

**CRISTINA BERTOLOTTO, M.D.**

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**PROFILE**

Trained physician with an extensive academic, clinical and scientific background. Acquired managerial skills in the private sector as a manager in the competitive field of technology transfer. Skilled negotiator and problem-solver. Fluent in English, Spanish and conversational French. American, Uruguayan and Italian citizenship.

**EDUCATION**

**Medical Doctor:** 1990, School of Medicine, University of the Republic Montevideo, Uruguay.

**Internships:**

- Clinical Hospital, University of the Republic, Montevideo, Uruguay
- Maciel Hospital, University of the Republic, Montevideo, Uruguay
- Pereira Rossel Hospital, Children and OBGYN Hospital, University of the Republic, Montevideo, Uruguay
- Viladerbo Hospital, Psychiatry Hospital, Montevideo, Uruguay

**Post-Doctoral Degree in Neuroscience:** 1999–2003, University of California Los Angeles, Department of Biology, Department of Physiological Sciences, and David Geffen School of Medicine.

**Certification:** 2016-Present, American Board Certified of Regenerative Medicine

**RESEARCH INTERESTS**

Translation Medical Research. Regenerative Medicine. Stem Cells. Human Pluripotent Autologous Adipose Stem Cells. Human mesenchymal stem cells; adult adipose; embryonic, umbilical cord, placenta, amniotic membrane stem cells and Langerhan Islets Stem Cell.

Neurogenesis; neuro-development; neuro-degeneration; neuro-regeneration; synapses; sensory system; morphology and molecular neurobiology; development of hearing and hearing loss related to inner and middle ear infections; sleep disorders. Neurodegenerative disease and aging process.

Differentiation of fibroblasts and myofibroblasts during fibrosis diseases and wound healing; genetic diseases and their relevance in development.

## CAREER

2017-Present: Director of the Regenerative Medicine Institute, Montevideo-Uruguay  
Treatment for regenerative medicine with autologous Stem Cells to treat patients with arthrosis, arthritis, and Neurological Diseases, Diabetes, Rejuvenate treatments for Cardiovascular Diseases.

2015- Present: Women Entrepreneurship Day World Ambassador of Uruguay  
(<http://womenseday.org/wed-world-ambassadors/>)

### 2014-Present

Founder of ClusterXStem Inc. in U.S.A.: ClusterXStem Inc., is a start-up company with a licensed technology from UCLA, based on Autologous and Allogeneic Adult Pluripotent and Adipose Stem Cells. These cells are used to prevent, treat, cure, and regenerate damaged or aged tissues, cells, and organs.

#### Chief Executive Officer at ClusterXStem Inc. 2014-2015

Founder and CEO of the company:

- Raised USD \$ 250,000 in seed funding
- Company valued today at USD \$ 7 million
- Company based in Uruguay in order to start the clinical trials there, but was created based off of FDA regulations
- Created the first GMP Lab in Uruguay for Stem Cell treatment with all the FDA and the Uruguayan Minister of Health regulations
- Created all of the clinical protocols and obtained approval regulations of the Minister of Health in Uruguay in order to treat patients with Autologous Adult Pluripotent Adipose Stem cells for the following studies: Stroke, Myocardium infarct, Cornea diseases, Rheumatoid Arthritis, and erectile dysfunction.

### 2012-Present

Consultant in Translation Medical Research and Technology Transfer. Visionary for emerging technologies. Supporting Technology Transfer Offices in different Academic Institutions in Latin American Countries.

Advisor of Agencia Nacional de Innovacion e Investigacion (ANII) Montevideo-Uruguay.

Consultant of Technology Transfer for the Pasteur Institute Montevideo -Uruguay

### 2009-2012

#### Manager, Technology Transfer Cedars-Sinai Medical Center

Responsible for identifying, evaluating and managing a portfolio of over 200 technologies ranging from medical devices, pharmaceuticals, diagnostics and cell therapy to software and biomarkers. Duties included assessing and developing invention disclosures, overseeing patent prosecution, establishing relationships with key scientists and external partners, identifying new business development opportunities, assessing commercial attractiveness of technologies, developing and maintaining R&D agreements and, coordinating deal terms and contract negotiation discussions.

Selected Accomplishments:

- Lead negotiator, from initial contact through development of deal terms and contract agreement, for a project resulting in the successful spin-off of three technologies into stand-alone startup companies.
- Achieved the highest number of technologies brought per year over a 10 year period
- Devised and developed a strategic alliance between a foreign research institute, government agencies and US research institute which resulted in the licensing of seven new technologies by Cedars-Sinai Medical Center, one of which has become a spinoff.
- Worked closely with in-home scientists and physicians to develop technology transfer strategies resulting in a 30% increase of invention disclosures.
- Proposed a patent prosecution strategy for a portfolio of 200 technologies which saved Cedars-Sinai Medical Center over \$0.5M in legal fees.
- Established strong relationships with 20+ world-renowned research institutions around the world interested in co-developing technologies with Cedars-Sinai Medical Center.

1999–2012

Research Scientist II

Department of Pediatrics, Neonatology Division

Cedars-Sinai Medical Center

Developed several fibroblast cell lines derived from various tissues including heart, placenta, tumor, tympanic membrane, skin, and cochlea, utilizing the EGFP alpha-smooth muscle actin transgenic mouse model. Also developed an embryonic Mesenchymal Stem Cell line from heart tissue from the EGFP transgenic mouse model.

As a team leader at the laboratory for ten years, teaching responsibilities included:

- Developing and incorporating new ideas and novel techniques
- Teaching Post-Doctoral Graduate Researchers and Post-Doctoral fellows in the Division of Neonatology, Department of Pediatrics
- Mentoring medical, graduate, and undergraduate students
- Teaching morphological techniques to a Post-Doctoral Researcher
- Giving research presentations at scientific seminars, journal clubs, and researcher laboratory meetings at the Division of Neonatology, Department of Surgery and Maternal Fetal Medicine Division.

1999–2013

Adjunct Associate Professor IV

Department of Pediatrics, School of Medicine

David Geffen School of Medicine at UCLA

Mentored residents and fellows in Neonatology and Maternal Fetal Medicine at UCLA School of Medicine and Cedars-Sinai Medical Center. Taught Post-Doctoral Graduate Researchers and Master students. Gave research presentations at scientific seminars, journal clubs, and researcher laboratory meetings. In 2004, created the Pediatric Summer Program at CSMC for High School, undergraduate and graduate medical students.

2007–2010

Board Member of the International Review Board

Cedars-Sinai Medical Center

Responsible for reviews, approvals and counseling in Human Research Protocols in order to comply with laws and standards aimed at protecting the rights and welfare of the human research subjects.

1996–1998

Staff Research Associate III

Department of Physiological Science, UCLA

Research and study focused on the development of the peripheral and central auditory system in rodents and amphibians. In particular, how synaptic connections are established using different techniques like combining immunohistochemical with transmission electron microscopy, scanning electron microscopy, molecular biology, and physiological techniques to characterize neurons during development.

Trained and mentored undergraduate, graduate students and Post-Doctoral Fellows.

1995–1996

Postdoctoral Graduate Researcher

Department of Physiological Science, UCLA

Research focused on morphological changes in the tectorial membrane of the frog, using light, transmission and scanning electron microscopy techniques.

Studied the auditory system during development in hamsters using microiontophoresis injections of different dyes, and combining the immunohistochemical with electronmicroscopy techniques.

Organized and maintained the laboratory. Trained and mentored undergraduate and graduate students.

1993–1995

Assistant Research Physiologist

Department of Physiology

David Geffen School of Medicine, UCLA.

Studied morphological changes in the peripheral and central nervous system during the aging process using light and electron microscopy techniques.

Developed a model for aging studies in cats using extracellular and intracellular injection of adriamycin drug: electrophysiological and morphological studies.

1990–1993

Postdoctoral Graduate Researcher

Department of Biology, UCLA.

Studied morphological aspects of the auditory organs in frogs using immunohistochemical techniques combined with transmission and scanning electronmicroscopy techniques.

Worked in Patch-Clamping techniques using hair cells from amphibians' inner ear as a model.

1985–1990

Assistant Professor I

Department of Physiology,

School of Medicine, University of the Republic, Montevideo, Uruguay.

Taught physiological sciences to third-year students.

Prepared and conducted neurophysiological seminars for third-year students.

1984–1990

Fellow in Comparative Neuroanatomy Laboratory

Clemente Estable Institute of Biological Research

Montevideo, Uruguay.

Studied morphological aspects of the structural organization of the spinal cord and medulla in electric fish. Organized and conducted seminars and laboratory activities for the International Symposium of Iberoamerican Biosciences.

1987–1989

Assistant Professor II, School of Medical Technology  
University of the Republic  
Montevideo, Uruguay.

Taught physiological sciences to second-year students.

1984–1985

Teaching Assistant  
Laboratory of Neurophysiology  
Department of Physiology, School of Medicine  
Montevideo, Uruguay.

Studied a mesencephalic periaqueductal gray-cochlea nucleus connection in guinea pigs with tracing neural connection techniques using microiontophoresis injections with HRP (electrophysiology recording and immunohistochemical morphological methods). Carried out sleep research with cats, prepared animals for surgery, implanted electrodes, recorded and interpreted electroencephalograms, analyzed and interpreted data.

1983–1985

Teaching Assistant of the Comparative Neuroanatomy Laboratory  
Clemente Estable Institute of Biological Research  
Montevideo, Uruguay.

Studied morphological aspects of structural organization of the spinal cord and medulla in electric fish, using immunohistochemical techniques combined with electron microscopy techniques.

1982–1984

Teaching Assistant  
Department of Biophysics, School of Medicine  
Montevideo, Uruguay.

Studied ions transport in membranes in a biological model and computer simulation. Prepared and conducted biophysics laboratory classes for first-year students.

## **HONORS and AWARDS**

*2016- Present: Member of the American Board Regenerative Medicine*

*2016-Present: President of ORTHOREGEN in Uruguay and Member of Latin-American*

2016- Invited to a **Women's Entrepreneurship Fund at Kiva's** headquarters in San Francisco by the Ambassador-at-Large for Global Women's Issues Cathy Russell joined representatives from Kiva and the Inter-American Development Bank today. San Francisco February 29<sup>th</sup>, 2016, USA

2015- **Invited by the U.S. Department of State** to the 6<sup>th</sup> Annual Global Entrepreneurship Summit 2015 in Nairobi, Kenya (July 25-26, 2015) as a woman Entrepreneur and member of **President Barak Obama's** delegates. (Only 1600 entrepreneurs from 187 different countries around the world were invited to this meeting).

2015- **Invited to the** Welcome Dinner hosted by the **President of Kenya Hon.Uhuru Kenyatta.C.G.H** in honor of Delegates attending the Global Entrepreneurship Summit

- 2015, and Obama Pre welcome Dinner Friday, 24th July, 2015 at Kenyatta International Conference Center, Nairobi Kenya
- 2015- **Invited by the President of the Stock Market of Uruguay Pablo Sitjar** (Bolsa de Valores de Montevideo) to the Stock Market's first Biotechnology event. Spoke at the conference as a woman biotech entrepreneur and as CEO of ClusterXStem Inc. Accompanied keynote speaker, Ambassador of United States of America Frank Baxter, on the podium. (March 26<sup>th</sup>, 2015)
- 2014- **Invited by the President of Uruguay Jose Mujica** to join meeting between the President of Uruguay and **United States President, Barak Obama**, in order to sign agreements of cooperation between the two countries in education, science, technology, biotechnology, health, and business. (May 13<sup>th</sup>, 2014)
- 2010- **Invited by the President of Uruguay Dr. Tabare Vazquez** to participate as honored Uruguayan Scientist to the "Foro the Innovation de las Americas", Montevideo-Uruguay (May 24-26-2010)
- 2015-Present **Elected as Ambassador of Uruguay for Women Entrepreneurship Day (WED)** an organization that is supported by the Department of the State and the United Nation

- 2009–Present Elected member of the Association of University Technology Managers (AUTM)
- 2007–Present Elected member of BIO (Biotechnology Industry Organization)
- 2005–Present Elected member of the American Society for Developmental Biology
- 2000–Present Elected member at the American Association for the Advancement of Science
- 1990–Present Elected member of the American Society for Neurosciences
- 1990–Present Elected member of the Association for Research in Otolaryngology
- 1990–Present Elected member of the Latin-American Association of Physiological Sciences
- 1994–Present Uruguayan Society of Biosciences
- 1974–1980 Honor Student, Institute Osimani y Llerena High School, Salto, Uruguay
- 1969–1973 Honor Student, José Pedro Varela Elementary School, Salto, Uruguay

### **PROFESSIONAL ACTIVITIES**

- 2007–2012 Member of the Committee for the International Project Cedars-Sinai Medical Center/Uruguay; (Office of Technology Transfer/Agencia Nacional de Investigación e Innovation del Uruguay).
- 2007–2010 Elected as a new member of the Internal Review Board committee representing the Department of Pediatrics, Cedars-Sinai Medical Center
- 1997–1998 Supervisor of the Scanning electron microscope at the Physiological Science Department at UCLA
- 1995–1998 Supervisor of the Scanning and Transmission electron microscopes at the House Ear Institute, Los Angeles, California

### **PROFESSIONAL MEMBERSHIPS**

- Uruguayan Union of Physicians
- Uruguayan Society of Bioscience
- Latin-American Association of Physiological Sciences
- Society for Neurosciences

- Association for Research in Otolaryngology
- American Association for the Advancement of Science
- Society for Developmental Biology
- Center for Androgen-Related Disorders
- Society for Cell Biology

### **LECTURES AND PRESENTATIONS:**

***“Synapse-like” connections between adipose tissue MUSE stem cells and adipocytes: Morphological and Molecular features of human adipose. Cristina Bertolotto***, Juan Carlos Rosillo, Saleh Heneidi, and Anabel S. Fernández. **TOBI** meeting June 9-11, 2017, Las Vegas- USA

***“Synapse-like” connections between adipose tissue derived pluripotent stem cells and adipocytes: Morphological and Molecular features of human adipose. Anabel S. Fernández, Juan Carlos Rosillo, Saleh Heneidi, and Cristina Bertolotto. IFATS*** meeting November 17-20 2016, San Diego- USA

**Prevención y tratamiento de lesiones deportivas con técnicas biológicas (células madre y PRP) en Atletas** (Prevention and treatment of sport injuries with biological technics (stem cells and PRP) in Athlets).

Lecture at Asociacion Uruguaya de Futbol (Uruguayan Soccer Association), September 25<sup>th</sup>, 2016- Montevideo, Uruguay

#### **MUSE Stem Cell**

Lecture at ORTHOREGEN, Indaiatuba, São Paulo, Brazil, September 23<sup>er</sup>, 2016

#### **Regenerative Medicine and Stem cell Relocalization**

Lecture at Le Lycée Français de Los Angeles, November 11<sup>th</sup>, 2015- Los Angeles, California, USA,

#### **Tratamientos Biologicos en lesiones deportivas** (Biological treatments in sport injury)

Lecture at the Club Nacional de Futbol, Montevideo-Uruguay, September 30, 2015

#### **Células Madre en el tratamiento de las lesiones deportivas** (Stem Cell treatment in sport injuries)

Lecture at Uruguayan Soccer Association, August 19<sup>th</sup>, 2015- Montevideo, Uruguay

#### **Caso de Exito: Proyecto Otoharmonics** (Case study: Otoharmonics Project)

Lecture at Taller de Vinculacion con la diaspora calificada, Montevideo- Uruguay, 7 de Agosto, 2015

#### **Avances en Terapias con celulas madre en pacientes con Accidentes Cerebrovasculares** (Advances with Stem Cell therapy in Stroke patients)

Lecture at Association Española Primera de Socorros Mutuos, Montevideo Uruguay- May 29<sup>th</sup>, 2015

#### **Medicina regenerativa con Relocalizacion celular** (Cellular relocalization in Regenerative

Medicine)

Lecture to School of Medicine CLAEH, Punta del Este- Uruguay, March, 19<sup>th</sup>, 2015

**Discovering a New Source of Adipocyte Stem Cells From Fat Tissue: Potential for Tissue Regeneration**

Symposium on “Neuron Glia Intereactions in Health and Disease: from Basic Biology to Translation Neuroscience”. Montevideo, Uruguay, October 22<sup>nd</sup> 2012.

**Discovering a New Source of Adipocyte Stem Cells From Fat Tissue: Potential for Tissue Regeneration.** Department of Pediatrics, Cedars-Sinai Medical Center, August 3rd, 2012

**Translation Medical Research, Invention and Commercialization. Case study: New Source of Adipocyte Stem Cells From Fat Tissue: Potential for Tissue Regeneration**

Le Lycée Français de Los Angeles, “High School Career Day”, October 12<sup>th</sup> 2012

**Technology Transfer at CSMC:**

**An introduction to the process for the Technology Transfer Office**

Retreat for Regenerative Medicine Institute, Anaheim, May 12, 2011.

**Intellectual Property Protection & Higher Education**

**Technology Transfer Case Study: Putting the Pieces Together**

Cedars-Sinai Medical Center, December 17<sup>th</sup>, 2010

**Technology Transfer: from the laboratory to the market**

The IEEE School of Engineering in Medicine and Biology Society, 21<sup>st</sup> of July 2010

**Basic Principles of Technology Transfer**

National Agency of Investigation and Innovation (ANII) Montevideo, Uruguay, July 20th, 2010

**Basic Principles of Technology Transfer**

Lviv, Ukraine, April 9<sup>th</sup>, 2010

**How to Protect your Intellectual Property**

**Technology Transfer Case Study**

Cedars-Sinai Medical Center, Radiation Oncology Department, March 25<sup>th</sup>, 2010

**Intellectual property protection**

**Technology Transfer Case Study**

Cedars-Sinai Medical Center, Surgery Department, February 19<sup>th</sup>, 2010

**Navigating the world of health care**

University of Santa Barbara, California, February 6<sup>th</sup>, 2010

**Marketing Technologies and Innovation: Industry Challenges and the Cedars-Sinai Medical Center Process**

National Agency of Investigation and Innovation (ANNI) Montevideo, Uruguay, January 8<sup>th</sup>, 2010

**Uruguay/Cedars-Sinai Medical Center**

Pasteur Institute, Montevideo, Uruguay, January 5<sup>th</sup>, 2010



### **Basic Principles of Intellectual Property**

Cedars-Sinai Medical Center, Nurses' program, August 20<sup>th</sup>, 2009.

### **Partnering Technology Transfer in Central and Eastern Europe, A Success Story**

RECOOP meeting Eastern Europe, Debrecen, Hungary, April 5<sup>th</sup>, 2009

### **Intellectual Property for New Investigators, Academic Development Course**

Cedars-Sinai Medical Center, March 9th, 2009

### **The Intellectual Property**

#### **New Investigators, Academic Development Course**

Department of OBGYN, Cedars-Sinai Medical Center, March 9th, 2009

### **Basic Principles of Intellectual Property**

Nurse Department of Cedars-Sinai Medical Center, August 20<sup>th</sup>, 2009

### **Partnering Technology Transfer in Central and Eastern Europe, A Success Story**

Debrecen, Hungary, April 5<sup>th</sup>, 2009

### **The Role of Fibroblasts/Myofibroblast in Fibrosis**

Department of Translation Medical Research, Research Institute, Cedars-Sinai Medical Center, January 2008

### **Stem cells for cardiovascular repair — The challenges of the aging heart**

Department of Pediatrics, Neonatology Division, Cedars-Sinai Medical Center, UCLA  
Journal Club lecture and discussion. Department of Pediatrics, Neonatology Division, Cedars-Sinai Medical Center. May 2008

### **Sex distribution in children with tympanosclerosis after insertion of a tympanostomy tube.**

Department of Pediatrics, Neonatology Division, Cedars-Sinai Medical Center, UCLA  
Journal Club lecture and discussion. Department of Pediatrics, Neonatology Division, Cedars-Sinai Medical Center. July 2005

### **Placental mesenchymal stem cells as potential autologous graft for pre- and perinatal neuroregeneration**

Department of Pediatrics, Neonatology Division, Cedars-Sinai Medical Center, UCLA  
Journal Club lecture and discussion. Department of Pediatrics, Neonatology Division, Cedars-Sinai Medical Center. July 2005

### **Premature Labor, Resetting Pregnancy's Clock**

Department of Pediatrics, Neonatology Division, Cedars-Sinai Medical Center, UCLA  
Journal Club lecture and discussion. Department of Pediatrics, Neonatology Division, Cedars-Sinai Medical Center. May 2005

### **Tympanosclerosis...Could you repeat it, please?**

Department of Pediatrics, Neonatology Division, Cedars-Sinai Medical Center, UCLA  
Minimally Invasive Surgical Technology Institute, Cedars-Sinai Medical Center. April 2005

### ***In vitro* differentiation and apoptosis of auditory myofibroblasts: $\alpha$ -smooth muscle actin EGFP transgenic mouse model**

Department of Pediatrics, Neonatology Division, Cedars-Sinai Medical Center, UCLA  
Medical Genetics Institute, Cedars-Sinai Medical Center. April 2005.

#### **Basic research studies for clinical diagnosis**

Department of Pediatrics, Neonatology Division, Cedars-Sinai Medical Center, UCLA  
Department of OBGYN, Cedars-Sinai Medical Center. May 2004.

#### **Cells**

Department of Pediatrics, Neonatology Division, Cedars-Sinai Medical Center, UCLA  
Le Lycée Francais de Los Angeles, Elementary School. May 2004.

#### **Core Morphology Unit: Applying Technology, Science and Collaboration to Improve Present and Future Patient Care**

Department of Pediatrics, Neonatology Division, Cedars-Sinai Medical Center, UCLA  
Minimally Invasive Surgical Technology Institute, Cedars-Sinai Medical Center. June 2003.

#### **Basic research studies for clinical diagnostic (introduction to different morphological techniques)**

Department of Pediatrics, Neonatology Division, Cedars-Sinai Medical Center, UCLA  
Department of Pediatrics, Neonatology Division, Cedars-Sinai Medical Center. May 2003.

#### **Study of the pancreas in IUGR rats**

Department of Pediatrics, Neonatology Division, Cedars-Sinai Medical Center, UCLA  
Lecture for the Department of Endocrinology, Diabetes Division, Journal Club seminars,  
Cedars-Sinai Medical Center. May 2003.

#### **Transgenic $\alpha$ -smooth muscle actin EGFP Mouse Model**

Department of Pediatrics, Neonatology Division, Cedars-Sinai Medical Center, UCLA  
Open House at Dr. Charles Simmons' Laboratory, Davis Building, Cedars-Sinai Medical Center.  
April 2003.

### **PUBLICATIONS/BIBLIOGRAPHY**

#### **PEER-REVIEWED RESEARCH PAPERS**

S. Wachsmann-Hogiu, D. Krakow, E. T. Sebald, **C. Bertolotto**, D. Acuna, and D. L. Farkas, "Confocal and two-photon microscopy in cartilage – expression patterns of Filamin A and B", Proc. SPIE (Bios'04 – Photonics West), 5322, 2004, pp. 140-145.

S. Wachsmann-Hogiu, D. Krakow, V. Kirilova, D. H. Cohn, **C. Bertolotto**, D. Acuna, Q. Fang, N. Krivorov, and D. L. Farkas, "Multiphoton, confocal, and lifetime microscopy for molecular imaging in cartilage", Proc SPIE (BIOS '05 Photonics West), 5699, 2005, pp. 75-81.

#### **SCIENTIFIC PAPERS IN PREPARATION**

**Cristina Bertolotto**; Acuna, D.; Waschsmann-Hogiu, S; Khoury, N.; Ubal, V.; Piroozzi, A.; Moghimi, A.; Honrubia, D; Wang, C.; Farkas, D.; Simmons, C. *In Vitro* differentiation and apoptosis of auditory myofibroblast: alpha smooth muscle actine EGFP transgenic mouse model. (To be submitted to **Hearing Research**).

**Cristina Bertolotto**, Nasif Khoury, Saleh Heneidi, S Wachsmann-Hogiu Jun Xu, Charles Wang, Charles Simmons. Cellular and Molecular Mechanisms of Middle Ear Inflammation and Tympanosclerosis. (To be submitted to **Hearing Research**)

**Cristina Bertolotto**, Ejaz Ahmed, Yuri Knauer, Valeria Ubal, Dora Acuna, Kolja A. Wawrowsky, S Wachsmann-Hogiu, Arash Moghimi, Ali Piroozi, Nasif Khoury, Daniel Farkas, Charles Simmons. Myofibroblast differentiation during skin wound healing process in a new  $\alpha$ -smooth muscle actin EGFP transgenic mouse model. (To be submitted to **The Journal of Burns and Wounds**)

Ali Piroozi, Ejaz Ahmed, **Cristina Bertolotto**, Arash Moghimi, Dora Acuna, Nasif Khoury, Valeria Ubal, Dynio Honrubia, Charles Wang, Jun Xu, Sebastian Wachsmann-Hogiu, Daniel Farkas, Charles F. Simmons. Nicotine up-regulates VEGF and pro-inflammatory cytokines in placental myofibroblast. (To be submitted to **Nature Medicine**).

Arash Moghimi, Ejaz Ahmed, Ali Piroozi, Valeria Ubal, **Cristina Bertolotto**, Yuri Knauer, Nasif Khoury, Jun Xu, Dora Acuna, Charles Wang, Charles Simmons. TGF- $\beta$ 1 and Thrombin Regulate  $\alpha$ -SM-Actin, MMP3 and TIMP-3 in Murine Placental Fibroblast. (To be submitted to **Pediatric Research**).

#### RESEARCH PAPERS (NON PEER-REVIEWED)

O. Trujillo-Cenoz and **C. Bertolotto** (1988). Some aspects of the structural organization of the spinal cord of *Gymnotus Carapo*, Teleostei Gymnotiformes. II. The motoneurons. **J. Ultrastructure and Molecular Structure Research** 101, 224-235.

O. Trujillo-Cenoz and **C. Bertolotto** (1990). Mauthner cells in the medulla of weakly electric fish *Gymnotus Carapo*. Experiencia, 46, 441-443.

M. Radmilovich, **C. Bertolotto**, J. L. Pena, M. Pedemonte and R. Velluti (1991). A search for a mesencephalic periaqueductal gray- cochlea nucleus connection. **Acta Physiologica, Pharmacologica et Therapeutica Latinoamericana**, Vol. 41, 369-375.

D. D. Simmons, **C. Bertolotto**, and P. M. Narins (1992). Innervation of the amphibian and basilar papillae in the leopard frog: Reconstruction of single labeled fibers. **Journal of Comparative Neurology** 321, 1-10.

D. D. Simmons, **C. Bertolotto**, and Narins, P. M (1994). Morphological gradients in sensory hair cells of the amphibian papilla of the frog, *Rana pipiens pipiens*. **Hearing Research**. 80:71-78.

D. D. Simmons, **C. Bertolotto**, and M. Leong (1994). Ultrastructural reconstruction of auditory hair cells and their synapses in low and high frequency regions of the frog inner ear. ICEM. 13:629-630.

D.D. Simmons, **C. Bertolotto**, and M. Leong (1995). Synaptic ultrastructure within the amphibian papilla of *Rana pipiens pipiens*: rostrocaudal differences. **Auditory Neuroscience** 1: 183-193.

R-H Liu, **C. Bertolotto**, J.K. Engelhardt and M.H. Chase (1996). Age related changes in soma size neurons in the spinal cord motor column of the cat. **Neuroscience Letters** 211: 163-166.

Simmons, D.D., **C. Bertolotto**, J.H. Kim, J.R. Kubba and N.B. Mansdorf (1998) Choline acetyltransferase expression during a putative developmental waiting period. Journals of Comparative Neurology. 397:281-295.

Simmons, DD, **C. Bertolotto**, K. Typpo, M. Wu, and A. Clay (1999) Differential onset, growth and distribution of cholinergic neurons in the developing hamster superior olive. **Anatomy and Embryology**. 200:585-595.

Bulotta A, Hui H, Anastasi E, **Bertolotto C**, Boros LG, Di Mario U, Perfetti R. Cultured pancreatic ductal cells undergo cell cycle re-distribution and beta-cell-like differentiation in response to glucagon-like peptide-1. **J. Molecular Endocrinology** 2002 Dec;29(3):347-60.

Farilla L, Hui H, **Bertolotto C**, Kang E, Bulotta A, Di Mario U, Perfetti R. Glucagon-like peptide-1 promotes islet cell growth and inhibits apoptosis in Zucker diabetic rats. **Endocrinology**. 2002 Nov; 143(11):4397-408.

Merkel P, Khoury N, **Bertolotto C**, Perfetti R. Insulin and glucose regulate the expression of the DNA repair enzyme XPD. **Molecular Cell Endocrinology** 2003 Mar 28; 201(1-2):75-85.

Farilla L, Bulotta A, Hirshberg B, Li Calzi S, Khoury N, Noushmehr H, **Bertolotto C**, Di Mario U, Harlan DM, Perfetti R. Glucagon-like peptide 1 inhibits cell apoptosis and improves glucose responsiveness of freshly isolated human islets. **Endocrinology**. 2003 Dec; 144(12):5149-58. Epub 2003 Aug 28.

Krakow D, Robertson SP, King LM, Morgan T, Sebald ET, **Bertolotto C**, Wachsmann-Hogiu S, Acuna D, Shapiro SS, Takafuta T, Aftimos S, Kim CA, Firth H, Steiner CE, Cormier-Daire V, Superti-Furga A, Bonafe L, Graham JM Jr, Grix A, Bacino CA, Allanson J, Bialer MG, Lachman RS, Rimoin DL, Cohn DH. Mutations in the gene encoding filamin B disrupt vertebral segmentation, joint formation and skeletogenesis. **Nature Genetics**. 2004 Apr;36(4):405-10. Epub 2004 Feb 29.

Kabos P, Matundan H, Zandian M, Bertolotto C, Robinson ML, Davy BE, Yu JS, Krueger RC Jr. Neural precursors express multiple chondroitin sulfate proteoglycans, including the lectican family. **Biochem Biophys Res Commun**. 2004 Jun 11; 318(4):955-63

Wachsmann-Hogiu S., Krakow D., Sebald E. T., **Bertolotto C.**, Acuna D., and Farkas D. L., "Confocal and two-photon microscopy in cartilage – expression patterns of Filamin A and B", **Proc. SPIE** (Bios'04 – Photonics West), **5322**, 140-145, 2004.

Mariana Baserga; **Cristina Bertolotto**; Augusto Sola, Different doses of dopamine have heterogeneous effects on cerebral hemodynamics and dopamine receptors in young rabbits as measured with Near-Infrared Spectroscopy. **Biology of the Neonate**. 2005 Jan 14; 87(4):229-235.

Mariana Baserga, **Cristina Bertolotto**, Nicole K MacLennan, Jennifer L Hsu, Tho Pham, Gizella S Laksana, Robert H Lane Uteroplacental Insufficiency Decreases Small Intestine Growth and Alters Apoptotic Homeostasis in the Term Intrauterine Growth Retarded Rats. **Early Human Development**. 2004 Sep; 79(2): 93-105.

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### **PATENT**

Patent US 2009/0317367 A1: Production of Adipocytes and Proliferation of Adult Stem/Progenitor Cells by Co-culturing Adipocytes and Macrophages. *Inventors*: Gregorio Chazenbalk, PhD; **Cristina Bertolotto, MD, PhD**; Ricardo Azziz, MD, MBA, MPH; Charles Simmons, MD; Saleh Heneidi.

### **SUBMITTED GRANTS**

**Department of Defense**, Orthopaedic Research Program Clinical Trial Award, 2009, "Repair of Soft Tissue Defects and Enhancement of Healing Environment with Cell-Assisted Lipotransfer Techniques in Injured Soldiers"

Pre-proposal grant already approved, waiting for the response of the proposal grant

Role: Co-Investigator

**Department of Defense**, Orthopaedic Research Program Idea Innovative Award, 2009 "Combined Use of Adipose Stem Cells and Growth Factors for Wound Healing in an Ischemic Model: Potential Application to Vascular Injuries' Treatment in Soldiers", Pre-proposal grant already approved, waiting for the response of the proposal grant

Role: Co-Investigator

PA06-181/ R21, NIDDK, 2009 "Use of Adipose stem cells to Generate Adipose Tissue in Lipodystrophy", Waiting for the response of the proposal grant

Role: Co-Investigator

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