**Luis R. Martinez, Ph.D., MBA**

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**Education**

M.B.A. Pace University, New York, NY, Lubin School of Business, 2014

Ph.D. Albert Einstein College of Medicine, Bronx, NY, Microbiology and Immunology, 2006

M.S. Long Island University, Brooklyn, NY, Biology, 2001

B.S. University of Puerto Rico, Mayagüez, PR, Industrial Microbiology, 1998

**Academic Positions**

*Associate Professor*, Department of Biological Sciences, The Border Biomedical Research Center (BBRC), University of Texas at El Paso (UTEP), TX, 2017-Present

*Associate Professor*, Department of Biomedical Sciences, New York Institute of Technology College of Osteopathic Medicine (NYIT COM), Old Westbury, NY, 2014-2017

*Adjunct Assistant Professor*, Department of Health Professions, York College of the City University of New York (CUNY), Queens, NY, 2013-2014

*Adjunct Assistant Clinical Professor*, Department of Medicine, Division of Infectious Diseases, Albert Einstein College of Medicine, Bronx, NY, 2011-Present

*Faculty* of the Dermatology Basic Science/Translational Research Program, Department of Dermatology, Albert Einstein College of Medicine, Bronx, NY, 2008-2015

*Assistant Professor*, Department of Biomedical Sciences, Long Island University-Post (LIU-Post), Brookville, NY, 2011-2014 (Promoted to *Associate Professor* with Tenure in 2014)

*Assistant Professor***,** Department of Biology and Medical Laboratory Technology,Bronx Community College (CUNY), Bronx, NY, 2009-2010

Post-doctoral fellow, Department of Medicine, Division of Infectious Diseases, Albert Einstein College of Medicine, Bronx, NY, 2006-2011

**Honors and Awards**

NYIT Faculty Scholar (distinguished speaker; 2017); AAAS Leshner Public Engagement Fellow in Infectious Diseases (2017-2018); ABRCMS Judges' Travel Subsidy Program (2015); Thomas J. Walsh Junior Investigator Award of the Medical Mycological Society of the Americas (2014); Scholar, Cold Spring Harbor Laboratories (2012); Long Island Business News, Health Care Hero Award (2011); Long Island University Research Faculty Committee Award (2011-2014); Benjamin Cummings/MACUB Student Research Award (2011-2013); Einstein, Dennis Shield Travel Award for Outstanding Post-doctoral Research (2010); NIH, Loan Repayment Program (2010-2014); NIH, Molecular Pathogenesis Training Grant (2006-2010); American Society for Microbiology General Meeting Minority Travel Award (2007); Scholar, Woods Hole Marine Biological Laboratory (2006); FASEB-MARC Travel Award to Experimental Biology Annual Meeting (2001)

**Teaching Experience**

Department of Biomedical Sciences, NYIT COM, Old Westbury, NY 2014-Present

* **Associate Professor** for Medical Microbiology (Mycology and Virology) and Immunology lectures for first and second year medical students (315 students per class). Led discussion and review sessions to clarify microbiological and immunological concepts.

Department of Health Professions, York College (CUNY), Queens, NY 2013-2014

* **Adjunct Assistant Professor** for Medical Mycology for undergraduate students majoring in health-related careers. Led discussion, laboratory, and review session to clarify medical mycology and immunology principles.

Department of Biomedical Sciences, LIU-Post, Brookville, NY Spring 2011-2014

* **Tenure-Track Assistant Professor** for Microbiology in Health Sciences, Clinical Immunology (*writing intensive course*), and Medical Mycology and Parasitology for undergraduate students majoring in health-related careers. Led discussion, laboratory, and review session to clarify basic microbiology and immunology principles. Guided students on their thesis projects for the Honors program.

Department of Biology, Bronx Community College (CUNY), Bronx, NY 2009-2010

* **Assistant Professor** for Microbiology and Infection Control, Anatomy and Physiology, Human Biology, and Medical Terminology for undergraduate students majoring in nursing and health-related careers. Led discussion, laboratory, and review session to clarify basic biology principles.

**Mentoring** (\* Research recognition award; † Under-represented minority groups; ϕ Peer-reviewed publication)

NYIT COM, 2014-Present

***Currently supervising medical student research for*:** Brenda Bukowiecki, Carly Epstein, Christian Belisario\* (2017 NYIT COM’s Scholar), Daniel Warda, Daniela DiCaro\*, Eleonora Koshchak, Jaclyn Del Pozzo, Kirshan Patel, Samuel Hoffman, Shenika Shah

***Supervised medical student research for*:** Christina Monteleone, Christopher Wilesϕ, Dylan Carmichael\*, George Koutsouras\*ϕ, Harsh Shah\*ϕ, Jawad Ahsan, Lilit Aslanyan\*ϕ, Nicholas Koroneos, Ron Varkey, Shreena Desai, Siddhant Kulkarni, Stevie Stauble, Yana Kryvokhyzha, Yevgeniy Kharonov\*

***Undergraduate Students through the NYIT Advanced Research Core (ARC) program*:** Arjun Vidyasagar, Maryann Assaf, Sabrina Gao, Rena Daniel

LIU-Post, 2011-2014

* ***Supervised MS thesis research for*:** Chitralekha Macherlaϕ, Shenan Patelϕ, Gunjan Desaiϕ, Dhavan Patelϕ, Jay Gandhiϕ, Habibullah Peerzadaϕ, Melissa Asplund\*ϕ, Vaibhav Ekharϕ, Swetha Manepalli\*ϕ, Asan Abdulkareemϕ, Bhavikkumar Shah, Suvarna Krishnamoorthy\*ϕ, Edra Sorrentino†ϕ, Q Jaekyu Jeong, Renita Jewth, Sergio Salamanca\*†ϕ, Dana Parisi\*ϕ, Gregory Jerome†, Hiu Ham Leeϕ
* ***Undergraduates*:** Jade M. Greco\*ϕ, Samantha J. Orsinger-Jacobsen\*ϕ, Mohammed Ahmadi\*ϕ, Laryssa Grguric\*, Maxine Tauber\*, Owen Chen, Cathleen Joseph†, Paul Kim, Lauren Bennett
* ***High School students*:** Anum Mitha\*, Allison Bellesheim\*
* ***Volunteer:*** Valerie Vaval†

Student Outcomes (2011-Present):

**Awards:**

*National:* Siemens-American Society of Clinical Pathologists Scholarship (2014, 2015), University of California-San Diego Amgen Scholar Program (2013), NIH-NIAID INRO program (2014), and Travel awards (2012, MMSA to attend the ASM general meeting in San Francisco, CA and ASM Annual Biomedical Research Conference for Minority Students (ABRCMS) in San Jose, CA)

*Regional:* MACUB Student Research grants (2011, 2012, 2013)*,* MACUB Best Poster in the microbiology and immunology section (2012, 2013)*,* First place in the Long Island Junior Varsity Science and Engineering Fair (High School; 2013)*,* and Recognition award in the New York State Science and Engineering Fair (High School; 2014)

*Institutional:* NYIT COM Academic Medical Scholar program (2015-2017), LIU-Post Outstanding Medical Biology Graduate student Award (2013, 2015)*,* William T. Bell Clinical Laboratory Sciences Award (2013)*,* andDr. Lawrence Strauss Memorial Scholarship (2013)

**Employment (Avg. 3 months after graduation, 100% rate):**

*Government:* Argonne National Laboratories, Koya University in Iraq, US Environmental Protection Agency

*Healthcare:*Atlanticare,Icon Global Central Laboratories, Maimonides Medical Center, NYIT COM, NYU Medical Center, Virginia Commonwealth University, Weill Cornell Medical College, Westchester Medical Center, Winthrop-University Hospital

*Pharmaceutical & Biotechnology:*Abbott Pharmaceuticals,Actelion Pharmaceuticals, Baxter Healthcare Corp., CVS Pharmacy, Genentech, Guardian Drug Company, Siemens, Zoetis

**Students pursuing a Higher or Professional degree:**

Anum Mitha, BS/DO student, NYIT COM (2014; junior)

Allison Bellesheim, BS student in Pre-Physician Assistant Studies, Hofstra University (2015; freshman)

Dana Parisi, PhD student, Hunter College (2016; first year)

Dhavan Patel, PharmD student, Massachusetts College of Pharmacy & Health Sciences (2016; first year)

Laryssa Grguric-Smith, MS student in Nutrition, LIU-Post (2015; graduated)

Mohammed Ahmadi, DO student, NYIT COM (2016; first year)

Sergio Salamanca, PhD student, Stony Brook University (2015; first year)

Ph.D. Thesis Committees:

Jorge Aguilar, MD/PhD candidate in 2017, Dept. of Microbiology and Immunology, Einstein

Mansa A. Munshi, PhD candidate in 2018, Dept. of Microbiology and Molecular Genetics, Stony Brook U

Carlos M. De Leon-Rodriguez, PhD candidate in 2017, Dept. of Microbiology and Immunology, Einstein

Paul Castellano, PhD candidate in 2017, Dept. of Microbiology and Molecular Genetics, Rutgers-NJSM

Volunteer at Career Mentoring Panels:

National Research Mentoring Network (Mentor) 2015-Present

Career Panelist at the David J. Heslin Memorial PhD Alumni Symposium at Einstein 2015

American Society for Microbiology (ASM) Mentoring Breakfast (From Graduate student to Postdoc) 2015

The Student and Postdoc Lounge at the ASM General meeting 2015

Community and Outreach service:

Montefiore Health Opportunities Program, Bronx, NY (Talked to students from disadvantage background) 2017

New York City Science and Engineering Fair, New York, NY (judged HS microbiology projects) 2009-2014

ASM’s Committee on Microbiological Issues Impacting Minorities (CMIIM; appointed member) 2012-Present

ASM’s Communication Committee’s Member Empowerment Taskforce (appointed member) 2015-Present

Annual Biomedical Research Conference for Minority Students (ABRCMS; judge) 2015

ISHAM’s working group on “Fungal biofilms and new therapeutic discoveries (appointed member) 2016

**University Service**

**NYIT COM**

Biosafety committee 2016

Biomedical Sciences and Anatomy Departments Faculty’s Search Committee for Arkansas new COM site 2015

Anatomy Department Faculty’s Search Committee 2015

Academic Medicine Scholar’s Selection Committee 2015-Present

Medical School Admission Committee 2014-Present

Research OversightCommittee Member 2014-Present

**LIU-Post**

School of Health Professions and Nursing Dean’s Search Committee 2014

Graduation Faculty Marshall 2014

Biomedical Science Department’s Curriculum Review 2013-2014

Outcomes Assessment Steering Committee Task Force on General Education 2013-2014

Athletics, Orientation & Student Life Committee 2013-2014

Institutional Animal Care and Use Committee (IACUC) 2013-2014

Summer Science Research Workshop 2011-2013

* *Advised and Presented* research work to high school science teachers that were interested in participating in or starting a science research program for their students.

High School Research Student Field Trip 2011

* *Advised* Long Island high school students interested in pursuing a career in life sciences.

Middle States Accreditation Committee 2011

* *Collected* institutional evidence for the sub-committee on Student Support Services.

Common Hour Lunch Series 2011

* *Advised* students interested in becoming biomedical scientists.

**Professional Development**

Cold Spring Harbor Laboratory, Cold Spring Harbor, NY 2012

*Protein Purification and Characterization*

* Learned techniques of protein isolation and characterization.

Institutional Animal Care and Use Committee, Boston, MA 2012

*IACUC 101: The Basics*

* Learned basic information of IACUC administration.

Marine Biological Laboratory, Woods Hole, MA 2006

[*Molecular Mycology: Current Approaches to Fungal Pathogenesis*](http://www.mbl.edu/education/courses/special_topics/momy.html)

* Learned molecular methods for studying fungal pathogens important in human disease.

New York Academy of Sciences, New York, NY 2005

*From Idea to IPO: the technology venture*

* Learned to build businesses that commercialize university-owned intellectual property.

**Professional Memberships:** American Association for the Advancement of Science; American Society for Microbiology; American Society of Cell Biology; Council on Undergraduate Research; International Society for Human and Animal Mycology; Medical Mycology Society of the Americas; Society for Leukocyte Biology

**Peer-Reviewed Publications (\* Undergraduate and † Graduate student co-authors)**

Complete list (*62 publications*) of Published Work in MyBibliography:

<http://www.ncbi.nlm.nih.gov/sites/myncbi/10c9nOi9rn8An/bibliography/48062664/public/?sort=date&direction=descending>

1. Ramos, R. L., K. Alviña, and **L. R. Martinez**. 2017. Diversity of graduates from bachelor’s, master’s, and doctoral degree neuroscience programs in the United States. J Undergrad Neurosci Educ. *In Press*.
2. Aslanyan†, L., V. V. Ekhar†, C. M. DeLeon-Rodriguez, and **L. R. Martinez**. 2017. Capsular specific IgM enhances complement-mediated phagocytosis and killing of *Cryptococcus neoformans* by methamphetamine-treated J774.16 macrophage-like cells. Int Immunopharmacol. **49:**77-84.
3. Zhang, L., C. Wiles†, **L. R. Martinez**, and G. Han. 2017. Neutrophil to lymphocyte ratio decreases after treatment of psoriasis with therapeutic antibodies. J Euro Acad Dermatol Venereol. *In Press*.
4. Aslanyan†, L., D. A. Sanchez, S. Valdebenito, E. A. Eugenin, R. L. Ramos, and **L. R. Martinez**. 2017. The crucial role of biofilms in *Cryptococcus neoformans* survival within macrophages and colonization of the central nervous system. J. Fungi. **3:**10.
5. Koutsouras†, G. W., R. L. Ramos, and **L. R. Martinez**. 2016. Role of microglia in fungal infections of the central nervous system. Virulence. **18:**1-14.
6. Mihu, M. R., V. Cabral, R. Pattabhi, M. T. Tar, K. P. Davies, A. J. Friedman, **L. R. Martinez**, and J. D. Nosanchuk. 2016. Sustained nitric oxide releasing nanoparticles interfere with methicillin-resistant *Staphylococcus aureus* adhesion and biofilm formation in a rodent central venous catheter model. Antimicrob Agents Chemother. **61:** e02020-16.
7. Delfiner†, M. S., **L. R. Martinez**, and C. S. Pavia. 2016. A Gram stain hands-on workshop enhances first year medical students’ technique competency in comprehension and memorization. PLoS One. **11:**e0163658.
8. Castellano, P., C. Nwagbo, **L. R. Martinez**, and E. A. Eugenin. 2016. Methamphetamine compromises gap junctional communication in astrocytes and neurons. J Neurochem. **137:**561-75.
9. Cordero, R. J., S. C. Liedke, G. De Souza-Araujo, **L. R. Martinez**, L. Nimrichter, S. Frases, J. M. Peralta, A. Casadevall, M. L. Rodrigues, J. D. Nosanchuk, and A. J. Guimaraes. 2016. Enhanced virulence of *Histoplasma capsulatum* through transfer and surface incorporation of glycans from *Cryptococcus neoformans* during co-infection. Sci Rep. **6:**21765.
10. Ahmadi\*, M., H. H. Lee†, D. A. Sanchez\*, A. J. Friedman, M. T. Tar, K. P. Davies, J. D. Nosanchuk, and **L. R. Martinez**. 2016. Sustained nitric oxide releasing nanoparticles induce cell death in *Candida albicans* yeast and hyphal cells preventing biofilm formation *in vitro* and in a rodent central venous catheter model. Antimicrob Agents Chemother. **60:**2185-2194*.* {Article featured in the website Nanowerk. http://www.nanowerk.com/nanotechnology-news/newsid=42433.php}
11. Shah†, H., and **L. R. Martinez**. 2016. Current approaches to implement citizen science in the classroom. J Microbiol Biol Educ. **17:**17-22.
12. Krishnamoorthy†, S., Shah†, B. P., Lee†, H. H., and **L. R. Martinez**. 2015. Microbicides alter the expression and function of RND-type efflux pump AdeABC in biofilm-associated cells of *Acinetobacter baumannii* clinical isolates. Antimicrob Agents Chemother. **60:**57-63.
13. Radu, M. R., J. Roman-Sosa, A. K. Varshney, E. A. Eugenin, B. P. Shah†, H. H. Lee†, L. N. Nguyen, A. J. Guimaraes, B. C. Fries, J. D. Nosanchuk, and **L. R. Martinez**. 2015. Methamphetamine alters the antimicrobial efficacy of phagocytic cells during methicillin-resistant *Staphylococcus aureus* skin infections. mBio. **6:**e01622-15. {Article featured in ASM’s mBiosphere blog, http://mbioblog.asm.org/mbiosphere/2015/11/yet-another-reason-to-avoid-methamphentamine-negative-effects-of-meth-on-wound-healing.html; Editor’s pick}
14. Grguric-Smith\*, L. M., H. H. Lee†, J. A. Gandhi†, M. B. Brennan†, C. M. DeLeon-Rodriguez, C. Coelho, G. Han, and **L. R. Martinez**. 2015. Neutropenia exacerbates infection by *Acinetobacter baumannii* clinical isolates in a murine wound model. Frontier Microbiol. **6:**1134.
15. **Martinez, L. R.** 2015. Role of Sterylglucosidase 1 (Sgl1) on the pathogenicity of *Cryptococcus neoformans*: potential applications for vaccine development. Front. Microbiol. **6:**1112. {Expert commentary; invited}
16. Abdulkareem†, A. F., H. H. Lee†, M. Ahmadi\*, and **L. R. Martinez**.2015. Fungal serotype-specific differences in bacterial-yeast interactions. Virulence. **6:**654-9. {Highlighted commentary on article in Virulence. **6:**677-678}
17. **Martinez, L. R.** and A. Casadevall. 2015. Biofilm Formation by *Cryptococcus neoformans*. Microbiol Spectrum. **3 (3):**MB-0006-2014.
18. Salamanca†, S. A., E. E. Sorrentino†, J. D. Nosanchuk, and **L. R. Martinez**. 2015. Impact of methamphetamine in infection and immunity. Front Neurosc. **8:**445.
19. Parisi†, D. N. and **L. R. Martinez**. 2014. Intracellular *Haemophilus influenzae* invades the brain: Is zyxin a critical blood brain barrier component regulated by TNF-alpha? Virulence. **5:**645-647. {Expert commentary; invited}
20. Gandhi†, J. A., V. V. Ekhar†, M. B. Asplund†, A. F. Abdulkareem†, M. Ahmadi\*, C. Coelho, and **L. R. Martinez**. 2014. Alcohol enhances *Acinetobacter baumannii*-associated pneumonia and systemic dissemination by impairing neutrophil antimicrobial activity in a murine model of infection. PLoS One. **9 (4):**e95707.
21. Tar, M. T., **L. R. Martinez**, J. D. Nosanchuk, and K. P. Davies. 2014. The effect of methamphetamine on an animal model of erectile function. Andrology. **2:**531-536.
22. Orsinger-Jacobsen\*, S. J., S. S. Patel†, E. M. Vellozzi, P. Gialanella, L. Nimrichter, K. Miranda, and **L. R. Martinez**. 2013. Use of a stainless steel washer platform to study *Acinetobacter baumannii* adhesion and biofilm formation on abiotic surfaces. Microbiology. **159:**2594-2604. {Images from the article were selected for the cover of the issue}
23. Manepalli†, S., J. A. Gandhi†, V. V. Ekhar†, M. B. Asplund†, C. Coelho, and **L. R. Martinez**. 2013. Characterization of a cyclophosphamide-induced murine model of immunosuppression to study *Acinetobacter baumannii* pathogenesis. J Med Microbiol. **62:**1747-1754.
24. Varshney, A. K., X. Wang, M. D. Scharff, J. MacIntyre, R. S. Zollner, O. V. Kovalenko, **L. R. Martinez**, F. R. Byrne, and B. C. Fries. 2013. Staphylococcal enterotoxin B-specific monoclonal antibody 20B1 successfully treats diverse *Staphylococcus aureus* infections. J Infect Dis. **208:**2058-2066.
25. Patel†, D., G. M. Desai†, S. Frases, R. J. Cordero, C. M. DeLeon-Rodriguez, E. A. Eugenin, J. D. Nosanchuk, and **L. R. Martinez**. 2013. Methamphetamine enhances *Cryptococcus neoformans* pulmonary infection and dissemination to the brain. MBio. **4:**e00400-13.{Article featured in The Los Angeles Times. <http://www.latimes.com/news/science/sciencenow/la-sci-sn-meth-lung-infection-20130730,0,2202905.story>; Editor’s pick}
26. Asplund†, M. B., C. Coelho, R. J. Cordero, and **L. R. Martinez**. 2013. Alcohol impairs J774.16 macrophage-like cell antimicrobial functions in *Acinetobacter baumannii*infection. Virulence. **4:**467-472.{Highlighted commentary on article in Virulence. **4:**435-436}
27. Eugenin, E. A., J. M. Greco\*, S. Frases, J. D. Nosanchuk, and **L. R. Martinez**. 2013. Methamphetamine Alters Blood Brain Barrier Protein Expression Facilitating Central Nervous System Infection by Neurotropic *Cryptococcus neoformans*. J Infect Dis. **208:** 699-704. {Images from the article were selected for the cover of the issue}
28. Peerzada†, H., J. A. Gandhi†, A. J. Guimaraes, J. D. Nosanchuk, and **L. R. Martinez**. 2013. Methamphetamine administration modifies leukocyte proliferation and cytokine production in murine tissues. Immunobiology. **218:**1063-1068.
29. **Martinez, L. R.** 2012. Nitric Oxide Releasing Nanoparticles: Challenges and Future Prospects of Therapeutic Delivery. Ther Deliv. **3:**1139-1142. {Expert commentary; invited}
30. Nicola, A. M., P. Albuquerque, **L. R. Martinez**, R. A. Dal-Rosso, C. Saylor, M. De Jesus, J. D. Nosanchuk, and A. Casadevall. 2012. Macrophage autophagy in immunity to *Cryptococcus neoformans* and *Candida albicans*. Infect Immun. **80:**3065-3076.
31. Macherla†, C., D. A. Sanchez, M. Ahmadi\*, E. M. Vellozzi, A. J. Friedman, J. D. Nosanchuk, and **L. R. Martinez**. 2012. Nitric oxide releasing nanoparticles for treatment of *Candida albicans* burn infections. Front Microbiol. **3:**193.
32. Blecher, K., **L. R. Martinez**, C. Tuckman-Vernon, P. Nacharaju, D. Schairer, J. Chouake, J. M. Friedman, A. Alfieri, C. Guha, J. D. Nosanchuk, and A. J. Friedman. 2012. Nitric oxide releasing nanoparticles accelerate wound healing in NOD-SCID mice. Nanomedicine. **8:**1364-1371.
33. Han, G., L. N. Nguyen, C. Macherla†, Y. Chi, J. M. Friedman, J. D. Nosanchuk, and **L. R. Martinez**. 2012. Nitric oxide releasing nanoparticles accelerate wound healing by promoting fibroblast migration and collagen deposition. Am J Pathol.**180**:1465-73.
34. Schairer, D., **L. R. Martinez**, K. Blecher, J. Chouake, P. Nacharaju, P. Gialanella, J. M. Friedman, J. D. Nosanchuk, and A. J. Friedman. 2012. Nitric oxide nanoparticles: Pre-clinical utility as a therapeutic for intramuscular abscesses. Virulence. **3**:62-67.
35. Silva, F., D. Rossi, **L. R. Martinez**, S. Frases, F. Fonseca, C. Campos, M. Rodrigues, J. D. Nosanchuk, and S. Daffre. 2011. Effects of microplusin, a copper-chelating antimicrobial peptide, against *Cryptococcus neoformans*. FEMS Microbiol Lett. **324**:64-72.
36. Cordero, R. J., B. Pontes, A. J. Guimaräes, **L. R.** **Martinez**, J. Rivera, B. C. Fries, L. Nimrichter, M. L. Rodrigues, N. B. Viana, and A. Casadevall. 2011. Chronological aging is associated with biophysical and chemical changes in the capsule of *Cryptococcus neoformans*. Infect Immun. **79**:4990-5000.
37. Friedman, A. J., K. Blecher, D. Schairer, C. Tuckman-Vernon, P. Nacharaju, D. Sanchez, P. Gialanella, **L. R. Martinez**, J. M. Friedman, and J. D. Nosanchuk. 2011. Improved antimicrobial efficacy with nitric oxide releasing nanoparticle generated S-nitrosoglutathione. Nitric Oxide. **25**:381-386
38. Friedman, A. J., K. Blecher, D. Sanchez, C. Tuckman-Vernon, P. Gialanella, J. M. Friedman, **L. R. Martinez**, and J. D. Nosanchuk. 2011. Susceptibility of Gram Positive and Negative Bacteria to Novel Nitric Oxide-Releasing Nanoparticle Technology. Virulence. **2**:217-221.
39. Nguyen, L. N., D. Trofa, B. Kadereit, Z. Hamari, M. Agovino, **L. R. Martinez**, A. Gacser, D. L. Silver, and J. D. Nosanchuk. 2011. *Candida parapsilosis* Fat storage-Inducing Transmembrane (FIT) protein 2 Regulates Lipid Droplet Formation and Impacts Virulence. Microbes Infect. **13**: 663-672.
40. Prados-Rosales, R., A. Baena, **L. R. Martinez**, J. Luque-Garcia, R. Kalscheuer, U. Veeraraghavan, C. Camara, J. D. Nosanchuk, G. S. Besra, B. Chen, J. Jimenez, A. Glatman-Freedman, W. R. Jacobs Jr, S. A. Porcelli, and A. Casadevall. 2011. *Mycobacteria* release active membrane vesicles that modulate immune responses in a TLR2 dependent-manner in mice. J Clin Invest. **121:**1471-83.
41. Mihu, M. R. and **L. R. Martinez**. 2011. Novel therapies for treatment of multi-drug resistant *Acinetobacter baumannii* skin infections. Virulence. **2:**97-102. {Invited review}
42. Guimarães, A. J., **L. R.** **Martinez**, and J. D. Nosanchuk. 2011.Passive administration of monoclonal antibodies against fungal pathogens. J Vis Exp. **48:**2532.
43. **Martinez, L. R.** and B. C. Fries. 2010. Fungal biofilms: relevance in the setting of human disease. Curr Fungal Infect Rep. **4:**266-275. {Invited review}
44. Lopes, L.C., R. Rollin-Pinheiro, A. J. Guimarães, V. C. Bittencourt, **L. R. Martinez**, W. Koba, S. E. Farias, J. D. Nosanchuk, and E. Barreto-Bergter. 2010.Monoclonal antibodies against peptidorhamnomannans of *Scedosporium apiospermum* enhance the pathogenicity of the fungus.PLoS Negl Trop Dis. **4(10):**e853.
45. **Martinez, L. R.**, M. R. Mihu, M. Tar, R. J. Cordero, G. Han, A. J. Friedman, J. M. Friedman, and J. D. Nosanchuk. 2010. Anti-biofilm and antifungal efficacy of chitosan against candidal biofilms using an *in vivo* central venous catheter model. J Infect Dis. **201:**1436-40. {Images from the article were selected for the cover of the issue}
46. Varshney, A. K., **L. R. Martinez**, S. M. Hamilton, A. E. Bryant, M. H. Levi, P. Gialanella, D. L. Stevens, and B. C. Fries. 2010. Augmented production of Panton Valentine Leukocidin toxin in methicillin resistant and sensitive *Staphylococcus aureus* is associated with worse outcome in murine skin infection model. J Infect Dis. **201:**92-6.
47. Mihu, M. R., U. Sandkovsky, G. Han, J. M. Friedman, J. D. Nosanchuk, and **L. R. Martinez**. 2010. The use of nitric oxide releasing nanoparticles as a treatment against *Acinetobacter baumannii* in wound infections. Virulence. **1:**62-7. {Highlighted commentary on article in Virulence. 1:6-7}
48. **Martinez, L. R.**, M. R. Mihu, G. Han, S. Frases, R. J. Cordero, A. Casadevall, A. J. Friedman, J. M. Friedman, and J. D. Nosanchuk. 2010. The use of chitosan to damage *Cryptococcus neoformans* biofilms. Biomaterials. **31**:669-79.
49. Han, G., **L. R. Martinez**, M. R. Mihu, A. J. Friedman, J. M. Friedman, and J. D. Nosanchuk. 2009. Nitric oxide releasing nanoparticles are therapeutic for *Staphylococcus aureus* abscesses. PLoS One. **4(11):**e7804.
50. **Martinez, L. R.**, G. Han, M. Chacko, M. R. Mihu, M. Jacobson, P. Gialanella, A. J. Friedman, J. D. Nosanchuk, and J. M. Friedman. 2009. Antimicrobial and healing efficacy of sustained release nitric oxide nanoparticles against *Staphylococcus aureus* skin infection. J Invest Dermatol. **129:**2463-9*.* {Highlighted commentary on article in J Invest Dermatol. 2009 Oct;129(10):2335-7}
51. **Martinez, L. R.,** M. R. Mihu, A. Gacser, L. Santambrogio, and J. D. Nosanchuk.2009. Methamphetamine enhances histoplasmosis by immunosuppression of the host. J Infect Dis. **200:**131-41*.* {Images from the article were selected for the cover of the issue}.
52. **Martinez, L. R.,** D. C. Ibom, A. Casadevall, and B. C. Fries. 2008. Characterization of phenotypic switching in *Cryptococcus neoformans* biofilms. Mycopathologia. **166:**175-80
53. **Martinez, L. R.,** P. Ntiamoah, A. Gacser, A. Casadevall, and J. D. Nosanchuk. 2007. Voriconazole inhibits melanization in *Cryptococcus neoformans*. Antimicrob Agents Chemother. **51:**4396-400.
54. **Martinez, L. R.,** P. Ntiamoah, A. Casadevall, and J. D. Nosanchuk. 2007. Caspofungin reduces the incidence of fungal contamination in cell culture. Mycopathologia. **164:**279-86.
55. **Martinez, L. R.** and A. Casadevall. 2007. *Cryptococcus neoformans* biofilm formation depends on surface support and carbon source and reduces fungal cell susceptibility to heat, cold, and UV light. Appl Environ Microbiol. **73:**4592-601.
56. **Martinez, L. R.,** and A. Casadevall. 2006. *Cryptococcus neoformans* cells in biofilms are less susceptible to antimicrobial molecules produced by the innate immune system. Infect Immun. **74:**6118-23.
57. **Martinez, L. R.,** E. Christaki, and A. Casadevall. 2006. Specific antibody to *Cryptococcus neoformans* glucurunoxylomannan antagonizes antifungal action against cryptococcal biofilms in vitro. J Infect Dis. **194:**261-66.
58. **Martinez, L. R.,** R. A. Bryan, C. Apostolidis, A. Morgenstern, A. Casadevall, and E. Dadachova. 2006. Antibody-guided alpha-radiation effectively damages fungal biofilms. Antimicrob Agents Chemother. **50:**2132-36.
59. **Martinez, L. R.** and A. Casadevall. 2006. Susceptibility of *Cryptococcus neoformans* biofilms to antifungal agents in vitro. Antimicrob Agents Chemother. **50:**1021-33.
60. **Martinez, L. R.,** and A. Casadevall. 2005. Specific antibody can prevent fungal biofilm formation and this effect correlates with protective efficacy. Infect Immun. **73:**6350-62.
61. **Martinez, L. R.,** D. Moussai, and A. Casadevall.2004.Antibody to *Cryptococcus neoformans* glucurunoxylomannan inhibits the release of capsular antigen. Infect Immun. **72:**3674-9.
62. **Martinez, L. R.,** J. Garcia-Rivera, and A. Casadevall. 2001. Differences in the thermal susceptibility of *Cryptococcus neoformans* serotypes A (var. *grubii*) and D (var. *neoformans*) strains. J Clin Microb. **39:**3365-7.

**Book Chapters**

**Martinez, L. R.** and A. Casadevall. 2015. Microbial biofilms, 2nd edition. ASM Press. Washington, DC. Editors: M. A. Ghannoum, M. Parsek, M. Whiteley, and P. K. Mukherjee.DOI:[10.1128/9781555817466](http://dx.doi.org/10.1128/9781555817466)

**Scientific Activities**

Peer Review and Professional Panels

*Member* of the Military Infectious Diseases Basic Research Award (MID–BRA) peer review panel of the Defense Medical Research and Development Program (DMRDP) of the Department of Defense of the United States, 2012 and 2016

*Reviewer* for the pilot funding for new research (Pfund) grants for the Louisiana’s NSF EPSCoR (Experimental Program to Stimulate Competitive Research), 2012

*Member* of the Science and Technology Grants Request for Proposal Program peer review panel of the Puerto Rico Science, Technology and Research Trust (PRSTR), 2015-Present

* Chair of Natural Sciences section (2016)

*Reviewer* for the British Society for Antimicrobial Chemotherapy Grant Programme, 2015

*Member* of the ASM Robert D. Watkins Graduate Research Fellowship selection committee, 2015-Present

Editorial experience

Associate Editor for Frontiers in Microbiology, 2011-Present

Editorial Board of Infection and Immunity, 2017-2019

*Ad hoc* Reviewer (2011-Present): Acta Biomaterialia, Advances and Applications in Bioinformatics and Chemistry, Antibiotics, Antimicrobial Agents and Chemotherapy, Journal of Antimicrobial Chemotherapy, Journal of Applied Microbiology, Archives of Virology, BMC Microbiology and Notes, Brazilian Journal of Microbiology, British Journal of Dermatology, Colloids and Surfaces B: Biointerfaces, Current Medicinal Chemistry, Expert Opinion on Emerging Drugs, Frontiers Microbiology, Fungal Genetics and Biology, Infection and Immunity, Journal of Infectious Diseases, Interdisciplinary Perspectives in Infectious Diseases, International Journal of Molecular Sciences, Journal of Invasive Fungal Infections, Journal of Medical Microbiology, Medical Mycology, Microbes and Infection, Microbiology, Nanomedicine, Nature Communications, Nature Medicine, Journal of Neuroinflammation, Neurotoxicity Research, Microbes and Infection, Microbial Pathogenesis, PLoS One, Scientific Reports, Sensors, Journal of Visualized Experiments, Virulence.

Invited speaker: ASM Microbe, New Orleans, LA (2017); Hofstra University, Hempstead, NY (2016); Brazil-U.S. Colloquium on Fungal Vesicles, Bronx, NY (2016); Wadsworth Institute of Public Health, Albany, NY (2016); ASM’s Florida Branch Annual Meeting, Cocoa Beach, FL (2015); Brooklyn College, Brooklyn, NY (2013); Molloy College, Rockville Centre, NY (2013); Texas Tech University Health Sciences Center, El Paso, TX (2013); University of Nevada, Reno, NV (2012); University of Arkansas Medical Sciences, Little Rock, Arkansas (2012); Brazilian Congress on Microbiology, Iguazu Falls, Brazil (2011); Long Island University, Brooklyn, NY (2011); International Union of Microbiological Societies, Istanbul, Turkey (2008)

**Leadership Activities**

*Member* of the 2017-2018 cohort of the American Association for the Advancement of Science (AAAS) Leshner Leadership Institute for Public Engagement with Science, 2017-2018

*Member* of ASM’s Committee on Microbiological Issues Impacting Minorities (CMIIM), 2012-Present

* Helped to secure funding for Travel Grants for underrepresented minority (URM) scientists to the ASM General Meeting and member of the selection committee
* Organizer and convener for CMIIM’s sponsored scientific session at the ASM General Meeting (2013-Present)
  + Drug Resistance in Populations with Health Disparities (2013, Denver, CO); Convener
  + Drug Resistance in Populations with Health Disparities (2014, Boston, MA); Convener
  + Immunology Issues and Infection in Hemoglobinopathy Populations with Health Disparities (2015, New Orleans, LA)
* Visited Capitol Hill and met with US congressmen in the Fall 2015 to advocate for federal and local funding allocation to programs directed to aid URM training and development in the basic sciences and medicine. <http://www.asm.org/index.php/public-policy/93-policy/93860-capitol-11-15>

**In the News**

1. Newsday Op-Ed. A cut in research would wound U.S. <http://www.newsday.com/opinion/commentary/a-cut-in-research-would-wound-u-s-1.13701060>; 6/2/17
2. NYIT’s The Box. Luis Martinez, Ph.D., Selected as a AAAS Public Engagement Fellow. <http://www.nyit.edu/box/features/luis_martinez_ph.d._selected_as_a_aaas_public_engagement_fellow>; 2/21/17
3. EurekAlert! AAAS Leshner Leadership Institute announces 2017-2018 Cohort of Public Engagement Fellows. <https://www.eurekalert.org/pub_releases/2017-02/aaft-all020817.php>; 2/16/17
4. Addiction now. NIH gives researcher $431,700 to study effects of meth on wounds. <https://www.drugaddictionnow.com/2017/02/06/nih-gives-researcher-431700-study-effects-meth-wounds/>; 2/6/17
5. Newsday. LI hospital’s new ‘super scrubs’ repel germs. <http://www.newsday.com/news/health/li-hospital-s-new-super-scrubs-repel-germs-1.12448475>; 10/12/16
6. Newsday. 6 LI nursing homes part of blood infection probe, health officials say. <http://www.newsday.com/news/health/6-li-nursing-homes-part-of-blood-infection-probe-ny-health-officials-say-1.12411007>; 10/5/16
7. NYIT’s The Box. Faculty profile. <http://www.nyit.edu/box/profiles/luis_r._martinez_ph.d>
8. EurekAlert! Methamphetamine and skin wounds: NYIT researcher wins NIH grant to study immune response. <https://www.eurekalert.org/pub_releases/2016-08/nyio-mas081916.php>; 8/19/16
9. Nanowerk. Utilizing nanotechnology for nitric oxide delivery in combating catheter-related microbial biofilms. <http://www.nanowerk.com/nanotechnology-news/newsid=42433.php>; 1/25/16
10. mBiosphere. Yet another reason to avoid methamphetamine: negative effects of meth on wound healing. <http://mbioblog.asm.org/mbiosphere/2015/11/yet-another-reason-to-avoid-methamphentamine-negative-effects-of-meth-on-wound-healing.html>; 11/2/15
11. Medscape. Meth use linked to deadly fungal infection. <http://www.medscape.com/viewarticle/808865>; 8/2/13
12. The Los Angeles Times. Meth use may increase risk of deadly lung infection. <http://articles.latimes.com/2013/jul/31/science/la-sci-sn-meth-lung-infection-20130730>; 7/31/13
13. LIU-Post campus press release. High school junior conducts award-winning research at LIU-Post lab. <http://liu.edu/CWPost/About/News/Press-Releases/2013/March/LIU-Post-Press-Release-Mar-25>; 3/25/13
14. LIU-Post Press magazine. Tracking drug abuse on neonatal immunity. <file:///C:/Users/lmarti13.ADMIN/Downloads/LIU_Post_PostPress_Spring2012%20(2).pdf>; Spring 2012
15. LIU-Post campus press release. C.W. Post professor to present AIDS research in Brazil. <http://www.liu.edu/CWPost/About/News/Press-Releases/2011/June/CWP-Press-Release3-June-10-2011>; 6/10/2011
16. UnderstandingNano.com. Novel nanotechnology heals abscesses caused by resistant Staph bacteria. <http://www.understandingnano.com/nanomedicine-nanoparticles-cream-no-staph.html>; 12/22/09
17. Infection control today. New technology promising against resistant Staph infections. <http://www.infectioncontroltoday.com/news/2009/04/new-technology-promising-against-resistant-staph.aspx>; 4/30/09

**Current, Pending, and Completed Support**

**Current Research Support**

1 R15 GM117501-01, Martinez (PI), 8/2016-7/2019, 40% effort, $431,700

Title: Impact of Methamphetamine (METH) Induced IL-6 production on Wound Healing and Inflammation

The major goal of this project: (1) Investigate the impact of METH on wound PMN leukocytes recruitment and repair *in vivo* and (2) Assess the role of METH on IL-6 production in the setting of wound healing and inflammation *in vivo*.

**Pending Research Support**

NSF IOS-Symbiosis, Defense and Self-Recognition Program, **Martinez (PI)**, Pre-proposal submitted 1/17/17

Title: Impact of interkingdom interactions on the evolution of encapsulated fungi

The major goal of this project: (1) Investigate whether direct fungal-bacterial interaction change the fungal capsular morphology and molecular pathways associated with capsular production, (2) Explore how secreted molecules in the extracellular milieu modify fungal-bacterial transcriptional responses, and (3) Determine whether fungal genetic variants emerge during prolonged fungal-bacterial co-culture.

**Completed Training Support**

5 K22 A1087817-021, Martinez (PI) 9/2011-12/2013, 75% effort, $227,376

Effect of Maternal Methamphetamine (METH) on Neonatal Immunity

The major goal of this project: 1) Determine whether offspring exposed to METH during pregnancy have defective innate immunity and 2) Assess the effect of METH on the integrity of the blood brain barrier (BBB) of exposed neonates in response to microbial challenge.

2006-2010 NIH, Molecular Pathogenesis Training Grant, supported my Postdoctoral Fellowship

2002-2006 NIH, Synergy of Host Defense Mechanisms (Training) Grant, supported my PhD research

2000-2001 NIH, Minority Bridge to the doctorate award