

Annual Report - 2016-2017

Wake Forest University Graduate School of Arts and Sciences



WAKE FOREST
UNIVERSITY

Table 1. Application Summary
Fall 2016

Degree Program	# Applications	# Accepted	# Enrolled
Biochemistry & Molecular Biology PhD	1	1 (100%)	1 (100%)
Biomedical Engineering MS	61	14 (23%)	5 (36%)
Biomedical Engineering PhD	166	54 (33%)	15 (28%)
Biomedical Sciences MS (IPP, MCB, NEUR)	48	26 (54%)	18 (69%)
Biomedical Sciences MS (Pre-medical Postbac)	106	17 (16%)	12 (71%)
Clinical and Population Translational Sciences MS	8	8 (100%)	8 (100%)
Comparative Medicine MS	1	0 (0%)	0 (0%)
Health Disparities in Neuroscience-related Disorders MS	8	6 (75%)	5 (83%)
Integrative Physiology and Pharmacology PhD	32	10 (31%)	5 (50%)
Molecular and Cellular Biosciences PhD	203	28 (14%)	12 (43%)
Molecular Medicine and Translational Science PhD	3	3 (100%)	3 (100%)
Molecular Medicine and Translational Science MS	1	1 (100%)	1 (100%)
Neuroscience PhD	100	19 (19%)	7 (37%)
TOTAL	738	187 (25%)	92 (49%)

Table 2. Applicant Demographics

Fall 2016

Degree Program	TOTAL	Male	Female	American Indian/ Alaska Native	Asian	Black or African American	Hispanic/ Latino	Pacific Islander	White	Two or more races	Not Reported
Biochemistry & Molecular Biology PhD	1		1						1		
Biomedical Engineering MS	61	33	28		5		4		22	1	29
Biomedical Engineering PhD	166	99	67		11	6	11		70	3	65
Biomedical Sciences MS (IPP, MCB, NEUR)	48	21	27		2	2	3		22		19
Biomedical Sciences MS (Pre-medical Postbac)	106	37	69	1	7	33	14		35	4	12
Clinical and Population Translational Sciences MS	8	4	4		1	1		1	4		1
Comparative Medicine MS	1		1						1		
Health Disparities in Neuroscience-related Disorders MS	8	3	5		1	2	3		3		
Integrative Physiology and Pharmacology PhD	32	15	17		3	4			13	2	10
Molecular and Cellular Biosciences PhD	203	92	111		20	16	16		70	3	78
Molecular Medicine and Translational Science PhD	3	2	1						2		1
Molecular Medicine and Translational Science MS	1	1			1						
Neuroscience PhD	100	47	53		10	5	3		54	2	26
TOTAL	738	354	384	1	61	69	54		297	15	241

**Table 3. Applicant Average Test Scores and GPA
Fall 2016**

Degree Program	GRE Verbal	GRE Quantitative	GRE (V + Q)	GRE Analytical	GPA	TOEFL	MCAT
Biochemistry & Molecular Biology PhD	148	148	296	4.0	3.29		
Biomedical Engineering MS	154	160	309	3.8	3.35	102.72	
Biomedical Engineering PhD	156	163	312	3.9	3.52	99.55	32
Biomedical Sciences MS (IPP, MCB, NEUR)	152	156	300	3.4	3.18	95.91	30
Biomedical Sciences MS (Pre-medical Postbac)	153	153	289	3.9	3.25		41
Clinical and Population Translational Sciences MS	148	161	309	3.0	3.59	98.00	27
Comparative Medicine MS	153	157	310	4.5	3.71		
Health Disparities in Neuroscience-related Disorders MS	150	147	297	3.7	3.06		8
Integrative Physiology and Pharmacology PhD	153	154	306	3.5	3.47	100.83	31
Molecular and Cellular Biosciences PhD	153	155	305	3.5	3.43	97.77	32
Molecular Medicine and Translational Science PhD	143	152	295	2.0	3.60		
Molecular Medicine and Translational Science MS					3.76		29
Neuroscience PhD	153	154	303	3.8	3.52	98.50	32
AVERAGES	151	155	303	3.6	3.44	99.04	29

Table 4. Accepted Student Profile
Fall 2016

Degree Program	TOTAL	Male	Female	American Indian/ Alaska Native	Asian	Black or African American	Hispanic/ Latino	Pacific Islander	White	Two or more races	Not Reported
Biochemistry & Molecular Biology PhD	1		1						1		
Biomedical Engineering MS	14	8	6				1		11	1	1
Biomedical Engineering PhD	54	24	30		4	3	3		35	1	8
Biomedical Sciences MS (IPP, MCB, NEUR)	26	12	14		1	1	3		13		8
Biomedical Sciences MS (Pre-medical Postbac)	17	7	10	1	1	8	3		3		1
Clinical and Population Translational Sciences MS	8	4	4		1	1		1	4		1
Health Disparities in Neuroscience-related Disorders MS	6	2	4		1	2	2		1		
Integrative Physiology and Pharmacology PhD	10	4	6		1	1			3	1	4
Molecular and Cellular Biosciences PhD	28	9	19			3	1		19	2	3
Molecular Medicine and Translational Science PhD	3	2	1						2		1
Molecular Medicine and Translational Science MS	1	1			1						
Neuroscience PhD	19	6	13		1	1			14		3
TOTAL	187	79	108	1	11	20	13	1	106	5	30

**Table 5. Accepted Student Average Test Scores and GPA
Fall 2016**

Degree Program	GRE Verbal	GRE Quantitative	GRE (V + Q)	GRE Analytical	GPA	TOEFL	MCAT
Biochemistry & Molecular Biology PhD	148	148	296	4.0	3.29		
Biomedical Engineering MS	157	160	317	4.4	3.48		
Biomedical Engineering PhD	160	163	323	4.4	3.67	104.33	31
Biomedical Sciences MS (IPP, MCB, NEUR)	153	155	308	3.7	3.20	101.75	
Biomedical Sciences MS (Pre-medical Postbac)	156	157	313	4.5	3.31		24
Clinical and Population Translational Sciences MS	148	161	309	3.0	3.59	98.00	27
Health Disparities in Neuroscience-related Disorders MS	150	146	296	3.7	3.17		8
Integrative Physiology and Pharmacology PhD	152	154	306	3.6	3.51	103.50	
Molecular and Cellular Biosciences PhD	157	155	312	3.7	3.48	101.00	34
Molecular Medicine and Translational Science PhD	143	152	295	2.0	3.60		
Molecular Medicine and Translational Science MS					3.76		29
Neuroscience PhD	159	159	317	4.5	3.58		
AVERAGES	153	155	308	3.8	3.47	101.72	26

Table 6. Matriculant Student Profile
Fall 2016

Degree Program	TOTAL	Male	Female	American Indian/ Alaska Native	Asian	Black or African American	Hispanic/ Latino	Pacific Islander	White	Two or more races	Not Reported
Biochemistry & Molecular Biology PhD	1		1						1		
Biomedical Engineering MS	5	4	1				1		4		
Biomedical Engineering PhD	15	10	5		1	2	1		10	1	
Biomedical Sciences MS (IPP, MCB, NEUR)	18	9	9			1	2		12		3
Biomedical Sciences MS (Pre-medical Postbac)	12	4	8	1	1	6	2		2		
Clinical and Population Translational Sciences MS	8	4	4		1	1		1	4		1
Health Disparities in Neuroscience-related Disorders MS	5	2	3		1	2	1		1		
Integrative Physiology and Pharmacology PhD	5	2	3		1				2		2
Molecular and Cellular Biosciences PhD	12	3	9			2	1		8		1
Molecular Medicine and Translational Science PhD	3	2	1						2		1
Molecular Medicine and Translational Science MS	1	1			1						
Neuroscience PhD	7	3	4						5		2
TOTAL	92	44	48	1	6	14	8	1	51	1	10

**Table 7. Matriculant Average Test Scores and GPA
Fall 2016**

Degree Program	GRE Verbal	GRE Quantitative	GRE (V + Q)	GRE Analytical	GPA	TOEFL	MCAT
Biochemistry & Molecular Biology PhD	148	148	296	4.0	3.29		
Biomedical Engineering MS	157	159	316	4.5	3.38		
Biomedical Engineering PhD	157	161	318	4.2	3.59	111.00	32
Biomedical Sciences MS (IPP, MCB, NEUR)	153	155	308	3.7	3.15	98.00	
Biomedical Sciences MS (Pre-medical Postbac)	157	158	314	4.6	3.32		25
Clinical and Population Translational Sciences MS	148	161	309	3.0	3.59	98.00	27
Health Disparities in Neuroscience-related Disorders MS	150	146	296	3.7	3.19		8
Integrative Physiology and Pharmacology PhD	151	153	304	3.5	3.35	96.00	
Molecular and Cellular Biosciences PhD	157	153	310	3.1	3.51	101.00	
Molecular Medicine and Translational Science PhD	143	152	295	2.0	3.60		
Molecular Medicine and Translational Science MS					3.76		29
Neuroscience PhD	158	158	316	4.4	3.55		
AVERAGES	153	155	307	3.7	3.44	100.80	24

**Table 8. Student Enrollment by Program and Degree
Fall 2016**

Degree Program	Total	PhD	PhD/MD	MS	BS/MS	Unclassified
Biochemistry and Molecular Biology (BAMB)	7	6	1			
Biomedical Engineering - WFU (BMES)	44	36	3	5		
Biomedical Engineering - VT (SBES)	54	44		10		
Biomedical Sciences MS (IPP, MCB, NEUR)	30			30		
Biomedical Sciences MS (Pre-medical Postbac)	14			14		
Cancer Biology (CABI)	18	18				
Clinical and Population Translational Sciences (CPTS)	15			15		
Health Disparities in Neuroscience-related Disorders (HDND)	10			10		
Integrative Physiology and Pharmacology (IPP)	22	21	1			
Microbiology and Immunology (MICR)	2	2				
Molecular and Cellular Biosciences (MCB)	12	12				
Molecular Genetics and Genomics (MOGN)	7	7				
Molecular Medicine and Translational Science (MMTS)	27	24		3		
Neuroscience (NEUR)	41	24	4		13	
Unclassified (UNCL)	10					10
TOTAL	313	194	9	87	13	10

Table 9. Registered Student Profile
Fall 2016

Degree Program	TOTAL	American Indian		Asian		Black or African American		Hispanic/ Latino		Native Hawaiian/ Pacific Islander		White		Not Reported	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Biochemistry and Molecular Biology (BAMB)	7											5	2		
Biomedical Engineering - WFU (BMES)	44			3	1		2					17	11	6	4
Biomedical Engineering - VT (SBES)	54	1			1	3	3		1			19	18	5	3
Biomedical Sciences MS (IPP, MCB, NEUR)	30						2		1			11	9	4	3
Biomedical Sciences MS (Pre-medical Postbac)	14		1		1	2	6		1			3			
Cancer Biology (CABI)	18			1	2		1					4	5	4	1
Clinical and Population Translational Sciences (CPTS)	15			1			1			1		6	3	1	2
Health Disparities in Neuroscience-related Disorders (HDND)	10				1	1	2					1	4	1	
Integrative Physiology and Pharmacology (IPP)	22			1	2							7	7	2	3
Microbiology and Immunology (MICR)	2												2		
Molecular and Cellular Biosciences (MCB)	12					1	1	1				1	7		1
Molecular Genetics and Genomics (MOGN)	7											2	3	2	
Molecular Medicine and Translational Science (MMTS)	27			1	2	2	4					6	5	5	2
Neuroscience (NEUR)	41		1	1			1		2			10	19	2	5
Unclassified (UNCL)	10					1		1				1		3	4
TOTAL	313	1	2	8	10	10	23	2	5	0	1	93	95	35	28

Table 10. New (1st Year) International Student Enrollment by Country
Fall 2016

Degree Program	TOTAL	Canada	China	Colombia	Denmark	India	Jordan	Saudi Arabia
Biomedical Sciences (BMSC)	3		2					1
Clinical and Population Translational Sciences (CPTS)	1		1					
Integrative Physiology and Pharmacology (IPP)	2				1		1	
Molecular and Cellular Biosciences (MCB)	1					1		
Neuroscience (NEUR)	2	1		1				
TOTAL	9	1	3	1	1	1	1	1

Table 12. Financial Support Summary
Fall 2016

Degree Program	Total	Institutional Support				External Support				
		Graduate Fellowship	Non-Grad Institutional	Tuition Scholarship	Teaching Assistantship	Individual Award	Research Grant	Training Grant	Self-Pay	Other
Biochemistry and Molecular Biology (BAMB)	7	5		8		3	2	3		
Biomedical Engineering - WFU (BMES)	38	11	23	45		1	53	2	7	
Biomedical Engineering - VT (SBES)	47									
Biomedical Sciences MS (IPP, MCB, NEUR)	44			30					34	
Biomedical Sciences MS (Pre-medical Postbac)	16			14					31	
Cancer Biology (CABI)	12	1	14	20		1	10	2	2	
Clinical and Population Translational Sciences (CPTS)	5		8	8			2	5	5	
Health Disparities in Neuroscience-related Disorders (HDND)	22	5		10			10		10	
Integrative Physiology and Pharmacology (IPP)	3	11	2	21		1	21	6	1	
Microbiology and Immunology (MICR)	7	2	2	5		1				
Molecular and Cellular Biosciences (MCB)	12	13		13			1		1	
Molecular Genetics and Genomics (MOGN)	29	2	6	7	1		6			
Molecular Medicine and Translational Science (MMTS)	4	6	15	33			24	10	1	
Neuroscience (NEUR)	3	20	11	34	1	7	18	8	2	
Unclassified (UNCL)	31									
TOTAL	293	76	81	248	2	14	147	36	94	0

*Virginia Tech support information not available

**Master's students received some tuition benefits only

Some students received multiple types of financial aid

Table 13. Class of 2016/2017: Degrees Conferred by Program and Degree

Degree Program	Total	PhD	MS
Biochemistry and Molecular Biology (BAMB)	3	3	
Biomedical Engineering (BMES)	13	8	5
Biomedical Sciences (IPP, MCB, NEUR)	14		14
Biomedical Sciences (Pre-medical Postbac)	10		10
Cancer Biology (CABI)	5	5	
Clinical and Population Translational Sciences (CPTS)	4		4
Health Disparities in Neuroscience-related Disorders (HDND)	3		3
Integrative Physiology and Pharmacology (IPP)	2	2	
Microbiology and Immunology (MICR)	2	2	
Molecular Genetics and Genomics (MOGN)	3	3	
Molecular Medicine and Translational Science (MMTS)	11	9	2
Neuroscience (NEUR)	6	6	
TOTAL	76	38	38

Table 14. Class of 2016/2017: Average Years to Degree Completion by Program

Degree Program	PhD	MS
Biochemistry and Molecular Biology (BAMB)	5.64	
Biomedical Engineering (BMES)	4.54	1.82
Biomedical Sciences (IPP, MCB, NEUR)		1.57
Biomedical Sciences (Pre-medical Postbac)		1.06
Cancer Biology (CABI)	3.99	
Clinical and Population Translational Sciences (CPTS)		3.73
Health Disparities in Neuroscience-related Disorders (HDND)		1.73
Integrative Physiology and Pharmacology (IPP)	4.52	
Microbiology and Immunology (MICR)	5.29	
Molecular Genetics and Genomics (MOGN)	5.36	
Molecular Medicine and Translational Science (MMTS)	5.13	1.73
Neuroscience (NEUR)	5.46	
TOTAL	4.94	1.72

Table 15. Class of 2016/2017: Placement by Program, Undergraduate Institution, Degree, and Plan

Program	Undergraduate Institution	Degree	Future Plan
BAMB	Wake Forest University	PhD	Postdoc, Wake Forest School of Medicine
BMES	Columbia University	PhD	Postdoc, Wake Forest School of Medicine
	University of Pittsburgh		Postdoc, University of North Carolina, Chapel Hill
	South China Normal University		Software Engineer, MathWorks
	Temple University		Postdoc, Wake Forest School of Medicine
	University of Pennsylvania		Continuing PhD/MD student
	University of North Carolina, Chapel Hill		VP of Technology and Development, Elemance, LLC
	Vanderbilt University		Postdoc, Wake Forest School of Medicine
	Virginia Tech		MS
	University of Virginia	Crash Safety Engineer, Karma Automotive	
Lees-McRae College		Biomedical Engineer, Wake Forest Inst. for Regenerative Med.	
BMSC (Pre-med)	Loyola University, Maryland	MS	MD student, Unknown Medical School
	University of North Carolina, Chapel Hill		MD student, Unknown Medical School
	University of North Carolina, Wilmington		MD student, Wake Forest School of Medicine
	Duke University		MD student, University of North Carolina, Chapel Hill
	Davidson College		MD student, Unknown Medical School
	University of Tampa		MD student, Wake Forest School of Medicine
	North Carolina Central University		MD student, Unknown Medical School
	University of North Carolina, Chapel Hill		MD student, Wake Forest School of Medicine
	Duke University		Clinical Researcher, Duke University School of Medicine
Centre College	MD student, Wake Forest School of Medicine		
BMSC	Loyola University, New Orleans	MS	Instructor, Guilford Technical Community College
	Elon University		PhD student, Wake Forest Graduate School
	Beloit College		MD student, St. George Medical School
	Guilford College		Unknown Industry Position
	Nanching University		PhD student, Wake Forest Graduate School
	Wake Forest University		MD student, Unknown Medical School
	TamilNadu Medical University		Research Technician, Wake Forest Inst. for Regenerative Med.
	Davidson College		PhD student, Wake Forest Graduate School
	University of Nebraska-Lincoln		Unknown
Huazhong Agricultural University	PhD student, University of Alabama at Birmingham		
CABI	Kathmandu University	PhD	Research Fellow, Unknown University
	Nanjing Medical University		Postdoc, Wake Forest School of Medicine
	Erskine University		Postdoc, University of Texas Medical Center
	University of North Carolina, Chapel Hill		Medical Writer, MedThink SciCom
	Bucknell University		Postdoc, University of Iowa

Program	Undergraduate Institution	Degree	Future Plan
CPTS	University of California, Berkeley	MS	Physician, Wake Forest Baptist Health
	University of North Carolina, Wilmington		Physician, Wake Forest Baptist Health
HDND	University of Evansville	MS	PA student, Unknown Medical School
	Wake Forest University		DO student, Virginia College of Osteopathic Medicine
	University of North Carolina, Charlotte		Researcher, Government
	Wake Forest University		DO student, Virginia College of Osteopathic Medicine
IPP	University of North Carolina, Greensboro	PhD	Postdoc, Duke University School of Medicine
	University of Michigan		Postdoc, University of Michigan Medical School
MICR	Whittier College	PhD	Postdoc, Cedar-Sinai Medical Center
MOGN	Shandong Univ. of Trad. Chinese Medicine	PhD	Postdoc, Regeneron Pharmaceuticals
MMTS	University of Balamand - Lebanon	PhD	Postdoc, Wake Forest Inst. for Regenerative Med.
	University of Virginia		Orthopaedic Surgeon, Wake Forest Baptist Health
	University of Oregon		Assistant Professor, Wake Forest School of Medicine
	Howard University		Postdoc, University of California, San Francisco
	Lake Forest College		Postdoc, Wake Forest School of Medicine
	University of Texas, El Paso		Unknown
	Bates College		Postdoc, National Cancer Institute, NIH
	Agnes Scott College		Postdoc, Emory University School of Medicine
	Xavier University of Louisiana		MS
	Wake Forest University	Surgeon, Wake Forest Baptist Health	
NEUR	Florida State University	PhD	Continuing PhD/MD student
	Appalachian State University		Postdoc,
	University of Northern Colorado		Postdoc, Medical University of South Carolina
	St. Mary's College of Maryland		Postdoc, University of California, Los Angeles
	University of North Carolina, Asheville		Postdoc, Johns Hopkins Medical School