptor	Home Country
Pharmaceutics/ Center for Drug Discovery & Center for Drug Interaction Research and Education (con't)	Timmerbeil, Bjorn	Derendorf	Germany
	Tischleder, Annette	Hughes	Germany
	Treyaprasert, Wanchai	Derendorf	Thailand
	Wallmeyer, Vera	Song	Germany
	Wandrey, Anne Julia	Derendorf	Germany
	Zdrojewski, Immo	Derendorf	Germany
Pharmacy Health Care Admin/ Center for Research in Pharmaceutical Care	Centellas, Casado	Ried	Spain
	Chopra, Balesh	Ried	United Kingdom
	Chowwanapoonpohn, Hathaikan	Lipowski	Thailand
	Davila, Elsa	Ried	France
	Ferreira, Conceicao	Ried	Portugal
	Garcia-Diaz, Davinia	Ried	Spain
	Gill, Leela	Ried	United Kingdom
	Hadi, Betissam	Ried	Belgium
	Hinck, Britta	Ried	Germany
	Jansen, Anita	Ried	Netherlands
	Montero, Antoni	Ried	Spain
	Moreno, Elena	Ried	Spain
	Patel, Gina	Ried	London
Silcock, Laura	Ried	United Kingdom	
Srann, Baljinder	Ried	United Kingdom	

Graduate Student Graduation Activities

Over the FY 03/04 academic year the COP had twelve students finish their graduate program and earn a Ph.D. degree. All four departmental graduate specialties were represented in the graduating class. The graduates according to commencement date were:

Ph.D. in Pharmaceutical Science Degrees Conferred

AUGUST 2003 (SUMMER COMMENCEMENT)

Name: **Dr. Thomas Kukar**
Dissertation Title: *Structure-function Studies of Human Carnitine Acetyltransferase.*
Faculty Mentor: Dr. Dong Hai Wu, Assistant Professor
Department: Medicinal Chemistry
Previous Degree: B.S. in Microbiology, University of Florida

Dr. Kukar has assumed a post-doctoral position at the Mayo Clinic in Jacksonville, FL.

DECEMBER 2003 (FALL COMMENCEMENT)

Name: **Dr. Vikram Arya**
Thesis Title: *Biopharmaceutical Aspects of Corticosteroid Therapy in Preterm Infants.*
Faculty Mentor: Dr. Guenther Hochhaus, Professor
Department: Pharmaceutics
Previous Degrees: B.S. in Pharmaceutical Sciences, Birla Institute of Technology, Mesra, Ranchi, India

Dr. Arya assumed a position with the Food and Drug Administration.

Name: **Dr. Intira Coowanitwong**
Dissertation Title: *Characterization of Sustained-release Formulations of Inhaled Rifampin for Tuberculosis Therapy.*
Faculty Mentor: Dr. Guenther Hochhaus, Professor
Department: Pharmaceutics
Previous Degree: B.S. in Pharmacy, Rangsit University, Thailand; M.S. in Manufacturing Pharmacy, Chulalongkorn University, Thailand

Dr. Coowanitwong has assumed a post-doctoral position at the University of Maryland.

Name: **Dr. Jerry Ryan Holder**
Dissertation Title: *Design Synthesis and Characterization of Melanocortin Receptor Ligands.*
Faculty Mentor: Dr. Carrie Haskell-Luevano, Assistant Professor
Department: Medicinal Chemistry
Previous Degree: B.S. in Microbiology, University of Florida

Dr. Holder has assumed a position as a Research Scientist 1 at Amgen, Inc., Thousand Oaks, CA.

Name: **Dr. Ariya Khunvichai**
Thesis Title: *Pharmacokinetics and Pharmacodynamics of Faropenem Daloxate.*
Faculty Mentor: Dr. Hartmut Derendorf, Professor
Department: Pharmaceutics
Previous Degrees: B.S. in Pharmacy, Mahidol University, Thailand

Dr. Khunvichai has assumed a position as a senior scientist working for Roche, Inc., in Nutley, NJ.

Name: **Dr. Feng Li**
Thesis Title: *The Interaction Between Increased Estrogen and Increased Cortisol is Necessary for Normal Blood Pressure Control in Late Gestation.*
Faculty Mentor: Dr. Maureen Keller-Wood, Professor
Department: Pharmacodynamics
Previous Degrees: B.S. in Medicine, Shanghai Medical University, Shanghai, People's Republic of China

Dr. Li has assumed a post-doctoral position in the laboratory of Dr. Oliver Smithies at the University of North Carolina Medical School, Chapel Hill, NC.

Name: **Dr. Xiaofei Wang**
Thesis Title: *Protective Effects of Estrogens Against Oxidative Stress.*
Faculty Mentor: Dr. James Simpkins, Professor and Dr. Michael Meldrum, Associate Professor
Department: Pharmacodynamics
Previous Degrees: B.S. in Medicinal Chemistry and M.S. in Microbiology, China Pharmaceutical University, Nanjing, People's Republic of China

Dr. Wang assumed a post-doctoral position at the University of North Texas Health Science Center at Fort Worth.

Name: **Dr. Yaning Wang**
Thesis Title: *Pharmacokinetics and Pharmacodynamic Evaluation of Beclomethasone Dipropionate.*
Faculty Mentor: Dr. Guenther Hochhaus, Professor
Department: Pharmaceutics
Previous Degrees: B.S. in Pharmacy, Beijing Medical University, China; M.S. in Biochemistry, Beijing University of Physical Education, China; M.S. in Biostatistics, University of Florida

Dr. Wang assumed a position with the Food and Drug Administration.

MAY 2004 (SPRING COMMENCEMENT)

Name: **Dr. Yan Gong**
Thesis Title: *Disposition and Effect of Human APP Swedish Mutation After rAAV2-Mediated Somatic Gene Transfer.*
Faculty Mentor: Dr. Jeff Hughes, Associate Professor
Department: Pharmaceutics
Previous Degrees: M.S. in Pharmaceutics, West China University of Medical Sciences; M.S. in Statistics, University of Florida

Dr. Gong assumed a post-doctoral position with the Center for Pharmacogenomics, College of Pharmacy, at the University of Florida.

Name: **Dr. Qi Liu**
Thesis Title: *Pharmacokinetic and Pharmacodynamic Modeling of Antibiotics and Resistance.*
Faculty Mentor: Dr. Hartmut Derendorf, Professor
Department: Pharmaceutics
Previous Degrees: B.S. in Pharmaceutical Analysis, West China University of Medical Sciences; M.S. in Clinical Pharmacy, West China University of Medical Sciences

Dr. Liu has assumed a position as a research scientist at Merck Co. Inc., in West Pointe, PA.

Name: **Dr. Evelyn Perez**
Thesis Title: *Estratriene Neuroprotection through an Antioxidant, Non-estrogen Receptor Mediated Mechanism.*
Faculty Mentor: Dr. James Simpkins, Professor and Dr. Michael Meldrum, Associate Professor
Department: Pharmacodynamics
Previous Degrees: B.S., University of North Florida

Dr. Perez assumed a post-doctoral position at the University of North Texas Health Science Center at Fort Worth.

Name: **Dr. Sooyeon Kwon**
Thesis Title: *Disability in Stroke: Effectiveness of Angiotensin-converting Enzyme Inhibitor on Post-stroke Residual Disability.*
Faculty Mentor: Dr. Abraham Hartzema, Professor
Department: Pharmacy Health Care Administration
Previous Degrees: B.S. in Pharmacy, Ewha Woman’s University, Korea; M.S. in Pharmaceutics, Seoul National University, Korea

Dr. Kwon has assumed an academic position of Assistant-In within the Department of Pharmacy Health Care Administration in the University of Florida, College of Pharmacy.

Master’s in Pharmaceutical Science Degrees Conferred

There were no Master’s degrees awarded during this fiscal year.

Graduate Student Funding and Awards

Awardees are recommended to the Graduate Studies Committee or the Executive 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, awardees are selected by the Executive Associate Dean for Research and Graduate Studies in discussion with the Graduate Studies Committee.

The COP carried the major load of the funding of graduate student stipends for FY 03/04 by supporting fifty-four graduate student stipends; fifteen students received support from extramural research grants; four graduate students received funding from their home government; and four graduate students funded their own graduate education this year. Thirteen graduate students received Grinter Awards as a supplement to their state funding. Graduate stipends ranged from \$11,973 to \$21,013 with an average overall stipend of \$15,079 for all graduate students.

Nineteen graduate student fellowship proposals totaling \$931,426 were submitted to extramural sources this year. Agencies to which proposals were submitted were the American Foundation for Pharmaceutical Education (AFPE), the American Heart Association – Florida Affiliate, UNCF-Merck Science Initiative, National Institute of Health (NIH), Burroughs Wellcome Fund Career Award, Perry Foote Small Grants Award, and the EPA Star Graduate Fellowship.

Alumni Scholarships

Beginning Fall Semester 1999, the University of Florida offered *Alumni Scholarship Program* 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 six additional *Alumni Scholarships* for FY 03/04. This scholarship represents the highest graduate student award available at the University and is funded at nationally competitive levels (\$20,000/year) plus all tuition remuneration. To ensure that Alumni Fellows receive every opportunity to succeed, the *Alumni Scholarships* provide a full four years of support for qualifying students. The recipients of the *Alumni Scholarships* are:

Mr. Jae-Min Hwang	Pharmacy Health Care Administration	FY 03/04
Ms. Ahunna Jennifer Onyenwenyi	Pharmacy Health Care Administration	FY 03/04
Ms. Elanor Pinto	Pharmaceutics	FY 03/04
Mr. Zia Tayab	Pharmaceutics	FY 03/04
Ms. Annesha White	Pharmacy Health Care Administration	FY 03/04
Ms. Krista Wilson	Medicinal Chemistry	FY 03/04

Ms. Claudia Battello	Pharmacodynamics	FY 02/03
Mr. Tobias Gerhard	Pharmacy Health Care Administration	FY 02/03
Ms. Kristen Merritt	Medicinal Chemistry	FY 02/03
Ms. Mei Tang	Pharmaceutics	FY 02/03

Mr. Justin Grobe	Pharmacodynamics	FY 01/02
Ms. Dionne Mayhew	Pharmacy Health Care Administration	FY 01/02
Mr. Michael Mueller	Pharmacy Health Care Administration	FY 01/02
Mr. Michael Taylor	Pharmacy Health Care Administration	FY 01/02

Ms. Brenda Pedersen	Medicinal Chemistry	FY 00/01
Mr. Stephen Graham	Pharmacy Health Care Administration	FY 00/01

Named Presidential Fellowship

Each year the Graduate School awards fellowships named in honor of former University of Florida presidents. Fellowships are awarded to students pursuing terminal degrees (Ph.D., Ed.D., or M.F.A.) and represent a four-year commitment to the student. Within the College of Pharmacy Named Presidential Awards are offered every other year. Stipends are \$17,000 for 12 months, which is accompanied by a tuition waiver. The recipient of the *Named Presidential Fellowship* is:

Mr. Harry Nyanteh	Pharmacy Health Care Administration	FY 02/03
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Fullbright Capes Scholarship

The CAPES Foundation is a Brazilian government agency awarding scholarship grants to graduate students at universities and research centers in Brazil and abroad. Its central purpose is to coordinate efforts to improve the quality of faculties and staff in higher education through its grant program. *CAPES* is particularly concerned with the training of researchers in doctorate, pre-doctoral short-term research and post-doctorate scholar programs. At present *CAPES* supports about 22,000 students in Brazilian graduate programs and 1,500 in other countries. The recipient of the *Fullbright Capes Scholarship* is:

Mr. Whocely Castro	Pharmaceutics	FY 02/03
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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 supplement of \$3,000 per year for up to 3 years and is announced at the annual Post-baccalaureate Reception (**ORGS Coordinated Events for the COP; Post-baccalaureate Reception**). The recipient of the *Lippman Award* is:

Mr. Jerry (Ryan) Holder	Medicinal Chemistry	FY 01/02
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Grinter Awards

Originated in 1988, the intent of the *Grinter Awards Program* was to serve as a mechanism to recruit graduate students with outstanding academic credentials into one of the College's 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 Awards* in the COP is illustrated in **Table 9**. Overall we have had a 65.3% acceptance of *Grinter Awards* by prospective students. Forty-four 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 Awardees is 3.55 with a GRE of 1240 and a TOEFL of 624.

Table 9: Statistical Summary of Grinter Program – 1988 to Present			
Statistic	Overall	%	03/04 Class
Total number offered	95		5
Total number accepted	65	68.4%	4
Total number graduated	27	42%	
Total number still enrolled: past & present	26	40%	
Number of active awardees - FY 03/04	13	20%	4
Grade Point Average (GPA)	3.55		3.55
Graduate Record Exam -GRE (Verbal + Quant.)	1240		1200
Test of English as a Foreign Language (TOEFL)	624		637

In FY 03/04 the COP offered 5 *Grinter Awards*, of which 4 were accepted (80%). The grade point averages and the Graduate Record Exam (GRE) scores were about the same as the overall group mean (**Table 9**). The recipients of *Grinter Awards* for FY 03/04 are:

Mr. Nilanjan (Neil) Chatterjee	Pharmacy Health Care Administration
Ms. Karen Mitchell	Pharmacy Health Care Administration
Ms. Ahunna Jennifer Onyenwenyi	Pharmacy Health Care Administration
Mr. Zia Tayab	Pharmaceutics

In addition to the scholarships and awards listed above the following student received additional funding support for FY 03/04.

Mr. Aleksandar Todorovic was awarded the Florida/Puerto Rico Affiliate American Heart Association (AHA) Pre-doctoral award. Mr. Todorovic is a graduate student in the Department of Medicinal Chemistry under the direction of Dr. Carrie Haskell-Luevano. He received a two-year, \$40,000 award for his project entitled “*Structure-Activity-Relationship Studies of Pro-Opiomelanocortin Derived Peptides*”.

17th Annual Research Showcase and Awards Recognition Day

A number of graduate students, post-doctoral 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**.

UF Graduate Student Forum Awards

The Graduate Student Forum was not held this year.

Perry A. Foote Small Grants Program

To both develop and promote research opportunities in Outcomes Research and Pharmacoeconomics, Dr. Abraham Hartzema, Perry A. Foote Eminent Scholar in Health Outcomes Research (Pharmacy Health Care Administration) initiated the Perry A. Foote Small Grants Program in Outcomes Research and Pharmacoeconomics during FY 01/02. Four graduate students in Pharmacy Health Care Administration received funding this year. They are:

Ms. Kanjanarat Penkarn	“Impact of the 30 Baht Health Insurance Policy on Hospital Drug Utilization in Thailand”	\$3,030
Mr. Harry Nyanteh	“The Relationship Between Asthma and Antibiotics: A Pharmacoepidemiology Study”	\$5,000
Ms. Sharrel Pinto	“AMA Guidelines on Gifts to Physicians: An Assessment of Intent to Comply”	\$1,825
Mr. Michael Taylor	“Prostate Cancer Clinical Practice Guidelines: Clinical and Economic Outcomes”	\$3,455

Special Awards for Graduate Students

Ms. Sharrel Pinto, a graduate student in the Department of Pharmacy Health Care Administration, was awarded the APhA-APRS ‘Postgraduate Best Paper Award’ in the Clinical Sciences section at the 2004 APhA Annual Meeting in Seattle, WA. Ms. Pinto’s paper was entitled “*Evaluation of Pharmacist Interventions in Diabetic Patients from Rural Community Health Care Centers*” and was authored by Sharrel Pinto, MS., Richard Segal, Ph.D., Almut Winterstein, Ph.D., Laura Annis, PharmD., Larry Pederson, R.Ph., Mina Willis, PharmD., PA-C, Daniel Robinson, PharmD., and DeWayne Yates.

Mr. Edgar Schuck, a graduate student in the Department of Pharmaceutics, had the opportunity to spend 6 weeks at Johnson Space Center/NASA in Houston, TX working under supervision of NASA's lead Pharmacologist, Dr. Lakshmi Putcha. The goal of Edgar’s project was to study the growth and the effects of the antibiotic ciprofloxacin in microgravity. He observed significant differences in growth patterns with some of the organisms tested and also differences in the effect of ciprofloxacin when compared to normal gravity controls. These data are being incorporated in a new research proposal to be submitted for funding by NASA this coming September.

International Student Academic Awards

At the International Student Academic Awards Ceremony held April 22, 2004, in the Reitz Union Auditorium, **four** of the College of Pharmacy’s international graduate students received awards for outstanding academic accomplishment. Each received an award certificate for their performance. The recipients of the **International Student Awards** are:

Mr. Boman Irani	Medicinal Chemistry
Ms. Sharrel Pinto	Pharmacy Health Care Administration
Mr. Edgar Schuck	Pharmaceutics
Ms. Virna Schuck	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 50 complete application packages, along with individual departmental brochures to the OGMP to be distributed amongst various minority schools in the nation. The ORGS continued to filter information down to 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. His report should identify all schools he visited. Each Department

then follows 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) held a joint seminar for the graduate students of PHCA and the Master's students at FAMU. After the seminar she spoke with students from FAMU who were interested in applying to our Ph.D. program.

The Department of Pharmaceutics has maintained an official affiliation with the Pharmaceutics Department at FAMU College of Pharmacy. Dr. Hartmut Derendorf, Professor and Chair of Pharmaceutics, serves on the National Advisory Board for the Research Centers in Minority Institutions and Dr. Jeffrey Hughes serves on the Minority Biomedical Research Support External Scientific Advisory Board; therefore, they visit FAMU routinely to talk about pharmacy graduate programs at UF.

Minority Student Awards

The *FAMU Feeder Scholarship Program* is a highly competitive program developed to provide support for highly qualified students to pursue graduate degrees at other institutions within the state of Florida. The FAMU feeder provides up to \$8,000 of annual stipend support for a period of 4 years. **Mr. Karl (Cameron) Schiller**, in the Department of Pharmacy Health Care Administration, received the second year funding of his *FAMU Feeder Scholarship*.

This past year three graduate students received minority funding from the National Institutes of Health. **Ms. April Braddy** was funded from an NIH training grant in the Department of Pharmacology and **Ms. Nilka Rivera Portalatin** and **Ms. Christine Joseph** received minority student supplemental funding from the NIH. Ms. Braddy and Ms. Portalatin both work with Dr. Laszlo Prokai and Ms. Joseph works with Dr. Carrie Haskell-Luevano.

Research Activities in the College of Pharmacy

Grant and Contract Efforts and Funding

Pharmaceutical Research continues to be a major effort within the College of Pharmacy at the University of Florida. According to the American Association of Colleges of Pharmacy (AACCP) annual listing of Colleges of Pharmacy and their placement relative to Schools of Pharmacy engaged in active Pharmaceutical Research, the University of Florida was ranked 15th this past year out of 60 schools with research programs (**Table 10**). These placements are based solely on fiscal year NIH funding (October to September of a given year).

Table 10: AACCP 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	\$90,959	14
1998	\$3,184,088	13	30	\$106,136	11
1999	\$3,770,008	10	32	\$117,813	11
2000	\$5,198,041	8	30	\$173,268	6
2001	\$3,749,322	16	33	\$113,616	20
2002	\$4,097,824	16	30	\$124,103	21
2003	\$6,064,002	15	27	\$224,593	12

Our faculty members continue to be productive and are making efforts to obtain more extramural support for their individual research efforts. During FY 03/04 the ORGS processed a total of 126 extramural grant or contract applications from the five Departments and our Administrative Office (**Table 11**) for a total of \$82,642,068 in **new** grant dollars. This is an increase in both the total number of proposals submitted (15.6%) and total dollars requested (56.6%) in FY 03/04 when compared to FY 02/03 (see **Table 12**). The majority (75.4%) of new proposals within the COP are proposals in which the Principal Investigator (PI) is a faculty member within the COP (**Tables 11 and 12**). Research faculty members are also encouraged to collaborate with other units within the University. Twenty-four percent of FY 03/04 grant submission dollars were attributed to grants that originated outside of the College of Pharmacy. Noteworthy is that all departments in the College were engaged in collaborative grant activity.

Table 13 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 03/04 our research funding dollars totaled \$7,604,542 with 100 individual awards coming into the College of Pharmacy. This represents a 17.2% increase in total research funding dollars but a 16.7% decrease in number of awards from FY 02/03.

Departmental comparisons show that Medicinal Chemistry continues to bring in the majority of research dollars within the COP (43.7% for FY 03/04 and 43.8% for FY 99-03). Noteworthy is that the Department of Pharmaceutics showed the largest improvement in total dollars brought into the College over FY 02/03 at 26.5% (\$1,097,069 in FY 02/03 versus \$1,388,138 in FY 03/04). Medicinal Chemistry experienced a 21.1% increase in total funding (\$2,744,228 in FY 02/03 versus \$3,323,351 in FY 03/04). Pharmacy Practice, Pharmacodynamics and Pharmacy Health Care Administration all showed a modest increase in total dollars awarded from the previous year; 11.1%, 5.7% and 4.2% respectively.

TOTAL EXTRAMURAL FUNDING to the COP is illustrated in **Table 14**. Total extramural support includes not only **RESEARCH** funds (also found in **Table 13**) but also those **ADMINISTRATIVE** funds that include professional service contract fees to support the clinical enterprises at Tacachale, the Veteran's Administration Hospital, Shands, and Jacksonville and makes up 12.1% of total extramural revenues in the College. In FY 03/04 **ADMINISTRATIVE** funds showed a 31.8% decrease from the previous academic year.

The combination of a 17.2% increase in **RESEARCH** dollars and a 31.8% decrease in **ADMINISTRATIVE** funds provided the College of Pharmacy with a 7.8% increase overall in FY 03/04 from FY 02/03 when *Total Extramural Funding* is considered (**Tables 14 and 15**).

Table 11: Proposal Processing Summary			
Department	Inside the College	Outside the College	Total
College Total			
# Proposals	95	31	126
Total Amount	\$50,381,093	\$32,260,975	\$82,642,068
Administration			
# Proposals	1		1
Total Amount	\$309,778		\$309,778
Medicinal Chemistry			
# Proposals	22	10	32
Total Amount	\$30,349,151	\$9,058,384	\$39,407,535
Pharmaceutics			
# Proposals	20	6	26
Total Amount	\$7,179,751	\$2,626,360	\$9,806,111
Pharmacodynamics			
# Proposals	18	4	22
Total Amount	\$8,134,515	\$3,017,790	\$11,152,305
Pharmacy Health Care Admin.			
# Proposals	13	5	18
Total Amount	\$327,337	\$2,278,446	\$2,605,783
Pharmacy Practice			
# Proposals	21	6	27
Total Amount	\$4,080,561	\$15,279,995	\$19,360,556

Inside the College = PI was a COP faculty member

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

Table 12: Proposal Processing Comparison

Fiscal Year	Inside the College	Outside the College	Total
FY 02/03			
# proposals	86	23	109
Total Amount	\$32,137,132	\$20,636,580	\$52,773,712
FY 03/04			
# proposals	95	31	126
Total Amount	\$50,381,093	\$32,260,975	\$82,642,068

Inside the College = PI was a COP faculty member

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

Table 13: Extramural Research Dollars - FY 99/00 to FY 03/04

Department	99/00	00/01	01/02	02/03	03/04	99-03	% of total
COLLEGE TOTAL	\$5,296,021	\$5,225,139	\$6,022,123	\$6,488,151	\$7,604,542	\$6,127,195	100.00%
IDC	\$1,135,846	\$1,117,317	\$1,150,387	\$1,347,223	\$1,633,280	\$1,276,811	100.00%
# grants	95	100	111	120	100	105.2	
%IDC	27.30%	27.20%	23.60%	26.21%	27.35%	26.33%	
Medicinal Chemistry	\$2,696,079	\$2,009,060	\$2,630,607	\$2,744,228	\$3,323,351	\$2,680,665	43.75%
IDC	\$566,412	\$442,281	\$596,236	\$619,296	\$731,661	\$591,177	46.30%
# grants	12	11	18	20	23	16.8	
%IDC	26.60%	28.20%	29.30%	29.14%	28.20%	28.29%	
Pharmaceutics	\$654,111	\$862,445	\$1,356,955	\$1,097,069	\$1,388,138	\$1,071,744	17.49%
IDC	\$152,509	\$181,616	\$165,688	\$232,563	\$235,755	\$193,626	15.16%
# grants	27	29	33	31	31	30.2	
%IDC	30.40%	26.70%	13.90%	26.90%	20.50%	23.68%	
Pharmacodynamics	\$962,578	\$730,216	\$587,602	\$768,811	\$812,823	\$772,406	12.61%
IDC	\$259,084	\$192,123	\$146,552	\$225,750	\$233,559	\$211,414	16.56%
# grants	12	13	10	10	8	10.6	
%IDC	36.80%	35.70%	33.20%	41.57%	40.30%	37.51%	
Pharmacy Health Care Administration	\$77,588	\$384,499	\$128,641	\$95,940	\$100,000	\$157,334	2.57%
IDC	\$1,625	\$63,867	\$2,448	\$10,248	\$0	\$15,638	1.22%
# grants	6	13.5	13	12	7	10.3	
%IDC	2.10%	19.90%	1.90%	11.96%	0.00%	7.17%	
Pharmacy Practice	\$905,665	\$1,238,919	\$1,318,318	\$1,782,103	\$1,980,230	\$1,445,047	23.58%
IDC	\$156,216	\$237,430	\$239,463	\$259,366	\$432,305	\$264,956	20.75%
# grants	38	33.5	37	47	31	37.3	
%IDC	20.80%	23.70%	22.20%	17.03%	27.90%	22.33%	

IDC = indirect costs

Table 14: Total Extramural Support - FY 99/00 to FY 03/04						
Dept.	99/00	00/01	01/02	02/03	03/04	Average 99-03
COLLEGE TOTAL	\$6,047,027	\$6,748,278	\$6,996,435	\$8,028,063	\$8,653,866	\$7,294,734
IDC	\$1,135,846	\$1,121,863	\$1,154,932	\$1,370,155	\$1,634,572	\$1,283,474
# grants	102	109	120	128	109	113.6
%IDC	23.10%	19.90%	19.80%	20.58%	23.29%	20.85%
RESEARCH	\$5,296,021	\$5,225,139	\$6,022,123	\$6,488,151	\$7,604,542	\$6,127,195
IDC	\$1,135,846	\$1,117,318	\$1,150,387	\$1,347,233	\$1,663,279	\$1,282,813
# grants	95	100	111	120	100	105.2
%IDC	27.30%	27.20%	23.60%	26.21%	28.00%	26.46%
ADMINISTRATION	\$751,006	\$1,523,139	\$944,312	\$1,539,912	\$1,049,324	\$1,161,539
IDC	\$0	\$4,545	\$4,545	\$22,932	\$1,292	\$6,663
# grants	7	9	9	8	9	8.4
%IDC	0.00%	0.30%	0.50%	1.51%	0.10%	0.48%

IDC= indirect costs

Outlined below in **Table 15** is a breakdown of the COP extramural support by sponsor type and number of awards for the last two fiscal years. The College’s main source of extramural support continues to be from federal dollars. Federal dollars were earmarked entirely for research purposes and showed a significant 63.1% increase in FY 03/04. State dollars were significantly decreased by 83.4% from FY 02/03 and reflects that we did not receive Tacachale funding from the Dept of Children and Families. This fiscal year extramural research support from Corporations and Companies showed a 23.1% drop in the number of awards received and a 10.6% decrease in dollars received compared to FY 02/03. Foundation and Society monies showed a 50% decrease in total dollars and a 7.4% decrease in the number of awards over FY 02/03. The College experienced a 40.8% drop in funding within the “Other” funding category from the previous year. Within this “Other” category are funds that include *Miscellaneous Donor* monies or funds in which faculty members have unrestricted use to support their individual research programs.

Table 15: Comparison by Sponsor				
Sponsor Category	FY 02/03		FY 03/04	
	# of Awards	Total Dollars	# of Awards	Total Dollars
Federal Agencies	31	\$3,469,064	34	\$5,657,503
Florida State Agencies	5	\$495,605	2	\$82,362
Corporations and Companies	52	\$2,215,008	40	\$1,979,932
Foundations & Societies	27	\$1,739,897	29	\$869,819
Other	13	\$108,489	4	\$64,250
Total Comparison	128	\$8,028,063	109	\$8,653,866

A more complete breakdown and two-year comparison of sponsor categories, number of awards and total dollars including indirect costs can be seen in **Tables 16-20**. In **Appendix B**: a complete listing of all extramural support by Department and Faculty members can be found.

Table 16: Federal Agencies Comparison						
Sponsor	FY 02/03			FY 03/04		
	Count	Total	IDC	Count	Total	IDC
NIH	28	\$3,371,828	\$890,109	33	\$5,425,323	\$1,218,792
U.S. Dept. of Agriculture				1	\$232,180	\$0
NSF	1	\$11,333	\$0			
U.S. Dept. of Veteran Affairs	2	\$85,903	\$0			
Total Federal Agencies	31	\$3,469,064	\$890,109	34	\$5,657,503	\$1,218,792

IDC = indirect costs

Table 17: State Agencies Comparison						
Sponsor	FY 02/03			FY 03/04		
	Count	Total	IDC	Count	Total	IDC
Dept. of Citrus				1	\$24,000	\$0
Univ. of South Florida	1	\$106,591	\$33,080	1	\$58,362	\$18,112
Dept. of Children & Families	1	\$324,065	\$15,432			
Dept. of Health	3	\$64,949	\$1,617			
Total Florida State Agencies	5	\$495,605	\$50,129	2	\$82,362	\$18,112

IDC = indirect costs

Table 18: Corporations and Companies Comparison						
Sponsor	FY 02/03			FY 03/04		
	Count	Total	IDC	Count	Total	IDC
Abbott GMBH & Co.	1	\$717,985	\$128,955			
Abbott Laboratories	1	\$51,240	\$10,248			
Asta Medica	1	\$4,100	\$820			
AstraZeneca	2	\$35,055	\$7,011	1	\$23,500	\$4,500
ChelaDerm	2	\$108,117	\$0	3	\$89,141	\$0
Eon Laboratories	12	\$95,000	\$10,364	9	\$79,167	\$8,061
Geltex Pharmaceuticals Corp.	3	\$656,250	\$131,250	5	\$1,093,750	\$218,750
Genzyme Corp.	2	\$68,102	\$13,620			
Glaxo Smith Kline, Inc.	11	\$166,186	\$33,237	9	\$141,425	\$22,289
Glaxo Wellcome, Inc.	2	\$1,500	\$300			
Hoffman LaRoche, Inc.				1	\$37,000	\$0
IVAX Corp.	4	\$182,383	\$31,449	2	\$236,420	\$35,834
Kendle Research Associates	4	\$66,200	\$13,240			
Merck & Company, Inc.	4	\$33,164	\$6,633	5	\$102,553	\$20,511

Table 18: Corporations and Companies Comparison (con't)						
Sponsor	FY 02/03			FY 03/04		
	Count	Total	IDC	Count	Total	IDC
Nanotherapeutics	1	\$900	\$180			
Pfizer, Inc.				1	\$37,500	\$7,500
Pharma-Forschung, Inc.				1	\$10,000	\$909
Sankyo Company, Ltd.				1	\$74,976	\$14,995
Sepracor, Inc.	1	\$22,500	\$4,500	1	\$22,500	\$4,500
West Pharmaceutical Services				1	\$32,000	\$6,400
3M Co.	1	\$6,326	\$1,265			
Total Corporations & Companies	52	\$2,215,008	\$393,072	40	\$1,979,932	\$344,249

IDC = indirect costs

Table 19: Foundations & Societies Comparison						
Sponsor	FY 02/03			FY 03/04		
	Count	Total	IDC	Count	Total	IDC
Am. Assoc. Colleges of Pharmacy				2	\$11,000	\$0
Am. Assoc. Pharm. Sci.				2	\$1,000	\$0
Am. Diabetes Association	1	\$99,130	\$12,930	1	\$100,000	\$13,043
Am. Fdtn. for Pharm. Education	4	\$33,500	\$0	5	\$29,750	\$0
Am. Heart Association - Florida	5	\$133,500	\$0	3	\$147,500	\$7,273
Am. Lung Association	1	\$36,740	\$0			
Children's Hospital New Orleans	2	\$13,896	\$2,780	1	\$13,284	\$2,656
Inst. Adv. Comm. Pharmacy	3	\$93,804	\$7,500	1	\$14,103	\$0
Juvenile Diabetes Foundation	1	\$150,000	\$13,636	1	\$150,000	\$13,636
Natl. Association Chain Drug Stores	1	\$50,000	\$0			
Natl. Kidney Foundation of Florida				1	\$20,000	\$0
Pharma Foundation	1	\$40,000	\$0			
Shands Teaching Hospital	2	\$905,527	\$0	5	\$60,182	\$1,293
Suwannee River Area AHEC	1	\$72,000	\$0	1	\$109,000	\$0
Trenton Medical Center						
UF Foundation	1	\$4,800	\$0	2	\$45,000	\$0
UF Research Foundation	4	\$107,000	\$0	3	\$99,000	\$0
United Negro College Fund				1	\$70,000	\$0
Total Foundations & Societies	27	\$1,739,897	\$36,846	29	\$869,819	\$37,902

IDC = indirect costs

Table 20: Other Comparison						
Sponsor	FY 02/03			FY 03/04		
	Count	Total	IDC	Count	Total	IDC
Miscellaneous Donors	13	\$108,489	\$0	3	\$14,250	\$0
University of Minnesota				1	\$50,000	\$15,517
Total Other	13	\$108,489	\$0	4	\$64,250	\$15,517

IDC = indirect costs

Licensing and Royalty Income

Three licensing agreements and the sale of stock generated a total of \$12,125 in revenues to the Departments of Pharmaceutics and Pharmacodynamics in the College during FY 03/04. These monies were distributed to the College as outlined in the UF IP distribution policy.

Patenting Activity

Outlined below in **Table 21** is a breakdown of the COP patenting activity by department.

Table 21: Patenting Activity			
Department/Center	Disclosures Submitted	Applications Filed	Patents Issued
Medicinal Chemistry	4	5	10
Pharmaceutics/Center for Drug Discovery	1	6	4
Pharmacodynamics	0	1	1
Pharmacy Health Care Admin./Center for Res. in Pharm. Care	0	0	0
Pharmacy Practice/Center for Pharmacogenomics	1	1	0
Total Patenting Activity	6	13	15

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 expose 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 select faculty mentors and submit grant or fellowship applications to outside funding agencies to support their research efforts. This year we had 4 professional students secure extramural stipends and research supply funds from 2 different sources.

The UF College of Pharmacy received two of fourteen **American Association of Colleges of Pharmacy (AACP) – Merck Scholarships**. Individual recipients receive a \$5,000 stipend and/or supply allowance to conduct their research activities with a faculty mentor along with an invitation to present their findings at next year's annual AACP Meeting. The recipients of the AACP – Merck Scholarship for FY 03/04 were **Ms. Kimberly Fleming** and **Mr. Keith Lowe**. Kimberly worked with Dr. Sean Sullivan, Associate Professor of Pharmaceutics on her project entitled "**Characterization of Anti-angiogenic Properties for Pigmented Epidermal Derived Growth Factor**" and

Keith worked with Dr. Sihong Song, Assistant Professor of Pharmaceutics on his project entitled “*Construction and In-vitro Evaluation of a Novel AAV Vector for Type 1 Diabetes Mellitus*”.

The College also had 6 students involved in a summer research program through the Department of Pharmacy Practice. Those students, along with their mentor and project title are listed below:

Fiadora Avramidis worked with Dr. Reggie Frye, Associate Professor in the Department of Pharmacy Practice on her project entitled “*Determination of Hypericin and Hyperforin in St. John’s Wort Extracts and Human Plasma*”.

Joy Kehoe and **Amy Klocman** worked with Dr. Julie Johnson, Professor in the Department of Pharmacy Practice on their project entitled “*CYP3A5 Polymorphisms in Verapamil Treated and Non-treated Patients*”.

Glenn Pebanco worked with Dr. Issam Zineh, Assistant Professor in the Department of Pharmacy Practice on his project entitled “*Pharmacogenetics and Inflammation in Metoprolol-treated Hypertensives*”.

Melanie Potvin worked with Dr. Reggie Frye, Associate Professor in the Department of Pharmacy Practice on her project entitled “*Mechanisms of Atypical Drug Kinetics and Interactions: In Vivo Activation of Naproxen Demethylation by Dapsone*”.

Yihua Song worked with Dr. Leslie Hendeles, Professor in the Department of Pharmacy Practice on her project entitled “*Clinical Evaluation of the Anticoagulation Service at Shands at the University of Florida*”.

NIH Short-term Research Training Program

Over the past seven years the UF College of Pharmacy has utilized the NIH Short-term Research Training Program, offered through the College of Medicine, to provide motivated pharmacy students a high quality 10-week summer research experience. The goal of this program is to guide the students in the construction of research protocols, in state-of-the-art biomedical techniques, and in the organization, critical evaluation, and presentation of their data at local and/or national scientific meetings. This program is also a mechanism to stimulate an interest in research and lead pharmacy students to consider possible careers in academic pharmacy.

This year, first and second year pharmacy students were introduced to this program through in-class formal presentations, e-mail messages and individual or group office informational sessions. Basic, clinical, epidemiological, ethical, and educational research projects were all considered appropriate as long as they were hypothesis-driven endeavors. Successful students were selected based on their academic record and letter of intent, faculty mentor commitment and the scientific merit of the research proposal. A six-member committee comprised of basic science and clinical faculty evaluated the formal student applications. Each student received \$4,328 for program support.

The COP had 5 students who submitted formal applications for the NIH summer program of which all 5 were funded. The five students, their summer research mentor and their project title are listed below:

Julio Duarte worked with Dr. Reggie Frye, Associate Professor in the Department of Pharmacy Practice on his project entitled “*Association Between Hydroxyecosatetraenoic Acids, Epoxyecosatrienoic Acids and CYP2C8 Polymorphisms and Hypertension*”.

Katherine Gaston worked with Dr. Julie Johnson, Professor in the Department of Pharmacy Practice on her project entitled “*Association Between Vitamin K Epoxide Reductase (VKOR) Gene Polymorphisms and Warfarin Resistance*”.

Amanda Hudson worked with Dr. Issam Zineh, Assistant Professor in the Department of Pharmacy Practice on her project entitled “*Association Between Renin-angiotensin-aldosterone System (RAAS) Gene Polymorphisms and Heart Failure Prognosis*”.

Matthew Stanton worked with Dr. Abraham Hartzema, Professor in the Department of Pharmacy Health Care Administration on his project entitled “*Data Management of a Quality of Life Instrument Specific for Sickle Cell Disease*”.

James Terrell worked with Dr. Jeff Hughes, Associate Professor in the Department of Pharmaceutics on his project entitled “*The Effect of GMI-liposomes on the Formation of Amyloid Plaques in APP/PS1 Transgenic Mice: An Animal Model for Alzheimer’s Disease*”.

Special Awards for Post-doctoral Fellows

Dr. Sonya Snedecor was awarded a two year fellowship sponsored by the United Negro College Fund and Merck. Dr. Snedecor is a post-doctoral fellow working with Dr. Abraham Hartzema in the Department of Pharmacy Health Care Administration to study pharmacoeconomics.

Dr. Andzej Wilczynski was awarded a Florida/Puerto Rico Affiliate American Heart Association (AHA) Post-doctoral award. Dr. Wilczynski is a post-doctoral fellow in the Department of Medicinal Chemistry working with Dr. Carrie Haskell-Luevano. He received a two-year, \$97,000 award for his project entitled “*Design, Synthesis and Characterization of Melanocortin Receptors Ligands*”.

U.S.-Thai Consortium Activities

History of the U.S.-Thai Consortium

In 1993, the University of Florida College of Pharmacy, nine other U.S. 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 which together designated the U.S.-Thai Consortium Agreement.

The mission of this U.S.-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 (Pharm.D.) or graduate (Ph.D.) study in programs in the selected U.S. 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 U.S. colleges to educate, 100 Thai faculty members (i.e., approximately 10 students per U.S. 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 U.S.-Thai Consortium. These annual meetings would be held in either Thailand or the U.S. 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; Chiang Mai, Thailand in 1998; Orlando, FL in 2000; Bangkok, Thailand in 2002; and Chicago, IL in 2004.

Current List of Thai and U.S. 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

U.S.

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

8th U.S.-Thai Pharmacy Education Consortium Meeting

The U.S.-Thai Consortium Meeting will be held September 24 and 25, 2004 in Chicago, IL.

Thai Students in the College of Pharmacy

Listed below (**Table 22**) is the current number of Thai students who have received Royal Thai Scholarships from their government to study abroad for either their Ph.D. or Pharm.D. degree. This year we did not have any new Thai students join our program. However, two Thai students (Dr. Intira Coowanitwong and Dr. Ariya Khunvichai) did graduate from our Pharmaceutics Ph.D. Program in the Fall 2003. Dr. Coowanitwong assumed a post-doctoral fellowship at the University of Maryland while Dr. Khunvichai is seeking a post-graduate position in the United States.

Table 22: Thai Students

Name	THAI Pharmacy College	Date Entered
Pharmacy Health Care Administration Ph.D. Program		
1. Ms. Penkarn Kanjanarat (Bomb)*	Chiang Mai	August, 2000
2. Mr. Sawaeng Watcharathanakij	Mahidol	August, 2002
Pharmaceutics Ph.D. Program		
3. Ms. Sasiporn Sarawek	Chiang Mai	January, 2003

* the name in parenthesis indicates the abbreviated name selected by the student

** not a Royal Thai Scholar

Visiting Faculty

During this last fiscal year the College did not have any faculty who visited Thailand nor did we have any faculty from Thailand visit us. However, within the Department of Pharmacy Health Care Administration Dr. Earlene Lipowski did have two visiting students from Thailand. Ms. Arpatat Chowwanapoonpohn was with us from January 6th to June 30th, 2003 and Ms. Arpatat Sirassamee was with us from August 12th to December 23rd, 2003.

ORGS Coordinated Events for the COP

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, post-doctoral fellows and research associates to the COP community. This year the event was held on Wednesday, September 10, 2003 in the Rion Ballroom at the Reitz Student Union from 6:00 PM to 9:00 PM. This year we had a record high of 127 people in attendance. At the reception this year we had eight new faculty members to introduce. In addition to the faculty, 11 new graduate students, 12 new post-doctoral fellows, and a number of research associates and visiting scientists were introduced to the college.

Annual Research Showcase and Awards Recognition Day

The 17th Annual Research Showcase and Awards Recognition Day took place on Thursday, April 15, 2004, at the University of Florida College of Pharmacy. A program booklet (**Appendix C**) is included that outlines the days 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. **Dr. Robert G. and Maria Bell** of Palm Harbor, Florida was the major sponsor with a \$3,500 donation. Dr. Robert Bell was formerly the Vice President of New Drug Development at Barr Laboratories and Ph.D. class of 1988. **Andrx Corporation** sponsored the poster competition with a \$1,000 donation. Our contact with Andrx was 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, pharmacy students and post-doctoral 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

- Post-doctoral Fellow Division
- Pharmacy Student Division
- Graduate Student Division

The finalists for the oral competition divisions submitted competitive abstracts that were 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 their graduate education. The **Junior Graduate Division** 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 in the areas of health outcomes research or related translational research in the clinical sciences.

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 \$600 cash award and commemorative plaque. Each of the finalists receives a \$300 cash award and a commemorative plaque.

Judges for the oral competition were: **Dr. William Cassano** (Director of Operations, Cheladerm, Inc., Department of Medicinal Chemistry, College of Pharmacy, University of Florida); **Dr. Ronald Evens** (President, MAPS 4 Biotech, Inc., Clinical Professor, Department of Pharmaceutics, College of Pharmacy, University of Florida); **Dr. Bin Liu** (Associate Professor, Department of Pharmacodynamics, College of Pharmacy, University of Florida); **Mr. Tom Munyer** (Director of Pharmacy Services, Tacachale, Department of Pharmacy Practice, College of Pharmacy, University of Florida); and **Dr. Issam Zineh** (Assistant Professor, Department of Pharmacy Practice, College of Pharmacy, University of Florida).

The winners of the oral competition are:

Senior Division – winner

Mr. Boman Irani Medicinal Chemistry \$600 cash award
Title: “*Benefits of Voluntary Exercise in Controlling Obesity and Sexual Dysfunction in Melanocortin-4 Receptor Deficient Mice.*”

Senior Division – finalist

Ms. Yan Gong Pharmaceutics \$300 cash award
Title: “*Disposition and Effects of Human Amyloid Precursor Protein Swedish Mutant in Rat Brain After rAAV2 Mediated Somatic Gene Transfer.*”

Senior Division – finalist

Mr. Srikumar Sahasranaman Pharmaceutics \$300 cash award
Title: “*Pharmacokinetic and Pharmacodynamic Evaluation of Mometasone Furoate.*”

Junior Division – winner

Mr. Aleksandar Todorovic Medicinal Chemistry \$600 cash award
Title: “*Peptide Bond Modifications of Melanocortin Agonists Result in Conversion of the Agonist into an Antagonist.*”

Junior Division – finalist

Mr. Aaron Hirko Pharmaceutics \$300 cash award
Title: “*Novel Gene Therapy for Alzheimer’s Disease.*”

Junior Division – finalist

Ms. Ke Ren Pharmaceutics \$300 cash award
Title: “*Genetic and Pharmacological Modulation of $\alpha 7$ Nicotinic Receptor.*”

Levitt Division – winner

Mr. Michael Taylor Pharmacy Health Care Administration \$600 cash award
Title: “*Surgery Versus Radiation: Is There a Difference in Prostate Cancer-specific Mortality?*”

Levitt Division – finalist

Ms. Sooyeon Kwon Pharmacy Health Care Administration \$300 cash award
Title: “*Disability and Patient Reported Outcomes in Patients with Stroke.*”

For the poster competition this year we had 23 posters from graduate students and post-doctoral fellows on display in the Reception Area of the Health Profession, Nursing and Pharmacy Building (HPNP). This year we did not have any posters submitted by pharmacy students. The posters were manned between 9:30 AM and 11:30 AM when individual judging took place. The winners of the Graduate Student Division received a \$300 cash award and a commemorative plaque. The winners of the Post-doctoral Fellow received a \$200 cash award and a commemorative plaque.

The poster judges were: **Dr. Veronika Butterweck** (Assistant Professor, Department of Pharmaceutics, College of Pharmacy, University of Florida); **Dr. Dorette Ellis** (Assistant Professor, Department of Pharmacodynamics, College of Pharmacy, University of Florida); **Dr. Jason Frazier** (Associate Professor, Department of Pharmacodynamics, College of Pharmacy, University of Florida); **Dr. Reginald Frye** (Associate Professor, Department of Pharmacy Practice, College of Pharmacy, University of Florida).

The winners of the poster competition are:

Graduate Student Division – winner

Ms. Mei Tang Pharmaceutics \$300 cash award
Title: “*rAAV1 Mediated hAAT Gene Therapy Modulated Cellular Immune Response and Prevents Type 1 Diabetes in NOD Mice.*”

Post-doctoral Fellow Division – winner

Dr. Christine Formea Pharmacy Practice \$200 cash award
Title: “*Cytochrome P450 3A4, 3A5, and P-glycoprotein as Pharmacogenomic Predictors of Tacrolimus Pharmacokinetics and Clinical Outcomes in Liver Transplant Recipients.*”

Post-doctoral Fellow Division – winner

Dr. Nicole Hebert Pharmacodynamics \$200 cash award
Title: “*High Temporal Resolution Analysis of Neurotransmitters Utilizing On-line Capillary Electrophoresis with Laser-induced Fluorescence Detection.*”

Other ORGS Activities

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 Executive Associate Dean 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; Graduate Studies Committee (GSC) Activities** for details and activities of this committee throughout the year.
- **Renovation of Existing Space:** The Executive Associate Dean served on the Pharmacy Renovation Committee as the COP representative to provide comments to the architects, engineers and construction personnel during Phase IIA of the College's renovation project of existing research space. This committee met monthly throughout the year while the 1st and 2nd floor of the College went through renovation. Pharmacodynamics faculty members, departmental and research staff, students and student members moved into the newly renovated space on floors 1 and 2 in mid-July of 2004.
- **College Space Committee:** This committee was established to prepare a written policy document on allocation and reallocation of research and office space. The committee met several times during the Fall semester and drafted a two page document that was finalized and approved by the College faculty in April of 2004. The committee will continue to meet as needed to revise policies and review any new edicts regarding the utilization of research space in the future.

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.
- **HSC Animal Advisory Committee:** This committee met several times throughout the year to discuss relevant issues related to staffing, budgetary issues and operations of the Health Science Center Animal Research Quarters.
- **Internal Advisory Board – McKnight Brain Institute (MBI):** The Executive Associate Dean served on this advisory board and assisted in drafting the mission statement for the MBI in preparation for the search for the new director of the MBI.

- **Search Committee Membership:** The Executive Associate Dean served as a member of the search committees for the Director of the McKnight Brain Institute (MBI) and the Director for the Alzheimer's Disease Center (ADC). These committees continued to meet on a regular basis throughout the year to complete the search process. Neither Director (MBI or ADC) had been finalized at the end of the academic year.

University Committees

- **Council of Graduate Deans:** This committee met once per semester 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.
- **University of Florida Community Campaign:** The Executive Associate Dean and Senior Secretary served as the faculty and staff coordinators for the College'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 2003 (September) and Spring 2004 (April) National Advisory Board Meetings.
- **AACP Annual Meeting:** The Executive Associate Dean attended the 2003 AACP Annual Meeting in Minneapolis, MN from July 20th to July 24th, 2003.
- **AACP Interim Meeting:** The Executive Associate Dean attended the 2004 AACP Interim Meeting in Washington DC from February 28th to March 2nd, 2004.
- **APhA Annual Meeting:** The Executive Associate Dean attended the 2004 APhA Annual Meeting in Seattle, WA from March 26th to March 31st, 2004.
- **86th Annual Meeting of the Endocrine Society:** The Executive Associate Dean attended the Endocrine Society Annual Meeting in New Orleans, LA from June 16th to June 19th, 2004.
- **SRA International Meeting:** The Program Assistant attended the 2003 Annual SRA International Meeting in Pittsburgh, PA from October 19th to October 22, 2003.
- **SRA Western Meeting:** The Program Assistant attended the 2004 SRA Western Section Meeting in Palm Springs, CA from May 14th to May 19th, 2004.

Appendices

Section

A = Letter to Graduate Applicants

B = Complete Listing of Extramural Support by Department and Faculty

C = 17th Annual Research Showcase and Awards Recognition Day Booklet



Dear Applicant:

Thank you for your interest in graduate education in the College of Pharmacy at the University of Florida. The College of Pharmacy currently has four major areas of graduate concentration. These areas include Medicinal Chemistry, Pharmaceutics, Pharmacodynamics and Pharmacy Health Care Administration. In your letter you did not indicate which graduate area(s) of study you are interested in.

We ask at this time that you please specify your area of research concentration. In doing this you would certainly expedite the application process and minimize the receipt of extra information about areas of research you have no interest in.

All College of Pharmacy graduate programs can be accessed on the World Wide Web (<http://www.cop.ufl.edu>). Using the WWW you would get a comprehensive review of the underlying theme of each of our graduate programs as well as the faculty and their research interests. Furthermore, you can download all application and admission forms for graduate study at the University of Florida from this web site. I strongly encourage you to utilize this source of information (WWW), as this is your most efficient mechanism to apply to one or more of the graduate programs in the College of Pharmacy.

In the event that you do not have access to the WWW, listed below is each of the Graduate Programs in the College of Pharmacy. We have included a short overview of the area of graduate concentration with the name, address, phone number and e-mail address of the respective graduate coordinator.

Graduate Program in Medicinal Chemistry

Medicinal Chemistry is a unique blend of the physical and biological sciences. The scope of the field is sufficiently broad to give students with many different science backgrounds a rewarding and challenging program of study. Areas of active research include natural products chemistry, drug delivery systems, organic synthesis of medicinal agents, metal chelate design, drug metabolism, molecular toxicology, molecular biology, analytical and forensic chemistry, molecular modeling and drug discovery. The department has excellent facilities for research in the major areas of Medicinal Chemistry and faculty have been highly successful in attracting extramural research support for the past several years.

Graduate Coordinator: Dr. Raymond Bergeron
Department of Medicinal Chemistry
PO Box 100485
College of Pharmacy, University of Florida
Gainesville, Florida 32610-0485
(352) 846-1956, E-mail: bergeron@mc.cop.ufl.edu

Graduate Program in Pharmaceutics

Research in the Pharmaceutics Department encompasses basic, applied, and clinical investigations in (i) pharmacokinetics/biopharmaceutics, (ii) pharmaceutical analysis, (iii) pharmaceutical biotechnology and drug delivery. In addition to teaching, all faculty members are involved in collaborative research projects with clinical and other basic scientists with the Health Center or on campus. Many maintain collaborative ties with scientists in other universities and the pharmaceutical industry worldwide.

Graduate Coordinator: Dr. Jeffrey Hughes
Department of Pharmaceutics
PO Box 100494
College of Pharmacy, University of Florida
Gainesville, Florida 32610-0494
(352) 846-2725, E-mail: hughes@cop.ufl.edu

Graduate Program in Pharmacy Health Care Administration

Drug therapy is the most widely used and efficacious treatment modality available for a variety of health disorders. However, problems (inappropriate prescribing, inadequate monitoring, and misuse of medication) with medication use are persistent and costly. Research and course of study in the Department of Pharmacy Health Care Administration focuses on various issues related to societal use of medications and include (i) estimating costs of drug-related morbidity and mortality, (ii) evaluating the prescribing process, medication use and related health care activities and ,(iii) examining ways to improve prescribing and use of medications in various health care systems.

Graduate Coordinator: Dr. Richard Segal
Department of Pharmacy Health Care Administration
PO Box 100496
College of Pharmacy, University of Florida
Gainesville, Florida 32610-0496
(352) 273-6268, E-mail: segal@cop.ufl.edu

Graduate Program in Pharmacodynamics

The purpose of the graduate program in Pharmacodynamics is to develop biomedical scientists with a broad knowledge in the areas of Physiology, Pharmacology, Endocrinology and Toxicology. Although the research interests of the faculty are broad, there is an emphasis on the holistic approach to drug actions in living systems. The Department has strong programs in the areas of cardiovascular, reproductive and neuroendocrine physiology and pharmacology, temperature regulation, neurobiology of aging, autonomic pharmacology, and neuropharmacology.

Graduate Coordinator: Dr. Joanna Peris
Department of Pharmacodynamics
PO Box 100487
College of Pharmacy, University of Florida
Gainesville, Florida 32610-0487
(352) 392-9768, E-mail: peris@cop.ufl.edu

Please direct any future questions or request for application materials concerning the area of study you are interested in to the graduate coordinator of the respective department listed above.

If we can be of further assistance to you please call us at (352) 273-6301. Again, thank you for your interest in our college at the University of Florida. We look forward to hearing from you and receiving your application forms.

Respectfully,



William J. Millard, Ph.D.
Executive Associate Dean
College of Pharmacy
University of Florida

Respectfully,



Deborah Kemp
Program Assistant
Office of Research and Graduate Studies
College of Pharmacy
University of Florida

Complete Listing of Extramural Support in the COP for FY 03/04

MEDICINAL CHEMISTRY

Faculty	Award Amount	Number	Agency	Project Title
Raymond Bergeron	\$1,093,750	3	Geltex Pharmaceuticals, Inc.	Polyamine Analogs, Their Synthesis & Their use as Human Pharmaceuticals.
	\$529,913	1	National Institute of Health	Oral Iron Chelators Predicated on Desferrithocin.
Carrie Haskell-Luevano	\$100,000	1	American Diabetes Association	Human Melanocortin-4 Receptor Polymorphisms and Obesity.
	\$20,000	1	American Heart Association	Structure-Activity-Relationship Studies of Pro-Opiomelanocortin Derived Peptides.
	\$47,500	1	American Heart Association	Design Synthesis & Characterization of Melanocortin Receptors Ligands.
	\$260,364	1	National Institute of Health	Characterization of Human Melanocortin-4 Receptor Polymorphisms.
	\$292,174	1	National Institute of Health	Structural Determinants of Neuroendocrine Receptors.
	\$38,355	1	National Institute of Health	Structural Determinants of Neuro-Endocrine Receptors.
	\$198,628	1	National Institute of Health	Endogenous G-Protein Coupled Receptor Antagonists.
Margaret James	\$396,888	6	National Institute of Health	Health Effects of Chlorinated Compounds: Admin. Core & Project 6.
	\$59,210	2	National Institute of Health	Bioavailability of Superfund Chemicals: Project 6 Supplement.
Laszlo Prokai	\$286,569	2	National Institute of Health	The Role of Quinol in Estrogen Neuroprotection.

PHARMACEUTICS & CENTERS FOR DRUG DISCOVERY and NEUROBIOLOGY OF AGING

Faculty	Award Amount	Number	Agency	Project Title
Veronika Butterweck	\$10,000	1	Pharma-Forschung	Initial Study on Antidepressant/Anxiolytic Activity of Neurapas (R).
Hartmut Derendorf	\$1,000	2	American Association of Pharmaceutical Sciences	American Association of Pharmaceutical Sciences Student Chapter.
	\$24,000	1	Department of Citrus	Drug Interactions with Dietary Supplements and Citrus Fruit Produce.
	\$37,500	1	Pfizer, Inc.	Cefpodoxime in Plasma and Skin Tissue.
	\$74,976	1	Sankyo Company, LTD.	PK/PD Studies of Cefpodoxime and Cefixime.
	\$232,180	1	U.S. Department of Agriculture	Grapefruit Juice-Drug Interaction.
Guenther Hochhaus	\$23,500	1	Astrazeneca, Inc.	Comparison of Free Drug Levels in Plasma & Tissue for Ciclesonide, a New Inhaled Glucocorticoid and Budesonide.
	\$79,169	9	EON Laboratories	Stability and Drug Content of Pharmaceutically Relevant Drug Formulations.
	\$64,750	1	IVAX Corporation	Efficacy and Safety of Talampanel as Adjunctive Therapy in Patients with Partial Seizures.
	\$22,500	1	Sepracor, Inc.	Assessment of Glucocorticoid Lung Targeting of a New Sepracor Glucocorticoid and its Comparison with Budesonide.
	\$32,000	1	West Pharmaceutical Services	Analysis of Quantification of Fluticasone Propionate (FP).

PHARMACEUTICS & CENTERS FOR DRUG DISCOVERY and NEUROBIOLOGY OF AGING (cont.)

Faculty	Award Amount	Number	Agency	Project Title
Jeff Hughes	\$5,000	1	American Foundation for Pharmaceutical Education	Enhanced Skin Permeation of Synthetic Matrix Metalloproteinase Inhibitor to Treat Alkali Injuries.
	\$181,302	1	National Institute of Health	Novel Treatments for Alzheimer's Disease: Project 4.
	\$58,362	1	University of South Florida	Defensins as Anti-Anthrax Agents.
Sihong Song	\$5,500	1	American Association of Colleges of Pharmacy	Merck Research Scholar Program.
	\$145,000	1	National Institute of Health	Anti-inflammatory Serpin (AAT and Elafin) Gene Transfer to Enhance Islet Transplantation.
	\$150,000	1	Juvenile Diabetes Foundation	Anti-inflammatory Serpin Gene Therapy for Preventing Type 1 Diabetes.
Sean Sullivan	\$5,500	1	American Association of Colleges of Pharmacy	Characterization of Anti-Angiogenic Properties for Pigmented Epidermal Derived Growth Factor.
	\$20,297	2	National Institute of Health	Increased INOH and Reactive Oxygen Species in Diabetic Retinopathy.
	\$43,934	1	National Institute of Health	Targeting the IGF-1 System in Retinal Angiogenesis.
Whei-Mei Wu	\$171,670	1	Ivax Corporation	Synthesis and In vitro/In vivo Evaluation of Novel Soft Anticholinergics.

PHARMACODYNAMICS

Faculty	Award Amount	Number	Agency	Project Title
Michael Katovich	\$34,761	1	National Institute of Health	AT2 Receptors in Cardiovascular Control.
	\$42,379	1	National Institute of Health	AT1 Receptor Control in Chronic Hypertension Attenuation.
	\$40,000	1	University of Florida Foundation	Katovich Pharmacodynamics Lab.
Maureen Keller-Wood	\$22,258	1	National Institute of Health	Estrogen Influences on Fetal Adrenocorticotropin.
	\$259,315	1	National Institute of Health	Control of Corticotropin During Pregnancy.
	\$268,415	1	National Institute of Health	Cortisol at MR Mediate Fetal Physiologic/Genomic Effects.
William Millard	\$123,928	1	National Institute of Health	Discovery of Novel Drugs for Alzheimer's Disease: Core D.
	\$21,767	1	National Institute of Health	Ethnic Differences in Response to Painful Stimuli.

PHARMACY HEALTH CARE ADMIN. & DUBOW FAMILY CENTER FOR RESEARCH IN PHARM. CARE

Faculty	Award Amount	Number	Agency	Project Title
Abraham Hartzema	\$5,000	1	Miscellaneous Donors	Miscellaneous Donors.
	\$70,000	1	United Negro College Fund	Merck Post-doctoral Science Research Fellowship Award.
Charles Hepler	\$9,000	1	Miscellaneous Donors	Miscellaneous Donors.
L. Douglas Ried	\$5,000	1	American Foundation for Pharmaceutical Education	Lipid Regulation and Weight Changes After Switching From Risperidone to Ziprasidone, Quetiapine or Olanzipine.
Rich Segal	\$6,000	2	American Foundation for Pharmaceutical Education	American Foundation for Pharmaceutical Education Fellowship.
	\$5,000	1	University of Florida Foundation	The Effect of Academic Detailing on COX-2 Utilization Rates.

PHARMACY PRACTICE & CENTER FOR PHARMACOGENOMICS

Faculty	Award Amount	Number	Agency	Project Title
Reginald Frye	\$54,960	1	Glaxo Smithkline	A Double-blind, Parallel, Randomized, Placebo-controlled Ascending Repeat-dose Study to Investigate GW695634X and GW678248X Safety, Tolerability and Pharmacokinetics Following Oral Administration of GW695634G to Healthy Subjects for 10 Days.
	\$399,483	2	National Institute of Health	St. John's Wort and CYP3A Metabolism in Men and Women.
	\$50,000	1	University of Minnesota	Mechanisms of Atypical Drug Kinetics and Interactions.
John Gums	\$37,000	1	Hoffmann-La Roche, Inc.	Pharmacoeconomic Project.
	\$250	1	Miscellaneous Donors	Electrolytes in Cardiovascular Disease.
Leslie Hendeles	\$13,284	1	Children's Hospital – New Orleans	A Phase I, Open-label Safety and Tolerability Study of Oral Theraclec Total in Subjects with Cystic Fibrosis.
	\$52,500	4	Glaxo Smithkline	DISKUS SAM40086.
	\$17,231	1	Glaxo Smithkline	Relative Amount of Fluticasone Delivered by HFA-MDI Through Chamber/Mask to Young Children with Asthma.
	\$7,975	2	Glaxo Smithkline	Randomized (2:1), Stratified, Double-blind, Parallel-group, Placebo-controlled, 12-Week, Multi-center Trial of Fluticasone Propionate HFA Inhalation Aerosol 88 MCG BID versus Placebo HFA Delivered via a MDI and a Valved Holding Chamber with Facemask in Pediatric Subjects with Asthma Age 24-47 Months.
	\$8,759	1	Glaxo Smithkline	Systemic Exposure to Fluticasone in Pre-school Children with Asthma.

PHARMACY PRACTICE & CENTER FOR PHARMACOGENOMICS (cont.)

Faculty	Award Amount	Number	Agency	Project Title
Leslie Hendeles (cont.)	\$94,836	4	Merck & Company, Inc.	A Double-blind, Randomized, Placebo-controlled, Multi-center, 2-period Crossover Study to Evaluate the Effect of a Single Dose of Montelukast on Exercise Induce Bronchophasm.
	\$7,717	1	Merck & Company, Inc.	A Multi-center, Randomized, Double-blind, Crossover Study Comparing the Effect of L-454560 & Placebo in Adult Patients with Chronic Asthma.
	\$99,000	3	University of Florida Research Foundation	Miscellaneous Residual.
Julie Johnson	\$13,750	1	American Foundation for Pharmaceutical Education	American Foundation for Pharmaceutical Education Clinical Pharmacy Post-PharmD. Fellowship in Biomedical Research.
	\$767,974	1	National Institute of Health	Hypertension Pharmacogenetics.
	\$12,734	1	National Institute of Health	Altered Renin Angiostensin System as Mechanism for Coronary Microvascular Dysfunction in Women.
	\$119,675	1	National Institute of Health	Beta-receptor Polymorphisms and Cardiovascular Pharmacogenomics.

PHARMACY PRACTICE & CENTER FOR PHARMACOGENOMICS (cont.)

Faculty	Award Amount	Number	Agency	Project Title
Janet Karlix	\$20,000	1	National Kidney Foundation	Metabolic Pharmacogenomics in Renal Transplant Patients.
Alan Knudsen	\$26,000	1	Shands Teaching Hospital	Drug Information and Pharmacy Resource Center.
J. Daniel Robinson	\$109,000	1	Suwannee River Area Health Education Center	Suwannee River Area Health Education Center, Inc.
Kristen Weitzel	\$14,103	1	Institute for Advancement of Community Pharmacy	Community Pharmacy Residency.
Issam Zineh	\$80,000	1	American Heart Association	Systemic Immunomodulatory Effects and Pharmacogenetics of Atorvastatin in Early Atherosclerosis.

ADMINISTRATION

Faculty	Award Amount	Number	Agency	Project Title
Michael Brodeur	\$7,022	1	Shands Teaching Hospital	Drug Information and Pharmacy Resource Center.
William J. Millard	\$89,142	3	Cheladerm, Inc.	Support the Development of the Iron Chelation Technology.
	\$27,160	3	Shands Jacksonville Medical Center	Management Fee for Contractual Agreement for Profession Services.
William H. Riffie	\$900,000	1	National Institute of Health	Extramural Research Facilities Construction Grant to Complete the Renovation of the Bottom Three Floors.

17TH ANNUAL RESEARCH SHOWCASE AND AWARDS RECOGNITION DAY

THURSDAY, APRIL 15, 2004



**UNIVERSITY OF FLORIDA
COLLEGE OF PHARMACY**

A SPECIAL THANKS TO THIS YEAR'S SPONSORS OF OUR 17TH ANNUAL RESEARCH SHOWCASE

DR. ROBERT G. AND MARIA BELL
Palm Harbor, FL

A major sponsor of this year's research showcase
Formerly Vice President for New Drug Development
Barr Laboratories
(Ph.D., Class of 1988)

ANDRX CORPORATION
Ft. Lauderdale, FL

Sponsor of the poster competition
Special thanks to Dr. Francisco Alvarez
Director, Analytical Research
(Ph.D., Class of 1981)

DR. ROBERT AND PHYLLIS LEVITT
Gainesville, FL

A very special thanks to Bob and Phyllis,
sponsors of the "Levitt Award" since 1993.
(B.S. Pharmacy, Class of 1961; Ph.D.
Psychology, Class of 1965)

SCHEDULE OF EVENTS

8:00am - 9:30am Students Set-up Poster Presentations
(Founders Gallery – ARB)

POSTER COMPETITION

9:30am - 11:30am **Poster Competition** with Students Present for Judging
(Reception Area – HPNP Building)

11:45am - 1:15pm Luncheon for Poster and Oral Judges in the Dean's
Conference Room (Room 4307 – HPNP Building)

ORAL COMPETITION

1:30pm - 1:40pm Introduction by Dr. William Millard, Executive
Associate Dean (Room G-301)

Levitt Division (20 minute presentations)

1:40pm – 2:00pm Sooyeon Kwon
2:00pm – 2:20pm Michael Taylor

Junior Division (15 minute presentations)

2:25pm - 2:40pm Aaron Hirko
2:40pm - 2:55pm Ke Ren
2:55pm - 3:10pm Aleksandar Todorovic

3:15pm - 3:30pm BREAK (15 minutes)

Senior Division (20 minute presentations)

3:30pm - 3:50pm Yan Gong
3:50pm - 4:10pm Boman Irani
4:10pm - 4:30pm Srikumar Sahasranaman

5:00pm - 7:00pm **Awards Reception** and Announcement of Division
Winners (Reception Area – HPNP Building)

ORAL COMPETITION

JUNIOR AWARD

- #1 Presenter: **Aaron Hirko**
Dept/Center: Pharmaceutics
Research Title: Novel Gene Therapy for Alzheimer's Disease.
- #2 **Presenter: Ke Ren**
Dept/Center: Pharmaceutics
Research Title: Genetic and Pharmacological Modulation of $\alpha 7$ Nicotinic Receptor Function.
- #3 Presenter: **Aleksandar Todorovic**
Dept/Center: Medicinal Chemistry
Research Title: Peptide Bond Modifications of Melanocortin Agonists Result in Conversion of the Agonist into an Antagonist.

LEVITT DIVISION

- #1 Presenter: **Sooyeon Kwon**
Dept/Center: Pharmacy Health Care Administration
Research Title: Disability and Patient Reported Outcomes in Patients with Stroke.
- #2 Presenter: **Michael Taylor**
Dept/Center: Pharmacy Health Care Administration
Research Title: Surgery Versus Radiation: Is There a Difference in Prostate Cancer-specific Mortality?

SENIOR DIVISION

- #1 Presenter: **Yan Gong**
Dept/Center: Pharmaceutics
Research Title: Disposition and Effects of Human Amyloid Precursor Protein Swedish Mutant in Rat Brain After rAAV2 Mediated Somatic Gene Transfer.
- #2 Presenter: **Boman Irani**
Dept/Center: Medicinal Chemistry
Research Title: Benefits of Voluntary Exercise in Controlling Obesity and Sexual Dysfunction in Melanocortin-4 Receptor Deficient Mice.
- #3 Presenter: **Srikumar Sahasranaman**
Dept/Center: Pharmaceutics
Research Title: Pharmacokinetic and Pharmacodynamic Evaluation of Mometasone Furoate.

POSTER COMPETITION

- # 1 **Effect of CYP2D6 and Metoprolol Pharmacokinetics on Adverse Effects.**
Authors: A. Beitelshes, A. Gaedigk, J. Leeder, K. Eberst, B. Timmerbeil, M. Lobmeyer, D. Pauly, J. Johnson
Department: Pharmacy Practice
Presenter: Amber Beitelshes (Postdoctoral Fellow)
- # 2 **Targeting DNA-PK by siRNA to Study AAV Replication.**
Authors: Y-K. Choi, S. Song
Department: Pharmaceutics
Presenter: Young-Kook Choi (Postdoctoral Fellow)
- # 3 **Cytochrome P450 3A4, 3A5, and P-glycoprotein as Pharmacogenomic Predictors of Tacrolimus Pharmacokinetics and Clinical Outcomes in Liver Transplant Recipients.**
Authors: C. Formea, T. Luu, A. Albekairy, H. Yarandi, T. Langae, V. Greene, S. Fujita, A. Hemming, R. Howard, A. Reed, J. Karlix
Department: Pharmacy Practice
Presenter: Christine Formea (Postdoctoral Fellow)
- # 4 **High Temporal Resolution Analysis of Neurotransmitters Utilizing On-line Capillary Electrophoresis with Laser-induced Fluorescence Detection.**
Authors: N. Hebert, J. Peris
Department: Pharmacodynamics
Presenter: Nicole Hebert (Postdoctoral Fellow)
- # 5 **Functional Human Alpha 1 Antitrypsin Secreted from Muscle Transduced by Adeno-associated Virus (rAAV1) Vector.**
Authors: Y. Lu, M. Compbell-Thompson, C. Li, T. Flotte, S. Song
Department: Pharmaceutics
Presenter: Yuanqing Lu (Postdoctoral Fellow)
- # 6 **Gene Delivery using Modified Poly-ethylenimines.**
Authors: G. Rao, R. Tsai, J. Hughes
Department: Pharmaceutics
Presenter: Gururaj Rao (Postdoctoral Fellow)

POSTER COMPETITION (cont.)

- # 7 **Ontogeny of Glucocorticoid and Mineralcorticoid Receptors in Fetal and Neonatal Lung and Kidney.**
Authors: M. von Reitzenstein, C. Wood, M. Keller-Wood
Department: Pharmacodynamics
Presenter: Marcela von Reitzenstein (Postdoctoral Fellow)
- # 8 **NMR Structure of the Agouti-related Protein (AGRP) – Derived Antagonist at the Melanocortin Receptors 3 and 4.**
Authors: A. Wilczynski, X. Wang, R. Bauzo, Z. Xiang, R. Thirumoorthy, A. Edison, N. Richards, C. Haskell-Luevano
Department: Medicinal Chemistry
Presenter: Andrzej Wilczynski (Postdoctoral Fellow)
- # 9 **The Angiotensin AT2 Receptor Attenuates the Vascular Response to Angiotensin II During Pregnancy.**
Authors: C. Beck, M. Katovich
Department: Pharmacodynamics
Presenter: Caren Beck (Graduate Student)
- # 10 **Targeted Drug-delivery to HIV-reservoir Cells with Immunoliposomes.**
Authors: W. Driessen, R. Gieseler, G. Marquitan, M. Hahn, L. Perdon, M. Scolaro, S. Sullivan
Department: Pharmaceutics
Presenter: Wouter Driessen (Graduate Student)
- # 11 **Cost-effectiveness of Nesiritide Versus Dobutamine in Patients with Acutely Decompensated Heart Failure.**
Authors: T. Gerhard, I. Zineh, A. Hartzema, A. Winterstein
Department: Pharmacy Health Care Administration
Presenter: Tobias Gerhard (Graduate Student)
- # 12 **Design and Synthesis of Non-peptide Urea, Characterized at the Mouse Melanocortin Receptors.**
Authors: C. Joseph, R. Bauzo, Z. Xiang, C. Haskell-Luevano
Department: Medicinal Chemistry
Presenter: Christine Joseph (Graduate Student)

POSTER COMPETITION (cont.)

13 Cost Effectiveness Analysis of Aspirin for Secondary Stroke Prevention in Patients with Atrial Fibrillation.

Authors: P. Kanjanarat
Department: Pharmacy Health Care Administration
Presenter: Penkarn Kanjanarat (Graduate Student)

14 Cost-benefit of Hydroxyurea for the Treatment of Sickle Cell Disease.

Authors: D. Mayhew
Department: Pharmacy Health Care Administration
Presenter: Dionne Mayhew (Graduate Student)

15 An Economic Model to Assess the Cost Effectiveness of Treating Asthmatics with Gastroesophageal Disease.

Authors: H. Nyanteh, C. Schiller, S. Sednecor, A. Hartzema
Department: Pharmacy Health Care Administration
Presenter: Harry Nyanteh (Graduate Student)

16 The Effect of Cholesterol Lowering Therapy on Coronary Heart Disease in a Diabetic Medicaid Population.

Authors: K. Schiller, H. Nyanteh
Department: Pharmacy Health Care Administration
Presenter: K. Cameron Schiller (Graduate Student)

17 Pharmacokinetics and Pharmacodynamics of Ciprofloxacin in Modeled Microgravity.

Authors: E. Schuck, M. Grant, L. Putcha, H. Derendorf
Department: Pharmaceutics
Presenter: Edgar Schuck (Graduate Student)

18 Alterations in Ghrelin-induced Food Intake and Growth Hormone Secretion in Melanocortin 3 and 4 Receptor Knockout Mice.

Authors: A. Shaw, B. Irani C. Haskell-Luevano, W. Millard
Department: Pharmacodynamics
Presenter: Amanda Shaw (Graduate Student)

POSTER COMPETITION (cont.)

19 rAAV1 Mediated hAAT Gene Therapy Modulate Cellular Immune Response and Prevents Type 1 Diabetes in NOD Mice.

Authors: M. Tang, S. Song.
Department: Pharmaceutics
Presenter: Mei Tang (Graduate Student)

#20 Development of Brain Tumor Organotypic Culture Model for Characterizing Polymer Plasmid DNA Mediated Gene Transfer.

Authors: N. Toussaint, S. Kearns, B. Scheffler, R. Mandel, D. Steindler, A. Yachnis, S. Sullivan
Department: Pharmaceutics
Presenter: Nathalie Toussaint (Graduate Student)

#21 Control of Cytotoxic Gene Expression by Rat Glioma Cells Transformed with Mifepristone Inducible Gene Switch.

Authors: L. Villegas, S. Sullivan
Department: Pharmaceutics
Presenter: Leah Villegas (Graduate Student)

#22 Blood Pressure Medication Compliance and Depressive Symptoms Among Patients with Coronary Artery Disease.

Authors: S. Watcharathanakij, S. Pinto, L. Ried
Department: Pharmacy Health Care Administration
Presenter: Sawaeng Watcharathanakij (Graduate Student)

#23 The Economic Burden of Hyperphosphatemia-related End Stage Renal Disease in Florida Medicaid Patients.

Authors: A. White
Department: Pharmacy Health Care Administration
Presenter: Annesha White (Graduate Student)

JUDGES

ORAL COMPETITION

Dr. William Cassano

Director of Operations, Cheladerm, Inc.
Department of Medicinal Chemistry
College of Pharmacy
University of Florida

Dr. Ronald Evens

President, MAPS 4 Biotec, Inc.
Clinical Professor, Department of Pharmaceutics
College of Pharmacy
University of Florida

Dr. Bin Liu

Associate Professor
Department of Pharmacodynamics
College of Pharmacy
University of Florida

Dr. Tom Munyer

Director of Pharmacy Services, Tacachale
Department of Pharmacy Practice
College of Pharmacy
University of Florida

Dr. Issam Zineh

Assistant Professor
Department of Pharmacy Practice
College of Pharmacy
University of Florida

JUDGES

POSTER COMPETITION

Dr. Veronika Butterweck

Assistant Professor
Department of Pharmaceutics
College of Pharmacy
University of Florida

Dr. Dorette Ellis

Assistant Professor
Department of Pharmacodynamics
College of Pharmacy
University of Florida

Dr. Jason Frazier

Associate Professor
Department of Pharmacodynamics
College of Pharmacy
University of Florida

Dr. Reginald Frye

Associate Professor
Department of Pharmacy Practice
College of Pharmacy
University of Florida