#### CHANGE DOCTORAL DEGREE PROGRAM FORM

GENERAL INFORMATI	ON				
College: <u>Medicine</u>		Departme	nt: <u>Toxicolo</u>	gy and Cancer Biology	
·					
Current Major Name:	Toxicology and Cancer Biology	Proposed	Major Name:	Toxicology and Cancer Biology	
Current Degree Title:	Ph.D.	Proposed	Degree Title:	Ph.D.	
Current Formal Option(s): $\frac{n/a}{}$		Proposed Option(s):			
-   (-)		-   (- /	l l		
Current Specialty Field w/in Formal Option:	ds <u>n/a</u>		osed Specialty Formal Option		
Date of Contact with A	Associate Provost for Academic	Administrat	ion¹: <u>9/17/2</u>	<u>2019</u>	
Bulletin (yr & pgs):	CIP Code <sup>1</sup> :	<u>26.1004</u>		Today's Date: <u>9/17/19</u>	
Accrediting agency (if applicable): $\underline{n/a}$					
Requested Effective Date: Semester following approval. OR Specific Date <sup>2</sup> :					
Dept Contact Person:	David Orren	Phone:	<u>323-3612</u>	Email: dkorre2@uky.edu	
CHANGE(S) IN PROGRAM REQUIREMENTS					

CHANGE(S) IN PROGRAM REQUIREMENTS				
	<u>Current</u>	<u>Proposed</u>		
1. Number of transfer credits allowed:	9	<u>9</u>		
(Maximum is Graduate School limit of total of 9 hou	urs (or 25% of the credit hours needed to fulfill th	he pre-qualifying residency requirement.)		
2. Residence requirement:	no change	no change		
(Minimum of one year before and after Qualifying I	Exams.)			
3. Language(s) and/or skill(s) required:	<u>no</u>	<u>no</u>		
4. Provisions for monitoring progress and termination criteria:	<u>yes</u>	<u>yes</u>		
5. Total credit hours required:	<u>36</u>	<u>36</u>		
6. Required courses:	18	<u>18</u>		
7. Required distribution of courses within program:	36 credit hrs (prequalifying) including 18 required courses for 31 credit hrs and electives for a minimum of 5 credit hours.	36 credit hrs (prequalifying) including 18 required courses for a minimum of 36 credit hrs (see attachment for details).		
8. Minor area or courses outside program required:	7	<u>Z</u>		
9.Distribution of courses levels required	(400G-500) 0 or 2 credit hr	(400G-500) 0 or 2 credit hr		

<sup>&</sup>lt;sup>1</sup> Prior to filling out this form, you MUST contact the Associate Provost for Academic Administration (APAA). If you do not know the CIP code, the APAA can provide you with that during the contact.

<sup>&</sup>lt;sup>2</sup> Programs are typically made effective for the semester following approval. No program will be made effective until all approvals are received.

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(400G-500/600-700):	(600-700) 29 or 31 credit hr plus 5 credit hr accepted elective	(600-700) 34 or 36 credit hr (see attachment for details).
10. Qualifying examination requirements:	<u>Yes</u>	<u>Yes</u>

11. Explain whether the proposed changes to the program (as described in numbers 1 through 10) involve courses offered by another department/program. Routing Signature Log must include approval by faculty of additional department(s).

No courses offered by other departments would be directly affected by the current change.

12. Other requirements not covered above:

no changes to admission, progression or graduation requirements.

13. What is the rationale for the proposed changes? If the rationale involves accreditation requirements, please include specific references to those requirements.

The current second year curriculum requirement for our Ph.D. program consists of a minimum of 14 credit hours of intensive coursework, which is substantially higher than that of other biomedical science programs in the College of Medicine. For example, doctoral students in Molecular and Cellular Biochemistry or Microbiology, Immunology, and Molecular Genetics Programs are required to complete a minimum of 8 or 10 credit hours of intensive coursework, respectively, in their second year. Thus, the rationale fot the change proposed here is to bring our Ph.D. curriculum more in agreement with course requirements of other biomedical sciences Ph.D. programs in the College of Medicine. Our proposed change eliminates elective courses as an absolute requirement for the Ph.D. degree in Toxicology and Cancer Biology, although doctoral students are still free to take electives as part of their training. Any credit hours lost by eliminating our elective requirement would be compensated for by increasing credit in other courses. Specifically, credit hours in TOX790 (Research in Toxicology) would be increased, primarily during the 2<sup>nd</sup> year in the program, and students would receive 1 credit hour/semester (instead of 0 credit hours) for their first four semesters in TOX770-001 (Toxicology Seminar). The attached document specifies the details of the current and proposed Ph.D. curricula. Importantly, this change will allow our Ph.D. students to focus more on their thesis research during their second year and thus permit them to be more productive researchers and successfully attain their degrees earlier. This change should also help provide relative consistency compared with other biomedical sciences doctoral programs for recruitment of Ph.D. students initially admitted through the Integrated Biomedical Sciences program.

#### CHANGE DOCTORAL DEGREE PROGRAM FORM

# Signature Routing Log

# **General Information:**

Proposal Name: <u>Toxicology and Cancer Biology Ph.D. curriculum update 2019</u>

Proposal Contact Person Name: <u>David Orren</u>
Phone: <u>323-</u>
3612
Email: <u>dkorre2@uky.edu</u>

#### **INSTRUCTIONS:**

Identify the groups or individuals reviewing the proposal; note the date of approval; offer a contact person for each entry; and obtain signature of person authorized to report approval.

# **Internal College Approvals and Course Cross-listing Approvals:**

Reviewing Group	Date Approved	Contact Person (na	me/phone/email)	Signature
Biomedical Education	12/3/19	Beth Garvy 323-5043	/ bgarv0@uky.edu	Beth Garvy, Phd, Chair
Committee		/	/	
		/	/	
		/	/	
		/	/	

# **External-to-College Approvals:**

Council	Date Approved	Signature	Approval of Revision <sup>3</sup>
Undergraduate Council			
Graduate Council	4/30/2020	Roshan Nikou	
Health Care Colleges Council			
Senate Council Approval		University Senate Approval	

Comments:		

<sup>&</sup>lt;sup>3</sup> Councils use this space to indicate approval of revisions made subsequent to that council's approval, if deemed necessary by the revising council.



Dr. Xiaoqi Liu Professor and Chair Department of Toxicology and Cancer Biology 306 Health Sciences Research Bldg. Lexington, KY 40536-0305 Phone: (859) 257-3760

Fax: (859) 323-1059 E-mail: <u>xiaoqi.liu@uky.edu</u> www.mc.uky.edu/toxicology/

April 27, 2020

Re: Toxicology and Cancer Biology Ph.D. Program Change

To whom it may concern:

This letter is in regards to the Ph.D. program change proposal submitted by Dr. David Orren in our department. Upon the request of the faculty, this program change was initiated and debated by our departmental Education Committee to arrive at the proposed changes in curriculum requirements. The Education Committee unanimously endorsed this proposal which was subsequently put on the agenda for our regular faculty meeting of September 17, 2019. At this meeting, Dr. Orren presented the program change proposal and there was no objection to the proposal being implemented as designed.

Please feel free to contact me if further information or clarification is needed.

Best regards,

Xiaoqi Liu, Ph.D.

Professor and Chair

Department of Toxicology and Cancer Biology University of Kentucky College of Medicine 306 HSRB, 1095 V.A. Drive

Lexington, KY 40536-0305

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Email: Xiaoqi.Liu@uky.edu

GOAL: To revise the TOX Ph.D. curriculum requirements to bring our coursework requirements more in agreement with other biomedical sciences Ph.D. programs, allowing our students to spend more time on their thesis research at an earlier stage, be more productive in research, and permit them to successfully obtain their degrees earlier.

#### Model approved by the TOX faculty (see page 2)

Remove the absolute requirement for electives, with any reduction in credit hours towards the 36 h requirement being compensated by increasing credit for TOX790 (Research in Toxicology) and providing 1 credit hour/semester for TOX770-001 (Toxicology Seminar) for the first four semesters of the program.

#### **Current Curriculum for Ph.D. in TOX/Cancer Biology**

## **Pre-qualifying**

#### **Common Core**

Course No: Title			Credit Hour
IBS601: Biomolecules and Metabolism			3
IBS602: Molecular Biology and Genetics			3
IBS603: Cell Biology and Signaling			3
IBS606: Physiological Communication			3
IBS608: Special Topics in IBS (4 x 0.5 h mini-courses)			2
IBS610: Critical Scientific Readings			2
IBS611: Practical Statistics			1
TOX600: Ethics in Scientific Research			1
TOX770-001: Toxicology Seminar <sup>1</sup>			0
TOX770-002: Toxicology Seminar/Orientation-Journal Club			1
TOX780: Special Problems in Toxicology			2
TOX790: Research in Toxicology (or IBS609) <sup>2</sup>			<u>≥4</u>
		Subtotal	≥24
Additional requirements: students must take at least 3 of the	following 4 courses		
TOX509: Environmental and Regulatory Toxicology	Fall		2
TOX663: Drug Metabolism and Disposition	Fall		2
TOX680: Molecular Toxicology and Carcinogenesis	Spring		3
MI616: Biology and Therapy of Cancer	Spring		3
		Subtotal	≥7
2 or more elective courses (from a list of recommended/approve	d electives)		<u>≥5</u>
		TOTAL	≥36

# **Post-qualifying**

TOX767: Dissertation Residency Credit<sup>3</sup> 2/semester

### PROPOSED PRE-QUALIFYING CURRICULUM for TOXICOLOGY and CANCER BIOLOGY Ph.D. Degree

Proposed Common Core (Pre-qualifying)			Credit Hour
IBS601: Biomolecules and Metabolism			3
IBS602: Molecular Biology and Genetics			3
IBS603: Cell Biology and Signaling			3
IBS606: Physiological Communication			3
IBS608: Special Topics in IBS (4 x 0.5 h mini-cours	es)		2
IBS610: Critical Scientific Readings			2
IBS611: Practical Statistics			1
TOX600: Ethics in Scientific Research			1
TOX770-001: Toxicology Seminar <sup>1</sup>			4
TOX770-002: Toxicology Seminar/Orientation-Jour	nal Club		1
TOX780: Special Problems in Toxicology			2
TOX790: Research in Toxicology (or IBS609) <sup>2</sup>			<u>≥4*</u>
		Subtotal	≥29
Additional requirements: students must take at le	east 3 of the following 4 courses	1	
TOX509: Environmental and Regulatory Toxicology	y Fall		2
TOX663: Drug Metabolism and Disposition	Fall		2
TOX680: Molecular Toxicology and Carcinogenesis	s Spring		3
MI616/TOX616: Biology and Therapy of Cancer	Spring		3
		Subtotal	≥7
		TOTAL	≥36

#### Footnotes:

<sup>&</sup>lt;sup>1</sup>Ph.D. students register for TOX770-001 until residency is completed and again in the semester in which they present a seminar (required for the degree). With the proposed change, students would receive 1 h credit in each of their first four semesters of TOX770-001.

<sup>&</sup>lt;sup>2</sup>Students can enter the Toxicology and Cancer Biology Ph.D. program directly or through the Integrated Biomedical Sciences (IBS) program, the latter taking a slightly different slate of courses during their first year. Specifically, those that enter directly register for TOX790 for at least 1 h credit in their first four semesters in the program. IBS students register for IBS609 for 3 h credit in their first two semesters, then at least 1 h credit of TOX790 in their third and fourth semesters.

<sup>&</sup>lt;sup>3</sup>Ph.D. students register for TOX767 each semester post-qualifying until successful completion of their dissertation.