



Date: _____

Student No: _____

Last 4 Digits of Social Security #: _____

E-mail: _____

Program Track: Environmental
 Biomedical
 Food Toxicology & Ingredient Safety

Applicant's Name: _____ Gender: M F
(Last) (First) (Middle) Birthday: _____

Campus Address: _____

Campus Phone: _____ Home Phone: _____

Home Address: _____

Legal Michigan Resident? Yes No U.S. Citizen? Yes No Permanent Resident Alien? Yes No

Undergraduate Education

University Attended: _____ GPA: _____
Degree Received/Major: _____ Date of Graduation: _____

Graduate Education

In which cooperating (e.g. department) doctoral program are you enrolled? _____ GPA: _____
Date of entry into cooperating PhD Program: _____ Major Professor: _____
Major Curriculum Code (See Attachment C) _____

List the courses you intend to use to fulfill the Environmental and Integrative Toxicological Sciences (EITS) requirements (see Attachment B). (For those courses you have already completed, please include the term/year completed and your grade (0.0 - 4.0). Future changes in this list should be brought immediately to the attention of the EITS Graduate Committee.

EITS Required Course Number and Name	Year Completed or Scheduled	Grade Received
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Endorsement:

I affirm that the above information is correct and understand that to participate in this program and receive the Doctor of Philosophy Degree in Environmental Toxicology, I must meet the requirements of my cooperating doctoral program and the Program in Environmental and Integrative Toxicological Sciences.

_____ Applicant's Signature Date

As the department chairperson of the applicant's affiliated department, I will recommend the candidate for the degree, in conjunction with the Graduate Director of the Program in Environmental and Integrative Toxicological Sciences, when the necessary requirements have been fulfilled.

_____ Department Chairperson Date

Support for Application:

The completed application and a letter of recommendation from your major thesis advisor in support of your application (see Attachment A, Item No. 2) should be sent to:

**EITS Graduate Committee
Institute for Integrative Toxicology
Food Safety Toxicology Building
1129 Farm Lane, 165
Michigan State University
East Lansing, MI 48824**

Questions regarding this form should be directed to:
Adelle Simmons, Graduate Secretary
517-884-2013/asimmons@msu.edu

Questions about the EITS doctoral program should be directed to:
Robert A. Roth, PhD
Director, Graduate Program in EITS
517-353-9841/rothr@msu.edu

(Retain Attachments for your files.)

ATTACHMENT A

Guidelines for Students in the Training Program in Environmental and Integrative Toxicological Sciences (EITS)

1. Student must be accepted into a cooperating department or doctoral program and have chosen a PhD thesis advisor. Application for admission to the Training Program in Environmental and Integrative Toxicological Sciences is usually made during the first year of graduate school. Application forms can be obtained from the Institute for Integrative Toxicology (IIT).
2. Return the completed application form to the IIT along with a letter of recommendation from your PhD thesis advisor attesting to your motivation toward Toxicology and/or Environmental Science. Application for admission to the Program in Environmental and Integrative Toxicological Sciences should be made at least two years prior to graduation and must be approved by members of the EITS Graduate Committee. A letter notifying you of acceptance will be sent to you by the Graduate Program Director of the IIT.
3. The EITS Graduate Committee meets three times each year (January 1, May 1 and September 1) to examine the information in each application to assure that students have proposed a plan of study and research that will meet all program requirements and requirements for graduation. A recommendation to the Director is then made.
4. The PhD Guidance Committee must contain at least two IIT-affiliated faculty (usually the PhD thesis advisor and one other IIT affiliate). Students should notify the IIT of the names of the faculty on the Guidance Committee soon after its formation. Please visit www.iit.msu.edu for a list of affiliated faculty.
5. You must complete the course requirements of the Training Program in Environmental and Integrative Toxicological Sciences (see Attachment B) in addition to all requirements of the major department/cooperating PhD program. The IIT requires a 3.0 GPA in program courses.
6. You must notify the Graduate Director of any intended changes in courses or in dissertation research topic.
7. All courses must be taken for a numerical grade. Credit/no credit designations are not acceptable unless approved by the EITS Graduate Committee.
8. At least six months prior to graduation, you must complete the "Application for Candidacy" form. The completed form should be returned to the IIT for approval by the EITS Graduate Policy Committee. You should send photocopies of the University forms entitled "Report of Guidance Committee" and "Record of Comprehensive Examinations" in support of your candidacy application. (These forms should be signed by the doctoral guidance committee.)
9. A letter will be sent by the Graduate Program Director of the IIT notifying you of acceptance into Candidacy. This indicates you have completed all IIT requirements except for defense of thesis.
10. There is a specific code for each department that indicates that you are getting a joint PhD degree in your Departmental Major and in Environmental Toxicology. Please do not assume that you are already correctly coded. You must fill out the section of the Application for Graduation regarding degree correctly so that the degree reflects joint status (i.e., Major Department-Environmental Toxicology). See attachment C for appropriate codes.
11. Upon successful completion of your thesis defense, you must submit to the IIT photocopies of University forms entitled "Record of Completion of Requirements" and "Graduate Credit Statement and Final Certification for Degree".
12. You should notify the IIT of graduation and give a forwarding address for future correspondence. Also, please keep the IIT notified of newly acquired positions so the IIT can keep an up-to-date record of positions attained by graduates.
13. Questions regarding the Program should be addressed to Dr. Robert A. Roth (or Adelle Simmons) at the Institute for Integrative Toxicology, Food Safety and Toxicology Building, 1129 Farm Lane, 165, 517-884-2013.

ATTACHMENT B

Training Program in Environmental and Integrative Toxicological Sciences (EITS)

To complete the degree program, the student shall meet the requirements of the department of affiliation (major department) and those of the Program in Environmental and Integrative Toxicological Sciences. Where course requirements overlap, a given course may be counted toward both major department and EITS requirements.

Requirements

1. The topic of the PhD thesis must be in the broad area of environmental toxicology and must be accepted by the EITS Graduate Committee.
2. The student must attend at least 12 seminars approved by the Institute for Integrative Toxicology. In addition, students must complete the course requirements for either the biomedical, environmental or Food Toxicology and Ingredient Safety track listed below with a grade point average of at least 3.0.

Required Courses

Biomedical Track: designed for doctoral students in biomedical disciplines

PHM 830	Experimental Design and Data Analysis	3 credits	Fall & Summer
PHM 801	Module 1, Principles of Drug-Tissue Interactions	1 credit	Fall, Spring, & Summer
PHM 816	Integrative Toxicology: Mechanisms, Pathology and Regulation	3 credits	Fall (odd years)
TBD	Topics in Toxicology	1 credit	
BMB 961	Selected Topics in Biochemistry II- Genomics (or comparable course)	1-2 credits	Fall & Spring

**plus one course chosen from among the courses in the elective course list

Environmental Track: designed for students with less mammalian biology background (e.g., chemistry, engineering, environmental law, etc.).

CSS 865	Environmental Fate of Organic Contaminants in Soils	3 credits	Spring (even years)
BE 891, Sec 003	Advanced Topics in Biosystems Engineering - Human and Environmental Risk Analysis	3 credits	Fall
ESP 803	Human and Ecological Health Assessment and Management	3 credits	Fall
PHM 450	Introduction to Chemical Toxicology	3 credits	Spring
PHM 816	Integrative Toxicology: Mechanisms, Pathology and Regulation	3 credits	Fall (odd years)
ACR 846	Law of Environmental Regulation	3 credits	Fall

**plus two courses selected from among approved elective courses in two interest groups

Food Toxicology and Ingredient Safety Track: designed for students interested in the safety of food-borne and consumer product ingredients.

PHM 830	Experimental Design and Data Analysis	3 credits	Fall & Summer
PHM 980	Pharmacokinetics	1 credit	Fall
PHM 816	Integrative Toxicology: Mechanisms, Pathology, and Regulation	3 credits	Fall (odd years)
FSC 807	Advanced Food Toxicology	3 credits	Fall (even years)
FSC 981	Food and Environmental Risk Assessment	2 credits	
FSC XXX	Current Issues in Ingredient Safety	1 credit	

Elective Courses

Environmental Dynamics

BE 891, Sec 003	Advanced Topics in Biosystems Engineering - Human and Environmental Risk Analysis	3 credits	Fall
CE 481	Environmental Chemistry: Equilibrium Concepts	3 credits	Fall
CE 821	Groundwater Hydraulics	3 credits	Fall
CE 822	Groundwater Modeling	3 credits	Spring (even years)
CSS 455	Pollutants in the Soil Environment	3 credits	Fall
ENE 801	Dynamics of Environmental Systems	3 credits	Spring
GLG 421	Environmental Geochemistry	4 credits	Spring
GLG 821	Aqueous Geochemistry	3 credits	Fall (odd years)
MMG 425	Microbial Ecology	3 credits	Spring
ZOL 897	Ecosystem Ecology and Global Change	4 credits	Spring (odd years)

Economics, Policy and Law

AEC 810	Institutional and Behavioral Economics	3 credits	Fall
AEC 829	The Economics of Environmental Resources	3 credits	Spring
PPL 808	Policy Development and Administration	3 credits	Spring
ACR 846	Law of Environmental Regulation	3 credits	Fall

Waste Management

CE 483	Water and Wastewater Engineering	3 credits	Fall
CE 485	Landfill Design	3 credits	Spring
CE 487	Microbiology for Environmental Science and Engineering	3 credits	Spring
ENE 804	Biological Processes in Environmental Engineering	3 credits	Fall

Analytical Chemistry

CEM 834	Advanced Analytical Chemistry I	3 credits	Fall
CEM 835	Advanced Analytical Chemistry II	3 credits	Fall
CEM 836	Separation Science	3 credits	Spring (odd years)
CEM 845	Structure and Spectroscopy of Organic Compounds	3 credits	Fall

Mechanisms of Toxicity

ANS 407	Food and Animal Toxicology	3 credits	Fall
EPI 810	Introductory Epidemiology	3 credits	Fall
FSC 807	Advanced Food Toxicology	3 credits	Fall (even years)

ATTACHMENT C

Training Program in Environmental and Integrative Toxicological Sciences (EITS)

Major Curriculum Codes

- 0472 Animal Science-Environmental Toxicology - CANR
- 7029 Biochemistry and Molecular Biology-Environmental Toxicology - CNS
- 7071 Cell and Molecular Biology-Environmental Toxicology - CNS
- 3938 Chemistry-Environmental Toxicology - CNS
- 4916 Comparative Medicine and Integrative Biology-Environmental Toxicology - CVM
- 0473 Crop & Soil Sciences-Environmental Toxicology - CANR
- 3968 Environmental Geosciences-Environmental Toxicology - CNS
- 0477 Fisheries and Wildlife-Environmental Toxicology - CANR
- 0474 Food Science-Environmental Toxicology - CANR
- 7087 Genetics-Environmental Toxicology - CNS
- 5274 Human Nutrition-Environmental Toxicology - CANR
- 7052 Human Nutrition-Environmental Toxicology - CNS
- 0475 Forestry-Environmental Toxicology - CANR
- 4901 Microbiology and Molecular Genetics-Environmental Toxicology - CVM
- 7098 Neuroscience-Environmental Toxicology - CNS
- 4920 Pathobiology and Diagnostic Investigation-Environmental Toxicology - CVM
- 4902 Pharmacology & Toxicology-Environmental Toxicology - CVM
- 3941 Integrative Biology-Environmental Toxicology - CNS

ATTACHMENT D

Training Program in Environmental and Integrative Toxicological Sciences (EITS)

Cooperating PhD Contacts

Department Chairperson	Graduate Secretary	Graduate Program Directors
Animal Science		www.ans.msu.edu
<p>Janice Swanson Animal Science Anthony Hall 474 S. Shaw Lane, Room 1290F East Lansing, Michigan 48824</p> <p>Phone: 517.355.8384 Email: swansoj@msu.edu</p>	<p>Barb Sweeney Animal Science Anthony Hall 474 S. Shaw Lane, Room 1290G East Lansing, Michigan 48824</p> <p>Phone: 517.355.8417 Email: sweeney4@msu.edu</p>	<p>Steven Bursian Animal Science Anthony Hall 474 S. Shaw Lane, Room 2209C East Lansing, Michigan 48824</p> <p>Phone: 517.355.8415 Email: bursian@msu.edu</p>
Biochemistry and Molecular Biology		www.bmb.msu.edu
<p>Thomas Sharkey Biochemistry & Molecular Biology Biochemistry Building 603 Wilson Road, Room 210 East Lansing, Michigan 48824</p> <p>Phone: 517.355.0804 Email: tsharkey@msu.edu</p>	<p>Jessica Lawrence Biochemistry & Molecular Biology Biochemistry Building 603 Wilson Road, Room 212 East Lansing, Michigan 48824</p> <p>Phone: 517.353.0807 Email: jesslaw@msu.edu</p>	<p>Jon Kaguni Biochemistry & Molecular Biology Biochemistry Building 603 Wilson Road, Room 322 East Lansing, Michigan 48824</p> <p>Phone: 517.353.6721 Email: kaguni@msu.edu</p>
Cell and Molecular Biology		www.cmb.msu.edu
	<p>Carol Christofferson Biomedical Physical Sciences Building 567 Wilson Road, Room 2240A East Lansing, Michigan 48824</p> <p>Phone: 517.353.9845 Email: chris323@msu.edu</p>	<p>Susan Conrad Biomedical Physical Sciences Building 567 Wilson Road, Room 2240 East Lansing, Michigan 48824</p> <p>Phone: 517.353.5161 Email: conrad@msu.edu</p>
Chemistry		www.chemistry.msu.edu
<p>Robert Maleczka Department of Chemistry Chemistry Building 578 S. Shaw Lane, Room 540 East Lansing, Michigan 48824</p> <p>Phone: 517.355.9715 xt124 Email: maleczka@msu.edu</p>	<p>Heidi Wardin Department of Chemistry Chemistry Building 578 S. Shaw Lane, Room 320 East Lansing, Michigan 48824</p> <p>Phone: 517.355.9715 xt343 Email: hwardin@chemistry.msu.edu</p>	<p>Gary John Blanchard Department of Chemistry Chemistry Building 578 S. Shaw Lane, Room 238 East Lansing, Michigan 48824</p> <p>Phone: 517.355.9715 xt224 Email: blanchard@chemistry.msu.edu</p>

Department Chairperson	Graduate Secretary	Graduate Program Directors
Comparative Medicine & Integrative Biology www.cvm.msu.edu/Education/cmib/		
	<p>Dimity Palazzola Comparative Medicine and Integrative Biology Veterinary Medical Center 784 Wilson Road, Room G326 East Lansing, Michigan 48824</p> <p>Phone: 517.353.3118 Email: palazz39@cvm.msu.edu</p>	<p>Vilma Yuzbasiyan-Gurkan Comparative Medicine and Integrative Biology Biomedical Physical Sciences Building 567 Wilson Road, Room 5172 East Lansing, Michigan 48824</p> <p>Phone: 517.884.5351 Email: yuzbasiyan@cvm.msu.edu</p>
Earth and Environmental Sciences www.ees.natsci.msu.edu		
<p>David Hyndman Geological Sciences Natural Sciences Building 288 Farm Lane Road, Room 206 East Lansing, Michigan 48824</p> <p>Phone: 517.355.4626 Email: hyndman@msu.edu</p>	<p>Pam Robinson Geological Sciences Natural Sciences Building 288 Farm Lane Road, Room 206 East Lansing, Michigan 48824</p> <p>Phone: 517.353.3263 Email: robin433@msu.edu</p>	<p>David Long Geological Sciences Natural Sciences Building 288 Farm Lane Road, Room 141 East Lansing, Michigan 48824</p> <p>Phone: 517.353.9618 Email: long@msu.edu</p>
Fisheries and Wildlife www.fw.msu.edu		
<p>Scott Winterstein Fisheries and Wildlife Natural Resources Building 480 Wilson Road, Room 7 East Lansing, Michigan 48824</p> <p>Phone: 517.353.2022 Email: winterst@msu.edu</p>	<p>Jill Cruth Fisheries and Wildlife Natural Resources Building 480 Wilson Road, Room 40 East Lansing, Michigan 48824</p> <p>Phone: 517.353.9091 Email: cruth@msu.edu</p>	<p>Shawn Riley Fisheries and Wildlife Natural Resources Building 480 Wilson Road, Room 2D East Lansing, Michigan 48824</p> <p>Phone: 517.353.9456 Email: rileysh2@msu.edu</p>
Food Sciences/Human Nutrition www.fshn.msu.edu		
<p>Frederick Derksen Food Science and Human Nutrition G.M. Trout Building 469 Wilson Road, Room 204 East Lansing, Michigan 48824</p> <p>Phone: 517.355.8474 xt100 Email: derksen@msu.edu</p>	<p>Marcia Hardaker Food Science and Human Nutrition G.M. Trout Building 469 Wilson Road, Room 106 East Lansing, Michigan 48824</p> <p>Phone: 517.353.3323 Email: hardake1@msu.edu</p>	<p>Zeynep Ustunol Food Science and Human Nutrition Anthony Hall 474 S. Shaw Road, Room 2105 East Lansing, Michigan 48824</p> <p>Phone: 517.355.7713 xt184 Email: ustunol@anr.msu.edu</p>

Department Chairperson	Graduate Secretary	Graduate Program Directors
Forestry		
www.for.msu.edu		
<p>Richard Kobe Forestry Natural Resources 480 Wilson Road, Room 210D East Lansing, Michigan 48824</p> <p>Phone: 517.355.8433 Email: kobe@msu.edu</p>	<p>Juli Mack Forestry Natural Resources 480 Wilson Road, Room 126 East Lansing, Michigan 48824</p> <p>Phone: 517.355.0092 Email: julimack@msu.edu</p>	<p>David Rothstein Forestry Natural Resources 480 Wilson Road, Room 210D East Lansing, Michigan 48824</p> <p>Phone: 517.432.3353 Email: rothste2@msu.edu</p>
Genetics		
www.genetics.msu.edu		
	<p>Cindy Robinson Genetics Program Biomedical Physical Sciences Building 567 Wilson Road, Room 2240 East Lansing, Michigan 48824</p> <p>Phone: 517.353.9845 Email: genetics@msu.edu</p>	<p>Cathy Ernst Genetics Program Biomedical Physical Sciences Building 567 Wilson Road, Room 2240 East Lansing, Michigan 48824</p> <p>Phone: 517.432.1941 Email: ernstc@msu.edu</p>
Integrative Biology		
www.integrativebiology.natsci.msu.edu		
<p>Thomas Getty Department of Zoology Natural Sciences Building 288 Farm Lane, Room 203 East Lansing, Michigan 48824</p> <p>Phone: 517.353.9864 Email: getty@msu.edu</p>	<p>Lisa Craft Department of Zoology Natural Sciences Building 288 Farm Lane, Room 203 East Lansing, Michigan 48824</p> <p>Phone: 517.353.4642 Email: craftl@msu.edu</p>	<p>Catherine Lindell Department of Zoology Natural Sciences Building 288 Farm Lane, Room 322 East Lansing, Michigan 48824</p> <p>Phone: 517.353.9874 Email: lindellc@msu.edu</p>
Microbiology and Molecular Genetics		
www.mmg.msu.edu		
<p>Victor DiRita Microbiology & Molecular Genetics Biomedical Physical Sciences Building 567 Wilson Road, Room 2215C East Lansing, Michigan 48824</p> <p>Phone: 517.884.8292 Email: dritavi@msu.edu</p>	<p>Betty Miller Microbiology & Molecular Genetics Biomedical Physical Sciences Building 567 Wilson Road, Room 2215 East Lansing, Michigan 48824</p> <p>Phone: 517.353.8916 Email: mille279@msu.edu</p>	<p>Donna Koslowsky Microbiology & Molecular Genetics Biomedical Physical Sciences Building 567 Wilson Road, Room 5174 East Lansing, Michigan 48824</p> <p>Phone: 517.884.5353 Email: koslowsk@msu.edu</p>
Neuroscience		
www.neuroscience.msu.edu		
<p>Jim Galligan Neuroscience Program Giltner Hall 293 Farm Lane, Room 108 East Lansing, Michigan 48824</p> <p>Phone: 517.355.8947 Email: galliga1@msu.edu</p>	<p>Jim Stockmeyer Neuroscience Program Giltner Hall 293 Farm Lane, Room 108 East Lansing, Michigan 48824</p> <p>Phone: 517.355.8947 Email: stockme1@msu.edu</p>	<p>Peter Cobbett Neuroscience Program Life Sciences 1355 Bogue St. Rm B330 East Lansing, Michigan 48824</p> <p>Phone: 517.353.5479 Email: cobbett@msu.edu</p>

Department Chairperson	Graduate Secretary	Graduate Program Directors
Pathobiology & Diagnostic Investigation		www.cvm.msu.edu/pdi
<p>Jill McCutcheon Pathobiology & Diagnostic Investigation Veterinary Medical Center 784 Wilson Road, Room F130G East Lansing, Michigan 48824</p> <p>Phone: 517.353.3145 Email: mccutc12@msu.edu</p>	<p>Denise Harrison Pathobiology & Diagnostic Investigation Veterinary Medical Center 784 Wilson Road, Room F130J East Lansing, Michigan 48824</p> <p>Phone: 517.432.4685 Email: harris22@msu.edu</p>	<p>Jennifer Thomas Pathobiology & Diagnostic Investigation Veterinary Medical Center 784 Wilson Road, Room G350 East Lansing, Michigan 48824</p> <p>Phone: 517.353.1633 Email: thoma435@msu.edu</p>
Pharmacology and Toxicology		www.phmtox.msu.edu
<p>Rick Neubig Pharmacology and Toxicology Life Sciences Building 1355 Bogue Street, Room B423 East Lansing, Michigan 48824</p> <p>Phone: 517.353.7147 Email: rneubig@msu.edu</p>	<p>Rebecca Mansel Pharmacology and Toxicology Life Sciences Building 1355 Bogue Street, Room B305 East Lansing, Michigan 48824</p> <p>Phone: 517.353.9619 Email: conatreb@msu.edu</p>	<p>Anne Dorrance Pharmacology and Toxicology Life Sciences Building 1355 Bogue Street, Room B432 East Lansing, Michigan 48824</p> <p>Phone: 517.432.7403 Email: dorranc3@msu.edu</p>
Physiology		www.physiology.natsci.msu.edu
<p>Charles "Lee" Cox Biomedical Physical Sciences Bldg. 567 Wilson Road, Room 2201E East Lansing, Michigan 48824</p> <p>Phone: 517.884.5059 Email: coxlee@msu.edu</p>	<p>Kim Crain Biomedical Physical Sciences 567 Wilson Road, Room 2205 East Lansing, Michigan 48824</p> <p>Phone: 517.884.5075 Email: crain@msu.edu</p>	<p>Susanne Mohr Biomedical Physical Sciences 567 Wilson Road, Room 3175 East Lansing, Michigan 48824</p> <p>Phone: 517.884.5114 Email: mohrs@msu.edu</p>
Plant, Soil and Microbial Sciences		www.psm.msu.edu
<p>James Kells Crop and Soil Sciences Plant and Soil Sciences Building 1066 Bogue Street, Room 486 East Lansing, Michigan 48824</p> <p>Phone: 517.355.0271 xt1103 Email: kells@msu.edu</p>	<p>Linda Colon Crop and Soil Sciences Plant and Soil Sciences Building 1066 Bogue Street, Room 372 East Lansing, Michigan 48824</p> <p>Phone: 517.355.0271 xt1111 Email: colon@msu.edu</p>	<p>Taylor Johnston Crop and Soil Sciences Plant and Soil Sciences Building 1066 Bogue Street, Room 260A East Lansing, Michigan 48824</p> <p>Phone: 517.355.0271 xt1164 Email: johnsto4@msu.edu</p>