

# ***CURRICULUM VITAE***

## **Carlos Eduardo Tadokoro, Ph. D.**

**Date of Birth:** September, 10<sup>th</sup>, 1970  
**Nationality:** Brazilian  
**Business Address:** Instituto Gulbenkian de Ciência  
Lab of Immune Regulation and Unit of Cell Imaging  
Rua da Quinta Grande, 6  
Oeiras, Postal Code: 2780-156, Portugal  
**Business phone:** 351-21-446-4606  
**Business telefax:** 351-21-440-7970  
**e-mail:** ctadokoro@igc.gulbenkian.pt

**Current position:** Principal Investigator  
Instituto Gulbenkian de Ciência

### ***Education:***

1998 – 2001 **Ph. D. in Immunology.** University of São Paulo, Institute of Biomedical Sciences, Department of Immunology, São Paulo, Brazil. **Thesis:** “Effect of *Trypanosoma cruzi* infection over the development of autoimmune diseases”.

1994 – 1997 **M. Sc. in Immunology.** University of São Paulo, Institute of Biomedical Sciences, Department of Immunology, São Paulo, Brazil. **Thesis:** “The role of bone marrow-derived macrophage populations in the immunization with *Trypanosoma cruzi* antigens”.

1989 – 1993 **B. Sc. in Biology.** University of São Paulo, Institute of Biological Sciences, São Paulo, Brazil. **Thesis:** “The role of different adjuvants in the immunization with *Trypanosoma cruzi* antigens”.

### ***Professional Appointments:***

01/2011 – Present **Principal Investigator**, Lab of Immune Regulation, Instituto Gulbenkian de Ciência, Portugal.  
**Major project:** study the generation and function of regulatory T cells through the intravital imaging.

2008 – 2010 **Research Assistant**, Unit of Cell Imaging, Instituto Gulbenkian de Ciência, Portugal.  
**Activities:** research and development of intravital setups for imaging in mice models.

2004 – 2008 **Postdoctoral Fellow**, Dept. of Pathology, New York University School of Medicine, USA.  
**Major project:** study the generation and differentiation of regulatory T cells *in vivo* by the development of new techniques of intravital cell/tissue imaging using a “multi-photon” microscope.

2002 – 2003 **Post-doctoral Fellow**, Department of Immunology, University of São Paulo, Brazil.  
**Major project:** study the effect of protozoan infections on the development of Experimental Autoimmune Uveitis (EAU) and Experimental Autoimmune Encephalomyelitis (EAE).

## **Research Grants**

### **Finished or ongoing:**

- 2008 – 2009      **National Multiple Sclerosis Society** (RG4303-A-1), New York, NY, USA.  
U\$ 78,817.00/1 year.
- 2011 – 2013      **“Fundação para a Ciência e Tecnologia”** (EBB-BIO 115514-2009), Lisbon, Portugal.  
€ 159,240.00/3 years.

### **Fellowships and Awards:**

- 2006 – 2008      **Post-doctoral Fellowship** from National Multiple Sclerosis Society (NMSS),  
(U\$162,481.00), New York, USA.
- 2004 – 2005      **Post-doctoral Fellowship** from The National Council for Scientific and  
Technological Development (CNPq), (U\$63,840.00), Brasília, Brazil.
- 2002              **Travel award** from Federation of Clinical Immunology Societies (FoCIS),  
(U\$500.00), USA.
- 1998 – 2001      **Ph. D. Fellowship** from “Fundação de Amparo à Pesquisa do Estado de São Paulo –  
FAPESP”, São Paulo, Brazil.
- 1995 – 1997      **M. Sc. Fellowship** from “Fundação de Amparo à Pesquisa do Estado de São Paulo  
– FAPESP”, São Paulo, Brazil.
- 1991 – 1993      **Under-Graduate Fellowship** from “Fundação de Amparo à Pesquisa do Estado de  
São Paulo – FAPESP”, São Paulo, Brazil.

### **Scientific Review Committees:**

- 2006 – 2007      **Reviewer “Ad Hoc”** for The National Council for Scientific and Technological  
Development (CNPq), Brazil.
- 2005              **Reviewer “Ad Hoc”** for the “8<sup>th</sup> Meeting of Scientific Activities of UNOPAR”, Brazil.
- 2002              **Scientific Jury** for the “XIII Scientific Week of the Department of Pathology – VI  
Young Scientist Award “Dr. Mario Mariano””, at University of São Paulo, Veterinary  
Medical School, Brazil.

### **Supervision of graduate students:**

- 2011              **Member of Ph.D. Thesis committee. Student:** Francisca Almeida. **Location:**  
University of Lisbon, Institute of Molecular Medicine, Lisbon, Portugal.
- 2010              **Master Thesis:** “*In vitro* and *in vivo* studies of retinoic acid effect on mouse T  
cells”. **Student:** Susana S. Caetano. **Location:** University of Lisbon, Lisbon, Portugal.  
**Score:** 18/20.
- 2009              **Master Thesis:** “Regulatory T cell effect on cellular contacts among dendritic, Th1,  
and Th17 cells”. **Student:** Ana Vaz. **Location:** University of Lisbon, Lisbon, Portugal.  
**Score:** 19/20.

### ***Invited Presentations:***

- 2011                    **Practical class:** “*In vivo* imaging of the uterus”, Reproductive Biology and Immunology Autumn School, Magdeburg, Germany.
- 2011                    **Seminar:** “Immunethology”, Department of Experimental Obstetrics and Gynecology, Medical Faculty, University of Magdeburg, Magdeburg, Germany.
- 2011                    **Seminar:** “Immunethology”, Faculdade de Ciências, Universidade de Lisboa, Lisbon, Portugal.
- 2010                    **Seminar:** “Immunethology”, Instituto Humanitas, Milan, Italy.
- 2010                    **Seminar:** “Immunethology”, Universidade Nova de Lisboa, Lisbon, Portugal.
- 2010                    **Seminar:** “Intravital Imaging”, EMBO practical course “3D Developmental Imaging”, Oeiras, Portugal.
- 2009                    **Seminar:** “Intravital Imaging”, EMBO practical course “Light microscopy in living cells”, Oeiras, Portugal.
- 2009                    **Seminar:** “The role of Vitamin A in Regulatory T cell generation”, Faculdade de Ciências, Universidade de Lisboa, Lisbon, Portugal.
- 2009                    **Seminar:** “Regulatory T cells: from thymic generation to function in target tissues”, Faculdade de Ciências, Universidade de Lisboa, Lisbon, Portugal.
- 2008                    **Seminar:** “Intravital Imaging”, EMBO practical course “3D Developmental Imaging”, Oeiras, Portugal.
- 2005                    **Seminar:** “The use of 2-photon microscopy in the evaluation of the role of regulatory T cells *in vivo*”, Dept. of Histology, ICB, USP, Brazil.
- 2005                    **Seminar:** “The influence of regulatory T cells in the interaction between effector T cells and dendritic cells”, Dept. of Immunology, ICB, USP, Brazil.
- 2001                    **Short talk** in the 11<sup>th</sup> International Congress of Immunology, Stockholm, Sweden.

### ***Organization of Courses:***

- 2010                    **Practical course on Imaging Acquisition inside the Immune System.**  
**Local:** “Instituto Gulbenkian de Ciência”, Oeiras, Portugal.  
**Dates:** from June 12<sup>th</sup> to June 18<sup>th</sup>, 2010.  
**Website:** <http://qobweb.igc.gulbenkian.pt/courses/imagis/index.php>

## **Publications:**

### **In press:**

1. Takiishi, T., **Tadokoro, C. E.**, Rizzo, L. V., de Moraes, L. V. Early IL-10 production is essential for syngeneic skin graft acceptance in mice. **J. Leukoc. Biol.**, 2012.

### **Submitted:**

1. Silva, H. B., Caetano, S., Monteiro, I., Conde, I. G., Baptista, F. G., Parreira, A., Hanson, K., Olivieri, D., Mota, M. M., Marinho, C. R., D'Imperio Lima, M. R., **Tadokoro, C. E.** Increase of skin tolerance after *Plasmodium berghei* sporozoite infection. **PLoS One.**, 2011.
2. Zenclussen, A. C., Olivieri, D., Dustin, M. L., **Tadokoro, C. E.** Intravital imaging of immune cells inside uterus and placentas. **J. Clin. Invest.**, 2011.

### **In preparation:**

1. Olivieri, D. N. and **Tadokoro, C. E.** New tools for imaging of virgin and pregnant uterus. Letter to the editor to be submitted to **Am. J. Reprod. Immunol.**, 2012.
2. Caetano, S. S., Silva, H. B., Gómez-Conde, I., Olivieri, D., **Tadokoro, C. E.** Dendritic cell and regulatory T cell dynamics inside the virgin and pregnant uterus, 2012.
3. Medeiros, M. M., Silva, H. B., Reece, S., Thompson, J., and **Tadokoro, C. E.** The influence of trophoblast infection during pregnancy, 2012.

### **Book chapter (in preparation):**

**Tadokoro, C. E.** & Zenclussen, A. C. (2013). Two-photon intravital microscopy of the virgin and pregnant mouse uterus. In Croy, A., Yamada, A. T., and DeMayo, F. J., *The Guide for Investigations of Mouse Pregnancy (Tool Kit for Physiological Phenotyping of Mouse Pregnancy)*. Massachusetts, USA: Elsevier/Academic Press.

### **Peer Reviewed Articles**

1. Caetano, S. S., Teixeira, T., **Tadokoro, C. E.** Intravital Imaging of the mouse thymus using two-photon microscopy. **J. Vis. Exp.**, 2011.
2. Olivieri, D., Faro, J., Gomez-Conde, I., **Tadokoro, C. E.** Tracking T and B cells from two-photon microscopy images using sequential monte carlo. **J. Integr. Bioinform.**, **8:180**, 2011.
3. Kim, J. V., Jiang, N., **Tadokoro, C. E.**, Liu, L., Ransohoff, R. M., Lafaille, J. J., and Dustin, M. L. Two-photon laser scanning microscopy imaging of intact spinal cord and cerebral cortex reveals requirement for CXCR6 and neuroinflammation in immune cell infiltration of cortical injury sites. **J. Immunol. Methods**, 352: 89-100, 2010.
4. Maraver, A.\*, **Tadokoro, C. E.\***, Badura, M. L., Shen, J., Serrano, M., and Lafaille, J. J. Effect of Presenilins in the apoptosis of thymocytes and homeostasis of CD8<sup>+</sup> T cells. **Blood**, 110: 3218-3225, 2007. **\*These authors contributed equally for this paper.**
5. Ivanov, I. I., McKenzie, B. S., Zhou, L., **Tadokoro, C. E.**, Lepelley, A., Lafaille, J. J., Cua, D. J., and Littman, D. R. The orphan nuclear receptor ROR $\alpha$  directs the differentiation program of proinflammatory IL-17<sup>+</sup> T helper cells. **Cell**, 126: 1121-1133, 2006.

6. **Tadokoro, C. E.**, Shakhar, G., Shen, S., Ding, Y., Lino, A. C., Maraver, A., Lafaille, J. J., Dustin, M. L. Regulatory T cells inhibits stable contacts between CD4<sup>+</sup> T cells and dendritic cells *in vivo*. **J. Exp. Med.**, 203: 505-511, 2006.
7. Shen, S., Ding, Y., **Tadokoro, C. E.**, Olivares-Villagomez, D., Camps-Ramirez, M., Curotto de Lafaille, M. A., and Lafaille, J. J. Control of homeostatic proliferation by regulatory T cells. **J. Clin. Invest.**, 115: 3517-3526, 2005.
8. Martin, A. P., de Moraes, L. V., **Tadokoro, C. E.**, Commodaro, A. G., Urrets-Zavalía, E., Rabinovich, G. A., Urrets-Zavalía, J., Rizzo, L. V., and Serra, H. M. Administration of a peptide inhibitor of alpha4-integrin inhibits the development of experimental autoimmune uveitis. **Invest. Ophthalmol. Vis. Sci.**, 46: 2056-2063, 2005.
9. Oliveira, M. A., **Tadokoro, C. E.**, Lima, G. M., Mosca, T., Vieira, L. Q., Leenen, P. J., and Abrahamsohn, I. A. Macrophages at intermediate stage of maturation produce high levels of IL-12 p40 upon stimulation with *Leishmania*. **Microbes Infect.**, 7: 213-223, 2005.
10. Pinge-Filho, P., Peron, J. P., de Moura, T. R., Menolli, R. A., Graça, V. K., Estevao, D., **Tadokoro, C. E.**, Jankevicius, J. V., and Rizzo, L. V. Protective immunity against *Trypanosoma cruzi* provided by oral immunization with *Phytomonas serpens*: role of nitric oxide. **Immunol. Lett.**, 96: 283-290, 2005.
11. Martins, G. A., Campanelli, A. P., Silva, R. B., **Tadokoro, C. E.**, Russo, M., Cunha, F. Q., Rizzo, L. V., and Silva, J. S. CD28 is required for T cell activation and IFN- $\gamma$  production by CD4<sup>+</sup> and CD8<sup>+</sup> T cells in response to *Trypanosoma cruzi* infection. **Microbes Infect.**, 6: 1133-1144, 2004.
12. Eckley, C. A., Michelsohn, N., Rizzo, L. V., **Tadokoro, C. E.**, and Costa, H. O. Salivary epidermal growth factor concentration in adults with reflux laryngitis. **Otolaryngol. Head Neck Surg.**, 131: 401-406, 2004.
13. **Tadokoro, C. E.**, Vallochi, A. L., Rios, L. S., Martins, G. A., Schlesinger, D., Mosca, T., Kuchroo, V. K., Rizzo, L. V., and Abrahamsohn, I. A. Experimental autoimmune encephalomyelitis can be prevented and cured by infection with *Trypanosoma cruzi*. **J. Autoimmun.**, 23: 103-115, 2004.
14. Malvezi, A. D., Cecchini, R., de Souza, F., **Tadokoro, C. E.**, Rizzo, L. V., and Pinge-Filho, P. Involvement of nitric oxide (NO) and TNF- $\alpha$  in the oxidative stress associated with anemia in experimental *Trypanosoma cruzi* infection. **FEMS Immunol. Med. Microbiol.**, 41: 69-71, 2004.
15. Martins, G. A., **Tadokoro, C. E.**, Silva, R. B., Silva, J. S., and Rizzo, L. V. CTLA-4 blockage increases resistance to infection with the intracellular protozoan *Trypanosoma cruzi*. **J. Immunol.**, 172: 4893-4901, 2004.
16. **Tadokoro, C. E.** and Abrahamsohn, I. A. Bone marrow-derived macrophages grown in GM-CSF or M-CSF differ in their ability to produce IL-12 and to induce IFN- $\gamma$  production after stimulation with *Trypanosoma cruzi* antigens. **Immunol. Lett.**, 77: 31-38, 2001.

17. Grisotto, M. G., D'Imperio Lima, M. R., Marinho, C. R., **Tadokoro, C. E.**, Abrahamsohn, I. A., Alvarez, J. M. Most parasite-specific CD8<sup>+</sup> cells in *Trypanosoma cruzi*-infected chronic mice are down-regulated for T-cell receptor-alpha-beta and CD8 molecules. **Immunology**, 102: 209-217, 2001.
18. Pinge-Filho, P. **Tadokoro, C. E.**, and Abrahamsohn, I. A. Prostaglandins mediate suppression of lymphocyte proliferation and cytokine synthesis in acute *Trypanosoma cruzi* infection. **Cell. Immunol.**, 193: 90-98, 1999.
19. Borges, M. M., Kloetzel, J. K., Andrade, H. F. Jr., **Tadokoro, C. E.**, Pinge-Filho, P., and Abrahamsohn, I. A. Prostaglandin and nitric oxide regulate TNF- $\alpha$  production during *Trypanosoma cruzi* infection. **Immunol. Lett.**, 63: 1-8, 1998.
20. **Tadokoro, C. E.**, Macedo, M. S., and Abrahamsohn, I. A. Saponin adjuvant primes for a dominant interleukin-10 production to ovalbumin and to *Trypanosoma cruzi* antigen. **Immunology**, 89: 368-374, 1996.

## **Communications in Scientific Meetings**

### **In International meetings:**

1. **Tadokoro, C. E.**, Vallochi, A. L., Rios, L. S., Martins, G. A., Schlesinger, D., Kuchroo, V. K., Rizzo, L. V., and Abrahamsohn, I. A. The effect of *T. cruzi* infection over EAE development. In: 2<sup>nd</sup> Annual Meeting of Federation of Clinical Immunology Societies, San Francisco, USA, 2002.
2. **Tadokoro, C. E.**, Vallochi, A. L., Rios, L. S., Schlesinger, D., Mosca, T., Kuchroo, V. K., Rizzo, L. V. Abrahamsohn, I. A. The development of experimental autoimmune encephalomyelitis could be completely abrogated by immunosuppressive effect of *Trypanosoma cruzi*. In: 11<sup>th</sup> International Congress of Immunology, Stockholm, Sweden, 2001.
3. Vallochi, A. L., **Tadokoro, C. E.**, Martins, G. A., Silveira, C., Martins, M. C., Belfort Jr., R., Rizzo, L. M., and Nakamura, M. V. Retinal antigens are not related to increased damage in patients with ocular toxoplasmosis. In: 11<sup>th</sup> International Congress of Immunology, Stockholm, Sweden, 2001.
4. Martins, G. A., Campanelli, A. P., **Tadokoro, C. E.**, Vallochi, A. L., Rizzo, L. V., Silva, J. S. Absence of CD28 leads to increased susceptibility to experimental *Trypanosoma cruzi* infection. In: 11<sup>th</sup> International Congress of Immunology, Stockholm, Sweden, 2001.
5. **Tadokoro, C. E.**, and Abrahamsohn, I. A. Bone-marrow derived macrophages cultured in GM-CSF (GMMOs) pulsed with *Trypanosoma cruzi* antigen prime naïve mice toward a Th1-type immune response. In: 13<sup>th</sup> European Immunology Meeting, Amsterdam, Netherlands, 1997.