COURSE AND CONTACT INFORMATION

Course: BMSC 8217 Ethics and Grant Writing **Semester:** Spring 2021 **Time:** 12:45-2:00 pm (Wednesday) **Location:** WebEx; Invitation will be provided for each class

INSTRUCTOR

Name: Ljubica Caldovic, PhD Campus Address: Ross Hall 561 Phone: (202) 994-1051 E-mail: ljubica@gwu.edu or LCaldovic@childrensnational.org Office hours: Arranged via WebEx or Zoom

COURSE DESCRIPTION: Ethical issues related to the conduct of research, animal use, and human subject participation. The design of a successful grant proposal.

COURSE PREREQUISITE(S)

Permission of Instructor

LEARNING OUTCOMES:

As a result of completing this course, students will be able to:

- 1. Define ethics of biomedical scientific investigation
- 2. List the Three R's involving the use of animals in research
- 3. Describe the principles and ethical obligations of students in areas such as authorship, data management, conflicts of interest, and human participant research as expected for scientists in the US.
- 4. Explain the history and practice of the social responsibilities of scientists and scientists in training

TEXTBOOKS AND OTHER LEARNING MATERIALS

Author	<u>Title</u>
Francis L. Macrina	Scientific Integrity; Text and Cases in Responsible Conduct of Research, 3 rd or 4 th edition
Bulger, Heitman, and Reiser	The Ethical Dimensions of the Biological and Health Sciences, 2 nd edition
Elliott and Stern, eds	Research Ethics: A Reader

"The Lab" -- https://ori.hhs.gov/content/thelab

"The Research Clinic" -- https://ori.hhs.gov/TheResearchClinic

RCR Case Stories -- https://ori.hhs.gov/rcr-casebook-stories-about-researchers-worthdiscussing

Video Case Stories -- https://ori.hhs.gov/videos/case-study

WEEK-BY-WEEK SCHEDULE OF TOPICS TO BE PRESENTED:

Weel	k Date	<u>Topic (Instructor)</u>
1	Wed, Jan 13, 2021:	Principles of Scientific Responsibility; Lab Safety (Caldovic)
2	Wed, Jan 20, 2021:	No Class – University Holiday
3	Wed, Jan 27, 2021:	Authorship and Peer Review (Caldovic)
4	Wed, Feb 3, 2021:	Research Misconduct – "The Lab" (Garrity and Sanders)
5	Wed, Feb 10, 2021:	Research Misconduct – "The Lab" (Garrity and Sanders)
6	Wed, Feb 17, 2021:	Clinical Research Misconduct – "The Research Clinic" (Hardy)
7	Wed, Feb 24, 2021:	Clinical Research Misconduct – "The Research Clinic" (Hardy)
8	Wed, Mar 3, 2021:	Commercial and Industry Relations; Conflicts of Interest (Comanescu)
9	Wed, Mar 10, 2021:	Data Management (Marvar)
	Wed, Mar 17, 2021:	No Class – Spring Break
10	Wed, Mar 24, 2021:	Dual Use (You)
11	Wed, Mar 31, 2021:	Mentor/Mentee Relationship (Hardy)
12	Wed, Apr 7, 2021:	Grant Preparation (Mendelowitz)
13	Wed, Apr 14, 2021:	Pre-doctoral Funding Opportunities (Hanley)
14	Wed, Apr 21, 2021:	Responsible Use of Animals in Research (Triplett)
15	Wed, Apr 28, 2021:	Scientists and Society (Caldovic)
	Wed, May 5, 2021:	Final Exam due at 5 pm

GRADING

Grades will be calculated from Research Day reports (30%), Final Exam (40%), and Class Participation (30%). If an instructor assigns other homework, the percentages will be adjusted.

University policies:

University policy on observance of religious holidays

In accordance with University policy, students should notify faculty during the first week of the semester of their intention to be absent from class on their day(s) of religious observance. For details and policy, see: students.gwu.edu/accommodations-religious-holidays.Academic integrity code

Academic Integrity

Academic Integrity is an integral part of the educational process, and GW takes these matters very seriously. Violations of academic integrity occur when students fail to cite research sources properly, engage in unauthorized collaboration, falsify data, and in other ways outlined in the Code of Academic Integrity. Students accused of academic integrity violations should contact the Office of Academic Integrity to learn more about their rights and options in the process. Outcomes can range from failure of assignment to expulsion from the University, including a transcript notation. The Office of Academic Integrity maintains a permanent record of the violation.

More information is available from the Office of Academic Integrity at studentconduct.gwu.edu/academic-integrity. The University's "Guide of Academic Integrity in Online Learning Environments" is available at studentconduct.gwu.edu/guide-academic-

integrity-online-learning-environments. Contact information: rights@gwu.edu or 202-994-6757.

Use of Electronic Course Materials and Class Recordings

Students are encouraged to use electronic course materials, including recorded class sessions, for private personal use in connection with their academic program of study. Electronic course materials and recorded class sessions should not be shared or used for non-course related purposes unless express permission has been granted by the instructor. Students who impermissibly share any electronic course materials are subject to discipline under the Student Code of Conduct. Please contact the instructor if you have questions regarding what constitutes permissible or impermissible use of electronic course materials and/or recorded class sessions. Please contact Disability Support Services at disabilitysupport.gwu.edu if you have questions or need assistance in accessing electronic course materials.

Support for students outside the classroom

Virtual academic support

A full range of academic support is offered virtually in the spring 2021. See coronavirus.gwu.edu/top-faqs for updates.

Tutoring and course review sessions are offered through Academic Commons in an online format. See academiccommons.gwu.edu/tutoring

Writing and research consultations are available online. See academiccommons.gwu.edu/writing-research-help

Coaching, offered through the Office of Student Success, is available in a virtual format. See studentsuccess.gwu.edu/academic-program-support

Academic Commons offers several short videos addressing different virtual learning strategies for the unique circumstances of the fall 2020 semester. See academiccommons.gwu.edu/study-skills. They also offer a variety of live virtual workshops to equip students with the tools they need to succeed in a virtual environment. See tinyurl.com/gw-virtual-learning

Writing Center

GW's Writing Center cultivates confident writers in the University community by facilitating collaborative, critical, and inclusive conversations at all stages of the writing process. Working alongside peer mentors, writers develop strategies to write independently in academic and public settings. Appointments can be booked online. See gwu.mywconline.

Academic Commons

Academic Commons provides tutoring and other academic support resources to students in many courses. Students can schedule virtual one-on-one appointments or attend virtual drop-in sessions. Students may schedule an appointment, review the tutoring schedule, access other academic support resources, or obtain assistance at academiccommons.gwu.edu.

Disability Support Services (DSS) 202-994-8250

Any student who may need an accommodation based on the potential impact of a disability should contact Disability Support Services to establish eligibility and to coordinate reasonable accommodations. disabilitysupport.gwu.edu

Counseling and Psychological Services 202-994-5300

GW's Colonial Health Center offers counseling and psychological services, supporting mental health and personal development by collaborating directly with students to overcome challenges and

difficulties that may interfere with academic, emotional, and personal success. healthcenter.gwu.edu/counseling-and-psychological-services

Safety and Security

In an emergency: call GWPD 202-994-6111 or 911

- For situation-specific actions: review the Emergency Response Handbook at safety.gwu.edu/emergency-response-handbook
- In an active violence situation: Get Out, Hide Out, or Take Out. See go.gwu.edu/shooterpret Stay informed: safety.gwu.edu/stay-informed

FACULTY

Dr. Sheila Garrity, JD, MPH, MBA, Associate Vice President for Research Integrity, GWU

- Dr. Patrick Hanley, Assistant Research Professor of Pediatrics, CNHS and GWU SMHS
- Dr. Steve Kubisen, Managing Director, Technology Commercialization Office, GWU
- Dr. Kristina Hardy, Associate Professor, Departments of Psychiatry & Behavioral Sciences and Pediatrics, GWU SNHS
- Dr. Paul Marvar, Assistant Professor of Pharmacology & Physiology, GWU SMHS
- Dr. David Mendelowitz, Professor of Pharmacology & Physiology, GWU SMHS
- Dr. Hiromi Sanders, JD, Director of Research Integrity, GWU
- Dr. Jason Triplett, Associate Professor of Pharmacology & Physiology, CNMC and GWU SMHS
- Dr. Edward You, Supervisory Special Agent, FBI Weapons of Mass Destruction Directorate, Biological Countermeasures Unit