UNIVERSITY CURRICULUM COMMITTEE – 2009-2010
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Law – No representative
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Social Work - Dr. Patricia M. Reeves
Veterinary Medicine - Dr. K. Paige Carmichael
Graduate School - Dr. Malcolm R. Adams
Undergraduate Student Representative – Cameron Secord
Graduate Student Representative – Lauren King

Dear Colleagues:

The attached proposal to offer the following Graduate Certificates in Clinical Residency in Pharmacy will be an agenda item for the April 2, 2010, Full University Curriculum Committee meeting:

PGY-1 Clinical Residency in Pharmacy
PGY-2 Clinical Residency in Pharmacy

Sincerely,

[Signature]

David E. Shipley, Chair
University Curriculum Committee

cc: Professor Jere W. Morehead
    Dr. Laura D. Jolly
MEMORANDUM

Date: November 17, 2009

To: Maureen Grasso, Dean
Graduate School

From: Svein Øie
Dean

Re: Proposal for Graduate Certificate of Clinical Residency in Pharmacy

The college is seeking to adjust its current nationally accredited clinical residency program to a non-degree graduate certificate program. This change is based on academic rationale and student demand. The proposed certificate program continues to meet national pharmacy residency accreditation standards and is similar in structure to the Certificate of Clinical Residency in the College of Veterinary Medicine.

The proposed change in our post-graduate residency program will enhance the academic rigor as well as provide course credit for faculty members who currently deliver and provide post-graduate residency instruction. The proposed program will also foster increased collaboration and scholarship between the graduate program and clinical sciences. Please provide your full support for approval of this program.

If you have any questions or need more information, please contact me.
November 17, 2009

Dean Maureen Grasso
Graduate School
University of Georgia
CAMPUS

RE: Proposal for the Graduate Certificate of Clinical Residency in Pharmacy

Dear Dean Grasso:

Attached is a proposal for the Graduate Certificate of Residency in Pharmacy Practice that has been voted and approved by the faculty in the College of Pharmacy. This program is similar in structure to the program that is currently in place at the College of Veterinary Medicine and also conforms to the standards of the American Society of Health System Pharmacists and the American Pharmacists Association which accredits our residency program.

This program will enhance the academic rigor of our existing residency program as well as provide course credit for faculty who have significant involvement in the training of the residents. The program will also generate significant formula funding per student per year. It is also an important mechanism for further enhancing scholarship and collaboration between the graduate program and the clinical sciences.

Sincerely,

[Signature]

Randall L. Tackett, PhD
Professor and Graduate Coordinator
College of Pharmacy
Proposal for
Graduate Certificate of Clinical Residency in Pharmacy

1. Institution  University of Georgia  Date  November 13, 2009
2. School/College  College of Pharmacy
3. Department  Clinical & Administrative Pharmacy
4. Level (undergraduate or graduate)  Graduate
5. Proposed Starting Date  Summer 2010
6. Abstract of the program for the University Council’s Agenda
7. Submit letters of support from the various academic unit heads involved in developing the program initiative or whose support is vital to its success.

SIGNATURES:

Department Head
Bradley G. Phillips

Dean of College
Svein Øie

Prepared by:
Randall L. Tackett, Ph.D, Graduate Coordinator
Bradley G. Phillips, Pharm.D, Department Head
Matthew Perri, Ph.D.
Brian Buck, Pharm.D, Dir. Residency Programs

Approved:  
Maureen Grasso  
Dean of the Graduate School
PROGRAM ABSTRACT

A graduate residency program is a training experience of one to two years in length for graduates with a Doctor of Pharmacy (PharmD) degree. At present, the College of Pharmacy offers a non-graduate community pharmacy residency program and will offer residencies in other practice areas in the future. Post-graduate residencies are being promoted by major national pharmacy organizations as a necessary capstone to the PharmD degree. The goal of these programs is to produce practitioners capable of providing innovative and state-of-the-art pharmacy services to patients. Furthermore, we expect that residents trained by UGA faculty will be able to improve and advance the professional practice of pharmacists as direct patient healthcare providers. On average, US patients visit a physician once per year, but visit pharmacies 11 times annually, underscoring the growing need for clinical training opportunities for our graduates. In order to enhance academic rigor, attract residents with high motivation for academia, and provide course credit for faculty who are providing training, we wish to offer UGA pharmacy residencies in the context of two graduate certificate programs - one that would encompass 1 year of training (PGY1) and the second (PGY2) would require 2 years for completion. Pharmacy care services are provided as part of the teaching programs of the College of Pharmacy under the direct supervision of faculty members in the College responsible for training of residents. Currently, residency-training programs do not generate credit hours, although the faculty and trainees view it as advanced post-graduate training. With the formal institution of this training program as a Certificate Program, the trainees will be awarded graduate residency training program certificates upon completion of the program.

PURPOSE AND EDUCATIONAL OBJECTIVES

The overall goal of the graduate residency program is to produce academically focused pharmacy practitioners in the State of Georgia who have the knowledge and skills to provide state-of-the-art care in a dynamic health care environment that will improve health. A graduate certificate program will provide advanced training in an academic environment.

The general program objectives of the graduate residency-training program are:

- To provide direct patient care in pharmacy practice environments.
- To refine skills in communications, patient care, health and wellness promotion, collaborative practice with other health disciplines, marketing and compensation strategies, patient and medication safety optimization, and technology.
- Promote advancement of the professional practice of pharmacy and life-long learning by working with pharmacy faculty and preceptors.
- To engage in practice-based research which leads to new knowledge or supports the provision and benefits of pharmacy services.
- To gain experience and abilities needed to prosper professionally in a competitive health care system.
• To participate in pharmacy administration functions, from strategic planning to staff supervision.
• To gain experience in teaching and scholarship.
• To serve and improve the community and general public.

The specific resident learning objectives are:
• Demonstrate the characteristics of a professional.
• Communicate clearly when speaking or writing.
• Deliver effective education and training programs.
• Understand patient care delivery systems in multiple practice settings.
• Design, execute, and report investigations of pharmacy-related issues.
• Establish a collaborative working relationship with health care providers.
• Design, recommend, monitor, and evaluate patient-specific therapy commensurate with the health care needs of the patient and the scope of responsibilities of the community pharmacist.
• Provide patient-specific and caregiver-specific education.
• Appropriately document patient care activities.
• Prepare and dispense medications using appropriate techniques.
• Deliver to the community educational programs that center on health/wellness promotion and disease prevention.
• Participate in the community pharmacy’s quality improvement approach to preventing medication-related problems and in the identification, assessment, and management of those that occur.
• Provide concise, applicable, and timely responses to requests for drug information from health care providers and patients.
• Participate in the identification of need, development, implementation and assessment of treatment guidelines and/or protocols related to patient care.
• Provide effective educational programs to health care professionals.
• Contribute to the development, implementation and operationalization of an innovative product or service.
• Participate in the marketing activities of a community pharmacy.
• Design strategies for determining the value of, and securing compensation for, patient care services.
• Direct the work of pharmacy students, technicians, and support personnel.
• Participate in the development and implementation of selected pharmacy policies and procedures.
• Participate in the community pharmacy’s quality assurance program.
• Participate in the evaluation of a current pharmacy service or program to determine if it meets the stated goals.
• Participate in the community pharmacy’s planning process.

DEMONSTRATED NEED FOR THE PROGRAM

The purpose of this proposal is to create a program to obtain graduate certification for pharmacy residents. By creating a graduate residency program, we will: 1)
Enhance the academic rigor of our residency program, 2) Promote advanced study in a graduate program, 3) Produce pharmacy residents who have solid training in state-of-the-art practice methods as well as a foundation in academic training, 4) Provide the residents with an official record of accomplishment upon completion of the training programs, and 5) Officially credit the work of the faculty members who oversee the post-graduate education of the residents. We believe that a residency program that incorporates graduate-level components (e.g., seminars, projects, and opportunity for elective courses) will be a more valuable program than a non-graduate residency.

Since its inception over 30 years ago, residency training has advanced the practice of pharmacy. Currently, there are approximately 1500 residency positions in the United States. Approximately 15% of pharmacy graduates pursue residency training. Moreover, residency training is increasingly being viewed as necessary for state-of-the-art practice in pharmacy. Most residency programs are offered through university-based health centers or are affiliated with colleges of pharmacy. Individuals who complete residencies are better prepared for the challenge and complexity of clinical practice and achieving status as board certified pharmacists. Residents that complete two years of post-graduate training may compete for College of Pharmacy faculty positions nationally. Participation on the part of faculty and residents expands the national reputation of the University of Georgia College of Pharmacy and provides greater opportunity to advance pharmacy practice in the state, region, and nation. All top-ranked U.S. colleges of pharmacy have residency programs. The American Association of Colleges of Pharmacy recently published a document calling for all colleges of pharmacy to promote and develop residency training and establish residency training as a requirement for clinical faculty employment by 2020.

STUDENT DEMAND

The majority of colleges of pharmacy in the United States have residency training programs. Some programs combine residency training with graduate work towards a MS degree, whereas others do not have a degree objective. Pharmacists completing the residency training programs are prepared for careers either in progressive pharmacy practice or academia. Successful completion of graduate residency certification will enhance their careers.

At present, over 2300 pharmacy graduates each year apply for residency programs. Of the UGA pharmacy graduating class, approximately 25 individuals applied for residency training programs. The number of students interested in these programs is growing nationally as well as among UGA students. Some national pharmacy organizations have proposed that all pharmacy graduates working in patient care settings should complete residencies. In the past few years, the College has had sufficient applications to its fill residency positions as well as to fill 12 positions for the coming year. Recent faculty hires at the rank of clinical assistant professor all have had at least two years of residency training.
DESIGN AND CURRICULUM OF THE PROGRAM

The program was developed according to national standards and guidelines of the American Society of Health-System Pharmacists for pharmacy resident post-graduate year 1 (PGY-1) and post-graduate year 2 (PGY-2) of training. Residents in the PGY-1 year acquire substantial knowledge required for skillful problem solving, refine their problem-solving strategies, strengthen their professional values and attitudes, and advance the growth of their clinical judgment. The instructional emphasis is on the progressive development of clinical judgment, self-reflection, and shaping of decision-making skills. In the second year (PGY-2), the resident builds upon the broad-based competencies achieved in the first year to provide care in the most complex of cases or in the support of care through practice leadership. Residents successfully completing two years of training develop an area of scholarship, are able to attain national board certification in pharmacy practice, and may pursue an academic career as a clinical faculty member. Residency programs throughout the country are accredited by The American Society of Health-System Pharmacists. Our program meets national PGY-1 and PGY-2 residency training standards and is currently accredited.

Our residency program focuses on training residents that complete both PGY-1 and PGY-2 years of training. Each resident will register for the following number of credits per academic session:
Post Graduate Year I (PGY1): Short Session II - 5 hrs; Fall Semester - 16 hrs; Spring Semester - 16 hrs; Long Session - 12 hrs.
Post Graduate Year II (PGY2): Fall Semester - 16 hrs; Spring Semester - 16 hrs; Maymester- 5 hrs and Short Session I - 5 semester hrs.

The advanced courses listed below require at least 40 hours of clinical training at various sites each week. Each course has variable credits (4-16) depending on the individual’s particular program each semester. In addition, residents will be required to register for a seminar each semester and complete a year-long longitudinal research project. Most residents will spend 75% of their time over the course of the training program in the clinical training sites. The PHRM 7810 course listed below has been approved by the College and the other courses are pending approval. The courses will be graded A-F. All of the skills imparted to the resident require that a one-on-one approach be used and that clinical case material and medical literature serve as the primary focus for delivery of the information. This intensive training is required by the accreditation standards for Pharmacy Residency programs and is the reason for the number of hours required for PGY1 and PGY2 training years.

<table>
<thead>
<tr>
<th>Specific required courses</th>
<th>Credit hours</th>
<th>Course #</th>
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<tbody>
<tr>
<td>Patient Care in the Community</td>
<td>Variable 4 - 16</td>
<td>PHRM 7810</td>
</tr>
<tr>
<td>Pharmacy care seminar</td>
<td>1</td>
<td>PHRM 7820</td>
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Residents may select to enroll in additional courses offered by the College and University depending on the advice of the Advisory Committee. Some suggested courses include:

**Elective Courses:**
- PHAR 6010 Pharmaceutical, Biotechnology, and Device Industries
- PHAR 6200 Clinical Trials Design and Management
- PHAR 7230 Medical Ethics
- PHRM 8640 Research Methods in Pharmacy Care Administration
- PHRM 4210/6210 Principles of Pharmaceutics II
- PHRM 6220 Statistical Methods II
- EPID 7010E Introduction to Epidemiology I
- EPID 7020 Introduction to Epidemiology II
- EPID 7200 Epidemiological Aspects of Health Disparities
- EPID 8100 Clinical Epidemiology and Evidence-Based Practice
- BIOS 7010 Introductory Biostatistics I
- BIOS 7020 Introductory Biostatistics II
- STAT 4230/6230 Applied Regression Analysis
- STAT 4240/6240 Sampling and Survey Models

The graduate residents are supervised at two levels during the program. First, they receive advisement and general supervision by the Graduate Coordinator and the Residency Director (a full-time faculty member) and a Residency Advisory Committee. Second, while they are assigned to the variable clinical rotations, they receive constant supervision and advice from the faculty and preceptors on the rotation. Faculty clinicians serve as practice “role models” and “coaches” for residents. These individuals provide written and verbal formative (during) and summative (at the end) evaluations of resident performance with each learning experience and/or clinical rotation using a systematic evaluation process known as the Residency Learning System (RLS). Within the RLS, an on-line system (Resi-Trak) is used to track and organize resident evaluations and plans to ensure that resident progress is documented and training outcomes are achieved. Residents and faculty clinicians or “preceptors” continually review and discuss evaluations as part of the “precepting” or “coaching” process. Use of the Resi-Trak system facilitates communication amongst faculty involved in the residency training program. This process also provides direction to the resident and promotes achievement of goals and objectives. Residents are required per the standards to complete periodic (usually quarterly) self-assessments as well as evaluations of the training program and preceptors. The results of these evaluations by a Residency Committee made up of Faculty Preceptors and Program leadership. Assessment plans also include exit interviews and periodic alumni and employer surveys. The results of these surveys and interviews are used to make improvements in the program where necessary. Assessment will also be performed through the course grading process. The grading method, as well as course expectations, will be detailed for the residents at the beginning of each course. The
resident must complete all assigned courses and clinical rotations and fulfill all residency outcomes satisfactorily in order to receive the certificate of completion of the program.

Each resident will be required to complete a residency project that is suitable for presentation at a national meeting. The project should also be prepared in written format suitable for submission to a peer-reviewed journal. The Residency Director and selected preceptors will approve the project and plan and oversee implementation and final write-up. The resident will receive periodic assessment from the Residency Director on the progress of this project (using the same evaluation process indicated above). The resident will register for course credit for this project.

Upon successful completion of all requirements prescribed in the proposed curriculum for the residency program, a certificate will be awarded which reads “PGY-2 Clinical Residency in Pharmacy.” Completion of the graduate residency program will be entered into the student’s transcript. In some instances, a resident may opt to complete only Post Graduate Year I (PGY1) of training. In this case, the resident’s certificate will read “PGY-1 Clinical Residency in Pharmacy.”

FACULTY RESOURCES

The College of Pharmacy has sufficient faculty members with expertise in areas that will be important to this program. All are licensed pharmacists and hold a variety of board certifications in their respective specialties. These faculty members teach courses, oversee clinical activities, and are involved in on-going scholarly activities that will contribute directly to this program. A complete listing of the faculty members involved in the program is below. Faculty members are listed according to their particular area of expertise or specialization.

Faculty involved in the program                      Area of Expertise

Randall L. Tackett, PhD (Graduate Coordinator)       Cardiology
Brian Buck, PharmD, FASHP (Residency Director)       Critical Care
David DeRemer, PharmD, BCPS                         Oncology
Susan Fagan, PharmD, BCPS, FCCP                     Neurology
Virginia Fleming, PharmD                             Internal Medicine
Daniel Forrister, PharmD                             Community Pharmacy
Josh Guffey, PharmD                                  Ambulatory Care
Keith Herist, PharmD, AAHIVE                        Infectious Disease
Carolyn Hunter, PharmD                              Internal Medicine
Sally Huston, PhD                                   Health Behavior
J. Russell May, PharmD, FASHP                       Drug Information
Michael Neville, PharmD, BCPS                       Community Pharmacy
Merrill Norton, PharmD, CCS, CCDP-D                 Addiction Pharmacy
Matthew Perri, III, PhD                             Community Pharmacy
Bradley G. Phillips, PharmD, BCPS (Dept. Head)  Cardiology
Beth Phillips, PharmD, BCPS   Ambulatory Care
Kalen Porter, PharmD, BCPS   Pediatrics
Sukhmani Sarao, PharmD   Community Pharmacy
Greene Shepherd, PharmD, DABAT, FAACT   Emergency Medicine
Robin Southwood, PharmD, BCPS   Internal Medicine
William J. Spruill, PharmD   Therapeutics & Pharmacokinetics
William E. Wade, PharmD   Community Pharmacy
Dianne Williams, PharmD   Drug Information

Adjunct Faculty members involved in the program

Trisha Branan, PharmD     Critical Care
Jill Butterfield, PharmD    Infectious Disease
Jody L. Carswell, PharmD    Neurology
Landon Castleman, PharmD    Community Pharmacy
Christina DeRemer, PharmD    Internal Medicine
Tomas Flynt, PharmD, BSPHR   Psychiatry
Tad Gomez, MS     Hospital Pharmacy
Dave Killough, PharmD    Surgery
Marjorie Phillips, PharmD   Medication Safety
Jason M. VanLandingham, Pharm.D   Community Pharmacy
Donna Vasil, PharmD   Renal Transplant
Tina Whitehouse, PharmD   Ambulatory Care

LIBRARY AND OTHER RESOURCES

The Science Library and other resources in the University of Georgia Library System have the journals, books, and electronic resources required to support this program. The current collection of specialty journals is sufficient to meet most needs of the trainees. Other library resources available within the University System, including Galileo, GIL, and the associated internet-based databases, will contribute to making the scientific literature available to the participants of this program. The Millikan Educational Resources Center in the College of Pharmacy will be accessible to the resident.

The College of Pharmacy has the basic facilities required for successful completion of the residency training programs. We have affiliations with many independent and chain community pharmacies that can serve as training sites. We have agreements in place with Kroger, Village Drugs, Barnes Pharmacy, Mercy Clinic, Medical College of Georgia Hospital Inc., Athens Regional Medical Center Anticoagulation Clinic, and the Veterans Affairs Medical Center (Community Based Outpatient Clinic).

While a small percentage of effort will be required from many of the faculty listed above, the Program Director will be expected to spend about 25% of effort specifically on residency activities.
FISCAL AND ENROLLMENT IMPACT AND ESTIMATED BUDGET

Currently there are 12 residents in our training program. The process of changing the existing program into a graduate certificate program will increase the number of graduate student credit hours generated by the College of Pharmacy. Our goal is eventually to have 25-30 resident positions in the program. We plan to continue to have 12 residents next year (2010/11) and 14 residents the following year. Funds for the stipends are consistent with current stipends in the profession as well as in comparable graduate residency certificate programs on campus (e.g., Vet Med).

Table: Summary of Current and Projected Expenses

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<td>Operating Costs</td>
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<td>Library Acquisitions</td>
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<tr>
<td>Total</td>
<td>$259,600</td>
<td>$261,600</td>
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We estimate that approximately 40 credit hours per year will be generated for each of the residents. This will generate over $20,000 in formula funding per student per year.

ADMISSIONS, RETENTION AND ADMINISTRATION OF THE PROGRAM

All policies of the University of Georgia Graduate School will be followed for admissions to this program. In addition, resident candidates will participate in a matching program hosted by the American Society of Health-System Pharmacists. After receipt of all necessary application materials, residents will undergo interview by College of Pharmacy faculty members. Residents will be selected through a candidate ranking system and the national matching program. Then, selected residents will submit all necessary materials for admission to the Graduate School. It will not be feasible for all pre-matched candidates to apply for Graduate School.

Each participant in a clinical training program will be assessed throughout and at the end of each clinical course or rotation in the manner discussed above as required by ASHP Residency Training Standards.

The Department of Clinical and Administrative Pharmacy will administer the residency certificate program. The Program will be directly supervised by the Graduate
Coordinator (Dr. Randall Tackett). A Residency Director (Dr. Brian Buck) has been appointed and is responsible for day-to-day supervision of the residents. The Department has a Residency Committee for program development, policy setting, and resident performance review. These individuals report to the Head of the Department of Clinical and Administrative Pharmacy. Residency training is specifically identified in the Department’s mission statement.

The residency program has been reviewed and was accredited in 2004 by the American Society of Health-System Pharmacists (ASHP) Commission on Credentialing. The program undergoes reaccreditation in April 2010. The residency program participates in the national Residency Matching Program conducted through ASHP. The residencies will be advertised through the ASHP Residency Showcase at the annual ASHP Midyear meeting and other residency showcases in the Southeast region.
Date: January 21, 2010

TO: Libby Johnson
Graduate School
CAMPUS

FROM: Randall Tackett
Clinical & Administrative Pharmacy
College of Pharmacy

RE: Graduate Residency Certificate Program Revisions

We have made the suggested changes as indicated below. Please let me know if any additional changes or information is required.

Comment: Clarify total number of hours for the certificate, including an explanation of why the credit hours are higher than most certificate programs.

Response: The hours proposed are in line with the expectation of the accrediting body and are due to the intensive clinical training received compared to other certificate programs. The proposed hours are similar to that of the Veterinary Residency Program that is present and operable here at the University of Georgia.

Comment: Provide semester by semester chart of coursework.

Response: Coursework hours have been detailed for each semester. Please see page 5.

Comment: Provide a general list of courses the students may take.

Response: Required and elective courses have been included. Please see pages 5 and 6.

Comment: Include discussion relative to if the student completes only the first year as opposed to through the second year.

Response: Specific educational requirements for PGY-1 and PGY-2 years are based on accreditation standards. Those that opt to complete only the PGY-1 year will receive a graduate certificate that reads, “PGY-1 Clinical Residency in Pharmacy”. This is noted in the in the last paragraph under the Design and Curriculum of the Program section on page 6.
Response: Postgraduate year-1 (PGY-1) and year-2 (PGY-2) is the terminology for pharmacy residency training. I have detailed the educational requirements and progression of knowledge residents obtain upon completion of each year of training in the first paragraph under the Design and Curriculum of the Program section (see bottom page 4).

Comment: Typo - Resources
Response: corrected