

CURRICULUM VITAE

Richard D. Bungiro Jr., Ph.D.

1. Richard D. Bungiro Jr., Ph.D.

Senior Lecturer
Department of Molecular Microbiology & Immunology
Brown University
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2. Address available upon request

3. Education

- 1992 Bachelor of Arts**
The Johns Hopkins University
Area of concentration: Biology
- 1999 Doctor of Philosophy**, Graduate Program in Pathobiology
Brown University
Dissertation Title: "Interleukin-12 as an adjuvant for vaccination against the parasitic helminth *Schistosoma mansoni*"

4. Appointments

- 1991-1992 Research Assistant**
Dana Center for Preventive Ophthalmology
The Johns Hopkins University School of Medicine, Baltimore MD
- 1992 Research Assistant**
Department of Molecular Microbiology and Immunology
Brown University, Providence RI
- 1992-1999 Ph.D. Candidate**
Department of Molecular Microbiology and Immunology
Brown University, Providence RI
- 1997-1998 Graduate Teaching Fellow**
The Harriet W. Sheridan Center for Teaching and Learning
Brown University, Providence RI
- 1999 Teaching Associate**
Department of Molecular Microbiology and Immunology
Brown University, Providence RI
- 1999-2004 Postdoctoral Fellow**
Department of Pediatrics, Section of Infectious Disease
Yale University School of Medicine, New Haven CT

- 2004-2008 Associate Research Scientist**
Department of Pediatrics, Section of Infectious Disease
Yale University School of Medicine, New Haven CT
- 2007-2008 Adjunct Instructor in Molecular Microbiology & Immunology**
Department of Molecular Microbiology & Immunology
Brown University, Providence RI
- 2008-2014 Lecturer in Biology**
Department of Molecular Microbiology & Immunology
Brown University, Providence RI
- 2014-present Senior Lecturer**
Department of Molecular Microbiology & Immunology
Brown University, Providence RI
- 2013-2016 Faculty Advising Fellow**
Office of the Dean of the College
Brown University, Providence RI
- 2014-present Academic Advisor**
Office of Undergraduate Biology Education
Brown University, Providence RI
- 2015-2016 Vice Chair**
College Curriculum Council
Office of the Dean of the College
Brown University, Providence RI
- 2017 Lecturer (Visiting summer appointment)**
2018 Department of Pediatrics
Section of Infectious Disease
Yale University School of Medicine, New Haven CT

5. Publications

5b. Chapters in Books

R.D. Bungiro Jr. and M. Cappello. (2004) "Helminth Infections". In: *The Encyclopedia of Gastroenterology*, L.R. Johnson (ed.), pp. 279-284, Academic Press, San Diego CA.

5c. Refereed Journal Articles

- 1) P.K. Suri, M. Goldberg, M. Madikizela, M.M. Petzke, **R.D. Bungiro Jr.**, S.J. Davies, B. Chakraborty, K.B. Nguyen, J.W. McCray Jr., & P.M. Knopf. (1997) Evaluation of recombinant protein r140, a polypeptide segment of tegumental glycoprotein Sm25, as a defined vaccine antigen against *Schistosoma mansoni*. *Parasite Immunology* **19**: 515-529.
- 2) H.C. Su, L.P. Cousens, L.D. Fast, M.K. Slifka, **R.D. Bungiro Jr.**, R. Ahmed, & C.A. Biron. (1998) CD4+ and CD8+ T cell interactions in IFN- γ and IL-4 responses to viral infections: requirements for IL-2. *Journal of Immunology*. **160**(10): 5007-5017.
- 3) **R.D. Bungiro Jr.**, M. Goldberg, P.K. Suri, & P.M. Knopf. (1999) Interleukin-12 as an adjuvant for an anti-schistosome vaccine consisting of adult worm antigens: protection of rats from cercarial challenge. *Infection and Immunity*. **67**(5): 2340-2348.

- 4) M.M. Petzke, P.K. Suri, **R.D. Bungiro, Jr.**, M. Goldberg, S.F. Taylor, S. Ranji, H. Taylor, J.W. McCray, Jr., & P.M. Knopf. (2000) *Schistosoma mansoni* gene GP22 encodes the tegumental antigen Sm25: (1) antibodies to a predicted B-cell epitope of Sm25 cross-react with other candidate vaccine worm antigens; (2) characterization of a recombinant product containing tandem-repeats of this peptide as a vaccine. *Parasite Immunology* **22**: 381-395.
- 5) A.M. Milstone, L.M. Harrison, **R.D. Bungiro Jr.**, P. Kuzmic, & M. Cappello. (2000) A broad spectrum Kunitz type serine protease inhibitor secreted by the hookworm *Ancylostoma ceylanicum*. *Journal of Biological Chemistry* **275**(38): 29391-29399.
- 6) **R.D. Bungiro Jr.**, J. Greene, E. Kruglov, & M. Cappello. (2001) Mitigation of hookworm disease by immunization with soluble extracts of *Ancylostoma ceylanicum*. *Journal of Infectious Diseases* **183**: 1380-7.
- 7) L.M. Harrison, A. Nerlinger, **R.D. Bungiro Jr.**, J.L. Cordova, P. Kuzmic, & M. Cappello. (2002) Molecular characterization of *Ancylostoma* inhibitors of coagulation factor Xa: hookworm anticoagulant activity *in vitro* predicts parasite bloodfeeding *in vivo*. *The Journal of Biological Chemistry*. **277**(8): 6223-6229.
- 8) **R.D. Bungiro Jr.**, L.M. Harrison, & M. Cappello. (2002) *Ancylostoma ceylanicum* Excretory/Secretory Protein 1: purification and molecular cloning of a major secretory protein from adult hookworms. *Molecular and Biochemical Parasitology* **119**: 147-51.
- 9) **R.D. Bungiro Jr.**, B.R. Anderson, & M. Cappello. (2003) Oral transfer of adult *Ancylostoma ceylanicum* hookworms into permissive and nonpermissive host species. *Infection and Immunity* **71**(4): 1880-1886.
- 10) M. Cappello, L.M. Harrison, **R.D. Bungiro Jr.**, R.C. Chadderdon, A. Milstone, A. Nerlinger, and P. Kuzmic. (2003) Molecular pathogenesis of hookworm anemia: prospects for a disease-based vaccine. *Journal of Parasitology* **89**(Suppl.) S158-64.
- 11) D. Chu, **R.D. Bungiro Jr.**, M. Ibanez, L.M. Harrison, E. Campodonico, B.F. Jones, J. Mieszczanek, P. Kuzmic, and M. Cappello. (2004) Molecular characterization of *Ancylostoma ceylanicum* Kunitz-type serine protease Inhibitor: Evidence for a role in hookworm associated growth delay. *Infection and Immunity* **72**(4):2214-2221.
- 12) **R.D. Bungiro Jr.**, C.V. Solis, L.M. Harrison, and M. Cappello. (2004) Purification, molecular cloning, and immunization with *Ancylostoma ceylanicum* Excretory/Secretory Protein 2, an immunoreactive protein produced by adult hookworms. *Infection and Immunity* **72**(4):2203-2213.
- 13) **R.D. Bungiro Jr.** and M. Cappello (2005) Detection of excretory/secretory coproantigens in experimental hookworm infection. *American Journal of Tropical Medicine and Hygiene* **73**(5):915-920.
- 14) M.R. Held, **R.D. Bungiro Jr.**, L.M. Harrison, I. Hamza, and M. Cappello (2005) Dietary iron content mediates hookworm pathogenesis *in vivo*. *Infection and Immunity* **74**(1):289-295.
- 15) M. Cappello, **R.D. Bungiro Jr.**, L.M. Harrison, L.J. Bischoff, J.S. Griffiths, B.D. Barrows, and R.V. Aroian. (2006) A purified *Bacillus thuringiensis* crystal protein with therapeutic activity against the hookworm parasite *Ancylostoma ceylanicum*. *Proceedings of the National Academy of Sciences* **103**(41):15154-15159.
- 16) D. Reiss, L.M. Harrison, **R.D. Bungiro Jr.**, and M. Cappello. (2007) An agar plate method for culturing hookworm larvae: analysis of growth kinetics and infectivity compared with standard coproculture techniques. *American Journal of Tropical Medicine and Hygiene* **77**(6):1087-1090.
- 17) B. Dondji, **R.D. Bungiro Jr.**, L.M. Harrison, J.J. Vermeire, C. Bifulco, D. McMahon-Pratt and M. Cappello. (2008) A role for nitric oxide in hookworm associated immune suppression. *Infection and Immunity* **76**(6):2560-2567.

- 18) **R.D. Bungiro Jr.**, T. Sun, L.M. Harrison, C.B. Shoemaker and M. Cappello. (2008) Mucosal antibody responses in experimental hookworm infection. *Parasite Immunology* 30(5):293-303.
- 19) K.C. Fairfax, J.J. Vermeire, L.M. Harrison, **R.D. Bungiro Jr.**, W. Grant, S.Z. Husain, and M. Cappello. (2009) Characterization of a fatty acid and retinol binding protein orthologue from the hookworm *Ancylostoma ceylanicum*. *International Journal for Parasitology* 39:1561-1571.
- 20) B. Dondji, T. Sun, **R.D. Bungiro Jr.**, J.J. Vermeire, L.M. Harrison, C. Bifulco, and M. Cappello. (2010) T cells mediate mucosal and systemic immune responses to experimental hookworm infection. *Parasite Immunology* 32:406-413.
- 21) D. Humphries, E. Mosites, J. Otchere, W.A. Twum, L. Woo, H. Jones-Sanpei, L.M. Harrison, **R.D. Bungiro**, B. Benham-Pyle, L. Bimi, D. Etoh, K. Bosompem, M. Wilson, and M. Cappello. (2011)
- 22) Epidemiology of hookworm infection in Kintampo North Municipality, Ghana: patterns of malaria coinfection, anemia, and albendazole treatment failure. *Am J Trop Med Hyg* 84(5):792-800.

5d. Non-Refereed Work

Invited Reviews

R.D. Bungiro Jr. and M. Cappello (2004) Hookworm infection: new developments and prospects for control. *Current Opinion in Infectious Diseases* 17:421–426.

R.D. Bungiro Jr. and M. Cappello (2011) 21st century progress toward the global control of human hookworm infection. *Current Infectious Disease Reports* 13(3):210-7.

Published Photographs

R.D. Bungiro Jr. and M. Cappello. (2004) "A hungry hookworm attaches to its host's intestinal wall". In: *Hookworms*, G. Jarrow, pg. 8, Kidhaven Press, Farmington Hills MI.

R.D. Bungiro Jr. and M. Cappello. (2008) "Hematoxylin-and-eosin-stained section of *Ancylostoma ceylanicum* attached to the small intestine of hamster gut mucosa". Cover photograph for *TRENDS in Parasitology*, Volume 24, Number 8, August 2008.

Educational Videos

R.D. Bungiro Jr. (2011) "Don't Stop B-cell-ievin' (The Immunology Song)". Video produced as a teaching tool for Brown University Course BIOL 0530: Principles of Immunology.
http://www.youtube.com/watch?v=zC_gAU2ypBQ

R.D. Bungiro Jr. (2012) "You Give Shots a Bad Name (The Anti-Anti-Vaccines Song)". Video produced as a teaching tool for Brown University Course BIOL 1600: Development of Vaccines to Infectious Diseases.
<http://www.youtube.com/watch?v=mZnrSi74lzc>

R.D. Bungiro Jr. (2012) "Malaria Gurls (The Malaria Song)". Video produced as a teaching tool for Brown University Course BIOL 1550: Biology of Emerging Microbial Diseases.
http://www.youtube.com/watch?v=w_L9Nt-viGs

R.D. Bungiro Jr. (2012) "Bind Me Maybe (The Immunology Song 2)". Video produced as a teaching tool for Brown University Course BIOL 0530: Principles of Immunology.
<http://www.youtube.com/watch?v=NEXt7Cdv6lq>

R.D. Bungiro Jr. (2012) "Threshold of Activation (The Immunology Song 3)". Video produced as a teaching tool for Brown University Course BIOL 0530: Principles of Immunology.
<http://www.youtube.com/watch?v=6QRVSPpm8Hg>

R.D. Bungiro Jr. (2013) "Get Ig (The Immunology Song 4)". Video produced as a teaching tool for Brown University Course BIOL 0530: Principles of Immunology.

<http://www.youtube.com/watch?v=i4vpGSwCkB0>

R.D. Bungiro Jr. (2014) "Hooked to a Carrier (The Immunology Song 5)". Video produced as a teaching tool for Brown University Course BIOL 0530: Principles of Immunology.

http://www.youtube.com/watch?v=Hd_PSn1vWFE

R.D. Bungiro Jr. (2015) "I Want VDJ (The Immunology Song 6)". Video produced as a teaching tool for Brown University Course BIOL 0530: Principles of Immunology.

<https://youtu.be/SwyXcZYJqlQ>

R.D. Bungiro Jr. (2016) "One Shot Away (A Vaccines Song)". Video produced as a teaching tool for Brown University Course BIOL 1600: Development of Vaccines to Infectious Diseases.

https://youtu.be/PvYBND_K2X4

R.D. Bungiro Jr. (2017) "Mr. Spock Teaches Gram Staining". Video produced as a teaching tool for Brown University Course BIOL 0510: Introductory Microbiology.

<https://youtu.be/iVhuKFO7sbk>

5f. Abstracts

Oral Presentations

43rd Annual Meeting of the American Society of Tropical Medicine and Hygiene, Cincinnati OH, November 1994. P.K. Suri, M. Goldberg, **R.D. Bungiro Jr.**, & P.M. Knopf. *Co-author of paper presented by P.K. Suri entitled: "Choice of adjuvant may affect the vaccine potential of recombinant antigen r140 against Schistosoma mansoni."* *The American Journal of Tropical Medicine and Hygiene*, 51(3): 231.

43rd Annual Meeting of the American Society of Tropical Medicine and Hygiene, Cincinnati OH, November 1994. **R.D. Bungiro Jr.**, M. Madikizela, & P.M. Knopf. "Characterization of the 5' terminus of mRNA transcribed from GP22, a *Schistosoma mansoni* gene encoding a candidate vaccine antigen." *The American Journal of Tropical Medicine and Hygiene*, 51(3): 231-232.

Annual Meeting of the Pathobiology Graduate Program, Brown University, Providence RI, September 1996. **R.D. Bungiro Jr.**, M. Goldberg, P.K. Suri, & P.M. Knopf. "Interleukin-12 and the humoral immune response in schistosomal infections."

45th Annual Meeting of the American Society of Tropical Medicine and Hygiene, Baltimore MD, December 1996. **R.D. Bungiro Jr.**, M. Goldberg, P.K. Suri, & P.M. Knopf. "Immunization with schistosomal antigens plus IL-12 leads to increased Th1-associated antibody responses that persist upon subsequent infection." *The American Journal of Tropical Medicine and Hygiene*, 55(2): 161.

Meeting of the New England Association of Parasitologists, Brown University, Providence RI, May 1997. **R.D. Bungiro Jr.**, M. Goldberg, P.K. Suri, & P.M. Knopf. "IL-12 and alum as adjuvants for an experimental anti-schistosome vaccine."

46th Annual Meeting of the American Society of Tropical Medicine and Hygiene, Orlando FL, December 1997. **R.D. Bungiro Jr.**, M. Goldberg, P.K. Suri, & P.M. Knopf. "Interleukin-12 and alum as adjuvants for an experimental anti-schistosome vaccine: effects on the humoral immune response." *The American Journal of Tropical Medicine and Hygiene*, 57(3): 164.

Paper received honorable mention in the Young Investigator Competition

Second Woods Hole Immunoparasitology Meeting, Woods Hole MA, April 1998. **R.D. Bungiro Jr.**, M. Goldberg, P.K. Suri, & P.M. Knopf. "IL-12 as an adjuvant for an *S. mansoni* vaccine: effects on humoral immunity and protection of rats from challenge infection."

Meeting of the New England Association of Parasitologists, Yale University School of Medicine, New Haven CT, May 1998. **R.D. Bungiro Jr.**, M. Goldberg, P.K. Suri, & P.M. Knopf. "Interleukin-12 as an adjuvant for a schistosome vaccine."

49th Annual Meeting of the American Society of Tropical Medicine and Hygiene, Houston TX, October 2000. **R.D. Bungiro Jr.**, E. Kruglov, & M. Cappello. "Mitigation of hookworm disease in

hamsters by immunization with soluble extracts of *Ancylostoma ceylanicum*." *The American Journal of Tropical Medicine and Hygiene* 62(3): 164.

Meeting of the New England Association of Parasitologists, Quinnipiac University, Hamden CT, October 2002. **R.D. Bungiro Jr.**, B.R. Anderson, & M. Cappello. "Oral transfer of adult hookworms into permissive and nonpermissive hosts."

51st Annual Meeting of the American Society of Tropical Medicine and Hygiene, Denver CO, November 2002. **R.D. Bungiro Jr.**, B.R. Anderson, & M. Cappello. "Oral transfer of adult *Ancylostoma ceylanicum* hookworms into permissive and nonpermissive host species." *The American Journal of Tropical Medicine and Hygiene* 67(2): 237.

683rd Meeting of the Helminthological Society of Washington, Gettysburg PA, March 2003. **R.D. Bungiro Jr.**, B.R. Anderson, & M. Cappello. "Pushing the parasitological envelope: transfer of adult hookworms into permissive and nonpermissive host species."

53rd Annual Meeting of the American Society of Tropical Medicine and Hygiene, Miami FL, November 2004. M.R. Held, **R.D. Bungiro Jr.**, L.M. Harrison, & M. Cappello. *Co-author of paper presented by M.R. Held entitled: "The Effect of Host Iron Status on Hookworm Pathogenesis."* *The American Journal of Tropical Medicine and Hygiene* 71(4): 297.

Meeting of the New England Association of Parasitologists, Yale University, New Haven CT, October 2004. **R.D. Bungiro Jr.** & M. Cappello. "Detection of parasite excretory-secretory antigens in the feces of hookworm infected animals."

Meeting of the New England Association of Parasitologists, University of Connecticut, Storrs CT, November 2005. L.M. DiFedele, **R.D. Bungiro Jr.**, L.M. Harrison, B.F. Jones, H.Y. Chen, M.R. Held, R. Gilman, M. Kosek, P. Yori, & M. Cappello. *Co-author of paper presented by L.M. DiFedele entitled: "Immune responses to hookworm infection in Latin America."*

Meeting of the New England Association of Parasitologists, University of Connecticut, Storrs CT, November 2005. M.R. Held, **R.D. Bungiro Jr.**, L.M. Harrison, D.J. Reiss, I. Howley, I. Hamza, & M. Cappello. "Dietary iron content mediates hookworm pathogenesis *in vivo*."

55th Annual Meeting of the American Society of Tropical Medicine and Hygiene, Atlanta GA, November 2006. B. Dondji, **R.D. Bungiro Jr.**, D. McMahon-Pratt, M. Cappello. *Co-author of paper presented by B. Dondji entitled: "Hookworm infection is associated with reduced lymphocyte proliferation and impaired antigen presentation."* *The American Journal of Tropical Medicine and Hygiene* 75(5 supplement): 277.

Poster Presentations

Molecular Parasitology Meeting, Woods Hole MA, September 1992. M. Madikizela, B.L. Mangold, M.D. Ricciardone, **R.D. Bungiro Jr.**, M.M. Petzke, P.K. Suri & P.M. Knopf. *Co-author of poster presented by M. Madikizela entitled: "S. mansoni: Heterogeneity among transcripts of gene GP22, a candidate vaccine antigen."*

Molecular Parasitology Meeting, Woods Hole MA, September 1994. **R.D. Bungiro Jr.**, M. Madikizela, P.K. Suri & P.M. Knopf. "Characterization of the 5' terminus of mRNA transcribed from GP22, a *Schistosoma mansoni* gene encoding a candidate vaccine antigen."

9th International Congress of Immunology, San Francisco CA, July 1995. P.M. Knopf, **R.D. Bungiro Jr.**, M.M. Petzke, M. Goldberg, P.K. Suri & J.W. McCray Jr. *Co-author of poster presented by P.M. Knopf entitled: "Multiple epitope conformations of a schistosome antigen."* Abstracts, 9th International Congress of Immunology, pg. 552.

21st New England Immunology Conference, Woods Hole MA, October 1995. **R.D. Bungiro Jr.**, P.K. Suri, M. Goldberg, & P.M. Knopf. "Interleukin-12 induces Th-1 associated antibody isotypes in mice vaccinated with solubilized membrane antigens of the parasitic helminth *Schistosoma mansoni*."

44th Annual Meeting of the American Society of Tropical Medicine and Hygiene, San Antonio TX, November 1995. **R.D. Bungiro Jr.**, M.M. Petzke, M. Goldberg, P.K. Suri, J.W. McCray Jr., &

P.M. Knopf. "Multiple epitope conformations of a schistosome antigen." Abstracts, 44th Annual Meeting of the American Society of Tropical Medicine and Hygiene, 53(2): 266.

22nd New England Immunology Conference, Woods Hole MA, November 1996. **R.D. Bungiro Jr.**, P.K. Suri, M. Goldberg, & P.M. Knopf. "Interleukin-12 as an adjuvant for experimental schistosome vaccines: effects on the humoral response."

Immunoparasitology Meeting, Woods Hole MA, April 1997. **R.D. Bungiro Jr.**, M. Goldberg, P.K. Suri, & P.M. Knopf. "Interleukin-12 and alum as coadjuvants for an experimental anti-schistosome vaccine: effects on the humoral immune response."

97th General Meeting of the American Society for Microbiology, Miami FL, May 1997. A. Shah, P.K. Suri, **R.D. Bungiro Jr.**, & P.M. Knopf. *Co-author of poster presented by A. Shah entitled: "Naked DNA vaccination for Schistosoma mansoni using the gene GP22."*

53rd Annual Meeting of the American Society of Tropical Medicine and Hygiene, Miami FL, November 2004. **R.D. Bungiro Jr.** & M. Cappello. "Detection of hookworm excretory/secretory antigens in the feces of experimentally infected animals" *The American Journal of Tropical Medicine and Hygiene* 71(4): 199.

St. Jude/Pediatric Infectious Diseases Society Pediatric Microbial Research Conference, Memphis TN, February 2005. M.R. Held, **R.D. Bungiro Jr.**, L.M. Harrison, & M. Cappello. *Co-author of poster presented by M.R. Held entitled: "Host iron status mediates hookworm pathogenesis."*

5g. Invited Lectures

Yale University School of Medicine, Department of Pediatrics Annual Research Forum, May 2005. "Hookworm pathogenesis and vaccine development: insights from permissive and nonpermissive host species".

Yale University School of Medicine, Department of Pediatrics Faculty Seminar Series, April 2007. "Molecular Pathogenesis of Hookworm Disease".

Brown University Department of Molecular Microbiology & Immunology Seminar Series, December 2007. "Hookworm infection: molecular pathogenesis and immune response".

Brown University, Faculty Fellows Advising Program, November 2010. "Hepatitis B Virus: Pathology and Prevention".

Brown University, Informational seminar hosted by Brown MEDLIFE, Community Health Departmental Undergraduate Group and University Health Services, April 2012. "Vaccine Rejection: The Public Price of Personal Choices".

Rhode Island Department of Health, Childhood Immunization Coalition meeting, June 2012. "Vaccine Rejection: The Public Price of Personal Choices".

Brown University, Academic Technology Showcase, September 2012. "BIOL 0530: Having Fun While Teaching Hard Things".

Brown University, A Day on College Hill, April 2014. "A Pox (Not) Upon Your House: The History, Science & Controversy of Vaccines."

Annual Meeting of the New England College Health Association, October 2014. "Vaccines on Campus: Raising Awareness and Dispelling Myths"

Brown University, A Day on College Hill, April 2015. "It's A Small, Measles-Infected World After All: The History, Science & Controversy of Vaccines"

Brown University, Brown Bearings (on-campus recruiting event), September 2016. "Infection, Injection, Protection! ...Rejection? The History, Science & Controversy of Vaccines"

Annual Meeting of the New England College Health Association, November 2016. "Spread the Word, Protect the Herd: Raising Vaccine Awareness on Campus"

Dr. Robert H Brown Middle School, Madison CT, June 2018. "Your Amazing, Weird and Wonderful Immune System"

6. Research Grants

6b. Completed Grants

Agency: National Institute of Allergy and Infectious Diseases, NIH
Yale Multidisciplinary Parasitology Training Program (T32 AI007404; Director: D. McMahon-Pratt)
Dates: 09/01/99-08/31/01 Role: Trainee

Agency: National Institute of Allergy and Infectious Diseases, NIH
Title: "Cloning of a Hookworm Excretory/Secretory Protein" (F32 AI051042)
Dates: 03/10/02-03/09/04 Role: Postdoctoral Fellow Amount: \$92,360

Agency: National Institute of Allergy and Infectious Diseases, NIH
Title: "Mucosal Immune Responses in Hookworm Infection" (R03 AI63110)
Dates: 03/15/05-02/28/07 Role: Principal Investigator Amount: \$161,579

Agency: National Institute of Arthritis and Musculoskeletal and Skin Disease, NIH
Yale Skin Diseases Research Core Center (P30 AR041942; PI: R. Tigelaar)
Title: "Optimization of a percutaneous model of hookworm infection" (Pilot/Feasibility Project)
Dates: 04/01/06-03/31/07 Role: Principal Investigator Amount: \$18,000

7. Service

7a. Service to the University

2010-present	Campus Accessibility Advisory Committee
2012-2015	Brown University Community Council
2013-present	Teaching With Technology Awards Committee
2013	Member of ASK Advisory Board
2013-present	Facilitator of Undergraduate Biology Commencement ceremony (announce names of approx. 175 graduating seniors)
2014	Discussion Facilitator for Transformative Conversations@BROWN workshop "How To Discuss What Matters Most To Us"
2014	Faculty Facilitator, First Generation Panel, 2014 Undergraduate Orientation
2014-2017	College Curriculum Committee
2015-2016	College Curriculum Executive Committee
2016	College Curriculum Committee NEASC Subcommittee on Undergraduate Education
2014-present	Biology Curriculum Committee
2015	Faculty Teaching Awards Committee
2015	Member of Search Committee, VP of Student Life
2015	Standing Committee on the Academic Code

2019 Evaluator for promotion review, Division of Biology

7b. Service to the Profession

2004 **Manuscript Reviewer**, *Expert Review of Vaccines*

2005-2007 **Manuscript Reviewer**, *Infection and Immunity*

2005 **Manuscript Reviewer**, *The Journal of Infectious Diseases*

2005-2007 **President**, The New England Association of Parasitologists

2008 **Manuscript Reviewer**, *Clinical and Vaccine Immunology*

7c. Service to the Community

2002-2004 **Vice President of Board of Directors**, Forgotten Felines, Westbrook CT
Forgotten Felines is a 501(c)3 nonprofit animal shelter

2002-2011 **Supplies Coordinator**, Forgotten Felines, Westbrook CT

2015-2017 **Member**, Democratic Town Committee, Madison CT

8. Honors, Fellowships & Societies

1992 **Scholarship Recipient**

1995 World Trade Club of Rhode Island

1992-1993 **Graduate Fellowship**

1996-1997 Division of Biology and Medicine, Brown University

1996-present **New England Association of Parasitologists**

1996 **Graduate Summer Fellowship**

1998 Division of Biology and Medicine, Brown University

1997 **Teaching Certificate**

Harriet W. Sheridan Center for Teaching and Learning, Brown University

1997 **Eleonore Way Presidential Award for Excellence in Teaching**

Brown University

1997 **Honorable Mention, Young Investigator Award Competition**

American Society for Tropical Medicine and Hygiene

1997-1998 **Graduate Teaching Fellowship**

Harriet W. Sheridan Center for Teaching and Learning, Brown University

1999 **Elected to Sigma Xi Membership**

Sigma Xi Scientific Research Society
(Elected to Associate Membership 1996)

2000-2004 **American Society of Tropical Medicine and Hygiene**

2010 **Barrett Hazeltine Senior Citation**

Brown University Class of 2010

First (and to date only) member of MMI to receive this citation

2011 **Dean's Award for Excellence in Undergraduate Teaching, Advising and Mentoring in the Biological Sciences**

Brown University

- 2011 **Certificate of Recognition for Exemplary Teaching**
Warren Alpert Medical School, Brown University
- 2012 **Teaching With Technology Showcase Award (BIOL 0530)**
Brown University
- 2012 **Barrett Hazeltine Senior Citation**
Brown University Class of 2012
- 2013 **Barrett Hazeltine Senior Citation**
Brown University Class of 2013
- 2014 **Barrett Hazeltine Senior Citation**
Brown University Class of 2014
First BioMed faculty member to receive this citation in three consecutive years
- 2014 **Inaugural Dean's Award for Excellence in Teaching in the Life Sciences**
Brown University
- 2014 **Comfort and Urry Prize for Leadership, Career Advising and Motivation**
Brown University
- 2015 **Barrett Hazeltine Senior Citation**
Brown University Class of 2015
First BioMed faculty member to receive this citation five times
- 2016 **Barrett Hazeltine Senior Citation**
Brown University Class of 2016
One of only three Brown faculty members (including Barrett Hazeltine) to receive at least six citations
Only Brown faculty member (besides Hazeltine himself) to receive this citation in five consecutive years
- 2016 **Inaugural SEAS Access Ambassador Award**
Office of Student and Employees Accessibility Services, Brown University
For demonstrating "exceptional awareness, inclusiveness, and support for students with disabilities".

9. Teaching

9a. Courses Led or Coconstructed

1999	BIOL 0530: Principles of Immunology (Course Leader)
2007-present	<u>Fall Enrollments</u> : 110 ('07); 116 ('08); 135 ('09); 135 ('10); 177 ('11); 233 ('12); 170 ('13); 197 ('14); 175 ('15); 218 ('16); 169 ('17); 160 ('18) <u>Summer Enrollments</u> : 10 ('99); 8 ('08); 11 ('09); 13 ('10); 23 ('11); 24 ('12); 17 ('14); 10 ('15); 19 ('16)
1999	BIOL 1550: Biology of Emerging Microbial Diseases (Course Leader)
2010 & 2012	<u>Enrollments</u> : 44 ('99); 49 ('10); 92 ('12)
2012-present	BIOL 1520: Innate Immunity (Coinstructor)
	<u>Enrollments</u> : 30 ('12); 19 ('13); 19 ('14); 19 ('15); 17 ('16); 32 ('17); 18 ('18)
2009-present	BIOL 1600: Development of Vaccines (Course Leader)
	<u>Enrollments</u> : 52 ('09); 45 ('10); 67 ('11); 65 ('12); 98 ('13); 60 ('14); 68 ('15); 75 ('16); 103 ('17); 114 ('18); 72 ('19)
2009-present	BIOL 0510: Introductory Microbiology (Coinstructor & Laboratory Director)
	<u>Enrollments</u> : 39 ('09); 63 ('10); 75 ('11); 62 ('12); 72 ('13); 81 ('14); 101 ('15); 110 ('16); 89 ('17); 100 ('18); 110 ('19)
2009	BIOL 2980: Graduate Independent Study
2011 & 2018	BIOL 2640C: The Immune System
	<u>Enrollments</u> : 15 ('11); 20 ('18)
2013	BIOL 0510: Introductory Microbiology (Course Leader/Laboratory Director)
	<u>Enrollment</u> : 72
2013	BIOL 0960: Independent Study in Science Writing
2013 & 2015	BIOL 1950: Directed Research/Independent Study
2014 & 2016	BIOL 1960: Directed Research/Independent Study
2014-2016	CEBI 0965: The Immune System: Your Inner Warrior (Course Leader)
	3 week pre-college summer course
2015	Faculty Sponsor, Undergraduate Research and Teaching Award
	Student's project was to develop a course-specific online laboratory manual for BIOL 0510 to be introduced in Spring 2016
2017	BIOL 0190S: Phage Hunters Part II (Coinstructor)
	<u>Enrollment</u> : 19
2018	GISP 0010: Memes and the Language of the Internet (Faculty Cosponsor)
	<u>Enrollment</u> : 8
2018-present	BIOL 1550: Biology of Emerging Microbial Diseases (Coinstructor)
	<u>Enrollments</u> : 41 ('18); 37 ('19)

9b. Guest Lectures Given

2000-2002	BIOL 1890: Human Histology
2002	Biology of Parasitic Protozoa and Helminths (Yale Univ. Course #EMD 664b)
2005	Advanced Topics in Molecular Parasitology (Yale Univ. Course #EMD 680a)
2005-2006	Role of Microorganisms in the Living World (Yale Univ. Course #EMD 642a)
2007-2009 2011 2013-2016	BIOL 1550: Biology of Emerging Microbial Diseases (2-3 lectures/year)
2008	Development of Vaccines (Univ. of Rhode Island Course #MTC 594)
2008 2010	BIOL 2640A: Viral Immunology
2008-2009 2011-2013	BIOL 0180: Biology of AIDS (2 lectures/year)
2008-2011	BIOL 1520: Innate Immunity ('08: 2 lectures; '09: 7 lectures; '10: 8 lectures; '11: 7 lectures)
2010-2013 2015	BIOL 0380: The Ecology and Evolution of Infectious Disease
2011	BIOL 3653: Integrated Medical Sciences II - Humoral Immunity Lecture
2011-2013	BIOL 1560: Virology (2 lectures/year)
2013	BIOL 1560: Virology (Pfizer) (2 lectures)
2013	BIOL 0940A: Viral Epidemics (2 lectures)

9c. Academic Advising and Related Activities

2009-2012	Member of Ph.D. Thesis Committee , Pathobiology Program
2009 & 2012	Royce Fellowship Advisor
2009-present	Reader for Senior Honors Theses
2009-present	First Year Advisor
2009-present	Sophomore Advisor
2009-present	MMI Representative at Academic Expos and Concentration Fairs
2010-2013	Randall Advisor (University-wide sophomore advising)
2010-present	Concentration Advisor for Biology
2010-present	Team Enhanced Advising and Mentoring (interdisciplinary advising collective)
2011	Judge for Radcliffe Hicks Prize Competition , Brown Debating Union
2011	Invited Speaker for Faculty Lunch Series , Summer@Brown
2011	Invited Speaker for Faculty Dinner , Women in Science and Engineering
2011-2012	Host for Film with Faculty Series , Curricular Resource Center
2012	Invited Speaker , Brown Women's Crew Commencement Celebration

2012 **Panelist**, Sheridan Center Voices - Past, Present & Future

2013 **Invited Performer**, Brown MED International Heartbeats Mixer

2013-2016 **Faculty Advising Fellow**

2013 **Invited Speaker**, Meiklejohn Advising Program Orientation

2013 **Invited Speaker**, Matched Advising Program for Sophomores panel “How to best engage faculty”

2014 **Invited Performer**, Brown Faculty Talent Show

2014 & 2015 **Invited Performer**, Brown UNICEF Comedy Show

2014 **Host for Film Screening**, Community Health Advocacy Program

2014 **Host for Film Screening**, Brown University Film Forum

2014-present **Advisor for Brown-RISD dual degree students**

2015-present **Pre-Planning Advisor**, Office of Biology Undergraduate Education (initial advising contact for students intending to declare concentrations in Biology)

2016 **Invited Panelist**, Brown UNICEF “Believe in Zero” panel discussion

2016-2018 **Faculty Representative**, SEAS Self-Advocacy Workshop (informational session for undergraduates with disabilities)

2017 **Moderator**, Brown Christian Union and BioLogos event “Are We More Than Our Genes?”

2018 **Invited Speaker**, Dr. Robert H. Brown Middle School, Madison CT “Your Amazing, Weird and Wonderful Immune System”