

CURRICULUM VITAE

Carlos Augusto Pereira

PERSONAL DATA

Name: Carlos Augusto Pereira

Place and date of birth: S.Paulo, 22.6.1948, Citizenship: Brazilian and French

e-mail. capereira48@gmail.com

Present address:

(Invited investigator)

Instituto Butantan, Laboratorio de Imunologia Viral

Av Vital Brasil 1500, 05503-900 S. Paulo Brasil

tel. 55.11. 26279622 e-mail. carlos.pereira@butantan.gov.br

(Invited professor)

Universidade de São Paulo

Escola Politécnica (GEnBio)

Tel. 55.11.30911105 e-mail. grugel@usp.br

Former professional addresses:

(Director) 1985-2013

Instituto Butantan, Laboratorio de Imunologia Viral

Av Vital Brasil 1500, 05503-900 S. Paulo Brasil

tel. 55.11. 26279622 e-mail. carlos.pereira@butantan.gov.br

(Invited professor) 1993-2000

Ecole Supérieure de Biotechnologie de Strasbourg

Université de Strasbourg, France

Bd Sébastien Brandt, Illkirch, tel. 33 (0)388360861

(Professor) 1972-1977

Faculdade de Medicina da Santa Casa de São Paulo, Microbiologia

Rua Doutor Cesário Mota Júnior, 112 - Vila Buarque, São Paulo - SP, 01221-020

Language knowledge

English, French, German, Portuguese, Spanish, Italian

ACADEMIC FORMATION

University

Biomedical School of “Universidade do Estado da Guanabara”, Rio de Janeiro (1967-71)

PhD

« Doutoramento » Viral Immunology, 1974

Universidade Estadual de Campinas, S.Paulo, Brazil

Determination of humoral immune response after antirabies vaccination

Post doctoral positions

Institut Pasteur, Service de la Rage, Paris, France

Universitat Wurzburg, Institut fur Virologie und Immunbiologie, Wurzburg, Germany

Université de Strasbourg, Institut de Virologie, Strasbourg, France

PROFESSIONAL POSITION

Investigator, Head of Laboratory Virus Immunology

Instituto Butantan, S.Paulo, Brasil

Laboratory of Viral Immunology

1985-2013

Director of BL3 Laboratory for Cell Culture R&D Technology on bioreactor for vaccine production

Instituto Butantan, S.Paulo, Brasil

1989-2013

Invited Professor

University of Strasbourg, France

« Ecole Supérieure de Biotechnologie de Strasbourg » (1995-2001)

« Institut de Virologie » (2003-2010)

Professor assistant

Faculdade de Medicina da Santa Casa de São Paulo, Microbiologia (1972-1977)

ACTIVITIES RELATED TO RESEARCH AND DEVELOPMENT (R&D)

Invited for conferences and chairing in several congresses and institutions in different countries.

Supervisor of Microbiology, Immunology and Biotechnology post-graduation.

40 PhD Thesis on R & D supervised from 1985 to 2014.

Several participations in academic examinations and in pharmaceutical meetings.

Consulting and Partner in development of human and veterinarian viral vaccines (Artelis, ATMI, Merck, Vallée, etc)

Member of editorial, advisory, consultant or referee board of several **scientific journals** (Bioprocess Engineering, Biotechnology & Bioengineering, Biotechnology Progress, Journal of Biotechnology, Biotechnology & Applied Biochemistry, Enzyme and Microbial Technology, Immunobiology, Trends in Microbiology, Electronic Journal of Pathology, Brazilian Journal of Medical and Biological Research, Cytotechnology (member of the Editor Board).

Member of consultant board of several **R & D financial institutions** (Fundação de Amparo a Pesquisa do Estado de São Paulo - FAPESP, Brazilian Council for Research and Development - CNPq, Instituto Oswaldo Cruz, Rio de Janeiro, University of Londrina, Brasil, Groupe of Immunobiotechnology - GIB - of University Louis Pasteur, Strasbourg, France).

Member of the Brazilian **Committee** of AIDS vaccine.

Director of the Viral Immunology R & D Laboratory (15 persons) (1985-2013) of the Instituto Butantan, a state owned institution with about 1000 employees responsible for human vaccine and sera development and production.

Vice-Director of the Division of Scientific Development (12 R & D Laboratories) of the Instituto Butantan, Brasil (1994-1996).

Responsible for the BL3 laboratory of R&D cell culture technology for production of immunobiologicals and for preclinical development of viral vaccines under GMP standards at the Instituto Butantan, S.Paulo, Brasil.

Vice-President of the Brazilian Society of Immunology (1995-1997).

Associate Professor and consultant of the University of Strasbourg, “Ecole Européenne de Biotechnologie de Strasbourg, France” (1995-2001) and “Institute of Virology” (2002-2010)

Invited Professor Universidade de São Paulo, Departamento de Engenharia Química (2012)

Fund raising from several institutions from different countries to develop research (about 200.000US\$/year), development (about 100.000US\$/year), UNESCO international training courses (about 10.000US\$/year) and build infrastructure (about 500.000US\$ for a BL3 laboratory for R&D large scale cell culture) for immunobiological production.

International activities of transfer of technology and human resources training (Brazilian institutions, INSERM, CNRS, European Economic Community EEC, "Deutsch Akademischer Austauschdienst- DAAD", UNESCO, ICRO, Rockefeller Foundation, etc...).

International Collaboration Programs (DFG, DAAD, INSERM, CNRS, CAPES) with European Universities (Wurzburg, Freiburg, Strasbourg) and Institutes (Max-Planck, Pasteur, Basel Institute of Immunology)

Member of the Brazilian National Biosafety Committee (CTNBio) (2006-2007)

Responsible for coordination of a multidisciplinary R&D project on viral gene expression and bioproduction in insect cells for new viral vaccines for human and animal use.

Coordinator of the TACnet – a network of laboratories for the study of Animal Cell Technologies (www.tacnetrd.com) and the organization of several Latin America conferences and training courses.

LIST OF PUBLICATIONS

C A Pereira

Researcher ID: H-8686-2012

1. **Pereira CA**, Mimica I, Takeda A. - Automated agglutination reaction for the detection of Australia antigen, *T. cruzi* antipolysaccharide antibodies. *Bull. Pan. Am. Health Org.* 1978, 4:12
2. **Pereira CA**, Pereira OAC. - Determination of the humoral immune response after antirabies vaccination as a guide to revaccination. *Bull. Pan. Am. Health Org.* 1979, 3:86
3. Longo IM, Ricci O, **Pereira CA**. - Identificação de cepas de *E.coli* enteropatogenicas em amostras de fezes por reação de imunofluorescência direta. *Rev.Saude Publ.S.Paulo* 1980, 14:31
4. **Pereira CA**, Longo I, Ricci O, Da Silva AP. - Automated complement fixation test for the detection of anti-*T.cruzi* antibodies. *Rev. Inst. Med. Trop. S.Paulo* 1980, 4:22
5. **Pereira CA**, Mimica I, Takeda A. - Reacciones de agglutination automatizada para la detection de antigeno Australia, anticuerpos antipolissacáridos de *T.Cruzi* y anticuerpos contra antigenos flagelares de *Salmonela*. *Bol. Of. Sanit. Panam.* 1980, 2:88
6. **Pereira CA**. Uma experiencia de ensino na Universidade. *Ciencia e Cultura* 1981,33,1
7. Nozaki-Renard J, **Pereira CA**, Schwartz J, Eyquem A, Atanasiu P. - Etude comparative de la cytotoxicité cellulaire dépendante des anticorps. *Rivue de l'Institut Pasteur de Lyon* 1981, 14:3.
8. Atanasiu P, Nozaki-Renard J, **Pereira CA**, Schwartz J, Eyquem A. - Comparative study between the antibody-dependent cellular cytotoxicity (ADCC) and neutralizing antibody in subjects vaccinated against rabies. In: *Cell culture rabies vaccines and their protective effect in man*. Eds: Kuwert, Wiktor, Koprowski. Proceedings of WHO consultations held in Essen, 1980, 200-208.
9. **Pereira CA**, Nozaki-Renard J, Schwartz J, Eyquem A. and Atanasiu P. - Cytotoxicity reactions against target cells infected with rabies virus. *J. Virol. Meth.* 1982, 5:75.
10. **Pereira CA**, Mercier G, Oth D, Dupuy JM. - Induction of Natural Killer cells and interferon during Mouse Hepatitis Virus infection. *Immunobiol.* 1984, 166:35-44
11. **Pereira CA**, Steffan AM, Kirn A. - Interaction between Mouse Hepatitis Virus and primary cultures of endothelial and Kupffer cells from resistant and susceptible inbred mouse strains. *J. Gen. Virol.* 1984, 65:1617-1620
12. **Pereira CA**, Steffan AM, Kirn A. - Sinusoidal cell damage allows Mouse Hepatitis Virus to produce injury in resistant mice. *Virus Res.* 1984, 1:557.
13. **Pereira CA**, Steffan AM, Koehren F, Kirn A. - Inhibition of Mouse Hepatitis Virus multiplication in activated Kupffer cells. *Braz. J. Med. Biol. Res.* 1985, 18:527-531
14. Kirn A, Keller F, Steffan AM, **Pereira CA**, Koehren F. Increase in the anti-infectious capacities of kupffer cells by in vitro treatment with endotoxin. In: *Experimental and Clinical Hepatology*. Eds. Broelsch CE, Zelder O, MTP press Ltd, Lancaster, 1985, 202-208.

15. DiLuzio NR, Knook DL, Lasskin DL, Nolan JP, **Pereira CA**, Wake K, Decker D. - What is kupffer cell activation? (round table). In: *Cells of the hepatic sinusoid*. A. Kirn, DL Knook, E Wisse, eds. Proceedings of the International Kupffer cell symposium held in Strasbourg, France, 1985,363,364.
16. Keller F, **Pereira CA**, Wild MT, Koehren F, Kirn A. - Kupffer cells activated in vitro display antiviral activity. In: *Cells of the hepatic sinusoid*. A. Kirn, DL Knook, E Wisse eds. Proceedings of the third International Kupffer cell symposium held in Strasbourg, France 1985,269-275.
17. **Pereira CA**, Steffan AM, Klein F, Rebel G, Kirn A. - Kupffer cells from mice fed a hypercholesterolemic diet have lost their ability to be activated by endotoxin in vitro. In: *Cells of the hepatic sinusoid*. A. Kirn, DL Knok, E. Wisse eds. Proceedings of the third international Kupffer cell symposium held in Strasbourg, France, 1985,365-370.
18. Steffan AM, **Pereira CA**, Kirn A. - Role of sinusoidal cells in the course of the hepatitis induced by mouse hepatitis viurs mice. In: *Cells of the hepatic sinusoid*. A Kirn, DL Knook, E. Wisse eds. Proceedings of the third international Kupffer cell symposium held in Strasbourg, France 1985, 377, 378.
19. **Pereira CA**, Steffan AM, Koehren F, Douglas CR, Kirn A. - Increased susceptibility of mice to MHV3 infection induced by hypercholesterolemic diet. Impairment of Kupffer cells. *Immunobiol.* 1987, 174:253-265
20. **Pereira CA**, Pickel K.- An immunological analysis of natural resistance against mouse hepatitis virus (JHM strain) infection in C3H mice. *Braz.J.Med.Biol.Res.* 1987,20:115-123
21. Consales C, Valentini EJG, Albas A, Mendonça RMZ, Fuches RMM, Soares MA, **Pereira CA**. - Preparation of cultured rabies virus and production of antiserum for human use. *J.Biol.Standard.*1988,16:27-32
22. Lucchiari MA, Longo MA, **Pereira CA**. - Non fatal demyelinating encephalomyelitis induced by Coronavirus (JHM strain) infection in mice. *Braz.J.Med.Biol.Res.* 1989,22:77.
23. Kirn A, Bingen A, Chen W, Gendrault JL, Gut JP, Keller F, **Pereira CA**, Steffan AM. 1989. - Interactions of viruses with sinusoidal cells. In: *Sinusoids in human liver: Health and Disease*. Ed.Bioulac-Sage P and Balabaud C. The Kupffer cell foundation, Rijswick, Netherlands.
24. Lucchiari MA, **Pereira CA**. - A major role of macrophage activation during mouse hepatitis virus type 3 infection. Genetic dependent resistance. *Immunobiol.* 1989,180:12.
25. Lucchiari MA, **Pereira CA**. - A major role of macrophage activation during mouse hepatitis virus type 3 infection. Age dependent resistance. *Immunobiol.* 1990,181:31.
26. Consales CA, Mendonça RZ, Gallina NM, **Pereira CA**. - Cytopathic effect induced by rabies virus in McCoy cells. *J.Virol.Meth.* 1990,27:277.
27. Consales CA, Mendonça RZ, Lucchiari MA, Vassão RC, **Pereira CA**. - The macrophage action on rabies virus infection in genetically selected high and low antibody responder lines of mice. *Res. Virol.* 1990, 141:57.
28. Braunwald J, Nonnenmacher CA, **Pereira CA**, Kirn A. - Increased susceptibility to mouse hepatitis virus type 3 (MHV3) infection induced by a hypercholesterolemic diet with increased adsorption of MHV3 to primary hepatocyte cultures. *Res.Virol.* 1991, 142:5-15.
29. Lucchiari MA, Martin JP, Modollel M, **Pereira CA**. - Acquired immunity dependence of A/J mice resistance to mouse hepatitis virus 3 infection. *J.Gen.Viro.* 1991,72:1317-1322.
30. **Pereira CA**, Lucchiari MA. - O BCG redescoberto. *Ciencia Hoje* 1991, 13:11.
31. Lucchiari MA, Modollel M, Eichmann K, **Pereira CA**. - *In vivo* depletion of interferon gamma leads to susceptibility of A/J mice to Mouse hepatitis Virus 3 infection. *Immunobiol.* 1992, 185:475-482
32. Dami S, Vassao R, Lucchiari MA, **Pereira CA**, Sant'Anna OA. A Comparative study in genetic homogeneous and heterogeneous populations to MHV3 infection. *Braz.J.Med.Biol.Res.* 1992, 25:1025-1027
33. Lucchiari MA, **Pereira CA**, Kuhn L, Lefkovits I. - The pattern of protein synthesized in the liver is profoundly perturbed upon infection of susceptible mice with Mouse Hepatitis Virus 3. *Res.Virol.* 1992, 143:231-240.
34. Lucchiari MA, Martin JP, **Pereira CA**. - Mouse hepatitis Virus 3 and interferon gamma binding to macrophage membranes of resistant and susceptible mice. *Braz.J.Med.Biol.Res.* 1993, 26:509-518
35. Vassão R, Russo M, Marcondes MCB e **Pereira CA**. Resistance of genetically selected mice to MHV3 infection correlates to but it is not dependent on the H2O2 release by macrophages. *Microb. Path.* 1993, 14:169-176
36. Mendonça RZ, **Pereira CA**. BHK cell growth on microcarriers in a bioreactor *Bol.Biotecnol.* 1993, 4:13-16
37. Mello IGC, **Pereira CA**. Virus specificity of the antiviral state induced by IFN gamma correlates with resistance to MHV3 infection *Arch.Virol.* 1993, 132:281-289
38. **Pereira CA**. Vacina contra raiva sem efeitos colaterais. *Ciencia Hoje* 1993, 16:56-57
39. **Pereira CA**, Lucchiari MA, Modolell M, Kuhn L, Lefkovitz I. An attempt to identify gene products related to the induction of antiviral state in macrophages resistant and sensitive to IFN-gamma *Res.Virol.* 1993, 144:479-486
40. Mendonça RZ, Yoshimoto I, Mendonça RMZ, De Franco M, Valentini EJG, Raw I, Beçak W, **Pereira CA**. - Preparation of human rabies vaccine in VERO cell culture using a microcarrier system *Braz.J.Med.Biol.Res.* 1993, 26:1305-1319.

41. Lucchiari MA, Modollel M, Vassao R, **Pereira CA**. - TNF alpha, IL1 and O₂⁻ release by macrophages do not correlate with the anti-Mouse hepatitis Virus 3 effect induced by interferon gamma *Microb. Path.* 1993, 15:447-454
42. Mendonça RZ, **Pereira CA**. - Interferon synthesis may account for the resistance of mice infected with street rabies virus *Braz.J.Med.Biol.Res.* 1994, 27:691-696
43. Lucchiari MA, Martin JP, Modollel M, **Pereira CA**. Delayed viral RNA and protein synthesis correlated with the virus growth in MHV3 infected macrophages of resistant mice *Braz.J.Med.Biol.Res.* 1994, 27:601-612
44. Mendonça RZ, Vaz de Lima IRA, Oliveira MI, **Pereira CA**, Hoshino-Shimizu S. - Studies on the efficiency of measles virus antigen production using VERO cell culture in a microcarrier system *Braz.J.Med.Biol. Res.* 1994, 27:1575-1587
45. Martin JP, Chen W, Koehren F and **Pereira CA**. The virulence of mouse hepatitis virus 3, as evidenced by permissivity of cultured hepatic cells towards escape mutants. *Res.Virol.* 1994, 145:297-302.
46. Vassao RC, Mello IGC, **Pereira CA**. Role of macrophages, interferon gamma and procoagulant activity in the resistance of genetic heterogeneous mouse populations to mouse hepatitis virus infection *Arch.Virol.* 1994, 137:277-288
47. Vassao RC and **Pereira CA**. Antiviral activity of interferon gamma "in vivo" during mouse hepatitis virus infection *Braz.J.Med.Biol.Res* 1994, 27:2407-2411
48. Borges MM, Vassao RC, **Pereira CA**, Kloetzel JK. gIFN and macrophage respiratory burst in *Calomys callosus* challenged with *Trypanosoma cruzi* bloodstream and metacyclic forms. *Immunol. Lett.* 1994, 42:81-85
49. Vassão RC, Sant'Anna OA, **Pereira CA**. A genetic analysis of macrophage activation and specific antibodies in relation with the resistance of heterogeneous mouse populations to MHV3 infection *Arch.Virol.* 1994, 139:417-425
50. Mendonça RZ, **Pereira CA**. - High density VERO cell culture on microcarriers in cell bioreactor. *Bioprocess Eng.* 1995, 12:279-282
51. **Pereira CA**. Research and Development (R & D) in Immunology at the Instituto Butantan. *Ciência e Cultura*, 1995, 47:118-119.
52. Vancetto MDC, Curi LC, **Pereira CA**. Neutralization of the effect of *Crotalus durissus terrificus* venom by gangliosides. *Braz.J.Med.Biol.Res.* 1995, 28:553-556
53. Vassao RC, Cabrera WH, Ibanez OC, **Pereira CA**. Specific T-cell response correlates with resistance of genetic heterogeneous mouse populations to Mouse Hepatitis Virus 3 infection. *Arch. Virol.* 1995, 140:1235-1245
54. Steffan AM, **Pereira CA**, Bingen A, Valle M, Martin JP, Koehren F, Royer C, Gendrault JL and Kirn A. Mouse Hepatitis Virus 3 infection provokes a decrease in the number of sinusoidal endothelial cell fenestrae both in vivo and in vitro. *Hepatology*, 1995, 22:395-401
55. Borges M, Vassao R, Andrade SG, **Pereira CA**, Kloetzel JK. Interferon gamma levels during the course of *Trypanosoma cruzi* infection of *Calomys callosus* (Rodentia-Cricetidae) and Swiss mice. *Parasitol. Res.* 1995, 81:498-504
56. **Pereira CA**, Soler G, Modolell M. Anti-MHV3 state induced by IFN gamma in macrophages is not related to arginine metabolism. *Arch. Virol.* 1997, 142:2001-2010
57. Mendonça RZ, **Pereira CA**. Cell metabolism and medium perfusion in VERO cell cultures on microcarriers in a bioreactor. *Bioprocess Eng.* 1998, 18:213-218
58. Zanetti CR, Tino de Franco M, Vassão RC, **Pereira CA**, Pereira OAC. Failure of protection induced by vaccination in cross protection experimental studies with Brazilian wild strains of rabies viruses. *Arch.Virol.* 1998, 143:1745-1756
59. Mendonça RZ, Prado JCM, **Pereira CA**. Attachment, spreading and growth of VERO cells on microcarriers for the optimization of large scale cultures. *Bioprocess Eng.* 1999, 20:565-571
60. Massotte D, Pouliquen Y, **Pereira CA**, Pattus F. Parameters influencing human mu opioid receptor overexpression in baculovirus-infected insect cells. *J. Biotechnol.* 1999, 69:39-45
61. Russo FO, Patel PC, Ventura AM, **Pereira CA**. HIV1 long terminal repeat modulation by glucocorticoids in monocytic and lymphocytic cell lines. *Virus Research* 1999, 64:87-94
62. Vassão RC, de Franco MT, Hartz D, Modolell M, Sippel AE, **Pereira CA**. Down-regulation of Bgp1a viral receptor by interferon gamma is related to the antiviral state and resistance to mouse hepatitis virus 3 infection. *Virology* 2000, 274:278-283
63. Hoshino-Shimizu S, Vaz de Lima LRA, Oliveira MI, **Pereira CA**, Moura A, Mendonça RZ. Measles serodiagnosis: production and evaluation of the IGM-measles ELISA IAL reagent. *Brazilian Journal of Microbiology* 2001, 32 :70-75
64. Frazzati-Gallina N, Paoli RL, Mourão-Fuches RM, Jorge SAC, **Pereira CA**. Higher production of rabies virus in serum-free medium cell cultures on microcarriers. *J. Biotechnol.* 2001, 92 :67-72
65. **Pereira CA**, Pouliquen Y, Rodas V, Massotte D, Mortensen C, Sogayar MC, Menissier-de-Murcia J. Optimized Insect Cell Culture for the production of recombinant heterologous proteins and baculovirus particles. *BioTechniques* 2001, 31 :1262-1268
66. Mendonça RZ, Arrózio SJ, Antoniazzi MM, Ferreira Jr JMC, **Pereira CA**. Metabolic active-high density VERO cell cultures on microcarriers following apoptosis prevention by galactose/glutamine feeding. *J. Biotechnol.* 2001, 97:13-22

67. Maranga L, Mendonça RZ, Bengala A, Peixoto CC, Moraes RHP, **Pereira CA**, Carrondo MJT. Enhancement of Sf9 cell growth and longevity through supplementation of culture medium with hemolymph. *Biotechnology Progress* 2002, 19, 58-63
68. Vassão RC, Consales CA, Sant'Anna AO, **Pereira CA**. Antibody responsiveness during immunization and challenge of genetically modified antibody responder mice with murine hepatitis virus 3. *Immunobiology* 2003, 207:1-9
69. Yokomizo AY, Antoniazzi MM, Galdino PL, Azambuja Jr.N, Jorge SAC, **Pereira CA**. Rabies Virus Production in High Vero Cell Density Cultures on Macroporous Microcarriers. *Biotechnology & Bioengineering* 2004, 85(5):506-515.
70. Neves FO, Ho PL, Raw I, **Pereira CA**, Moreira C, Nascimento ALTO. Overexpression of a synthetic gene encoding human alpha interferon in Escherichia coli. *Protein Expression and Purification* 2004, 35:353-359
71. Mendonça RZ, Oliveira MI , Vaz-de- Lima LRA, Andrade GP, **Pereira CA**, Hoshino-Shimizu S. Effect of Cell Culture System on the Production of Human Viral Antigens. *J.Bras.Patol.Med.Lab* 2004, 40:147-151
72. **Pereira CA**, Schenberg ACG. Pós-graduação em Biotecnologia: êxitos e dificuldades de uma experiência interinstitucional. *Revista Brasileira de Pós-Graduação*. 2004, 1:101-110
73. Moreira C, Tsuhako H, Tino de Franco M, Modolell M, **Pereira CA**. Arginine metabolism during macrophage autocrine activation and infection with mouse hepatitis virus 3. *Immunobiology* 2004, 209:585-598.
74. Souza APB, Peixoto CC, Maranga L, Carvalhal AV, Moraes RHP, Mendonça RMZ, **Pereira CA**, Carrondo MJT, Mendonça RZ. Purification and characterization of an anti-apoptotic protein isolated from *Lonomia obliqua* hemolymph. *Biotechnol. Prog* 2005, 21:99-105.
75. **Pereira CA**, Modolell M, Frey JR, Lefkovits I. Gene expression in IFN gamma activated murine macrophages. *Braz.J.Med.Biol.Res.* 2004, 37:1795-1809.
76. Raffoul T, Swiech K, Arantes MK, Sousa APB, Mendonça RZ, **Pereira CA**, Suazo CAT. Performance evaluation of CHO Ki cell in culture medium supplemented with hemolymph. *Braz. Arch Biol Technol.* 2005, 48:85-95
77. **Pereira CA**, Moreira C, Tsuhako MH, de Franco MT. Mouse Hepatitis Virus 3 binding to macrophages correlates with mouse resistance/susceptibility to experimental infection. *Scand.J.Immunol.* 2005, 62:95-99
78. Rodas VM, Marques FH, Honda MT, Soares DM, Jorge SAC, Antoniazzi MM, Medugno C, Castro ME, Ribeiro BM, Souza ML, Tonso A, **Pereira CA**. Cell culture derived AgMNPV bioinsecticide. Biological constraints and bioprocess issues *Cytotechnology* 2005, 48 27-39.
79. Batista FRX, **Pereira CA**, Mendonça RZ, Moraes AM. Enhancement of Sf9 Cells and Baculovirus Production Employing Grace's Medium Supplemented with Milk Whey Ultrafiltrate. *Cytotechnology* 2005, 49: 1-9.
80. Brillet K, Conceição MM, Pattus F, **Pereira CA**. Bioprocess parameters of cell growth and human mu opioid receptor expression in recombinant Drosophila S2 cell cultures in a bioreactor. *Bioprocess and Biosystems Engineering*. 2006, 28:291-293
81. Codran A, Royer C, Jaeck D, Bastien-Valle M, Baumert TF, Kieny MP, **Pereira CA**, Martin JP. Entry of hepatitis C virus pseudotypes into primary human hepatocytes by clathrin-dependent endocytosis. *J.Gen Virol.* 2006, 87:2583-2593
82. Consales CA, **Pereira CA**, Passos EC, Carrieri ML, Galina NMF, Sant' Anna OA. Lack of correlation between rabies virus replication in the brain and antibody isotype profile in genetically modified mice. *J. Venom. Anim. Toxins Trop. Dis.* 2006, 3: 423-434
83. Batista FRX, **Pereira CA**, Mendonça RZ, Moraes AM. Evaluation of Concentrated Milk Whey as a Supplement for Sf9 Spodoptera frugiperda Cells in Culture. *Eletronic Journal of Biotechnology* 2006, 9:522-532
84. Tsuhako MH, Augusto O, Linares E, Dagli MLZ, **Pereira CA**. Association between nitric oxide synthesis and vaccination-acquired resistance to murine hepatitis virus by spf mice. *Free Radical Biology & Medicine*. 2006, 41:1534-1541
85. Yokomizo AY, Jorge SAC, Astray RM, Fernandes I, Ribeiro OG, Horton DSPQ, Tonso A, Tordo N, **Pereira CA**. Rabies virus glycoprotein expression in Drosophila S2 cells. I. Functional recombinant protein in stable co-transfected cell line. *Biotechnol. Journal* 2007, 2:102-109.
86. Santos MG, Jorge SAC , Brillet K, **Pereira CA**. 2007. Improving heterologous protein expression in transfected Drosophila S2 cells as assessed by EGFP expression. *Cytotechnology* 2007, 54:15-24
87. Mendonça RZ, Oliveira EC, **Pereira CA**, Lebrun I. Effect of bioactive peptides isolated from yeastolate, lactalbumin and NZCase in the insect cell growth *Bioprocess Biosyst Eng* 2007, 30:157-164.
88. Galesi ALL, Batista FRX, Mendonca RZ, **Pereira CA**, Moraes AM. 2007. Design of culture media for Drosophila melanogaster S2 cells producing recombinant G glycoprotein from rabies virus. In: Cell Technology for Cell Products, R. Smith (ed.), Springer, 403-413.
89. Swiech K, Galesi ALL, Moraes AM, Mendonca RZ, **Pereira CA**, Suazo CAT. 2007. Comparison of the cultivation of wild and transfected Drosophila melanogaster S2 cells in different media. In: Cell Technology for Cell Products, R. Smith (ed.), Springer, 415-423.
90. Galesi, A.L.L., Pereira, C.A. e Moraes, A.M. Culture of transgenic Drosophila melanogaster Schneider 2 cells in serum-free media based on TC100 basal medium. *Biotechnology Journal* 2007, 2:1399-1407
91. Conceição MM, Tonso A, Freitas CB, **Pereira CA**. Viral antigen production in cell cultures on microcarriers. Bovine parainfluenza 3 virus and MDBK cells. *Vaccine* 2007, 25:7785-7795

92. Astray RM, Augusto E, Yokomizo AY, **Pereira CA**. Analytical approach for extraction of recombinant membrane viral glycoprotein from stably transfected *Drosophila melanogaster* cells. *Biotechnology Journal* 2008, 3: 98-103
93. Galesi ALL, Batista FRX, Mendonca RZ, **Pereira CA**, Moraes AM. 2007. Design of culture media for *Drosophila melanogaster* S2 cells producing recombinant G glycoprotein from rabies virus. In: Cell Technology for Cell Products, R. Smith (ed.), Springer, 403-413.
94. Swiech K, Galesi ALL, Moraes AM, Mendonca RZ, **Pereira CA**, Suazo CAT. 2007. Comparison of the cultivation of wild and transfected *Drosophila melanogaster* S2 cells in different media. In: Cell Technology for Cell Products, R. Smith (ed.), Springer, 415-423.
95. Swiech K, Silva CS, Arantes MK, Santos AS, Astray RM, **Pereira CA**, Suazo CAT. Characterization of growth and metabolism of *Drosophila melanogaster* cells transfected with the rabies virus glycoprotein gene. *Biotechnol. Appl. Biochem.* 2008, 49, 41-49
96. Pamboukian MM, Jorge SAC, Santos MG, Yokomizo AY, **Pereira CA**, Tonso A. Insect cells respiratory activity in bioreactor *Cytotechnology* 2008, 57:37-44
97. Mendonça RZ, Greco KN, Sousa APB, Moraes RHP, Astray RM, **Pereira CA**. Enhancing effect of a protein from *Lonomia obliqua* hemolymph on recombinant protein production. *Cytotechnology*. 2008, 57:83-91
98. Bovo R, Galesi ALL, Jorge SAC, Piccoli RAM, Moraes AM, **Pereira CA**, Augusto EFP. Kinetic response of a *Drosophila melanogaster* cell line to different medium formulations and culture conditions. *Cytotechnology*. 2008, 57:23-35
99. Batista FRX, **Pereira CA**, Mendonça RZ, Moraes AM. Formulation of a protein-free medium based on IPL-41 for the sustained growth of *Drosophila melanogaster* S2 cells. *Cytotechnology*. 2008, 57:11-22
100. Jorge SAC, Santos AS, Spina A, **Pereira CA**. Expression of the Hepatitis B Virus Surface Antigen in *Drosophila* S2 cells. *Cytotechnology* 2008, 57:51-59.
101. Benmaamar R, Astray RM, Wagner R, **Pereira CA**. High-level expression of rabies virus glycoprotein with the RNA-based Semliki Forest Virus expression vector. *Journal of Biotechnology* 2009, 139, 283-290.
102. Mello IMVGC, Thumann C, Schvoerer E, Soulier E, Pinho JRR, Silvestre DAMM, Queiroz, ATL, Wolf P, Baumert TF, Keller FS, **Pereira CA**. Conservation of hepatitis C virus non structural protein 3 amino acid sequence in viral isolates during liver transplantation. *Journal of Viral Hepatitis* 2009, 16, 732-737
103. Lemos MAN, Santos AS, Astray RM, **Pereira CA**, Jorge SAC. Rabies virus glycoprotein expression in *Drosophila* S2 cells. I. Design of expression/selection vectors, subpopulations selection and influence of sodium butyrate and culture medium on protein expression. *Journal of Biotechnology* 2009, 143:103-110
104. Santos AS, Lemos MAN, **Pereira CA**, Jorge SAC. Rabies virus glycoprotein expression in *Drosophila* S2 cells: Influence of re-selection on protein expression. *Biotechnology Journal* 2009, 4:1578-1581
105. Mantovani MC, Conceição MM, Ferreira AJS, Labriola L, Santos PB, Tonso A, **Pereira CA**, El-Dorry H, Sogayar MC. Immobilization of Primary Cultures of Insulin-Releasing Human Pancreatic Cells. *Islets* 2009, 1:3, 224-231.
106. Augusto EFP, Moraes AM, Piccoli RAM, Barral MF, Suazo CAT, Tonso A, **Pereira CA**. Nomenclature and guideline to express the amount of a membrane protein synthesized in animal cells in view of bioprocess optimization and production monitoring. *Biologics* 2010, 38:105-112
107. Tsuhako MH, Augusto O, Linares E, Chadi G, **Pereira CA**. Tempol ameliorates murine viral encephalomyelitis by preserving the blood-brain barrier, reducing viral load and lessening inflammation. *Free Radical Biology and Medicine* 2010 48:704-712
108. Benmaamar R, Wagner R, **Pereira CA**. "Rabies prevention: Current trends in anti-rabies vaccines". In: Rabies: Symptoms, Treatment and Prevention. Series: *Virology Research Progress* (Ed. JG Williamson), Nova Science Publishers, Inc. Pub. Date: 2010 - 2nd Quart ISBN: 978-1-61668-250-7.
- https://www.novapublishers.com/catalog/product_info.php?products_id=11148
109. Brillet K, **Pereira CA**, Wagner R. Expression of membrane proteins in *Drosophila melanogaster* S2 cells: production and analysis of a EGFP-fused G Protein-Coupled Receptor as a model. In: *Heterologous Expression of Membrane Proteins: Methods and Protocols* (Ed. Isabelle Mus-Veteau) Humana Press, January 10, 2010
- <http://www.amazon.co.uk/Heterologous-Expression-Membrane-Proteins-Protocols/dp/1607613433>
110. Ventini DC, Astray RM, Lemos MAN, Jorge SAC, Calderon C, Suazo CAT, Tonso A, **Pereira CA**. Recombinant rabies virus glycoprotein synthesis in bioreactor by transfected *Drosophila melanogaster* S2 cells carrying a constitutive or an inducible promoter. *Journal of Biotechnology* 2010, 146:169-172
111. Batista, FRX, Greco, KN, Astray RM; Jorge SAC, Augusto, EFP, **Pereira, CA**, Mendonça, RZ, Moraes ÂM. Behavior of wild-type and transfected s2 cells cultured in two different media. *Applied Biochemistry and Biotechnology* 2011, 163:1-13
112. Ventini DC, Damiani R, Sousa APB, Oliveira JE, Peroni CN, Ribela MTCP, Bartolini P, Tonso A, Soares CRJ, **Pereira CA**. Improved bioprocess with CHO-hTSH cells on higher microcarrier concentration provides higher overall biomass and productivity for rhTSH *Applied Biochemistry and Biotechnology* 2011, 164:401.

- 113.** Pamboukian MM, **Pereira CA**, Augusto EAP, Tonso A. Adaptation of the “Dynamic Method” for measuring the specific respiration rate in oxygen transfer systems through diffusion membrane. *Biotechnology Journal* 2011, 6 :1497-1503
- 114.** Moraes AM, Jorge SAC, Astray RM, Suazo CAT, Calderón Riquelme CE, Augusto EFP, Tonso A, Pamboukian MM, Piccoli RAM, Barral MF, **Pereira CA**. Drosophila melanogaster S2 cells for expression of heterologous genes: From gene cloning to bioprocess development. *Biotechnology Advances* 2012, 30:613–628
- 115.** Rossi N, Silva BG, Astray R, Swiech K, **Pereira CA**, Suazo CAT. Effect of hypothermic temperatures on production of rabies virus glycoprotein by recombinant Drosophila melanogaster S2 cells cultured in suspension. *Journal of Biotechnology* 2012, 161:328– 335
- 116.** Astray RM, Jorge SAC, Lemos MAN, Yokomizo AY, Boldorini VLL, Puglia ALP, Ribeiro OG, **Pereira CA**. Kinetic studies of recombinant rabies virus glycoprotein (RVGP) cDNA transcription and mRNA translation in *Drosophila melanogaster* S2 cell populations, *Cytotechnology* 2013, 65:829-838
- 117.** Nunez EGF, Leme J, Parizotto LA, Chagas WA, Rezende AG, Costa BLV, Ventini Monteiro DC, Boldorini VLL, Jorge SAC, Astray RM, **Pereira CA**, Caricati CP, Tonso A. Influence of aeration–homogenization system in stirred tank bioreactors, dissolved oxygen concentration and pH control mode on BHK-21 cell growth and metabolism. *Cytotechnology* (in press) DOI 10.1007/s10616-013-9612-0
- 118.** Puglia ALP, Rezende AG, Jorge SAC, Wagner R, **Pereira CA**, Astray RM. Quantitative RT-PCR for titration of replication-defective recombinant Semliki Forest Virus. *Journal of Virological Methods* 2013 193:647- 652
- 119.** Núñez EGF, Jorge SAC, Astray RM, Rezende AG, Costa BLV, Ventini DC, **Pereira CA**, Tonso A. Semliki Forest Virus as a vector: pros and cons for its use in biopharmaceuticals production. *Brazilian Archives of Biology and Technology*, 2013 56:859-866
- 120.** Leme J, Núñez EGF, Parizotto LA, Chagas WA, Santos ES, Caricati ATP, Rezende AG, Costa BLV, Ventini Monteiro DC, Boldorini VLP, Jorge SAC, Astray RM, **Pereira CA**, Caricati CP, Tonso A A multivariate calibration procedure for UV/VIS spectrometric monitoring of BHK-21 cell metabolism and growth. *Biotech Prog* 2014 30:241-248
- 121.** Astray RM, Ventini DC, Boldorini VLL, Silva FG, Rocca MP, **Pereira CA**. Rabies virus glycoprotein and immune response pattern using recombinant protein or recombinant RNA viral vectors Vaccine 2014, 32:2829–2832
- 122.** Patiño SFS, Mancini RA, **Pereira CA**, Suazo CAT, Mendonca RZ, Jorge SAC. Transient expression of rabies virus glycoprotein (RVGP) in *Drosophila melanogaster* Schneider 2 (S2) cells. *Journal of Biotechnology* 2014 (in press)
- 123.** Núñez EGF, Leme J, Parizotto LA, Rezende AG, Costa BLV, Boldorini VLL, Jorge SAC, Astray RM, Pereira C, Caricati CP, Tonso A. Approach toward an efficient inoculum preparation stage for suspension BHK - 21 cell culture. *Cytotechnology* 2014 (DOI 10.1007/s10616-014-9756-6)
- 124.** Santos MG, Machado AZ, Martins CN, Domenice S, Costa EMF, Nishi MY, Ferraz-de-Souza B, Jorge SAC, Pereira CA, Soardi FC, Mello MP, Maciel-Guerra AT, Guerra-Junior G, Mendonca BB. Homozygous Inactivating Mutation in NANOS3 in Two Sisters with Primary Ovarian Insufficiency. *BioMed Res Int* 2014 (<http://dx.doi.org/10.1155/2014/787465>)