



**UPR School of Medicine
Division of Biomedical Sciences
Responsible Conduct in Research Compliance Program ([RC]²P)**



Program Description

A quintessential component of graduate biomedical sciences is the education and training in scientific research integrity. As bioethical issues have increasingly surfaced in the biomedical sciences, federal agencies have assisted institutions in the implementation of policies and guidelines to assure the ethical conduct of research. The UPR School of Medicine and its Division of Graduate Biomedical Sciences have traditionally used as a template the NIH's Office for Research Integrity (ORI)-defined fundamental instructional areas for education and training in the Responsible conduct of Research (RCR). Yet, other ethical and important areas are addressed as well. To further underscore the institutional commitment with scientific research integrity, the division's efforts in collaboration with NIH-sponsored programs such as the MBRS RISE and SCORE Programs, have been coalesced into an official **Responsible Conduct in Research Compliance Program ([RC]²P)**. At this stage the program requires all students enrolled in the graduate biomedical sciences program to certify completion of education and training in the ORI-defined nine instructional areas of RCR during their first two years of study and prior to graduation. Students are therefore required to attend and participate in all seminars and workshops coordinated by the Division of Biomedical Sciences and/or those co-sponsored by NIH-supported programs. This education and training effort begins for our students during the first week of the academic year in our traditional **Orientation Week Program**, and follows longitudinally throughout the academic year with the participation of external and internal resources in a series of seminars and workshops. These activities consist of interactive sessions for the optimal benefit of our students. Upon successful completion of each individual module students receive an official certificate of participation, which serves as evidence of the completion of such requirement. Some of the topics can be covered more than once during the year giving students an expanded opportunity to receive the specific education prior to graduation. Academic Year 2012-13 and past academic years activities are summarized below. As an additional requirement all graduate students are provided with the **ORI Introduction to the Responsible Conduct of Research** manual by Nick Steneck: (2002) and its reading is mandatory, for which reason these must certify in writing that they have responsibly completed this task.

Compliance with the **[RC]²P** can also be achieved upon students' completion of the **Bioethical & Survival Skills Course (PHAR 8507)** offered by the Pharmacology Department, or any other equivalent course. Furthermore, students will use as resources the online courses provided by a series of universities. For instance, the table below lists the weblinks to the online courses by the University of New Hampshire and Columbia University, and access to pdf files of specific cases from Florida State University. Documented completion of these official ORI-sponsored online courses can also constitute evidence of compliance with the **[RC]²P**. The Division of Biomedical Sciences in conjunction with departmental graduate programs coordinators will keep track and record of student's timely and successful completion of the **[RC]²P**. Beginning Academic Year 2008-09 the **Responsible Conduct in Research Compliance Program ([RC]²P)** will evolve into an additional course offering of the Division of Biomedical Sciences of the PR School of Medicine, and with participation extended to faculty members interested in receiving this education and training.

		UPR School of Medicine Division of Biomedical Sciences Responsible Conduct in Research Compliance Program					
RCR Modules: ORI-defined Instructional Areas (9)*	Module Topics	Seminars & Workshops	ORI: Introduction to the Responsible Conduct of Research* (By Nick Steneck) (mandatory reading)	Bioethical & Survival Skills Course (PHAR 8507)	RCRCP Activities Academic Year 2012-13	Online resources	
						Columbia University University of New Hampshire	Florida State University Case Studies
Research Misconduct*	<ul style="list-style-type: none"> Bioethics Scientific Fraud and Its Consequences 	√	√	√	Dra. Marlen Oliver Vázquez (August 1, 2012) "Basics of Bioethics"	http://ccnmtl.columbia.edu/ projects/rcr/rcr_misconduct/	

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						Columbia University University of New Hampshire	Florida State University Case Studies
					Prof. Efraín Flores Rivera (August 1, 2012) "Plagiarism"	http://www.unh.edu/rcr/Misc/onduct-Title.htm	
Human Subjects Protection*	<ul style="list-style-type: none"> Human in Research Studies The Ethical Inclusion of Infants and Children 	√	√	√	Dr. Margarita Irizarry (August 1, 2012) "Human Subjects"	http://www.unh.edu/rcr/HumSubj-Title.htm	http://www.cgsnet.org/portals/0/pdf/CS-HumanSubjects.pdf
Hazardous Substances and Recombinant DNA Technology	<ul style="list-style-type: none"> Biosafety Radiation Safety Recombinant DNA Technology 	√			Sr. Jossian J. Pagán Lisboa (August 24, 2012) "Radioactivity" Sr. José Robles (August 24, 2012) "Handling of Biomedical and Pathogenic Waste"	http://www.unh.edu/rcr/HazMat-Title01.htm	
Animal Welfare*	<ul style="list-style-type: none"> The Use of Animals in Research 	√	√	√		http://www.unh.edu/rcr/AnimalSubj-Title.htm	http://www.cgsnet.org/portals/0/pdf/CS-AnimalWelfare.pdf
Mentor / Trainee Responsibilities*	<ul style="list-style-type: none"> Mentoring - Not as Simple as It Seems 	√	√ ♦	√		http://ccnmtl.columbia.edu/projects/rcr/rcr_mentoring/ http://www.unh.edu/rcr/Mentoring-Title.htm	http://www.cgsnet.org/portals/0/pdf/CS-Mentoring.pdf
Peer Review*	<ul style="list-style-type: none"> Peer Review of manuscripts and grants 	√	√	√		http://www.drq.nih.gov/Videos/Video.asp http://www.unh.edu/rcr/PeerReview-Title.htm	
Publication Practices and Responsible	<ul style="list-style-type: none"> Authorship What Constitutes 	√	√	√		http://ccnmtl.columbia.edu/projects/rcr/rcr_authorship/	http://www.cgsnet.org/portals/0/pdf/CS-Publication.pdf

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Authorship*	"Publication"?					http://www.unh.edu/rcr/Authorship-Title.htm	
Data Acquisition, Management, Sharing and Ownership*	<ul style="list-style-type: none"> Collection and Interpretation of Data Data Storage and Ownership 	√	√	√		http://ccnmtl.columbia.edu/projects/rcr/rcr_data/ http://www.unh.edu/rcr/DataMgt-Title.htm	http://www.cgsnet.org/portals/0/pdf/CS-DataManagement.pdf
Conflict of Interest and Commitment*	<ul style="list-style-type: none"> Conflict of Interest and Commitment 	√	√	√		http://ccnmtl.columbia.edu/projects/rcr/rcr_conflicts/ http://www.unh.edu/rcr/Conflict-Title.htm	http://www.cgsnet.org/portals/0/pdf/CS-ConflictsInterest.pdf
Collaborative Science*	<ul style="list-style-type: none"> Collaboration agreements: Material transfers and Memorandums of Understanding and Agreements (MOUA) 	√	√	√		http://ccnmtl.columbia.edu/projects/rcr/rcr_science/ http://www.unh.edu/rcr/Collaboration-Title.htm	http://www.cgsnet.org/portals/0/pdf/CS-Collaboration.pdf

Resources Affiliations



External



Internal – UPR System

- a. Dra. Marlen Oliver Vázquez
Director, Institute of Humanistic Studies & Bioethics
- b. Prof. Efraín Flores Rivera
Director, Centro de Apoyo Tecnológico para el Aprendizaje (CATA)
- c. Mr. José Robles
Health & Safety Officer

- d. Office of Radiological Protection
Mr. Jossian J. Pagán Lisboa
Director, Office of Laboratory Safety in Research
- e. Dr. Margarita Irizarry
President, IRB II
Professor, School of Health Related Sciences

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Human Subjects Protection*	<ul style="list-style-type: none"> Human in Research Studies The Ethical Inclusion of Infants and Children 	√	√	√	Dr. Margarita Irizarry (August 4, 2011) "Human Subjects"	http://www.unh.edu/rcr/HumSubj-Title.htm	http://www.cgsnet.org/portals/0/pdf/CS-HumanSubjects.pdf
Hazardous Substances and Recombinant DNA Technology	<ul style="list-style-type: none"> Biosafety Radiation Safety Recombinant DNA Technology 	√			Sr. Jossian J. Pagán Lisboa (August 4, 2011) "Radioactivity" Sr. José Robles (August 4, 2011) "Handling of Biomedical and Pathogenic Waste"	http://www.unh.edu/rcr/HazMat-Title01.htm	
Animal Welfare*	<ul style="list-style-type: none"> The Use of Animals in Research 	√	√	√	Dr. Elizabeth Rivera (August 12, 2011) "General Session" Mrs. Carmen Álvarez (August 12, 2011) "Occupational Health and Safety in the Animal Resources Center" Dr. Melween Martínez (August 19, 2011) "Aseptic Surgery; Anesthesia and Analgesia"	http://www.unh.edu/rcr/AnimalSubj-Title.htm	http://www.cgsnet.org/portals/0/pdf/CS-AnimalWelfare.pdf

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Mentor / Trainee Responsibilities*	<ul style="list-style-type: none"> Mentoring - Not as Simple as It Seems 	√	√ ♦	√	Dr. Howard G. Adams (September 2, 2011) <i>"Overcoming Communications Barriers in the Grad Research Lab."</i> ----- <i>"Enhancing Faculty Involvement with Graduate Students Through Improved Mentoring Strategies"</i>	http://ccnmtl.columbia.edu/projects/rcr/rcr_mentoring/ http://www.unh.edu/rcr/Mentoring-Title.htm	http://www.cgsnet.org/portals/0/pdf/CS-Mentoring.pdf
Peer Review*	<ul style="list-style-type: none"> Peer Review of manuscripts and grants 	√	√	√		http://www.drq.nih.gov/Video/Video.asp http://www.unh.edu/rcr/PeerReview-Title.htm	
Publication Practices and Responsible Authorship*	<ul style="list-style-type: none"> Authorship What Constitutes "Publication"? 	√	√	√		http://ccnmtl.columbia.edu/projects/rcr/rcr_authorship/ http://www.unh.edu/rcr/Authorship-Title.htm	http://www.cgsnet.org/portals/0/pdf/CS-Publication.pdf
Data Acquisition, Management, Sharing and Ownership*	<ul style="list-style-type: none"> Collection and Interpretation of Data Data Storage and Ownership 	√	√	√		http://ccnmtl.columbia.edu/projects/rcr/rcr_data/ http://www.unh.edu/rcr/DataMgt-Title.htm	http://www.cgsnet.org/portals/0/pdf/CS-DataManagement.pdf
Conflict of Interest and Commitment*	<ul style="list-style-type: none"> Conflict of Interest and Commitment 	√	√	√		http://ccnmtl.columbia.edu/projects/rcr/rcr_conflicts/ http://www.unh.edu/rcr/Conflict-Title.htm	http://www.cgsnet.org/portals/0/pdf/CS-ConflictsInterest.pdf
Collaborative Science*	<ul style="list-style-type: none"> Collaboration agreements: 	√	√			http://ccnmtl.columbia.edu/projects/rcr/rcr_science/	http://www.cgsnet.org/portals/0/pdf/CS-Collaboration.pdf

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	Material transfers and Memorandums of Understanding and Agreements (MOUA)			√		http://www.unh.edu/rcr/Collaboration-Title.htm	

Resources Affiliations



External

- a. Dr. Howard G. Adams
 - i. Director, H.G. Adams & Associates, Inc
 - ii. Norfolk, Virginia



Internal – UPR System

- b. ∞ Dr. Carmen L. Cadilla
 - i. Director, MBRS-RISE Program, UPR-MSc (*sponsored the activity*)
- c. Dr. Melween Martínez
 - i. Director, Animal Resources Center
- d. Mrs. Carmen Álvarez
 - i. Supervisor, Animal Resources Center
- e. Dr. Elizabeth Rivera
 - i. President, IACUC Committee
- f. Mr. José Robles
 - i. Health & Safety Officer
 - ii. Office of Radiological Protection
- g. Mr. Jossian J. Pagán Lisboa
 - i. Director, Office of Laboratory Safety in Research
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Research Misconduct*	<ul style="list-style-type: none"> Bioethics Scientific Fraud and Its Consequences 	√	√	√	Dr. Leonides Santos y Vargas (August 5, 2010) "Basics of Bioethics"	http://ccnmtl.columbia.edu/projects/rcr/rcr_misconduct/ http://www.unh.edu/rcr/Misc/onduct-Title.htm	
Human Subjects Protection*	<ul style="list-style-type: none"> Human in Research Studies The Ethical Inclusion of Infants and Children 	√	√	√	Dr. Leonides Santos y Vargas (August 5, 2010) "Basics of Bioethics"	http://www.unh.edu/rcr/HumSubj-Title.htm	http://www.cgsnet.org/portals/0/pdf/CS-HumanSubjects.pdf
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Animal Welfare*	<ul style="list-style-type: none"> The Use of Animals in Research 	√	√	√	Dr. Elizabeth Rivera (August 13, 2010) "General Session" Mrs. Carmen Álvarez (August 13, 2010) "Occupational Health and Safety in the Animal Resources Center" Dr. Melween Martínez (August 20, 2010) "Aseptic Surgery; Anesthesia and Analgesia"	http://www.unh.edu/rcr/AnimalSubj-Title.htm	http://www.cgsnet.org/portals/0/pdf/CS-AnimalWelfare.pdf

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Mentor / Trainee Responsibilities*	<ul style="list-style-type: none"> Mentoring - Not as Simple as It Seems 	√	√ ♦	√	Dr. Howard G. Adams (October 19, 2010) <i>"Managing Stress Associated with Graduated School"</i> ----- <i>"Enhancing Faculty Involvement with Graduate Students Through Improved Mentoring Strategies"</i>	http://ccnmtl.columbia.edu/projects/rcr/rcr_mentoring/ http://www.unh.edu/rcr/Mentoring-Title.htm	http://www.cgsnet.org/portals/0/pdf/CS-Mentoring.pdf
Peer Review*	<ul style="list-style-type: none"> Peer Review of manuscripts and grants 	√	√	√	Dr. Michael J. Leibowitz (October 30, 2010) <i>"Peer Review"</i>	http://www.drq.nih.gov/Video/Video.asp http://www.unh.edu/rcr/PeerReview-Title.htm	
Publication Practices and Responsible Authorship*	<ul style="list-style-type: none"> Authorship What Constitutes "Publication"? 	√	√	√	Dr. Michael J. Leibowitz (October 30, 2010) <i>"Publications Practices"</i> Lic. Eugenio J. Torres Oyola & Lic. Boris Jaskille (March 15, 2011) <i>"Protecting and Commercializing Intellectual Property: A look at Act 150 of 2010"</i> ∞	http://ccnmtl.columbia.edu/projects/rcr/rcr_authorship/ http://www.unh.edu/rcr/Authorship-Title.htm	http://www.cgsnet.org/portals/0/pdf/CS-Publication.pdf
Data Acquisition, Management, Sharing and Ownership*	<ul style="list-style-type: none"> Collection and Interpretation of Data Data Storage and Ownership 	√	√	√	Dr. Michael J. Leibowitz (October 30, 2010) <i>"Data Acquisition"</i> Lic. Eugenio J. Torres Oyola & Lic. Boris Jaskille (March 15, 2011) <i>"Protecting and Commercializing</i>	http://ccnmtl.columbia.edu/projects/rcr/rcr_data/ http://www.unh.edu/rcr/DataMgt-Title.htm	http://www.cgsnet.org/portals/0/pdf/CS-DataManagement.pdf

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					<i>Intellectual Property: A look at Act 150 of 2010</i> [∞]		
Conflict of Interest and Commitment*	<ul style="list-style-type: none"> Conflict of Interest and Commitment 	√	√	√	Dr. Michael J. Leibowitz (October 30, 2010) "Conflict of Interest"	http://ccnmtl.columbia.edu/projects/rcr/rcr_conflicts/ http://www.unh.edu/rcr/Conflict-Title.htm	http://www.cgsnet.org/portals/0/pdf/CS-ConflictsInterest.pdf
Collaborative Science*	<ul style="list-style-type: none"> Collaboration agreements: Material transfers and Memorandums of Understanding and Agreements (MOUA) 	√	√	√	Dr. Michael J. Leibowitz (October 30, 2010) "Collaborative Research"	http://ccnmtl.columbia.edu/projects/rcr/rcr_science/ http://www.unh.edu/rcr/Collaboration-Title.htm	http://www.cgsnet.org/portals/0/pdf/CS-Collaboration.pdf

Resources Affiliations



External

- a. Lic. Eugenio J. Torres Oyola
Registered Patent Attorney
& Boris Jaskille, Esq.
Ferraiuoli-Torres-Marchand & Rovira Office
- b. Dr. Howard G. Adams
Director, H.G. Adams & Associates, Inc

- c. Norfolk, Virginia
Dr. Michael Leibowitz
Professor of Molecular Genetics, Microbiology, and
Immunology
Director of Academic Diversity Initiatives, GSBS-RWJMS,
UMDNJ



Internal – UPR System

- d. ∞ Dr. Emma Fernández
Director, RCMI Program, UPR-MSC (*sponsored the activity*)
- e. Dr. Leonides Santos y Vargas
Director, Institute of Humanistic Studies & Bioethics
- f. Dr. Melween Martínez
Director, Animal Resources Center
- g. Mrs. Carmen Álvarez
Supervisor, Animal Resources Center

- h. Dr. Elizabeth Rivera
President, IACUC Committee
- i. Mr. José Robles
Health & Safety Officer
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- j. Mr. Jossian J. Pagán Lisboa
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Human Subjects Protection*	<ul style="list-style-type: none"> Human in Research Studies The Ethical Inclusion of Infants and Children 	√	√	√	Dr. Leonides Santos y Vargas (August 6, 2009) <i>"Basics of Bioethics"</i>	http://www.unh.edu/rcr/HumSubj-Title.htm	http://www.cgsnet.org/portals/0/pdf/CS-HumanSubjects.pdf
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Peer Review*	<ul style="list-style-type: none"> Peer Review of manuscripts and grants 	√	√	√		http://www.drug.nih.gov/Video/Video.asp http://www.unh.edu/rcr/PeerReview-Title.htm	
Publication Practices and Responsible Authorship*	<ul style="list-style-type: none"> Authorship What Constitutes "Publication"? 	√	√	√		http://ccnmtl.columbia.edu/projects/rcr/rcr_authorship/ http://www.unh.edu/rcr/Authorship-Title.htm	http://www.cgsnet.org/portals/0/pdf/CS-Publication.pdf
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	(MOUA)						

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Research Misconduct*	<ul style="list-style-type: none"> Bioethics Scientific Fraud and Its Consequences 	√	√	√	Dr. Leonides Santos y Vargas (August 1, 2008) <i>"Basics of Bioethics"</i>	http://ccnmtl.columbia.edu/projects/rcr/rcr_misconduct/ http://www.unh.edu/rcr/Misc/onduct-Title.htm	
Human Subjects Protection*	<ul style="list-style-type: none"> Human in Research Studies The Ethical Inclusion of Infants and Children 	√	√	√	Dr. Leonides Santos y Vargas (August 1, 2008) <i>"Basics of Bioethics"</i>	http://www.unh.edu/rcr/HumSubj-Title.htm	http://www.cgsnet.org/portals/0/pdf/CS-HumanSubjects.pdf
Hazardous Substances and Recombinant DNA Technology	<ul style="list-style-type: none"> Biosafety Radiation Safety Recombinant DNA Technology 	√			Sr. Jossian J. Pagán Lisboa (August 1, 2008) <i>"Radioactivity"</i> Sr. José Robles (August 1, 2008) <i>"Handling of Biomedical and Pathogenic Waste"</i>	http://www.unh.edu/rcr/HazMat-Title01.htm	
Animal Welfare*	<ul style="list-style-type: none"> The Use of Animals in Research 	√	√	√	Dr. Elizabeth Rivera (August 15, 2008) <i>"General Session"</i> Mrs. Carmen Álvarez (August 15, 2008) <i>"Occupational Health and Safety in the Animal Resources Center"</i> Dr. Melween Martínez (August 22, 2008) <i>"Aseptic Surgery; Anesthesia and Analgesia"</i>	http://www.unh.edu/rcr/AnimalSubj-Title.htm	http://www.cgsnet.org/portals/0/pdf/CS-AnimalWelfare.pdf

RCR Modules: ORI-defined Instructional Areas (9)*	Module Topics	UPR School of Medicine Division of Biomedical Sciences Responsible Conduct in Research Compliance Program					
		Seminars & Workshops	ORI: Introduction to the Responsible Conduct of Research* (By Nick Steneck) (mandatory reading)	Bioethical & Survival Skills Course (PHAR 8507)	RCRCP Activities Academic Year 2008-09	Online resources	
						Columbia University University of New Hampshire	Florida State University Case Studies
Mentor / Trainee Responsibilities*	<ul style="list-style-type: none"> Mentoring - Not as Simple as It Seems 	√	√ ♦	√		http://ccnmtl.columbia.edu/projects/rcr/rcr_mentoring/ http://www.unh.edu/rcr/Mentoring-Title.htm	http://www.cgsnet.org/portals/0/pdf/CS-Mentoring.pdf
Peer Review*	<ul style="list-style-type: none"> Peer Review of manuscripts and grants 	√	√	√		http://www.drug.nih.gov/Video/Video.asp http://www.unh.edu/rcr/PeerReview-Title.htm	
Publication Practices and Responsible Authorship*	<ul style="list-style-type: none"> Authorship What Constitutes "Publication"? 	√	√	√	Dr. Mariluz Frontera (September 26, 2008) <i>"Intellectual Property"</i> ^{oo} Dr. Waldemar Adam (Sept. 3 - Nov. 12, 2008) <i>"How to prepare a Scientific Manuscript for Publications"</i> ^{oo}	http://ccnmtl.columbia.edu/projects/rcr/rcr_authorship/ http://www.unh.edu/rcr/Authorship-Title.htm	http://www.cgsnet.org/portals/0/pdf/CS-Publication.pdf
Data Acquisition, Management, Sharing and Ownership*	<ul style="list-style-type: none"> Collection and Interpretation of Data Data Storage and Ownership 	√	√	√		http://ccnmtl.columbia.edu/projects/rcr/rcr_data/ http://www.unh.edu/rcr/DataMgt-Title.htm	http://www.cgsnet.org/portals/0/pdf/CS-DataManagement.pdf
Conflict of Interest and Commitment*	<ul style="list-style-type: none"> Conflict of Interest and Commitment 	√	√	√		http://ccnmtl.columbia.edu/projects/rcr/rcr_conflicts/ http://www.unh.edu/rcr/Conflict-Title.htm	http://www.cgsnet.org/portals/0/pdf/CS-ConflictsInterest.pdf
Collaborative Science*	<ul style="list-style-type: none"> Collaboration agreements: Material transfers and 	√	√	√		http://ccnmtl.columbia.edu/projects/rcr/rcr_science/ http://www.unh.edu/rcr/Collaboration-Title.htm	http://www.cgsnet.org/portals/0/pdf/CS-Collaboration.pdf

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		Seminars & Workshops	ORI: Introduction to the Responsible Conduct of Research* (By Nick Steneck) (mandatory reading)	Bioethical & Survival Skills Course (PHAR 8507)	RCRCP Activities Academic Year 2008-09	Online resources	
						Columbia University University of New Hampshire	Florida State University Case Studies
	Memorandums of Understanding and Agreements (MOUA)						

Resources Affiliations



Internal – UPR System

- a. Dr. Waldemar Adam
Emeritus Professor, UPR-Río Piedras Campus
- b. Dr. Leonides Santos y Vargas
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- c. ∞ Dr. Carmen L. Cadilla
MBRS-RISE, Program Director (*sponsored the activity*)
Professor, Department of Biochemistry
- d. Dr. Melween Martínez
Director, Animal Resources Center
- e. Mrs. Carmen Álvarez
Supervisor, Animal Resources Center
- f. Dr. Elizabeth Rivera
President, IACUC Committee
- g. Mr. José Robles
Health & Safety Officer
Office of Radiological Protection
- h. Mr. Jossian J. Pagán Lisboa
Director, Office of Laboratory Safety in Research
- i. Sra. Mariluz Frontera
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						Columbia University University of New Hampshire	Florida State University Case Studies
Research Misconduct*	<ul style="list-style-type: none"> Bioethics Scientific Fraud and Its Consequences 	√	√	√	Dr. Leonides Santos y Vargas (August 3, 2007) "Basics of Bioethics" Dra. Delia Camacho (May 20, 2008) "Scientific Research Misconduct"	http://ccnmtl.columbia.edu/projects/rcr/rcr_misconduct/ http://www.unh.edu/rcr/Misc/onduct-Title.htm	
Human Subjects Protection*	<ul style="list-style-type: none"> Human in Research Studies The Ethical Inclusion of Infants and Children 	√	√	√	Dr. Leonides Santos y Vargas (August 3, 2007) "Basics of Bioethics" Dr. Margarita Irizarry (March 14, 2008) "Ethical Dimensions"	http://www.unh.edu/rcr/Hum/Obj-Title.htm	http://www.cgsnet.org/portals/0/pdf/CS-HumanSubjects.pdf
Hazardous Substances and Recombinant DNA Technology	<ul style="list-style-type: none"> Biosafety Radiation Safety Recombinant DNA Technology 	√			Sr. Jossian J. Pagán Lisboa (August 3, 2007) "Radioactivity" Sr. José Robles (August 3, 2007) "Handling of Biomedical and Pathogenic Waste"	http://www.unh.edu/rcr/Haz/Mat-Title01.htm	
Animal Welfare*	<ul style="list-style-type: none"> The Use of Animals in Research 	√	√	√	Dr. Elizabeth Rivera (August 13, 2007) "General Session" Mrs. Carmen Álvarez (August 13, 2008) "Occupational Health and Safety in the Animal Resources Center" Dr. Melween Martínez (August 20, 2007)	http://www.unh.edu/rcr/AnimalSubj-Title.htm	http://www.cgsnet.org/portals/0/pdf/CS-AnimalWelfare.pdf

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						Columbia University University of New Hampshire	Florida State University Case Studies
					<i>"Aseptic Surgery; Anesthesia and Analgesia"</i>		
Mentor / Trainee Responsibilities*	<ul style="list-style-type: none"> Mentoring - Not as Simple as It Seems 	√	√ ♦	√	Dr. Rick McGee (August 24, 2007) <i>"Ins & Outs of Mentoring: Why it Sometimes Works and Sometimes Doesn't"</i> ----- <i>"Are Scientists Born or Created? Turning the Development of Scientists into a Science"</i>	http://ccnmtl.columbia.edu/projects/rcr/rcr_mentoring/ http://www.unh.edu/rcr/Mentoring-Title.htm	http://www.cgsnet.org/portals/0/pdf/CS-Mentoring.pdf
Peer Review*	<ul style="list-style-type: none"> Peer Review of manuscripts and grants 	√	√	√	Dr. Rick McGee (January 24, 2008) <i>"Grant Review Process: Mock NIH Study Section"</i> Dr. Michael Leibowitz (February 11, 2008) <i>"Scientific Publications: Practices, Authorship and Peer Review"</i>	http://www.drq.nih.gov/Video/Video.asp http://www.unh.edu/rcr/PeerReview-Title.htm	
Publication Practices and Responsible Authorship*	<ul style="list-style-type: none"> Authorship What Constitutes "Publication"? 	√	√	√	Dr. Michael Leibowitz (February 11, 2008) <i>"Scientific Publications: Practices, Authorship and Peer Review"</i> Dr. Margarita Irizarry (October 5, 2007) <i>"Authorship"</i> ^{no}	http://ccnmtl.columbia.edu/projects/rcr/rcr_authorship/ http://www.unh.edu/rcr/Authorship-Title.htm	http://www.cgsnet.org/portals/0/pdf/CS-Publication.pdf
Data Acquisition, Management, Sharing and Ownership*	<ul style="list-style-type: none"> Collection and Interpretation of Data Data Storage and Ownership 	√	√	√		http://ccnmtl.columbia.edu/projects/rcr/rcr_data/ http://www.unh.edu/rcr/DataMgt-Title.htm	http://www.cgsnet.org/portals/0/pdf/CS-DataManagement.pdf
Conflict of Interest and Commitment*	<ul style="list-style-type: none"> Conflict of Interest and Commitment 	√	√	√	Dr. Rick McGee (April 28, 2008) <i>"Conflict of Interest and Commitment"</i>	http://ccnmtl.columbia.edu/projects/rcr/rcr_conflicts/ http://www.unh.edu/rcr/Conf	http://www.cgsnet.org/portals/0/pdf/CS-ConflictsInterest.pdf

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						Columbia University University of New Hampshire	Florida State University Case Studies
						licl-Title.htm	
Collaborative Science*	<ul style="list-style-type: none"> • Collaboration agreements: Material transfers and Memorandums of Understanding and Agreements (MOUA) 	√	√	√		http://ccnmtl.columbia.edu/projects/rcr/rcr_science/ http://www.unh.edu/rcr/Collaboration-Title.htm	http://www.cgsnet.org/portals/0/pdf/CS-Collaboration.pdf

Resources Affiliations



External

- a. Dr. Rick McGee
Associate Dean for Faculty Recruitment and Professional Development
Northwestern University, Feinberg School of Medicine, Chicago, IL
- b. Dr. Michael Leibowitz
Professor of Molecular Genetics, Microbiology, and Immunology
Director of Academic Diversity Initiatives, GSBS-RWJMS, UMDNJ



Internal – School of Medicine and Medical Sciences Campus

- c. Dr. Delia Camacho
Dean of Academic Affairs, UPR-MCS
- d. Dr. Leonides Santos y Vargas
Director, Institute of Humanistic Studies & Bioethics
- e. ∞ Dr. Carmen L. Cadilla
MBRS-RISE, Program Director (*sponsored the activity*)
Professor, Department of Biochemistry
- f. Dr. Melween Martínez
Director, Animal Resources Center
- g. Mrs. Carmen Álvarez
Supervisor, Animal Resources Center
- h. Dr. Elizabeth Rivera
President, IACUC Committee
- i. Mr. José Robles
Health & Safety Officer
Office of Radiological Protection
- j. Mr. Jossian J. Pagán Lisboa
Director, Office of Laboratory Safety in Research
- k. Dr. Margarita Irizarry
President, IRB II
Professor, School of Health Related Sciences

References

- 1) Graduate Biomedical Sciences Programs Orientation Week
- 2) Flyers, Division of Biomedical Sciences Seminars/Workshops
- 3) ORI Introduction to the Responsible Conduct of Research, by Nick Steneck (<http://ori.dhhs.gov/documents/rcintro.pdf>)
- 4) * General topics about Responsible Conduct: The book entitled [On Being a Scientist: A Guide to Responsible Conduct in Research: Third Edition](http://www.nap.edu/catalog.php?record_id=12192) (http://www.nap.edu/catalog.php?record_id=12192).
- 5) ♦ Mentoring: http://ori.dhhs.gov/education/products/niu_mentorship/mentoring/meintro.html
- 6) Online Resources:
 - Online Courses:
 - Columbia University: <http://ccnmtl.columbia.edu/projects/rcr/index.html>
 - University of New Hampshire: <http://www.unh.edu/rcr/index.html>
 - Case Studies in pdf
 - Florida State University ~ Case Studies
 - Animal Care (<http://www.cgsnet.org/portals/0/pdf/CS-AnimalWelfare.pdf>)
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 - Collaborative Research (<http://www.cgsnet.org/portals/0/pdf/CS-Collaboration.pdf>)
 - Conflicts of Interest (<http://www.cgsnet.org/portals/0/pdf/CS-ConflictsInterest.pdf>)
 - Data Management (<http://www.cgsnet.org/portals/0/pdf/CS-DataManagement.pdf>)
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 - Mentor/Trainee Relationships (<http://www.cgsnet.org/portals/0/pdf/CS-Mentoring.pdf>)
 - Video-Inside the Peer Review Process
 - NIH Center for Scientific Review
 - Peer Review (<http://www.drq.nih.gov/Video/Video.asp>).

Approved: February 5, 2008

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By: Associate Deanship for Biomedical Sciences & Graduate Program Staff