

# NTR390/PGS388K: Molecular Mechanisms and Methods in Nutrition and Cancer

Spring, 2017, Division of Pharmacology & Toxicology, College of Pharmacy, The University of Texas at Austin

TIME AND PLACE: Thursdays, 2:00-5:00 PM, PHR 4.114

COURSE DIRECTOR: John DiGiovanni, PhD  
Professor and Coulter R. Sublett Chair in Pharmacy  
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Office Hours: upon request

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## POLICIES AND RECOMMENDATIONS

**Required Text:** None.

### Evaluation (100% Total):

Journal Article #1 review (Written)	20%
Journal Article #2 review (Written)	20%
Take home final exam (Written)	60%

A	90.00-100.00
B	80.00-89.99
C	70.00-79.99
D (credit)	60.00-69.99
F (no credit)	0.00 -59.99

**Course Communication:** Announcements pertaining to this class will be sent to your registered UT email and/or posted on Blackboard (see below). Please watch for these notices as you are responsible for all information sent to you or posted on the Blackboard course site. Therefore, check emails and visit the Blackboard site regularly.

The official **Canvas®** web site for this course can be accessed either through UTDirect or *via* <http://courses.utexas.edu>. Either access point is UTEID-protected, and provides you links to the courses in which you are currently enrolled. Visit this site for additional resources associated with this course (your grades, power point presentation, the discussion board, contacting faculty by Email, electronic versions of suggested and **required** readings and hyperlinks).

The website will also be used for official, course-related announcements and for the exchange of class information and questions via the discussion board. Be aware that any messages posted to the discussion board are available to all enrolled students and faculty

You may also contact faculty members directly via **Email**.

### Contact information for participating faculty:

Dr. John DiGiovanni	<a href="mailto:john.digiovanni@austin.utexas.edu">john.digiovanni@austin.utexas.edu</a>
Dr. Linda DeGraffenried	<a href="mailto:degraffenried@austin.utexas.edu">degraffenried@austin.utexas.edu</a>
Dr. Edward "Ted" Mills	<a href="mailto:ted_mills@mail.utexas.edu">ted_mills@mail.utexas.edu</a>
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Dr. Karen Vasquez  
Dr. Jianjun Shen  
Dr. Dawit Kidane  
Dr. Stefano Tiziani  
Dr. Lauren Ehrlich  
Dr. Christopher Jolly

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**Course Text:** Any required reading material pertaining to lectures will be made available via the Blackboard.

**Lecture Notes:** These will be posted on Blackboard at least 3 days prior to lectures. If you want to get the notes earlier, contact the instructor of record. Please print lecture notes and have them available during the corresponding lecture.

**Disability Accommodation:** Please provide documentation from the Dean of Students Office by the 4<sup>th</sup> class period for any disability-related accommodation you require.

**Web-Based Class Sites:** If you do not want your name included in UT password-protected electronic class rosters, you must restrict your directory information in the Office of the Registrar, MAI Building, Rm 1. If you have restricted this information, you will not receive email, class materials and confidential grade postings on Blackboard.

**Classroom Courtesy:** Disruptive behavior, talking, reading the newspaper, etc. are rude and distracting to your fellow students. If you display such disrespectful and disruptive behavior, you will be asked to leave. If you persist or continue to exhibit such behavior on repeated occasions, you will be dismissed from the course and referred to the Dean of Students Office for counseling. **Please switch off and put away all electronic devices before class begins. This includes cell phones, pagers, laptops, MP3 players, radios, etc.**

**Scholastic Honesty:** All students are expected to conduct themselves in an ethical manner and to have read and understood the sections of the *General Information Catalogue* on scholastic dishonesty. Penalties for instances of scholastic dishonesty in this course will be as outlined in the *General Information Catalogue*. The least severe penalty in this course shall be failure.

## Class/Presentation Schedule, Spring 2017

Jan 19 <sup>th</sup>	Multi-Stage Carcinogenesis: Models and Mechanisms I	DiGiovanni
Jan 26 <sup>th</sup>	Multi-Stage Carcinogenesis: Models and Mechanisms II	DiGiovanni
Feb 2 <sup>nd</sup>	Diet, Inflammation and Cancer	Jolly
Feb 9 <sup>th</sup>	Cell Signaling and Cell Cycle	deGraffenried
Feb 16 <sup>th</sup>	How to Review Scientific Papers	DiGiovanni
Feb 23 <sup>rd</sup>	Phytochemicals/phytonutrients and cancer chemoprevention	Saha
March 2 <sup>nd</sup>	Mutation, DNA Repair Mechanisms and Genomic Instability	Vasquez
March 9 <sup>th</sup>	Cancer Stem Cells	DiGiovanni
March 16 <sup>th</sup>	<b>No Class</b>	<b>Spring Break</b>
March 23 <sup>rd</sup>	Dietary energy balance and cancer	DiGiovanni
March 30 <sup>th</sup>	Cancer Metabolism and the Warburg Effect	Mills
April 6 <sup>th</sup>	Microbiome and Cancer	Kidane
April 13 <sup>th</sup>	Genomics/Proteomics Methods	Shen
April 20 <sup>th</sup>	Metabolomics Analysis Methods	Tiziani
April 27 <sup>th</sup>	Flow Cytometry/FACS Analysis Methods	Ehrlich
May 4 <sup>th</sup>	Transgenic Mouse Models for Nutrition and Cancer Research	DiGiovanni

Class period is from 2:00-5:00 pm Thursday afternoons. Each class period will include an initial section of didactic lecture on the topic shown followed by a discussion period involving one (or possibly two, if warranted, or desired) literature papers dealing with the lecture topic in the context of nutrition and cancer. At least one of the papers discussed will use an important methodology associated with the topic. Grades will be based on two assigned papers to write a formal critique and a take home final exam.