## FALL 2013 PhD COURSE SCHEDULE

## **Graduate School of Biomedical Sciences**

Consult (http://njms.rutgers.edu/gsbs/index.cfm) or Respective Instructors for up to date information.

Please note that it is the responsibility of the student to contact the respective instructor for the correct time, dates and room assignment information. Instructor e-mail addresses and phone numbers are provided for your convenience.

Course #	Title	Course Director	Prerequisites	Credits	Grade Mode	Days Offered	Start Date	End Date	Time	Location	
BIOC 5000Q	Thesis Research	Faculty	Completion of course requirements.	5 PT 10 FT	S/U			By Arrangement			
BIOC 502AQ, BQ, CQ*	Biochemical Techniques	Faculty	Graduate Biochemistry or equivalent.	2	N			By Arrangement	:		
BIOC 5020Q*	Biochemical Techniques	Faculty	Graduate Biochemistry or equivalent.	1 to 10	S/U	By Arrangement					
BIOC 5285Q	Enzyme Inhibitor in Drug Discovery	Dr. Suriender Kumar kumarsu@njms.rutgers.edu 973-972-4750	Open to Masters and PhD students. IBMS.	2	N	Monday 09/16/13 12/16/13 5.00 PM - MS 7.00 PM E-67					
BIOC 5290Q	Critical Readings of the Literature	Dr. Pat O'Connor oconnojp@njms.rutgers.edu 973-972-5011	Approval and confirmation by Course Director. Open to PhD students only.	3	N	Monday and Wednesday	09/04/13	12/18/13	12.30 PM - 2.00 PM	MSB E-609	
BMEG 5000Q	Thesis Research	Faculty	Completion of course requirements.	5 PT 10 FT	S/U	By Arrangement					
BMEG 593AQ, BQ, CQ*	Biomedical Engineering Research	Faculty		2	N	By Arrangement					
BMEG 5930Q*	Biomedical Engineering Research	Faculty		1 to 10	S/U			By Arrangement			
CBMM 5000Q	CBMM Thesis Research	Faculty	Open to PhD students only.	5 PT 10 FT	S/U			By Arrangement	:		
CBMM N5001	Basic Histology	Dr. Grace Pinhal-Enfield pinhalgr@njms.rutgers.edu 732-742-8656	Enrollment limit 30. Open to Masters and PhD students. Masters students need permission of Course Director via email. PhD needs permission of Program/Track Director. (See below for required text).	з	N	Thursday	08/29/13	12/12/13	6.00 PM - 9.00 PM	Lecture: MSB C-600 Lab: MSB B-518 and MSB B-544	
CBMM 5002Q	Practical Approaches for Studying Protein Function	Dr. Maha Abdellatif abdellma@njms.rutgers.edu 973-972-3926 Dr. Danish Sayed sayeddh@njms.rutgers.edu 973-972-0349	Graduate Molecular Biology or equivalent.	2	N	Wednesday	09/11/13	12/04/13	2.00 PM - 4.00 PM	MSB G-609	

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CBMM 5350Q	Molecular Medicine of the Heart	Dr. Gopal Babu babugo@njms.rutgers.edu 973-972-5376	Permission of Course Director. Open to Masters and PhD students. (See below for required text).	3	N	Tuesday	09/10/13	12/17/13	9:30 AM - 12:30 PM	MSB G-609
CBMM 593AQ, BQ, CQ*	Cell Biology Research	Faculty		2	N			By Arrangement		
CBMM 5930Q*	Cell Biology Research	Faculty	First Year Cell Biology Graduate Program.	1 to 10	S/U			By Arrangement		
CBNP 5000Q	CBNP Thesis Research	Faculty	Open to PhD students only.	5 PT 10 FT	S/U	By Arrangement				
CBNP 5020Q	Principles of Pharmacology	Dr. Lester Sultatos sultatle@njms.rutgers.edu 973-972-6612	Open to PhD students only.	2	N	Wed/Fri	09/11/13	11/01/13	1.00 PM - 3.00 PM	MSB H-609B
CBNP 5150Q	Cellular & Developmental Neuroscience	Dr. Teresa Wood woodte@njms.rutgers.edu 973-972-6529 Dr. Steve Levison levisosw@njms.rutgers.edu 973-972-5162	Open to Masters and PhD students. (See below for required text).	2	N	Mon/Wed/Fri	10/21/13	12/20/13	3.00 PM - 4.30 PM	Cancer Center F-1196
CBNP 5155Q	Critical Readings in CBNP	Dr. Eldo Kuzhikandathil kuzhikev@njms.rutgers.edu 973-972-1157 Dr. Martha Nowycky nowyckmc@njms.rutgers.edu 973-972-4391	Open to PhD students only.	1	S/U	Tuesday	09/03/13	12/10/13	1.00 PM - 3.00 PM	MSB H-609B
CBNP 593AQ, BQ, CQ*	Lab Rotations in CBNP	Dr. Dorothy Vatner vatnerdo@njms.rutgers.edu 973-972-1339	Use for first 3 rotations.	2	N			By Arrangement		
CBNP 5930Q*	Lab Rotations in CBNP	Dr. Dorothy Vatner vatnerdo@njms.rutgers.edu 973-972-1339	Use this course # for all subsequent rotations.	1 to 10	S/U			By Arrangement		
DENT 5000Q	Thesis Research	Faculty	Completion of course requirements.	5 PT 10 FT	S/U			By Arrangement		
DENT	Introduction to Structural Biology	Dr. N. Ramasubbu ramasun1@sdm.rutgers.edu 973-972-0704	Open to Masters and PhD students.	1	N	Wednesday 08/28/13 12/11/13 10.00 AM - MSB B-554 (Room B-970 12/04 & 12/1				
DENT 5220Q	Methods in Microscopic Imaging	Dr. Kabilan Velliyagounder velliyka@sdm.rutgers.edu 973-972-5051	Enrollment Limit 12. Open to Masters and PhD students.	2	N	Wednesday	09/04/13	12/18/13	1.00 PM - 3.00 PM	Dental School D-986 (Room B-723 on 9/18, 10/2, 10/16, and 11/13)

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DENT	Oral Microbiology	Dr. Scott Kachlany kachlasc@sdm.rutgers.edu	Enrollment limit 60. Open to both Masters and PhD students. (See	3	N	Monday	08/26/13	11/29/13	1.00 PM - 3.00 PM	Dental School
5300Q		973-972-3057	below for required text).			Friday	,,	,,	10.00 AM - 12.00 PM	B-961 & B-963
DENT 593AQ, BQ, CQ*	Research Rotations	Dr. Daniel Fine finedh@sdm.rutgers.edu 973-972-3728		2	N			By Arrangement		
DENT 5930Q	Research Rotations	Dr. Daniel Fine finedh@sdm.rutgers.edu 973-972-3728		1 to 10	S/U	By Arrangement				
GSND 0596Q	Professional Skills I	Dr. Teresa Wood woodte@njms.rutgers.edu 973-972-6529 Dr. Steve Levison levisosw@njms.rutgers.edu 973-972-5162	Enrollment limit 42. Preference given to 2nd year PhD. All others, permission of Course Directors.	1	S/U	Tuesday and Thursday	08/27/13	10/17/13	5.00 PM - 6.30 PM	Cancer Center G-1196
GSND 5113Q	Gene Expression	Dr. Emanuel Goldman egoldman@njms.rutgers.edu 973-972-4483 X24367	Open to Masters and PhD students.	3	N	Tuesday	09/03/13	12/18/13	5.00 PM - 7.40 PM	ICPH Auditorium
GSND 5135Q Sect. 1	Research Design & Statistics	Dr. Catherine Myers catherine.myers2@va.gov cemyers@njms.rutgers.edu 973-676-1000 x1810	Open to PhD students only. Preference given to CBNP & BME students. Others by permission of instructor only. Enrollment limit 20. (See below for required text)	2	N	Monday and Wednesday	10/21/13	12/18/13	9.00 AM - 11.00 AM	MSB B-516
GSND 5135Q Sect. 2	Research Design & Statistics	Heather Franklin franklhr@sph.rutgers.edu	Open to PhD students only. Enrollment limit 20. (See below for required text)	2	N	Monday and Wednesday	10/21/13	12/18/13	9.00 AM - 11.00 AM	MSB B-540 A+B
GSND 5200Q	Introduction to Biomedical Sciences (CORE)	Dr. Frederick Coffman coffmafd@njms.rutgers.edu 973-972-2861		5	N	Monday, Wednesday, and Friday	08/28/13	12/11/13	9:30 AM - 11:30 AM	MSB C-600
GSND 5215Q	Animal Models of Human Disease	Dr. Reza Razavi rrazavi@njhf.org 908-315-5868	Open to Masters and PhD students.	3	N	Wednesday	09/04/13	12/18/13	6:00 PM - 9:00 PM	Cancer Center G-1196
GSND 5235Q	Principles of Clinical and Translational Research in Oncology	Dr. Robert Wieder wiederro@njms.rutgers.edu 973-972-3558	Open to Master's and PhD students. (See below for suggested text).	2	N	Monday	09/16/13	12/16/13	6.00 PM - 8.15 PM	Cancer Center G-1196
GSND 5315Q	The Nature, Science and NEJM Course <b>A</b>	Dr. Eric Altschuler altschel@njms.rutgers.edu 973-972-5439	Open to Masters and PhD students.	1	N	Tuesday	09/03/13	12/17/13	5.00 PM - 6.00 PM	Dental School D-987

Course #	Title	Course Director	Prerequisites	Credits	Grade Mode	Days Offered	Start Date	End Date	Time	Location	
GSND 5316Q	The Nature, Science and NEJM Course <b>B</b>	Dr. Eric Altschuler altschel@njms.rutgers.edu 973-972-5439	Students receiving permission to take GSND 5315Q more than once will register for this. Permission of program director (Master's) or class advisor/track director (Ph.D.) required. Open to Masters and PhD students.	1	S/U	Tuesday	09/03/13	12/17/13	5.00 PM - 6.00 PM	Dental School D-987	
GSND 5910Q	MD/PhD Seminar/Journal Club	Dr. Padmini Salgame salgampa@njms.rutgers.edu 973-972-8647	Restricted to students in MD/PhD program.	1	S/U	By Arrangement					
MBGC 5000Q	MBGC Thesis Research	Faculty	Open to PhD students only.	5 PT 10 FT	S/U			By Arrangement			
MBGC 5035Q	Next Generation Sequencing and Data Analysis	Dr. Jeffrey Rosenfeld rosenfj1@njms.rutgers.edu 973-972-1004	Either completion of GSND 5200Q with a grade of B or concurrent registration in the course, or completion with a grade of B in MBGC 5055Q - Mol Genet of Model Orgs.	2	N	Monday and Wednesday	10/21/13	12/18/13	9.30 AM - 11.30 AM	MSB B-540 E+F (Room B-619 B+C on 12/02) *CLASS WILL NOT MEET ON 10/21 &	
MBGC 5070Q	Advances in Nucleic Acids: DNA	Dr. Mukund Modak modak@njms.rutgers.edu 973-972-5515	Open to PhD students only. IBMS.	2	N	Monday and Wednesday	09/04/13	10/23/13	1.15 PM - 3.15 PM	MSB E-675	
MBGC 5071Q	Advances in Nucleic Acids: RNA	Dr. Mukund Modak modak@njms.rutgers.edu 973-972-5515	Open to PhD students only. IBMS.	2	N	Monday and Wednesday	10/28/13	12/16/13	1.15 PM - 3.15 PM	MSB E-675	
MBGC 5075Q	Cell Death	Dr. Raymond Birge birgera@njms.rutgers.edu 973-972-4497	Open to Masters and PhD student. (See below for required text).	2	N	Monday and Thursday	10/21/13	12/20/13	6.00 PM - 8.00 PM	MSB B-619	
MBGC 5910Q	MBGC Seminar Series	Dr. Muriel Lambert mlambert@njms.rutgers.edu 973-972-4405	Required course for MBGC students. Must register in fall AND spring.	0.5	S/U		Sep-13	Dec-13			
MBGC 593AQ, BQ, CQ*	Lab Rotations in MBGC		Use for first 3 rotations.	2	N			By Arrangement			
MBGC 5930Q*	Lab Rotations in MBGC		Use this course # for all subsequent rotations.	1 to 10	S/U	By Arrangement					
MICR 5000Q	Thesis Research	Faculty	Completion of course requirements.	5 PT 10 FT	S/U	By Arrangement					
MPHD 5000Q	MD/PhD Thesis Research	Dr. Padmini Salgame salgampa@njms.rutgers.edu 973-972-8647	Restricted to students in MD/PhD program.	5 PT 10 FT	S/U			By Arrangement			

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MPHD 5930Q	MD/PhD Laboratory Research	Dr. Padmini Salgame salgampa@njms.rutgers.edu 973-972-8647	Restricted to students in MD/PhD program.	1 - 10	S/U			By Arrangement		
MSBS 5130Q	Stem Cell Biology & Applications in Molecular Medicine	Dr. Pranela Rameshwar rameshwa@njms.rutgers.edu 973-972-4913	Open to Masters and PhD students.	3	N	Monday	08/26/13	12/02/13	6.00 PM - 9.00 PM	MSB C-600
MSBS 5140Q	Biological Terrorism & Weapons of Mass Destruction	Dr. Brendan McCluskey mccluske@ca.rutgers.edu 973-972-6164 Dr. Nancy Connell connell@njms.rutgers.edu 973-972-3579	Enrollment limit 50. Open to Masters and PhD students.	2	N	Monday	09/09/13	12/16/13	4.00 PM - 6.00 PM	MSB C-600
MSBS 520AQ	Advanced Stem Cell Seminar	Dr. Pranela Rameshwar rameshwa@njms.rutgers.edu 973-972-4913	MSBS 5130Q or concurrent registration. Open to Masters and PhD students.	2	N	Wednesday	08/28/13	11/30/13	6.00 PM - 8.00 PM	MSB C-600 (Room MSB B-554 on 10/09)
NEUR 5000Q	Thesis Research	Faculty	Completion of course requirements.	5 PT 10 FT	S/U	By Arrangement				
NEUR 5200Q	Fundamentals of Neuroscience	Dr. Steve Levison levisosw@njms.rutgers.edu 973-972-5162	Open to Masters and PhD students. (See below for required text).	3	N	Thursday	08/29/13	12/12/13	5.00 PM - 8.00 PM	Dental School B-963
NEUR 593AQ, BQ, CQ*	Research in Neuroscience	Dr. Richard Servatius servatrj@njms.rutgers.edu 973-676-1000 x 3678	Permission of Course Director. Open to PhD students only.	2	N			By Arrangement		
NEUR 5930Q	Research in Neuroscience	Dr. Richard Servatius servatrj@njms.rutgers.edu 973-676-1000 x 3678	Permission of Course Director. Open to PhD students only.	1 to 10	S/U			By Arrangement		
PATH 5000Q	Thesis Research	Faculty	Completion of course requirements.	5 PT 10 FT	S/U			By Arrangement		
PATH 5010Q	General Pathology	Dr. George Studzinski studzins@njms.rutgers.edu 973-972-5869	Permission of Course Director. Enrollment limit 30. Open to Masters and PhD students. (See below for required text).	2	N	Monday, Wednesday, and Friday	09/06/13	10/18/13	12.00 PM - 2.00 PM	MSB C-555
PATH	Cellular Pathology	Dr. Muriel Lambert	Open to Masters and PhD students. (See below for required text).	2	N	Monday	10/21/13	12/19/13	4.00 PM -	MSB B-617
5100Q	3,					Thursday			6.00 PM	MSB B-556
PATH 5210Q	Molecular and Cellular Immunology	Dr. Elizabeth Raveche raveches@njms.rutgers.edu 973-972-5240	(See below for required text).	3	N	Monday and Wednesday	10/21/13	02/03/14	4.30 PM - 6.00 PM	

Course #	Title	Course Director	Prerequisites	Credits	Grade Mode	Days Offered	Start Date	End Date	Time	Location	
PATH 5910Q	Pathology Seminar	Dr. Raphael Mannino manninrj@njms.rutgers.edu 973-715-3924		1	N			By Arrangement			
PHMS 5000Q	Biomedical Science Thesis Research	Faculty	Completion of course requirements.	5 to 10	S/U			By Arrangement	:		
PHMS 593AQ, BQ, CQ*	Research in Interdisciplinary Biomedical Sciences	Faculty		2	N	By Arrangement					
PHMS 5930Q*	Research in Interdisciplinary Biomedical Sciences	Faculty		1 to 10	S/U	By Arrangement					
PHPY N5021	Fundamentals of Pharmacology	Dr. Martha Nowycky nowyckmc@njms.rutgers.edu 973-972-4391	Open to Masters and PhD students.	3	N	Monday	09/09/13	12/16/13	6.00 PM - 9.00 PM	MSB B-556	
PHPY N5225	Principles of Toxicology	Dr. Ramez Labib ramez.labib@avon.com Dr. Thomas Visalli Thomas_Visalli@eisai.com	Open to Masters and PhD students.	3	N	Thursday	09/05/13	12/05/13	6.00 PM - 9.00 PM	MSB B-556	
PHPY 5000Q	Thesis Research	Faculty	Completion of course requirements.	5 PT 10 FT	S/U			By Arrangement			
PHPY 593AQ, BQ, CQ*	Research in Pharmacology and Physiology	Dr. Martha Nowycky nowyckmc@njms.rutgers.edu 973-972-4391	Limited to PHPY PhDs.	2	N			By Arrangement	:		
PHPY 5930Q*	Research in Pharmacology and Physiology	Dr. Martha Nowycky nowyckmc@njms.rutgers.edu 973-972-4391	Limited to PHPY PhDs.	1 to 10	S/U			By Arrangement	:		
TIII 5000Q	III Thesis Research	Faculty	Open to PhD students only.	5 PT 10 FT	S/U			By Arrangement			
TIII 5155Q	Critical Readings in I <sup>3</sup>	Dr. Nikhat Parveen parveeni@njms.rutgers.edu 973-972-4483 X25218 Dr. David Kaback kaback@njms.rutgers.edu 973-972-4483 X28967	PhD only with priority to 1st year I3 students.	0.5	N	Tuesday	08/27/13	10/15/13	9.30 AM - 11.00 AM	ICPH E220R	
TIII 5156Q	Critical Readings in I <sup>3</sup>	Dr. Amariliz Rivera riveraam@njms.rutgers.edu 973-972-2568	PhD only with priority to 1st year I3 students.	0.5	N	Tuesday	10/29/13	12/10/13	9.30 AM - 11.00 AM	MSB E-609	

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TIII 5157Q	Critical Readings in	Dr. Betsy Barnes barnesbe@njms.rutgers.edu 973-972-3319	IBMS & Molecular and Cellular Immunology.	0.5	N	Tuesday	10/29/13	12/17/13	10.00 AM - 11.00 AM	Cancer Center H-1196	
TIII 5158Q	Inflammation and	Dr. Luis Ulloa ulloalu@njms.rutgers.edu 973-972-3971		0.5	N	Monday	09/09/13	10/28/2013	5:00 PM - 7:00 PM		
TIII 5620Q	Classic & 21st Century  Pathogens	Dr. David M. Lukac lukacdm@njms.rutgers.edu 973-972-4483 X20907	Open to PhD students only.	2	N	Monday, Wednesday, and Friday	08/26/13	10/16/13	1.30 PM - 3.00 PM	ICPH Auditorium	
TIII 593AQ, BQ, CQ*	Lab Rotations in I <sup>3</sup>	Dr. Purnima Bhanot bhanotpu@njms.rutgers.edu 973-972-3273	Use for the first 3 rotations.	2	N	By Arrangement					
TIII 5930Q*	Lab Rotations in I <sup>3</sup>	Dr. Purnima Bhanot bhanotpu@njms.rutgers.edu 973-972-3273	Use this course # for all subsequent rotations.	1 to 10	S/U	By Arrangement					

\* First three rotations – register for A, B, C respectively – all subsequent rotations register for 1 to 10 cr S/U

COURSES HIGHLIGHTED IN YELLOW ARE NOT AVAILABLE FOR ONLINE REGISTRATION - During the online registration period, students may obtain email permission from the course director and forward the email to the Registrar at leeba@gsbs.rutgers.edu to be manually registered in any course highlighted in yellow. Add/Drop formas are required after online registration has ended.

Last Update:10/15/13 BS

		Required Text
CBMM	Molecular Medicine of	
5350Q	the Heart	Physiology of the heart (fifth edition) by Arnold M. Katz
CBMM N5001	Basic Histology	Ovalle WK and Nahirney PC. (2008) Netter's Essential Histology, Saunders, Elsevier. ISBN 978-1929007868
CBNP	Cellular &	Principles of Neural Science (5th Edition); Kandel, Schwartz and Jessell, McGraw-Hill.
5150	Developmental	Fundamental Neuroscience (4th Edition); Squire et al., Academic Press.
5150	Neuroscience	Development of the Nervous System (3rd Edition); Sanes, Reh and Harris, Elsevier
DENT 5300Q	Oral Microbiology	Medical Microbiology, 6th edition. Murray, et al. Mosby, Inc. ISBN: 978-0-323-05470-6
GSND	Experimental Design	
5135	& Statistics for	Gravetter & Wallnau, Statistics for the Behavioral Sciences, 9th edition (note new edition)
5135	Biomedical Sciences	
GSND	Principles of Clinical	Suggested texts:Clinical Trials in Oncology, Second Edition by Stephanie Green, Jacqueline Benedetti, and John Crowley, 2003, Chapman & Hall/CRC
5235Q	Land Translational	Fundamentals of Clinical Trials by Lawrence M. Friedman, Curt D. Furberg, and David L. DeMets (Paperback - Dec 1999), Springer Science-Business Media
3233Q	Research in Oncology	in undamentals of official trials by Lawrence M. Friedman, out D. Furberg, and David L. Delviets (Faperback - Dec 1999), Springer Science-Business Media

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MBGC 5075Q	Cell Death	MEANS TO AN END - Apoptos	EANS TO AN END - Apoptosis and Other Cell Death Mechanisms, Douglas Green, 2010, Cold Spring Harbor Laboratory Press										
NEUR 5200Q	Fundamentals of Neuroscience	4th Edition of Neuroscience,	Edition of Neuroscience, Ed. by Purves et al.										
PATH 5010Q	General Pathology	Suggested Reading: "Wheater's Functional Histology, 5th edition".  Suggested Reading: "Robbins and Cotran Pathologic Basis of Disease" Eight Edition, Kumar, Abbas, Fausto & Aster Saunders Elsevier, 2010.											
PATH 5100Q	Cellular Pathology	Molecular Biology of the Cell	Molecular Biology of the Cell - Alberts etal eds										
PATH 5210Q	Immunology	Janeway's Immunobiology 8	aneway's Immunobiology 8 <sup>th</sup> Edition, Garland Scientific										