

NEW MINOR

An academic minor is a secondary area of study that is separate from the major and is typically defined by a set of courses and/or credit hour requirements within a specified discipline. In other words, a minor is a structured group of courses that leads to considerable knowledge and understanding of a subject, although with less depth than a major. Minors are typically between 18 and 32 credit hours in length, depending on the college and disciplinary area.

Once approved at the college level, your college will send the proposal for a new minor to the appropriate Senate academic council (HCCC and/or UC) for review and approval. Once approved at the academic council level, the academic council will send your proposal to the Senate Council office for additional review and then a 10-day posting online, during which senators review on their own and have an option to register an objection if they so desire. If no objection is raised to the Senate Council Office within ten days of the posting the proposal, then it is approved. The Senate Council Office will report approvals to the Provost, Registrar and other appropriate entities, including the contact person.

1. GENERAL INFORMATION			
1a	Home college: Medicine		
1b	Home educational unit (department or school): <i>Pharmacology and Nutritional Sciences</i>		
1c	Proposed minor name: <i>Pharmacology</i>		
1d	CIP Code (provided by Institutional Effectiveness): 26.1001	Today's date: 1/1/2016	
1e	Is there an accrediting agency related to this minor?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	If "Yes," name:		
1f	Requested effective date:	<input checked="" type="checkbox"/> Fall semester following approval.	OR <input type="checkbox"/> Specific Date ¹ :
1g	Contact person name: <i>Michael Kilgore</i>	Email: <i>M.Kilgore@uky.edu</i>	Phone: <i>859.323.1821</i>
2. OVERVIEW			
2a	Provide a brief description of the proposed new minor. (300 word limit)		
	<p><i>Description: This proposed minor in Pharmacology will provide a unique and distinctive educational program as well as an outstanding recruiting tool for the University. This program will complement a wide range of majors across campus including Biology, Chemistry, Psychology, Neuroscience, AgBiotech, Nursing, Health Sciences, Kinesiology and others. Pharmacology is a branch of medicine and biology that seeks to understand the development and the effects of drugs from both natural and synthesized sources. It is a field that has arguably had a greater impact on human, animal and agricultural health and wellbeing than that of any other discipline within science.</i></p> <p><i>This minor in pharmacology is designed to prepare graduates to enter agricultural, medical, dental, veterinary, nursing, medical technology and other health related professions. Regardless of their degree and career choices, the completion of this minor will prepare students to navigate the medical choices that lie before us</i></p>		

¹ Minors are effective for the fall semester following approval. No minor will be made effective unless all approvals, up through and including University Senate approval, are received.

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	<p><i>all. It will also offer students a unique opportunity to discover how drugs work and how they are developed and used. The curriculum will have 2 required courses in pharmacology. The first is an introduction to Pharmacology (PHA 200) and will serve as a mechanism to expose students to a field they will not have seen before and to offer a view into the minor and how it can help them prepare for their educational goals and careers beyond. This will be followed by a more in depth course (PHA 421G) that will explore how drugs act (pharmacodynamics), how they are metabolized and transported (pharmacokinetics) and sites and mechanisms of drug action. These courses will be followed by electives that will examine drugs used in a wide range of fields including reproduction, the endocrine system, infectious diseases, cancer, cardiovascular disease and behavior and brain function (PHA 422G, 423G, 424G, 425G and PSY 459).</i></p>		
2b	<p>Will this minor be associated with an existing degree program?</p>	<p>Yes <input type="checkbox"/></p>	<p>No <input checked="" type="checkbox"/> X</p>
	<p>If "Yes," describe how the new minor will complement the existing degree program. (150 word limit)</p>		
2c	<p>Explain the need for the new minor (e.g. market demand and cross-disciplinary considerations). (300 word limit)</p>		
	<p><i>Need: There is sound reasoning for the development of an undergraduate minor in Pharmacology. The first, and most compelling, is to help prepare our undergraduates to succeed in medical, dental, graduate and other programs in clinical, application of policy and agricultural sciences. The second reason to develop the Pharmacology minor is that while pharmacology is critical to many fields of graduate and professional training, it is taught at the undergraduate level at very few institutions. While critical to undergraduates in medical, veterinary and agricultural sciences, there are currently only 4 US Universities listed in The American Society for Pharmacology and Experimental Therapeutics (ASPET) that offer an undergraduate program in pharmacology. The development of such a program would offer UK an excellent opportunity to distinguish itself from our peer institutions and offer potential students a unique program that could well influence their decision to attend UK. Therefore, this proposed minor would offer our students a distinctive educational opportunity and would serve as a recruiting tool to attract undergraduates that might be considering graduate and professional training. Four the courses in this minor also can be taken for graduate credit and would be useful electives in other programs.</i></p> <p><i>Although the majority of courses proposed are within the college of medicine, the goal is that as the minor grows additional faculty will be interested in developing courses in plant pathology, AgBiotech and other program across campus. We have reached out across campus and while there is considerable interest in developing this new academic discipline at the University of Kentucky, there is an understandable desire to start modestly until the minor demonstrates its appeal to students. We also envision interactions with the schools of Business and Law in the future, given the importance of the pharmaceutical industry in the commercial sector. The discussions with these units have been ongoing and will continue upon the approval of this program.</i></p>		
2d	<p>Describe the demographics of the intended audience. (150 word limit)</p>		
	<p><i>Demographics: It is anticipated that a wide range of students would be attracted to a minor in pharmacology. At least initially, students across campus in pre-med, pre-dental, kinesiology, health sciences, clinical sciences, psychology and other students in degree programs related to health professions would represent the intended audience for this minor. This audience could expand to plant pathology and other agriculture units in the future.</i></p>		
2e	<p>Describe how the proposed minor will be administered, including admissions, student advising, retention, etc. (150 word limit)</p>		
	<p><i>Administration: Student advising will be handled by the director for undergraduate studies (DUGS) in the</i></p>		

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	<i>department of Pharmacology and Nutritional Sciences. Admission into the minor will be predicated on completion of required prerequisites, PHA 200, and be in good standing with the University Registrar. The office of Biomedical Education under Dr. Becky Dutch, Associate Dean for Biomedical Education, will assist the Department of Pharmacology and Nutritional Sciences and the DUGS.</i>						
2f	The faculty of record is the faculty body responsible for ALL aspects of the program, including courses, credit hours, rigor, changes to the program, etc. Please identify the program's <i>faculty of record</i> by choosing ONE of the four scenarios below. For more information on each faculty of record scenario, visit http://www.uky.edu/Faculty/Senate/files/Forms/UNDG_DegPgm/facultyofrecord1.html .						
	<input type="checkbox"/> Scenario 1	OR	<input checked="" type="checkbox"/> Scenario 2	OR	<input type="checkbox"/> Scenario 3	OR	<input type="checkbox"/> Scenario 4
	If Scenarios 2, 3, or 4 are chosen, please provide describe/list/name the members of the faculty of record and describe the voting rights of members of the faculty of record. Include the process and standards for identifying the program director, as well as adding and deleting members of the faculty of record. (150 word limit)						
	<i>The Faculty of record include: Drs. Nada Porter, interim Chair, Mike Piascik, Hollie Swanson, Robert Hadley, Rolf Craven and Michael Kilgore, Director of Undergraduate Studies. Members have full voting rights and the Chair, in consultation with the other faculty of record, will add or remove members. Administrative support will be provided by the Dr. Becky Dutch, Associate Dean for Biomedical Education.</i>						
2g	Initially, will any portion of the minor be offered via distance learning (DL)?				Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
	If "Yes," please indicate below the percentage of the minor that will be offered via DL.						
	1% - 24% <input type="checkbox"/>	25% - 49% <input type="checkbox"/>	50% - 74% <input type="checkbox"/>	75 - 99% <input type="checkbox"/>	100% <input type="checkbox"/>		
	If "Yes," describe the DL course(s) in detail, including the number of required DL courses. (200 word limit)						
3. RESOURCES							
3a	Will the minor utilize courses from other academic units?				Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
	If "Yes," two pieces of supporting documentation are required.						
	<input checked="" type="checkbox"/> Check to confirm that appended to the end of this form is a letter of support from each unit's chair/director ² from which individual courses will be used. The letter must include demonstration of true collaboration between multiple units ³ and impact on the course's use on the home educational unit.						
	<input type="checkbox"/> Check to confirm that appended to the end of this form is verification that each unit's chair/director of the other unit has consent from the faculty members of the unit. This typically takes the form of meeting minutes.						
3b	What are the (non-course) financial implications for the proposed minor, including any projected budget needs? (300 word limit)						
	<i>None are anticipated.</i>						
3c	Will the proposed minor utilize resources (e.g. departmentally controlled equipment or lab space) from additional units/programs?				Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	

² A dean may submit a letter only when there is no educational unit below the college level, i.e. there are no departments/schools.

³ Show evidence of detailed collaborative consultation with such units early in the process.

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	If “Yes,” identify the other resources that will be shared. (150 word limit)
	These will all be handled through the Associate Dean for Biomedical Education's office.
	If “Yes,” two pieces of supporting documentation are required.
	<input type="checkbox"/> Check to confirm that appended to the end of this form is a letter of support from the appropriate chair/director ⁴ of each unit from which “other resources” will be used.
	<input type="checkbox"/> Check to confirm that appended to the end of this form is verification that the chair/director of each affected unit has consent from the faculty members of the unit. This typically takes the form of meeting minutes.

4. ADMISSIONS CRITERIA AND CURRICULUM STRUCTURE

4a	Are there any admissions requirements for the proposed minor? (150 word limit)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	If “Yes,” describe below.		
	<i>Students will be admitted into the program when they declare Pharmacology as their minor and upon completion of the following: Pre-minor courses with a cumulative GPA of 2.0 and award of a grade of C or higher in the minor prerequisites (either BIO 148 or BIO 152 and 4 credits from either PGY 206+207 or Bio 350). Requests to waive any prerequisite must be made in writing to the Director of Undergraduate Studies. Students will be advised under their majors.</i>		

4b	Are there any prerequisites for the minor? (If “Yes,” indicate and answer using the area below. If “No,” indicate and proceed to 4d.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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Prefix & Number	Course Title	Credit Hrs	Course Status ⁵
BIO 148	Introductory Biology	3	Existing
BIO 350	Animal Physiology	4	Existing
PGY 206	Elements of Physiology	3	Existing
PGY 207	Case Studies in Physiology	1	Existing
			Select one....

4c	Provide the Bulletin language for prerequisites. (150 word limit)
	Pharmacology minor prerequisites: 3 Credits are required from BIO 148 and 4 credits from either PGY 206+207 or Bio 350. Requests to waive any prerequisite must be made in writing to the Director of Undergraduate Studies.

4d	List the required courses below.		
Prefix & Number	Course Title	Credit Hrs	Course Status ⁶
PHA 200	Pharmacology: Drugs and Human Health	3	Existing

⁴ A dean may submit a letter only when there is no educational unit below the college level, i.e. there is no department/school.

⁵ Use the drop-down list to indicate if the course is a new course (“new”), an existing course that will change (“change”), or if the course is an existing course that will not change (“no change”).

⁶ Indicate if the course is new (“new”), exists but will change (“change”), or exists but will not change (“no change”).

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PHA421G	PHARMACOLOGY: PRINCIPLES OF DRUG ACTION	3	New
			Select one....
			Select one....
			Select one....

4e Provide the Bulletin language for required courses.

Pharmacology minor requirements: BIO 350 or PGY 206 and 207 must have been completed prior to registering for PHA 421G but PHA 200 can be taken any time before or after the other minor prerequisite has been fulfilled. Requests to waive any prerequisite must be made in writing to the Director of Undergraduate Studies.

4f Are there any electives for the minor? (If “Yes,” indicate and answer using the area below. If “No,” indicate and proceed to 4h.)

Yes No

Prefix & Number	Course Title	Credit Hrs	Course Status ⁷
PHA 422G	Pharmacology of treating human disease	3	Existing
PHA 423G	Exploring the Dark side of medicine	3	New
PHA 424G	Pharmacology of human endocrinology and reproduction	3	New
PHA 425G	Neuropharmacology-Treating Disorders of the Brain	3	New
PSY 459	Drugs and Behavior	3	Existing
			Select one....
			Select one....

4g Provide the Bulletin language for electives.

Pharmacology minor electives: 9 credits must be completed from any combination of electives. Note: Although not needed for the minor, PHA 421G, 422G, 423G, 424G and 425G will all be able to be taken for graduate (G) credit.

4h What is the total number of credit hours required for the minor? (e.g. 18 or 20)

18

If an explanation about the total credit hours is necessary, use the space below. (150 word limit)

4i Are there any other requirements for the minor? If “Yes,” note below. (150 word limit)

Yes No

5. APPROVALS/REVIEWS

Information below does not supersede the requirement for individual letters of support from educational unit administrators and verification of faculty support (typically takes the form of meeting minutes).

⁷ Indicate if the course is new (“new”), exists but will change (“change”), or exists but will not change (“no change”).

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In addition to the information below, attach documentation of department and college approval. This typically takes the form of meeting minutes but may also be an email from the unit head reporting department- and college-level votes.

		Reviewing Group Name	Date Approved	Contact Person Name/Phone/Email
5a	(Within College)			
				/ /
		Curriculum Committee	March 6	859 / 257 / 5286; Dorcas Beatty / ddbeatt@cuq.edu
				/ /
				/ /
5b	(Collaborating and/or Affected Units)			
				/ /
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				/ /
5c	(Senate Academic Council)		Date Approved	Contact Person Name
	Health Care Colleges Council (if applicable)			
	Undergraduate Council		3/21/18	Joanie Ett-Mims

 **College of
Medicine**
*Department of Pharmacology
and Nutritional Sciences*

*University of Kentucky
College of Medicine
Department of Pharmacology &
Nutritional Sciences
MS-311 UKMC
Lexington, KY 40536-0298
Phone: (859) 323-5454
Fax: (859) 323-1981
www.pharmns.med.uky.edu*

September 28, 2016

Dr. Michael Kilgore
Associate Professor
Department of Pharmacology & Nutritional Sciences

Dear Dr. Kilgore,

I am writing to express my strong support for the creation of an **undergraduate minor in Pharmacology** at the University of Kentucky. No other university in the state or in surrounding states offers such a minor and, thus, it would represent a unique educational opportunity to students on our campus. I anticipate UK students from a broad range of basic and health science programs would be interested, especially those intending to pursue professional/graduate careers in dentistry, medicine or pharmacy. In fact, it could potentially serve as a recruiting tool to attract students to UK. You have sought input from multiple programs/colleges across campus and gauging from the responses received, there appears to be great interest in having this program go forward.

At present, you have worked on creating **4 new undergraduate (G) courses** to support the existing PHA 200 and PHA 422G courses offered by our department. Once general interest in the program is assessed, you have indicated that the department can undertake development of additional new course offerings.

On behalf of the department, I thank you for undertaking the creation of a Pharmacology minor, for conveying the educational value of such a minor to colleagues across campus and for all your efforts in seeking support for this program.

Sincerely,



Nada M Porter, PhD
Associate Professor and Interim Chair

Brothers, Sheila


From: Speck, Dexter
Sent: Tuesday, April 03, 2018 12:15 PM
To: Brothers, Sheila
Cc: Kilgore, Michael
Subject: Support for the Physiology minor in Pharmacology

As Director of Teaching for the Physiology Department, as well as the Course Director for both PGY 206 and PGY 207, I am pleased to welcome your students into these 2 courses which you have listed as prerequisites for your Proposed New Minor in Pharmacology.

MEMORANDUM

DATE: October 4, 2016

TO: Michael Kilgore, PhD
Associate Professor
Pharmacology and Nutritional Sciences

FROM: Robert S. DiPaola, MD 
Dean, College of Medicine

RE: Support for Proposed Pharmacology Minor

This letter is to affirm that the College of Medicine is fully supportive of the proposed Pharmacology minor. The College is committed to our faculty teaching within the program and will provide the needed administrative support through the Office of Biomedical Education. Pharmacology is an exciting field of study, and work in this area has traditionally been a strength at UK. This proposed minor provides an important new option for our students that is available at very few universities.

see blue.



College of Medicine

*Rebecca Ellis Dutch, Ph.D.
Department of Molecular and
Cellular Biochemistry
BBSRB B177
Lexington, KY 40536-0509
Tel: (859) 323-1795
E-mail: rdutc2@uky.edu*

September 6, 2016

Dear Dr. Kilgore,

I am very excited about your proposal to create a Pharmacology minor, and am writing to provide my full and unqualified endorsement for this new program. The University of Kentucky has a history of strength in this area, and the creation of a new undergraduate minor, with its accompanying courses, will open this area to our undergraduates. Very few universities have pharmacology programs at the undergraduate level, so this new minor will set UK apart by building on this area of strength.

While this will be the first undergraduate minor to house in the College of Medicine, our college has been extremely active in undergraduate teaching, and also co-leads the Neuroscience major and the Microbiology minor. The Office of Biomedical Education, which I oversee, is fully prepared to provide the needed administrative support.

Please do not hesitate to contact me if you have any additional questions. I look forward to seeing this exciting program grow!

Sincerely,

Rebecca Dutch
Professor, Molecular and Cellular Biochemistry
Associate Dean for Biomedical Education



College of Medicine
Department of Pharmacology & Nutritional Sciences
Division of Nutritional Sciences
Nancy R. Webb, PhD, Professor, Director
535 Charles T. Wethington Building
Lexington, KY 40536-0200
Phone: 859-323-4933 | Fax: 859-257-3646

Michael Kilgore, PhD
Professor
Department of Pharmacology & Nutritional Sciences
University of Kentucky

September 23, 2016

Dear Michael,

First, let me thank you for taking the lead in our Department's initiative to create an undergraduate minor in Pharmacology. I was surprised to learn that only a few universities across the country offer an undergraduate degree program in this discipline. Thus, this new minor will provide a unique offering for prospective students interested in pursuing careers in health sciences, medicine, pharmacy, veterinary science, and agriculture. With our department's strengths in both pharmacology education and pharmacological research we will be able to build a strong curriculum that will be attractive to a wide range of students in Biology, Chemistry, AgBiotech, etc. I look forward to working with you and the other participating faculty as you work to grow the program and add new courses to the curriculum.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Nancy Webb'.

Nancy R. Webb, PhD
Professor, Pharmacology & Nutritional Sciences
Director, Division of Nutritional Sciences



Sept. 21, 2016

Michael Kilgore, Ph.D.
Department of Pharmacology and Nutritional Sciences
College of Medicine
University of Kentucky

University of Kentucky

College of Pharmacy

Joe Chappell, Professor & Chair
George A. Digenis Professor of Drug Design
& Discovery
Department of Pharmaceutical Sciences
789 South Limestone Street
Lexington, KY 40536-0082
Office: (859) 218-0775
Cell phone (859) 536-4593
chappell@uky.edu

RE: Minor in Pharmacology

Dear Professor Kilgore:

I wish to have this letter serve as general endorsement from the Department of Pharmaceutical Sciences and as a more specific endorsement from myself for the proposed Minor in Pharmacology you have advanced.

For the sake of recognizing your efforts, I would like to comment about your very deliberate and measured approach in developing this exciting educational opportunity. You first spoke to me about your ruminations on this matter almost 3 years ago. At that time, you were seeking broad perspective on the value that such an option would have for the undergraduate population. Since that time, you have periodically informed me of progress in advancing this proposal and you recently provided me with a copy of the latest version. I, in turn, distributed the proposal to the Department's Advisory Council for broad perspective and feedback. Our Advisory Council consists of faculty members elected by the constituents within their disciplinary focal groups (i.e. Med Chem, Pharmaceutics, and Experimental Pharmacology), the Departmental Vice Chair, representing professional education within the Department), and the College DGS, representing our graduate education mission.

The responses I received were very supportive and encouraging, but a few doubted that it would improve or better track students into our professional program, the Pharm D program. However, the majority of respondents thought it could give students a much better appreciation for the diversity of career opportunities within the broad field of pharmacology, and provide a fundamental, rigorous training regardless of their ultimate career objectives.

I'm also very supportive of such opportunities for our undergraduate population because I think they need more opportunities learn about career and professional paths prior to setting sail. We talk collectively amongst ourselves about how many students might choosing this option might and guessed it might be up to 20. But such a class size would certainly benefit those students thinking about doing a project in a research laboratory, as well as simply give them a glimpse into what a graduate degree in pharmacology might look like.

Without a doubt, the Department of Pharmaceutical Sciences faculty and myself as the Chair are all fully supportive of the Minor in Pharmacology option for our undergraduate population.

Very sincerely,

Joe Chappell



Department of Biology
101 T. H. Morgan Building
Lexington, KY 40506-0225
Office: (859) 257-2805

September 26th, 2016

Michael Kilgore, PhD
Dept. of Pharmacology and Nutritional Sciences
UK Medical Center, MN 150
Lexington KY, USA 40536-0298

Dear Michael,

As we have discussed, the department of Biology is generally supportive of your proposed Pharmacology minor. We have discussed this at a faculty meeting, and in many individual conversations. Thanks so much for coming over in person too, to address concerns by our Department. Most faculty viewed the current and future courses you will be teaching as beneficial, especially to the new neuroscience major we have instituted.

All the best with this endeavor, and we look forward to working together with you as this moves forward.

Sincerely,

A handwritten signature in black ink that reads 'Bruce O'Hara'. The signature is written in a cursive, slightly slanted style.

Bruce F. O'Hara, Ph.D.
Professor and interim Chair
Dept. of Biology



College of Arts and Sciences
Department of Psychology
125 Kastle Hall
Lexington, KY 40506-0044
859 257-9640
fax 859 323-1979
www.uky.edu

September 8, 2016

Michael Kilgore, Ph.D.
Professor & Chair
College of Pharmacy
University of Kentucky

Dear Dr. Kilgore:

I am writing to indicate my support for the development of a minor in Pharmacy. The availability of the minor will be a very attractive option for some of our majors in Psychology. Thank you for taking the initiative on this.

Sincerely,

A handwritten signature in black ink that reads "Robert F. Lorch, Jr." in a cursive script.

Robert F. Lorch, Jr.
Professor & Chair



Luke A. Moe, Ph.D.
Department of Plant & Soil Sciences
University of Kentucky
311 Plant Science Building
Lexington, KY 40546-0312, USA

office: (859) 218-0761
fax: (859) 257-7125
e-mail: luke.moe@uky.edu

September 17, 2016

To Whom It May Concern:

I am writing on behalf of the Agricultural & Medical Biotechnology (ABT) undergraduate program in support of the proposed Pharmacology undergraduate minor. As chair of the ABT steering committee, I believe that this would provide an excellent opportunity for our students to enhance their education and training in a highly relevant discipline.

I would be happy to discuss this further if necessary.

Best regards,

A handwritten signature in black ink, appearing to read 'L A Moe'.

Luke A. Moe, Ph.D.
Chair, Agricultural & Medical Biotechnology steering committee
Associate Professor, Department of Plant & Soil Sciences
College of Agriculture, Food, and Environment
University of Kentucky
Lexington, KY 40546-0312, USA



College of Arts and Sciences
Department of Psychology
125 Kastle Hall
Lexington, KY 40506-0044
859 257-9640
fax 859 323-1979
www.uky.edu

January 24, 2018

Dear Dr. Kilgore

I am writing this letter as Director of the Undergraduate Neuroscience Bachelor of Science program, to express my support for the creation of **PHA 425G: Neuropharmacology: Treating Disorders of the Brain**. This course will be an excellent addition to the university catalog and is complimentary to a course that I teach **PSY 459 Neuropharmacology: Drugs and Behavior**.

Once approved, I am going to submit a proposal to add PHA 425G to the elective structure of the undergraduate neuroscience major, and I am confident that this course will be valued by our students, as well as those pursuing a minor in pharmacology. I look forward to our continuing collaborations.

Best regards,

Mark A.

Prendergast, Ph.D.

Mark A. Prendergast

University Research Professor

Director, Undergraduate Neuroscience B.S. Program

Digitally signed by Mark A. Prendergast, Ph.D.
DN: cn=Mark A. Prendergast, Ph.D., o=University
of Kentucky, ou=Department of Psychology,
email=mark.prendergast@uky.edu, c=US
Date: 2018.01.24 16:29:05 -05'00'