

Office of Research and Graduate Studies

2006  **2007**

Annual Report

**University of Florida
College of Pharmacy**

Office of Research and Graduate Studies Staff

William J. Millard, Ph.D.

Executive Associate Dean
Professor, Department of Pharmacodynamics

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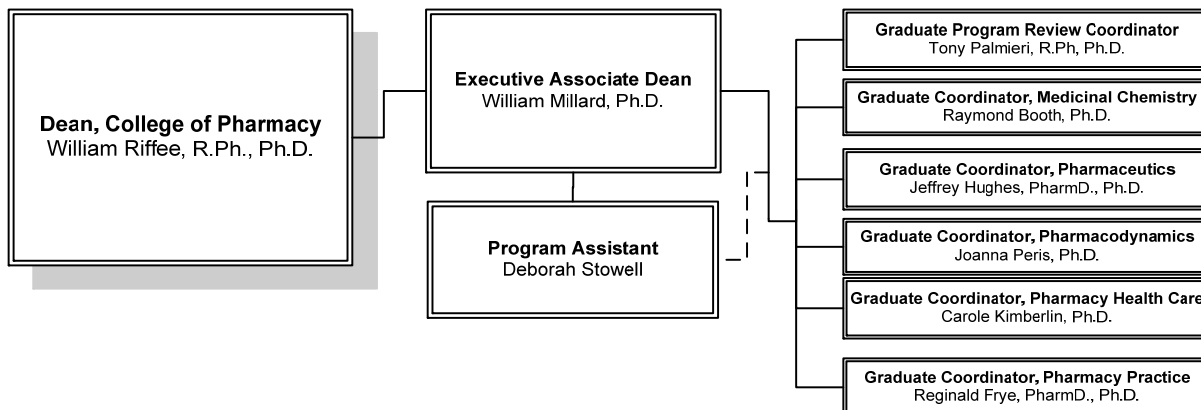
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Introduction

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, Professor in the Department of Pharmacodynamics, accepted the role as Associate Dean for Research and Graduate Studies 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 for the College of Pharmacy and as part of this position 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.

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 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 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 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. Since June 2001 the ORGS Program Assistant has been Ms. Deborah Stowell. The Program Assistant's role is to handle the daily operations of the ORGS. 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 as well as dealing individually with graduate students and assisting them with various problems and graduate course registration. A major responsibility of the Program Assistant is to coordinate the various functions of the ORGS as well as the tracking and filing of new and ongoing research grants.

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

Graduate Education and Program Activities

Graduate Programs in the College of Pharmacy

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 Ph.D. track within the Pharmaceutics graduate program in the Fall of 2004. This 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 the departments of Medicinal Chemistry, Pharmaceutics, and Pharmacodynamics requires each student to prepare and defend a thesis as part of their degree. Pharmacy Health Care Administration has the option of a thesis or 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. To assist the ORGS in the management of graduate activities in the College, the Graduate Studies Committee (GSC) was established.

The University of Florida online [Forensic Science Program](#) has been designed to meet the needs of today's working professionals. The **Forensic Science Program** consists of four areas of concentration, Forensic Toxicology, Forensic Drug Chemistry, Forensic DNA & Serology and Forensic Science. Within each concentration the program offers a Master's Degree or a Certificate. The Toxicology concentration is provided by the College of Veterinary Medicine while the Drug Chemistry, DNA & Serology, and Forensic Science concentrations are provided by the College of Pharmacy.

The first **Forensic Science Program** online course to be taught was Forensic Toxicology in the Fall of 2000 with only 30 enrollees. Currently, there are over 550 enrollments each semester representing 350 students from 24 different countries. In Spring 2006, the **Forensic Science Program** was recognized by the [American Distance Education Consortium](#) with the National Award for Excellence in Distance Education.

In FY 05/06 the Department of Pharmacy Healthcare Administration initiated an online [Pharmacy Regulation and Policy](#) Master of Science program that provides the necessary credentials for practitioners who want to understand the law better and speak more authoritatively in the workplace when issues of law and regulations arise. This unique masters program is also a career pathway for people who are interested in regulatory or policy-making careers with pharmacy corporations, government agencies, professional associations, managed care organizations, or industry.

Currently, **Pharmacy Regulation and Policy Program** has 44 enrollments with the first class of M.S. students to graduate in Spring 2008.

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 departments and the **President of the COP Graduate Student Organization**. Beginning April 2007, Dr. Tony Palmieri, Clinical Assistant Professor in the Department of Pharmaceutics, was asked to join the GSC to head-up the College's program review. 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 Committee were:

Non-voting Chair:	Dr. William Millard	Office of Research and Graduate Studies
Non-voting Secretary:	Ms. Deborah Stowell	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
	Dr. Tony Palmieri	Pharmaceutics
	Dr. Reginald Frye	Pharmacy Practice
	Ms. Krista Wilson	President of COP Graduate Student Organization
Ex-officio Member:	Dr. William Riffée	Dean

The GSC met nine times throughout the year. Some of the issues that were deliberated included:

- Selection of the FY 06/07 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 20th Annual Research Showcase and Awards Recognition Day
- Preparation for external review of each of the four graduate specialties in the College during FY 07/08

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 (1-2 per year) and also sits in on the Graduate Studies Committee as a voice for the graduate students. **Ms. Krista Wilson**, from the department of 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 Faculty, Graduate Student, Post-doctoral Fellow, Visiting Scholar and Exchange Student Demographics

The College has 44 graduate faculty members who are closely involved in the training of all graduate students, post-doctoral 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**. Ninety-four graduate students were engaged in studies leading to either the M.S. or Ph.D. degree this year. The COP graduated fourteen Ph.D. students and one M.S. Student (see below: **Graduate Student Graduation Activities**). The COP accepted 18 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. This year the number of male students compared to female students was an equal split for a 50/50 percent ratio. The college has a 34/66 percent American/Foreign student ratio as well.

U.S. minority students comprised 9% (8 of 94) of the COP graduate student population (**Table 3**) which is the same as last year and slightly lower than the three previous years before that. The minority graduate student percentage was 9% (8 of 94) in FY 05/06; 13.2% (12 of 91) in FY 04/05; 13.9% (11 of 79) in FY 03/04; 13.2% (10 of 76) in FY 02/03; and 14.5% (11 of 76) in FY 01/02. Distribution of graduate students among the four degree-granting departments is illustrated in **Table 4**. Again this year the Department of Pharmaceutics had the highest number of graduate students with 42. Pharmacy Health Care Administration had 22 students, Medicinal Chemistry had 20 students and Pharmacodynamics had 10 students pursuing graduate degrees. GPA and graduate program entrance test scores for both the entire population of COP graduate students and the entering class of 06/07 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**.

Noteworthy is that the COP Ph.D./M.S. graduate program had 2 students leave the graduate program in FY 07/08. This represents only an attrition rate of 3.2% (3 of 95). One student left the program for academic reasons in Pharmaceutics and one student left the program for personal reasons in Medicinal Chemistry.

Table 1: Graduate Faculty		
Department/Center	Faculty Name	
Medicinal Chemistry	Raymond Bergeron	Hendrik Luesch
	Raymond Booth	Kenneth Sloan
	Carrie Haskell-Luevano	Ian Tebbett
	Margaret James	Donna Wielbo
Pharmaceutics/ Center for Drug Discovery & Center for Drug Interaction Research and Education	Nicholas Bodor	Jeffrey Hughes
	Veronika Butterweck	Cary Mobley
	Hartmut Derendorf	Sihong Song
	Guenther Hochhaus	Sean Sullivan
Pharmacodynamics	Dorette Ellis	Michael Meldrum
	Jason Frazier	William Millard
	Michael Katovich	Joanna Peris
	Maureen Keller-Wood	William Riffie
	Bin Liu	
Pharmacy Health Care Admin/ Center for Research in Pharmaceutical Care	Donna Berardo	Earlene Lipowski
	David Brushwood	L. Douglas Ried
	Abraham Hartzema	Richard Segal
	Teresa Kauf	Almut Winterstein
	Carole Kimberlin	
Pharmacy Practice/ Center for Pharmacogenomics	Paul Doering	Larry Lopez
	Reginald Frye	Susan Marino
	Leslie Hendeles	Michael McKenzie
	Julie Johnson	J. Daniel Robinson
	Taimour Langae	Issam Zineh

Table 2: Graduate Students					
Department/Center	Name	Date Entered	Expected Grad Date	Degree Sought	Mentor
Pharmacodynamics	Bhatia, Chinki	Aug. 04	May. 08	Ph.D.	Frazier
	Dismuke, Michael *	Aug. 06	May. 11	Ph.D.	Ellis
	Dutta, Garima *	Aug. 06	May. 11	Ph.D.	Peris
	Kasper, James *	Aug. 06	May. 11	Ph.D.	Peris
	Lingis, Melissa	Aug. 04	May. 08	Ph.D.	Keller-Wood
	Li, Zhimin	Aug. 04	May. 08	Ph.D.	Peris
	Mao, Haoyu	Aug. 04	May. 08	Ph.D.	Liu
	Qi, Yanfei	Aug. 05	May. 09	Ph.D.	Peris
	Sharma, Heera *	Aug. 06	May. 11	Ph.D.	Peris
	Shenoy, Vinayak	Aug. 05	May. 09	Ph.D.	Katovich

Table 2: Graduate Students (cont.)

Department/Center	Name	Date Entered	Expected Grad Date	Degree Sought	Mentor
Medicinal Chemistry	Benedet, John *	Aug. 06	Left Prog.	Ph.D.	James
	Haslach, Erica *	Aug. 06	May. 11	Ph.D.	Bergeron
	Jiang, Yi	Jan. 05	Dec. 08	Ph.D.	Bergeron
	Kwan, Jason	Aug. 05	May. 09	Ph.D.	Bergeron
	Li, Wenjun *	Aug. 06	May. 11	Ph.D.	James
	Majumdar, Susruta **	Aug. 02	Aug. 06	Ph.D.	Sloan
	Malini, Devarajan Hema *	Aug. 06	May. 11	Ph.D.	Sloan
	Merritt, Kristen	Aug. 02	Aug. 07	Ph.D.	James
	Nyagode, Betty	Aug. 02	Aug. 07	Ph.D.	James
	Palusak, Ryan **	Jan. 05	Dec. 06	M.S.	Haskell-Luevano
	Proneth, Bettina	Jan. 04	Dec. 08	Ph.D.	Haskell-Luevano
	Rivera-Portalatin, Nilka **	Jan. 03	Dec. 06	Ph.D.	Prokai
	Sacco, James **	Aug. 01	Aug. 06	Ph.D.	James
	Sun, Zhuming	Aug. 05	May. 09	Ph.D.	Bergeron
	Taori, Kanchan	Jan. 06	Dec. 10	Ph.D.	Luesch
	Thomas, Joshua **	Aug. 01	Aug. 06	Ph.D.	Sloan
	Travers, Sean *	Aug. 06	May. 11	Ph.D.	Bergeron
	Wang, Xiaoli **	Aug. 02	Aug. 06	Ph.D.	Prokai
	Wilson, Krista	Aug. 03	Dec. 07	Ph.D.	Haskell-Luevano
	Yao, Hua	Aug. 01	Aug. 07	Ph.D.	Bergeron
Pharmacy Health Care Admin./Center for Research In Pharmaceutical Care	Al-Khars, Ibrahim *	Aug. 06	May. 11	Ph.D.	Kimberlin
	Ali, Ayad	Aug. 05	Aug. 07	M.S.	Hartzema
	Allen, Mark	Aug. 05	May. 09	Ph.D.	Kimberlin
	Balding, Diane	Aug. 00	May. 08	Ph.D.	Ried
	Ballentine, Amanda **	Aug. 02	Aug. 06	Ph.D.	Lipowski
	Campbell, Caren	Jan. 07	May. 10	M.S.	Kimberlin
	Chen, Chih-Ying	Aug. 04	May. 08	Ph.D.	Segal
	Douglas, Charles	Aug. 05	May. 09	Ph.D.	Kimberlin
	Garman, Patrick	Aug. 04	May. 08	Ph.D.	Ried
	Gerhard, Tobias **	Aug. 02	May. 07	Ph.D.	Winterstein
	Ghandi, Pranav *	Aug. 06	May. 11	Ph.D.	Kimberlin
	Hampp, Christian	Aug. 04	May. 08	Ph.D.	Segal
	He, Jinghua	Aug. 05	May. 09	Ph.D.	Kimberlin
	Hsu, Chienning	Aug. 04	May. 08	Ph.D.	Segal
	Hwang, Jae-Min	Aug. 03	Dec. 07	M.S.	Winterstein
	Mueller, Michael	Aug. 01	May. 08	Ph.D.	Kimberlin
	Murkherjee, Kumar	Aug. 04	May. 08	Ph.D.	Segal
	Onyenwenyi, Ahunna	Aug. 03	May. 08	Ph.D.	Segal
	Ritho, Jane	Aug. 05	May. 09	Ph.D.	Kimberlin
	Shetty, Namrata	Aug. 05	May. 09	Ph.D.	Kimberlin
Telfair, Tamara	Aug. 02	Dec. 07	Ph.D.	Hartzema	
Watcharathanakij, Sawaeng	Aug. 02	May. 08	Ph.D.	Segal	

Table 2: Graduate Students (cont.)

Department/Center	Name	Date Entered	Expected Grad Date	Degree Sought	Mentor
Pharmaceutics/ Center for Drug Discovery & Center for Drug Interaction Research and Education	Barbour, April	Aug. 05	May. 10	Ph.D.	Derendorf
	Castro, Whocely **	Aug. 02	Dec. 06	Ph.D.	Derendorf
	Driessen, Wouter **	Aug. 03	May. 07	Ph.D.	Sullivan
	Ghobrial, Oliver	Aug. 04	Aug. 08	Ph.D.	Derendorf
	Goyal, Navinkumar	Aug. 04	Aug. 08	Ph.D.	Hochhaus
	Grimstein, Christian	Jan. 05	Dec. 09	Ph.D.	Song
	Grundmann, Oliver	Aug. 04	Aug. 08	Ph.D.	Butterweck
	Hassan, Am Mahbub	Aug. 05	May. 10	Ph.D.	Hughes/Hochhaus
	Hirko, Aaron **	Aug. 01	Aug. 06	Ph.D.	Hughes
	Li, Hong	Aug. 04	Aug. 08	Ph.D.	Song
	Li, Yanjun	Aug. 04	Aug. 08	Ph.D.	Derendorf
	Liu, Jiang	Aug. 05	May. 10	Ph.D.	Derendorf
	Mudunuri, Keerti	Jan. 04	Aug. 08	Ph.D.	Hochhaus
	Patel, Gina	Aug. 05	May. 10	Ph.D.	Hochhaus
	Phipps, Stephen	Aug. 04	Aug. 08	Ph.D.	Butterweck
	Pinto, Elanor	Aug. 03	Dec. 07	Ph.D.	Hochhaus
	Potocka, Elizabeth	Aug. 04	Aug. 08	Ph.D.	Derendorf
	Sahre, Martina	Jan. 07	May. 11	Ph.D.	Butterweck
	Sarawek, Sasiporn	Jan. 03	Dec. 07	Ph.D.	Butterweck
	Schmidt, Stephan	Aug. 05	May. 10	Ph.D.	Derendorf
	Shi, Rong *	Aug. 06	May. 11	Ph.D.	Hughes
	Tang, Mei **	Aug. 02	Dec. 06	Ph.D.	Song
	Tayab, Zia	Aug. 03	Left Prog.	Ph.D.	Hochhaus
	Toussaint, Nathalie **	Aug. 02	May. 07	Ph.D.	Sullivan
	Vanachayangkul, Pattaraporn	Aug. 04	Aug. 08	Ph.D.	Butterweck
	Villegas, Leah	Aug. 02	Aug. 07	Ph.D.	Sullivan
	Wang, Nasha	Aug. 04	Aug. 08	Ph.D.	Hochhaus
Wang, Zhaohua *	Aug. 06	May. 11	Ph.D.	Hughes	
Weide, Michael	Aug. 06	May. 11	Ph.D.	Hughes	
Wu, Kai **	Aug. 02	Dec. 06	Ph.D.	Hochhaus	
Xu, Jian	Aug. 05	May. 10	Ph.D.	Hughes	
Yadava, Preeti **	Aug. 02	May. 07	Ph.D.	Hughes	
Zdrojewski, Immo	Aug. 03	Dec. 07	Ph.D.	Derendorf	
Clinical Pharmaceutical Science Track: Department of Pharmacy Practice and Center for Pharmacogenomics	Dravid, Prajakta	Aug. 04	Aug. 08	Ph.D.	Frye
	Duarte, Julio *	Aug. 06	May. 11	Ph.D.	Johnson
	Le, Myphuong	Aug. 05	May. 10	Ph.D.	Johnson
	Lobmeyer, Maximilian	Aug. 04	Aug. 08	Ph.D.	Johnson
	Mohamed, Mohamed	Aug. 05	May. 10	Ph.D.	Frye
	Navare, Hrishikesh	Aug. 05	May. 10	Ph.D.	Johnson
	Potvin, Melonie *	Aug. 06	May. 11	Ph.D.	Johnson
	Price, Elvin	Aug. 04	Aug. 09	Ph.D.	Zineh
Schentrup, Anne	Aug. 04	May. 08	Ph.D.	Johnson	

* new students entering a graduate program during FY 06/07

** students who graduated with an M.S. or Ph.D. during FY 06/07

Table 3: Graduate Student Demographics

Gender	Citizenship						American Minority					
	United States		Foreign		Black		Hispanic		Asian			
	#	%	#	%	#	%	#	%	#	%		
TOTAL	94		32	34.0%	62	66.0%	3	3.2%	3	3.2%	2	2.1%
Male	47	50.0%	15	31.9%	32	68.1%	1	2.1%	1	2.1%	0	0.0%
Female	47	50.0%	17	36.2%	30	63.8%	2	4.3%	2	4.3%	2	4.3%

Table 4: Graduate Students, Fellows, Visiting Scholars and Exchange Students

Department/Center	Graduate Students	Post-doctoral Fellows	Visiting Scholars	Exchange Students
Medicinal Chemistry	20	11	2	0
Pharmaceutics/CDD & CDIR&E	42	5	0	2
Pharmacodynamics	10	3	0	0
Pharmacy Health Care Admin./CRPC	22	0	0	2
Pharmacy Practice/CPG	No Grad. Prog.	6	1	0
COLLEGE TOTAL	94	25	3	4

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 (94)*	3.42	515	699	1214	104	49
FY 06/07 Class (18)	3.36	528	699	1227	127	48

* numbers in parenthesis denote student population

Table 6: Post-doctoral Fellows and Visiting Scholars

Department/Center	Name	Mentor	Home Country
Medicinal Chemistry	Bharti, Neelam	Bergeron	India
	Fang, Lijuan	Booth	Canada
	Juntunen, Juha-Mati	Sloan	Finland
	Liu, Yanxia	Luesch	China
	Matthew, Susan	Luesch	India
	McManis, James	Bergeron	USA
	Rouzaud, Francois	Haskell-Luevano	France
	Shih, Hea-Soon	James	South Korea
	Singh, Shailendra	Bergeron	India
	Sivendran, Sashikala	Booth	Sri Lanka
	Wilczynski, Andrzej	Booth	Poland
	Witek, Rachel	Haskell-Luevano	USA
	Xiang, Zhimin	Haskell-Luevano	China
	Pharmaceutics/ Center for Drug Discovery & Center for Drug Interaction Research and Education	Choi, Young-kook	Song
Kumar, Vipul		Derendorf	India
Lu, Yuanqing		Song	China
Talcott, Susanne		Derendorf	Germany
Zhang, Bin		Song	China

Table 6: Post-doctoral Fellows and Visiting Scholars (cont.)			
Department/Center	Name	Mentor	Home Country
Pharmacodynamics	Feng, Bihua	Keller-Wood	China
	Grobe, Justin	Katovich	USA
	Zarikova, Alevtina	Peris	Russia
Pharmacy Practice/ Center for Pharmacogenomics	Anderson, Shawn	Gums	USA
	Arrendale, Justin	Taylor	USA
	Brunner, Martin	Johnson	Australia
	Cherian, Sonia	Robinson	USA
	Niu, Yuxin	Johnson	China
	Pacanowski, Michael	Johnson	USA
	Shin, Jaekyu	Johnson	South Korea

PharmD/Ph.D. Students in Graduate Programs in the College

The University of Florida, College of Pharmacy offers a [joint Doctor of Pharmacy \(PharmD\) and Doctor of Philosophy \(Ph.D.\) degree](#) program for qualified Doctor of Pharmacy students who are interested in accelerated graduate studies. The purpose of this program is to prepare clinically oriented pharmaceutical scientists. Through the selection of appropriate graduate level courses and attainment of research skills and experience through research clerkships, students in the Doctor of Pharmacy program can receive advanced standing in one of the graduate pharmaceutical science disciplines in the College of Pharmacy. The joint degree program enables students to attain both degrees within a time frame of approximately nine years of study from the beginning of college. This includes at least two years of prepharmacy studies, four years of professional education, and approximately three to four years of graduate studies.

Because of the increasing interest of our PharmD students in the Clinical Pharmaceutical Sciences Program in our Departments of Pharmacy Practice and Pharmaceutics (see page 2), we have experienced a resurgence of the PharmD/PhD program in recent years. Until now the COP has had only one person complete the PharmD/Ph.D. track (Dr. Michael Taylor, May 2005 in our PHCA Department). Currently we have a total of four students PharmD/PhD students completing the joint degree program. Four students have completed their PharmD curriculum and now have entered the Ph.D. program and two students whom are currently finishing their PharmD degree and will enter the Ph.D. portion of the joint program in the next year or so. A complete listing of PharmD/Ph.D. students is listed below (**Table 7**).

Table 7: PharmD/Ph.D. Students Engaged in COP Graduate Programs			
Student Name	Department/Program	Expected Graduation Year	
		PharmD	Ph.D.
Completing the Ph.D.:			
Dr. Anne Schenturp	Pharmacy Practice/CST*	2004**	2008
Dr. Elvin Price	Pharmacy Practice/CST	2004**	2009
Dr. Julio Duarte	Pharmacy Practice/CST	2006**	2010
Dr. Melanie Potvin	Pharmacy Practice/CST	2006**	2010
Completing the PharmD Degree:			
Ms. Mariellen Moore	Pharmacy Practice/CST	2007	2011
Ms. Heather Davis	Pharmacy Practice/CST	2007	2011
Mr. Jason Karnes	Pharmacy Practice/CST	2008	2012
Mr. Daniel Gonzalez	Pharmacy Practice/CST	2008	2012

* CST= Clinical Scientist tract

** = Completed PharmD

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.

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.

Graduate student application activity for FY 06/07 for each of the departments is illustrated in **Table 8**. The College received 163 completed applications. Of the 163 completed applications received by the departments, only 21 (or 12.9%) of the applicants were accepted, of which 16 students (or 76.2% of the potential students) will enter our graduate programs for FY 07/08.

Department	# Completed Applications	# Applications Accepted	% Accepted	# Applicants Entered	% Entered
Medicinal Chemistry	42	7	16.7%	3	42.9%
Pharmaceutics	83	8	9.6%	8	100.0%
Pharmacodynamics	17	3	17.6%	2	66.7%
Pharmacy Health Care Admin.	21	3	14.3%	3	100.0%
COLLEGE TOTAL	163	21	12.9%	16	76.2%

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 the college hosted 4 students with three quarters of them coming from Germany (**Table 9**).

Department	Student Name	Mentor	Home Country
Pharmaceutics/ Center for Drug Discovery & Center for Drug Interaction Research and Education	Kluxen, Felix	Derendorf	Germany
	Spalthoff, Veronica	Derendorf	Germany
Pharmacy Health Care Admin./ Center for Research in Pharm. Care	Rahnavard, Farzad	Ried	Germany
	Llomaki, Jenni	Hartzema	Finland

Graduate Student Graduation Activities

During this academic year the COP had fourteen students finish their graduate program and earn a Ph.D. degree and one who earned a Master's degree. The graduates according to commencement date were:

Ph.D. in Pharmaceutical Science Degrees Conferred

AUGUST 2006 (SUMMER COMMENCEMENT)

Name: **Dr. Amanda Ballentine**
Dissertation Title: *Measuring Organizational Sponsorship Credibility: The Application of Source Credibility Theory in Determining the Most Effective Advocacy Advertisement Sponsor*
Faculty Mentor: Dr. Earlene Lipowski, Associate Professor
Department: Pharmacy Health Care Administration
Previous Degree: PharmD, University of Texas

Dr. Ballentine is currently looking for employment in pharmaceutical marketing regulation.

Name: **Dr. Aaron Hirko**
Dissertation Title: *Peripheral Expression of Plasma Gelsolin as a Treatment for Alzheimer's Disease*
Faculty Mentor: Dr. Jeffrey Hughes, Associate Professor
Department: Pharmaceutics
Previous Degree: B.S. in Human Nutrition, University of Florida

Dr. Hirko assumed a post-doctoral position at the University of Pittsburgh.

Name: **Dr. Susruta Majumdar**
Dissertation Title: *Prodrug Strategies Aimed at Improving Topical Delivery of Drugs Using the N-alkyl-N-alkyloxy-carbonylaminomethyl (NANOCAM) Promoeity*
Faculty Mentor: Dr. Kenneth Sloan, Professor
Department: Medicinal Chemistry
Previous Degree: M.S. in Chemistry, University of Delhi, India

Dr. Majumdar assumed a post-doctoral position at the Sloan-Kettering Cancer Center at Columbia University, New York City.

Name: **Dr. James Sacco**
Dissertation Title: *Phase II Biotransformation of Xenobiotics in Polar Bears (Ursus Maritimus) and Channel Catfish (Ictalurus Punctatus)*
Faculty Mentor: Dr. Margaret James, Professor
Department: Medicinal Chemistry
Previous Degree: M.S. in Philosophy, University of Malta

Dr. Sacco assumed a post-doctoral position at the School of Veterinary Medicine, University of Wisconsin-Madison.

Name: **Dr. Joshua Thomas**
Dissertation Title: *Improving the Topical Delivery of Phenol-containing Drugs: An Alkylcarbonyloxymethyl and Alkyloxy-carbonyloxymethyl Prodrug Approach*
Faculty Mentor: Dr. Kenneth Sloan, Professor
Department: Medicinal Chemistry
Previous Degree: B.S. in Chemistry, Wingate University, Wingate, NC

Dr. Thomas assumed a post-doctoral position at the National Cancer Institute, National Institute of Health, Frederick, MD.

Name: **Dr. Xiaoli Wang**
Dissertation Title: *Synthesis and in vitro Evaluation of Cytochrome P450 Isoform-selective Substrate Analogs as Exhaled-breath Markers of Enzyme Competency*
Faculty Mentor: Dr. Laszlo Prokai, Professor
Department: Medicinal Chemistry
Previous Degree: M.S. in Pharmaceutical Sciences, Xi'an Jiaotong University, China

Dr. Wang's employment after graduation is undecided at this time.

DECEMBER 2006 (FALL COMMENCEMENT)

Name: **Dr. Whocely Castro**
Dissertation Title: *Effect of Grapefruit Juice on P-glycoprotein Activity*
Faculty Mentor: Dr. Hartmut Derendorf, Professor
Department: Pharmaceutics
Previous Degrees: B.S. in Pharmacy, M.S. in Pharmaceutical Sciences, Federal University of Minas Gerais, Brazil

Dr. Castro assumed a scientist position at the Eisai Research Institute, Andover, MA.

Name: **Dr. Nilka Rivera-Portalatin**
Dissertation Title: *Mechanism of the Antioxidant Action of Estrogens*
Faculty Mentor: Dr. Laszlo Prokai, Professor
Department: Medicinal Chemistry
Previous Degree: B.S. and M.S. in Chemistry, University of Puerto Rico

Dr. Rivera-Portalatin assumed a faculty position as a chemistry professor at the University of Puerto Rico.

Name: **Dr. Mei Tang**
Dissertation Title: *Alpha 1 Antitrypsin Gene Therapy and its Immunoregulatory Function for Preventing Type 1 Diabetes in Non-obese Diabetic Mice*
Faculty Mentor: Dr. Sihong Song, Associate Professor
Department: Pharmaceutics
Previous Degree: M.D. in Medicine, West China University of Medical Sciences; M.S. in Statistics, University of Florida

Dr. Tang assumed a senior scientist position at the Schering-Plough Corporation, Kenilworth, NJ.

Name: **Dr. Kai Wu**
Dissertation Title: *Factors Affecting Pulmonary Targeting of Inhaled Corticosteroids*
Faculty Mentor: Dr. Guenther Hochhaus, Professor
Department: Pharmaceutics
Previous Degrees: B.S. in Microbiology, Nankai University; M.S. in Molecular Biology, Southern Illinois University; M.S. in Statistics, University of Florida

Dr. Wu assumed a senior scientist position at Novartis, Cambridge, MA.

MAY 2007 (SPRING COMMENCEMENT)

Name: **Dr. Wouter Driessen**
Dissertation Title: *Development of Ligand-targeted Plasmid DNA Delivery Systems for Cancer Gene Therapy*
Faculty Mentor: Dr. Sean Sullivan, Professor
Department: Pharmaceutics
Previous Degrees: B.S. and M.S. in Pharmaceutical Sciences, Utrecht University, The Netherlands

Dr. Driessen assumed a post-doctoral position working with Dr. Jeff Hughes in the Department of Pharmaceutics, College of Pharmacy, University of Florida.

Name: **Dr. Tobias Gerhard**
Dissertation Title: *Time-dependent Confounding in Antihypertensive Drug Studies*
Faculty Mentor: Dr. Almut Winterstein, Assistant Professor
Department: Pharmacy Health Care Administration
Previous Degrees: B.S. in Pharmacy, Albert-Ludwigs University, Freiburg, Germany

Dr. Gerhard assumed a position as an Assistant Professor at Ernest Mario School of Pharmacy, as well as the Associate Director for the Center for Education and Research on Mental Health Therapeutics Institute for Health, Health Care Policy and Aging Research, Rutgers University, Piscataway, NJ.

Name: **Dr. Nathalie Toussaint**
Dissertation Title: *Development of Polymer Plasmid DNA Gene Delivery*
Faculty Mentor: Dr. Sean Sullivan, Professor
Department: Pharmaceutics
Previous Degrees: B.S. in Pharmaceutical Sciences, University of Florida

Dr. Toussaint assumed a position as a Research Investigator in Discovery Pharmaceutics at Bristol Myers Squibb, Princeton, NJ.

Name: **Dr. Preeti Yadava**
Dissertation Title: *Cationic Chemical Systems for siRNA Delivery*
Faculty Mentor: Dr. Jeffrey Hughes, Associate Professor
Department: Pharmaceutics
Previous Degrees: B.S. in Pharmacy, UIPS, Panjab University, India

Dr. Yadava assumed a post-doctoral position at the University of Sciences in Philadelphia, PA.

Master's in Pharmaceutical Science Degrees Conferred

DECEMBER 2006 (FALL COMMENCEMENT)

Name: **Mr. Ryan Palusak**
Faculty Mentor: Dr. Carrie Haskell-Luevano, Professor
Department: Medicinal Chemistry
Previous Degree: B.S. in Molecular Biology and Microbiology, University of Central Florida

Mr. Palusak assumed a position performing analytical work for Kelly Scientific Resources, Troy, MI.

Forensic Sciences Master's Degrees Conferred

This year in the Forensics programs there were 226 students enrolled in one of the two Master's programs and 81 students enrolled in one of the three certificate programs. Within the Master's programs there was a total of 54 students who graduated; 10 (18.5%) from the Drug Chemistry concentration, 41 (75.9%) from the DNA and Serology concentration, and 3 (.06%) from the new Forensic Science concentration. Within the certificate programs there was a total of 65 students who received their certificate; 17 (26.2%) from the Drug Chemistry concentration, 44 (67.7%) from the DNA and Serology concentration, and 4 (.06%) from the Death Investigation concentration. Listed below (**Table 10**) are those students who have graduated with their Master's in the COP concentrations.

Table 10: Master's Graduates in the Forensic Sciences Program

Program	Name	
Summer 2006		
DNA and Serology	Adcock, Sean	Mizen, Robyn
	Ashley, David	Myers, Jelena
	Clemens, Anna	Palmer, Jenifer
	Czczuga, Joshua	Petrino, Stephana
	Fowler, Kathryn	Rondez, Elaine
	Fry, Valthea	Rosmarion-Tabert, Kerstin
	Gutierrez, Cynthia	Simons, Misty
	Harvey, Lindsay	Wilson, Robyn
	Hummel, Gregory	Wong, Raymond
	Johnson, Elizabeth	Wood, Rachel
Drug Chemistry	Jones, Breanne	
	Blow, Valerie	Lin, Hui
	Cassidy, Summer	Munden, Regina
	Ford, Lindsay	Sweet, Amanda
Fall 2006		
DNA and Serology	Boles, Mary	Holgard, Victoria
	Boyd, Shannon	Humphrey, Joel
	Byrd, Kelli Marie	Lennertz, Michelle
	Colville, Laura	Lynch, Julie
	Garcia, Arika	Metz, Malerie
	Green, Sara	Rocca, Keith
	Guidry, Robin	Smedberg, Jennifer
	Hendrick, Tanya	

Table 10: Master's Graduates in the Forensic Sciences Program (cont.)

Program	Name	
Fall 2006 (cont.)		
Drug Chemistry	Larish, Jennifer	Tiller, Michael
	Rivero, Kristen	Tiscione, Nicholas
Spring 2007		
DNA and Serology	Burgess, Lisa	Whitten, Heather
	Shea, Alison	Wolack, Jennifer
	Stone, Laura	
Forensic Science	Klinkam, Connie	Wilson, Robyn
	Schroeder, Jason	

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 by supporting forty-three graduate student stipends; four students received support from their department; ten graduate students received support from extramural research grants; one graduate student received funding from his home government; and six graduate students funded their own graduate education this year. Eleven graduate students received Grinter Awards as a supplement to their state funding. Graduate stipends ranged from \$14,000 to \$30,000 with an average overall stipend of \$17,175.

Seven graduate student fellowship proposals totaling \$219,791 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, National Institute of Health (NIH), and Merck & Co.

Alumni Scholarships

Beginning Fall Semester 1999, the University of Florida offered the *Alumni Scholarship Program* with the express interest of increasing graduate enrollment and attracting high quality students to each graduate program at the University. This scholarship represents the highest graduate student award available at the University and is funded at nationally competitive levels at \$25,000/year for four years plus all tuition remuneration. The College of Pharmacy received three additional *Alumni Scholarships*. The recipients of the *Alumni Scholarships* are:

Mr. John Benedet	Medicinal Chemistry	FY 06/07
Mr. Michael Weide	Pharmaceutics	FY 06/07
Ms. Heera Sharma	Pharmacodynamics	FY 06/07
Ms. April Barbour	Pharmaceutics	FY 05/06
Mr. Jiang Liu	Pharmaceutics	FY 05/06
Ms. Yanfei Qi	Pharmacodynamics	FY 05/06
Mr. Vinayak Shenoy	Pharmacodynamics	FY 05/06
Mr. Jinghua He	Pharmacy Health Care Administration	FY 05/06
Ms. Chin-Ying Chen	Pharmacy Health Care Administration	FY 04/05
Mr. Kumar Mukherjee	Pharmacy Health Care Administration	FY 04/05
Ms. Nasha Wang	Medicinal Chemistry	FY 04/05
Mr. Jae-Min Hwang	Pharmacy Health Care Administration	FY 03/04
Ms. Ahunna 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

Named Presidential Fellowships

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 with a \$17,000 per year stipend which is accompanied by a tuition waiver. Within the College of Pharmacy the Named Presidential Award used to be offered every other year. Effective this year the University had stopped this program and no new fellowships were offered. The recipient of the *Named Presidential Fellowship* is:

Ms. Elizabeth Potocka	Pharmaceutics	FY 04/05
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Fullbright Capes Scholarships

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 Awards

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 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. Wouter Driessen	Pharmaceutics	FY 04/05
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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 11**. Overall we have had a 63.8% acceptance of *Grinter Awards* by prospective students. Sixty-seven 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 3.56 with a GRE of 1241 and a TOEFL of 107.

Table 11: Statistical Summary of the Grinter Program – 1988 to Present			
Statistic	Overall	%	06/07 Class
Total number offered	105		5
Total number accepted	67	63.8%	5
Total number graduated	45	67.2%	
Total number still enrolled: past & present	19	28.4%	
Number of active awardees	11	16.4%	5
Grade Point Average (GPA)	3.56		3.82
Graduate Record Exam -GRE (Verbal + Quant.)	1241		1140
Test of English as a Foreign Language (TOEFL)	107		106

This year the COP offered 5 new *Grinter Awards*. The recipients of the *Grinter Awards* are:

Ms. Erica Haslach	Medicinal Chemistry	FY 06/07
Mr. Sean Travers	Medicinal Chemistry	FY 06/07
Ms. Rong Shi	Pharmaceutics	FY 06/07
Mr. Zhaohua Wang	Pharmaceutics	FY 06/07
Mr. Pranav Gandhi	Pharmacy Health Care Administration	FY 06/07

Mr. Jason Kwan	Medicinal Chemistry	FY 05/06
Ms. Gina Patel	Pharmaceutics	FY 05/06
Ms. Jane Ritho	Pharmacy Health Care Administration	FY 05/06

Mr. Christian Hampp	Pharmacy Health Care Administration	FY 04/05
Ms. Elizabeth Potocka	Pharmaceutics	FY 04/05
Ms. Zhimin Li	Pharmacodynamics	FY 04/05

20th Annual Research Showcase and Awards Recognition Day

A number of graduate students, post-doctoral fellows and professional 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 of the University of Florida was held on Wednesday, April 4, 2007. There was a total of fifty one graduate students from among all areas of the university who participated in this event, including two from the College of Pharmacy. Ahunna Onyenwenyi and Michael Mueller, both from the Department of Pharmacy Health Care Administration, participated in the poster competition.

International Student Academic Awards

At the International Student Academic Awards Ceremony held April 26, 2007, in the Reitz Union Auditorium, five of the College of Pharmacy’s international graduate students received a certificate award for outstanding academic accomplishment. The recipients of the *International Student Awards* are:

Ms. Betty Nyagode	Medicinal Chemistry
Ms. Sasiporn Sarawek	Pharmaceutics
Ms. Ahunna Onyenwenyi	Pharmacy Health Care Administration
Mr. Kumar Mukherjee	Pharmacy Health Care Administration
Mr. Sawaeng Watcharathanakij	Pharmacy Health Care Administration

Graduate Minority Activities and Awards

The ORGS has continued to work with the Graduate School’s Office of Graduate Minority Programs (OGMP) and its Associate Dean, Laurence B. Alexander, 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. Abraham Hartzema, Professor in the Department of Pharmacy Health Care Administration (PHCA), held a joint seminar for the graduate students in PHCA and the Master’s students at FAMU. After the seminar he spoke with students from FAMU who were interested in applying to our Ph.D. program.

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 (AACP) 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 12th this past year out of 60 schools with research programs (**Table 12**). These placements are based solely on fiscal year NIH funding (October to September of a given year).

Table 12: AACP Statistics for NIH Funding					
NIH Fiscal Year	NIH Support	Rank	FTE Ph.D.'s	NIH Support/ FTE- Ph.D.	Rank
2002	\$4,097,824	16	30	\$124,103	21
2003	\$6,064,002	15	27	\$224,593	12
2004	\$5,599,586	13	34	\$164,691	21
2005	\$5,999,517	13	35	\$171,415	18
2006	\$7,223,656	12	35	\$206,390	12

Our faculty members continue to be productive and are making efforts to obtain more extramural support for their individual research efforts. During this year the ORGS processed a total of 116 extramural grant or contract applications from the five Departments and our Administrative Office (**Table 13**) for a total of \$84,253,534 in **new** grant dollars. This is a 41.9% increase in total dollars requested when compared to FY 05/06 (see **Table 14**). The majority (79.3%) of new proposals within the COP are proposals in which the Principal Investigator (PI) is a faculty member within the COP (**Tables 13 and 14**). Research faculty members are also encouraged to collaborate with other units within the University. Twenty percent of grants submitted were originated outside of the College of Pharmacy.

Table 15 shows total extramural research dollars brought into the College over the last five academic years (from July to June of a given fiscal year). This year our research funding dollars totaled \$8,206,842 with 96 individual awards coming into the College of Pharmacy. This represents a slight decrease in total research funding dollars of 6.8% and a 6.8% decrease in number of awards from FY 05/06.

During FY 06/07 departmental comparisons show that Medicinal Chemistry brought in the majority of research dollars within the COP at 37.1% (\$3,036,954). Pharmacy Practice was second at 29.1% (\$2,752,450); followed by Pharmaceuticals at 17.3% (\$1,426,898); Pharmacodynamics at 13.5% (\$567,993); and Pharmacy Health Care Administration at 3.1% (\$422,547). Noteworthy, is that Pharmacy Health Care Administration had the biggest increase over last year of 131.5% (FY 05/06 was \$181,532).

TOTAL EXTRAMURAL FUNDING to the COP is illustrated in **Table 16**. Total extramural support includes not only **RESEARCH** funds (also found in **Table 15**) but also those **ADMINISTRATIVE** funds that include professional service contract fees to support the clinical enterprises at the Veteran's Administration Hospital and Shands-Jacksonville, which makes up 2.4% of total extramural revenues in the College. This year **ADMINISTRATIVE** funds showed a 51% decrease from the previous academic year.

The combination of a 6.8% decrease in **RESEARCH** funds and a 51% decrease in **ADMINISTRATIVE** funds provided the College of Pharmacy with an 8.8% decrease overall in FY 06/07 from FY 05/06 when **Total Extramural Funding** is considered (**Tables 16 and 17**).

Table 13: Proposal Processing Summary

Department	Inside the College	Outside the College	Total
College Total			
# Proposals	92	24	116
Total Amount	\$67,398,533	\$16,855,001	\$84,253,534
Administration			
# Proposals	1	0	1
Total Amount	\$63,945	\$0	\$63,945
Medicinal Chemistry			
# Proposals	24	4	28
Total Amount	\$29,170,332	\$3,245,231	\$32,415,563
Pharmaceutics			
# Proposals	19	7	26
Total Amount	\$6,138,847	\$4,104,625	\$10,243,472
Pharmacodynamics			
# Proposals	18	5	23
Total Amount	\$15,198,266	\$2,453,187	\$17,651,453
Pharmacy Health Care Admin.			
# Proposals	9	2	11
Total Amount	\$3,149,402	\$1,676,513	\$4,825,915
Pharmacy Practice			
# Proposals	21	6	27
Total Amount	\$13,677,741	\$5,375,445	\$19,053,186

Inside the College = PI was a COP faculty member; Outside the College = PI was outside the COP; COP personnel were co-investigators

Table 14: Proposal Processing Comparison

Fiscal Year	Inside the College	Outside the College	Total
FY 05/06			
# proposals	103	31	134
Total Amount	\$35,013,874	\$24,375,730	\$59,389,604
FY 06/07			
# proposals	92	24	116
Total Amount	\$67,398,533	\$16,855,001	\$84,253,534

Inside the College = PI was a COP faculty member; Outside the College = PI was outside the COP; COP personnel were co-investigators

Table 15: Extramural Research Dollars - FY 02/03 to FY 06/07

Department	02/03	03/04	04/05	05/06	06/07	02/03 - 06/07	% of total
COLLEGE TOTAL	\$6,474,477	\$8,071,132	\$6,743,553	\$8,803,441	\$8,206,842	\$7,659,889	100.00%
IDC	\$1,343,390	\$1,684,597	\$1,374,914	\$1,819,550	\$1,562,748	\$1,557,040	100.00%
# grants	121	102	82	103	96	100.8	
%IDC	26.2%	26.4%	25.6%	26.1%	23.5%	25.6%	
Medicinal Chemistry	\$2,731,896	\$3,549,799	\$2,479,168	\$2,410,972	\$3,036,954	\$2,841,758	37.10%
IDC	\$615,463	\$772,705	\$618,457	\$554,326	\$704,644	\$653,119	41.95%
# grants	21	23	13	23	25	21	
%IDC	29.1%	27.8%	33.2%	29.9%	30.2%	30.0%	
Pharmaceutics	\$1,095,727	\$1,628,328	\$1,115,239	\$1,339,450	\$1,426,898	\$1,321,128	17.25%
IDC	\$232,563	\$246,029	\$83,161	\$274,257	\$207,786	\$208,759	13.41%
# grants	31	33	27	27	25	28.6	
%IDC	26.9%	17.8%	8.1%	25.7%	17.0%	19.1%	
Pharmacodynamics	\$768,811	\$812,774	\$1,434,709	\$1,597,340	\$567,993	\$1,036,325	13.53%
IDC	\$225,750	\$233,559	\$361,146	\$466,000	\$162,727	\$289,836	18.61%
# grants	10	8	16	17	12	12.6	
%IDC	41.6%	40.3%	33.6%	41.2%	40.2%	39.4%	
Pharmacy Health Care Admin.	\$95,940	\$100,000	\$366,007	\$182,532	\$422,547	\$233,405	3.05%
IDC	\$10,248	\$0	\$33,892	\$18,282	\$63,300	\$25,144	1.61%
# grants	12	7	10	8	8	9	
%IDC	12.0%	0.0%	10.2%	11.1%	17.6%	10.2%	
Pharmacy Practice	\$1,782,103	\$1,980,230	\$1,348,430	\$3,273,147	\$2,752,450	\$2,227,272	29.08%
IDC	\$259,366	\$432,305	\$278,258	\$506,684	\$424,291	\$380,181	24.42%
# grants	47	31	16	28.0	26.0	29.6	
%IDC	17.0%	27.9%	26.0%	18.3%	18.2%	21.5%	

IDC = indirect costs

Table 16: Total Extramural Support - FY 02/03 to FY 06/07

Dept.	02/03	03/04	04/05	05/06	06/07	Average 02 - 06
COLLEGE TOTAL	\$8,008,170	\$9,430,915	\$7,221,540	\$9,216,892	\$8,409,268	\$8,457,357
IDC	\$1,350,890	\$1,685,890	\$1,374,914	\$1,819,550	\$1,562,748	\$1,558,798
# grants	129	113	88	106	97	106.6
%IDC	20.3%	21.8%	23.5%	24.6%	22.8%	22.6%
RESEARCH	\$6,474,477	\$8,071,132	\$6,743,553	\$8,803,441	\$8,206,842	\$7,659,889
IDC	\$1,343,390	\$1,684,597	\$1,374,914	\$1,819,550	\$1,562,748	\$1,557,040
# grants	121	102	82	103	96	100.8
%IDC	26.2%	26.4%	25.6%	26.1%	23.5%	25.6%
ADMINISTRATION	\$1,533,693	\$1,359,783	\$477,987	\$413,451	\$202,426	\$797,468
IDC	\$7,500	\$1,293	\$0	\$0	\$0	\$1,759
# grants	8	11	6	3	1	5.8
%IDC	0.5%	0.1%	0.0%	0.0%	0.0%	0.1%

IDC= indirect costs

Outlined below in **Table 17** 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 Agencies. Federal dollars were earmarked entirely for research purposes and showed a 10.9% decrease this year from FY 05/06. State dollars were increased by 378.5% as well as in the number of awards received by 400%; Corporations and Companies showed a 34.6% decrease in dollars received and a 19.4% decrease in the number of awards received; and Foundation and Society monies showed a 28.6% decrease in the dollars received but an 18.8% increase in the number of awards received compared to FY 05/06. The College experienced a significant increase 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 17: Comparison by Sponsor				
Sponsor Category	FY 05/06		FY 06/07	
	# of Awards	Total Dollars	# of Awards	Total Dollars
Federal Agencies	52	\$7,105,795	42	\$6,328,472
Florida State Agencies	1	\$128,800	5	\$616,281
Corporations and Companies	36	\$1,313,555	29	\$859,302
Foundations & Societies	16	\$837,823	19	\$598,213
Other	1	\$29	2	\$7,000
Total Comparison	106	\$9,386,002	97	\$8,409,268

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 18-22**. In **Appendix B**: a complete listing of all extramural support by Department and Faculty members can be found.

Table 18: Federal Agencies Comparison						
Sponsor	FY 05/06			FY 06/07		
	Count	Total	IDC	Count	Total	IDC
AHCA				1	\$47,200	\$0
FDA	1	\$31,777	\$9,862			
NIH	48	\$6,846,663	\$1,647,339	37	\$5,836,394	\$1,344,210
U.S. Department Agriculture	1	\$16,000	\$0	1	\$317,933	\$0
U.S. Dept. of Veteran Affairs	2	\$50,530	\$0	1	\$63,945	\$0
Smithsonian Institution				2	\$62,999	\$18,137
Total Federal Agencies	52	\$6,944,970	\$1,657,201	42	\$6,328,471	\$1,362,347

IDC = indirect costs

Table 19: State Agencies Comparison						
Sponsor	FY 05/06			FY 06/07		
	Count	Total	IDC	Count	Total	IDC
Department of Health	1	\$128,800	\$0	5	\$616,281	\$26,701
Total Florida State Agencies	1	\$128,800	\$0	5	\$616,281	\$26,701

IDC = indirect costs

Table 20: Corporations and Companies Comparison

Sponsor	FY 05/06			FY 06/07		
	Count	Total	IDC	Count	Total	IDC
Abbott Laboratory	1	\$34,160	\$6,832	1	\$7,829	\$1,566
AstraZeneca	1	\$19,945	\$1,813			
BioLine Rx				1	\$3,464	\$1,099
Denali Biotechnologies	1	\$625	\$125			
Eon Laboratories	2	\$15,833	\$1,439			
Finzelberg GMBH & Co. KG	1	\$14,040	\$1,276	1	\$18,579	\$3,716
Geni Herbs	1	\$15,438	\$3,088			
Genzyme Corporation	1	\$200,000	\$0			
Glaxo Smith Kline, Inc.	7	\$207,178	\$24,665	1	\$1,500	\$300
Glycadia	1	\$20,160	\$4,032	1	\$2,520	\$504
Golin-Harris International, Inc.	1	\$5,000	\$0	1	\$5,000	\$1,257
IVAX Corporation	4	\$132,200	\$12,018	3	\$78,700	\$7,155
Johnson & Johnson	1	\$163,125	\$32,625	5	\$173,300	\$42,092
MAP Pharmaceuticals				1	\$6,250	\$1,250
Max Zeller Sohne	1	\$10,179	\$2,036			
Merck & Company, Inc.	1	\$50,000	\$0	1	\$50,000	\$0
Merck Selbstmedikation GMBH				1	\$10,979	\$2,196
Novartis - United States	3	\$105,560	\$21,112	4	\$133,533	\$26,706
Noven Pharmaceuticals	4	\$60,321	\$12,164	1	\$14,310	\$2,862
Pascoe GMBH	1	\$25,785	\$5,157			
Pfizer, Inc.	2	\$165,256	\$0	2	\$161,051	\$12,210
SkyePharma				3	\$20,940	\$4,188
SmithKline Beecham				1	\$150,000	\$30,000
Steigerwalk Arzneimittelwerk				1	\$21,347	\$4,269
Tokiwa Phytochemical Company	1	\$50,000	\$10,000			
United Therapeutics Corporation	1	\$18,250	\$3,650			
Total Corporations & Companies	36	\$1,313,555	\$142,032	29	\$859,302	\$141,370

IDC = indirect costs

Table 21: Foundations & Societies Comparison

Sponsor	FY 05/06			FY 06/07		
	Count	Total	IDC	Count	Total	IDC
Am. Cancer Society	1	\$11,715	\$0			
Am. Diabetes Association	1	\$100,000	\$13,043	1	\$100,000	\$13,043
Am. Foundation for Pharm. Education				1	\$5,000	\$0
Am. Heart Association – FL	9	\$308,402	\$7,273	5	\$239,198	\$15,273
James S. McDonnell Foundation				2	\$7,173	\$0
Nemours Children's Clinic				7	\$20,250	\$1,841
Rho Chi Society - Eli Lilly Corporation				1	\$7,500	\$0
Shands Teaching Hospital	1	\$49,557	\$0			
Shands Jacksonville Medical Center	1	\$314,364	\$0	1	\$202,426	\$0
UF Foundation	3	\$45,500	\$0			
U.S.-Israel Binational Science Foundation				1	\$16,666	\$2,173
Total Foundations & Societies	16	\$829,538	\$20,316	19	\$598,213	\$32,330

IDC = indirect costs

Table 22: Other Comparison

Sponsor	FY 05/06			FY 06/07		
	Count	Total	IDC	Count	Total	IDC
Miscellaneous Donors	1	\$29	\$0	2	\$7,000	\$0
Total Other	1	\$29	\$0	2	\$7,000	\$0

IDC = indirect costs

Licensing and Royalty Income

Through licensing agreements and the sale of stock the College of Pharmacy generated a total of \$3,414 in revenues during FY 06/07. These monies were distributed to the College as outlined in the UF IP distribution policy.

Graduate Student Research Activities

Oliver Grundmann, a graduate student in the Department of Pharmaceutics working with Dr. Veronika Butterweck, received a \$1,750 travel award from the **Society for Medicinal Plant Research** to present his poster entitled “*Hypothermic Effects of Hops and its Antagonism*” at the International Congress and 54th Annual Meeting of the Society for Medicinal Plant Research in Helsinki, Finland.

Whocely Victor de Castro, a graduate student in the Department of Pharmaceutics working with Dr. Veronika Butterweck, received a \$600 travel award from the **American Society of Pharmacognosy** to present his poster entitled “*Grapefruit Juice-drug Interactions: Grapefruit Juice and its Components Inhibit P-glycoprotein Mediated Transport of Talinanolol in Caco-2 Cells*” at the 47th Annual Meeting in Washington, DC.

Jian Xu, a graduate student in the Department of Pharmaceutics working with Dr. Hartmut Derendorf, received a \$620 travel award from the **International Pharmaceutical Federation U.S.A. Foundation** to present his poster entitled “*A Novel Pharmacokinetics/Pharmacodynamics (PK/PD) Approach to Predict Total Prednisolone Levels in Human Plasma*” at the 3rd World Congress of Pharmaceutical Science in Amsterdam, The Netherlands.

Stephan Schmidt, a graduate student in the Department of Pharmaceutics working with Dr. Hartmut Derendorf, received a \$1,500 travel award from the **American Society for Microbiology (ASM) Grant Program** to present his poster entitled “*Experimental Pitfalls in Protein Binding Measurement*” at the 46th Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC) meeting in San Francisco, CA. Mr. Schmidt also received a \$250 travel award and a \$1,000 cash award from the **American College of Clinical Pharmacology (ACCP)** to present his poster entitled “*Linezolid Against MRSA-A New Medeling Approach*” at the 36th ACCP Annual Meeting in San Francisco, CA.

Bettina Proneth, a graduate student in the Department of Medicinal Chemistry working with Dr. Carrie Haskell-Luevano, received a \$385 travel award from the **American Peptide Society** to present her poster entitled “*A Combination of Ligand SAR Studies and Site-directed Mutagenesis Reveals Requirements for Antagonist Activity at the Melanorcortin-3 Receptor*” at the 20th American Peptide Symposium in Montreal, Canada.

Krista Wilson, a graduate student in the Department of Medicinal Chemistry working with Dr. Carrie Haskell-Luevano, received a \$750 award from the **American Peptide Society** to attend the 20th American Peptide Symposium in Montreal, Canada as a member of the Student Affairs Committee. She also presented a poster entitled “*Construction and Characterization of Melanocortin-2 and -4 Receptor Chimeras*” at the meeting.

Vinayak Shenoy, a graduate student in the Department of Pharmacodynamics working with Dr. Michael Katovich, received a \$500 cash award from the **Howard Hughes Medical Institute (HHMI) Graduate Student Award** for mentoring undergraduate student and publishing a research article entitled “*Prevention of Angiotensin II-induced Cardiac Remodeling by Angiotensin-(1-7)*”.

Preeti Yadava, a graduate student in the Department of Pharmaceutics working with Dr. Jeffrey Hughes, received many awards this past year as follows: a \$500 cash award from the **Howard Hughes Medical Institute (HHMI) Graduate Student Award** for mentoring undergraduate student and publishing research articles with them on non-viral systems for gene delivery; a \$500 travel award from the **American Association of Pharmaceutical Scientists (AAPS)** and a \$250 travel award from the **University of Florida** to present her poster entitled “*siRNA Delivery Systems*” at the AAPS Annual Conference in San Antonio, TX; a \$500 cash award from the **American Association of Indian Pharmaceutical Scientists (AAiPS)** for outstanding research (2005-2006); and won \$250 for 2nd prize for her podia presentation entitled “*siRNA Delivery: Lipoplexes vs. Polyplexes*” at the **Globalization of Pharmaceutics Education Network (GPEN)** meeting in Lawrence, KS.

Michael Mueller, a graduate student in the Department of Pharmacy Health Care Administration working with Dr. Carole Kimberlin, received a \$1,000 travel award from the **Wal-Mart Scholars Program** to attend the American Association of Colleges of Pharmacy (AACP) Annual Meeting in Orlando, FL.

Charles Douglas, a graduate student in the Department of Pharmacy Health Care Administration working with Dr. Carole Kimberlin, received a \$1,000 travel award from the **Wal-Mart Scholars Program** to attend the American Association of Colleges of Pharmacy (ACCP) Annual Meeting in Orlando, FL.

Yanjun Li, a graduate student in the Department of Pharmaceutics working with Dr. Jeffrey Hughes, received a \$1,250 travel award from the **American Society for Microbiology (ASM) Grant Program** to present her poster entitled “*MIC and Time-kill Studies of Voriconazole against Clinical Strains of Candida*” at the 46th Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC) in San Francisco, CA. Ms. Li also received a \$620 travel award from the **International Pharmaceutical Federation U.S.A. Foundation** for her project entitled “*Time-kill and Post-antifungal Effects (PAFE) of Voriconazole (vori) against Candida Clinical Strains: Verifying Experimental Validity by Determination of Vori Concentrations using HPLC*” at the 3rd Pharmaceutical Sciences World Congress in Amsterdam, The Netherlands.

Professional 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, professional 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 **3** professional student secure extramural funds from three different funding agencies and are listed below:

Courtney Mack, a professional student working with Dr. Leslie Hendeles in the Department of Pharmacy Practice, received a travel award from the **American College of Clinical Pharmacy (ACCP)** to present her poster entitled “*Systemic Cytokine Balance Differs between Asthma Patients with and without Positive Response to Adenosine*” at the ACCP Annual Meeting in St. Louis, MO.

Gregory Welder, professional student working with Dr. Issam Zineh in the Department of Pharmacy Practice, received a \$3,600 travel award from the **American College of Clinical Pharmacy (ACCP)** to present his poster entitled “*SLCO1B1 Gene Variation and Apolipoprotein Response to Atorvastatin*” at the ACCP Annual Meeting in St. Louis, MO. Mr. Welder also received a \$250 travel award from the **American Society for Clinical Pharmacology and Therapeutics (ASCPT) Presidential Trainee Award** to present his poster entitled “*Atorvastatin Inhibits interleukin-1 Beta-induced Production of Epithelial Neutrophil-activating Peptide from Human Endothelial Cells in a Dose-dependent Fashion*” at the ASCPT Annual meeting in Anaheim, CA.

Shannon Zandy, a professional student working with Dr. Joanna Peris, Associate Professor in the Department of Pharmacodynamics, received a one year, \$5,000 award from the **American Foundation for Pharmaceutical Education** for her project entitled “*Neurochemical Changes Associated with Increased Motivation for Ethanol Self-administration*”.

NIH Short-term Research Training Program

Over the past eight 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 are then 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 would then evaluate the student’s application. During FY 06/07 this NIH training program was not funded.

Post-doctoral Fellow Research Activities

Dr. Justin Grobe, a post-doctoral fellow in the Department of Pharmacodynamics working with Dr. Michael Katovich, has been awarded the Clinical Science Cardiovascular Section Young Investigator Award from the **American Physiological Society** for his project entitled “*Angiotensin-(1-7) Prevents Cardiac Remodeling During Angiotensin II-induced Hypertension*”. Dr. Grobe received a \$500 award, certificate of recognition, and a travel allowance to attend their national meeting in Washington DC.

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; Chicago, IL in 2004; and Bangkok, Thailand in 2007.

Current List of Thai and U.S. Schools of Pharmacy in the Consortium

Thai	U.S.
1. Chulalongkorn University	1. University of Florida
2. Mahidol University	2. Purdue University
3. Khon Kaen University	3. Ohio State University
4. Srinakharinwirot University	4. University of Wisconsin
5. Prince of Songkla University	5. University of Arizona
6. Silpakorn University	6. University of Minnesota
7. Ubon Ratchathani University	7. University of Illinois at Chicago
8. Chiang Mai University	8. University of Maryland at Baltimore
9. Naresuan University	9. University of North Carolina
10. Thammasat University	10. Rutgers University

9th U.S.-Thai Pharmacy Education Consortium Meeting

The 9th U.S.-Thai Pharmacy Education Consortium meeting was held January 6-9, 2007 in Bangkok, Thailand. Dr. Earlene Lipowski, Associate Professor in the Department of Pharmacy Health Care Administration, attended this meeting as a representative from the University of Florida.

The Consortium meeting featured a report of accomplishments from 1993-2006 and a drafting of a memorandum of agreement for consideration to continue the Consortium for an additional 15 years, bringing it to 2037. Members of the Consortium found the initiative productive, resulting in valuable learning experiences and there was a consensus that the relationship be continued with an emphasis in three areas: professional and graduate education; clinical training and experience for pharmacists and student pharmacists; and a program of exchange scholars and collaborative research.

Thai Students in the College of Pharmacy

Listed below (**Table 23**) is the current number of Thai students and those who have received Royal Thai Scholarships from their government to study abroad for either their Ph.D. or PharmD degree.

Table 23: Thai Students			
Name	Department	THAI Pharmacy College	Date Entered
Mr. Sawaeng Watcharathanakij	Pharmacy Health Care Admin.	Mahidol	August, 2002
Ms. Sasiporn Sarawek	Pharmaceutics	Chiang Mai	January, 2003
Ms. Pattaraporn Vanachayangkul *	Pharmaceutics	Chiang Mai	August, 2004

* not a Royal Thai Scholar

ORGS Coordinated Events

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 6, 2006, in the Rion Ballroom at the Reitz Student Union from 6:00 PM to 9:00 PM. This year we had the second highest attendance record of 125 faculty, staff and students. At the reception this year 17 new graduate students, 5 new faculty, and a number of new post-doctoral fellows, research associates and visiting scientists were introduced to the college.

Annual Research Showcase and Awards Recognition Day

The 20th Annual Research Showcase and Awards Recognition Day took place on Thursday, February 22, 2007, at the University of Florida, College of Pharmacy. A program booklet (**Appendix C**) is included that outlines the days events, a complete list of 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 our many sponsors. Our two major sponsors of the program were **Novartis Pharmaceuticals** with an \$8,000 donation and **Dr. Robert G. and Maria Bell** of Palm Harbor, Florida, and Ph.D. Class of 1988, with a \$3,500 donation. Other long time supporters are **Dr. Francisco M. and Luisa Alvarez** of Fort Lauderdale, Florida, and Ph.D. Class of 1981, sponsoring the poster competition with a \$600 donation; and **Dr. Robert A. and Phyllis Levitt** of Boca Raton and Gainesville, Florida and Ph.D., Class of 1961, sponsoring the **Levitt Division** of the Oral Competition with a \$500 gift. For a complete list of our sponsors please refer to the program booklet.

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 within 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: **Richard Lalonde, PharmD.** (Global Head of Clinical Pharmacology, Pfizer Global Research and Development); **Susan Marino, Ph.D.** (Assistant Professor, Department of Pharmacy Practice, College of Pharmacy, University of Florida); **Russell Weiner, Ph.D.** (Director, Clinical Biomarker Development, Bristol-Myers Squibb); and **Tom Johns, PharmD.** (Assistant Director of Clinical Pharmacy Operations, Shands Pharmacy Services).

The winners of the oral competition are:

	<i>Senior Division – winner</i>	
Ms. Preeti Yadava	Pharmaceutics	\$600 cash award
Title: “Non-viral siRNA Delivery Systems”		
	<i>Senior Division – finalist</i>	
Ms. Beatrice Nyagode	Medicinal Chemistry	\$300 cash award
Title: “What is the Seasoning in your Fillet?”		
	<i>Senior Division – finalist</i>	
Ms. Leah Villegas	Pharmaceutics	\$300 cash award
Title: “Development of Non-viral Gene Therapy Targeting the Insulin-like Growth Factor System for Treatment of Brain Tumors”		
	<i>Junior Division – winner</i>	
Dr. Anzeela Schentrup	Pharmaceutics	\$600 cash award
Title: “Arachidonate 5-Lipoxygenase Pathway Gene Polymorphisms Modify Subgroup-dependant Risk of Cardiovascular Events in the International Verapamil SR/Trandolapril Study – Genetic Substudy (INVEST-GENES)”		
	<i>Junior Division – finalist</i>	
Ms. Krista Wilson	Medicinal Chemistry	\$300 cash award
Title: “Construction and Characterization of Human Melanocortin-2 and -4 Chimeras”		
	<i>Junior Division – finalist</i>	
Mr. Jason Kwon	Medicinal Chemistry	\$300 cash award
Title: “Marine Natural Products for Drug Discovery”		
	<i>Levitt Division – winner</i>	
Ms. Ahunna Onyenwenyi	Pharmacy Health Care Administration	\$600 cash award
Title: “Rates of Hypokalemia After Implementation of a More Stringent Insulin Protocol in Critical Care Patients”		
	<i>Levitt Division – finalist</i>	
Ms. Chih-Ying Chen	Pharmacy Health Care Administration	\$300 cash award
Title: “Utilization of CNS Stimulants (CNSS) Treatment for Newly Diagnosed ADHD Children”		

For the poster competition this year we had 43 posters from graduate students, pharmacy students and post-doctoral fellows on display in the Reception Area of the Health Profession, Nursing and Pharmacy Building (HPNP). The posters were manned between 9:30 AM and 11:30 AM when individual judging took place. The winners in each of the divisions received a \$300 cash award and a commemorative plaque.

The poster judges were: **Vikram Arya, Ph.D.** (Division of Clinical Pharmacology IV, Food and Drug Administration); **Robert Bell, Ph.D.** (President and CEO, Drug & Biotechnology Development, LLC); **Mark Chirico, Ph.D.** (Assistant Professor, Department of Pharmacy Practice, College of Pharmacy, University of Florida); **Bärbel Eppler, Ph.D.** (Vice President of Preclinical and Quality Assurance, Nanotherapeutics, Inc.); **Benjamin Epstein, PharmD.** (Assistant Professor, Department of Pharmacy Practice, College of Pharmacy, University of Florida); **Maureen McKenzie, Ph.D.** (Chief Executive Officer, DENALI BioTechnologies, LLC).

The winners of the poster competition are:

Graduate Student Division – winner

Ms. Chinki Bhatia Pharmacodynamics \$300 cash award
Title: “*Presynaptic Inhibition of Excitatory Afferents to Hilar Mossy Cells*”

Graduate Student Division – winner

Mr. Stephan Schmidt Pharmaceutics \$300 cash award
Title: “*Linezolid vs. MRSA-A new PK/PD Model*”

Pharmacy Student Division – winner

Mr. Gregory Welder Pharmacy Practice \$300 cash award
Title: “*In Vitro and In Vivo Modulation of CXCL5/ENA-78 by Atorvastatin with NOS3-Associated Response Variability*”

Post-doctoral Fellow Division – winner

Dr. Michael Pacanowski Pharmacy Practice \$300 cash award
Title: “ *β_2 -Adrenergic Receptor Polymorphisms and Antihypertensive Treatment Outcomes in the International Verapamil SR/Trandolapril Study – GENetic Substudy (INVEST-GENES)*”

Post-doctoral Fellow Division – winner

Dr. Rachel Witek Medicinal Chemistry \$300 cash award
Title: “*Structure-activity Studies of β -Melanocyte Stimulating Hormone Truncation Peptides at the Melanocortin Receptors*”

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.
- **College Space Committee:** The Executive Associate Dean serves as chair of the College Space Committee. This committee was established to prepare a written policy document on allocation and reallocation of research and office space. The committee will continue to meet as needed to revise policies and review any new edits regarding the utilization of research space in the future.
- **Self-Study Steering Committee:** The Executive Associate Dean served as a member of the College's Self-study steering committee. This committee was involved in preparation of the report for the January 2007 site visit of the Accreditation Council for Pharmacy Education (ACPE). The ACPE is the governing body which accredits the college's professional degree programs. This committee met bi-weekly throughout most of the academic year to set guidelines, prepare surveys and write the sections for the self study report.

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.
- **Anatomical Specimen Task Force:** This committee met twice throughout the year to consider current and future policies and use of cadavers and human specimens within the Health Science Center teaching facilities.
- **HSC Traffic and Parking Task Force:** This committee met four times throughout the academic year to consider issues and establish policies related to parking and traffic patterns in and around the HSC.

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.
- **Committee on Committee's:** The Executive Associate Dean was appointed to this Senate committee for a one-year term. The Committee met monthly during the Fall and Spring semesters to review all Senate committees, consider the selection process for members, the purpose of the committees, and attendance at the committee meetings. The Committee has the responsibility of recommending to the Senate the addition, reclassification, or dissolution of any Senate Committee and may make suggestions to the President concerning any University committee on which faculty members serve. The Committee reports to the Senate at least twice a year. This Committee was chaired by Dr. John Leavey.

- **Land Use Facilities Planning Committee:** The Executive Associate Dean was appointed to this committee for a three year term. This committee met monthly in Emerson Alumni Hall to provide recommendations to UF entities related to policies related to UF land use and facilities development. The breadth of this committee considered the land use for new building sites as well as planning for proposed renovation of existing buildings. Our charge was to also assist in the development and updating of the UF Master Plan related to land and building use.
- **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 the Fall 2006 (Sept.) and Spring 2007 (April) National Advisory Board Meetings.
- **AACP Annual Meeting:** The Executive Associate Dean attended the 2006 AACP Annual Meeting in San Diego, CA from July 6th to July 13th, 2006.
- **AACP Interim Meeting:** The Executive Associate Dean attended the 2007 AACP Interim Meeting in Arlington, VA from February 3rd to February 7th, 2006.
- **SRA International Meeting:** The Program Assistant attended the 2006 Annual Society of Research Administrators (SRA) International Meeting in Quebec, Canada from October 14th to October 20th, 2006.
- **SRA International Meeting:** The Program Assistant attended the 2007 Society of Research Administrators (SRA) Sectional Meeting in Kansas City, MO from April 28th to May 5th, 2007.

Appendices

Section

A = Letter to Graduate Applicants

B = Complete Listing of Extramural Support by Department and Faculty

C = 20th 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) 273-7726, 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) 273-7863, 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) 273-6265, 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) 273-7688, 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 eventually, receiving your application forms.

Respectfully,



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

Respectfully,



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

Complete Listing of Extramural Support in the COP for FY 06/07

MEDICINAL CHEMISTRY

Faculty	Amount	Number	Agency	Project Title
Raymond Bergeron	\$570,179	2	National Institute of Health	Iron Chelators Predicated on Desferrithiocin
	\$1,000,000	1	National Institute of Health	Desferrithiocin Analogue Actinide Decorporation Agents
Raymond Booth	\$363,977	2	National Institute of Health	Functional Probes for Brain Histamine H1 Receptors
Carrie Haskell-Luevano	\$21,826	2	National Institute of Health	Physiology and Genetics of Food Procurement in Rodents
	\$223,536	2	National Institute of Health	Characterization of Human Melanocortin-4 Receptor Polymorphisms
	\$252,894	1	National Institute of Health	Structural Determinants of Neuroendocrine Receptors
	\$3,464	1	Bioline Rx	Bioline Service Contract
	\$15,065	1	National Institute of Health	Discovery of Alpha-MSH Analogs for Skin Cancer Prevention
	\$16,666	1	U.S.-Israel Binational Science Foundation	Development of Novel Oral Available Backbone Cyclic Anti-obesity Drug Lead
	\$2,000	1	Miscellaneous Donors	Miscellaneous Donors
	\$100,000	1	American Diabetes Association	Voluntary Exercise Identifies New Gene Candidates for the Prevention of Type 2 Diabetes
Margaret James	\$1,521	2	National Institute of Health	Administrative Core-Health Effects of Chlorinated Compounds
	\$8,201	1	National Institute of Health	Dichloroacetate Kinetics, Metabolism and Toxicology
	\$7,501	1	National Institute of Health	Pharmacotoxicology of Trichloroethylene Metabolites
Hendrik Luesch	\$88,000	1	American Heart Association	Protection from Stroke-induced Brain Damage Through Modulation of Gene Expression

MEDICINAL CHEMISTRY (cont.)				
Faculty	Amount	Number	Agency	Project Title
Hendrik Luesch (cont.)	\$288,750	2	Florida Department of Health	The Mode of Action of the Antitumor Agent Apratoxin A
	\$62,999	2	Smithsonian Institution	Chemical Variation in Marine Cyanobacteria for Drug Discovery
Kenneth Sloan	\$10,374	1	National Institute of Health	Stable-Isotope Labeled Dinitrophenylhydrazines and Methods for Their Use

PHARMACEUTICS & CENTERS FOR DRUG DISCOVERY and NEUROBIOLOGY OF AGING				
Faculty	Amount	Number	Agency	Project Title
Nicholas Bodor	\$14,310	1	Noven Pharmaceuticals	A Dose-Ranging Pharmacokinetic Study of Estradiol Transdermal System, Vivelle Dot (R), in Mini-pigs and A Dose-ranging Pharmacokinetic Study of Methylphenidate Transdermal System (MYS) in Mini-pigs
Veronika Butterweck	\$10,979	1	Merck, Darmstadt, Germany	Anxiolytic Effects of a Passionflower Extract in the Elevated Plus Maze
	\$18,579	1	Finzelberg GMBH & Company	Antigout and Antioxidant Activity of Plant Extracts
	\$21,347	1	Steigerwald Arzneimittelwerk GmbH, Darmstadt, Germany	Antioxidant Properties of St. John's Wort and Single Compounds
	\$317,933	1	U.S. Department of Agriculture	Grapefruit Juice – Drug Interactions After Acute and Chronic Use
Hartmut Derendorf	\$50,000	1	Johnson & Johnson	In Vitro Study Investigating the Effects of Rwj-416457 on Bacterial Strains
	\$5,000	1	Golin-Harris International Inc.	Maintenance of Drug Interaction Web Site
	\$50,000	1	Merck & Company Incorporated	Merck Graduate Student Training Fellowship
	\$100,000	1	Pfizer Incorporated	Pfizer Graduate Fellowship Award
	\$15,199	1	National Institute of Health	Chronic Opioids and Aging
	\$60,000	1	Johnson & Johnson	An Exploratory Study to Evaluate the Penetration of Ceftobiprole into Soft Tissue Determined by In Vivo Microdialysis

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

Faculty	Amount	Number	Agency	Project Title
Hartmut Derendorf (cont.)	\$43,650	1	Johnson & Johnson	Microdialysis Validation of Ceftobiprole (BAL9141)
	\$5,000	1	Johnson & Johnson	Protocol Development for an Exploratory Study of Ceftobiprole in Tissue
	\$14,650	1	Johnson & Johnson	Evaluation of BAL9141 Solution Preparation, Stability and Compatibility
Guenther Hochhaus	\$78,700	3	Ivax Corporation	Efficacy and Safety of Talampanel as Adjunctive Therapy in Patients with Partial Seizures
	\$2,520	1	Glycadia	Determination of GLY-230 using HPLC/MS/MS
Jeff Hughes	\$156,154	1	National Institute of Health	Gene Delivery Based on Microbes
	\$190,535	1	Florida Department of Health	Multifaceted Non-viral Cancer Gene Therapy
	\$58,406	1	University of North Texas	Project #2 Discovery of Novel Drugs for Alzheimer's Disease
Sihong Song	\$206,763	1	National Institute of Health	Recombinant AAV for Correction of Genetic Abnormalities
Sean Sullivan	\$0	1	National Institute of Health	Circulating Progenitors Determine Angiogenic Retinopathy
	\$7,173	2	James S. McDonnell Foundation	Development of Non-viral Gene Therapy for Treatment of Brain Cancer

PHARMACODYNAMICS

Faculty	Amount	Number	Agency	Project Title
Michael Katovich	\$40,932	2	National Institute of Health	AT1 Receptor Control in Chronic Hypertension Attenuation
Maureen Keller-Wood	\$1,132	1	National Institute of Health	Control of Corticotropin During Pregnancy
	\$230,945	2	National Institute of Health	Cortisol at MR Mediate Fetal Physiologic/Genomic Effects
	\$22,258	1	National Institute of Health	Estrogen Influences on Fetal Adrenocorticotropin
	\$21,770	1	American Heart Association	Mechanism(S) by Which Cortisol-induced Enlargements of Fetal Sheep Hearts Occurs

PHARMACODYNAMICS (cont.)				
Faculty	Amount	Number	Agency	Project Title
William Millard	\$21,213	1	National Institute of Health	Mechanisms of Central and Peripheral Hyperalgesia
	\$23,789	1	National Institute of Health	Ethnic Differences in Responses to Painful Stimuli
	\$25,172	1	National Institute of Health	Project #2 Discovery of Novel Drugs for Alzheimer's Disease
Joanna Peris	\$175,782	1	National Institute of Health	Time Resolution of Ethanol-Induced Neurotransmission
	\$5,000	1	American Foundation for Pharmaceutical Education	Neurochemical Changes Associated with Increased Motivation for Ethanol Self-administration

PHARMACY HEALTH CARE ADMIN. & DUBOW FAMILY CENTER FOR RESEARCH IN PHARM. CARE				
Faculty	Amount	Number	Agency	Project Title
Abraham Hartzema	\$4,344	1	Florida Department of Health	Guidance and Evaluation of Pharmacy Health Information Tech.(PHIT) in Florida Critical Access Hospitals
	\$61,051	1	Pfizer Incorporated	An Evaluation of Resources Consumption in Disease Progression in HIV/AIDS Patients
	\$67,214	1	Novartis	Resource Use, Costs, and Persistency of Iron Chelation Therapy for Sickle Cell Disease Patients in the Florida Medicaid
	\$5,000	1	Miscellaneous Donors	Miscellaneous Donors
Teresa Kauf	\$150,000	1	SmithKline Beecham	Impact of Medicaid Drug Policy on the Use of Lamotrigine Among Florida Medicaid Enrollees with Epilepsy
SooYeon Kwon	\$23,792	1	National Institute of Health	Improving Anti-thrombotic use in Stroke Prevention
Earlene Lipowski	\$47,200	1	Agency for Health Care Research and Quality	Embracing the PBRN Model to Improve the Medication Use Process
Rich Segal	\$63,945	1	U.S. Department of Veterans Affairs	Professional Services for North Florida/South Georgia VARMC Rehabilitation Outcomes Research Center

PHARMACY PRACTICE & CENTER FOR PHARMACOGENOMICS

Faculty	Amount	Number	Agency	Project Title
Leslie Hendeles	\$20,940	3	SkyePharma	A Randomized, Double-blind, Placebo-controlled, Parallel Group, Stratified, Multicenter, 12 Week Study Comparing the Safety and Efficacy of Fluticasone and Formoterol Combination (Flutiform 100/10 µg Twice Daily) in a Single Inhaler (SkyePharma HFA pMDI) with the Administration of Placebo or Fluticasone (100 µg Twice Daily) and Formoterol (10 µg Twice Daily) Alone in Adolescent and Adult Patients with Mild to Moderate Asthma
	\$66,319	3	Novartis	The Effect of Omalizumab on Airway Responsiveness to Adenosine with Poorly Controlled Asthma
	\$1,500	1	Glaxo SmithKline	A Randomized, Double-blind, Parallel Group Study Evaluating the Safety of Fluticasone Propionate/Salmeterol 100/50MCG HFA (2 Inhalations OF 50/25 MCG) Twice Daily Compared with Fluticasone Propionate 100MCG HFA (2 Inhalations of 50MCG) Twice Daily in Subjects 4-11 Years of Age with Persistent Asthma
	\$6,250	1	MAP Pharmaceuticals	A Randomized, Double-blind, Placebo Controlled, Crossover Safety Study of 2 Single Repeat Doses of MAP0004 (TEMPO DHE) in Adult Asthmatics over 15 Days
Julie Johnson	\$20,250	7	Nemours Children's Clinic	Biostatistics and Bioinformatics Information
	\$1,588,379	3	National Institute of Health	Pharmacogenomic Evaluation of Antihypertensive Responses
	\$47,428	1	American Heart Association	Cyp3a5 Genotype: Influence on Pharmacokinetics, Pharmacodynamics and Drug Interactions
	\$7,829	1	Abbott GMBH & Company KG	Heart Disease Outcomes: Impact of Genetics and Pharmacogenetics
	\$7,500	1	Rho Chi Society – Eli Lilly and Company	Genetic Polymorphisms and Diabetes in the International Verapamil SR-Trandolapril Study: Associations in Antihypertensive Drug Pathways
\$764,957	1	National Institute of Health	Hypertension Pharmacogenetics	
Taimour Langace	\$6,446	1	National Institute of Health	Pharmacotoxicology of Trichloroethylene Metabolites

PHARMACY PRACTICE & CENTER FOR PHARMACOGENOMICS (cont.)

Faculty	Amount	Number	Agency	Project Title
Daniel Robinson	\$132,652	1	University of Florida Area Health Education Centers	North Florida Area Health Education Centers Program
Issam Zineh	\$80,000	1	American Heart Association	Systemic Immunomodulatory Effects and Pharmacogenetics of Atorvastatin in Early Atherosclerosis
	\$2,000	1	American Heart Association	Anti-inflammatory Effect of Vaccinium Berry Extract on Human Endothelial Cells

ADMINISTRATION

Faculty	Amount	Number	Agency	Project Title
William Millard	\$202,426	1	Shands Jacksonville	Pharmaceutical Care and Education Contract 3430 (Contractual Agreement for Professional Services Between Shands Jacksonville and The University of Florida)

20TH ANNUAL RESEARCH SHOWCASE AND AWARDS RECOGNITION DAY

THURSDAY, FEBRUARY 22ND, 2007



UNIVERSITY OF FLORIDA
COLLEGE OF PHARMACY

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SCHEDULE OF EVENTS

8:00am - 9:00am Set-up Poster Presentations (Reception Hall, HPNP Building)

POSTER COMPETITION

9:00am - 11:30am **Poster Competition** – Students Present for Judging (Reception Hall, HPNP Building)

ORAL COMPETITION

1:00pm - 1:10pm **Introduction** – Dr. William Millard, Executive Associate Dean (Room G-112, HPNP Building)

Levitt Division (20 minute presentations)

1:10pm - 1:30pm Chin-Ying Chen
1:30pm - 1:50pm Ahunna Onyenwenyi

Junior Division (15 minute presentations)

1:55pm - 2:10pm Jason Kwan
2:10pm - 2:25pm Anzeela Schentrup
2:25pm - 2:40pm Krista Wilson

2:40pm - 2:50pm **BREAK**

Senior Division (20 minute presentations)

2:50pm - 3:10pm Beatrice Nyagode
3:10pm - 3:30pm Leah Villegas
3:30pm - 3:50pm Preeti Yadava

4:00pm – 5:00pm **Keynote Address** – Richard Lalonde, Pharm.D.
“Improved Drug Development Based on Modeling and Simulations” (Room G-101, HPNP Building)

5:00pm - 7:00pm **Awards Reception** – Refreshments and Announcement of Winners (Reception Hall, HPNP Building)

ORAL COMPETITION

LEVITT DIVISION

#1 Presenter: **Chih-Ying Chen**
Department: Pharmacy Health Care Administration
Research Title: Utilization of CNS Stimulants (CNSS) Treatment for Newly Diagnosed ADHD Children

#2 Presenter: **Ahunna Onyenwenyi**
Department: Pharmacy Health Care Administration
Research Title: Rates of Hypokalemia After Implementation of a More Stringent Insulin Protocol in Critical Care Patients

JUNIOR DIVISION

#1 Presenter: **Jason Kwan**
Department: Medicinal Chemistry
Research Title: Marine Natural Products for Drug Discovery

#2 Presenter: **Anzeela M. Schentrup**
Department: Pharmaceutics
Research Title: Arachidonate 5-Lipoxygenase Pathway Gene Polymorphisms Modify Subgroup-dependant Risk of Cardiovascular Events in the International Verapamil SR/Trandolapril Study – Genetic Substudy (INVEST-GENES)

#3 Presenter: **Krista Renner Wilson**
Department: Medicinal Chemistry
Research Title: Construction and Characterization of Human Melanocortin-2 and -4 Chimeras

SENIOR DIVISION

#1 Presenter: **Beatrice A. Nyagode**
Department: Medicinal Chemistry
Research Title: What is the Seasoning in your Fillet?

#2 Presenter: **Leah R. Villegas**
Department: Pharmaceutics
Research Title: Development of Non-viral Gene Therapy Targeting the Insulin-like Growth Factor System for Treatment of Brain Tumors

#3 Presenter: **Preeti Yadava**
Department: Pharmacodynamics
Research Title: Non-viral siRNA Delivery Systems

POSTER COMPETITION

1 **Comparison of Pharmacodynamic Target Attainment of Ertapenem in Healthy Volunteers and Intensive Care Unit Patients Using Monte Carlo Simulations**

Presenter: Vipul Kumar (Pharmaceutics/Post-doctoral Fellow)
Authors: V Kumar, O Burkhardt, M Pletz, T Welte, H Lode, H Derendorf

2 **DNA Variations in Voltage-gated Calcium Channel Beta 2 Subunit Gene CACNB2**

Presenter: Yuxin Niu (Pharmacy Practice/Post-doctoral Fellow)
Authors: Y Niu, J Moss, T Langae, Y Gong, J Johnson

3 **β_2 -Adrenergic Receptor Polymorphisms and Antihypertensive Treatment Outcomes in the International Verapamil SR/Trandolapril Study – GENetic Substudy (INVEST-GENES)**

Presenter: Michael Pacanowski (Pharmacy Practice/Post-doctoral Fellow)
Authors: M Pacanowski, Y Gong, T Langae, R Cooper-DeHoff, N Schork, C Pepine, J Johnson

4 **Structure-activity Studies of β -Melanocyte Stimulating Hormone Truncation Peptides at the Melanocortin Receptors**

Presenter: Rachel Witek (Medicinal Chemistry/Post-doctoral Fellow)
Authors: R Witek, J Schaub, K Wilson, Z Xiang, F Portillo, C Haskell-Luevano

5 **Alpha 1 Antitrypsin (AAT) Inhibits Granzyme B Activity and NK Cell Killing**

Presenter: Bin Zhang (Pharmaceutics/Post-doctoral Fellow)
Authors: B Zhang, M Tang, C Wasserfall, M Atkinson, M Brantly, S Song

6 **Systemic Cytokine Balance Differs Between Asthma Patients with and without Positive Response to Adenosine Bronchoprovocation**

Presenter: Courtney Church (Pharmacy Practice/Pharmacy Student)
Authors: C Church, I Zineh, L Hendeles

7 **Cholesterol Transporter ABCG8 T400K Gene Variant and Response to Atorvastatin**

Presenter: Jenine Gomez (Pharmacy Practice/Pharmacy Student)
Authors: J Gomez, G Welder, C Arant, T Wessel, R Schofield, T Langae, I Zineh

8 **Risk of Diabetes Associated with the KCNJ11 E23K Variant in the INVEST GENetic Substudy**

Presenter: Daniel Gonzalez (Pharmacy Practice/Pharmacy Student)
Authors: D Gonzalez, M Pacanowski, J Johnson

POSTER COMPETITION (cont.)

9 **The Influence of CYP2C9 Polymorphisms on *In Vitro* metabolism of Repaglinide**

Presenter: Jason Karnes (Pharmacy Practice/Pharmacy Student)
Authors: J Karnes, C Galloway, R Frye

10 **Analysis of Transfection Efficiency of PGL3 and PGL4.13 Plasmids in HEK293 and PC12 Cell Lines using Various Methods**

Presenter: Nikola Kenjic (Pharmaceutics/Pharmacy Student)
Authors: N Kenjic, M Weide, J Hughes

11 **Immunomodulatory Effects of Vaccinium Berry Extract and Astaxanthin on Human Endothelial Cells**

Presenter: Michelle Martone (Pharmacy Practice/Pharmacy Student)
Authors: M Martone, G Welder, I Zineh

12 **Discovery of BAY 43-9006 (Nexavar) for the Treatment of Cancer: Key Structure Activity Relationships**

Presenter: Reina Natero (St. Pete Campus/Pharmacy Student)
Authors: R Natero, D Bankston, J Barbosa, D Brittelli, Y Caringal, R Carlson, J Dumas, T Gane, S Heald, B Hibner, J Johnson, M Katz, N Kennure, J Kingery-Wood, W Lee, X Liu, T Lowinger, I McAlexander, M Monahan, U Khire, J Renick, B Riedl, H Rong, R Sibley, R Smith, D Wolanin

13 **The Solubility of Adenosine-5-Monophate**

Presenter: Nam Nguyen (Pharmaceutics/Pharmacy Student)
Authors: N Nguyen, M Hassan, L Hendeles, J Hughes

14 **Genotyping Single Nucleotide Polymorphisms in the Adrenergic Receptor System to Assess Cardiovascular Outcomes in Women**

Presenter: Shantelle Noble (Pharmacy Practice/Pharmacy Student)
Authors: S Noble, I Zineh, M Pacanowski, J Johnson

15 **Hepatic Lipase Gene Variation (-514C→T) and Lipid Response to Atorvastatin**

Presenter: Hetain Patel (Pharmacy Practice/Pharmacy Student)
Authors: H Patel, G Welder, C Arant, T Wessel, R Schofield, I Zineh

16 **Quality of Vancomycin Use in Patients with AKI in the ICU**

Presenter: Ashley Tyler (Pharmacy Health Care Admin./Pharmacy Student)
Authors: A Tyler, A Winterstein, A LeClaire, A Onyenwenyi, B Staley, J Layon, A Gabrielli, A Bihorac

POSTER COMPETITION (cont.)

17 **In Vitro and In Vivo Modulation of CXCL5/ENA-78 by Atorvastatin with NOS3-Associated Response Variability**

Presenter: Gregory Welder (Pharmacy Practice/Pharmacy Student)
Authors: G Welder, N Chegini, C Arant, T Wessel, T Langae, R Schofield, I Zineh

18 **Integrity of siRNA-liposome Complexes after Lyophilization**

Presenter: Melissa Gibbs (Pharmaceutics/Pharmacy Student)
Authors: M Gibbs, P Yadava, J Hughes

19 **Effects of Freeze-Thawing on siRNA Stability**

Presenter: Carlos Castro (Pharmaceutics/Pharmacy Student)
Authors: C Castro, M Gibbs, P Yadava, J Hughes

20 **Presynaptic Inhibition of Excitatory Afferents to Hilar Mossy Cells**

Presenter: Chinki Bhatia (Pharmacodynamics/Graduate Student)
Authors: B Nahir, C Bhatia, C Frazier

21 **NO-Induced Increases in Outflow Facility Correlate with Decreases in TM Cell Volume**

Presenter: William Dismuke (Pharmacodynamics/Graduate Student)
Authors: W Dismuke, C Mbadugha, D Ellis

22 **Determination of Desethylamodiaquine by Liquid Chromatography Tandem Mass Spectrometry: Application to Cytochrome P450 2C8 Studies in Human Liver Microsomes**

Presenter: Prajakta Dravid (Pharmaceutics/Pharm. Practice/Graduate Student)
Authors: P Dravid, R Frye

23 **Monitoring Glucose Regulation Parameters in Veterans Living with Schizophrenia-related Disorders and Switched from One Second-Generation Antipsychotic to Another**

Presenter: Patrick Garman (Pharmacy Health Care Admin./Graduate Student)
Authors: P Garman, L Ried, M Bengtson, C Hsu

24 **Simultaneous Determination of Dexamethasone, Dexamethasone 21-acetate and Paclitaxel in Simulated Biological Matrix by RP-HPLC: Assay Development and Validation**

Presenter: Navin Goyal (Pharmaceutics/Graduate Student)
Authors: N Goyal, A Achchabi, E Goldberg, G Hochhaus

POSTER COMPETITION (cont.)

25 **Effect of Alpha 1 Antitrypsin (AAT) on Murine Collagen Induced Arthritis**

Presenter: Christian Grimstein (Pharmaceutics/Graduate Student)
Authors: C Grimstein, Y-K Choi, S Song

26 **Evaluation of Anxiolytic-like Activity of an Extract and Fractions Prepared from *Apocynum Venetum* in the Elevated Plus Maze Test in Mice**

Presenter: Oliver Grundmann (Pharmaceutics/Graduate Student)
Authors: O Grundmann, J Nakajima, C Michalski, A Pomerence, S Seo, V Butterweck

27 **Bone Marrow Cell-based and Viral Vector-mediated Gene Therapy for Alpha-1 Antitrypsin Deficiency**

Presenter: Hong Li (Pharmaceutics/Graduate Student)
Authors: H Li, S Song

28 **Lipid Profile Monitoring in Veterans Living with Schizophrenia-related Disorders and Treatment with Switching Second Generation Antipsychotics**

Presenter: Chienning Hsu (Pharmacy Health Care Admin./Graduate Student)
Authors: C Hsu, L Ried, M Bengtson, P Garman

29 **Treatment Initiation of Antiviral Therapy for Hepatitis C Patients Enrolled in Florida Medicaid**

Presenter: Chienning Hsu (Pharmacy Health Care Admin./Graduate Student)
Authors: C Hsu, T Kauf, E Lipowski

30 **HPLC Validate the Results of Voriconazole Time-kill and Postantifungal Effects (PAFE) Experiments against Candida Species**

Presenter: Yanjun Li (Pharmaceutics/Graduate Student)
Authors: Y Li, C Clancy, M Nguyen, H Derendorf

31 **High Temporal Resolution of Amino Acid Levels in Rat Nucleus Accumbens During Operant Ethanol Self Administration**

Presenter: Zhimin Li (Pharmacodynamics/Graduate Student)
Authors: Z Li, A Zharikova, J Bastian, L Esperon, B Jowers, J Peris

POSTER COMPETITION (cont.)

32 Role of Mineralocorticoid Receptors in Regulation of Cortisol, Electrolytes, and Blood Pressure in Pregnancy

Presenter: Melissa Lingis (Pharmacodynamics/Graduate Student)
Authors: M Lingis, M Keller-Wood

33 Preparation and Characterization of Corticosteroid Nanoparticles for Intravitreal Delivery

Presenter: Keerti Mudunuri (Pharmaceutics/Graduate Student)
Authors: K Mudunuri, G Hochhaus

34 Inhalable Nanoparticles for Asthma Therapy

Presenter: Gina Patel (Pharmaceutics/Graduate Student)
Authors: G Patel, G Hochhaus

35 Characterization of Loteprednol Etabonate Microspheres

Presenter: Elanor Pinto (Pharmaceutics/Graduate Student)
Authors: E Pinto, G Hochhaus

36 Liver X Receptor- α (LXRA) Gene Polymorphism and Variable CRP Response to Statins

Presenter: Elvin Price (Pharm. Practice/Pharmaceutics/Graduate Student)
Authors: E Price, L Mangravite, R Krauss, I Zineh

37 Structure-activity Relationship Studies of the Mouse Melanocortin-3 Receptor by Site-directed Mutagenesis

Presenter: Bettina Proneth (Medicinal Chemistry/Graduate Student)
Authors: B Proneth, Z Xiang, W Millard, S Litherland, C Haskell-Luevano

38 Effects of 17-beta-estradiol on Cardiac Remodeling in the DOCA-salt Model of Hypertension

Presenter: Yanfei Qi (Pharmacodynamics/Graduate Student)
Authors: Y Qi, V Shenoy, J Machado, T Bolton, J Grobe, M Katovich

39 Pharmacokinetics of Luteolin and its Metabolite

Presenter: Sasiporn Sarawek (Pharmaceutics/Graduate Student)
Authors: S Sarawek, H Derendorf, V Butterweck

POSTER COMPETITION (cont.)

40 Linezolid vs. MRSA-A new PK/PD Model

Presenter: Stephan Schmidt (Pharmaceutics/Graduate Student)
Authors: S Schmidt, H Derendorf

41 Prevention of Angiotensin II-induced Cardiac Remodeling by Angiotensin-(1-7)

Presenter: Vinayak Shenoy (Pharmacodynamics/Graduate Student)
Authors: Shenoy, J Grobe, A Mecca, M Lingis, T Bolton, J Machado, R Speth, M Raizada, M Katovich

42 Prevention of Kidney Stone Formation by Ammi Visnaga L

Presenter: Pattaraporn Vanachayangkul (Pharmaceutics/Graduate Student)
Authors: P Vanachayangkul, K Byer, S Khan, V Butterweck

43 A Novel Pharmacokinetic/Pharmacodynamic (PK/PD) Approach to Predict Total Prednisolone Concentrations in Human Plasma

Presenter: Jian Xu (Pharmaceutics/Graduate Student)
Authors: J Xu, J Winkler, H Derendorf

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