

CURRICULUM VITAE
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University of Pittsburgh

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Citizenship: Brazil and USA

EDUCATION and TRAINING

Undergraduate

1987 - 1993

Universidade Federal de Pernambuco - MD
UFPE
Recife, Brazil

Medicine
Jose Luiz de Lima Filho
Summa cum laude - Top
academic performance in the
1993 class

Graduate

1994 - 1999

The Johns Hopkins University
Baltimore, Maryland

PhD
Pharmacology
Mette Strand, Gerald Hart and
Ronald Schnaar

Postgraduate

1993 - 1994

Universidade Federal de Pernambuco - Anesthesiology
UFPE
Recife, Recife

Tereza Maciel

APPOINTMENTS and POSITIONS

Academic

1999 - 2005

School of Medicine
The Johns Hopkins University
Baltimore, Maryland

Research Faculty
Pharmacology and Molecular
Sciences

2003 - Present

FIOCRUZ - Pernambuco
Fundação Oswaldo Cruz - FIOCRUZ

Adjunct Public Health Scientist
Department of Virology and

	Recife, Brazil	Experimental Therapeutics
2005 - 2009	School of Medicine The Johns Hopkins University Baltimore, Maryland	Assistant Professor Medicine
2009 - Present	Graduate School of Public Health University of Pittsburgh Pittsburgh	Associate Professor Infectious Diseases and Microbiology
Non-Academic		
1993 - 1994	Pernambuco State Health Secretary Catende, Pernambuco, Brazil	General Medical Practitioner Internal Medicine

CERTIFICATION and LICENSURE

Medical or Other Professional Licensure

1993 - Present	National Medical Certificate - Brazil National Medical Council - CREMEPE, 10615
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MEMBERSHIP in PROFESSIONAL and SCIENTIFIC SOCIETIES

1995 - Present	Member, The American Society of Tropical Medicine and Hygiene
1995 - Present	Member, Brazilian Society of Biotechnology
2001 - Present	Member, The American Association of Immunologists

HONORS and AWARDS

1988 - 1993	Prize Professor Otávio de Freitas - Best Medical Student at the Universidade Federal de Pernambuco - UFPE Class of 1993. (Among 60 Graduates)
1988 - 1993	Academic Excellence during medical school National Medical Council - CREMEPE
1988 - 1993	Undergraduate Research Scholarship (Conselho Nacional de Pesquisa e Desenvolvimento – CNPq)
1992	Honor's Certificate (Associação Brasileira de Química – ABQ)
1994 - 1999	Advance Scientific Education Scholarship (Coordenação de Aperfeiçoamento de Pessoal de Nível Superior – CAPES)

PUBLICATIONS

Peer-reviewed Publications

1. Marques E T H, Netto FA, Filho JL. A Low-cost Oxygen Meter. Biochemical

- Education. 1991 Mar; 19 (2):77-78.
2. Marques Jr E T A, Lima Filho JL. Ascorbic acid biosensor using ascorbate oxidase immobilized on alkylamine glass beads. *Applied Biochemistry and Biotechnology*. 1992; 32:73-78. PMID: 1416950.
 3. Parente AH, Marques ET Jr, Azevedo WM, Diniz FB, Melo EH, Lima Filho JL. Glucose biosensor using glucose oxidase immobilized in polyaniline. *Applied biochemistry and biotechnology*. 1992 Dec; 37 (3):267-73. PMID: 1303064.
 4. Marques ID, Marques E T A, Silva AC, Ledingham WM. Ascorbic acid determination in biological fluids using ascorbate oxidase immobilized on alkylamine glass beads in a flow injection potentiometric system. *Applied Biochemistry and Biotechnology*. 1994 Jan; 44 (1):81-89.
 5. Nadruz W Jr, Marques ET, Azevedo WM, Lima-Filho JL, Carvalho LB Jr. Immobilization of xanthine oxidase on a polyaniline silicone support. *Brazilian journal of medical and biological research = Revista brasileira de pesquisas médicas e biológicas / Sociedade Brasileira de Biofísica ... [et al.]*. 1996 Mar; 29 (3):347-50. PMID: 8736128.
 6. Marques ET Jr, Weiss JB, Strand M. Molecular characterization of a fucosyltransferase encoded by *Schistosoma mansoni*. *Molecular and biochemical parasitology*. 1998 Jun 1; 93 (2):237-50. PMID: 9662708.
 7. Marques Jr ET Jr, Ichikawa Y, Strand M, August JT, Hart GW, Schnaar RL. Fucosyltransferases in *Schistosoma mansoni* development. *Glycobiology*. 2001 Mar; 11 (3):249-59. PMID: 11320063.
 8. Raviprakash K, Marques E, Ewing D, Lu Y, Phillips I, Porter KR, Kochel TJ, August TJ, Hayes CG, Murphy GS. Synergistic neutralizing antibody response to a dengue virus type 2 DNA vaccine by incorporation of lysosome-associated membrane protein sequences and use of plasmid expressing GM-CSF. *Virology*. 2001 Nov 10; 290 (1):74-82. PMID: 11883007.
 9. Nascimento E, Marques E T, Leao IC, Pereira VR, Gomes YM, Chikhlikar PR, August JT, Lucena-Silva N. Protective immunity of single and multi-antigen DNA vaccines against schistosomiasis. *Memorias do Instituto Oswaldo Cruz*. 2002; 97 (1):105-109. PMID: 12426603.
 10. Akasaki K, Nakamura N, Tsukui N, Yokota S, Katoh R, MICHIHARA, A, Tsuji H, Marques E T A, August JT. Biochemical characterization and immunohistochemical localization of a lysosomal membrane glycoprotein, TSC403/DC-LAMP, enriched in the lung and lymphatic tissues. *Seikagaku*. 2003; 75 (8):942.
 11. Lu Y, Raviprakash K, Leao IC, Chikhlikar PR, Ewing D, Anwar A, Chougnet C, Murphy G, Hayes CG, August TJ, Marques ET Jr. Dengue 2 PreM-E/LAMP chimera targeted to the MHC class II compartment elicits long-lasting neutralizing antibodies. *Vaccine*. 2003 May 16; 21:2178-89. PMID: 12706709.
 12. Marques ET Jr, Chikhlikar P, de Arruda LB, Leao IC, Lu Y, Wong J, Chen JS, Byrne B, August JT. HIV-1 p55Gag encoded in the lysosome-associated membrane protein-1 as a DNA plasmid vaccine chimera is highly expressed, traffics to the major histocompatibility class II compartment, and elicits enhanced immune responses. *The Journal of biological chemistry*. 2003 Sep 26; 278 (39):37926-36. PMID: 12824194.
 13. de Arruda LB, Chikhlikar PR, August JT, Marques ET. DNA vaccine encoding

- human immunodeficiency virus-1 Gag, targeted to the major histocompatibility complex II compartment by lysosomal-associated membrane protein, elicits enhanced long-term memory response. *Immunology*. 2004 May; 112 (1):126-33. PMID: 15129672. PMCID: PMC1782456.
14. Akasaki K, Nakamura N, Tsukui N, Yokota S, Murata S, Katoh R, Michihara A, Tsuji H, Marques ET Jr, August JT. Human dendritic cell lysosome-associated membrane protein expressed in lung type II pneumocytes. *Archives of biochemistry and biophysics*. 2004 May 15; 425 (2):147-57. PMID: 15111122.
 15. Chikhlikar P, Barros de Arruda L, Agrawal S, Byrne B, Guggino W, August JT, Marques ET Jr. Inverted terminal repeat sequences of adeno-associated virus enhance the antibody and CD8(+) responses to a HIV-1 p55Gag/LAMP DNA vaccine chimera. *Virology*. 2004 Jun 1; 323 (2):220-32. PMID: 15193918.
 16. Anwar A, Chandrasekaran A, Ng ML, Marques E, August JT. West Nile pre-membrane-envelope genetic vaccine encoded as a chimera containing the transmembrane and cytoplasmic domains of a lysosome-associated membrane protein: increased cellular concentration of the transgene product, targeting to the MHC II co. *Virology*. 2005 Feb 5; 332 (1):66-77. PMID: 15661141.
 17. Chikhlikar P, Barros de Arruda L, Maciel M, Silvera P, Lewis MG, August JT, Marques ET. DNA encoding an HIV-1 Gag/human lysosome-associated membrane protein-1 chimera elicits a broad cellular and humoral immune response in Rhesus macaques. *PLoS one*. 2006; 1:e135. PMID: 17205139. PMCID: PMC1762437.
 18. Gupta V, Tabiin TM, Sun K, Chandrasekaran A, Anwar A, Yang K, Chikhlikar P, Salmon J, Brusica V, Marques ET, Kellathur SN, August TJ. SARS coronavirus nucleocapsid immunodominant T-cell epitope cluster is common to both exogenous recombinant and endogenous DNA-encoded immunogens. *Virology*. 2006 Mar 30; 347 (1):127-39. PMID: 16387339.
 19. Braga-Neto UM, Marques ET Jr. From functional genomics to functional immunomics: new challenges, old problems, big rewards. *PLoS computational biology*. 2006 Jul 28; 2 (7):e81. PMID: 16863395. PMCID: PMC1523295.
 20. Arruda LB, Sim D, Chikhlikar PR, Maciel M Jr, Akasaki K, August JT, Marques ET. Dendritic cell-lysosomal-associated membrane protein (LAMP) and LAMP-1-HIV-1 gag chimeras have distinct cellular trafficking pathways and prime T and B cell responses to a diverse repertoire of epitopes. *Journal of immunology (Baltimore, Md.: 1950)*. 2006 Aug 15; 177 (4):2265-75. PMID: 16887987.
 21. Khan AM, Miotto O, Heiny AT, Salmon J, Srinivasan KN, Nascimento EJ, Marques ET Jr, Brusica V, Tan TW, August JT. A systematic bioinformatics approach for selection of epitope-based vaccine targets. *Cellular immunology*. 2006 Dec; 244 (2):141-7. PMID: 17434154. PMCID: PMC2041846.
 22. Moreira KA, Chaves AC, Marques E T A, Prazeres DM, Azevedo WM, Porto AL, Lima Filho JL. Extraction of dengue 2 plasmid DNA vaccine (pD2) from cell lysates by aqueous two-phase systems. *Biotechnology*. 2007; 6:520-526.
 23. Gomes AL, Silva AM, Cordeiro MT, Guimarães GF, Marques ET Jr, Abath FG. Single-tube nested PCR using immobilized internal primers for the identification of dengue virus serotypes. *Journal of virological methods*. 2007 Oct; 145 (1):76-9. PMID: 17573132. PMCID: PMC1993823.
 24. Cordeiro MT, Silva AM, Brito CA, Nascimento EJ, Magalhães MC, Guimarães GF,

- Lucena-Silva N, de Carvalho EM, Marques ET Jr. Characterization of a dengue patient cohort in Recife, Brazil. *The American journal of tropical medicine and hygiene*. 2007 Dec; 77 (6):1128-34. PMID: 18165535.
25. Khan AM, Miotto O, Nascimento EJ, Srinivasan KN, Heiny AT, Zhang GL, Marques ET, Tan TW, Brusica V, Salmon J, August JT. Conservation and variability of dengue virus proteins: implications for vaccine design. *PLoS neglected tropical diseases*. 2008; 2 (8):e272. PMCID: PMC2491585. PMID: 18698358.
 26. Acioli-Santos B, Segat L, Dhalia R, Brito CA, Braga-Neto UM, Marques ET, Crovella S. MBL2 gene polymorphisms protect against development of thrombocytopenia associated with severe dengue phenotype. *Human immunology*. 2008 Feb; 69 (2):122-8. PMID: 18361938.
 27. Marques Jr ET, Maciel Filho R, August PN. Overcoming health inequity: potential benefits of a patient-centered open-source public health infrastructure. *Cadernos de saúde pública*. 2008 Mar; 24 (3):547-57. PMID: 18327442.
 28. Maciel M Jr, Kellathur SN, Chikhlikar P, Dhalia R, Sidney J, Sette A, August TJ, Marques ET Jr. Comprehensive analysis of T cell epitope discovery strategies using 17DD yellow fever virus structural proteins and BALB/c (H2d) mice model. *Virology*. 2008 Aug 15; 378 (1):105-17. PMCID: PMC2615555. PMID: 18579176.
 29. Rosati M, Valentin A, Jalah R, Patel V, von Gegerfelt A, Bergamaschi C, Alicea C, Weiss D, Treece J, Pal R, Markham PD, Marques ET, August JT, Khan A, Draghia-Akli R, Felber BK, Pavlakis GN. Increased immune responses in rhesus macaques by DNA vaccination combined with electroporation. *Vaccine*. 2008 Sep 19; 26 (40):5223-9. PMID: 18468743.
 30. Nascimento EJ, Braga-Neto U, Calzavara-Silva CE, Gomes AL, Abath FG, Brito CA, Cordeiro MT, Silva AM, Magalhães C, Andrade R, Gil LH, Marques ET Jr. Gene expression profiling during early acute febrile stage of dengue infection can predict the disease outcome. *PloS one*. 2009; 4 (11):e7892. PMCID: PMC2775946. PMID: 19936257.
 31. da Silva AN, Nascimento EJ, Cordeiro MT, Gil LH, Abath FG, Montenegro SM, Marques ET. Identification of continuous human B-cell epitopes in the envelope glycoprotein of dengue virus type 3 (DENV-3). *PloS one*. 2009; 4 (10):e7425. PMCID: PMC2760205. PMID: 19826631.
 32. Nascimento EJ, Silva AM, Cordeiro MT, Brito CA, Gil LH, Braga-Neto U, Marques ET. Alternative complement pathway deregulation is correlated with dengue severity. *PloS one*. 2009; 4 (8):e6782. PMCID: PMC2728508. PMID: 19707565.
 33. Cordeiro MT, Braga-Neto U, Nogueira RM, Marques ET Jr. Reliable classifier to differentiate primary and secondary acute dengue infection based on IgG ELISA. *PloS one*. 2009; 4 (4):e4945. PMCID: PMC2660412. PMID: 19340301.
 34. Valentin A, Chikhlikar P, Patel V, Rosati M, Maciel M, Chang KH, Silvera P, Felber BK, Pavlakis GN, August JT, Marques ET. Comparison of DNA vaccines producing HIV-1 Gag and LAMP/Gag chimera in rhesus macaques reveals antigen-specific T-cell responses with distinct phenotypes. *Vaccine*. 2009 Jul 30; 27 (35):4840-9. PMCID: PMC2743166. PMID: 19539586.
 35. Lemos RR, Castelletti CH, Lima Filho JL, Marques ET, Oliveira JR. In silico identification of new genetic variations as potential risk factors for Alzheimer's disease in a microarray-oriented simulation. *Journal of molecular neuroscience* :

- MN. 2009 Sep; 39:242-7. PMID: 19290494.
36. Yang K, Sun K, Srinivasan KN, Salmon J, Marques ET, Xu J, August JT. Immune responses to T-cell epitopes of SARS CoV-N protein are enhanced by N immunization with a chimera of lysosome-associated membrane protein. *Gene therapy*. 2009 Nov; 16 (11):1353-62. PMID: 19727132.
 37. Calzavara-Silva CE, Gomes AL, Maia RC, Acioli-Santos B, Gil LH, Marques Jr ET. Early molecular markers predictive of dengue hemorrhagic fever. *Anais da Academia Brasileira de Ciências*. 2009 Dec; 81 (4):671-7. PMID: 19893893.
 38. Dhalia R, Maciel M Jr, Cruz FS, Viana IF, Palma ML, August T, Marques Jr ET. Membrane and envelope virus proteins co-expressed as lysosome associated membrane protein (LAMP) fused antigens: a potential tool to develop DNA vaccines against flaviviruses. *Anais da Academia Brasileira de Ciências*. 2009 Dec; 81 (4):663-9. PMID: 19893892.
 39. Gomes AL, Wee LJ, Khan AM, Gil LH, Marques ET Jr, Calzavara-Silva CE, Tan TW. Classification of dengue fever patients based on gene expression data using support vector machines. *PloS one*. 2010; 5 (6):e11267. PMCID: PMC2890409. PMID: 20585645.
 40. Tan PT, Heiny AT, Miotto O, Salmon J, Marques ET, Lemonnier F, August JT. Conservation and diversity of influenza A H1N1 HLA-restricted T cell epitope candidates for epitope-based vaccines. *PloS one*. 2010; 5 (1):e8754. PMCID: PMC2807450. PMID: 20090904.
 41. Simon GG, Hu Y, Khan AM, Zhou J, Salmon J, Chikhlikar PR, Jung KO, Marques ET, August JT. Dendritic cell mediated delivery of plasmid DNA encoding LAMP/HIV-1 Gag fusion immunogen enhances T cell epitope responses in HLA DR4 transgenic mice. *PloS one*. 2010; 5 (1):e8574. PMCID: PMC2797323. PMID: 20052293.
 42. Braga C, Luna CF, Martelli CM, de Souza WV, Cordeiro MT, Alexander N, de Albuquerque Mde F, Júnior JC, Marques ET. Seroprevalence and risk factors for dengue infection in socio-economically distinct areas of Recife, Brazil. *Acta tropica*. 2010 Mar; 113 (3):234-40. PMID: 19896921.
 43. Guedes DR, Cordeiro MT, Melo-Santos MA, Magalhaes T, Marques E, Regis L, Furtado AF, Ayres CF. Patient-based dengue virus surveillance in *Aedes aegypti* from Recife, Brazil. *Journal of vector borne diseases*. 2010 Jun; 47 (2):67-75. PMID: 20539043.
 44. Rigato PO, Maciel M Jr, Goldoni AL, Piubelli O, de Brito CA, Fusaro AE, Eurico de Alencar LX, August T, Azevedo Marques ET Jr, da Silva Duarte AJ, Sato MN. Immunization of neonatal mice with LAMP/p55 HIV gag DNA elicits robust immune responses that last to adulthood. *Virology*. 2010 Oct 10; 406 (1):37-47. PMID: 20667577.
 45. Lund O, Nascimento EJ, Maciel M Jr, Nielsen M, Larsen MV, Lundegaard C, Harndahl M, Lamberth K, Buus S, Salmon J, August TJ, Marques ET Jr. Human leukocyte antigen (HLA) class I restricted epitope discovery in yellow fever and dengue viruses: importance of HLA binding strength. *PloS one*. 2011; 6 (10):e26494. PMCID: PMC3198402. PMID: 22039500.
 46. Rodriguez-Barraquer I, Cordeiro MT, Braga C, de Souza WV, Marques ET, Cummings DA. From re-emergence to hyperendemicity: the natural history of the

- dengue epidemic in Brazil. *PLoS neglected tropical diseases*. 2011; 5 (1):e935. PMID: 21245922.
47. Goldoni AL, Maciel M Jr, Rigato PO, Piubelli O, de Brito CA, Melo A, Marques ET, August JT, Duarte AJ, Sato MN. Mucosal and systemic anti-GAG immunity induced by neonatal immunization with HIV LAMP/gag DNA vaccine in mice. *Immunobiology*. 2011 Apr; 216 (4):505-12. PMID: 20870310.
 48. de Melo AB, da Silva Mda P, Magalhães MC, Gonzales Gil LH, Freese de Carvalho EM, Braga-Neto UM, Bertani GR, Marques ET Jr, Cordeiro MT. Description of a prospective 17DD yellow fever vaccine cohort in Recife, Brazil. *The American journal of tropical medicine and hygiene*. 2011 Oct; 85 (4):739-47. PMID: 21976581.
 49. Rigato PO, Maciel M Jr, Goldoni AL, Piubelli OG, Orii NM, Marques ET, August JT, Duarte AJ, Sato MN. Maternal LAMP/p55gagHIV-1 DNA immunization induces in utero priming and a long-lasting immune response in vaccinated neonates. *PLoS one*. 2012; 7 (2):e31608. PMID: 22355381.
 50. Rust NM, Papa MP, Scovino AM, da Silva MM, Calzavara-Silva CE, Marques ET Jr, Peçanha LM, Scharfstein J, Arruda LB. Bradykinin enhances Sindbis virus infection in human brain microvascular endothelial cells. *Virology*. 2012 Jan 5; 422 (1):81-91. PMID: 22047990.
 51. McCormick KD, Liu S, Jacobs JL, Marques ET Jr, Sluis-Cremer N, Wang T. Development of a robust cytopathic effect-based high-throughput screening assay to identify novel inhibitors of dengue virus. *Antimicrobial agents and chemotherapy*. 2012 Jun; 56 (6):3399-401. PMID: 22391547.
 52. Jung KO, Khan AM, Tan BY, Hu Y, Simon GG, Nascimento EJ, Lemonnier F, Brusic V, Miotto O, Tan TW, Marques ET, Dhalia R, Salmon J, August JT. West Nile virus T-cell ligand sequences shared with other flaviviruses: a multitude of variant sequences as potential altered peptide ligands. *Journal of virology*. 2012 Jul; 86 (14):7616-24. PMID: 22573867.
 53. Carvalho-Leandro D, Ayres CF, Guedes DR, Suesdek L, Melo-Santos MA, Oliveira CF, Cordeiro MT, Regis LN, Marques ET, Gil LH, Magalhaes T. Immune transcript variations among *Aedes aegypti* populations with distinct susceptibility to dengue virus serotype 2. *Acta tropica*. 2012 Nov; 124 (2):113-9. PMID: 22877626.
 54. Xavier Eurico de Alencar L, de Mendonça Braga-Neto U, José Moura do Nascimento E, Tenório Cordeiro M, Maria Silva A, Alexandre Antunes de Brito C, da Silva Mda P, Gil LH, Montenegro SM, Marques ET Jr. HLA-B*44 Is Associated with Dengue Severity Caused by DENV-3 in a Brazilian Population. *Journal of tropical medicine*. 2013; 2013:648475. PMID: 23818909.
 55. de Melo AB, Nascimento EJ, Braga-Neto U, Dhalia R, Silva AM, Oelke M, Schneck JP, Sidney J, Sette A, Montenegro SM, Marques ET. T-cell memory responses elicited by yellow fever vaccine are targeted to overlapping epitopes containing multiple HLA-I and -II binding motifs. *PLoS neglected tropical diseases*. 2013; 7 (1):e1938. PMID: 23383350.
 56. Garcia-Bates TM, Cordeiro MT, Nascimento EJ, Smith AP, Soares de Melo KM, McBurney SP, Evans JD, Marques ET Jr, Barratt-Boyes SM. Association between magnitude of the virus-specific plasmablast response and disease severity in dengue patients. *Journal of immunology (Baltimore, Md. : 1950)*. 2013 Jan 1; 190

- (1):80-7. PMCID: PMC3529775. PMID: 23203929.
57. Carter DM, Bloom CE, Nascimento EJ, Marques ET, Craigo JK, Cherry JL, Lipman DJ, Ross TM. Sequential seasonal H1N1 influenza virus infections protect ferrets against novel 2009 H1N1 influenza virus. *Journal of virology*. 2013 Feb; 87 (3):1400-10. PMCID: PMC3554183. PMID: 23115287.
 58. Queiroz SR, Silva AN, Santos JJ, Marques ET Jr, Bertani GR, Gil LH. Construction of yellow fever virus subgenomic replicons by yeast-based homologous recombination cloning technique. *Anais da Academia Brasileira de Ciências*. 2013 Mar; 85 (1):159-68. PMID: 23460439.
 59. Homma A, Tanuri A, Duarte AJ, Marques E, de Almeida A, Martins R, Silva-Junior JB, Possas C. Vaccine research, development, and innovation in Brazil: a translational science perspective. *Vaccine*. 2013 Apr 18; 31:B54-60. PMID: 23598493.
 60. Castanha PM, Cordeiro MT, Martelli CM, Souza WV, Marques ET Jr, Braga C. Force of infection of dengue serotypes in a population-based study in the northeast of Brazil. *Epidemiology and infection*. 2013 May; 141 (5):1080-8. PMID: 22800513.
 61. Viana IF, Soares TA, Lima LF, Marques E T A, Krieger M, Dhalia R, Lins RD. De novo design of immunoreactive conformation-specific HIV-1 epitopes based on Top7 scaffold. *RSC Advances*. 2013 May 14; 3:11790.
 62. Pastor AF, Rodrigues Moura L, Neto JW, Nascimento EJ, Calzavara-Silva CE, Gomes AL, Silva AM, Cordeiro MT, Braga-Neto U, Crovella S, Gil LH, Marques Jr ET, Acioli-Santos B. Complement factor H gene (CFH) polymorphisms C-257T, G257A and haplotypes are associated with protection against severe dengue phenotype, possible related with high CFH expression. *Human immunology*. 2013 Jun 6. PMID: 23747994.
 63. Mailliard R, Smith KN, Fecek RJ, Rappocciolo G, Nascimento E, Marques E T H, Watkins SC, Mullins JI, Rinaldo CR. Selective Induction of CTL helper rather than killer activity by natural epitope variants promotes dendritic cell-mediated HIV-1 dissemination. *Journal of Immunology*. (in press).

Reviews, Proceedings of Conferences and Symposia (not peer-reviewed), Editorials

1. Marques E T A. Vacina para Dengue. *Biotechnologia Ciência & Desenvolvimento*.

Books, Book Chapters, Monographs

1. Marques Jr E T A. Fucosyltransferases. In: Ernst B, Hart GD, Sinaÿ P, editors. *Carbohydrates in Chemistry and Biology*. Wiley-VCH Verlag GmbH, 2000. . 197-211 (invited).

Published Abstracts

1. Marques E T H, Weiss J, Strand M. Molecular Characterization Of A Fucosyltransferase Type Vii By S. Mansoni [abstract]. 1998; San Francisco, CA 1998.
2. Arruda LB, Sim D, Maciel M, Marques E T A. Different HIV-Gag cellular trafficking mediated by LAMP/gag and DC-LAMP/gag DNA chimeras influences the repertoire

- of activated T and B cells [abstract]. In: 12th Annual International Congress of Immunology/4th Annual Conference of the Federation-of-Clinical-Immunology-Societies (FOCIS); Federat Clin Immunol Soc, Immunology 2004. 2004 Jul 18-23 ; Montreal, Canada MEDIMOND, 2004. 165-169.
3. Nascimento E, McBurney SP, Evans JD, Douradinha B, McCormick K, Wang T, Klimstra W, Ryman K, Barratt-Boyes S.M., Marques E. Dengue virus infection modulates expression of regulatory complement factors in Hepatocytes. [abstract]. In: American Society of Tropical Medicine and Hygiene; American Society of Tropical Medicine and Hygiene 60th Annual Program. 2011 Dec 4-8 ; Philadelphia, USA American Society of Tropical Medicine and Hygiene, 2011 Dec 4. 232.
 4. Piazza P, Campbell DM, Mailliard R, Marques E, Hildebrand WH, Buchli R, Rinaldo CR. Dengue NS3 Protein Elicits Heterotypic CD8 Memory T Cell Responses To Dominant and Sub-Dominant Epitopes [abstract]. 2013 May 29-Jun 1; Dubrovnik, Croatia.
 5. Maciel M, Srinivasan K, Marques E T A. T-cell epitope discovery for Yellow Fever Vaccine: Comparing elispot and prediction by the Pred(Balb/C) [abstract]. Federat Clin Immunol Soc Clinical Immunology. 2006; 119:S194-S195.
 6. Goldoni AL, Maciel M, Rigato PO, Marques E T A. HIV Chimeric Lamp/Gag Vaccine Induces Mucosal and Systemic Immunity in Neonatal Mice [abstract]. Aids Research And Human Retroviruses. 2008; 24:85-85.
 7. Rigato P, Goldoni AL, Marques E T A. Effect Of Maternal Immunization With The Dna Chimeric Vaccine Lamp/Gag Of Hiv-1 In The Neonatal Immune DNA Vaccine Response [abstract]. Aids Research And Human Retroviruses. 2008; 24:143-144.
 8. Lu Y, Chikhlikar PR, Leao IC, Marques E T A. HIV-1 Gag DNA vaccine chimera with adjuvant properties of a dendritic cell C-type multi-lectin receptor (DC-MLR) signaling domain and lysosomal-associated membrane protein (LAMP) in an AAV-ITR plasmid vector [abstract]. Glycobiology. 2001; 11 (10):887.
 9. Marques E T A, Weiss J, Strand M. Characterization of a Schistosoma Mansoni Fucosyltransferase: A Potential Target for Rational Drug Design [abstract]. American Journal Of Tropical Medicine And Hygiene. 1997; 57:89.
 10. Marques E T A, Hart GW, Schnaar RL, Strand M, Ichikawa Y. Inhibition of Schistosoma Mansoni Fucosyltransferases by Fucose-Type 1-N-Iminosugars [abstract]. American Journal Of Tropical Medicine And Hygiene. 1999; 61:831-831.
 11. Marques E T A, Ichikawa, Y, Hart GW, Schnaar RL. Identification of Different Schistosoma Mansoni Fucosyltransferase Activities in Developmental Stages Using Face [abstract]. American Journal Of Tropical Medicine And Hygiene. 1999; 61:491-491.
 12. Raviprakash R, Lu Y, Ewing D, Murphy GS, August JT, Kochel T, Porter KR, Hayes CG, Marques E T A. Increased Antibody Response To A Dengue Virus Type 2 Dna Vaccine By Targeting Of Antigen To An Endosomal/Lysosomal Vesicular (Lamp) Pathway And Co-Immunization With A Plasmid Expressing GMCSF [Abstract]. American Journal Of Tropical Medicine And Hygiene. 2000; 62:494-494.
 13. Arruda LB, Sim D, Chikhlikar PR, Marques E T A. Title Modulation of epitope presentation by differential trafficking to antigen processing compartments: Application to HIV vaccine development [abstract]. FASEB JOURNAL. 2003; 17 (7):C23-C23.

14. Rigato P, Maciel M, Goldoni A, Piubelli O, Brito CA, Fusaro A, August JT, Marques E T H, Duarte AJ, Sato MN. CD8-and CD4-T Cell Long Lasting Cellular and Humoral Immune Response in Neonatal Mice Vaccination with DNA Chimeric Vaccine LAMP/Gag of HIV-1 [abstract]. *Aids Research And Human Retroviruses*. 2008 Oct 1; 24:143-143.
15. Rodriguez-Barraquer I, Marques E T H, Cummings DA. Age Shifts Of Dhf In Brazil: Insight From A Serological Survey In Recife [Abstract]. *American Journal Of Tropical Medicine And Hygiene*. 81 (5):101-101.
16. Goldoni A, Maciel M, Rigato P, Piubelli O, Brito C, Fusaro A, Noemia O, August JT, Marques E T H, Duarte AJ, Sato M. Enhanced CD4+ and CD8+ T Cell Responses Followed HIV DNA Lamp/gag Vaccination in Mice During Early Phase of Life [abstract]. *Clinical Immunology*. 2009 Dec 31; 131:S83.
17. Marques E T A. Molecular characterization of a fucosyltransferase type VII encoded by *Schistosoma mansoni*. [abstract]. *Glycobiology*. 1998 Nov 1; 8 (11):1109-1109.

Other Publications

1. Identification of *Schistosoma mansoni* Fucosyltransferase and their evaluation as therapeutic targets Johns Hopkins University.
2. Mooney G, O'Donnell O, Arber S, Carr-Hill R, Mkandawire T, Sommerfeld J, Thompson R, Marques E T H, Sadana R, Almeida C, Romero RV WHO/TDR/UNRISD Bulletin 2007 Equitable access to health care and infectious disease control: Concepts, measurement and interventions. 0 0 2007.

RESEARCH

Current research support

Funding Agency:	Bill and Melinda Gates Foundation
Grant Number:	OPP1068374
Title of Grant:	Detection Of Recent Hiv-1 Infections Based On Naturally Inspired Synthetic Oligomers
Principal Investigator:	Donald Burke
Marques Role on Grant:	PI (multiple)
Years Inclusive:	2012 - 2015
Percent Effort:	15.0 %
Total Direct Costs:	\$355,000
Total Amount Awarded:	\$390,500

Funding Agency:	NIH/NIAID
Grant Number:	5R44AI062177
Title of Grant:	Defining T Cell Epitopes in Dengue Virus Infection
Principal Investigator:	Ramila Philip
Marques Role on Grant:	PI (multiple)
Years Inclusive:	2012 - 2014

Percent Effort: 5.0 %
Total Direct Costs: \$36,936
Total Amount Awarded: \$55,404

Funding Agency: Seeding Labs Foundation
Title of Grant: Equipment infrastructure for a virology lab expansion
Principal Investigator: Ernesto Marques
Marques Role on Grant: PI (sole)
Years Inclusive: 2013 - 2013
Total Direct Costs: \$200,000
Total Amount Awarded: \$200,000

Funding Agency: CNPq
Title of Grant: Pronex-8. Innate immune factors associated with dengue immunopathogenesis.
Principal Investigator: Ernesto Marques
Marques Role on Grant: PI (multiple)
Years Inclusive: 2010 - 2013
Total Direct Costs: \$150,000
Total Amount Awarded: \$150,000

Pending research support

Funding Agency: NIH- Fogarty
Title of Grant: University of Pittsburgh Global Infectious Diseases training program
Principal Investigator: Lee Harrison
Marques Role on Grant: Collaborator
Years Inclusive: 2014 - 2019

Funding Agency: HEMOBRAS/FINEP
Title of Grant: Pre-clinical validation of dengue antibody therapy
Principal Investigator: Ernesto Marques
Marques Role on Grant: PI (multiple)
Years Inclusive: 2013 - 2015
Percent Effort: 25.0 %
Total Direct Costs: \$303,915
Total Amount Awarded: \$468,029

Past research support

Funding Agency: NIH/NIAID
Grant Number: AI082632
Title of Grant: Center for Immunology of Emerging Infectious Diseases
Principal Investigator: Donald Burke

Marques Role on Grant: PI (multiple)
Years Inclusive: 2009 - 2011
Percent Effort: 10.0 %
Total Direct Costs: \$530,000
Total Amount Awarded: \$795,000

Funding Agency: FIOCRUZ/PDTIS
Title of Grant: Dengue vaccine development - Infrastructure for a clinical virology laboratory

Principal Investigator: Ernesto T. A. Marques
Marques Role on Grant: PI (multiple)
Years Inclusive: 2002 - 2010
Total Direct Costs: \$250,000
Total Amount Awarded: \$250,000

Funding Agency: UNESCO PN-DST/AIDS
Title of Grant: Targeting of immunogenically conserved HIV-1 amino-acid sequences to the major histocompatibility complex class II compartment with LAMP-1

Principal Investigator: Ernesto Marques
Marques Role on Grant: PI (sole)
Years Inclusive: 2008 - 2009
Total Direct Costs: \$150,000
Total Amount Awarded: \$150,000

Funding Agency: NIH/NIAID
Grant Number: AI-40085
Title of Grant: High throughput T-cell epitope discovery (Clinical Core)
Principal Investigator: Thomas August N01; Clinical Core PI Ernesto Marques
Marques Role on Grant: PI (multiple)
Years Inclusive: 2004 - 2009
Percent Effort: 10.0 %
Total Direct Costs: \$72,222
Total Amount Awarded: \$118,444

Funding Agency: NIH/NIAID
Grant Number: AI-40085
Title of Grant: High throughput T-cell epitope discovery (Development of a vaccinee and sample database system)
Principal Investigator: Thomas August N01; Database development PI Ernesto Marques
Marques Role on Grant: PI (multiple)
Years Inclusive: 2004 - 2009
Percent Effort: 5.0 %
Total Direct Costs: \$71,776
Total Amount Awarded: \$118,712

Funding Agency: NIH/NIAID
Grant Number: AI-40085
Title of Grant: High throughput T-cell epitope discovery (T-cell epitope validation in human samples)
Principal Investigator: Thomas August N01; T-cell epitope validation PI Ernesto Marques
Marques Role on Grant: PI (multiple)
Years Inclusive: 2004 - 2009
Percent Effort: 40.0 %
Total Direct Costs: \$470,360
Total Amount Awarded: \$771,390

Funding Agency: NIH/NIAID
Grant Number: U19 AI56541
Title of Grant: T-cell based and MHC targeted tetravalent dengue DNA vaccine (Clinical Core)
Principal Investigator: Thomas August U19; Clinical Core PI Ernesto Marques
Marques Role on Grant: PI (multiple)
Years Inclusive: 2003 - 2008
Percent Effort: 30.0 %
Total Direct Costs: \$336,629
Total Amount Awarded: \$552,074

Funding Agency: NIH/NIAID
Grant Number: AI56541
Title of Grant: T-cell based and MHC targeted tetravalent dengue DNA vaccine (Human T-cell epitope discovery)
Principal Investigator: Thomas August U19; Human T-cell PI Ernesto Marques
Marques Role on Grant: PI (multiple)
Years Inclusive: 2003 - 2008
Percent Effort: 10.0 %
Total Direct Costs: \$175,654
Total Amount Awarded: \$288,072

Funding Agency: WHO/TDR
Title of Grant: Vaccination with DNA encoding Schistosoma mansoni tegumental proteins
Principal Investigator: Ernesto T. A. Marques
Marques Role on Grant: PI (sole)
Years Inclusive: 2000 - 2001
Total Direct Costs: \$71,689
Total Amount Awarded: \$79,644

OTHER SCHOLARLY ACTIVITIES

Editorial Board(s)

2001 - 2006 Editor, Archives in Biochemistry and Biotechnology
2012 - Present Editor, PLoS ONE
2013 - Present Associate Editor, PLoS NTD

Manuscript Reviewer

1999 - Present Reviewer, Archives in Biochemistry and Biotechnology
2000 - Present Reviewer, The Journal of Biological Chemistry
2000 - Present Reviewer, Glycobiology
2000 - Present Reviewer, Vaccine
2001 - Present Reviewer, The Brazilian Journal of Medical and Biological Research
2001 - Present Reviewer, Human retrovirology
2003 - Present Reviewer, Journal of General Virology
2003 - Present Reviewer, Journal of Biotechnology
2003 - Present Reviewer, American Journal of Tropical Medicine and Hygiene
2004 - Present Reviewer, Archives of Virology
2006 - Present Reviewer, MBC Immunology
2006 - Present Reviewer, Virus Research
2006 - Present Reviewer, PLoS ONE
2008 - Present Reviewer, PLoS NTD
2008 - Present Reviewer, PLoS Medicine
2009 - Present Reviewer, Immunology
2009 - Present Reviewer, Journal of Immunology

Grant Reviewer

2010 - 2011 Reviewer, Research Competitiveness Program at the American Association for the Advancement of Science (AAAS) provides review services and guidance to research programs working on a review project advising the Rhode Island Science and Technology Advisory Council
2012 - Present Reviewer, NIH NIAID

Conference Planning & Review

2008 - 2008 Programme Committee Member Reviewer, First Pan-American Dengue Research Meeting, Recife Brazil
2010 - 2010 Programme Committee Member Reviewer, Second Pan-American Dengue Research Meeting, Cancun Mexico
2010 - 2011 Reviewer, IDM Diversity poster competition
2010 - 2011 Reviewer, IDM Research Day Judge
2010 - 2012 Programme Committee Member for Computational Immunology & Immunoinformatics Stream, 10th International Conference on Artificial Immune Systems
2012 - 2012 Programme Committee Member Reviewer, Third Pan-American

Other Review Activities

2010 - 2011 Invention Reviewer, Office of Technology Management, University of Pittsburgh.

PATENTS

1. Marques Jr E T A, Montengro SM, Rangel AN, Abath FG Dengue Linear antibody eptiopes/ Epítapos Lineares Do Envelope Do Vírus Da Dengue. BR PI 0704650-2. Filed on 2007 Nov 30.
2. Brasier A, Recinos A, Wiktorowicz J, Spratt H, Hyunsu JU, Vasilakis N, Marques E T H, Tenorio M, Gil L, Nascimento E Method and Biomarkers for the Detection of Dengue Hemorrhagic Fever. 2012170556. Filed on 2012 Dec 14.
3. Marques E T A, Marcadores Prognosticos de Resposta Clinica de Pacientes Infectados com Virus da Dengue / Level of gene expression as well as their encoded products as a prognostic tool to predict Dengue virus-infected patient outcome. PI0903187-1 A2. Issued on 2011 Oct 25.
4. Marques E T A, August TJ Chimeric vaccines. 8318173/ 10/474371. Issued on 2012 Nov 27.
5. Dhalia R, Maciel Filho R, Marques E T A DNA Vaccine Against Virus of Yellow Fever. 20120308603/ 13/504464. Issued on 2012 Dec 6.
6. Marques E T, August TJ Chimeric Vaccines comprising the lumenal domain of LAMP-1 or LAMP-2. 1385538. Issued on 2013 Jan 30.

INVITED PRESENTATIONS

1. Marques E T A. Targeting antigens to the MHC II compartment. Presented at: The Johns Hopkins Singapore; The Johns Hopkins University; 1999; Singapore.
2. Marques E T A. Fucosyltransferases in Schistosoma mansoni development. Presented at: Fukuyama University, Department of Pharmacology, Host -Kenji Akasaki; 1999; Fukuyama, Japan.
3. Marques E T A. Targeting dengue antigens to the MHC II compartment. Presented at: Centro de Pesquisa Aggeu Magalhaes, Fundacao Oswaldo Cruz, Department of Immunology Host - Norma Lucena; 2000; Recife, PE, Brazil.
4. Marques E T A. Genetic Vaccines For Emerging Infectious Diseases. Presented at: Universidade Federal de Pernambuco, Department of Biochemistry and The Center for Technological Integration, Host - Eduardo Magalhaes; 2000; Recife, PE Brazil.
5. Marques E T A. MHC II Targeted Genetic Vaccines. Presented at: Instituto Superior Tecnico, Centre for Biological and Chemical Engineering, Host - Joaquim Sampaio; 2001; Lisbon, Portugal.
6. Marques E T A. LAMP-Targeted Schistosome DNA Vaccine. Presented at: 8th International Symposium on Schistosomiasis. Plenary section. Host - Frederico Abath; 2001; Recife, PE, Brazil,.

7. Marques E T A. LAMP-Targeted DNA Vaccines. Presented at: Universidade Federal do Rio de Janeiro. Department of Microbiology and Immunology, Hosts: Dr. Ligia Pecanha and Dr. Leila S. Fonseca; 2001; Rio de Janeiro, RJ, Brazil.
8. Marques E T A. LAMP-Targeted Schistosome DNA Vaccine. Presented at: Institut Paster de Lille. Department of Schistosomiasis, Malaria and Inflammation, Host: Dr. Monique Capron; 2002; Lille, France,.
9. Marques E T A. MHC II Targeted Genetic Vaccines For Emerging Infectious Diseases. Presented at: Fundacao Oswaldo Cruz FIOCRUZ, Instituto Oswaldo Cruz - IOC, Host: Dr. Romulo Maciel; 2002; Rio de Janeiro, RJ, Brazil.
10. Marques E T A. MHC II Targeted Genetic Vaccine For Dengue. Presented at: Universidade de Sao Paulo, Department of Clinical Immunology. Host: Dr. Alberto Duarte; 2002; Sao Paulo, SP, Brazil.
11. Marques E T A. MHC II Targeted Genetic Vaccines. Presented at: XXXIII Reunião Anual da Sociedade Brasileira de Bioquímica e Biologia Molecular SBBq. Plenary section speaker, Host: Dr. Jose Luis de Lima Filho; 2004; Caxambu, MG, Brazil,.
12. Marques E T A. MHC II Targeted Genetic Vaccine For HIV. Presented at: Universidade de Sao Paulo, Department of Dermatology. Host: Dr. Alberto Duarte; 2004; Sao Paulo, SP, Brazil.
13. Marques E T A. Human Immunomic Research in Infectious diseases. Presented at: Meharry Medical College, Tennessee Host F. Villalta; 2004; Nashville Tennessee.
14. Marques E T A. Human Immunomic Research in Primary Immune Deficiencies. Presented at: Primary Immune Deficiency Symposium. Host: Dr. Alberto Duarte; 2005; Sao Paulo, SP, Brazil.
15. Marques E T A. AIDS Vaccine research and development strategies for collaboration between “India, Brazil and South Africa. Presented at: IBSA “India, Brazil and South Africa” cooperative workshop.. Host - Ministry of Health; 2006; Cape Town, South Africa.
16. Marques E T A. Use of open source electronic information systems as a tool for increasing equitable access to Health Care. Presented at: Equitable assess to Health Care and Infectious diseases Control: Concepts Measurements and Interventions Symposium WHO/TDR Host Dr. Johannes Sommerfeld; 2006; Rio de Janeiro Brazil.
17. Marques E T A. Dengue epidemiology and immunopathology in Recife - Brazil. Presented at: Weill Cornell - XI Tropical Medicine Research Center Meeting & the III International Collaboration in Infectious Diseases Research Host - Albert Ko; 2007; Ilheus, Bahia Brazil.
18. Marques E T A. Dengue epidemiology and immunopathology in Recife - Brazil. Presented at: Third Asian Regional Dengue Research Network Meeting Novartis Institute for Tropical Diseases & PDVI Host Scott Halstead; 2007; Taipei Taiwan.
19. Marques E T A. Innate immune response factors in dengue immunopathology. Presented at: Novartis- Minisymposium on Dengue: Host - Alex Jetzer, and Paul Herrling; 2008; Guarujá, Sao Paulo; Brazil.
20. Marques E T A. Involvement of host innate immune responses on dengue vasculopathy. Presented at: Second Pan-American Dengue Research Meeting,; 2010; Cancun, Mexico.
21. Marques E T A. Complement system activation in dengue infection: opportunities

- for Computational modeling. Presented at: The Eighth Annual Conference of the Mid-South Computational Biology and Bioinformatics Society MCBIOS.; 2010; Texas.
22. Nascimento E, Marques E. Involvement of Host Innate Immune Responses on Dengue Vasculopathy. Presented at: XXI Brazilian Virology Meeting/V Mercosul Virology Meeting; 2010 Oct 17-20; Gramado, Rio Grande do Sul, Brazil.
 23. Nascimento E, Marques E. Comprehensive T-Cell Epitope Mapping Of Denv-3 Envelope, Ns1, Ns3 And Ns5 Proteins On Hla A2, A24, B7, Dr2, Dr3 And Dr4 Transgenic Mice. Presented at: Second Pan-American Dengue Research Network Meeting; 2010 Nov 16-19; Cancun, Mexico.
 24. Marques E T A. The Role of the Complement System in the Development of Dengue Vasculopathy. Presented at: Center for Tropical Diseases - CTD University of Texas Medical Branch in Galveston.; 2011; Texas.
 25. Marques E T A. Complement System in the Development of Dengue Vasculopathy. Presented at: IV International Symposium on Tropical Arboviruses and Hemorrhagic Fevers; 2011; Belém, Para, Brazil.
 26. Marques E T A. Dengue in Brazil: Critical questions for vaccine introduction. 2011; Sao Paulo, Brazil, Instituto Adolfo Lutz.
 27. Marques E T A. Dengue epidemiology and immunopathology in Brazil. Presented at: Science 2011, University of Pittsburgh.; 2011; Pittsburgh, PA.
 28. Marques E T A. MHC-II targeted genetic vaccines. Presented at: CVR Symposium, University of Pittsburgh.; 2011; Pittsburgh, PA.
 29. Van panhuis W, Marques E, Burke DS. Global access to local dengue surveillance data. Presented at: Vaccine-to-Vaccination meeting; 2011 Nov 5; San Juan, Puerto Rico.
 30. Marques E T A. Development of high throughput tool for seroepidemiology. Presented at: Instituto Adolfo Lutz; 2012; Sao Paulo, SP, Brazil.
 31. Marques E T A. Influence of host genetics on dengue pathogenesis. Presented at: Novartis Institute for Tropical Diseases. Conference On Dengue; 2012; Sao Paulo, Brazil.
 32. Marques E T A. Prognostic biomarkers of dengue Immunopathology. Presented at: International Congress of Tropical Medicine and Malaria; 2012; Rio de Janeiro Brazil.
 33. Moderator. Presented at: Sanofi Pasteur Satellite Symposium on Dengue during the International Congress of Tropical Medicine and Malaria; 2012; Rio de Janeiro Brazil.
 34. Garcia-Bates T, Cordeiro M, Nascimento E, Smith A, Evans JD, Marques E, Barratt-Boyes SM. Profound virus-specific plasmablast response in secondary dengue virus infection correlates with disease severity. Presented at: Pan American Dengue Research Network; 2012 Sep 12-15; Cartagena Colombia.
 35. Van panhuis W, Marques E, Choisy M, Cummings D, Burke DS. Global sharing of dengue surveillance data. Presented at: Regional meeting in dengue prevention and control; 2012 Sep 17; New Delhi, India.
 36. Burke DS, Marques E T A. Progress Report - Detection of Recent HIV-1 Infections Based on Naturally Inspired Synthetic Oligomers. Presented at: BMGF Recency program progress report; 2013 May; Seattle.

OTHER PRESENTATIONS

1. Marques E T A. A Biosensor For Ascorbic Acid (Using Ascorbate Oxidase Immobilized On Nylon Net And Gilson Oxygraph). Presented at: XVII Encontro Anual Da Sociedade Brasileira De Bioquímica E Biologia Molecular; 1989.
2. Marques E T A. Biosensor For Ascorbic Acid Using Ascorbate Oxidase Immobilized On Glass Beads. Presented at: V Encontro Anual Da Federação Das Sociedades De Biologia Experimental; 1990.
3. Marques E T A. Mechanisms Of Ketoconazole Effect In Lipid Composition And Respiration In *Paracoccidioides brasiliensis*. Presented at: XI Congress Of The International Society For Human And Animal Mycology; 1991.
4. Marques E T A. Determination Of Glucose Oxidase Activity On Polyaniline. Presented at: XXXI Congresso Brasileiro De Química; 1991.
5. Marques E T A. Studies Of Respiration Of *Saccharomyces cerevisiae* In Batch Fermentation. Presented at: XXXI Congresso Brasileiro De Química; 1991.
6. Marques E T A. Low Cost Data Acquisition System For Biological Applications. Presented at: XXI Encontro Anual Da Sociedade Brasileira De Bioquímica E Biologia Molecular; 1992.
7. Marques E T A. Redox Effects Of Polyaniline On The Glucose Oxidase Activity. Presented at: XXI Encontro Anual Da Sociedade Brasileira De Bioquímica E Biologia Molecular; 1992.
8. Marques E T A. Effects Of Ketoconazole On The Oxygen Consumption And Lipid Content In *Paracoccidioides brasiliensis*. Presented at: XXI Encontro Anual Da Sociedade Brasileira De Bioquímica E Biologia Molecular; 1992.
9. Marques E T H. Glucose Biosensor Using Glucose Oxidase Immobilized In Alkylamine Glass Beads. Presented at: Sixth European Congress On Biotechnology; 1993.
10. Marques E T A. Ascorbic Acid Determination In Biological Fluids Using Ascorbate Oxidase Immobilized On Glass Beads In A Flow Injection Potentiometric System. Presented at: Sixth European Congress On Biotechnology; 1993.
11. Marques E T A. Flow Injection Potentiometric System Of Ascorbic Acid Using A Low Cost Home Made Oxygen Electrode. Presented at: XXII Encontro Anual Da Sociedade Brasileira De Bioquímica E Biologia Molecular; 1993.
12. Marques E T A. Xanthine Oxidase Immobilized On Polyaniline. Presented at: XXII Encontro Anual Da Sociedade Brasileira De Bioquímica E Biologia Molecular; 1993.
13. Marques E T A. Action Of Immobilized Xanthine Oxidase On Polyaniline And Glass On Purines. Presented at: XXII Encontro Anual Da Sociedade Brasileira De Bioquímica E Biologia Molecular; 1993.
14. Keun OK, Marques E T A, Kun-Young P, August JT. [P10-174] Adjuvant Effects of Zymosan and Lipoteichoic Acid on West Nile DNA Vaccine. Poster presented at: University of South Korea; 2006; Seul, Korea.
15. Van panhuis W, Cordeiro MT, De Oliveira VF, De Melo WT, Marques E, Burke DS. Spatiotemporal patterns of dengue transmission in Pernambuco Brazil: 2001-2009. Poster presented at: Third Panamerican Dengue Research Network Meeting; 2012 Sep 12; Cartagena, Colombia.

TEACHING

Graduate Courses

Year(s)	Course Number & Title	Role
2001 - 2009	330.600, Medical Pharmacology	Group Instructor
2005 - 2010	330.600, Medical Pharmacology	Lecturer/ Secondary Instructor
2006 - 2006	223.689.01, Biologic Basis of Vaccine Development	Lecturer/ Secondary Instructor
2009 - 2012	MSMVM 3440, Vaccines and immunity	Lecturer/ Secondary Instructor
2009 - Present	IDM 2003, Host Response to Microbial Infection	Lecturer/ Secondary Instructor
2012 - Present	IDM 2014, Functional Genomics of Microbial Pathogens	Lecturer/ Secondary Instructor
4/30/2013 - 5/10/2013	Production, selection, and evaluation of antigenicity and immunogenicity of recombinant antigens	Lecturer

Postgraduate Courses

Year(s)	Course Number & Title	Role
7/15/2013 - 7/19/2013	Vaccines in Public Health	Lecturer

Precepting/Experiential

Year(s)	Course Number & Title	Role
2010	IDM Seminar series	Seminar Speaker
2010	ID Grand rounds	Seminar Speaker
2010	UPMC - CCM CRISMA weekly meeting	Seminar Speaker
2012 - Present	practical training in translational & field research	Course coordinator
2012 - Present	PHDL/ International Modeling Program	Course preparation

MENTORING AND ADVISING

Master's Students

Year(s)	Student's Name & Degree/Discipline	Advisor's Role
2006 - 2008	Andrea Rangel MSc (2008) Characterization of DENV3 B-cell linear epitopes	Co-Advisor

2009 - 2010	Kevin McCormick MSc (2010) A Cytopathic Effect-Based High-Throughput Screening Assay Identified Two Novel Compounds That Inhibit Dengue Infection: Streptovitacin A And Nagilactone C	Service on Masters or Doctoral Committees
2009 - 2010	Keith Atchison MPH (2010) dengue epidemiology	Co-advisor
2010 - 2011	Francis M. Still MSc (2011) Dengue Virus Infection Of B Lymphocytes In Vitro	Service on Masters or Doctoral Committees
2010 - 2011	Gisele Lima MSc (2011) Dengue inflammatory responses	Service on Masters or Doctoral Committees
2011 - 2013	Amy Lee Caroline MSc (2013) Non-Human primate Immune responses to infection with rift valley fever virus	Service on Masters or Doctoral Committees
2012 - 2013	Erin Cathcart MPH (2013) Role of host genetics in dengue infection	Co-Advisor

Doctoral Students

Year(s)	Student's Name & Degree/Discipline	Advisor's Role
1999 - 2003	Luciana Barros de Arruda Hinds PhD (2003) DC-LAMP/HIVgag chimeric DNA vaccine	Co-Advisor
2000 - 2003	Debora Nguyen PhD (2003) HIV co-receptors and host proteins on viral envelop	Service on Masters or Doctoral Committees
2000 - 2003	Lisa Cimaskasy PhD (2003) Host proteins on HIV viral envelop	Service on Masters or Doctoral Committees

2000 - 2003	Kakoli Niyogi PhD (2003) HIV co-receptors	Service on Masters or Doctoral Committees
2003 - 2008	Marli Tenorio PhD (2008) Characterization of a dengue cohort in Recife - Brazil	Co-Advisor
2006 - 2008	Ana Maria da Silva MSc (2008) DENV3 kinetics in severe dengue	Advisor
2006 - 2010	Sabrina Ribeiro de Almeida PhD (2010) Dengue Molecular Virology	Co-Advisor
2008 - 2011	Andrea Rangel PhD (2011) Dengue Vaccine	Co-Advisor
2008 - 2012	Liciana Alencar PhD (2012) Characterization of dengue envelop T-cell epitopes.	Advisor
2008 - 2012	Andrea Barbosa PhD (2012) Characterization of yellow fever T-cell epitopes	Advisor
2008 - 2013	Ana Maria Silva PhD (2013) Molecular epidemiology of dengue	Co-Avisor
2009 - Present	Heike Erna Brand (expected 2014) Development of diagnostic assays for emerging viral diseases	Advisor
2009 - Present	Georgia Guimarães (expected 2013) Tetravalent dengue DNA vaccine targeted to the MHCII compartment	Co-Advisor

2009 - Present	Stella Joan Berendam (expected 2014) Innate responses of lymphatic cells	Service on Masters or Doctoral Committees
2009 - Present	Sarah Dickin (expected 2014) Environmental and socio-economic factors determining dengue incidence	Co-Advisor
2010 - 2012	Klécia Marília Soares de Melo MSc (2012) Development of dengue serological diagnostics	Advisor
2011 - Present	Isabelle Viana (expected 2015) B-cell epitope delivery platform / Protein Engineering	Co-Advisor
2012 - Present	Mariana Palma (expected 2015) HIV Immunotherapy	Co-Advisor
2012 - Present	Sandra Mayer (expected 2016) dengue virus entry	Service on Masters or Doctoral Committees
2012 - Present	Priscila Mayrelle da Silva Castanha (expected 2016) Kinetics of Maternal antibody transfer to neonates	Co-Advisor

Other Students

Year(s)	Student's Name & Degree/Discipline	Advisor's Role
2000 - 2006	Nia Banks MD/PhD (2006) Role of host proteins on HIV envelop	Service on Masters or Doctoral Committees

Postdoc or Fellow

Year(s)	Student's Name & Degree/Discipline
1999 - 2000	Ihid Carneiro Leao Schistosomiasis vaccine

1999 - 2001	Yang Lu Dengue vaccine
2001 - 2007	Priya Chikhlikar HIV and Dengue Vaccine
2003 - 2005	Patricia Furtado Dengue B-cell epitope mapping
2003 - 2007	Milton Maciel Yellow Fever epitope mapping. Yellow fever vaccine
2004 - 2005	Srinivasan Kelatur Computational models of HLA peptide binding
2004 - 2006	Kern-He Chang HLA peptide binding
2004 - 2006	Jerome Salmon Dengue T cell epitope mapping
2004 - 2006	Ulisses Braga-Neto Immunomics & computational biology
2004 - 2007	Laura Gil Dengue molecular virology
2004 - 2008	Rafael Dhalia Antigen engineering
2004 - Present	Eduardo Nascimento Dengue immunology
2005 - 2009	Vladmir Perovik Rabies virus T-cell epitope mapping
2006 - 2009	Rita Maia Rabies T-cell epitope mapping
2006 - 2009	Carlos Calzavara Functional genomics of dengue immune responses
2006 - 2013	Bartolomeu Acioli

	Role of host genetics in dengue responses
2008 - Present	Marli Tenorio Dengue clinical virology
2010 - Present	Bruno Douradinha Vaccine delivery platform

SERVICE

Service to Internal Organizations

Department Committees

2010 - 2011 Member, IDM Doctoral student award selection

School/University Committees

2010 - Present Member, IDM Bioscience curriculum committee
2012 Member, Selection of Asst. Professor position for HIV research in Beira, Mozambique
2012 Member, Search committee member Research Asst. Professor at IDM
2013 - Present Member, Faculty Diversity Committee

Other Committees

2009 - Present Member, Center for Vaccine Research (CVR) Retreat committee

Service to External Organizations

Public Policy and Programs

2002 - 2004 Consultant, Consultant/Scientific adviser for the Secretary of Epidemiological Surveillance. Brazilian Ministry of Health and United Nations Educational, Scientific and Cultural Organization (UNESCO).
2006 - Present Member, AIDS Vaccine Committee at the Brazilian Ministry of Health, Advisory committee for the Ministry of Health

Other Professional Activities

2007 - 2008 Consultant ITI-Genoa Biotechnology Scientific Adviser working on a HIV therapeutic vaccine HIV-LAMP