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4.

March 1991 - March 1994	Staff Fellow, Section on Molecular Virology and Genetics, Laboratory of Viral and Molecular Pathogenesis, NINDS, NIH, Bethesda, Maryland
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5b. Book Chapters and Reviews

11. Morris-Love, J., and **W.J. Atwood.** Complexities of JC polyomavirus receptor-dependent and -independent mechanisms of infection. Viruses. 2022 May 24;14(6):1130. doi: 10.3390/v14061130.

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9. Haley, S.A., and **W.J. Atwood.** 2017. Progressive Multifocal Leukoencephalopathy: Endemic viruses and lethal brain disease. Ann. Rev. Virol. 4:349-367.

8. Assetta, B., and **W.J. Atwood.** 2017. The Biology of JC Polyomavirus. Biol. Chem. 398(8): 839-855.

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5c. Refereed Journal Articles

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98. Morris-Love, J., O'Hara, B.A., Gee, G.V., Dugan, A.S., O'Rourke, R.S., Armstead, B.E., Assetta, B., Haley, S. A., & Atwood, W. J. (2022). Biogenesis of JC polyomavirus associated extracellular vesicles. Journal of Extracellular Biology,1,e43. https://doi.org/10.1002/jex2.43

97. O'Hara BA, Gee GV, Haley SA, Morris-Love J, Nyblade C, Nieves C, Hanson BA, Dang X, Turner TJ, Chavin JM, Lublin A, Koralnik IJ, **Atwood WJ.** Teriflunomide inhibits JCPyV infection and spread in glial cells and choroid plexus epithelial cells. Int J Mol Sci. 2021 Sep 10;22(18):9809. doi: 10.3390/ijms22189809. PMID: 34575975.

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*91. O'Hara BA., Morris-Love J., Gee GV., Haley SA., Atwood WJ., 2020. JC Virus infected choroid plexus epithelial cells produce extracellular vesicles that infect glial cells independently of the virus attachment receptor. PLoS Pathog. 2020. Mar4:16(3):e1008371. doi:10.1371/journal.ppat.1008371. *One of four papers selected as the best of PLoS Pathogens 2020.

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20. **W.J. Atwood**. 2001. A combination of low dose chlorpromazine and neutralizing antibodies inhibit the spread of JC Virus in a tissue culture model: implications for prophylactic and therapeutic treatment of progressive multifocal leukoencephalopathy. J. NeuroVirol. 7:307-310.

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6. Tornatore, C.S., Meyers, K., **Atwood, W.J.**, Conant, K., and E.O. Major. 1994.Temporal characterization of HIV-1 mRNA transcripts from persistently infected human fetal astrocytes. J. Virol. 68:93-102.

5. Tornatore, C., Amemiya, K., **Atwood, W.**, Conant, K., and J. Berger.1994. JC Virus: Current controversies in the molecular virology and pathogenesis of progressive multifocal leukoencephalopathy. Reviews in Medical Virology 4:197-219.

4. **Atwood, W.J.,** Tornatore, C., Meyers, K., and E.O. Major. 1993. HIV-1 mRNA transcripts from persistently infected human fetal astrocytes. Ann. New York Acad. Sci. 693:323-324.

3. **Atwood, W.J.**, Berger, J., Kaderman, R., Tornatore, C.S., and E.O. Major. 1993. HIV-1 infection of the central nervous system. Clin. Microbiol. Rev. 6:339-366.

2. Breau, W., **Atwood, W.J.** and L.C. Norkin. 1992. Class I major histocompatibility complex proteins are an essential component of the SV40 receptor. Journal of Virology 66:2037-2045.

1. **Atwood, W.J.** and L.C. Norkin. 1989. Class I major histocompatibility proteins as cell surface receptors for simian virus 40. Journal of Virology 63:4474-4477.

5g. <u>Invited Lectures</u>

Neurology Grand Rounds, Rhode Island Hospital, Progressive Multifocal Leukoencephalopathy: Endemic Viruses and Lethal Brain Disease, January 2, 2019
Progressive Multifocal Leukoenephalopathy: Endemic Viruses and Lethal Brain Disease, April 18, 2018, University of Michigan, Ann Arbor
Effect of Teriflunomide on Human Polyomavirus Infection in Primary Astrocytes and in Choroid Plexus Epithelial Cells, October 12, 2018, Sanofi-Genzyme Advisory Board, Berlin Germany
Long-term HCP Patient Considerations in Active Relapsing-Remitting PML., September, 14, 2018, Sanofi-Genzyme-Portland, ME
Pediatric Research Colloquium, Women & Infants Hospital, Providence, RI, January 13, 2017
National Institute of Neurological Disorders and Stroke, Three Decades of Research in PML and Disorders Affecting the CNS, Bethesda, MD, June 2014
Transplant Grand Rounds, Division of Organ Transplantation, Rhode Island Hospital, Providence, RI, February 28, 2014
University of Massachusetts Medical School, Department of Microbiology and Physiological Systems, Worcester, MA, March 4, 2014
Wheeler School Biology Club, Providence, RI, September 2013
PML Consortium NYAS June 2013
Rhode Island Hospital, COBRE Center for Stem Cell Biology, March 2013
National Institute of Neurological Disorders and Stroke, Office of the Clinical Director, Bethesda, MD, October 2012
Vertex Pharmaceuticals Inc., Cambridge, MA, October 2011
Temple University School of Medicine, Philadelphia, PA, July 2011
Perseid Pharmaceuticals, Chicago, Il., June 2010
Astellas Pharmaceuticals, Chicago Il., May 2010.
National Institute of Neurological Disorders and Stroke, Bethesda, MD, May 2010
Third Meeting on HIV and the Central Nervous System, Stresa-Lago Maggiore, Italy, Oct. 2009
Yale University, Cancer Grand Rounds, New Haven CT, May 2009
Roger Williams Hospital, COBRE Center for Stem Cell Biology, Providence, RI 2009
Boston University, Center for HIV/AIDS Care and Research, Boston, November 2008
Glaxo Smith-Kline, London, UK May 2007
UC Irvine, Center for Virus Research, Irvine, CA March 2007
Boston University, Department of Microbiology, Boston, MA February 2007
Harvard University, Department of Microbiology, Boston, MA December 2006
Rhode Island Hospital, Transplantation Grand Rounds, Providence, RI October 2006
Biogen-Idec, Inc., Cambridge, MA October 2006
Medical College of Wisconsin, Grand Rounds, January 2006
Berlex Pharmaceuticals, Monteville NJ, August 2005.
Millenium Pharmaceuticals, Cambridge, MA, July 2005.
Schering-Plough Pharmaceuticals, Kenilworth, NJ, June 2005.
Elan Pharmaceuticals, So. San Franscisco, CA, April 2005.
Biogen-Idec, Cambridge, MA, March 2005.
Temple University School of Medicine, November 2004.
Penn State College of Medicine, Hershey, September 2004.
University of Cincinnati Medical School, Grand Rounds, March 2004
National Cancer Institute, Center for Scientific Review, February 2004
University of Massachusetts Medical School, January 29, 2004
Boston College, October 21, 2003
University of Utah School of Medicine, July 9, 2003
National Chung Cheng University, March 25, 2003, Chia-Yi, Taiwan, ROC

Chia-Yi Chang Gung Memorial Hospital, March 26, 2003, Chia-Yi, Taiwan, ROC
The Women's Club of Barre Massachusetts, February 13, 2003, Barre, Massachusetts.
The University of Massachusetts, Amherst, Department of Microbiology, April 4, 2002.
Johns Hopkins University School of Medicine, December 4, 2000
The National Institute of Neurological Diseases and Stroke, November 8, 2000
The Pennsylvania State University, September 11, 2000
University of Kentucky, Lexington, Kentucky December 6, 1999
University of Massachusetts, Amherst, MA 1999
Infectious Disease Rounds, Brown University, Providence, RI, 1999
Pathology Research and Teaching Rounds, Brown University, Providence, RI 1999
Rhode Island College, Providence, RI 1998
Hematology and Oncology Fellows Conference, Miriam Hospital, Providence, RI 1998

5h. Papers Read

International Agency for Research on Cancer, 6th Workshop on Emerging Issues in Oncogenic Virus Research, San Pietro in Bevagna, Manduria, Italy, June 7-12, 2022.
American Society for Virology Annual Meeting, June 15-19, 2020. Virtual.
American Academy of Neurology Annual Meeting, May 15-18, 2020. Virtual.
International Society for Extracellular Vesicles, Annual Meeting, April 24-28, 2019, Kyoto, Japan
Exosomes, Microvesicles, and Infectious Disease, May 31-June 1, 2019, Bolger Center, Potomac, MD
DNA Tumor Virus 50th Anniversary Meeting, July 9-14, 2019, Trieste, Italy
35th Congress of the European Committee for Treatment and Research in Multiple Sclerosis (ECTRIMS), September 11-13, 2019, Stockholm, Sweden
International Agency for Research on Cancer, 4th Workshop on Emerging Issues in Oncogenic Virus Research, San Pietro in Bevagna, Manduria, Italy, May 30- June 3, 2018.
American Society of Neurochemistry, Plenary Lecture, Progressive Multifocal Leukoencephalopathy: Endemic Viruses and Lethal Brain Disease. Riverside, CA, March 25-28, 2018.
International Agency for Research on Cancer, 4th Workshop on Emerging Issues in Oncogenic Virus Research, San Pietro in Bevagna, Manduria, Italy, June 15-19, 2016.
2nd International Progressive Multifocal Leukoencephalopathy Consortium Research Conference, MoIndal, Sweden, August 2015
American Society for Virology Annual Meeting, State College, PA, July 2013
New York Academy of Sciences, Consortium on Progressive Multifocal Leukoencephalopathy, June 19-20, 2013, New York, NY
American Society for Virology Annual Meeting, Plenary Lecture, Madison, WI, July 2012
International Agency for Research on Cancer, Plenary Lecture, San Pietro di Bavagna, Italy, June 2012
IVth International Conference of Human Polyomaviruses, Barcelona, Spain 2007
American Society for Virology Annual Meeting, Madison, WI July 2006
DNA Tumor Virus Meeting, San Diego, CA July 2006
The Third International Workshop on the Structural Biology of Small DNA Tumor Viruses, April 11-16, 2005, Siena, Italy
State-of-the-Art lecture, 2nd International Meeting on Polyomavirus Nephropathy. Baltimore, MD May 19-20, 2005
NINDS Workshop: Selective adhesion molecule inhibitors and CNS disease. Washington, DC July 26, 2005.
Polyomaviruses and Human Diseases: Basic and Clinical Aspects, Sept.11-14, 2005, Providence RI
6th International Symposium on Neurovirology, September 10-14, 2004, Sardinia, Italy
Polyomaviruses and Human Diseases: Basic and Clinical Aspects, June 11-13, 2004, Sapporo, Japan
Workshop on Receptors and Entry for Oncogenic Viruses, Park City Marriott, Park City, Utah, July 9-12, 2003.
The Second International Workshop on the Structural Biology of Small DNA Tumor Viruses, April 22-27, 2003, Siena, Italy

Polyomaviruses and Human Diseases: Basic and Clinical Aspects, May 8-10, 2003, Pozzolatico, Florence, Italy
Basic, Clinical, and Epidemiological Studies of Progressive Multifocal Leukoencephalopathy: Implications for Therapy. Portland, ME July 2002
Polyomavirus Nephropathy in Immunosuppressed Kidney and other Solid Organ Transplant Patients. Bethesda, MD, August 2002.
Current Progress on the Biology of JC Virus and the Clinical course of Progressive Multifocal Leukoencephalopathy: A prospective view of new treatment paradigms in immune deficient patients. Chicago, IL February 3, 2001
The Structural Biology of Small DNA Tumor Viruses, **Siena, Italy** May 1-6, 2001
The IVth European Meeting on Glial Cell Function in Health and Disease, May 24-27, 2000.
Lifespan/Tufts/Brown Center for AIDS Research, HIV/AIDS Symposium, January 26, 2000
Third Annual National Institutes of Health Centers for AIDS Research Symposium, November 1, 2000

6a. Active Funding

1. **National Institutes of Health Grant #R35-NS116836-01;** "Progressive multifocal leukoencephalopathy: Endemic viruses and lethal brain disease"; 05/01/20-04/30/28; **Principal Investigator; W. J. Atwood.** Direct costs-$514,500; 50% effort.

6b. Award and Funding History

1. **Sanofi-Genzyme Corp.**, "Antiviral activity of teriflunomide" 11/17/2017-12/31/2020; **Principal Investigator; W.J. Atwood.** Direct costs-$82,965; 5% effort.

2. **National Institutes of Health Grant # R01-NS043097-15;** "Virus-Host Cell Interactions in AIDS-Associated PML"; 12/15/01-01/31/22; **Principal Investigator; W. J. Atwood.** Direct Costs-$218,750/yr; 25% effort.

3. **National Institutes of Health Grant # P01-NS065719-06; "**Structure-function based development of JC virion specific antagonists for PML; 08/01/14-05/31/20; **Principal Investigator; W. J. Atwood.** Direct costs-$1,333,900/yr; 30% effort.

4. **National Institutes of Health Grant # P30 RR031153-01**; "Center for Cancer Signaling Networks"; 04/15/2011-03/31/2016; **Prinicpal Investigator; W.J. Atwood.** Direct Costs-$721,601/yr; 30% effort

5. **National Institutes of Health Grant # P01-NS065719; "**Structure-function based development of JC virion specific antagonists for PML; 09/30/09-07/31/14; **Principal Investigator; W. J. Atwood.** Direct costs-$951,744/yr; 20% effort.

6. **Translational Innovation Partnership Awards Program;** Small molecule inhibitors of human polyomavirus infection. **Principal Investigator;** 08/08/2012-06/26/2013**W.J. Atwood.** Direct Costs-$50,000.

7. **National Institutes of Health Grant # R01-CA71878**; "Cellular Receptors for the Human Polyomavirus,JCV"; 04/1/02-03/31/13; **Principal Investigator; W. J. Atwood.** Direct Costs - $165,590/yr; 15%effort.

8. **National Institutes of Health Grant # P20 RR015578-07**; "Center for Cancer Signaling Networks"; 07/01/05-02/29/11; **Principal Investigator; W.J. Atwood**, Direct Costs-$1,620,513/yr 30% effort.

9. **Raymond and Beverly Sackler Foundation, Inc.**; "Targeted Therapies for Carcinoid Syndrome"; 09/01/06-08/31/11; **Principal Investigator; W.J. Atwood,** Direct Costs-$150,000/yr; 10% effort.

10. **National Institutes of Health Grant # 1F31 NS053340-01**; "Role of JCV coat proteins in neuropathogenesis of PML"; 09/01/05-08/31/08; PI-Megan Gasparovic; Direct Costs-$45,833/yr.**; Mentor; W.J. Atwood.**

11. **National Multiple Sclerosis Society Pilot Award;** "Human Embryonic Stem Cell Model of JCV-Induced CNS Disease"; 08/01/07-07/31/08; **Principal Investigator: W.J. Atwood,** Direct costs-$40,000/yr; 2% effort.

12. **National Institutes of Health Grant # R13-CA110760-01;** "2nd Symposium on Polyomaviruses and Human Disease"; 06/04/04-05/31/08; **Principal Investigator; W.J. Atwood.** Direct Costs-$17,000/yr.

13. **Biogen-Idec, Inc.**; "Development and Screening of JC Virus Specific Therapeutics" 08/01/06-07/31/07; **Principal Investigator; W.J. Atwood**, Direct Costs-$122,258/yr; 2.5% effort.

14. **Fujisawa Healthcare Inc.,** "Anti-viral Activity of FK778 against the Human Polyomaviruses, JCV and BKV"; 12/1/02-06/30/05; **Principal Investigator; W.J. Atwood.** Direct Costs-$24,683/yr; 5% effort.

15. **National Institutes of Health Grant # R29-CA71878**; "Cellular Receptors for the Human Polyomavirus,JCV"; 09/1/97-08/31/01; **Principal Investigator; W. J. Atwood.** Direct Costs - $69,500/yr; 50%effort.

16. **National Institutes of Health, Center of Biomedical Research Excellence Grant # NIH 1 P20 RR15578-01** (01-05); Center for Genetics and Genomics; 10/1/00-9/30/05; (PI- J. Sedivy) - Co-Investigator of Project A - Characterization of Events Regulating the Balance Between Resistance and Infection (Project PI- C.A. Biron); Direct Costs Requested for Project A - $913,000/5yr. Project A, Specific Aim 1-Establishment of Approaches to Identify Early Events in Infection of B cells by JC Virus (**Investigator-W.J. Atwood**); 10% Effort in Year 1, 15% Effort in Years 2-5.

17. **National Institutes of Health Sponsored Lifespan/Tufts/Brown Center for AIDS Research.** Developmental Research Grant, "Virus Chemokine Receptor Interactions in HIV-Dementia", **Principal Investigator; W. J. Atwood.** 01/01/00-12/31/01, Direct Costs $30,000/1yr; 10% effort.

18. Brown University Salomon Faculty Research Award, "Virus-Chemokine Receptor Interactions in AIDS Dementia", 1999, **Principal Investigator; W. J. Atwood.** Award of $7,500/1yr.

19. Brown University Salomon Faculty Research Award, "The Role of Cellular Receptor in Restricting the Tropism of JCV to Glial Cells", 1998, **Principal Investigator; W. J. Atwood** Award of $10,000/1yr.

20. Brown University Funded Small Grant, "Cellular Receptor for the Human Polyomavirus, JCV", 1997, **Principal Investigator; W. J. Atwood.** Award of $1500/1yr.

21. Rhode Island Foundation Medical Research Grant, "Cellular Receptor for the Human Polyomavirus, JCV", 1997, **Principal Investigator; W. J. Atwood.** Award of $5000/1yr.

22. American Cancer Society Institutional Grant Allocation, 1996, **Principal Investigator; W. J. Atwood.** "Cellular Receptor for the Human Polyomavirus, JCV", Award of $11,000/1yr.

23. Rhode Island Foundation Medical Research Grant, "Cellular Receptor for the Human Polyomavirus, JCV", 1996, **Principal Investigator; W. J. Atwood.** Award of $4,840/1yr.

7. University Service

Member, Neoplasia Search Committee for Pathology and Lab Medicine, 2017-2018
Member, Search Committee for Division Director of Infectious Disease in the Department of Medicine, 2011
Member, Search Committee for Environmental Toxicology Faculty Positions in Pathology, 2011
Member, Brown Institute for Brain Sciences Executive Committee, 2011-present
Chair, MCB Department Space Committee, 2011-present
Vice Chair, Department of Molecular Biology, Cell Biology & Biochemistry, 2009
Chair, Center for Genomics and Proteomics Senior Faculty Search Committee, 2006
Member, Campus Planning Advisory Committee, 2005-2007
Chair, Laboratories of Molecular Medicine Seminar Series, 2005-present
Chair, Laboratories of Molecular Medicine Operations Committee, 2004-present
Member, Search Committee for Faculty Position in Bacteriology in MMI, 2003-2005
Member, Search Committee for Environmental Toxicology Faculty Position in Pathology, 2003-2004
Member, Search Committee for NMR Faculty Position in MPPB, 2003-2004
Member, Pathobiology Graduate Program Steering Committee, 1999-present
Member, Medical School Curriculum Sub-Committee on the Basic Biology of Cells, 1999
Member, Search Committee for Faculty Position in Immunology in MMI, 1997-1999
Chair, Molecular Microbiology and Immunology Seminar Series, 1996

Service to the Profession

Editorial Board, Virus Research (2012-present)
Editorial Board, Virology (2010-present)
Associate Editor, PLOS Pathogens (2009-present)
Editorial Board, Journal of Virology (2004-present)
Organizer and Host for the 3rd International Meeting on Human Polyomavirus Diseases, Sept.11-14, 2005, The Providence Biltmore.
Secretary, International Society for Neurovirology (2004-2007)
Editorial Board, International Society for NeuroVirology Newsletter (2004-2005)
Member, Board of Directors, International Society for NeuroVirology (2003-2008)
Secretary Elect, International Society for NeuroVirology (2003-2004)

Grant Reviews

National Institutes of Health, NINDS Special Emphasis Panel (R35) (2022)
National Institutes of Health, NINDS Special Emphasis Panel (R35) (2021)
National Institutes of Health, Special Emphasis Study Section, Chair (2020)
National Institutes of Health, NINDS Research Program Award (R35) (2020)
National Institutes of Health, CNBT Study Section, Ad hoc reviewer (2017)
National Institutes of Health, Virology A Study Section, Ad hoc reviewer (2016)
National Institutes of Health, Special Emphasis Study Section, Chair (2015)
National Institutes of Health, Special Emphasis Study Section, Chair (2014)
National Institutes of Health, Virology A Study Section, Ad hoc reviewer (2014)
National Cancer Institute, Site Visit Team, University of Pittsburgh Cancer Institute (2010)
National Cancer Institute, Molecular Oncology Special Emphasis Panel, Program Projects (2010)
National Institutes of Health, Virology B Study Section, Ad hoc reviewer (2009)

National Institutes of Health, Virology B Study Section, Ad hoc reviewer (2009)
National Institutes of Health, F32 Fellowship Panel (2008)
National Institutes of Health, Virology Study Section, Member (2003-2007)
National Institute of Neurological Disorders and Stroke, NSD-C Review Panel, 2003
National Institutes of Health Special Emphasis Panel to review the "Multi Center Neurologic AIDS Research Consortium" 2002
National Institutes of Health Special Emphasis Study Section, 2002
National Institutes of Health, Virology Study Section Ad-Hoc Member (2001-2003)
Department of Veterans Affairs, (2000-present)
Brown University Center for AIDS Research Developmental Grants Program (1998-present)
Lifespan Developmental Grants Program (1996-present)

Manuscript Reviews

Nature Communications (2018)
Science Translational Medicine (2014)
Cell Host and Microbe (2011)
PLOS Pathogens (2009)
PLOS Genetics (2009)
Science (1998)
Proceeding of the National Academy of Sciences (1998)
Journal of Immunology (1998)
Virology (1996-present)
Journal of Neurovirology (1996-present)
Journal of Virology (1996-present)
Cancer Research (2002-present)

8. Academic Honors/Fellowships/Societies

Fellow of the American Association for the Advancement of Science (Elected 2021)
Outstanding Investigator Award (R35), National Institutes of Health (NIH) (2020-2028)
Fellow of the American Academy of Microbiology (Elected 2015)
Master of Arts *Ad Eundem* Brown University (2001)
Gerson-Lehrman Group Scholar (2007-present)
Dean's Teaching Excellence Award, Brown Medical School, 2005-2006
Editorial Board, Journal of Virology (2005-2007)
2nd term appointment to Editorial Board, Journal of Virology (2008-2010)
National Institutes of Health, Virology Study Section, Member (2003-2007)
American Association for the Advancement of Science
American Society of Microbiology
Sigma Xi
American Society for Virology
International Society for NeuroVirology (Founding Member)
American Society for Cell Biology

9. UNDERGRADUATE TRAINING AND TEACHING ACTIVITIES

Program Activities

Freshman Advisor 2021
AB Biology Advisor for the Class of 2022
AB Biology Advisor for the Class of 2018
AB Biology Advisor for the Class of 2014

SciB Biology Advisor for Class of 2013
Sophomore Advisor 2011-2013
Freshman Advisor 2009-2013
AB Biology Advisor for the Class of 2010
AB Biology Advisor for the Class of 2007
AB Biology Advisor for the Class of 2002
AB Biology Advisor for Class of 1999
Reader for Honors Theses (2 students per year), 1996-present

Advisor for Undergraduate Independent Study and Senior Honors Theses (Bio195/196)

Avi Lukacher
Position: Brown University Undergraduate Volunteer Intern, 2021
Research Project: Susceptibility of ependymal cells and brain microvascular endothelial cells to JCPyV infection.
Brief Description: Mr. Lukacher is investigating the susceptibility of these brain barrier cells to infection with a human polyomavirus

Jacob Kaiserman
Position: Brown University PLME Undergraduate Student Research Assistant, 2021
Research Project: Exploring ivermectin as an antiviral
Brief Description: Mr. Kaiserman is investigating the the drug ivermectin for activity against human polyomaviruses.

Christopher Nieves
Position: Brown University Undergraduate Student UTRA awardee, 2020
Research Project: Investigating changes in the extracellular vesicle proteome following viral infection.
Brief Description: Mr. Nieves is validating and studying proteins that are differentially expressed in extracellular vesicles isolated from uninfected and infected cells.

Charlotte Nyblade
Position: Brown University Undergraduate Student Research Assistant, 2019
Research Project: Role of BK virus SIM domain in viral persistence
Brief Description: Ms. Nyblade is investigating the role of a putative SIM domain in the small t antigen of BK virus that may be responsible for disrupting PML nuclear bodies.
Current Position: Graduate student in a combined DVM/PhD program at Virginia Tech.

Abigail Atkinson
Position: Brown University Undergraduate Student Research Assistant, 2017-2018
Research Project: Role of serotonin receptor isoforms in JCPyV infection.
Brief Description: Ms. Atkinson is investigating the role of serotonin receptor isoforms in virus infection.
Current Position: Post-Bac Research Fellow, National Institute of Neurological Disease and Stroke

LeeAnn Filosa
Position: Brown University Undergraduate Student Research Assistant, 2009
Research Project: Biophysical analysis of polyomavirus uncoating.

Brief Description: Ms. Filosa investigated the role of the five-fold pore in polyomavirus infection.

Rahul Banerjee
Position: Brown University Undergraduate Student Research Assistant, 2009
Research Project: Innate immunity to polyomaviruses
Brief Description: Mr. Banerjee investigated the role of human defensins in polyomavirus infection.
Current Position: Fellow, Hematology and Oncology, UCSF

Nisha Narula
Position: Brown University Undergraduate Student Research Assistant, 2008
Research Project: Role of receptor glycosylation in JC Virus infection.
Brief Description: Ms. Narula investigated the role of NFAT in BKV gene expression.
Current Position: General Surgery Resident, Beth Israel Deaconess, Boston, MA

Sarah Wilson
Position: Brown University Undergraduate Student Research Assistant, 2005
Research Project: Role of receptor glycosylation in JC Virus infection.
Brief Description: Ms. Wilson investigated whether the 5HT2aR for JCV is modified by glycosylation
Current Position: Senior Scientist II, AbbVie Inc, Cambridge MA

Kinjal Patel
Position: Brown University Undergraduate Student Research Assistant, 2005
Research Project: The role of transcription factors in JCV tropism.
Brief Description: Ms. Patel studied the role of transcription factors in JCV tropism.
Current Position: Vice President, Clinical Strategy, Cricket Health, Los Angeles, CA

Alejandro Vasquez
Position: Brown University Undergraduate Student Research Assistant, 2005
Research Project: Mapping the JC virus induced cell signaling cascade in glial cells.
Brief Description: Mr. Vasquez mapped a signal transduction cascade in glial cells following virus binding to receptors.
Current Position: Clinical Instructor in Surgery, The Warren Alpert Medical School of Brown University, Providence RI

Olivia Rissland
Position: Brown University Undergraduate Student Research Assistant, 2003
Research Project: pH-dependent infection of human glial cells by HIV-1.
Brief Description: Ms. Rissland investigated the mechanism of pH independent infection of glial cells by HIV-1
Current Position: Assistant Professor, University of Colorado School of Medicine, Aurora, CO

Leigh Baxt
Position: Brown University Undergraduate Student Research Assistant, 2002
Research Project: Role of syndecans in infection of glial and B cells by HIV-1
Brief Description: Ms. Baxt investigated the distribution of 4 members of the syndecan family of glycosaminoglycans on human glial cells and B cells and will determine whether they are involved in HIV-1 infection of these cell types.

Current Position: Associate Director, Biology at Tri-Institutional Therapeutics Discovery Institute, NYC

Andrew Kwon

Position: Brown University Undergraduate Student Research Assistant, 2001
Research Project: Functional characterization of JCV agno protein
Brief Description: Mr. Kwon cloned JCV with and without the gene encoding agno protein. He will use these viruses to investigate the role of agno in the viral life cycle.
Current Position: Principal at Acsel Health, Hawthorne, CA

Benjamin Chen

Position: Brown University Undergraduate Student Research Assistant, 2000
Research Project: Cloning and overexpression of JCV capsid proteins
Brief Description: Mr. Chen cloned key viral proteins that contribute to the overall structure of the virus particle. He used these cloned proteins to investigate virus interactions with host cell surfaces.
Current Position: Director, Translational Research Pathology, Bristol-Myers Squibb, Cambridge MA

Katharine Beach

Position: Brown University Undergraduate Student Research Assistant, 1999
Research Project: Synthesis of JC Virus-like particles containing a luciferase reporter gene.
Brief Description: Ms. Beach worked on a project to develop virus-like particles capable of delivering a foreign gene to cells of interest. This has applications in gene therapy protocols.

Mai T. Pho

Position: Brown University Undergraduate Student Research Assistant, 1999
Research Project: Mechanisms of JC Virus Internalization into Human Glial Cells.
Brief Description: Ms. Pho experimentally described the mechanisms by which JC Virus gains access into the cytoplasm of a cell.
Current Position: Assistant Professor of Medicine, University of Chicago Department of Medicine, Chicago, Ill

Farooq Ahmed

Position: Brown University Undergraduate Student Research Assistant, 1998
Research Project: Elucidation of the Role of Cytokines in JC Virus Infection.
Brief Description: Mr. Ahmed examined whether inflammatory cytokines affected JC Virus gene expression in human glial cells.
Current Position: Freelance writer, editor, raconteur, Marina Del Rey, CA

Grant Wei

Position: Brown University Undergraduate Student Research Assistant, 1998
Research Project: JC Virus Interactions with Human B and T cells
Brief Description: Mr. Wei examined the interactions between JC Virus and receptors present on glial cells and on human B cells.
Current Position: Associate Professor of Emergency Medicine, Robert Wood Johnson Medical School, New Brunswick, NJ

Andrew Cheifetz

Position: Brown University Undergraduate Student Research Assistant, 1997
Research Project: Cloning and Characterization of the Major Capsid Protein of JC Virus
Brief Description: Mr. Chiefetz initiated the work to clone JC Virus capsid proteins.

Current Position: Pediatric Dentist, Vanguard Dental Group, Derry, NH

Andrew Hope
Position: Brown University Undergraduate Student Research Assistant, 1997
Research Project: JC Virus-Host Cell Interactions
Brief Description: Mr. Hope studied the interactions between JC Virus and host cell surface receptors.
Current Position: Chief, Department of Allery and Immunology, Santa Clara Homestead, Permanente Medical Group, Sunnyvale, CA

Jessica (Kobil) Batista
Position: Brown University Undergraduate Student Research Assistant, 1997
Research Project: The Role of Cytokines in JC Virus Gene Expression
Brief Description: Ms. Kobil examined whether inflammatory cytokines affected JC Virus gene expression in human glial cells.
Current Position: Radiologist, Pembroke Pines, FL

Roni (Mintz) Shtein
Position: Brown University Undergraduate Student Research Assistant, 1997
Research Project: The Role of Cytokines in Modulating JC Virus Infection of Glial Cells
Brief Description: Ms. Mintz examined whether inflammatory cytokines affected infection of cells by JC Virus.
Current Position: Associate Professor of Opthamology, University of Michigan, Ann Arbor Michigan

T. Nicole Walker
Position: Leadership Alliance Summer Research Program, 1997
Research Project: Activity of the JC Virus Late Promoter in Human Cells
Brief Description: Ms. Walker examined the activity of JC Virus late gene expression in human glial cells.
Current Position: Senior Associate, Content at Spark Foundry, NYC

Christine K. Liu
Position: Brown University Undergraduate Student Research Assistant, 1996
Research Project: Interactions of JC Virus with Receptors on Glial Cells
Brief Description: Ms. Liu studied the interactions between JC Virus and host cell surface receptors.
Current Position: Assistant Professor of Medicine, Boston University School of Medicine

10. GRADUATE TRAINING AND TEACHING ACTIVITIES

Graduate Program Committees

Member, MCB Graduate Program Admissions Committee, 2007-2008
Member, MCB Graduate Program Executive Committee, 2005-2010
Chair, MCB Graduate Program Admissions Committee, 2005-2007
Member Pathobiology Graduate Program Admissions Committee, 2003-2004
Member MCB Graduate Program Admissions Committee, 2003-2004
Trainer, Department of Education Graduate Training Grant in Areas of National Need, 2000-present
Member Pathobiology Graduate Program Steering Committee, 1999-present
Chair, Pathobiology Graduate Program Admissions Committee, 1999-2001

Member MCB Graduate Program Curriculum Committee, 1999-2001
Member Pathobiology Graduate Program Curriculum Committee, 1999-present
Member MCB Graduate Program Admissions Committee, 1999
Advisory Committees for MCB Ph.D. students, (2-4 students per year), 1997-present
Advisory Committees for Pathobiology Ph.D. students, (2-4 students per year), 1997-present
Member Pathobiology Graduate Program Admissions Committee, 1997-2001
Chair, MCB Graduate Program Retreat Committee, 1997
Member of Molecular Cellular and Biochemistry Graduate Program, 1996-present
Trainer MCB NIH Training Grant, 1996-present
Member MCB Graduate Program Retreat Committee, 1996
Member of Pathobiology Graduate Program, 1996-present

Graduate Program Ph.D. Advisory and Thesis Committees

Rafael Britt	Brown University MCB Graduate Program Thesis Advisor: Gerwald Jogl
Samantha Borys	Brown University Pathobiology Program Thesis Advisor: Laurent Brossay
Maureen Dowell	Brown University MCB Graduate Program Thesis Advisor: Richard Bennett
Brandon Armstead	Brown University Pathobiology Program Thesis Advisor: Al Ayala
Paul Campbell	Brown University MCB Graduate Program Thesis Advisor: Chris Degraffenreid
Garvin Dodard	Brown University Pathobiology Graduate Program Thesis Advisor: Laurent Brossay Ph.D. granted, Brown University, 2020
Ethan Fitzgerald	Brown University MCB Graduate Program Thesis Advisor: Amanda Jamieson Ph.D. granted, Brown University, 2022
Jocelyn Newton	Brown University Pathobiology Graduate Program Thesis Advisor: Gerwald Jogl Ph.D. granted, Brown University, 2019
Timothy Erich	Brown University Pathobiology Graduate Program Thesis Advisor: Laurent Brossay Ph.D. granted, Brown University, 2017
Dorothy Koveal	Brown University MCB Graduate Program Thesis Advisor: Rebecca Page Ph.D. granted, Brown University, 2013
Danielle Gutelius	Brown University Pathobiology Graduate Program Thesis Advisor: Shuping Tong Ph.D. granted, Brown University 2012

Alex Valm	Brown University Pathobiology Graduate Program Thesis Advisor: Rudolf Oldenbourgh Ph.D. granted, Brown University 2012
Cindy Banh	Brown University MCB Graduate Program Thesis Advisor: Laurent Brossay Ph.D. granted, Brown University 2011
Ahmet Eken	Brown University MCB Graduate Program Thesis Advisor: Jack Wands Ph.D. granted, Brown University 2011
Raquel Sherwood	Brown University MCB Graduate Program Thesis Advisor: Richard Bennett Ph.D. granted, Brown University 2012
Chui-Sun Yap	Brown University MCB Graduate Program Thesis Advisor: John Sedivy Ph.D. granted, Brown University 2008
Xian O'Brien	Brown University Pathobiology Graduate Program Thesis Advisor: Jonathan Reichner Ph.D. granted, Brown University 2009
Tamoko Konkin	Brown University Pathobiology Graduate Program Thesis Advisor: Shuping Tong Ph.D. granted, Brown University 2008
Lindsay Lovasco	Brown University MCB Graduate Program Thesis Advisor: Richard Freiman Ph.D. granted, Brown University 2008
Marlowe Tessmer	Brown University Pathobiology Graduate Program Thesis Advisor: Laurent Brossay Ph.D. granted, Brown University 2007
Erika Lawson	Brown University MCB Graduate Program Thesis Advisor: Douglas Hixson Ph.D. granted, Brown University 2007
Briana Erickson	Brown University MCB Graduate Program Thesis Advisor: Douglas Hixson Ph.D. granted, Brown University 2007
Jodie Pietruska	Brown University Pathobiology Graduate Program Thesis Advisor: Agnes Kane Ph.D. granted, Brown University 2007
Wendy Jobling	Brown University MCB Graduate Program Thesis Advisor: John Sedivy Ph.D. granted, Brown University 2006
Prasana Sapute	Brown University MCB Graduate Program Thesis Advisor: Tricia Serio

	Ph.D. granted, Brown University 2006
Alicia Chung	Brown University MCB Graduate Program Thesis Advisor: Eugene Chin Ankyrin Repeats SOCS Box-3 Mediates Ubiquitination and Degradation of Tumor Necrosis Factor Receptor II. Ph.D. granted, Brown University, 2004
Shawna Fleming-Demers	Brown University Pathobiology Graduate Program Thesis Advisor: Kim Boekelheide Thesis title: "Gamma-tubulin expression in sertoli cells in vivo leads to disruption of spermatogenesis". Ph.D. granted, Brown University, 2002
Frank DeSilva	Brown University MCB Graduate Program Thesis Advisor: Peter Shank Thesis title: "Infection of B-Lymphocytes by Human Immunodeficiency Virus Type 1: Implications in Activation and Transformation", Ph.D. granted, Brown University, 2001
Eric Wagner	Brown University Pathobiology Graduate Program Thesis Advisor: Surendra Sharma Thesis title: "Intrinsic Differences Between Naïve and Germinal Center/Memory Human B Lymphocytes: Survival, Cell Cycle Progression, and Comparison with Malignant B Cells" Ph.D. granted Brown University, 2000
Leslie P. Cousens	Brown University Pathobiology Graduate Program Thesis Advisor, Christine Biron Thesis title: "Cytokine Regulation of NK and T cell IFN-γ Responses During Viral Infections" Ph.D. granted Brown University, 1999

Advisor for Ph.D. Thesis Research

Jenna Morris-Love	Graduate Student, Pathobiology Graduate Program, Brown University 2016-2022
Prior Degree:	M.S. University of Connecticut
Research Project:	Polyomaviral persistent infections.
Current Position:	Research Scientist, Moderna, Cambridge, MA
Benedetta Assetta	
Position:	Graduate Student, Pathobiology Graduate Program, Brown University 2011-2016.
Prior Degree:	M.S. University of Bologna
Research Project:	Epigenetic regulation of human polyomaviruses
Post-Doctoral:	Dr. Alvin Huang, Brown University
Current Position:	Research Scientist, Astellas Pharma, Inc. Westborough, MA

Steven Zins

Position:	Graduate Student, Pathobiology Graduate Program, Brown University 2010-2015.
Prior Degree:	B.S. University of Michigan, Ann Arbor
Research Project:	Human alpha defensins as inhibitors of polyomavirus infection.
Current Position:	Science Department Head, Portsmouth Abbey School

Stacy-ann A. Allen-Ramdial

Position:	Graduate Student, Pathobiology Graduate Program, Brown University 2007-2013.
Prior Degree:	B.A. Boston College
Research Project:	Role of gangliosides in human polyomavirus infections.
Current Position:	Science Technology and Weapons Analyst, Washington DC

Joslynn A. Faustino (Jordan)

Position:	Graduate Student, Pathobiology Graduate Program, Brown University 2004-2010.
Prior Degree:	B.A. University of Rhode Island
Research Project:	Transcriptional control of BKV and inhibition by FK778 and related compounds. Post-Doctoral: Research Scientist, SRI International, Menlo Park, CA
Current Position:	Research Project Manager, Memory and Aging Program, Butler Hospital, Providence RI

Megan Stanifer (Gasparovic)

Position:	Graduate Student, MCB Graduate Program, Brown University 2003-2008.
Prior Degree:	B.S. Boston University
Research Project:	Role of JCV minor capsid proteins in infection.
Post-Doctoral:	Dr. Sean Wheelan, Harvard University, Cambridge, MA
Current Position:	Assistant Professor, University of Florida

Aisling S. Dugan

Position:	Graduate Student, Pathobiology Graduate Program, Brown University 2003-2007.
Prior Degree	B.A. Smith College
Research Project:	Characterization of receptors for BK Virus.
Post-doctoral:	Post-doctoral fellow with Ralph Isberg, Tufts
Current position:	Associate Professor of Biology, Assumption College, Worcester, MA

Kate Luisi (Manley)

Position:	Graduate Student, MCB Graduate Program, Brown University. 2001-2007.
Prior degree:	B.S. University of East Anglia, UK
Research Project:	Gene expression profiling is susceptible versus resistant cells.
Post-Doctoral:	Presidential Post-doctoral Fellow, Novartis Institutes for BioMedical Research, Cambridge, MA
Current Position:	Director, Function Head Molecular Biology and Systems Serology, Glaxo Smith-Klein Vaccines, Washington DC

William Querbes

Position:	Graduate Student, Pathobiology Graduate Program, Brown University 2001-2006.
Prior degree:	B.S. SUNY Geneseo

Research Project: Mechanisms of JC Virus Cellular Invasion
Current Position: Senior Vice President, Head of Therapeutic Discovery and Translational Sciences, Tessera Therapeutics, Cambridge MA

Sylvia Eash
Position: Graduate Student, Pathobiology Graduate Program, Brown University. 2000-2005.
Prior degree: B.A. Bethel College, Indiana
Research Project: Tissue distribution of JCV receptors
Current Position: Director, Alliance Management & Business Development at Beam Therapeutics Inc., Boston MA

Gretchen Gee
Position: Graduate Student, MCB Graduate Program, Brown University. 1999-2004.
Prior degree: B.S. Worcester Polytechnic Institute
Research Project: Mechanisms of resistance in human glial cells that are refractory to infection with JCV
Post-Doctoral: Dr. Karl Kelsey, Brown University
Current position: Assistant Professor (Research), University of Massachusetts Medical School, R&D Scientist II Analytical, MassBiologics

Aarthi Ashok
Position: Graduate Student, MCB Graduate Program, Brown University. 1998-2003
Prior degree: B.S. University of Sheffield, UK
Research Project: Cellular receptors for the Human Polyomavirus, JCV
Post-Doctoral: Dr. Ramanujan Hedge, NICHD, NIH
Current Position: Associate Professor, University of Toronto, Canada

Becky Schweighardt
Position: Graduate Student, Pathobiology Graduate Program, Brown University. 1997-2001
Prior degree: B.S. University of Massachusetts, Dartmouth
Research Project: Virus-Chemokine Receptor Interactions in HIV Dementia
Post-Doctoral: Post-doc with Dr. Doug Nixon at the Gladstone Institute of Molecular Virology
Current Position: Chief Scientific Officer, Grace Science LLC, Menlo Park, CA

Rotating Graduate Student Trainees:

Ryan O'Rourke
Position: Graduate Student, Pathobiology Graduate Program, Brown University. 2019.
Prior degree: B.S. University of Vermont
Research Project: Autophagy pathways impacting viral infection

Brandon Armstead
Position: Graduate Student, Pathobiology Graduate Program, Brown University. 2018.
Prior degree: B.S. Penn State
Research Project: Exosome biogenesis

Iliana Escobar
Position: Graduate Student, Pathobiology Graduate Program, Brown University. 2017.
Prior degree: A.B. Brown University
Research Project: Role of exosomes in virus infection

Jenna Morris-Love
Position: Graduate Student, Pathobiology Graduate Program, Brown University 2016
Prior Degree: M.S. University of Connecticut
Research Project: Polyomaviral persistent infections.

Emily Chen
Position: Graduate Student, MCB Graduate Program, Brown University. 2016.
Prior degree: B.S. Brandeis
Research Project: Infectivity of PML mutants

Heather Bennett
Position: Graduate Student, MCB Graduate Program, Brown University. 2009.
Prior degree: B.S. Richard Stockton College of New Jersey
Research Project: Role of defensins in BKV infection.

Stephen Jones
Position: Graduate Student, MCB Graduate Program, Brown University. 2009.
Prior degree: B.S. University of Florida
Research Project: Epigenetics of polyomavirus infection.

Noelle Hutchins
Position: Graduate Student, Pathobiology Graduate Program, Brown University. 2008.
Prior degree: B.S. UNC Chapel Hill
Research Project: Transcriptional regulation of JCV by NFAT4.

Stacy-Ann Allen
Position: Graduate Student, Pathobiology Graduate Program, Brown University. 2008.
Prior degree: B.S. Boston University
Research Project: Role of gangliosides in polyomavirus infection.

Courtney Klaips
Position: Graduate Student, MCB Graduate Program, Brown University. 2007.
Prior degree: B.A. Wheaton College
Research Project: Transcriptional regulation of JCV by NFAT4.

Katie Pratt
Position: Graduate Student, MCB Graduate Program, Brown University. 2006.
Prior degree: B.Sc.
Research Project: Microarray analysis of virus induced genes.

Alex Valm
Position: Graduate Student, Pathobiology Graduate Program, Brown University. 2006.

Prior degree: B.S. UNC Chapel Hill
Research Project: BKV entry mechanisms.

Spiro Marangoudakis
Position: Graduate Student, MCB Graduate Program, Brown University. 2006.
Prior degree: B.S. Boston University
Research Project: BKV induced cellular gene expression.

Derek Boucher
Position: Graduate Student, Pathobiology Graduate Program, Brown University. 2004.
Prior degree: B.S. URI, M.S. Yale
Research Project: BKV induced cellular gene expression.

Lindsay Lovasco
Position: Graduate Student, MCB Graduate Program, Brown University. 2004.
Prior degree: B.S. UMASS Amherst
Research Project: Intracellular trafficking of JCV.

Isil Guney
Position: Graduate Student, MCB Graduate Program, Brown University. 2000.
Prior degree: B.S. Xavier University, New Orleans
Research Project: Is JC Virus Infection Cell Cycle Dependent?

Michelle Jurofcik
Position: Graduate Student, MCB Graduate Program, Brown University. 2000.
Prior degree: B.S. Worcester Polytechnic Institute
Research Project: Does HIV-1 gp120 Induce Apoptosis in Human Astrocytes?

Alias Algarin-Algarin:
Position: Graduate Student, MCB Graduate Program, Brown University. 1996.
Prior degree: B.S. University of Puerto Rico
Research Project: Biology of JC Virus Infection

11. POST-DOCTORAL TRAINING ACTIVITIES

Dr. Aaron Derdowski
Position: Post-doctoral research fellow, Atwood Lab, Brown University 2011-2013
Prior degree: Ph.D., Lab of Terry Dermody, Vanderbilt University, Nashville TN
Research Project: Development of pseudoviruses to study novel human polyomaviruses
Current Position: Associate Vice President, Healthcare & Life Sciences, Proactive Worldwide

Dr. Melissa Maginnis
Position: Post-doctoral research fellow, Atwood Lab, Brown University 2007-2013
Prior degree: Ph.D., Lab of Terry Dermody, Vanderbilt University, Nashville TN
Research Project: Polyomavirus induced signaling mechanisms
Current Position: Associate Professor, University of Maine, Orono

Dr. Christian Nelson
Position: Post-doctoral research fellow, Atwood Lab, Brown University 2008-2014

Prior degree: Ph.D., Lab of Colin Parrish, Cornell University, Ithaca NY
Research Project: Structural mechanisms of capsid disassembly
Current Position: Assistant Professor, SUNY Cortland, NY

Dr. Irene Gracia, Ahufinger
Position: Visiting Scholar, Atwood Lab, Brown University 2009-2010
Prior degree: MD,Ph.D., University of Seville, Seville, Spain
Research Project: Serotonin receptors and JCV infection

12. HONORS AND AWARDS RECEIVED BY STUDENTS AND TRAINEES

Post-doctoral

Melissa Maginnis
Ruth Kirschstein National Research Service Award (F32) (2008-2011)
Christian Nelson
Ruth Kirschstein National Research Service Award (F32) (2009-2012)

Ph.D. Thesis Students

Becky Schweighardt, 1997-2001
Joukowski Prize for Outstanding Dissertation, 2001
Graduate Student Training Award in Areas of National Need, 2000
Seventh West Coast Retrovirus Meeting Travel Award, 2000
Pathobiology Graduate Program Retreat Poster Competition, 2nd Place
Sigma Xi Research Grant, 1999
Keystone Symposium on Molecular and Cellular Biology Travel Award, 1999
Sigma Xi Research Grant, 1998

Aarthi Ashok, 1998-2003
International Society for Neurovirology, Investigators in Training Award, 2000
MCB Graduate Program Retreat Poster Competition, Honorable Mention, 1998

Gretchen Gee, 2000-2005
International Society for Neurovirology, Investigators in Training Award, 2003

4th International Symposium on Neurovirology, Poster Award (1st place), 2002

William Querbes, 2002-2006
Joukowski Prize for Outstanding Dissertation, 2006
Pathobiology Graduate Program Retreat Poster Competition, 1st Place 2003
Trainee, Graduate Education in Areas of National Need (2002-2004)

Kate Manley, 2002-2007
ASV Travel Award, 2006

Aisling Dugan, 2004-2008
ASV Travel Award, 2006
Frederic Poole Gorham Biological Fellowship (2004-2005)
Trainee, Graduate Education in Areas of National Need (2005-2007)
Pathobiology Graduate Program Retreat Poster Competition, Best Poster, 2005

Megan Stanifer, 2004-2009
ASV Travel Award, 2006
Ruth Kirschstein National Research Service Award (F31) (2005-2008)
Neal Nathansen Lectureship Award in Neurovirology, 2007

Joslynn Jordan, 2005-2010
Pathobiology Graduate Program Retreat Poster Competition, Honorable Mention, 2007

Stacy-ann Allen, 2007-2013
ASV Travel Awards, 2008, 2009

Stephen Zins, 2010-2015
ASV Travel Award 2010, 2011
Ruth Kirschstein National Research Service Award (F31) (2013-2014)

Bennedetta Assetta, 2011-2017
Frederic Poole Gorham Biological Fellowship (2012-2013)

Undergraduate Independent Study and Senior Honors Students

Avi Lukacher, 2021-2022
Brown University Undergraduate Training and Research Assistantship, 2021

Jacob Kaiserman, 2020-2022
Brown University Program in Medical Education Summer Research Award, 2021

Chris Nieves, 2020-2022
Brown University Undergraduate Training and Research Assistantship, 2021

Alejandro Vasquez, 2005-2006
Biology Prize, 2006

Olivia Rissland, 2002-2003
Brown University Program in Medical Education Summer Research Award, 2002
Faculty Scholar, 2003-2004, Rhodes Scholar, 2004-2007

Leigh Baxt, 2002-2003
Brown University Undergraduate Training and Research Assistantship, 2002
Elizabeth Leduc Biology Prize, 2003

Andrew Kwon, 2000-2001
Brown University Howard Hughes Advanced Research Fellowship, 2001

Benjamin J. Chen, 1999-2000
Research at Brown Grant Award (RAB), 2000
Barry M. Goldwater Scholarship, 2000
Brown University Howard Hughes Advanced Research Fellowship, 2000

Mai T. Pho, 1998-1999
Brown University Undergraduate Training and Research Assistantship

Grant Wei, 1997-1998
Research at Brown Grant Award (RAB), 1998
Brown University Program in Medical Education Summer Research Award, 1997

Tamesha Nicole Walker, 1996-1997
Leadership Alliance Summer Research Program Award

Jessica Kobil, 1996-1997
Brown University Undergraduate Training and Research Assistantship

Andrew P. Hope, 1996-1997
Brown University Howard Hughes Advanced Research Fellowship, 2000

13. BROWN COURSE TEACHING

2022-2023

Biol 0940A	Sophomore Seminar: Viral Epidemics-Remote Course Leader: Walter Atwood Enrollment: 19 (19/19 responded to evaluation) Course Evaluation: 4.47 Teaching Evaluation: 4.72
Biol 2950/2980	Graduate Independent Research Laboratory supervision of Jenna Morris-Love
Biol 1950/1960	Directed Research/Independent Study Laboratory supervision of undergraduate students Jacob Kaiserman, and Avi Lukacher.

2021-2022

Biol 0940A	Sophomore Seminar: Viral Epidemics-Remote Course Leader: Walter Atwood Enrollment: 19 (19/19 responded to evaluation) Course Evaluation: 4.31 Teaching Evaluation: 4.57
Biol 2950/2980	Graduate Independent Research Laboratory supervision of Jenna Morris-Love
Biol 1950/1960	Directed Research/Independent Study Laboratory supervision of undergraduate students Chris Nieves, Jacob Kaiserman, and Avi Lukacher.

2020-2021

Biol 0940A	Sophomore Seminar: Viral Epidemics-Remote Course Leader: Walter Atwood Enrollment: 19 (19/19 responded to evaluation) Course Evaluation: 4.74 Teaching Evaluation: 4.89

Biol 2950/2980 Graduate Independent Research
Laboratory supervision of Jenna Morris-Love

Biol 1950/1960 Directed Research/Independent Study
Laboratory supervision of undergraduate students Charlotte Nyblade.

2019-2020

Biol 0940A Sophomore Seminar: Viral Epidemics
Course Leader: Walter Atwood
Enrollment: 19
Course Evaluation: 4.67*
Teaching Evaluation: 4.63*

* Beginning in the 2019/2020 academic year evaluation scores changed and are now based on a scale of 1-5 with 5 being the best.

Biol 2950/2980 Graduate Independent Research
Laboratory supervision of Jenna Morris-Love

2018-2019

Biol 0940A Sophomore Seminar: Viral Epidemics
Course Leader: Walter Atwood
Enrollment: 17
Course Evaluation: 1.56
Teaching Evaluation: 1.06

Biol 2950/2980 Graduate Independent Research
Laboratory supervision of Jenna Morris-Love

2017-2018

Biol 0940A Sophomore Seminar: Viral Epidemics
Course Leader: Walter Atwood
Enrollment: 20
Course Evaluation: 1.94
Teaching Evaluation: 1.5

Biol 2950/2980 Graduate Independent Research
Laboratory supervision of graduate students Benedetta Assetta and Jenna Morris-Love

2016-2017

Biol 0940A Sophomore Seminar: Viral Epidemics
Course Leader: Walter Atwood
Enrollment: 20
Course Evaluation: 1.47
Teaching Evaluation: 1.2

Biol 2950/2980 Graduate Independent Research
Laboratory supervision of graduate students Benedetta Assetta

2015-2016

Biol 0940A — Sophomore Seminar: Viral Epidemics
Course Leader: Walter Atwood
Enrollment: 20
Course Evaluation: 1.84
Teaching Evaluation: 1.47

Biol 2950/2980 — Graduate Independent Research
Laboratory supervision of graduate students Steven Zins and Benedetta Assetta

2014-2015

Biol 0940A — Sophomore Seminar: Viral Epidemics
Course Leader: Walter Atwood
Enrollment: 19
Course Evaluation: 2.0
Teaching Evaluation: 1.75

Biol 2950/2980 — Graduate Independent Research
Laboratory supervision of graduate students Stacy-ann Allen, Steven Zins and Benedetta Assetta

2013-2014

Biol 0940A — Sophomore Seminar: Viral Epidemics
Course Leader: Walter Atwood
Enrollment: 17
Course Evaluation: 2.2
Teaching Evaluation: 2

Biol 2950/2980 — Graduate Independent Research
Laboratory supervision of graduate students Stacy-ann Allen, Steven Zins and Benedetta Assetta

2012-2013

Biol 0940A — Sophomore Seminar: Viral Epidemics
Course Leader: Walter Atwood
Enrollment: 17

Biol 2950/2980 — Graduate Independent Research
Laboratory supervision of graduate students Stacy-ann Allen, Steven Zins and Benedetta Assetta

2011-2012

Biol 2950/2980 — Graduate Independent Research
Laboratory supervision of graduate students Stacy-ann Allen, Steven Zins and Benedetta Assetta

2010-2011

Biol 2950/2980 — Graduate Independent Research
Laboratory supervision of graduate students Stacy-ann Allen, Steven Zins and Benedetta Assetta

Biol 0500 — Molecular Cell Biology
Course Leader: Walter Atwood

Enrollment: 122
Course Evaluation: 2.42
Teaching Evaluation: 2.78

2009-2010

Bio295/296 Graduate Independent Research
Laboratory supervision of graduate students Stacy-ann Allen and Steve Zins

Biol 0500 Molecular Cell Biology
Course Leader: Walter Atwood/Peter Heywood
Enrollment: 138
Course Evaluation: 2.65
Teaching Evaluation: 3.08

2008-2009

Bio 295/296 Graduate Independent Research
Laboratory supervision of graduate students Kate Manley, Joslynn Jordan, Aisling Dugan, Megan Gasparovic, and Stacy-ann Allen

Bio 203 Foundations for Advance Study in Experimental Biology
Course Leader: Kim Mowry
Enrollment: 7
Course Evaluation: 2.00 where 1.0 is outstanding and 5.0 is poor
Teaching Evaluation: 2.14 where 1.0 is outstanding and 5.0 is poor

2007-2008 (Sabbatic Leave, Fall 2007)

Bio 295/296 Graduate Independent Research
Laboratory supervision of graduate students Kate Manley, William Querbes, Joslynn Jordan, Aisling Dugan, and Megan Stanifer

2006-2007

Bio 295/296 Graduate Independent Research
Laboratory supervision of graduate students Kate Manley, William Querbes, Joslynn Jordan, Aisling Dugan, and Megan Gasparovic

Bio 203 Foundations for Advance Study in Experimental Biology
Course Leader: Tricia Serio
Enrollment: 14
Course Evaluation: 1.77 where 1.0 is outstanding and 5.0 is poor
Teaching Evaluation: 2.86 where 1.0 is outstanding and 5.0 is poor

Bio 229 Seminars in Cell Biology, Course Leader
Enrollment: 13
Course Evaluation: 1.75 where 1.0 is outstanding and 5.0 is poor
Teaching Evaluation: 1.67 where 1.0 is outstanding and 5.0 is poor

2005-2006

Bio 295/296 Graduate Independent Research
Laboratory supervision of graduate students Gretchen Gee, Sylvia Eash, Kate Manley, William Querbes, Joslynn Jordan, Aisling Dugan, and Megan Stanifer

Bio 264 Advanced Topics in Microbial Pathogenenesis, Viral Neuropathogenesis Section
Course Leader: Andrew Campbell
Enrollment: 6

Bio 156 Virology, Course Leader
Enrollment: 29
Course Evaluation: 1.67 where 1.0 is outstanding and 5.0 is poor
Teaching Evaluation: 1.44 where 1.0 is outstanding and 5.0 is poor

Bio 195/196 Directed Research/Independent Study
Laboratory supervision of undergraduate students Sarah Wilson, Kinjal Patel and Alejandro Vasquez

2004-2005

Bio 295/296 Graduate Independent Research
Laboratory supervision of graduate students Gretchen Gee, Sylvia Eash, Kate Manley, William Querbes, Joslynn Jordan, Aisling Dugan, and Megan Stanifer

Bio 156 Virology, Course Leader
Enrollment: 44
Course Evaluation: 1.56 where 1.0 is outstanding and 5.0 is poor
Teaching Evaluation: 1.62 where 1.0 is outstanding and 5.0 is poor

Bio 158 Medical Microbiology, Virology Section
Enrollment:72
Teaching Evaluation: 3.92 where 1.0 is poor and 5.0 is outstanding

2003-2004

Bio 295/296 Graduate Independent Research
Laboratory supervision of graduate students Gretchen Gee, Sylvia Eash, Kate Manley, William Querbes

Bio 201 A Introduction to MCB Faculty Trainer Research
Open to entering graduate program
Overview of viral infections of the human central nervous system.

Bio 285 Introduction to Pathobiology Faculty Research
Open to entering graduate program
Overview of viral infections of the human central nervous system.

Bio 195/196 Directed Research/Independent Study
Laboratory supervision of undergraduate student Olivia Rissland

Bio 158 Medical Microbiology, Course Coordinator, Enrollment 75 Medical Students
Coordinated lectures in four different programmatic themes in Medical Microbiology
Course Evaluation: 2.6 where 1.0 outstanding and 5.0 is poor

Bio 158 Medical Microbiology, Virology Section, Enrollment 75 Medical Students
Taught the virology component of this four component course.
Teaching Evaluation: 3.46 where 1.0 is poor and 5.0 is outstanding

2002-2003 (Sabbatic Leave, Spring 2003)

Bio 295/296 Graduate Independent Research
Laboratory supervision of graduate students Aarthi Ashok, Gretchen Gee, Sylvia Dimitrova, Kate Manley, William Querbes

Bio 285 Introduction to Pathobiology Faculty Research, Course Coordinator
Open to entering graduate program

Bio 195/196 Directed Research/Independent Study
Laboratory supervision of undergraduate students Leigh Baxt and Olivia Rissland

2001-2002

Bio 295/296 Graduate Independent Research
Laboratory supervision of graduate students Aarthi Ashok, Gretchen Gee, Sylvia Dimitrova, and Kate Manley

Bio 201 A Introduction to MCB Faculty Trainer Research
Open to entering graduate program
Overview of viral infections of the human central nervous system.

Bio 285 Introduction to Pathobiology Faculty Research
Open to entering graduate program
Overview of viral infections of the human central nervous system.

Bio 195/196 Directed Research/Independent Study
Laboratory supervision of undergraduate students Andrew Kwon

Bio 158 Medical Microbiology, Course Coordinator, Enrollment 67 Medical Students
Coordinated lectures in four different programmatic themes in Medical Microbiology
Course Evaluation: 3.93 where 1.0 excellent and 5.0 is poor

Bio 158 Medical Microbiology, Virology Section, Enrollment 67 Medical Students
Taught the virology component of this four component course.
Teaching Evaluation: 3.95 where 1.0 is excellent and 5.0 is poor

Bio 156 Virology, Course Leader,
Enrollment: 30 undergraduates, 5 graduate students
Taught basic concepts in virology based on the current literature
Course Evaluation: 1.63 where 1.0 is excellent and 5.0 is poor
Teaching Evaluation: 1.29 where 1.0 is excellent and 5.0 is poor

2000-2001

Bio 295/296 Graduate Independent Research
Laboratory supervision of graduate students Becky Schweighardt, Aarthi Ashok, Gretchen Gee, and Sylvia Dimitrova

Bio 201 A Introduction to MCB Faculty Trainer Research
Open to entering graduate program class of 1999
Overview of viral infections of the human central nervous system.

Bio 285 Introduction to Pathobiology Faculty Research
Open to entering graduate program class of 1999
Overview of viral infections of the human central nervous system.

Bio 195/196 Directed Research/Independent Study
Laboratory supervision of undergraduate students Andrew Kwon

Bio 158 Medical Microbiology, Course Coordinator, Enrollment 67 Medical Students
Coordinated lectures in four different programmatic themes in Medical Microbiology
Course Evaluation: 2.46 where 1.0 is excellent and 5.0 is poor.

Bio 158 Medical Microbiology, Virology Section, Enrollment 67 Medical Students
Taught the virology component of this four component course.
Teaching Evaluation: 2.25 where 1.0 is excellent and 5.0 is poor.

1999-2000 **Beginning with the 1999 academic year Brown University inverted the scoring system used to evaluate faculty and courses. Under this new system a score of 1.0 is excellent and a score of 5.0 is poor. Prior to the 1999 academic year a score of 5.0 was excellent and a score of 1.0 was poor.**

Bio 295/296 Graduate Independent Research
Laboratory supervision of graduate students Becky Schweighardt, Aarthi Ashok, Gretchen Gee, Isil Guney, and Michelle Jurofcik

Bio 201 A Introduction to MCB Faculty Trainer Research
Open to entering graduate program class of 1999
Overview of viral infections of the human central nervous system.

Bio 285 Introduction to Pathobiology Faculty Research
Open to entering graduate program class of 1999
Overview of viral infections of the human central nervous system.

Bio 195/196 Directed Research/Independent Study
Laboratory supervision of undergraduate students Katharine Beach and Benjamin J. Chen

Bio 158 Medical Microbiology, Course Coordinator, Enrollment 67 Medical Students
Coordinated lectures in four different programmatic themes in Medical Microbiology
Course Evaluation: 2.53 where 1.0 is excellent and 5.0 is poor.

Bio 158 Medical Microbiology, Virology Section, Enrollment 67 Medical Students
Taught the virology component of this four component course.
Teaching Evaluation: 1.66 where 1.0 is excellent and 5.0 is poor.

Bio 156 Virology, Course Leader,
Enrollment: 30 undergraduates, 5 graduate students
Taught basic concepts in virology based on the current literature
Course Evaluation: 1.34 where 1.0 is excellent and 5.0 is poor
Teaching Evaluation: 1.29 where 1.0 is excellent and 5.0 is poor

1998-1999

Bio 295/296 Graduate Independent Research
Laboratory supervision of graduate students Becky Schweighardt, Aarthi Ashok, and Gretchen Gee.

Bio 201 A Introduction to MCB Faculty Trainer Research

Open to entering graduate program class of 1999
Overview of viral infections of the human central nervous system.

Bio 285 Introduction to Pathobiology Faculty Research
Open to entering graduate program class of 1999
Overview of viral infections of the human central nervous system.

Bio 195/196 Directed Research/Independent Study
Laboratory supervision of undergraduate student Mai Pho.

Bio 158 Medical Microbiology, Course Coordinator, Enrollment 74 Medical Students
Coordinated lectures in four different programmatic themes in Medical Microbiology
Course Evaluation: 3.65 where 5.0 is excellent and 1.0 is poor.

Bio 158 Medical Microbiology, Virology Section, Enrollment 74 Medical Students
Taught the virology component of this four component course.
Teaching Evaluation: 4.1 where 5.0 is excellent and 1.0 is poor.

Bio 156 Virology, Course Leader,
Enrollment: 28 undergraduates, 2 graduate students
Taught basic concepts in virology based on the current literature
Course Evaluation: 4.7 where 5.0 is excellent and 1.0 is poor
Teaching Evaluation: 4.7 where 5.0 is excellent and 1.0 is poor

1997-1998

Bio 295/296 Graduate Independent Research
Laboratory supervision of graduate students Becky Schweighardt and Aarthi Ashok.

Bio 201 A Introduction to MCB Faculty Trainer Research
Open to entering graduate program class of 1997
Overview of viral infections of the human central nervous system.

Bio 285 Introduction to Pathobiology Faculty Research
Open to entering graduate program class of 1997
Overview of viral infections of the human central nervous system.

Bio 195/196 Directed Research/Independent Study
Laboratory supervision of undergraduate students Farooq Ahmed and Grant Wei.

Bio 158 Medical Microbiology, Course Coordinator, Enrollment 66 Medical Students
Coordinated lectures in four different programmatic themes in Medical Microbiology
Course Evaluation: 3.4 where 5.0 is excellent and 1.0 is poor.

Bio 158 Medical Microbiology, Virology Section, Enrollment 66 Medical Students
Taught the virology component of this four component course.
Teaching Evaluation: 4.5 where 5.0 is excellent and 1.0 is poor.

Bio 156 Virology, Course Leader,
Enrollment: 32 undergraduates, 2 graduate students
Taught basic concepts in virology based on the current literature
Course Evaluation: 4.7 where 5.0 is excellent and 1.0 is poor

Teaching Evaluation: 4.7 where 5.0 is excellent and 1.0 is poor

1996-1997

Bio 295/296 Graduate Independent Research
Laboratory supervision of graduate student Becky Schweighardt.

Bio 201 A Introduction to MCB Faculty Trainer Research
Open to entering graduate program class of 1996
Overview of viral infections of the human central nervous system.

Bio 285 Introduction to Pathobiology Faculty Research
Open to entering graduate program class of 1996
Overview of viral infections of the human central nervous system.

Bio 195/196 Directed Research/Independent Study
Laboratory supervision of undergraduate students Andrew Cheifetz, Andy Hope, Roni Mintz, and Jessica Kobil.

Bio 158 Medical Microbiology, Virology Section, Enrollment 72 Medical Students
Taught the virology component of this four component course.
Teaching Evaluation: 4.1 where 5.0 is excellent and 1.0 is poor.

Bio 156 Virology, Course Leader,
Enrollment: 19 undergraduates, 8 graduate students
Taught basic concepts in virology based on the current literature
Course Evaluation: 4.5 where 5.0 is excellent and 1.0 is poor
Teaching Evaluation: 4.6 where 5.0 is excellent and 1.0 is poor

1995-1996

Bio 295/296 Graduate Independent Research
Laboratory supervision of graduate student Alias Algarin-Algarin.

Bio 201 A Introduction to MCB Faculty Trainer Research
Open to entering graduate program class of 1996
Overview of viral infections of the human central nervous system.

Bio 195/196 Directed Research/Independent Study
Laboratory supervision of undergraduate student Christine Liu.

Bio 158 Medical Microbiology, Virology Section, Enrollment 72 Medical Students
Taught the virology component of this four component course.
Teaching Evaluation: 4.1 where 5.0 is excellent and 1.0 is poor.

14. Patents

2017 US0096951556B2, Compounds for the Treatment and Prevention of Infections, Issued July 4, 2017