

Curriculum vitae – Igor C. Almeida

NAME: Igor Correia de Almeida
DATE AND PLACE OF BIRTH: July 29, 1960, Campina Grande, PB, Brazil
CITIZENSHIP: Brazilian
U.S. VISA STATUS: Permanent resident
PROFESSIONAL ADDRESS: University of Texas at El Paso (UTEP)
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DEGREES AWARDED

- 1981: Pharmacy degree, Universidade Regional do Nordeste (currently UEPb), Campina Grande, PB, Brazil.
1989: Master of Science (Molecular Biology) Escola Paulista de Medicina (EPM, currently Federal University of São Paulo-UNIFESP), Sao Paulo, SP, Brazil. Supervisor: Prof. Carl P. Dietrich
1994: Doctor of Science (Microbiology and Immunology), Escola Paulista de Medicina-EPM (currently UNIFESP), Sao Paulo, Brazil. Supervisor: Prof. Luiz R. Travassos

PROFESSIONAL ACTIVITIES

- Mar/1989–Mar/1993: Lecturer in Biochemistry, Albert Einstein Jewish Hospital Nursing School, Sao Paulo, SP, Brazil.
Nov/1993–May/1994: Substitute Adjunct Professor, Department of Microbiology, Immunology and Parasitology (DMIP), UNIFESP, Sao Paulo, Brazil.
Jun/1994–Jun/1995: Substitute Adjunct Professor, DMIP, UNIFESP, Sao Paulo, Brazil.
Jun/1995–Jun/1996: Visiting Adjunct Professor, DMIP, UNIFESP, Sao Paulo, Brazil.
Sep/1996–Dec/1998: Post-Doctoral Fellow, Department of Biochemistry, Division of Molecular of Parasitology and Biological Chemistry, University of Dundee, Scotland, UK.
Sponsor: Prof. Michael A.J. Ferguson
Feb/1999–Oct/2004: Assistant Professor, Department of Parasitology, University of Sao Paulo (USP), Brazil.
Oct /2004–Present: Associate Professor (tenure-track), Department of Biological Sciences, University of Texas at El Paso (UTEP), El Paso, Texas, USA.

RESEARCH EXPERIENCE AND INTERESTS

1. Structural analysis of glycosylphosphatidylinositol (GPI)-anchored molecules from *Trypanosoma cruzi* and other protozoan parasites by mass-spectrometry (MS) and other analytical techniques.
2. Proteomics and lipidomics of *T. cruzi*.
3. Innate and acquired (humoral) immunity studies on glycosylphosphatidylinositol (GPI)-anchored glycoproteins and glycolipids of *Trypanosoma cruzi*.
4. Structural analysis of glycoconjugates, proteins, lipids and other biomolecules from pathogenic fungi, arthropod vectors and bacteria (LPS, lipid A, lipopeptides) by MS and other analytical techniques.
5. Development of diagnostic (chemiluminescent) immunoassays for Chagas' disease (American trypanosomiasis). Large-scale screening for Chagas' disease in blood banks.
6. Development of lipid A-based and GPI-based adjuvants for experimental and human vaccination.

SCHOLARLY PUBLICATIONS (refereed papers and invited reviews)

1. Almeida, I.C., Milani, S.R., Gorin, P.A.J., Travassos, L.R. (1991) Complement-mediated lysis of *Trypanosoma cruzi* trypomastigotes by the human anti-alpha-galactosyl antibodies. *J. Immunol.* 146: 2394-2400.
2. Gutierrez, P.S., Almeida, I.C., Nader, H.B., Dietrich, C.P. (1991) Decrease in sulphated glycosaminoglycans in aortic dissection — possible role in the pathogenesis. *Cardiovasc. Res.* 25: 742-748.
3. Almeida, I.C., Krautz, G.M., Krettli, A.U., Travassos, L.R. (1993) Glyconjugates of *Trypanosoma cruzi*: a 74 kD antigen of trypomastigotes specifically reacts with lytic anti-alpha-galactosyl antibodies from patients with chronic Chagas disease. *J. Clin. Lab. Anal.* 7: 307-316.
4. Travassos, L.R., Almeida, I.C. (1993) Carbohydrate immunity in American trypanosomiasis. *Springer Sem. Immunopathol.* 15: 183-204. **Review.**
5. Almeida, I.C., Ferguson, M.A.J., Schenkman, S., Travassos, L.R. (1994) GPI-anchored glycoconjugates from *Trypanosoma cruzi* trypomastigotes are recognised by lytic anti-alpha-galactosyl antibodies isolated from patients with chronic Chagas' disease. *Braz. J. Med. Biol. Res.* 27: 443-447.
6. Almeida, I.C., Ferguson, M.A.J., Schenkman, S., Travassos, L.R. (1994) Lytic anti-alpha-galactosyl antibodies from patients with chronic Chagas disease recognise novel O-linked oligosaccharides on mucin-like GPI-anchored glycoproteins of *Trypanosoma cruzi*. *Biochem. J.* 304: 793-802.
7. Almeida, I.C., Rodrigues, E.G., Travassos, L.R. (1994) Chemiluminescent immunoassays: discrimination between the reactivities of natural and human patient antibodies with antigens from eukaryotic pathogens, *Trypanosoma cruzi* and *Paracoccidioides brasiliensis*. *J. Clin. Lab. Anal.* 8: 424-431.
8. Souto-Padrón, T., Almeida, I.C., Souza, W., Travassos, L.R. (1994) Distribution of alpha-galactosyl-containing epitopes on *Trypanosoma cruzi* trypomastigote and amastigote forms from infected Vero cells detected by chagasic antibodies. *J. Euk. Microbiol.* 41: 47-54.
9. Travassos, L.R., Almeida, I.C., Takahashi, H.K. (1994) Carbohydrate epitopes: structure and presentation and the reactivity of biological ligands. Recognition of alpha-D-GalpNAc and alpha-D-Galp conformational structures. *Ci. Cult. J. Braz. Ass. Adv. Sc.* 46: 242-248.
10. Travassos, L.R., Puccia, R., Cisalpino, P., Tabora, C., Rodrigues, E.G., Rodrigues, M., Silveira, J.F., Almeida, I.C. (1995) Biochemistry and molecular biology of the main diagnostic antigen of *Paracoccidioides brasiliensis*. *Arch. Med. Res.* 26: 297-304.
11. Almeida, I.C., Neville, D.C.A., Mehlert, A., Treumann, A., Ferguson, M.A.J., Previato, J.O., Travassos, L.R. (1996) Structure of the N-linked oligosaccharide of the main diagnostic antigen of the pathogenic fungus *Paracoccidioides brasiliensis*. *Glycobiology* 6: 507-515.
12. Andrade, A.L.S.S., Zicker, F., Oliveira, R.M., Silva, S.A., Luquetti, A., Travassos, L.R., Almeida, I.C., Andrade, S.S., Andrade, J.G. and Martelli, C.M. (1996) Randomised trial of efficacy of benzimidazole in treatment of early *Trypanosoma cruzi* infection. *Lancet* 348: 1407-1413. **Referred.**
13. Gazzinelli, R.T., Camargo, M.M., Almeida, I.C., Morita, Y.S., Giraldo, M., Acosta-Serrano, A., Hieny, S., Englund, P.T., Ferguson, M.A.J., Travassos, L.R., Sher, A. (1997) Identification and characterization of protozoan products that trigger the synthesis of IL-12 by inflammatory macrophages. *Chem. Immunol.* 68:136-152. **Review.**
14. Camargo, M.M., Almeida, I.C., Pereira, M.E.S., Ferguson, M.A.J., Travassos, L.R., Gazzinelli, R.T. (1997a) Glycosylphosphatidylinositol-anchored mucin-like glycoproteins isolated from *Trypanosoma cruzi* trypomastigotes initiate the synthesis of pro-inflammatory cytokines by macrophages. *J. Immunol.* 158: 5890-5901.
15. Almeida, I.C., Covas, D.T., Soussumi, L.M.T., Travassos, L.R. (1997) A highly sensitive and specific chemiluminescent enzyme-linked immunosorbent assay for diagnosis of active *Trypanosoma cruzi* infection. *Transfusion* 37: 850-857.
16. Camargo, M.M., Andrade, A.C., Almeida, I.C., Travassos, L.R., Gazzinelli, R.T. (1997) Glycoconjugates isolated from *Trypanosoma cruzi* but not *Leishmania* species membranes trigger nitric oxide synthesis as well as microbicidal activity by IFN- γ -primed macrophages. *J. Immunol.* 159: 6131-6139.

17. Procópio, D.O., Teixeira, M.M., Camargo, M.M., Travassos, L.R., Ferguson, M.A.J., **Almeida, I.C.**, Gazzinelli, R.T. (1999) Differential inhibitory mechanism of cyclic AMP on TNF- α and IL-12 synthesis by macrophages exposed to microbial stimuli. *British J. Pharmacol.* 127: 1195-1205.
18. **Almeida, I.C.**, Gazzinelli, R.T., Ferguson, M.A.J., Travassos, L.R. (1999) *Trypanosoma cruzi* mucins: potential functions of a complex structure. *Mem. Inst. Oswaldo Cruz* 94:173-176. **Review.**
19. Branquinha, M.H., Vermelho, A. B., **Almeida, I.C.**, Mehler, A., Ferguson, M.A.J. (1999). Structural studies on the polar glycoinositol phospholipids of *Trypanosoma (Schizotrypanum) dionisii* from bats. *Mol. Biochem. Parasitol.* 102: 179-189.
20. Gazzinelli, R., Rodrigues, M.M., **Almeida, I.C.**, Travassos, L.R. (1999) Role of parasite surface glycoconjugates on induction/regulation of immune responses and inflammation elicited during *Trypanosoma cruzi* infection: potential implications on pathophysiology of Chagas' disease. *Cienc. Cult. J. Braz. Assoc. Adv. Sci.* 51: 411-428. **Review.**
21. **Almeida, I.C.**, Camargo, M.M., Procopio, D.O., Silva, L.S., Mehler, A., Travassos, L.R., Gazzinelli, R.T., Ferguson, M.A.J. (2000) Highly purified glycosylphosphatidylinositols from *Trypanosoma cruzi* are potent proinflammatory agents. *EMBO J.* 19: 1476-1485.
22. Lischke, A., Klein, C., Stierhof, Y.D., Hempel, M., Mehler, A., **Almeida, I.C.**, Ferguson, M.A.J., Overath, P. (2000) Isolation and characterization of glycosylphosphatidylinositol-anchored, mucin-like surface glycoproteins from bloodstream forms of the freshwater-fish parasite *Trypanosoma carassii*. *Biochem. J.* 345: 693-700.
23. Giraldo, M., Cannizzaro, H., Ferguson, M.A.J., **Almeida, I.C.**, Gazzinelli, R.T. (2000) Fractionation of membrane components from tachyzoite forms of *Toxoplasma gondii*: differential recognition by immunoglobulin M (IgM) and IgG present in sera from patients with acute or chronic toxoplasmosis. *J. Clin. Microbiol.* 38: 1453-1460.
24. Pereira-Chioccola, V.L., Acosta-Serrano, A., **Correia de Almeida, I.**, Ferguson, M.A., Souto-Padron, T., Rodrigues, M.M., Travassos, L.R., Schenkman, S. (2000) Mucin-like molecules form a negatively charged coat that protects *Trypanosoma cruzi* trypomastigotes from killing by human anti- α -galactosyl antibodies. *J. Cell Sci.* 113: 1299-1307.
25. Talvani, A., Ribeiro, C.S., Aliberti, J.C., Michailowsky, V., Santos, P.V., Murta, S.M., Romanha, A.J., **Almeida, I.C.**, Farber, J., Lannes-Vieira, J., Silva, J.S., Gazzinelli, R.T. (2000) Kinetics of cytokine gene expression in experimental chagasic cardiomyopathy: tissue parasitism and endogenous IFN- γ as important determinants of chemokine mRNA expression during infection with *trypanosoma cruzi*. *Microbes Infect.* 2: 851-866.
26. Maya-Monteiro, C.M., Daffre, S., Logullo, C., Lara, F.A., Alves, E.W., Capurro, M.L., Zingali, R., **Almeida, I.C.**, Oliveira, P.L. (2000) HeLp, a heme lipoprotein from the hemolymph of the cattle tick, *Boophilus microplus*. *J. Biol. Chem.* 275: 36584-36589.
27. Panunto-Castelo, A., **Almeida, I.C.**, Rosa, J.C., Greene, L.J., Roque-Barreira, M. (2000) The Rubino test for leprosy is a beta2-glycoprotein 1-dependent antiphospholipid reaction. *Immunology* 101: 147-153.
28. Ropert, C., **Almeida, I.C.**, Closel, M., Travassos, L.R., Ferguson, M.A.J., Cohen, P., Gazzinelli, R.T. (2001) Requirement of mitogen-activated protein kinases and IkappaB phosphorylation for induction of proinflammatory cytokines synthesis by macrophages indicates functional similarity of receptors triggered by glycosylphosphatidylinositol anchors from parasitic protozoa and bacterial lipopolysaccharide. *J. Immunol.* 166: 3423-3431.
29. Campos, M.A., **Almeida, I.C.**, Takeuchi, O., Akira, S., Valente, E.P., Procopio, D.O., Travassos, L.R., Smith, J.A., Golenbock, D.T., Gazzinelli, R.T. (2001) Activation of Toll-like receptor-2 by glycosylphosphatidylinositol anchors from a protozoan parasite. *J. Immunol.* 167: 416-423.
30. Acosta-Serrano, A., **Almeida, I.C.**, Freitas-Junior, L.H., Yoshida, N., Schenkman, S. (2001) The mucin-like glycoprotein super-family of *Trypanosoma cruzi*: structure and biological roles. *Mol. Biochem. Parasitol.* 114: 143-150. **Review.**
31. **Almeida, I.C.**, Gazzinelli, R.T. (2001) Proinflammatory activity of glycosylphosphatidylinositol anchors derived from *Trypanosoma cruzi*: structural and functional analyses. *J. Leukoc. Biol.* 70: 467-477. **Review.**
32. Di Noia, J.M., Buscaglia, C.A., De Marchi, C.R., **Almeida, I.C.**, Frasch, A.C. (2002) A *Trypanosoma cruzi* small surface molecule provides the first immunological evidence that Chagas' disease is due to a single parasite lineage. *J. Exp. Med.* 195: 401-413.

33. Soares, R.P., Macedo, M.E., Ropert, C., Gontijo, N.F., **Almeida, I.C.**, Gazzinelli, R.T., Pimenta, P.F., Turco, S.J. (2002) *Leishmania chagasi*: lipophosphoglycan characterization and binding to the midgut of the sand fly vector *Lutzomyia longipalpis*. *Mol. Biochem. Parasitol.* 121: 213-224.
34. Ropert, C., Ferreira, L.R.P., Campos, M.A.S., Procópio, D.O., Travassos, L.R., Ferguson, M.A.J., Reis, L.F.L., Teixeira, M.M., **Almeida, I.C.**, Gazzinelli, R.T. (2002) Macrophage signaling by glycosylphosphatidylinositol-anchored mucin-like glycoproteins derived from *Trypanosoma cruzi* trypomastigotes. *Microbes Infect.* 4: 1015-25. **Review.**
35. Procópio, D.O., **Almeida, I.C.**, Torrecilhas, A.C.T., Cardoso, J.E., Teyton, L., Travassos, L.R., Bendelac, A., Gazzinelli, R.T. (2002) Glycosylphosphatidylinositol-anchored mucin-Like glycoproteins from *Trypanosoma cruzi* bind to CD1d but do not elicit dominant innate or adaptive immune responses via the CD1d/NKT cell pathway. *J. Immunol.* 169:3926-33.
36. Teixeira, M.M., **Almeida, I.C.**, Gazzinelli, R.T. (2002) Introduction: innate recognition of bacteria and protozoan parasites. *Microbes Infect.* 4: 883-6. **Review (as invited co-organizer of the “Forum in Immunology”)**.
37. Paiva-Silva, G.O., Sorgine, M.H., Benedetti, C.E., Meneghini, R., **Almeida, I.C.**, Machado, E.A., Dansa-Petretski, M., Yepiz-Plascencia, G., Law, J.H., Oliveira, P.L., Masuda, H. (2002) On the biosynthesis of *Rhodnius prolixus* heme-binding protein. *Insect. Biochem. Mol. Biol.* 32: 1533-41.
38. Lara, F.A., Lins, U., Paiva-Silva, G., **Almeida, I.C.**, Braga, C.M., Miguens, F.C., Oliveira, P.L., Dansa-Petretski, M. (2003) A new intracellular pathway of haem detoxification in the midgut of the cattle tick *Boophilus microplus*: aggregation inside a specialized organelle, the hemosome. *J. Exp. Biol.* 206:1707-15.
39. Zufferey, R., Allen, S., Barron, T., Sullivan, D.R., Denny, P.W., **Almeida, I.C.**, Smith, D.F., Turco, S.J., Ferguson, M.A. and Beverley, S.M. (2003) Ether phospholipids and glycosylinositolphospholipids are not required for amastigote virulence or for inhibition of macrophage activation by *Leishmania major*. *J. Biol. Chem.* 278: 44708-44718.
40. Campos, M.A., Rosinha, G.M., **Almeida, I.C.**, Salgueiro, X.S., Jarvis, B.W., Splitter, G.A., Qureshi, N., Bruna-Romero, O., Gazzinelli, R.T. and Oliveira, S.C. (2004) Role of Toll-like receptor 4 in induction of cell-mediated immunity and resistance to *Brucella abortus* infection in mice. *Infect. Immun.* 72: 176-186.
41. Buscaglia, C.A., Campo, V.A., Di Noia, J.M., Torrecilhas, A.C., De Marchi, C.R., Ferguson, M.A., Frasch, A.C., **Almeida, I.C.** (2004) The surface coat of the mammal-dwelling infective trypomastigote stage of *Trypanosoma cruzi* is formed by highly diverse immunogenic mucins. *J. Biol. Chem.* 279: 15860-15869.
42. da Silva, A.F., Rodrigues, M.L., Farias, S.E., **Almeida, I.C.**, Pinto, M.R., and Barreto-Bergter, E. (2004) Glucosylceramides in *Colletotrichum gloeosporioides* are involved in the differentiation of conidia into mycelial cells. *FEBS Lett.* 561: 137-143.
43. Malley, R., Morse, S.C., Leite, L.C., Areas, A.P., Ho, P.L., Kubrusly, F.S., **Almeida, I.C.** and Anderson, P. (2004) Multiserotype protection of mice against pneumococcal colonization of the nasopharynx and middle ear by killed nonencapsulated cells given intranasally with a nontoxic adjuvant. *Infect. Immun.* 72: 4290-4292.
44. Andrade, A. L.S.S., Martelli, C.M.T., Oliveira, R.M., Silva, S.A., Soussumi, L.M.T., Covas, D.T., Silva L.S., Andrade, J.G., Travassos, L.R., and **Almeida, I.C.** (2004) Benznidazole efficacy among *Trypanosoma cruzi*-infected adolescents 6-year follow-up. *Am. J. Trop. Med. Hyg.*, 71(5):594-597.
45. Cassera, M.B., Gozzo, F.C., D’Alexandri, F.L., Merino, E.F., del Portillo, H.A., Peres, V. J., **Almeida, I.C.**, Eberlin, M.N., Wunderlich, G., Wiesner, J., Jomaa, H., Kimura, E.A., and Katzin, A.M. (2004) The methylerythritol phosphate pathway is functionally active in all intraerythrocytic stages of *Plasmodium falciparum*. *J. Biol. Chem.* 279(50):51749-59.
46. Zamboni DS, Campos MA, Torrecilhas AC, Kiss K, Samuel JE, Golenbock DT, Lauw FN, Roy CR, **Almeida IC**, and Gazzinelli RT. (2004) Stimulation of Toll-like receptor 2 by *Coxiella burnetii* is required for macrophage production of pro-inflammatory cytokines and resistance to infection. *J Biol Chem.* 2004 Dec 24;279(52):54405-15. **[Cover page]**
47. da Cunha, J.P., Nakayasu, E.S., Elias, M.C., Pimenta, D.C., Tellez-Inon, M.T., Rojas, F., Manuel, M., **Almeida, I.C.**, and Schenkman, S. (2005) *Trypanosoma cruzi* histone H1 is phosphorylated in a

- typical cyclin dependent kinase site accordingly to the cell cycle. *Mol Biochem Parasitol* 140: 75-86.
48. Nimrichter, L., Cerqueira, M.D., Leitão, E.A., Miranda, K., Nakayasu, E.S., Almeida, S.R., **Almeida, I.C.**, Alviano, C.S., Barreto-Bergter, E. and Rodrigues, M.L. (2005) Structure, cellular distribution, antigenicity and biological functions of *Fonsecaea pedrosoi* ceramide monohehexosides. *Infect. Immun.* 73: 7860–7868.
 49. Fogaca, A.C., **Almeida, I.C.**, Eberlin, M.N., Tanaka, A.S., Bulet, P. and Daffre, S. (2006) Ixodidin, a novel antimicrobial peptide from the hemocytes of the cattle tick *Boophilus microplus* with inhibitory activity against serine proteinases. *Peptides* 27: 667-674.
 50. Gomes, M.T., Monteiro, R.Q., Grillo, L.A., Leite-Lopes, F., Stroeder, H., Ferreira-Pereira, A., Alviano, C.S., Barreto-Bergter, E., Neto, H.C., Cunha, E.S.N.L., **Almeida, I.C.**, Soares, R.M. and Lopes, A.H. (2006) Platelet-activating factor-like activity isolated from *Trypanosoma cruzi*. *Int J Parasitol.* 36: 165-173.
 51. Laurino, C.C., Fritzler, M.J., Mortara, R.A., Silva, N.P., **Almeida, I.C.** and Andrade, L.E. (2006) Human autoantibodies to diacyl-phosphatidylethanolamine recognize a specific set of discrete cytoplasmic domains. *Clin. Exp. Immunol.* 143: 572-584. [Cover page]
 52. Paiva-Silva, G.O., Cruz-Oliveira, C., Nakayasu, E.S., Maya-Monteiro, C.M., Dunkov, B.C. Masuda, H., **Almeida, I.C.***, Oliveira, P.L.* (2006) A novel heme degradation pathway in a blood sucking insect. *Proc. Natl. Acad. Sci. U.S.A.*, 103:8030-8035. [*Both corresponding authors]
 53. Oliveira, G.A., Baptista, D.L., Guimaraes-Motta, H., Almeida, I.C., Masuda, H. and Atella, G.C. (2006) Flight-oogenesis syndrome in a blood-sucking bug: biochemical aspects of lipid metabolism. *Arch Insect Biochem Physiol*, 62, 164-175.
 54. Utz, S., Roditi, I., Kunz Renggli, C., Almeida, I.C., Acosta-Serrano, A. and Butikofer, P. (2006) *Trypanosoma congolense* procyclins: unmasking cryptic major surface glycoproteins in procyclic forms. *Eukaryot Cell*, 5, 1430-1440.
 55. Maldonado, R.A., Kuniyoshi, R.K., Linss, J., **Almeida, I.C.** (2006) *Trypanosoma cruzi* oleate desaturase: molecular characterization and comparative analysis with other trypanosomatids. *J. Parasitol.*, in press.
 56. Cunha, J.P.C., Nakayasu, E.S., **Almeida, I.C.**, Schenkman, S. (2006) Post-translational modifications of *Trypanosoma cruzi* histone H4. *Mol. Biochem.Parasitol.*, in press.
 57. Monteiro, A.C., Schmitz, V., Svensjo, E., Gazzinelli, R.T., **Almeida, I.C.**, Todorov, A., Arruda, L.B., Torrecilhas, A.C.T., Pesquero, J.B., Morrot, A., Bouskela, E., Bonomo, A., Lima, A.P.C.A., Müller-Esterl, W., Scharfstein, J. (2006) Cooperative activation of TLR2 and Bradykinin B2 Receptor is required for induction of type-1 immunity in a mouse model of subcutaneous infection by *Trypanosoma cruzi*. *J. Immunol.*, in press.

SUBMITTED MANUSCRIPTS

1. Torrecilhas, A.C.T. Nakayasu, E.S., Nohara, L.L., Jacysyn, J.F., Ropert, C., de Souza, W., Cunha e Silva, N., Andrade, D., Scharfstein, J., Golenbock, D., Gazzinelli, R.T., Colli, W., Alves, M.J.M., and **Almeida, I.C.** (2006) *Trypanosoma cruzi* shed vesicles enhance host cell invasion by engaging Toll-like receptor 2.

BOOK CHAPTER

- Acosta-Serrano, A., Hutchinson, C., Nakayasu, E.S., **Almeida, I.C.**, Carrington, M. (2006) Comparison and evolution of the surface architecture of trypanosomatid parasites. In *Trypanosomes - After the Genome*. D. Barry, J. Mottram, R. McCulloch, and A. Acosta-Serrano (Eds.), Horizon Scientific Press, Norwich, UK, In press.

PATENTS

1. Title: *Process of preparation of mucin-like glycoconjugates and its application on the diagnosis of active form of Chagas' disease*. **Brazilian Patent INPI no. PI 940095-3**. Participants: Universidade Federal de São Paulo (UNIFESP), **Igor C. Almeida** (inventor) and Luiz R. Travassos (inventor). **Status: Brazilian patent granted in 2001.**
2. Title: *Preparation and utilization of Trypanosoma cruzi antigens in a highly sensitive and specific assay for the diagnosis of Chagas' disease*. **Brazilian Patent INPI no. PI 9603267-7**. Participants:

CV - Igor C. Almeida

Universidade Federal de São Paulo (UNIFESP), Fundação Hemocentro de Ribeirão Preto (FHCRP), **Igor C. Almeida** (inventor), Luiz R. Travassos (inventor) e Dimas Covas (inventor). **Status: under final analysis.**

3. Title: *Highly sensitive and specific serological test for the diagnosis of Chagas' disease.* **American patent No. 6,682,900.** Assignee: FCHRP. Inventors: Luiz R. Travassos, **Igor C. Almeida** and Dimas Covas. **Status: patent granted in January 27, 2004.**
4. Title: *A simple method for the preparation of lipid A from Gram-negative bacteria and its application as adjuvant in vaccination.* **Brazilian Patent application.** Participants: Instituto Butantan, Universidade de São Paulo (USP), Universidade Federal de São Paulo (UNIFESP), **Igor C. Almeida** (inventor), Luiz R. Travassos (inventor) e Isaias Raw (inventor). **Status: Brazilian patent application filed on August 21, 2003.**

SPONSORED FUNDING (AS PRINCIPAL INVESTIGATOR)

1. **Grant No. 98/10495-5**
 Project title: "Characterization of immunologically active glycosylphosphatidylinositol (GPI)-anchored glycoconjugates from *Trypanosoma cruzi*".
 Funding institution: FAPESP-Brazil
 Amount granted: US\$ 253,000
 Period: March 1999 – Sep 2004
2. **Project ID. No. 990942**
 Project title: "Identification, Purification and Biochemical Studies of the Macrophage Receptor for *Trypanosoma cruzi* Glycosylphosphatidylinositols".
 Funding institution: WHO/UDNP/World Bank/TDR
 Amount granted: US\$ 40,000
 Period: June 2000 – May 2003
3. **Start-up funds**
 Project title: "Structure and Immunological Function of *Trypanosoma cruzi* Glycosylphosphatidylinositol (GPI)-anchored glycoconjugates".
 Amount granted: US\$ 100,000
 Funding institution: BBRC-Biology (Grant No. 5G12RR008124).
 Period: Oct 2004 – June 2006
4. **Grant number: 2 R25 GM049011-07**
 Project Title: Border Bridges to the Baccalaureate Program
 Funding institution: National Institute of Health/National Institute of General Medical Science
 Role: Principal Investigator
 Budget Period: 09/30/05-06/30/08
 Project Period: 09/30/1992 - 06/30/2008
 Period Allocation Amount: \$ 209,293
 Overall goal: To promote the successful transition of minority (primarily Mexican-American) students with biomedical interests from the community college to the university and to improve their completion of a baccalaureate degree.
5. **Grant number: 2 R25 GM049011-08**
 Project Title: Border Bridges to the Baccalaureate Program
 Funding institution: National Institute of Health/National Institute of General Medical Science
 Role: Principal Investigator
 Budget Period: 07/01/2006 - 06/30/2007
 Project Period: 09/30/1992 - 06/30/2008
 Current Allocation Amount: \$ 210,039
 Overall goal: To promote the successful transition of minority (primarily Mexican-American) students with biomedical interests from the community college to the university and to improve their completion of a baccalaureate degree.

GRADUATE PROGRAM PARTICIPATION (theses and dissertations directed)

Master

1. Cláudia Regina De Marchi, 2000-2003
2. Renata Kelly Kuniyoshi, 2000-2003
3. Xirlene Santos Salgueiro, 1999-2003

Ph.D.

1. Ana Claudia T. Torrecilhas, 2000-2004
2. Audrie Garcia Piovezam, 2000-present (being carried out at USP, Sao Paulo, Brazil)
3. Adina Delbem, 2000-2004 (as co-supervisor)
4. Heleni Stroeder, 2002-present (being carried out at USP, Sao Paulo, Brazil)
5. Ernesto Satoshi Nakayasu, 2005-present (at UTEP, El Paso, TX, USA)
6. Lilian Lie Nohara, August 2005-present (at UTEP, El Paso, TX, USA)

Post-Doctoral Fellows

1. Maria de Fátima Oliveira, 2000-2002
2. Jorge Alberto Lopez Rodrigues, April 2003- April 2005
3. Leonardo Nimrichter, 2004-March 2005.
4. Luciane Ganiko, August 2005-present (at UTEP, El Paso, TX, USA)

SCIENTIFIC SOCIETIES

1. Brazilian Society for Protozoology, since 1990.
2. Brazilian Society for Biochemistry and Molecular Biology, since 1999.
3. American Society for Biochemistry and Molecular Biology, since December 2004.
4. American Society for Microbiology, since February 2005.
5. American Association of Immunologists, since June 2005.
6. Glycobiology Society, since February 2006.

CONFERENCES AND SEMINARS (last five years)

1. 49th American Society for Mass Spectrometry (ASMS) Conference on Mass Spectrometry and Allied Topics, Chicago, E.U.A., 27-31 May, 2001. Round-table.
2. XXVIII Annual Meeting on Basic Research in Chagas Disease, Caxambu, MG, Brazil, Nov 5-7, 2001. Conference.
4. University of Dundee, The School of Life Sciences, The Wellcome Trust Biocentre, Division of Molecular Parasitology and Biological Chemistry, Dundee, Scotland, UK, Mar 8, 2002. Seminar.
5. XXXI Annual Meeting of the Brazilian Society of Biochemistry (SBBq), Caxambu, MG, Brazil, May 18-21, 2002. Conference and Round-Table.
6. Federal University of São Paulo (UNIFESP), Dept. of Microbiology, Immunology and Parasitology, Aug 27, 2002, São Paulo, SP, Brazil. Seminar.
7. Molecular Biology Institute of Paraná (IBMP), Oswaldo Cruz Foundation (FioCruz), Curitiba, PR, Brazil, Sep 13, 2002. Seminar.
8. University of São Paulo, Dept. of Biochemistry, São Paulo, Brazil, 21 de Oct 21, 2002. Seminar.
9. Seattle Biomedical Research Institute Seminar Series, Seattle, WA, USA, Jan 21, 2003. Seminar.
10. The Scripps Research Institute, Dept. of Immunology, La Jolla, CA, USA, Jan 24, 2003. Seminar.
11. University of São Paulo, Dept. Parasitology, São Paulo, SP, May 23, 2003. Seminar.
12. New York University, Dept. of Parasitology, New York, NY, Sep 23, 2003. Seminar.
13. Yale University, Microbial Pathogenesis Section, New Haven, CT, Sep 24, 2003. Seminar.
- University of Texas at El Paso, Dept. of Biological Sciences, El Paso, TX, Feb 16, 2004. Seminar.
14. University of Brasília, Faculty of Medicine, Brasília, DF, Brazil, June 4, 2004. Seminar.
15. Gordon Research Conference in Biology of Host-Parasite Interactions, Newport, RI, June 27-July 2, 2004. Invited speaker at Carbohydrate Function Session (June 29).
16. WHO/TDR International Bioinformatics Course, University of São Paulo, IME, Sao Paulo, Brazil, July 15, 2004. Conference.

CV - Igor C. Almeida

17. University of Sao Paulo, Dept. of Microbiology, University of São Paulo, Aug 26, 2004. Seminar
18. University of Sao Paulo, Dept. of Immunology, Sao Paulo, Brazil, Oct 10, 2004. Seminar.
19. University of Sao Paulo, Dept. of Parasitology, ICB, Sao Paulo, Brazil, Oct 22, 2004. Seminar.
20. Texas A&M University, Department of Microbiology, College of Medicine, Feb 21, 2005. Seminar.
21. University of Texas at El Paso, Dept. Biol. Sciences, September 9, 2005. Seminar
22. XXI Annual Meeting of the Brazilian Society of Protozoology, Caxambu, MG, Brazil, November 7-9, 2005. Conference and Round-Table.
23. Washington University, Dept. of Molecular Microbiology, St. Louis, MI, April 26, 2006. Seminar
24. University of Texas Medical Branch at Galveston (UTMB), Texas, Dept. of Microbiology & Immunology, May 23, 2006. Seminar.
25. University of Oklahoma Health Sciences Center, Oklahoma Center for Medical Glycobiology, College of Medicine, Oklahoma City, OK, September 13, 2006. Seminar.

Updated on September 19, 2006