CURRICULUM VITAE

NILGUN EREKEN TUMER

Work: Dept. of Plant Biology and Pathology

Rutgers University

School of Environmental and Biological Sciences

New Brunswick, N.J. 08903-0231

Tel: 848-932-6359

Email: tumer@aesop.rutgers.edu

PERSONAL DATA:

Citizenship: USA Gender: Female

Marital Status: Married, two children

EDUCATION:

Nov. 1982-Nov. 1984 Postdoctoral Fellow, Department of Molecular Genetics and Cell biology,

The University of Chicago, Chicago, Illinois

Aug. 1978-Oct. 1982 Ph.D. in Biochemistry, Purdue University, W. Lafayette, Indiana

Sept. 1974-June 1978 B.A. Chemistry with Honors, Agnes Scott College, Decatur, Georgia

June 1974 High School Diploma, Robert College, Istanbul, Turkey

FELLOWSHIPS AND APPOINTMENTS:

July 2014-present Distinguished Professor, Department of Plant Biology and Pathology, Rutgers

University, New Brunswick, New Jersey

May 2011-present Director, School of Environmental and Biological Sciences Core Facility,

Rutgers University (http://sebs.rutgers.edu/core-facility/)

July 2001-July 2014 Professor, Department of Plant Biology and Pathology, Rutgers University, New

Brunswick, New Jersey

Oct. 1992-July 2001 Associate Professor, Department of Plant Pathology and the Biotech Center,

Rutgers University, New Brunswick, New Jersey

June 1989 - Sept. 1992 Group Leader, Plant Sciences Division, Monsanto Co., St. Louis, Missouri

April 1987-June 1989 Research Specialist, Plant Sciences Division, Monsanto Co., St. Louis, Missouri

Nov. 1984-April 1987 Senior Research Biologist, Plant Sciences Division, Monsanto Co., St. Louis,

Missouri

Jan. 1982-Nov. 1984 Postdoctoral Fellowship, American Cancer Society, Department of Molecular

Genetics and Cell Biology, The University of Chicago, Chicago, Illinois (Robert

Home: 50 Red Oak Way

Belle Mead, N.J. 08502

Tel: 908/281-4487

Haselkorn, advisor)

Aug. 1978-Oct. 1982 Research Assistant, Department of Biochemistry, Purdue University

Jan. 1980-May 1980 Teaching Assistant, Department of Biochemistry, Purdue University

SCHOLARSHIPS AND HONORS:

March 2015	Best Paper Award 2015 Toxins (Basel) in recognition for the outstanding publication
mechanism of	"Trichothecene mycotoxins inhibit mitochondrial translation-Implication for the toxicity (2011) <i>Toxins (Basel)</i> 12, 1484-1501
July 2012	Professor of the Year Award, Graduate Program in Plant Biology, Rutgers University
April 2012	Rutgers University Patent Award
May 2009	First recipient of an NIH ARRA award in NJ, AI077805 "C.elegans as a model for ricin intoxication"
Sept 2009	Rutgers University Merit Award
March 2008	Elected to Rutgers University Senate
March 6, 2008	Rutgers Press Release "Rutgers Research Reveals How Food Poisoning and Bioterrorism Toxins Could Be Tamed" and Rutgers Focus article by Carl Blesch
April 2006	Rutgers University Sustained Research Excellence Award
April 2006	Rutgers University Patent Award
March 2006	Rutgers University Faculty Academic Service Increment Award
April 2005	Rutgers University Faculty Academic Service Increment Award
Dec. 2004	Rutgers University Academic Excellence Fund Award
April 2004	Rutgers University Patent Award
Oct. 2002	Elected as a member of the American Society for Biochemistry and Molecular Biology
April 2000	Rutgers University, Cook/NJAES Award for Excellence in Research
April 2000	Japanese Society for Promotion of Science Fellowship for Research at Tokyo University
Dec. 1999	Rutgers University Patent Award (two awards)
May 1995	Johnson & Johnson Research Discovery Award
May 1990	Monsanto Company Stock Award for Excellence in Research
1989-1990	Executive Excellence Program, Monsanto Co., St. Louis, MO
Dec. 1987	Achievement Award, Monsanto Co., St. Louis, MO
1983-1984	Postdoctoral Fellowship, American Cancer Society, The University of Chicago, Chicago,
	IL
1982-1983	Postdoctoral Fellowship in Genetics, The University of Chicago, Chicago, IL

June 1978	Graduation with honor, Chemistry Department, Agnes Scott College, Decatur, GA
1974-1978	College Scholarship Award covering tuition, room and board, Agnes Scott College,
	Decatur, GA
1977-1978	Charles A. Dana Scholarship Award, Agnes Scott College, Decatur, GA
June 77-Aug. 77	NSF Research Experience for Undergraduates (REU) Award, Auburn University,
	Auburn, AL

ADVISORY BOARDS AND SERVICE ON COMMITTEES:

2016-present	Compensation Review Committee, SEBS, Rutgers University
2015-Present	Editor-in-Chief, Plant Toxins section of Toxins (Basel)
2015-Present	Editorial Board Toxins (Basel)
2015-Present	Section Leader, Natural Products and Human Health Section of the Plant Biology and Pathology Department, Rutgers University
2015-present	Executive Committee, Department of Plant Biology
2015-present	Curriculum Committee, Department of Plant Biology and Pathology
2014-2017	Chair, Gene discovery and Engineering Resistance (GDER) Panel, USDA US Wheat and Barley Scab Initiative (USWBSI)
Nov. 2014	Editor, Toxins (Basel) Special Issue on Plant Toxins
2013-Present	Editorial Board, Microbial Cell
2013-Present	Panel member, NIH ZRG1 Topics in Bacterial Pathogenesis Panel IDM-B 80
2013	Panel member, Multi-project grant applications (U19) NIAID Centers of Excellence in Translational Research (CETR)
2012	Panel Member, NIH Bioengineering Sciences and Technologies Study Section BST-T[30]
2012	Panel member, NIH ZRG1 Bacterial Pathogenesis Special Emphasis Panel, IDM-A 80
2011-Present	Editorial Board, International Journal of Biochemistry and Molecular Biology
2011-2013	Academic and Promotions Committee, School of Environmental and Biological Sciences, Rutgers University
2008-2010	Member, Rutgers University Senate
2007-2015	Vice-Chair, Gene discovery and Engineering Resistance (GDER) panel, USDA US Wheat and Barley Scab Initiative (USWBSI)
2007- 2009	Panel Member, Eukaryotic Genetics, Genes and Genome Systems Cluster, National Science Foundation

2007	Panel Member, NIAID "Cooperative Research Partnerships for Biodefense" October 22-24, 2007
2007	Acting Chair, NIAID "Partnerships into Therapeutics and Diagnostics of Biodefense Toxins" Study Section in Washington DC on March 29-30, 2007.
2007-2011	Advisory Committee, Department of Plant Biology and Pathology
2006-Pres.	Panel member, Busch Biomedical Research Grants, Rutgers University
2006-2012	Chair, Admissions Committee, Graduate Program in Plant Biology and Pathology, School of Environmental and Biological Sciences, Rutgers University
2002-2006	Panel member, National Science Foundation, Biochemistry of Gene Expression
2004-2005	Member, Department of Plant Biology and Pathology Faculty Academic Service Increment Program Committee
2004	Cook College Judicial Panel
2003-2006	Member, Biological Sciences Area Committee, Graduate School, Rutgers University
2002-2005	Panel member, United States Department of Agriculture, Small Business Innovation Program (SBIR)
2001-2004	Cook College Planning Committee, Cook College, Rutgers University
2000-2004	Member, Center for Advanced Food Technology (CAFT) Faculty Advisory Board
1995-1998	Panel member, Breast Cancer Program, DOD US Army Medical Research
1993-2000	Panel member, National Science Foundation, Biochemistry of Gene Expression

GRANT SUPPORT:

2017-22	NIH 2R01AI072425-10A1 "Inhibitors targeting ribosome interactions of ricin." Total: \$2,182,115 (Nilgun Tumer, P. I.). Direct costs for fiscal year 1: \$295,000.
2017-18	Alberts Biodiversity Award, SEBS, "Applied Biosystems Proflex PCR System." \$10,235 (Nilgun Tumer, P.I., Michael Pierce, Co-PI).
2016-18	USDA-ARS 59-0790-6-069 "A genome wide screen to identify novel genes for FHB resistance" \$134, 000 (Nilgun Tumer, P.I., John McLaughlin, Co-P.I.)
2015-16	New Jersey Health Foundation "Fragment Library for Fragment Based Drug Discovery at Rutgers." \$88,000 with matching funds (Nilgun Tumer and David Kimball, Co-P.I.s)
2015-16	NIH R01AI072425-08S1 Minority Supplement for Helen Lopez \$36,000.
2014-16	USDA-ARS 59-0206-1-121 "A genome wide screen to identify novel genes for FHB resistance" \$134, 000 (Nilgun Tumer, P.I., John McLaughlin, Co-P.I.)
2012-16	NIH 2R01AI072425-06A1 What makes ricin toxic \$1,533,150 (Nilgun Tumer, P. I. Wendie Cohick, Co-P.I.)
2011-15	NIH 5T32AI007403 Training Grant in Virus-host Interactions in Eukaryotic Cells \$855,705 (Gary Brewer, P.I.)

2013-14	NIH 5R01AI072425-07 Administrative Supplement to Recover Losses due to Hurricane Sandy, \$77,473. Period: 2013-2014 (Nilgun Tumer, PI, Wendie Cohick, Co-PI)		
2013-14	NIH 3R01AI072425-07S1 What makes ricin toxic \$53,887 (Minority supplement for Juan Gnecco, Nilgun Tumer, P. I.)		
2012-14	NIH 1R21AI092011-01A1 Role of the ribosomal stalk in the activity of Shiga toxins \$418,643 (Nilgun Tumer, P. I.)		
2012-14	USDA-ARS 59-0206-1-121 A genome wide screen to identify novel genes for FHB resistance \$130,000 (Nilgun Tumer, P.I., John McLaughlin, Co-P.I.)		
2012-13	Research Infrastructure Award SEBS, Li-Cor Odyssey CLx Infrared Imaging System \$43,700 (Nilgun Tumer, P. I.)		
2012-13	Research Infrastructure Award SEBS, Beckman Optima XE-90-IVD Ultracentrifuge \$29,408 (Nilgun Tumer, P. I.)		
2012-13	Office of the Vice President Typhoon FLA9500 Phosphoimager/Fluoroimager and 2D-DIGE analysis software from GE Healthcare \$141,789 (Nilgun Tumer, P. I.)		
2011-13	NIH R03TW008418 Interaction of ricin A chain with the ribosomal stalk, Fogarty International Center Collaboration Award (FIRCA) \$176,840 (Nilgun Tumer, P.I., Marek Tchorzewski Co-P.I.)		
2011-12	USDA-ARS 59-0206-1-121 A genome wide screen to identify novel genes for FHB resistance \$62,739 (Nilgun Tumer, P.I., John McLaughlin, Co-P.I.)		
2011-12	Office of the Vice-President for Research, Typhoon FLA9500 Phosphoimager/Fluoroimager with 2D DIGE analysis software \$141,789 (Nilgun Tumer, P.I.)		
2011-12 Harvester	Research Infrastructure Award SEBS, Perkin Elmer Microplate Counter and Filtermat Cell		
	\$50,000 (Nilgun Tumer, P. I.)		
2010-11	NIH 1S10RR025424 A confocal microscope \$419,356 (Nilgun Tumer, P.I., Judy Storch, Dawn		
Brasaemle,	George Carman, Dipak Sarkar, Barth Grant, Monica Driscoll, Kim McKim, Paul Breslin, Co-P.I.)		
2010-11	NIH 3U01AI082120-02S1 Research Supplement for a Multi-mode Microplate Reader \$53,040 (Pang, Tumer, Millard, multiple P.I.'s)		
2010-11	Office of the Vice-President for Research, GE Healthcare isothermal calorimeter, iTC200 \$115,920 (Nilgun Tumer, PI),		
2010-11	Office of the Vice-President for Research, Singer RoTor HDA high throughput screening robot \$95,900 (Nilgun Tumer, P.I.)		
2009-13	NIH U01AI082120 Optimization of small molecule inhibitors of Shiga and ricin toxins \$3,883,631 (Pang, P.I., Tumer, Co-P.I., Millard, Co-P.I.) \$995,250 to Nilgun Tumer, including \$300,000 for a Biacore T200.		
2009-11	NIH R21AI077805 <i>C.elegans</i> as a model for ricin intoxication \$422,150 (Tumer, P.I., Grant, Co-P.I.)		

2009-11	USDA-ARS 59-0206-1-121 A genome wide screen to identify novel genes for Fusarium Head Blight Resistance \$97,430 (Nilgun Tumer, P.I., Mike Lawton, John McLaughlin and Susan McCormick, Co-P.I.)
2009-10	NIH AI072425-03S1 ARRA Summer Student Supplement Mechanism of cytotoxicity of Ricin \$53,766 (Tumer, P.I., Cohick, Co-P.I.)
2008-10	NIH AI072425-02S1 Research Supplement to Promote Diversity in Health-Related Research Program \$36,369 (Nilgun Tumer, Mentor, Natasha Mendez, Post Baccalaureate Student).
2008-09	USDA-ARS 59-0206-1-121 A genome wide screen to identify novel genes for Fusarium Head Blight Resistance \$61,992 (Nilgun Tumer, PI, John McLaughlin, Co-P.I.).
2008-09	Research Infrastructure Award (SEBS) for Olympus BX41 Fluorescence Microscope \$45,000 (Nilgun Tumer, P. I, Mehmet Uzumcu, Wendie Cohick and Michael Lawton co-PIs)
2008-09	Center for Advanced Food Technology (CAFT) Detection of food pathogens using Surface Plasmon Resonance Biosensor Technology \$14,000 (Nilgun Tumer, P. I., Rong Di, Co-P. I.)
2007-12	NIH R01 AI072425 Mechanism of cytotoxicity of ricin \$1,894,875 (Nilgun Tumer, P. I., Wendie Cohick, Co-P.I.)
2007-09	Busch Biomedical Research Support, <i>C. elegans</i> as a model for Shiga toxin induced disease \$45,000 (Nilgun Tumer, P.I.)
2007-08	USDA-ARS 59-0790-6-069 Modification of the ribosomal target to enhance resistance to trichothecene mycotoxins \$51,270 (Nilgun Tumer, P. I., Rong Di and Ann Blechl, Co-P. I.).
2007-08	NSF-MCB 0348299 REU Mechanism of translation inhibition and mRNA destabilization by pokeweed antiviral protein \$ 5,000 (Nilgun Tumer, P. I., Andrew Tortora, undergraduate).
2007-08	Center for Advanced Food Technology (CAFT) Detection of food pathogens using Surface Plasmon Resonance Biosensor Technology \$14,000 (Nilgun Tumer, P. I., Rong Di, Co-P. I.)
2006-08	NIH R21 AI068869-01 Identification of ribosomal target of Shiga-like toxins \$424,250 (Nilgun Tumer, P. I., Wendie Cohick, Co-P. I.)
2006-07	USDA-ARS 59-0790-6-069 Modification of the ribosomal target to enhance resistance to trichothecene mycotoxins \$49,614 (Nilgun Tumer, P. I., Rong Di Co-P. I.).
2006-07	NSF-MCB 0348299 REU Mechanism of translation inhibition and mRNA destabilization by pokeweed antiviral protein \$ 5,000 (Nilgun Tumer, P. I., Jonathan Cruz, undergraduate).
2006-07	NSF-MCB 0130531 REU Pokeweed antiviral Protein and inhibition of frameshifting \$5,00 (Nilgun Tumer, P. I., Andrew Tortora, undergraduate).
2005-07	NIH R03 AI057805-01 Effect of pokeweed antiviral protein on hepatitis C virus IRES \$154,000 (Rong Di, P. I., Nilgun Tumer Co-P. I.)
2005-06	NSF- MCB 0348299 REU Mechanism of translation inhibition and mRNA destabilization by pokeweed antiviral protein \$5,000 (Nilgun Tumer, P. I., Kevin VanArsdale, undergraduate).
2005-06	NSF- MCB 0130531 REU Pokeweed antiviral Protein and inhibition of frameshifting \$5,000 (Nilgun Tumer, P. I., Tiffany Kung, undergraduate).
2005-06	Center for Advanced Food Technology (CAFT)- A real-time PCR assay for detection of a food pathogen \$14,000 (Nilgun Tumer, P. I., Rong Di, Co-P.I.)

2004-08	NSF- MCB 0348299 Mechanism of translation inhibition and mRNA destabilization by pokeweed antiviral protein \$600,000 (Nilgun Tumer, P.I.).
2004-06	NIH R21AI59720-01 Mechanism of action of ricin A chain \$580,292 (Nilgun Tumer, P. I., Wendie Cohick, Co-P. I.).
2004-05	Academic Excellence Fund, Rutgers University, A Biacore Biosensor for Biomolecular Interactions \$250,000 (Nilgun Tumer, P. I., Longqin Hu, Co-P. I.).
2004-05	NSF-MCB 0348299 REU Mechanism of translation inhibition and mRNA destabilization by pokeweed antiviral protein \$5,000 (Nilgun Tumer, P. I., Kevin VanArsdale, undergraduate).
2004-05	USDA-ARS 59-0790-6-069 Modification of the ribosomal target to enhance resistance to trichothecene mycotoxins \$50,000 (Nilgun Tumer, P. I.)
2004-05	Center for Advanced Food Technology (CAFT)- A real-time PCR assay for detection of a food pathogen \$14,000 (Nilgun Tumer, P. I., Rong Di, Co-P. I.)
2004	Rutgers undergraduate fellows program \$1,500 (John Ruppert, undergraduate)
2003-04	NSF-MCB 0130531 REU Pokeweed antiviral protein and inhibition of ribosomal frameshifting \$ 5,000 (Nilgun Tumer, P. I., Eric Kyu, undergraduate)
2003-04	Center for Advanced Food Technology (CAFT)- A real-time PCR assay for detection of a food pathogen \$17,000 (Nilgun Tumer, P. I.)
2003-04	NSF DBI 0302581 A real time PCR machine to quantify gene expression \$57,500 (Nilgun Tumer, P. I., Gerben Zylstra, Tom Leustek and Eric Lam, Co-P. I.'s)
2003-05	USDA-ARS 59-0790-6-069 Modification of the ribosomal target to enhance resistance to trichothecene mycotoxins, \$52,683 (Nilgun Tumer, P. I.)
2002-05	NSF-MCB 0130531 Pokeweed antiviral protein and inhibition of frameshifting \$360,000 (Nilgun Tumer, P. I., Jonathan Dinman, Co-P. I.)
2002-03	USDA-ARS 59-0790-6-069 Modification of the ribosomal target to enhance resistance to trichothecene mycotoxins, \$54,000 (Nilgun Tumer, P. I.)
2002-03	Center for Advanced Food Technology (CAFT)- Production of phytoestrogens in tomato and potato \$11,250 (Nilgun Tumer, P. I., Rong Di Co-P. I.)
2002-04	Charles and Johanna Busch Memorial Fund, Genomic Analysis of Plant Defense Response, \$20,000 (Nilgun Tumer, P. I.)
2001-02	USDA Hatch Grant, Regulation of mRNA stability by pokeweed antiviral protein \$16,365 (Nilgun Tumer, P. I.)
2001-02	Center for Advanced Food Technology (CAFT) "Production of phytoestrogen genistein in potato" \$14,217 (Nilgun Tumer, P. I., Rong Di, Co-P. I.)
2000-04	NSF-MCB 99-82498 Mechanism of toxicity and antiviral activity of pokeweed antiviral protein \$428,000 (Nilgun Tumer, P. I., Katalin Hudak, Co-P. I.)
2000-01	NSF-MCB 97-27941 REU "Research support for undergraduates" \$4,000 (Nilgun Tumer, P. I., Katalin Hudak, Co-P.I., Marianne Baricevic, undergraduate)

2000-01	Center for Advanced Food Technology "Production of phytoestrogen genistein in potato" \$15,000 (Nilgun Tumer, P. I., Rong Di, Co-P. I.)
1999-00	NSF-MCB 96-31308- Genetic analysis of pokeweed antiviral protein \$20,000 (Nilgun Tumer, P. I.)
1999-00	Center for Advanced Food Technology (CAFT), Enhancement of flavor precursors in potato \$29,713 (Nilgun Tumer, P. I.)
1999-02	Polar Technology Center, Caracas, Venezuela, Ensuring stable and durable resistance to pathogens and pests \$218,095 (Nilgun Tumer, Rutgers and Zaida Lentini, CIAT, Colombia, Co-P. I.)
1998-01	Hughes Institute, Pokeweed antiviral protein against disease \$281,127 (Nilgun Tumer, P. I.)
1998-00	NSF-MCB 97-27941, Pokeweed antiviral protein and inhibition of frameshifting \$218,196 to N. Tumer (Nilgun Tumer P. I., Jonathan Dinman Co-P. I.)
1998-99	Center for Advanced Food Technology (CAFT), Inhibition of Enzymatic Browning, \$29,628 (Nilgun Tumer, P. I.)
1997-99	International Potato Technology, ForBio America \$160,000 (Nilgun Tumer, P. I.)
1997-98	NSF-MCB 9419919, "Research support for undergraduates" \$6,000 (Nilgun Tumer, P. I., Bijal
Parikh,	undergraduate)
1996-99	NSF-MCB 9419919, Genetic Analysis of Pokeweed Antiviral Protein \$270,000 (Nilgun Tumer, P. I.)
1995-97	NSF-MCB 96-31308, Analysis of Antiviral Function of Pokeweed Antiviral Protein \$93,474 (Nilgun Tumer, P. I.)
1995-97	Johnson & Johnson, Pokeweed Antiviral Protein Against AIDS \$20,000 (Nilgun Tumer, P. I.)
1995-96	New Jersey Commission on Science and Technology, Development of herbicide resistant turfgrass through mutant selection and transformation, \$111,000 (Lisa Lee, P. I., Nilgun Tumer, Co-P. I.)
1994-97	Basic American Foods, inhibition of enzymatic browning, \$15,000 (Nilgun Tumer, P. I.)
1994-96	Center for Advanced Food Technology (CAFT), inhibition of enzymatic browning, \$56,856 (Nilgun Tumer, P. I.)
1994-96	Charles and Johanna Busch Biomedical Research Grant, Molecular genetic analysis of pokeweed antiviral protein \$9,000 (Nilgun Tumer, P. I.)
1994-95	Center for Interdisciplinary Studies in Turfgrass Science, Development of enhanced herbicide resistance and abiotic stress tolerance in creeping bentgrass through particle gun transformation, \$44,282 (Nilgun Tumer, Lisa Lee and Barbara Zilinskas Co-P. I.'s)
1994-97	NIH, post doctoral Fellowship, Annette Chiang (Post-Doc.) Nilgun Tumer (Sponsor), \$72,900
1994	UMDNJ Robert Wood Johnson Medical School, Graduate Science Careers Program, summer research support for an undergraduate
1993	Office of the Provost, Rutgers, Undergraduate Internship, \$2,000
1993-94	Monsanto Company, Virus resistance in potato \$10,000

1992-95	USAID, Improving sweet potato for African farmers through biotechnology, \$132,000 (Robert Horsch, P. I., Maud Hinchee and Nilgun Tumer, Co-P. I.)
1992-95	Ministry of Agriculture, Italy, Development of cucumber mosaic virus resistant tomato plants, \$920,000 (Nilgun Tumer, P. I., Robert Horsch, Co-P.I.)
1992-96	Rockefeller Foundation, Resistance to PVX and PVY in Mexican Potatoes, \$438,000 (Nilgun Tumer, P. I., Robert Horsch, Co-P.I.)
1989-92	DeRuiter Seed Company, The Netherlands, Transgenic cucumber resistant to CMV, ZYMV, WMV and PRSV \$1,055,500 (Nilgun Tumer, P.I., Robert Horsch, Co-P. I.)

PATENTS:

Issued:

US Patent No. 9,428,758. Issued Aug. 30, 2016. Inventors: Nilgun E. Tumer and John E. McLaughlin, Anwar Bin-Umer. Plant genes that confer resistance to trichothecene mycotoxins and Fusarium head blight.

US Patent No. 8,895,006. Issued Nov. 25, 2014. Inventors: Nilgun E. Tumer and Xiao-Ping Li. Ricin ribosome binding protein compositions and methods of use thereof.

US Patent No. 8,753,642. Issued Jun 17, 2014. Inventors, Rong Di and Nilgun E. Tumer. Method of treating Hepatitis C virus.

US Patent No. 8,026,410 B2 Issued Sept. 27, 2011. Inventors: Nilgun E. Tumer and Rong Di. Transgenic plants expressing L3 Delta proteins are resistant to trichothecene fungal toxins.

US Patent No. 7,462,694. Issued Dec. 9, 2008. Inventors: Nilgun E. Tumer, Katalin Hudak and Bijal Parikh. C-terminally truncated non cytotoxic PAP mutants.

US Patent No. 7,235,715. Issued June 26, 2007. Inventors: Nilgun E. Tumer, Jonathan Dinman and Katalin Hudak. Virus resistant transgenic plants expressing L3.

US Patent No. 7,019,126. Issued March 28, 2006. Inventors: Nilgun E. Tumer and Pinger Wang. Transgenic plants producing a PAP II protein.

US Patent No. 6,821,781. Issued November 23, 2004. Inventors: Nilgun E. Tumer and Thomas Leustek. A method for selecting transformed plant cells using ethionine and cystathionine gamma synthase as the selection agent and marker gene.

US Patent No. 6,627,736. Issued September 30, 2003. Inventor: Nilgun E. Tumer. PAP mutants that exhibit antiviral and/or anti fungal activity in plants.

US Patent No. 6,146,628. Issued November 14, 2000. Inventors: Nilgun E. Tumer and Fatih M. Uckun. Biotherapeutic Agents Comprising Recombinant PAP and PAP Mutants.

US Patent No. 6,137,030. Issued October 24, 2000. Inventor: Nilgun E. Tumer. PAP mutants that exhibit antiviral and/or anti fungal activity in plants.

US Patent No. 5,880,329. Issued March 9, 1999. Inventor: Nilgun E. Tumer. DNAs encoding pokeweed antiviral protein mutants.

US patent No. 5,756,322. Issued May 26, 1998. Inventor: Nilgun E. Tumer. Pokeweed antiviral protein mutants.

European patent # WO 9418336. Issued Aug. 18, 1994. Inventors: E. C. Lawson, J. D. Weiss, C. L. Hemenway and N. E. Tumer. Virus resistant plants and method therefore.

US patent No. 5,304,730. Issued April 19, 1994. Inventors: E. C. Lawson, J. D. Weiss, C. L. Hemenway and N. E. Tumer. Virus resistant plants and method therefore.

US Patent No. 5,185,253. Issued Feb. 9, 1993. Inventor: Nilgun E. Tumer. Virus resistant plants.

US patent No. 4,970,168. Issued Nov. 13, 1990. Inventor: Nilgun E. Tumer. Virus resistant potato.

BIBLIOGRAPHY:

Ph.D. Thesis:

N. E. Tumer (1982) Soybean Glycinin: Characterization of its Message and its Genes (Dr. M. A. Hermodson, major professor, Dr. N. C. Nielsen, thesis director)

Journal Articles:

- 1. Grela, P., Li, X-P., Horbowicz, P., Dziwierzynska, Tchorzewski, M. and Tumer, N. E. (2017). Human ribosomal P1-P2 heterodimer represents an optimal docking site for ricin A chain with a prominent role for P1 C-terminus. *Sci. Rep.* 7:5608. doi:10.1038/s41598-017-05675-5.
- 2. X. P. Li, N. E. Tumer (2017). Differences in Ribosome Binding and Sarcin/Ricin Loop Depurination by Shiga and Ricin Holotoxins. Toxins (Basel). 9(4). pii: E133. doi: 10.3390/toxins9040133.
- 3. Y. Zhou, X.-P. Li, B. Chen, N. E. Tumer (2017). Ricin uses arginine 235 as an anchor residue to bind to P-proteins of the ribosomal stalk. *Sci. Rep.* 7:42912. doi:10.1038/srep42912.
- 4. A.E. Jetzt, X.P. Li, <u>N.E. Tumer</u>, W.S. Cohick (2016). Toxicity of ricin A chain is reduced in mammalian cells by inhibiting its interaction with the ribosome. *Toxicol. Appl. Pharmacol.* 310:120-128.
- 5. D. Basu, J. N. Kahn, X. P. Li, N. E. Tumer (2016). Conserved arginines at the P-Protein stalk binding site and the active site are critical for ribosome interactions of Shiga toxins but do not contribute to differences in the affinity of the A1 subunits for the ribosome. *Infect. Immun.* 84:3290-3301.
- 6. D. Basu, X. P. Li, J. N. Kahn, K. L. May, P. C. Kahn, N. E. Tumer (2016). The A1 subunit of Shiga toxin 2 has higher affinity for ribosomes and higher catalytic activity than the A1 subunit Shiga toxin 1. *Infect. Immun.* 84:149-161.
- 7. N. E. Tumer (2015). Introduction to the toxins special issue on plant toxins. Toxins (Basel). 7:4503-4506.
- 8. J. E. McLaughlin, M. A. Bin-Umer, T. Widiez, D. Finn, S. McCormick, <u>N. E. Tumer</u> (2015). A Lipid Transfer Protein Increases the Glutathione Content and Enhances Arabidopsis Resistance to a Trichothecene Mycotoxin. *PLoS One*. 2015 Jun 9;10(6):e0130204. doi: 10.1371/journal.pone.0130204.
- 9. D. Basu and N. E. Tumer (2015). Do the A subunits contribute to the differences in the toxicity of Shiga toxin 1 and Shiga toxin 2? *Toxins (Basel)* 7:1467-485.
- 10. R. Di, N. E. Tumer (2015). Pokeweed Antiviral Protein: Its Cytotoxicity Mechanism and Applications in Plant Disease Resistance. *Toxins (Basel)* 7:755-772.
- 11. B. Cakir and N. E. Tumer (2015) Arabidopsis Bax inhibitor-1 inhibits cell death induced by pokeweed antiviral protein in *Saccharomyces cerevisiae*. *Microbial Cell* 2:43-56.

- 12. Q. Yan, X. P. Li and <u>N. E. Tumer</u> (2014) Wild Type RTA and Less Toxic Variants Have Distinct Requirements for Png1 for Their Depurination Activity and Toxicity in *Saccharomyces cerevisiae*. *PLoS One* Dec 1;9(12):e113719. doi: 10.1371/journal.pone.0113719.
- 13. M. A. Bin-Umer, J. E. McLaughlin, M. S. Butterly, S. McCormick, N. E. Tumer (2014). Elimination of damaged mitochondria through mitophagy reduces mitochondrial oxidative stress and increases tolerance to trichothecenes. *Proc. Natl. Acad. Sci USA* 111:11798-803.
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- N. Tumer and O. Zoubenko (1997). Activation of plant defenses and resistance to fungal infection in transgenic plants expressing a nontoxic pokeweed antiviral protein mutant is independent of salicylic acid accumulation. Plant Biology '97 August 2-6, Vancouver, BC, Plant Physiol. Suppl. 114, 1456.
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- A. N. Chiang, D. J. Hwang and <u>N. E. Tumer</u> (1996). Evidence for myristoylation of a plant viral protein: Myristoylation of potato virus Y VPg. Xth International Congress of Virology, August 11-16, Jerusalem, Israel. W19-4.
- N. E. Tumer, D. -J. Hwang and M. Bonness (1996). Enzymatic activity of pokeweed antiviral protein is required for its antiviral activity. Gordon research Conference on Plant Senescence and programmed cell death, July 14-19, Plymouth State College, Plymouth, NH
- A. N. Chiang, D. J. Hwang and N. E. Tumer (1996). Evidence for myristoylation of a plant viral protein: Myristoylation of potato virus Y VPg. American Society for Virology 15th Annual Meeting, July 13-17 Ontario, Canada. W26-8.

- P. Wang and N. E. Tumer (1996). Toxicity and Antiviral Activity of Pokeweed Antiviral Protein II in Transgenic Plants. American Society for Virology 15th Annual Meeting, July 13-17 Ontario, Canada. P1-25.
- N. E. Tumer, D.-J. Hwang, A. Chiang, M. Bonness, O. Zoubenko and P. Wang (1996). Antiviral proteins from *Phytolacca species* and their therapeutic applications. June 2-5, Monroe Wall Symposium, Rutgers University, New Brunswick, NJ
- M. Bonness, D. -J. Hwang and N. Tumer (1996). RNA depurination activity is required for the antiviral mechanism of pokeweed antiviral protein. June 8, New York Area Plant Molecular Biology Annual Meeting, Cook College, Rutgers University, New Brunswick, NJ
- N. E. Tumer, D. J. Hwang and Y. Hur (1995). Isolation and characterization of pokeweed antiviral protein mutations in *Saccharomyces cerevisiae*. American Society of Virology Annual Meeting. July 8-12, Austin, Texas W44-6.
- A. N. Chiang and N. E. Tumer (1995). Analysis of resistance to potato virus Y in transgenic potato plants. American Society of Virology Annual Meeting. July 8-12, Austin, Texas W44-9.
- P. Wang and N. E. Tumer (1995). Analysis of antiviral protein expression in pokeweed. American Society of Virology Annual Meeting. July 8-12, Austin, Texas P1-28.
- D. J. Hwang, Y. Hur and N. Tumer (1995). Isolation and characterization of pokeweed antiviral protein mutations. The 1995 Annual Workshop on Cancer Research in New Jersey, March 4, 1995, Merck & Co., Inc. Whitehouse Station, New Jersey. PL11.
- A. N. Chiang, J. M. Jilka, D. J. Hwang and N. E. Tumer (1994). Analysis of resistance in transgenic potato expressing PVY protease (NIa) and replicase (NIb) genes. American society for Virology, 13th annual meeting, July 9-13, Madison, Wisconsin. W41-5.
- N. E. Tumer, A. Chiang and Y. Hur (1994). Resistance mediated by viral nonstructural genes and by ribosome inactivating proteins. 4th International Congress of plant Molecular Biology. 19-24 June 1994. Amsterdam, Holland, 1519.
- L. Lee, C. Laramore, P. Day and <u>N. Tumer</u> (1994). Development of herbicide resistant Turfgrass through mutant selection and protoplast transformation. Congress on Cell and Tissue Culture, June 4-7, 1994, Research Triangle Park, NC, June 4-7. P-1036.
- Y. Hur and N. E. Tumer (1994). Broad Spectrum virus resistance mediated by expression of pokeweed antiviral protein. Cancer Institute of New Jersey, First annual scientific retreat, June 7, 1994, Princeton, New Jersey. Abstract P-10.
- L. Pitcher, C. Hartman, L. Lee, <u>N. Tumer</u> and B. Zilinskas (1994). Antioxidant enzymes and environmental stress tolerance. Third Annual Rutgers Turfgrass Symposium. 21-22 January, 1994, Cook College, Rutgers.
- C. Hartman, L. Lee and N. Tumer (1994). Particle gun transformation of creeping bentgrass (*Agrostis palustris*). Keystone Symposia on Improved Crop and Plant Products Through Biotechnology, January 4-23, 1994, Keystone, Colorado. Abstract 255.
- N. Tumer, J. Lodge and W. Kaniewski (1993). Broad spectrum virus resistance in transgenic plants expressing pokeweed antiviral protein. IXth International Congress of Virology. 8-13 August 1993. Glasgow, Scotland. W65-3.
- N. Tumer, J. Lodge, W. Kaniewski (1993). Broad spectrum virus resistance in transgenic plants expressing pokeweed antiviral protein. American Society for Virology 12th annual meeting. July 10-14, Davis, CA. Abstract # 24-6.
- N. Tumer, J. Lodge, W. Kaniewski and K. O'Connell (1992). Cloning and characterization of pokeweed antiviral protein. In Keystone Symposia on Molecular and Cellular Biology. Supplement 16F. April 10-16, 1992, Keystone, CO. Abstract # Y233.
- N. E. Tumer, C. Lawson, C. Hemenway, J. Weiss, W. Kaniewski, D. Nida, J. Anderson and B. Sammons (1991). Engineering resistance to potato leafroll virus in Russet Burbank potato. In The International Society for Plant Molecular Biology Third International Congress. October 6-11, 1991, Tucson, Arizona. Abstract # 1164

- C. J. Braun, J. D. Weiss, N. E. Tumer and C. L. Hemenway. (1991). Potato virus X as a model system to study viral replication. In The International Society for Plant Molecular Biology Third International Congress. October 6-11, 1991, Tucson, Arizona. Abstract # 1312
- D. L. Nida, G. S. Anderson, C. L. Hemenway, W. K. Kaniewski, E. C. Lawson, J. D. Weiss and <u>N. E. Tumer</u> (1991). Development of potato leafroll virus resistance in Russet Burbank. American Society of Phytopathology Annual Meeting. August 17-21, 1991, St. Louis, MO. Abstract # 866
- R. T. Fraley, F. J. Perlak, D. A. Fischoff, <u>N. Tumer</u>, D. Stark, G. Barry and G. Kishore (1991). Improving potato processing and pest control through gene transfer. In Second International Potato Molecular Biology Symposium. August 11-15, 1991, St. Andrews, Scotland. Abstract 15.
- N. E. Tumer, L. Haley, W. Kaniewski and P. Sanders (1990). Analysis of the mechanism of resistance in transgenic tobacco expressing AMV coat protein. In VIIIth International Congress of Virology. August 26-31, Berlin, Germany. Abstract # P80-018
- N. E. Tumer, W. Kaniewski, C. Lawson, L. Haley and P. E. Thomas (1990). Engineering resistance to potato leafroll virus in transgenic Russet Burbank potato. In VIIIth International Congress of Virology. August 26-31, Berlin, Germany. Abstract # W80-001.
- W. Kaniewski, B. Sammons, M. Lidell and N. Tumer (1990). Analysis of the mechanism of protection in transgenic potato resistant to PVX and PVY. In VIIIth International Congress of Virology. August 26-31, Berlin, Germany. Abstract # P80-020.
- C. Lawson, W. Kaniewski, L. Haley, R. Rozman, C. Newell and N. Tumer (1989). Genetically engineered virus resistance in Russet Burbank potato to potato virus X and potato virus Y. In First International Symposium on the molecular biology of the potato. August 13-18, 1989, Bar Harbor, Maine. Abstract #55.
- C. Hemenway, R.X. Fang, W. K. Kaniewski, N. H. Chua and N. E. Tumer (1988). Analysis of the mechanism of protection in transgenic plants expressing the PVX coat protein gene. In UCLA Symposia on Molecular and Cellular Biology, Supplement 12C. March 26-April 1, 1988. Steamboat Springs, CO. Abstract # Y313.
- N. Tumer, K. O'Connell, M. Cuozzo, W. Kaniewski and N. H. Chua (1988). Analysis of protection in transgenic plants expressing the cucumber mosaic virus coat protein or its antisense RNA. In UCLA Symposia on Molecular and Cellular Biology, Supplement 12C. March 26-April 1, 1988, Steamboat Springs, CO. Abstract # Y347.

PROGRAM AND SYMPOSIUM COMMITTEES:

Organizer, The 30th International Horticultural Congress (IHC-2018) in Istanbul, Turkey, Aug. 12-16, 2018.

Organizer, The 10th International Symposium on Shiga toxin (Verocytotoxin) Producing *Escherichia coli* Infections (VTEC 2018) in Florence Italy, May 6-9, 2018.

Workshop Chair, Gene Discovery and Engineering (GDER) Workshop 2016. National Fusarium Head Blight Forum, St. Louis, MO Dec. 4-6, 2016.

Workshop Chair, Pathogen Biology and Genetics (PBG) and Gene Discovery and Engineering (GDER) joint workshop 2015. National Fusarium Head Blight Forum, St. Louis, MO Dec. 4-6, 2016.

Workshop Chair, Gene Discovery and Engineering (GDER) Workshop 2015. National Fusarium Head Blight Forum, St. Louis, MO Dec. 6-8, 2015.

Workshop Chair, Pathogen Biology and Genetics (PBG) and Gene Discovery and Engineering (GDER) joint workshop 2015. National Fusarium Head Blight Forum, St. Louis, MO Dec. 6-8, 2015.

Session chair, Ribosomal stalk and RNA *N*-Glycosidase 2013. International Conference on Nucleic Acid Enzymes and Enzymes in Human Diseases. The Chinese University of Hong Kong, Hong Kong, June 16-21, 2013.

Organizer, Gene Discovery and Engineering Resistance to *Fusarium* Plenary Session. 2012 National Fusarium Head Blight Forum, Orlando, Florida Dec. 4-6, 2012

Organizer, Symposium on Ribotoxic Stress: Mechanisms and Models of Human disease. "Ricin and Shiga toxins interact differently with the ribosomal stalk." 50th Annual Society of Toxicology Meeting, Washington, D.C. March 6-10, 2011

Organizer, Gene Discovery and Engineering Resistance to *Fusarium* Plenary Session. 2011 National Fusarium Head Blight Forum, St. Louis, MO, Dec. 4-6, 2011.

Chair, Workshop on Plant Viruses I: Transmission and Encapsidation at the American Society of Virology Meeting in Montreal, Canada, July 10-14, 2004.

Intensive Course on New Approaches for Plant Biotechnology- Plant Genomics, TheUnited Nations University and Centro de Biotechnologia, Instituto de Estudios Avanzados (IDEA) in Venezuela, April 1-5, 2002.

Intensive Course on Molecular Approaches for Disease Resistance and Modulating Gene Expression in Transgenic Plants- CIAT, Cali, Colombia during December 10-14, 2000

Convener, Plant RNA Viruses II Workshop, 19th Annual Meeting of the American Society of Virology, Fort Collins, CO July 8-12, 2000.

Convener, Engineered Resistance Workshop, Annual meeting of the American Society for Virology, Madison, WI, July 9-13, 1994.

Moderator, Third Annual Rutgers Turfgrass Symposium, Cook College, Rutgers University, January 21-22, 1994.

Chairman, Workshop on Stability and Utility of Viral Replicons in Crop Engineering, Molecular Genetics of Plant-Microbe Interactions Symposium, Rutgers University, N. J. April 21-24, 1993

Organizer, Fifth International Symposium Biotechnology and Plant Protection: Viral Pathogenesis and Disease Resistance. University of Maryland, College Park, MD. October 19-21, 1992

Organizer, Plant Virology workshop - Third International Congress of Plant Molecular Biology, Tucson Arizona, Oct. 6-12, 1991

Co-chairman, Workshop on Applications of Biotechnology to Human Food and Animal Feed Uses, Boyce Thompson institute, May 1989.

INVITED RESEARCH PRESENTATIONS:

Invited Speaker, "Microbiology at Rutgers University Symposium," Rutgers University, New Brunswick, NJ, February 2-3, 2017.

Invited Speaker, "Interaction of ricin and Shiga toxins with ribosomes," Danforth Center, St. Louis, MO, Dec. 6, 2016.

Invited speaker, Xiao-Ping Li Biacore User's Meeting, Wistar Institute, Philadelphia, Sept. 8, 2016.

Invited Speaker, Corn Utilization and Technology Conference, St. Louis, MO, June 6-8, 2016.

Invited Speaker, Gordon Conference on Mycotoxins and Phycotoxins. Stonehill College, Easton MA, June 14-19, 2015.

Invited Speaker, Rutgers RWJMS Basic Science Seminar Series, Robert Wood Johnson Medical School, April 2, 2015.

Gene Discovery and Engineering Resistance to Fusarium Executive Committee Meeting. 2014 National Fusarium Head Blight Forum, St. Louis, MO Dec. 3-6, 2014

Biacore Users Meeting. Xiao-Ping Li and N. E. Tumer Nov 19, 2014, Wistar Institute, Philadelphia.

Invited Speaker, International Conference on Nucleic Acid Enzymes and Enzymes in Human Diseases. "Ribosome interactions of ribosome inactivating proteins." The Chinese University of Hong Kong, Hong Kong, June 16-21, 2013.

Invited Speaker, "Interaction of ricin and Shiga toxins with ribosomes." Istanbul University, Istanbul, Turkey, Jan 11, 2013.

Invited Speaker, "Interaction of ricin and Shiga toxins with ribosomes." Bosphorous University, Istanbul, Turkey, Jan. 4, 2013.

Invited Speaker, "Interaction of ricin and Shiga toxins with ribosomes." Istanbul Technical University, Istanbul, Turkey. Jan. 3, 2013.

Invited Speaker, 17th World Congress of the International Society on Toxinology. "P1/P2 proteins of the human ribosomal stalk are required for ribosome binding and depurination by ricin in human cells." Animal, Plant and Microbial Toxins. Honolulu, Hawaii July 8-13, 2012.

Invited speaker, A. Bin Umer and J. McLaughlin. "Lipid Transfer Proteins Confer Resistance to Trichothecenes." Annual meeting of the National Fusarium Head Blight Forum, Orlando, FL. December 4-6, 2012.

Invited speaker, "Ricin and Shiga toxins interact differently with the ribosomal stalk." Symposium on Ribotoxic Stress: Mechanisms and Models of Human disease. 50th Annual Society of Toxicology Meeting, Washington, D.C. March 6-10, 2011.

Invited Speaker, J. McLaughlin "Activation tag screening to identify novel genes for trichothecene resistance." 2010 National Fusarium Head Blight Forum, Milwaukee, WI, Dec. 7-9, 2010.

Invited Speaker, "Ricin and Shiga toxin interact differently with the ribosomal stalk." NIH Trans Research Center of Excellence Workshop on Toxins, The Uniformed Services University, Bethesda, Maryland, Sept. 23-24, 2010.

Invited speaker, M. Pierce "Development of a qRT-PCR assay to examine kinetics of ribosome depurination by ribosome inactivating proteins using *S. cerevisiae* as a model." NIH Trans RCE Workshop on Toxins, The Uniformed Services University, Bethesda, Maryland, Sept. 23-24, 2010.

Invited Speaker, J. McLaughlin 2010. "A genome-wide screen in *Saccharomycescerevisiae* to identify the genes that mediate cytotoxicity of ricin." NIH Trans RCE Workshop on Toxins, The Uniformed Services University, Bethesda, Maryland, Sept. 23-24, 2010.

Invited speaker, "Interaction of ricin and Shiga toxin with the ribosomal stalk." Centro de Biologia Molecular Severo Ochoa, Consejo Superior de Investigaciones Científicas and Universidad Autonoma de Madrid 28049 Madrid, Spain, Sept 16, 2009.

Invited Speaker, "A genome-wide screen to identify the potential targets of trichothecene mycotoxins." 2008 National Fusarium Head Blight Forum, Indianapolis, IN, Dec. 2-4, 2008.

Invited Seminar Speaker "Interaction of ricin A chain with ribosomes," Dept of Cell & Developmental Biology, Oregon Health and Science University, Portland, Oregon, Nov. 10, 2008.

Invited Speaker, "Endoplasmic reticulum targeted toxins inhibit activation of the unfolded protein response by preventing splicing of the Hac1 mRNA." XIV. International Congress of Virology, Istanbul, Turkey, August 10-15, 2008.

Invited Speaker XII. "A genome wide screen to identify the potential targets of trichothecene mycotoxins." International Congress of Mycology, Istanbul, Turkey, August 5-9, 2008.

Invited Speaker, "Ribosome interactions of ricin." Ricin and Shiga Toxin Workshop, Wadsworth Center, Albany, New York, June 18-19, 2008.

Invited speaker, "New insights into the targets of ribosome inactivating proteins and trichothecene mycotoxins." The Second Annual Mini-Symposium "Microbiology at Rutgers University," Feb. 7, 2007.

Invited speaker, "Expression of a truncated form of ribosomal protein L3 in transgenic wheat confers resistance to deoxynivalenol and Fusarium Head Blight." The National Fusarium Head Blight Forum, The Westin Crown Center, Kansas City, Missouri, Dec. 2-4, 2007.

Invited speaker, "New insights into the mechanism of translation inhibition, cell death and antiviral activity of ribosome inactivating proteins." The Noble Foundation, Ardmore, Oklahoma, Oct. 30, 2007.

Invited speaker, "New insights into the mechanism of translation inhibition, cell death and antiviral activity of ribosome inactivating proteins." Oklahoma State University, Stillwater, Oklahoma, Oct. 31, 2007.

Invited speaker, "New Insights into the Function of Ribosome Inactivating Proteins." Ege University, Izmir, Turkey, Aug 21, 2007.

Invited participant, NIAID Optimizing Positive Hits for Potency and Safety in Anti-Infective Drug Development Conference, Gaithersburg, MD, Feb 7-8, 2007.

Invited speaker, "Ricin inhibits activation of the unfolded protein response." Northeast Biodefense Center (NBC) and NIAID Region II Center of Excellence for Biodefense and Emerging Infectious Diseases Research Conference, Lake George, New York, Oct. 29-31, 2006.

Invited Seminar Speaker, "New insights about translation inhibition, mRNA destabilization and cell death caused by ribosome inactivating proteins" Hunter College, New York, November 18, 2006.

Invited speaker, "Pokeweed antiviral protein utilizes the endoplasmic reticulum associated protein degradation pathway to enter the cytosol." 5th Symposium on Post-Transcriptional Regulation of Plant Gene Expression, The University of Texas at Austin, Texas, June 8-12, 2005.

Invited participant, DMID, NIAID Botulinum Neurotoxins and Ricin Investigator's Meeting, NIH, Bethesda, Maryland, October, 26, 2004.

Invited seminar speaker, "Retro-translocation of pokeweed antiviral protein," North Carolina State University, October 21, 2004.

Invited speaker, "Enhancement of the primary flavor compound methional in potato by increasing the level of soluble methionine. Division of Agricultural and Food Chemistry, 228th National Meeting of the American Chemical Society, Philadelphia, PA, August 22, 2004.

Invited speaker, "Retro-translocation of pokeweed antiviral protein from the endoplasmic reticulum to the cytosol," American Society of Virology, Montreal, Canada, July 10-14, 2004.

Invited seminar speaker, "Regulation of translation and mRNA stability by pokeweed antiviral protein." Colorado State University, Fort Collins, Colorado, December 11-13, 2003.

Invited speaker, 3rd Workshop on Biotechnology, University of Sao Paulo, Rutgers and Ohio State, Piracicaba, Brazil, March 17-18, 2003.

Invited plenary speaker, "Genomic analysis of the effects of pokeweed antiviral protein on genes involved in ribosome biogenesis." Noncoding RNA, its role in translation and gene regulation, Jacques Monod Conference, Aussois, France Jan. 14-19, 2003.

Invited speaker, "Biomedical applications of Pokeweed Antiviral Protein," Advances in Therapeutic Agents Discovery and Development Workshop at Rutgers University, Jan 29, 2002.

Invited speaker, "Effects of PAP on the stability of its own mRNA," Plant Molecular Biology Gordon Research Conference, Holderness School, Rhode Island, July 7-10, 2002.

Invited speaker, "Binding of PAP to the cap structure of eukaryotic mRNA." American Society of Virology meeting in Lexington, Kentucky on July 20-24, 2002.

Invited plenary speaker, "Binding of PAP to the cap structure of eukaryotic mRNA." Post-transcriptional Control of Gene Expression in Plants, A Plant Sciences Institute Symposium, Iowa State University, Ames, Iowa, May 10-13, 2001.

Invited speaker, "Regulation of mRNA Stability by Pokeweed Antiviral Protein", Pioneer Hi-Bred, Des Moines, Iowa, May 9, 2001.

Invited speaker, "Genomics" and "Disease resistance," Global Consortium on Plant Biotechnology and Genomics, Sofia, Bulgaria, May 17-19, 2000.

Invited speaker, "A novel mechanism for inhibition of translation by pokeweed antiviral protein," Bristol Myers Squibb, New Brunswick, NJ, May 10, 2000.

Invited speaker, "Pokeweed antiviral protein and its applications," American Home Products, Princeton, New Jersey, May 4, 2000.

Invited speaker, "A novel mechanism for inhibition of translation by pokeweed antiviral protein," University of Tokyo, Tokyo, Japan, April 19, 2000.

Invited speaker, "A novel mechanism for inhibition of translation by pokeweed antiviral protein," Nara Institute of Science and Technology, Nara, Japan, April 13, 2000.

Invited speaker, "Resistance to fungal infection in transgenic plants expressing pokeweed antiviral protein," Novartis, Research Triangle Park, North Carolina, March 23, 2000.

Invited speaker, "A novel mechanism for inhibition of translation by pokeweed antiviral protein," Thomas Jefferson University, Philadelphia, PA, December 22, 1999.

Invited speaker, 11th International Congress of Virology (ICV), Sydney, Australia, August 8-13, 1999 (could not attend).

Invited speaker, "Broad spectrum pathogen resistance by expression of nontoxic forms of pokeweed antiviral protein" Global Consortium on Plant Biotechnology, Beijing, China, May 19-22, 1999.

Invited plenary speaker, "Broad-spectrum pathogen by expression of nontoxic forms of pokeweed antiviral protein." 7th International Congress of Plant Pathology, Edinburgh, Scotland, 9-16 August, 1998.

Invited speaker, "Pokeweed antiviral protein specifically inhibits Ty1 directed frameshifting and Ty1 retrotransposition in *Saccharomyces cerevisiae*." 17th Annual meeting of the American Society of Virology, British Columbia, Canada, July 11-15, 1998.

Invited speaker, "Plant resistance to fungal infection induced by pokeweed antiviral protein mutants" CYTED Latin American meeting on Plant Biotechnology, Caracas, Venezuela, March 18-22, 1998.

Invited speaker, "Plant virus resistance," International Workshop on Agricultural Biotechnology, Sao Paulo, Brazil, December 8-12, 1997.

Invited speaker, "Enzymatic browning in potato," Basic American Foods, Blackfoot, Idaho, September 10-13, 1997.

Invited speaker, "Strategies to create disease resistant crops" Plant Molecular Biology Minisymposium, USDA, Beltsville, MD, Sept. 20, 1996.

Invited speaker, "Enzymatic activity of pokeweed antiviral protein is required for its antiviral activity." Xth International Congress of Virology, Jerusalem, Israel, August 11-16, 1996.

Invited speaker, "Evidence for myristoylation of a plant viral protein: Myristoylation of potato virus Y VPg." Xth International Congress of Virology, Jerusalem, Israel, August 11-16, 1996.

Invited speaker, "Enzymatic activity of pokeweed antiviral protein is required for its antiviral activity." Gordon research Conference on Plant Senescence and Programmed Cell Death, Plymouth State College, Plymouth, NH, July 14-19, 1996.

Invited speaker, "Strategies to create disease resistant crops" Plant Molecular Biology Minisymposium, USDA, Beltsville, MD, Sept. 20, 1996.

Invited speaker, "Induction of defense mechanisms and resistance to infection in transgenic plants expressing pokeweed antiviral protein." Agbiotech Center Informal Seminar Series, April 24, 1996.

Invited speaker, "Induction of defense response and resistance to pathogens in transgenic plants expressing pokeweed antiviral protein." American Cyanamid Co. Princeton, N. J. Oct. 13, 1995.

Invited speaker, "Analysis of resistance in transgenic potato expressing PVY protease (NIa) and replicase (NIb) genes." American Society of Virology Meeting, Austin, Texas July 8-12, 1995.

Invited speaker, "Therapeutic application of pokeweed antiviral protein," Enzon, Inc. Piscataway, N. J. June 14, 1995.

Invited speaker, "Pokeweed antiviral protein against viral infection." Biology Department, Rensselaer Polytechnic Institute, Troy, New York, April 28, 1995.

Invited participant, Transgenic virus-resistant plants and new plant viruses workshop, College Park, MD, April 21-22, 1995.

Invited speaker, "Isolation and characterization of pokeweed antiviral protein mutations." The 1995 Annual Workshop on Cancer Research in New Jersey, Merck & Co., Inc. Whitehouse Station, NJ, March 4, 1995.

Invited speaker, "Pokeweed antiviral protein against viral infection," University of Alabama Medical School, Birmingham, AL, Dec. 12, 1994.

Invited speaker, "Pokeweed antiviral protein against viral infection," University of California, Riverside, Oct. 17, 1994.

Invited speaker, "Therapeutic applications of pokeweed antiviral protein," The University of Minnesota Medical School, Minneapolis, MN, Aug. 15, 1994.

Invited plenary speaker, "Analysis of virus resistance mediated by ribosome inactivating protein." Annual meeting of the American Society for Virology, Madison, Wisconsin, July 9-13, 1994.

Invited plenary speaker, "Resistance mediated by viral nonstructural genes and by ribosome inactivating proteins." 4th International Congress of Plant Molecular Biology, Amsterdam, the Netherlands, June 19-24, 1994.

Invited participant, Food, Food chemicals and management of human genome workshop, CAFT, Cook College, Rutgers, June 6, 1994.

Invited speaker, "Virus resistance mediated by pokeweed antiviral protein," Department of Botany, University of Texas, Austin, Texas, February 3, 1994.

Invited speaker, "Turfgrass transformation" American Cyanamid Co. Princeton, N.J., January 27, 1994.

Invited speaker, "Progress toward resistance to potato viruses," Fifth International Symposium on Biotechnology and Plant Protection, University of Maryland, College Park, Maryland, October 19-21, 1992.

Invited speaker, "Cloning and characterization of pokeweed antiviral protein" A Keystone Symposium Crop improvement via Biotechnology: an International Perspective, Keystone, Colorado, April 10-16, 1992.

Invited plenary speaker, "Engineering resistance to potato leafroll virus in Russet Burbank potato" International Symposium on Potato Pest Management, Jackson Hole, Wyoming, Oct. 13-16, 1991.

Lecturer, Teacher's workshop, Washington University, June 21, 1991.

Invited speaker, "Virus resistance in transgenic plants," McKnight guest lecturer, University of California, Berkeley February 18, 1991.

Invited plenary speaker, "Engineering resistance to virus infection in transgenic plants" Second US-Japan Symposium on Biotechnology, St. Petersburg, FL, Jan. 6-9, 1991.

Invited speaker, "Analysis of the mechanism of resistance in transgenic tobacco expressing AlMV coat protein" VIIIth International Congres of Virology meeting in Berlin, August 26-31, 1990.

Lecturer, Plant-Microbe Interactions Workshop, University of Guelph, Ontario, Canada, August 16, 1990.

Invited speaker, "Analysis of virus resistance in transgenic potato." University of Illinois, Urbana-Champaign, Sept. 1989.

Invited speaker, "Analysis of the mechanism of resistance in transgenic tobacco expressing AlMV coat protein" Plant Molecular Biology Gordon Conference, June 1989.

Invited speaker, "Resistance to potato virus X and potato virus Y in transgenic potato," Horticultural Biotechnology Symposium, Davis, CA, Aug. 1989.

Invited speaker, "Virus resistance in transgenic plants," National Capital Area Branch Tissue Culture Meeting at Beltsville, MD, March 1989.

Invited plenary speaker, "Analysis of virus resistance in transgenic potato," Annual Potato Conference at Moses Lake, WA, Feb. 1989.

Invited speaker, "Analysis of virus resistance in transgenic plants" American Society of Agronomy Meeting, Anaheim, CA, Nov. 1988.

Invited plenary speaker, "Coat protein mediated resistance" Crop Protection Conference, Brighton, England, Nov. 1988.

Invited plenary speaker, "Producing virus tolerance in plants through genetic engineering" Moet-Hennessy Conference on Advanced technology and Plant Breeding Strategy, Paris, France, Sept. 1988.

Invited speaker, "Coat protein mediated resistance," University of Florida, May 1988.

Invited speaker, "Coat protein mediated resistance against alfalfa mosaic virus," Rockefeller University Sept. 1987.

Invited speaker, "Expression of coat protein genes in transgenic plants confers protection against alfalfa mosaic virus and potato virus X," NATO Meeting on Plant Molecular Biology, Denmark, June 1987.

Invited speaker, "Coat protein mediated resistance," Purdue University, May 1987.

Invited speaker, "Expression of coat protein genes in transgenic plants confers protection against alfalfa mosaic virus," University of Louisville April 1987.

Invited plenary speaker, "Coat protein mediated resistance," Gordon Conference on Agricultural Biotechnology, Jan. 1987

TEACHING ACTIVITIES: (U: Undergraduate, G: Graduate)

Spring 2017 16:765:538 Plant Pathogenesis (G)

(Taught by Drs. Nilgun Tumer and Eric Lam)

Fall 2016 Microbial Biology Seminar 16:682:521 (G)

(Coordinated by Gerben Zylstra, taught one lecture)

Fall 2015 11:126:407 Comparative Virology (U)

(Taught by Drs. Nilgun Tumer and Brad Hillman)

Spring 2015 11:126:444 Advanced Technologies in Biosciences (U)

(Developed this new course and co-taught by Michael Pierce and Xiao-Ping Li)

16:765:538 Plant Pathogenesis (G)

(Taught by Drs. Nilgun Tumer and Eric Lam)

Fall 2014 Microbial Biology Seminar 16:682:521 (G)

(Coordinated by Gerben Zylstra, taught one lecture)

Fall 2014 Core Seminars in Plant Biology II (G)

(Coordinated by Pal Maliga, hosted Rick Vierstra)

Fall 2013 11:126:407 Comparative Virology (U)

(Taught by Drs. Nilgun Tumer and Brad Hillman)

Microbial Biology Seminar 16:682:521 (G)

(Coordinated by Gerben Zylstra, taught one lecture)

Spring 2013 16:765:538 Plant Pathogenesis (G)

(Taught by Drs. Nilgun Tumer and Eric Lam)

Fall 2012 Introduction to Plant Biology 16:765:501 (G)

(Coordinated by Tom Leustek, taught one lecture)

Microbial Biology Seminar 16:682:521 (G)

(Coordinated by Gerben Zylstra, taught one lecture)

Fall 2011 11:126:407 Comparative Virology (U)

(Taught by Drs. Nilgun Tumer and Brad Hillman)

Spring 2011 16:765:538 Plant Pathogenesis (G)

(Taught by Drs. Nilgun Tumer and Eric Lam)

Fall 2009 11:126:407 Comparative Virology (U)

(Taught by Drs. Nilgun Tumer and Brad Hillman)

Spring 2009 16:765:538 Plant Pathogenesis (G)

(Taught by Drs. Nilgun Tumer and Eric Lam)

Fall 2008 16:765:501 Introduction to Plant Biology (G)

(Organized by Dr. Michael Lawton and team taught)

Fall 2007 11:126:407 Comparative Virology (U)

(Taught by Drs. Nilgun Tumer and Brad Hillman)

16:765:501 Introduction to Plant Biology (G)

(Organized by Dr. Michael Lawton and team taught)

Spring 2007 16:765:538 Plant Pathogenesis (G)

(Taught by Drs. Nilgun Tumer and Eric Lam)

Fall 2006 16:765:501 Introduction to Plant Biology (G)

(Organized by Dr. Michael Lawton and team taught)

Fall 2005 11:126:407 Comparative Virology (U)

(Taught by Drs. Nilgun Tumer and Brad Hillman)

16:765:501 Introduction to Plant Biology (G)

(Organized by Dr. Michael Lawton and team taught)

Spring 2005 16:765:538 Plant Pathogenesis (G)

(Taught by Drs. Nilgun Tumer and Eric Lam)

11:015:390 George H. Cook Honors Program (U), Reader for John Ruppert's Cook Honors

Thesis; Research advisor, Dr. Rong Di

Fall 2004 16:765:501 Introduction to Plant Biology (G)

(Organized by Dr. Michael Lawton and team taught)

11:015:390 George H. Cook Honors Program (U), Reader for John Ruppert's Cook Honors

Thesis; Research advisor, Dr. Rong Di

Spring 2003 16:765:538 Plant Pathogenesis (G) (Taught by Dr. Nilgun Tumer)

Fall 2003 11:126:407 Comparative Virology (U)

(Taught by Drs. Nilgun Tumer and Brad Hillman)

Fall 2002 16:765:501 Introduction to Plant Biology (G)

(Organized by Drs. Nilgun Tumer and William Meyer and team taught)

16:681:501 General Microbiology (G) (Organized by Max Haggblom, Lee Kerkhof, Costantino

Vetriani) Guest lecture on viruses

16:765:531 Principles of Plant Pathology (G) (Organized by Peter Oudemans) Guest lecture

on viruses

Spring 2002 11:126:413 Plant Molecular Biology (G/U)

(Organized by Dr. Pal Maliga)

Intensive Course on New Approaches for Plant Biotechnology

Organized and lectured in the Plant Genomics part of this training course organized by the United Nations University and held at Centro de Biotecnologia, Instituto de Estudios Avanzados (IDEA)

in Venezuela during April 1-5, 2002.

Fall 2001 16:765:501 Introduction to Plant Biology (G)

(Organized by Drs. Nilgun Tumer and Rong Di and team-taught)

11:126:407 Comparative Virology (U)

(Taught by Drs. Nilgun Tumer and Brad Hillman)

11:015:390 George H. Cook Honors Program (U), research advisor for David Fegen's Cook

Honors Thesis

Spring 2001 16:765:538 Plant Pathogenesis (G) (Taught by Dr. Nilgun Tumer)

11:126:110 Issues and Concepts in Biotechnology (U)

(Organized by Drs. Peter Day and Mike Lawton and team-taught)

01: 694:484:01 Seminar in Molecular Biology and Biochemistry (U)

(Organized by Sam Gunderson)

Fall 2000 16:765:501 Problems in Plant Biology (G)

(Organized by Dr. Nilgun Tumer and team-taught)

16:681:501 General Microbiology (U)

(Organized by Dr. Alan Antoine)

Spring 2000 11:126:110 Issues and Concepts in Biotechnology (U)

(Organized by Drs. Peter Day and Mike Lawton and team-taught)

01: 694:484:01 Seminar in Molecular Biology and Biochemistry (U)

(Organized by Sam Gunderson)

Fall 1999 11:126:407 Comparative Virology (U)

(Taught by Drs. Nilgun Tumer and Brad Hillman)

16:775:601 Problems in Plant Biology (G)

(Organized by Drs. Nilgun Tumer and Eric Lam and team-taught)

16:681:501 General Microbiology (U)

(Organized by Dr. Alan Antoine)

Spring 1999 16:765:538 Plant Pathogenesis (G) (Taught by Dr. Nilgun Tumer)

11:126:110 Issues and Concepts in Biotechnology (U)

(Organized by Drs. Peter Day and Mike Lawton and team-taught)

Fall 1998 16:775:601 Problems in Plant Biology (G)

(Organized by Drs. Nilgun Tumer and Brad Hillman and team-taught) 11:015:101 Perspectives on Agriculture and the Environment (U)

(Taught by Dr. Nilgun Tumer)

Spring 1998 11:126:110 Issues and Concepts in Biotechnology (U)

(Organized by Drs. Peter Day and Mike Lawton and team-taught)

11:015:390 George H. Cook Honors Program (U)

Fall 1997 11:015:101 Perspectives on Agriculture and the Environment (U)

(Taught by Dr. Nilgun Tumer)

16:775:601 Problems in Plant Biology (G) (Organized by Dr. Brad Hillman and team-taught)

Spring 1997 16:770:508 Plant Pathogenesis (G)

(Taught by Dr. Nilgun Tumer)

11:126:110 Issues and Concepts in Biotechnology (U)

(Organized by Drs. Peter Day and team-taught)

Fall 1996 11:015:101 Perspectives on Agriculture and the Environment (U)

(Taught by Dr. Nilgun Tumer)

16:765:535 Plant Virology (Taught by Drs. Brad Hillman and Nilgun Tumer)

Summer 1996 Polymerase Chain Reaction (PCR) A two-day hands-on laboratory

and lecture course for Continuing Professional Education (Organized and taught by Drs. Nilgun Tumer and Navin Sinha)

Spring 1996 11:015:390 George H. Cook Honors Program (U)

11:126:110 Issues and Concepts in Biotechnology (U)

(Organized by Dr. Peter Day and team-taught)

Fall 1995 16:765:531 Principles of Plant Pathogenesis (G)

(Organized by Dr. Don Kobayashi and team-taught)

16:775: 601 Problems in Plant Biology (G)

(Organized by Dr. Brad Hillman and team-taught)

Spring 1995 16:770:508 Plant Pathogenesis (G)

(Taught by Dr. Nilgun Tumer)

11:126:110 Issues and Concepts in Biotechnology (U)

(Organized by Dr. Peter Day and team-taught)

Spring 1994 16:765:535 Plant Virology (G) (Taught by Drs. Brad

Hillman and Nilgun Tumer)

Spring 1993 16:770:508 Plant Pathogenesis (G)

(Organized by Dr. Nilgun Tumer)

11:126:110 Issues and Concepts in Biotechnology (U)

(Organized by Dr. Peter Day and team-taught)

Graduate programs:

2016-Present Member, Rutgers Center for Lipid Research Member, Cancer Institute of New Jersey

2010-Present Member, Microbial Biology Graduate Program, Rutgers University, New Brunswick, NJ Member, Graduate Program in Food Science, Rutgers University, New Brunswick, NJ

1993-Present Member, Graduate Program in Microbiology and Molecular Genetics (Molecular Biosciences),

Rutgers University, New Brunswick, NJ

1992-Present Member, Graduate Program in Plant Biology, Rutgers University, New Brunswick, NJ

Research Personnel:

Graduate Students:

Yijun Zhou Ph.D. student in Molecular Biosciences (2013-Present)

Daniel Finn
M.S. Plant Biology Graduate Program. Thesis Director. Completed M.S. Aug. 2016.

Ph.D. Plant Biology Graduate Program. Thesis Director. Completed Ph.D. Oct 2016.

Anwar Bin Umer
Ph.D. Molecular Biosciences Graduate Program. Thesis Director. Completed Ph.D. Jan 2014

Qing Yan Ph.D. Plant biology Graduate Program. Thesis Director. Completed Ph.D. Oct. 2013

Keysson Viera Visiting Ph.D. student from Brazil (2013)

Jia-Chi Chiou Ph.D. Food Science Graduate Program. Thesis Director. Completed Ph.D. Jan 2011

Maria Montano Ph.D. student in Molecular Biosciences (2011)

Varsha Shete M.S. Food Science Graduate Program. Thesis Director. Completed M.S. May 2009 Eric Kyu M.S. Molecular Biosciences Graduate Program. Completed MS in Dec. 2009

Marianne Baricevic Ph.D. Molecular Biosciences Graduate Program. Thesis Director. Completed Ph.D. May 2008

NSF Teaching Fellowship in K-12 education 2005-2008

Bijal Parikh M.D. Ph.D. Molecular Biosciences Graduate Program. Thesis Director. Completed Ph.D. May 2004

Sorina Popescu
Victoria Shi
Victoria Shi
Chris Coetzer
Oleg Zoubenko
Pinger Wang
Duk-Ju Hwang
Ph. D. Plant Biology Graduate Program. Thesis Director. Completed Ph.D. May 2000
Pinger Wang
Ph. D. Plant Biology Graduate Program. Thesis Director. Completed Ph.D. Jan 2001
Ph.D. Plant Biology Graduate Program. Thesis Director, Completed Ph.D. May 2000
Pinger Wang
Ph.D. Plant Biology Graduate Program. Thesis Director. Completed Ph.D. Jan. 1999
Ph.D. Plant Biology Graduate Program. Thesis Director. Completed Ph.D. May 1994

Member, Thesis Committee:

Cindy Wang Plant Biology, Eric Lam, Advisor, Ph.D. in progress Shannon Morath Plant Biology, Joan Bennett, Advisor, Ph.D. in progress

Valdir Barth Molecular Biosciences, Nancy Woychik, Advisor, Ph.D. in progress

Cindy Wang
Plant Biology, Eric Lam, Advisor, Ph. D. in progress
Jose Planta
Plant Biology, Jo Messing, Advisor, Ph.D. in progress.
Michael Johnson
Marine Science, Kay Bidle Advisor, M.S. January 2015
Martin Calvino
Plant Biology, Jo Messing, Advisor, Ph.D. October 2014
Ryan Rubino
Molecular Biosciences, Hua Zhu Advisor, M.S. May 2014
Jason Krychiw
Plant Biology, Brad Hillman Advisor, M.S. May 2014

Inna Nikonorova Molecular Biosciences, Alexey Ryazanov, Advisor, Ph.D. May 2014 David Pu Plant Biology, Plant Biology, Joan Bennett, advisor, M.S. April 2012

Carmen Colazzo

Junjie Li

Plant Biology, Michael Lawton, Advisor, M.S. 2010

Plant Biology, Xuemei Chen, Advisor, Ph.D. Oct. 2004

Anna Louw

Plant Biology, Tom Leustek, Advisor, M.S. Oct. 2001

Jungsup Kim

Food Science, Tom Leustek, Advisor, Ph.D. May 2000

Priya Sriraman

Plant Biology, Pal Maliga, Advisor, Ph.D. June 2000

Ying Yu

Food Science, Bruce Wasserman, Advisor, Ph.D. Aug. 2000

Helen He Mu

Food Science, Bruce Wasserman, Advisor, Ph.D. Aug. 2000

Wen-Zhe Hwang
Malini Rao
Plant Biology, Pal Maliga, Advisor, M.S. Oct. 1998
Jingkun Li
Food Science, T. C. Lee, Advisor, M.S. Oct. 1998
Food Science, T. C. Lee, Advisor, Ph.D. Jan. 1998

German Serino Plant Biology, Pal Maliga, Advisor, Ph.D. Jan. 1998

Lee Meisel Plant Biology, Eric Lam, Advisor, Ph.D.

Research Assistant Professors:

Xiao-Ping Li 2005-Present

Rong Di- 2002-2009; moved to independent position in 2009

Lab Manager/Core Facility Manager:

Michael Pierce 2009-Present

Postdocs:

Samantha Lee 2015-2016, USDA Postdoctoral fellowship

Przemek Grela 2012-2015 Kerrie May 2010-2013

Jennifer Nielsen-Kahn 2009-present, part-time

John McLaughlin 2008-2010; Research Asistant 2010-2012, Research Associate 2012-Present

 Xennan Xu
 2009-10

 Birsen Cakir
 2005-2007

 Bijal Parikh
 2005-2006

Hemalatha Saidasan 2003-2005; Research assistant 2005-2010

(co-directed with M. Lawton)

Padmanaban Annamalai 2002-03

(co-directed with M. Lawton)

Ulku Baykal 2001-2002; Research Assistant 2002-05; Research Associate 2005-09

Katalin Hudak Research Associate 2002-04 Rong Di Research Associate 2001-02

V. K. Baranwal 2000-01 Mirjana Seskar 1999-01 Maria Santana 1999-00 Jorge Vivanco 1999-00 Pinger Wang 1999-00

Katalin Hudak 1997-00; Research Assistant 2000-02 Rong Di 1997-99; Research Assistant 1999-01

Cheung Ho Lee 1996-97 Maureen Bonness 1995-96 Sergey Smirnov 1994-95 Duk-Ju Hwang 1994-95

Annette Chiang 1993-96, NIH postdoctoral Fellowship

Yoonkang Hur1993-94Lisa Lee1992-95Christina Hartman1992-94Michael Moynihan1992-93

Graduate Students (Rotation)

Brandon Schweibenz Molecular Biosciences 2015-16 Valdir Barth Molecular Biosciences 2014-15 Wilmer Rodriguez Molecular Biosciences 2014-2015

Molecular Biosciences 2012-13 Yijun Zhou Amy Bronzino Plant Biology 2000-01 Maria Montano Molecular Biosciences 2010-11 Anna Louw Plant Biology 1999-00 Jose Planta Microbiology 1998-99 Molecular Biosciences 2010-11 Barbara Sotolongo Debaleena Basu Plant Biology 2010-11 Matthew Bockol Microbiology 1998-99 Plant Biology 2009-10 Sreevani Pelala Food Science 1997-98 Hongbo Pan Anwar Bin Umer Molecular Biosciences 2009-10 Ramya Sundararajan Microbiology 1996-97 Plant Biology 1995-96 Jason Schifano Molecular Biosciences 2009-10 Wei-Ming Yuang Minjung Chae Food Science 2009-10 Xiafeng Liu Plant Biology 1995-96 Thong Vo Plant Biology 1995-96 Molecular Biosciences 2009-10 Murlikrishna Vemula Liang Guo Molecular Biosciences 2009-10 Patricia Knospler Microbiology 1993-94 Microbiology 1993-94 Jiachi Chiou Food Science 2008-09 Rebecca Pheffer Qing Yan Plant Biology 2007-08 Catherine Hanus Microbiol 1993-94

Kwang Huei Low Molecular Biosciences 2001-2002

Post Baccalaureate:

Helen Lopez NIH Research Supplement to Promote Diversity in Health-Related Research Program 2015-16 Juan Gnecco

NIH Research Supplement to Promote Diversity in Health-Related Research Program 2014-15

(declined)

Natasha Mendez NIH Research Supplement to Promote Diversity in Health-Related Research Program 2008-10

Undergraduates:

Maha Khan Aresty undergraduate program 2017-present

Divakar Rajeswaran Research for credit 2016-present Stephen McCroskery Aresty undergraduate 2016-present Kaitlin Kim Research for credit 2016-present Mario Pinzas Aresty Undergraduate 2016-present

Kylie Besz Research for credit 2016-17 **Brian Santos** Research for credit 2016-17 Shayenthan Rajeswaran Research for credit 2015-16 Monica Stewart Research for credit 2015-16 Sarah Zhang Research for credit 2015-16 Sukla Mohajan Research for credit 2015-16 Matthew Butterly Research for credit 2013-14

Juan Gnecco NIH undergraduate student support 2012-13

Dipixia Rathod Research for credit 2012-13 Monica Mazur Summer student 2012-13 Rama Gyawali Summer student 2012

Diana Vengsarkar NIH summer supplement 2010-12 Kristopher Raghavan Research in Genetics 2011-12

Henry Ma NIH summer supplement, Johns Hopkins University 2009-10

Shana Ereken NIH Summer supplement 2009-2010

Maria Montano Aresty Research Center for Undergraduates Fellowship 2008, Cook Honors Thesis, 2010

NIH summer supplement 2009-10

Manoj Thakore Undergraduate Research 2009-10

David Pu NSF Research Experience for Undergraduates fellowship 2008-09

Mustafa Engin Research for credit 2008-09

Andrew Tortora NSF Research Experience for Undergraduates fellowship, virology internship 2006-09

NSF Research Experience for Undergraduates fellowship 2004-06 Kevin VanArsdale NSF Research Experience for Undergraduates Fellowship 2003-04 Eric Kyu Jonathan Cruz NSF Research Experience for Undergraduates fellowship 2006-07

John Ruppert Cook Honors Thesis 2006-07 Craig Pritch Research for credit 2006-07

Samik Patel Laboratory research for credit 2006-07 Hussain Darbar Laboratory research for credit 2006-07

Ambrish Patel Aresty Research Center for Undergraduates Fellowship 2005-07 Tiffany Kung NSF Research Experience for Undergraduates fellowship 2005-06

Remy Schneider Laboratory research for credit 2005-06

David Fegen Cook Honors Thesis 2001-02 Research for credit 2000-01 Moris Tjetjep Peter Lynch Research for credit 2000 Marianne Baricevic Research for credit 2000 Scott Nadle Research for credit 2000 Khawlah Husseini Research for credit 1999 Orcun Urun Independent Study 1999 Parul Shah Research for credit 1998-99 Cecilia Lim Research for credit 1998-99 Annette Arora Research for credit 1998 Research for credit 1998 Haleema Janjua Priti Gaitonde Research for credit 1997-98

Lauren Junker Research for credit 1997
Denise Steiger Research for credit 1997
Bijal Parikh Cook Honors Thesis 1997-98
Bernadette Baronia Research for credit 1996
Chris Mialkowski Research for credit 1996
Ina Zimmerling Cook Honors Program 1996
Asha Ramakrishna Research for credit 93-94

Participants in the Graduate Science Careers Program UMDNJ-Robert Wood Johnson Medical School

Maria Pagan Project rise 2015 Tinaya Wos Summer 1998 Irving Vega Summer 1995 Evelyn Icasiano Summer 1994

Participants in the Project SEED Program, American Chemical Society

Meyrolin Garcia	Dickinson High School. Jersey City, NJ	Summer 2009
Tin Vo	Dickinson High School, Jersey City, NJ	Summer 2008
Darnash Bouchard	Irvington High School, Irvington, NJ	Summer 2007
Amel Butt	Dickinson High School, Jersey City, NJ	Summer 2006

High School Students

Adelina Branescu	Highland Park High School, NJ	Summer 2017
Tabor Nelson	Cushing Academy, Ashburnham, Mass.	Summer 2010
Sharon Li	Montgomery High School, Skillman, NJ	Summer 2008