

AISLING S. DUGAN

Curriculum Vitae

Home address: 11 Sharon St, Providence RI 02908
Work Address: Assumption College, 500 Salisbury Street, Worcester, MA 01609
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EDUCATION

- Sept. 2003 - Dec. 2007 **Doctor of Philosophy in Biology and Medicine**
Brown University, Providence, RI
Pathobiology Graduate Program
Mentor: Walter J. Atwood, Ph.D.
- Sept. 1996 - May 2000 **Bachelor of Arts in Biological Science; Minor in Chemistry**
Smith College, Northampton, MA

RESEARCH EXPERIENCE

- Sept. 2010 –present **Assistant Professor**
Dept. of Natural Sciences, Assumption College, Worcester, MA
Research program: Exploring the relationship between the human virus, BK virus, and the host cell it infects.
- Jan. 2009 – Aug 2010 **Howard Hughes Postdoctoral Research Associate**
Dept. of Microbiology, Tufts University, Boston, MA
Laboratory of Ralph R. Isberg, Ph.D.
Research project: Explored the role of host cell kinases and phosphatases in *Legionella pneumophila* infection.
- Dec. 2007 – Dec. 2008 **Postdoctoral Research Associate**
Dept. of Molecular Biology, Cell Biology, and Biochemistry,
Brown University, Providence, RI
Laboratory of Walter J. Atwood, PhD
Research project: Determined the role of innate antimicrobial peptides in polyomavirus infection.
- Sept. 2003 - Dec. 2007 **Graduate Student**
Pathobiology Graduate Program, Brown University, Providence, RI
Laboratory of Walter J. Atwood, Ph.D.
Research project: Investigated interactions between the human pathogen, BK Virus, and sialic acid receptors of kidney host cells.
- Sept. 2001- Aug. 2003 **Research Assistant and Laboratory Manager**
Dept. of Pathology, Beth Israel Deaconess Medical Center, Boston, MA
Laboratory of Arthur Mercurio, Ph.D.
Research project: Utilized siRNA knockdown of integrins and Rho GTPases to study the effect of these proteins on breast cancer cells in vitro and in vivo.
- Sept. 2000 - Sept. 2001 **Antibody Research Associate**
BioSource International, Hopkinton, MA

Duties: Conjugated peptides, affinity purified antibodies from serum, conducted ELISAs to assay antibody titer.

Summer 1999

Intern

Dept. of Microbiology, University of Michigan, Ann Arbor, MI
Laboratory of Don Clewell, Ph.D.

Research project: Studied the exchange of plasmids carrying antibiotic resistance genes in the bacterial species, *Enterococcus faecalis*.

TEACHING EXPERIENCE

Sept. 2010 – present

Assistant Professor

Assumption College, Worcester, MA

BIO410 – Immunology lecture and laboratory

BIO250 - Microbiology lecture and laboratory

BIO102 - Human Biology in Health and Disease lecture and laboratory

BIO160L - Concepts in Biology laboratory

BIO275 - Guest Lecturer for Special Topics: Trees

HON300/HON444 – Honors Thesis

Research mentor for 3 Honors students

BIO490 - Independent Study in Biology

Research mentor to 3 research students

INT300 – Internship

Faculty mentor for 2 off-campus student research internships

Summer undergraduate research projects (10 weeks)

Research mentor to 5 research students

July 2007, '08, '13, '14

Instructor

Summer@Brown Program, Brown University, Providence, RI

Germs in the New with laboratory

Bacteriology with laboratory

The Great Diseases

Aug. 2009 – Aug. 2010

Curriculum Developer & Content Specialist

Tufts University, Boston, MA

Great Diseases: A Collaborative Approach to Real World Science in the Classroom, NIH Research Education Grant (R25RR026012-01),

March 2010 & 2011

Guest Lecturer in Microbiology

Wellesley College, Wellesley, MA

Fall 2007

Mentored Co-Instructor

Rhode Island College, Providence, RI

Introductory Biology lecture and laboratory

2004-2005

Teaching Assistant and Lecturer

Brown University, Providence, RI

Medical Microbiology

Cancer Biology

Fall 1999

Laboratory Assistant

Smith College, Northampton, MA

Bacteriology

PUBLICATIONS

1. Stroh LJ, Gee GV, Blaum BS, **Dugan AS**, Feltkamp MCW, Atwood WJ. Trichodysplasia Spinulosa-associated Polyomavirus employs a displayed binding site on VP1 to engage sialylated glycolipids. *Plos Pathogen*. 2015. 11 (8): e1005112.
2. Asrat S, **Dugan AS**, Isberg RR. The frustrated host response to *Legionella pneumophila* is bypassed by MyD88-dependent translation of pro-inflammatory cytokines. *Plos Pathogen*. 2014. 10 (7): e1004229.
3. Bouley SJ, Maginnis MS, Derdowski A, Gee GV, O'Hara BA, Nelson CD, Bara AM, Atwood WJ, **Dugan AS**. Host cell autophagy promotes BK virus infection. *Virology*. 2014. 456-457: 87-95.
4. Barry KC, Fontana MF, Portman JL, **Dugan AS**, Vance RE. IL-1 α Signaling Initiates the Inflammatory Response to Virulent *Legionella pneumophila* In Vivo. *Journal of Immunology*. 2013. 190(12):6329-39.
5. Jordan JA, Manley K, **Dugan AS**, O'Hara BA, Atwood WJ. Transcriptional regulation of BK virus by nuclear factor of activated T cells. *Journal of Virology*. 2010. 84 (4): 1722-30.
6. Li Z, **Dugan AS**, Bloomfield G, Skelton J, Ivens A, Losick V, Isberg RR. DupA: a key regulator of the amoebal MAP kinase response to *Legionella pneumophila*. *Cell Host & Microbe*. 2009. 6 (3): 253-267.
7. Gasparovic ML, Maginnis MS, O'Hara BA, **Dugan AS**, Atwood WJ. Modulation of PML protein expression regulates JCV infection. *Virology*. 2009. 390 (2): 279-288.
8. **Dugan AS**, Maginnis MS, Jordan JA, Gasparovic ML, Manley K, Page R, Williams G, Porter E, O'Hara BA, Atwood WJ. Human alpha-defensins inhibit BK Virus by aggregating virions and blocking binding to host cells. *Journal of Biological Chemistry*. 2008. 283 (45): 31125-31132.
9. **Dugan AS**, Gasparovic ML, Atwood WJ. Direct correlation between sialic acid binding and infection of cells by two human polyomaviruses (JCV and BKV). *Journal of Virology*. 2008. 82 (5): 2560-2564.
10. **Dugan AS**, Gasparovic ML, Tsomaia N, Mierke DF, O'Hara BA, Manley K, Atwood WJ. Identification of amino acid residues in BK virus VP1 that are critical for viability and growth. *Journal of Virology*. 2007. 81 (21): 11798-11808.
11. **Dugan AS**, Eash S, Atwood WJ. Update on BK Virus entry and intracellular trafficking. *Transplant Infectious Disease*. 2006. 8 (2): 62-67.
12. Gee GV, **Dugan AS**, Tsomaia N, Meirke DF, Atwood WJ. The role of sialic acid in human polyomavirus infections. *Glycoconjugate Journal*. 2006. 23 (1-2): 19-26.
13. Lipscomb EA, Simpson KJ, Lyle SR, Ring JE, **Dugan AS**, Mercurio AM. The alpha6beta4 integrin maintains the survival of human breast carcinoma cells in vivo. *Cancer Research*. 2005. 65 (23): 10970-10976.
14. **Dugan AS**, Eash S, Atwood W. An N-linked glycoprotein with alpha(2,3)-linked sialic acid is a receptor for BK virus. *Journal of Virology*. 2005. 79 (22): 14442-14445.

15. Elphick GF, Querbes W, Jordan JA, Gee GV, Eash S, Manley K, **Dugan A**, Stanifer M, Bhatnagar A, Kroeze W, Roth BL, Atwood WJ. The human polyomavirus, JCV, uses serotonin receptors to infect cells. *Science*. 2004. 306 (5700): 1380-1383.
16. Simpson KJ, **Dugan AS**, Mercurio AM. Functional analysis of the contribution of RhoA and RhoC GTPases to invasive breast carcinoma. *Cancer Research*. 2004. 64 (23): 8694-8701.
17. Lipscomb EA, **Dugan AS**, Rabinovitz I, Mercurio AM. Use of RNA interference to inhibit integrin (alpha6beta4)-mediated invasion and migration of breast carcinoma cells. *Clinical & Experimental Metastasis*. 2003. 20 (6): 569-576.

(Underlined name indicated an Assumption undergraduate co-author)

FELLOWSHIPS AND GRANTS

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| 2014 | Assumption College Faculty Development Grant
Title: The Role of Cell Cycle in BK Virus Infection of Host Cells
(Total Awarded \$4000) |
| 2013 | Assumption College Honors Program Research Fellowship
Faculty mentor to Hieu Nguyen '15
Title: Human Immune Response to Bacterial Infection
(Total awarded \$7000) |
| 2011-2012 | American Society for Microbiology Undergraduate Summer Fellowship
Faculty mentor to Stephanie Bouley '12
Title: Determining the role of host autophagy in BK virus infection at Brown University
(Student awarded \$4000 plus travel to conference)
*39 of 69 applications were funded |
| 2011 | Assumption College Honors Program Research Fellowship
Faculty mentor to Stephanie Bouley '12
Title: Determining the role of host autophagy in BK virus infection at Brown University
(Total awarded \$7000) |
| 2009-2010 | NRSA Postdoctoral Fellowship Grant (F32AI084202-01),
National Institute of Allergy and Infectious Disease/NIH, Tufts University
Primary Investigator
Title: Dissecting the Role of ERK and DUSP on <i>Legionella pneumophila</i> Infection
(Awarded ~\$65,000 plus benefits) |
| 2009-2010 | TEACR (Training in Education And Critical Research Skills) Fellowship,
Institutional Research and Academic Career Development Award, NIH/NIGMS,
Tufts University
Trainee
Title: Dissecting the Role of ERK and DUSP on <i>Legionella pneumophila</i> Infection
(Awarded full salary and training for 3 years, but because I received NRSA grant I only accepted training) |
| 2005-2007 | GAANN Training Grant, Pathobiology Graduate Program, Brown University |

	Trainee Title of Project: Dissecting BK Virus Receptor Interactions (Awarded ~\$70,000 plus benefits)
2004-2006	Frederic Poole Gorham Biological Fellowship, Brown University Trainee Title of Project: Dissecting BK Virus Receptor Interactions
Summer 1999	Praxis summer fellowship funded through Smith College Dept. of Microbiology, University of Michigan Undergraduate Intern Title: Antibiotic Resistance in <i>Enterococcus faecalis</i> (Awarded \$2000)
Summer 1998	Summer Internship Funding Program (SIFP) fellowship through Smith College Dept. of Environmental Conservation Undergraduate Intern Title: Assessing Wellness of Fisheries in Central New York State (Awarded \$2000)

AWARDS

July 2008	Postdoctoral Travel Award, American Society for Virology
Sept. 2007	Student Travel Award, 4th International Conference on Polyomavirus and Human Disease
Aug. 2006	Charles Kuhn Graduate Award in Disease Pathogenesis, Pathobiology Graduate Program, Brown University
July 2006	Student Travel Award, American Society for Virology
1996-2000	Dean's List, Smith College

INVITED RESEARCH LECTURES – ORAL PRESENTATIONS

July 2014	<i>Host cell autophagy promotes BK virus infection.</i> XIVth International Union of Microbial Sciences (IUMS), Montreal, Canada
April 2014	<i>The Ins and Outs of BK virus infection.</i> Bryant University, Smithfield, RI
Feb. 2011, '13, '14	<i>How BK virus infects host cells,</i> "Faculty Showcase" Assumption College, Natural Science Dept. Seminar Series, Worcester, MA. * To recruit students for summer research projects.
Nov. 2012	<i>Virus vs. Host: lessons learned from BK Virus infection,</i> Hamilton College, Biology Dept. Seminar Series, Clinton, NY
Nov. 2011	<i>How human defensins protect against viral infection.</i> Rhode Island College, Biology Dept. Seminar Series, Providence RI
June 2011	<i>Alpha-defensin 5, HD5, inhibits BK virus infection.</i> Novartis, Cambridge, MA

- April 2011 *The immune system strikes back: Human defensins protect against viral infection.* Assumption College, Natural Science Dept. Seminar Series, Worcester, MA
- July 2008 *Alpha-defensins, HNP-1 and HD5, inhibit primate polyomavirus infection of host cells.* American Society for Virology, Ithaca, NY
- Sept. 2007 *The role of charged amino acids in VP1 in BK virus lifecycle.* 4th International Conference on Polyomavirus and Human Disease, Barcelona, Spain
- Aug. 2007 *Identification of amino acid residues in BK Virus VP1 critical for viability and growth.* Pathobiology Graduate Program Annual Retreat, Bristol, RI
- July 2006 *BK Virus interaction with sialic acid receptors on host cells.* American Society for Virology, Madison, WI
- Sept. 2005 *An N-linked glycoprotein with $\alpha(2,3)$ -linked sialic acid is a receptor for BK virus.* 3rd International Conference on Polyomavirus and Human Disease, Providence, RI

ACCEPTED ABSTRACTS - POSTER PRESENTATIONS

- May 2014 *Host Cell Autophagy Promotes BK virus Infection*
American Society for Microbiology 114th General Meeting, Boston, MA
- Oct. 2011 *The Role of Autophagy in BK virus Infection.*
American Society Microbiology 46th Annual Regional I Meeting, Brockton, MA
- Feb. 2006 *BK Virus Interaction with Sialic Acid on Receptors of Host Cells*
Keystone Symposium: Cell Biology of Virus Entry, Replication and Pathogenesis, Santa Fe, NM

MENTORED STUDENT PRESENTATIONS

- April 2015 Assumption College Undergraduate Research Symposium. Worcester, MA
Faculty mentor for student projects:
- Lauren Pepi: *Investigating Inhibition of Host Cell Cycle on BK Virus Infection* (poster)
 - Hieu Nguyen: *The Effect of Montamine Analogs on E. coli and S. aureus Growth* (oral)
 - Joe Douglass: *Evaluation of the iSTAT Hematocrit and Hemoglobin Tests: Improving clinical practice and outcomes* (oral)
 - Shannon Martin: *Localizaiton of EFHC1 protein in Tetrahymena thermophila axonemes using Cryo-ET* (poster)
- April 2014 Assumption College Undergraduate Research Symposium. Worcester, MA
Faculty mentor for student projects:
- Lauren Brown & Jane Dreske: *Classification and Characteristics of an Unknown Bacterium* (poster)
 - Meaghan Ekstrom & Nicole Stantial: *Determining the Identity of an Unknown Bacterium: Sphingomonas* (poster)
 - Kelly Black: *Discovering an Unknown Bacterium* (poster)
 - Anne (Maggie) Bara, Rebecca Rood, Samantha Williams, & Sarah Williams: *Identification and Characterization of the Morphological, Metabolic, and Mammalian Immune Response to an Unknown Bacterium* (poster)

- Kinga Piskorz & Tamara Salman: *Identifying an Unknown Bacterium* (poster)
 - Paul Kehoe & Jack Mourad: *Isolation and Analysis of Unknown Bacterium from the Lab Bench* (poster)
 - Anne (Maggie) Bara & Hieu Nguyen: *RAW264.7 Cellular Response to Dermacoccal and Staphylococcal Infection* (oral)
 - Julianna Elhoussan: *Psoriasis Drug Trial and Analysis of Gender, Race and Age* (poster)
- Oct. 2013 American Society for Microbiology: 48th Annual Regional Meeting, Storrs, CT
Faculty mentor for student project:
- Anne (Maggie) Bara & Hieu Nguyen: *RAW264.7 Cellular Response to Dermacoccal and Staphylococcal Infection* (poster)
- April 2013 Assumption College Undergraduate Research Symposium. Worcester, MA
Faculty mentor for student project:
- Britni Hagopian & Ally O'Malley: *Identification of an Unknown Bacterium using Genetic and Metabolic Assays* (poster)
*Winner of Poster Prize
- June 2012 American Society for Microbiology 112th General Meeting, San Francisco
Faculty mentor for student project:
- Stephanie Bouley: *The Role of Autophagy in BK Virus Infection of Host Cells* (poster)
*Received Outstanding Student Poster Award
- April 2012 Council of Undergraduate Research Posters on the Hill, Washington, D.C
Faculty mentor for student project:
- Stephanie Bouley: *The Role of Autophagy in BK Virus Infection of Host Cells* (poster)
*76 of 850 abstracts accepted
- April 2012 Assumption College Undergraduate Research Symposium, Worcester, MA
Faculty mentor for student project:
- Stephanie J. Bouley: *The Role of Autophagy in BK Virus Infection of Host Cells* (poster)

RESEARCH STUDENTS AND THEIR ACCOMPLISHMENTS

Laboratory Research Students – Including Summer Research, Independent Study (BIO490), and Honors program research (HON300/HON444)

- 2013-2015 **Hieu Nguyen '15**, Assumption College
- HON300/Hon444 Honor's Thesis Title: The effect of montamine analogs on *E.coli* and *S. aureus* growth (Oral presentation/defense-March 2015)
 - Oral Presentation at Assumption College Undergraduate Research Symposium (April 2015)
 - Awarded Assumption College Natural Science Summer Undergraduate Research Funding (summer 2014)
 - Poster Presentation at Assumption College Undergraduate Research Symposium (April 2014)
 - Presented research poster at American Society for Microbiology: Region I Meeting, Storrs, CT (Oct. 2013)

- Oral Presentation at Assumption College Natural Sciences Seminar Series (Sept. 2013)
 - Awarded Assumption College Honors Program Summer Research Fellowship (summer 2013)
 - Current position: Graduate student in Pharm.D. program at Massachusetts College of Pharmacy and Health Sciences (Fall 2015-)
- 2014-2015 **Lauren Pepi** '15 Assumption College
- Summer and BIO490 Research Project: Cell Cycle Inhibition Influences BK Virus Infection
 - Teaching Assistant for Bacteriology course, Summer@Brown program for high school students, Brown University (July 2015)
 - Poster Presentation at Assumption College Undergraduate Research Symposium (April 2015)
 - Oral Presentation at Assumption College Natural Sciences Seminar Series (Sept. 2014)
 - Awarded Assumption College Natural Science Summer Undergraduate Research Funding (summer 2014)
 - Current position: Graduate student in Ph.D. program in Chemistry at the University of Georgia (Fall 2015-)
- Summer 2014 **Sarah William** '14, Assumption College
- Summer Research Project: The Effect of Elafin on BK Virus Infection
 - Teaching Assistant for Bacteriology course, Summer@Brown program for high school students, Brown University (July 2014)
 - Current position: Graduate student in Masters of Public Health Program at Boston University (Fall 2015-)
- 2013-2014 **Maggie Bara** '14, Assumption College
- Summer and Bio490 Research Project: Immune Response to *Dermaococcus* Infection
 - Oral Presentation at Assumption College Undergraduate Research Symposium (April 2014)
 - Presented research poster at American Society for Microbiology: Region I Meeting, Storrs, CT (Oct. 2013)
 - Oral Presentation at Assumption College Natural Sciences Seminar Series (Sept 2013)
 - Teaching Assistant for Bacteriology course, Summer@Brown program for high school students, Brown University (July 2013)
 - Awarded Assumption College Natural Science Summer Undergraduate Research Funding (summer 2013)
 - Current Position: Research Associate I at Broad Institute of Harvard and MIT (July 2014-present)
- Fall 2013 **Matt Cooke** '13, Assumption College
- BIO490 Research Project: Testing for Enterovirus in Blackstone Valley Wastewater Treatment Center
 - Oral Presentation at Assumption College Undergraduate Research Symposium (April 2013)
 - Current position: Associate Scientist I at Leica Biosystems, Danvers, MA (2014-present)
- 2011- 2012 **Stephanie Bouley** '12, Assumption College

- HON300/Hon444 Honor's Thesis Title: Understanding the Role of Autophagy in BK Virus Infection
- Fulbright Scholarship, University of Tübingen, Germany (2012-2013)
- Travel Award, American Society for Microbiology, 112th General Meeting (June 2012)
- Outstanding Poster Award, American Society for Microbiology 112th General Meeting, San Francisco (June 2012)
- Poster Presentation, Posters on the Hill, Washington, DC (April 2012)
- Oral Presentation at Assumption College Undergraduate Research Symposium (April 2012)
- Oral Presentation at Assumption College Natural Sciences Seminar Series (Sept. 2011)
- Awarded American Society for Microbiology Undergraduate Summer Fellowship *39 of 69 applications were funded (summer 2011)
- Current position: Ph.D. Graduate student in Program in Experimental and Molecular Medicine at Dartmouth College, Hanover, NH (2013-present)

Mentor for off-campus internships (INT300)

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| Fall 2014 | <p>Joe Douglas '15, Assumption College</p> <ul style="list-style-type: none"> • <u>INT300 Research Project</u>: Evaluation of I-Stat hemocrit and hemoglobin tests: Improving clinical practice and outcomes • Off-campus internship at Department of Pathology, Massachusetts General Hospital, Boston, MA • Poster Presentation at Assumption College Undergraduate Research Symposium (April 2015) • Oral Presentation at Assumption College Natural Sciences Seminar Series (Feb. 2015) |
| Fall 2013 | <p>Julianne Elhoussan '14, Assumption College</p> <ul style="list-style-type: none"> • <u>INT300 Research Project</u>: Research in Rheumatoid Arthritis • Off-campus internship at UMASS Advance Clinical Care Center • Poster Presentation at Assumption College Undergraduate Research Symposium (April 2014) |

Mentor for Honors Student (HON300/HON444) conducting off-campus research

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| 2014 | <p>Shannon Martin '15, Assumption College</p> <ul style="list-style-type: none"> • <u>Hon444 Honor Thesis Title</u>: Location of EFHC1 protein in <i>Tetrahymena thermophiles</i> axonemes using Cryo-ET (Oral presentation/defense-December 2014) • <u>Hon300 Research Proposal</u>: The effect of the natural product, montamine, on BK virus infection • Awarded American Cancer Society's Fuller Fellowship program (summer 2015) • Oral presentation Assumption College Undergraduate Research Symposium (April 2015) • Oral Presentation at Assumption College Natural Sciences Seminar Series (Nov. 2014) • REU Summer Fellowship Program at Brandeis Material Research Science and Engineering Center, Waltham, MA (summer 2014) |
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Committee Member for Honor Theses

- April 2013 **Jenna Garozzo** '13 Honors Thesis title: *Molecular mechanisms of axon guidance: A study of integrins and netrin-1*
- Feb. 2015 **Elise Prayson** '15. Honors Thesis title: *Crabp1 regulates lipid accumulation in mammary gland fat cells*
- March 2015 **Kaitlin Poirier** '15 Honors Thesis title: *Cooking with Crohn's Disease- Microbiota in the Mix*

ASSUMPTION COLLEGE COMMITTEE WORK

- 2015 – present **Institutional Review Board (IRB) Committee Member**
- 2014 - present **Undergraduate Symposium Committee Member**
- 2014-2015 **Biology Program Review Committee Member**, Assumption College
- 2013 - 2014 **Faculty Search Committee Member, Physics Position in Natural Sciences Department** *Successful Search
- 2013 – present **Honors Program Council Member**
- 2013 - present **Faculty Development Grant Committee Member**
- 2013 – 2015 **Coordinator of Natural Science Departmental Seminar Series** (5 semesters)
- 2012 - 2014 **Undergraduate Symposium Committee Member**
- 2011 - 2014 **College Conduct Board Member**
- 2011 - 2012 **Curriculum Committee (Alternate) Member** (attended every meeting)
- 2011 - 2012 **Faculty Search Committee Member, Anatomy Position in Natural Sciences Dept.** *Successful Search

OTHER SERVICE AT ASSUMPTION COLLEGE

- 2014 - present **Reviewer** for scientific journals:
Microbial Pathogenesis
Journal of Molecular and Genetic Medicine
- Feb. 2015 **Faculty Participant**, Exploring Majors Fair, Assumption College
- Jan .2015 **International Group Travel Leader – 9 day trip to Costa Rica**
Organized and lead environmental and cultural student trip to Costa Rica
11 members of the Assumption community participated
- Nov. 2011-2014 **Presenter/Organizer**, “How to get a Summer Research Internship!” Natural Science Dept. Seminar Series, Assumption College

- March 2014 **International Group Travel Leader – 7 day trip to Belize**
Organized and lead biodiversity and cultural student trip to Belize
7 members of the Assumption community participated
- April 2012 **Presenter**, “Landing the Perfect Internship,” Student organized event in residential hall, Assumption College
- 2011 & 2012 **Faculty Participant**, Accepted Student Day/Yield Day, Assumption College
- Oct. 2011 **Presenter**, “How to reduce stress!” Student organized event in residential hall, Assumption College
- May 2011 **Panelist**, “Career Panel: A Career at a Liberal Arts College,” Tufts University, Department of Microbiology, Boston, MA
- April 2011 **Judge**, Undergraduate Research Symposium, Assumption College
- March 2008 **Presenter**, Microbiology and Disease Workshop for Accelerated Learning Activities Program (ALAP), Warwick, RI

PROFESSIONAL DEVELOPMENT

- May 2014 **Getting Started as a Microbiologist at a Primarily Undergraduate Institution (PUI) Workshop**
American Society for Microbiology 114th General Meeting
Boston, MA
- April 2014 **Teaching and Technology Mini Conference**
Center for Teaching Excellence and Information Technology
Assumption College, Worcester, MA
- Jan. 2014 **Designing Scientific Teaching Tools for Biochemistry and Molecular Biology (BMB) Education**
American Society for Biochemistry and Molecular Biology,
Simmons College, Boston, MA
- Oct. 2010 **Microbial Genome Annotation Regional Training (IMG-ACT)**
Department of Energy Joint Genome Institute,
Worcester State University, Worcester, MA
- July 2010 **Graduate Institute for Teaching (GIFT) Summer 4-week Intensive Workshop**
Tufts University, Medford, MA
- April 2010 **Process Oriented Guided Inquiry Learning (POGIL) Training**
National Science Foundation (NSF) funded, Newport, RI
- 2005-2007 **Teaching Certificate I Program**
Sheridan Center for Teaching and Learning, Brown University
- 2007-2008 **Teaching Certificate III Program**
Sheridan Center for Teaching and Learning, Brown University

PROFESSIONAL SOCIETY

2010 – present	Northeast Branch of American Society for Microbiology - Individual member
2008 – present	American Society for Microbiology - Associate member
2004 - present	American Society for Virology - Associate member