# MARTIN MALDONADO

22 Xinling Road, Shantou University,

Medical College, 515041, Shantou, China.

+86-13501415490

w12martin@yahoo.com.ar


## EDUCATION

2006-10 Doctoral degree in Medicine. Ehime University Graduate School of Medicine. Japan.

2003-04 Specialization in Exercise Physiology. Universidade Federal de Santa Maria, Brazil.

1996-02 Physical Education Sciences. Universidad Nacional de Rio Cuarto, Argentina.

## ACADEMIC AWARDS

2005-10 Monbukagakusho Research and Ph.D. Scholarship. Ministry of Education, Culture,

Sports, Science and Technology (MEXT) of Japan.

## RESEARCH AND ACADEMIC EXPERIENCE

2013-15 Post-doctoral Researcher in Stem Cells and iPS cells. Research Center of Reproductive Medicine, Department of Genetics and Molecular Biology, Shantou University, Medical College.

2010-12 Post-doctoral Visiting Researcher in Neuro-Pharmacology. Ehime University Graduate School of Medicine.

2006-10 Research and Teaching Assistant. Ehime University Graduate School of Medicine.

2005-06 Research student. Dept. of Pharmacology, Ehime University, School of Medicine.

2003-04 Research Member. Physiologic response of Fighter Pilots in ergometric test under hypoxic conditions. Laboratory of Exercise Physiology and Human Performance (LAFEPH), Universidade Federal de Santa Maria.

2003-04 Research Member. Preventive Cardiology for workers at the “Universidade Federal

de Santa Maria", based on lifestyle changes. Universidade Federal de Santa Maria.

2003-04 Research Member. International Study of Asthma and Allergy in Childhood (Isaac) (Urban and Rural children of 7 to 12 years of age); Department of Pediatrics and Pneumology, Universidad Federal de Santa Maria.

2002-04 Research Member. International Study of Asthma and Allergy in Childhood (Isaac) (Urban and Rural Children of 12 to 14 years of age); Department of Pediatrics and Pneumology, Universidade Federal de Santa Maria.

2002-04 Researcher and Evaluator. Laboratory of Exercise Physiology and Human Performance, Universidad Federal de Santa Maria.

## LIST OF PUBLICATIONS

THE METABOLISM OF HISTAMINE IN RAT HYPOTHALAMUS AND CORTEX AFTER RESERPINE TREATMENT. (Under review) Martin Maldonado, Kazutaka Maeyama. Molecular and Cellular Neuroscience, Article #MCN-14-161

MALIGNANT TRANSFORMATION POTENTIALS OF HUMAN UMBILICAL CORD MESENCHYMAL STEM CELLS BOTH SPONTANEOUSLY AND VIA 3-METHYCHOLANTHRENE INDUCTION.
Qiuling Tang, Qiurong Chen, Xiulan Lai, Sizheng Liu, Yezeng Chen, Zexin Zheng, Qingdong Xie, Martin Maldonado, Zhiwei Cai, Shan Qin, Guyu Ho, Lian Ma.
Plos One Vol. 8 (12):e81844. 2013

SIMULTANEOUS ELECTROCHEMICAL MEASUREMENT METHOD OF HISTAMINE AND *N*$^{\tau}$-METHYLHISTAMINE BY HPLC-AMPEROMETRY WITH OPA- $NA_2SO_3$ DERIVATIZATION.
Martin Maldonado, Kazutaka Maeyama.
Anal. Biochem. , 432 (2013) 1–7.

ANALYSIS OF PHYSIOLOGIC VARIBLES DURING ACUTE HYPOXIA AND MAXIMAL STRESS TEST IN ADOLESCENTS CLINICALLY DIAGNOSED WITH MILD INTERMITENT OR MILD PERSISTENT ASTHMA.
Martin Maldonado, Cruz Portela Luiz Osorio.
J. Bras. Pneumol., 37 (6) 712-719. 2011.

DEVELOPMENT OF SIMULTANEOUS MEASUREMENT METHOD OF HISTAMINE AND *N*$^{\tau}$-METHYLHISTAMINE USING HPLC-AMPEROMETRY AND ITS APPLICATION FOR STUDY OF HISTAMINE FUNCTION.
Martin Maldonado.
Ehime Medical Journal, Vol. 29, No. 2, 95-102, 2010.

OBESITY AND ITS RELATIONSHIP WITH ASTHMA PREVALENCE AND SEVERITY IN ADOLESCENTS FROM SOUTHERN BRAZIL.
Cassol, V., Rizzato, T.M., Teche, S.P., Basso, D.F., Centenaro, D.F., Maldonado, M., Moraes, E.Z.C., Hirakata, V.N., Sole, D., Mena-Barreto S.S. (2006). Journal of Asthma, 43, 57-60.

PREVALENCE OF ASTHMA AMONG ADOLESCENTS IN THE CITY OF SANTA MARIA, IN THE STATE OF RIO GRANDE DO SUL, BRAZIL. INTERNATIONAL STUDY OF ASTHMA AND ALLERGIES IN CHILDHOOD (ISAAC) PROJECT. Cassol, V.E., Sole, D., Mena-Barreto, S.S., Teche, S.P., Rizzato, T.M., Maldonado, M., Centenaro, D.F., Moraes, E.Z.C., J. Bras. Pneumol., 31 (3) 191-196. 2005.

PREVALENCE AND SEVERITY OF ASTHMA AMONG ADOLESCENTS AND THEIR RELATIONSHIP WITH THE BODY MASS INDEX.
Vitor Emanuel Cassol, Dirceu Sole, Sergio Saldanha Mena Barreto, Cassol, V., Rizzato, T.M., Teche, S.P., Basso, Hirakata, V.N., Maldonado, M., Colpo, E., Sole, D., J Pediatr (Rio J), 81 (4): 305-309. 2005.

## ADITIONAL INFORMATION

Nationality: Argentine

Date of Birth: December 5, 1974

Civil Status: Single

Spoken Languages: Native language: Spanish.
Foreign languages: Portuguese, English, Japanese, Chinese Mandarin (basic).

## DESCRIPTION OF RESEARCH EXPERIENCE / CONDUCTED RESEARCHES

Period: 2002 to 2004
As a research member and evaluator of the Laboratory of Exercise Physiology and Human Performance, Brazil, I have conducted researches in the field of "Metabolic changes in mild and moderate asthmatics through acute hypoxic test simulated in laboratory". The focus of this research has included anaerobic adaptations to high altitude exercise in asthmatic children. I have also joined the research projects of the International Study of Asthma and Allergy in Childhood (Isaac) organized by the Department of Pediatrics, Faculty of Medicine, Federal University of Santa Maria as a research member. In these projects, 7,000 children aged 7-14 years old were evaluated for analyzing the risk factors of asthma. In addition to this, I have investigated the relationship between risk factors, such as obesity and environment with the prevalence and severity of asthma symptoms. I have also participated as a research member in the project: "Preventive Cardiology" in cooperation with the University Hospital (HUSM),

Universidade Federal de Santa Maria, RS, Brazil and the research project: "Physiologic response of fighter pilots in ergometric test under hypoxic conditions" In this project, AMX jet's squadron pilots from the Brazilian Air Force, Air Base, located in Santa Maria, RS, Brazil, were exposed to hypoxic condition and analyzed hematologic variables.

Period: 2005
As a research student at the Laboratory of Pharmacology, Ehime University, I have studied and developed the general techinques of laboratory management, cell culture using RBL-2H3 cells (rat bosophilic leukimia cells, a tumor analog of mast cells), and histological preparations among others.

Period: 2006 to 2010
During my PhD research I have developed an electrochemical HPLC method for the simultaneous quantitative analysis of histamine and $N^{\tau}$-methylhistamine with the purpose of studying histaminergic activity in neurons as well as in peripheral tissues.

Period: 2010 to 2012
As a Visiting Researcher at Ehime University, Japan, I have performed *in vivo* and *in vitro* experiments in order to elucidate the dynamics of histamine and catecholamines metabolism in brain of rodents through the use of specific stimulant and inhibitor drugs such as pargyline, clorgiline, L-histidine and reserpine among others.
I would like to add that along the period of my PhD and research work, I have mastered the techniques of radio isotopes, western blotting, PCR, *in vivo* microdialysis, stereotaxis aparatus management, techniques of micro vessels cannulation for injection or sample withdrawal in the rat model and I have also investigated the action of grapefruit and lavender essential oils on the concentration of several aminergic neurotransmitters.

Period: 2013 to 2015

As a Postdoctoral Fellow: I am currently working at the Research Center of Reproductive Medicine; The Department of Pediatrics, The Second Affiliated Hospital, and The Translational Medicine Laboratory, Shantou University, Medical College (China).
My research is focused on the production of 2, 3 and 4 factors Polycistronic Leniviral particles, the generation of iPS cells from Human Umbilical Mesenchymal Stem Cells (HUMSCs) and the induction of iPSCs into Endocrine Beta-like cells for treatment of Diabetes Type 1.
My research work also involves the induction of Embryonic Stem Cells (ESCs) and HUMSCs into Beta-like cells and the transplantation of HUMSCs for wound healing, among others.
During the period of 2013 I have accumulated a vast experience related to the isolation and culture of Stem Cells such as HUMSCs, Human Umbilical Vein Endothelial Cells (HUVEC); Human Amnion Epithelial Cells (HAEC) and Human Chorion Stromal Cells (HCSC).