Brief Summary

Dr Gregorio Chazenbalk is as a basic scientist with more than 25 years of experience in molecular and cellular biology, immunology and thyroid autoimmunity. Dr Chazenbalk have His previous work pertaining to the molecular mechanisms involved in the adipocyte dysfunction involved in the pathophysiology of PCOS. During these years Dr Chazenbalk has demonstrated a record of successful and productive research including almost 100 publications in peer-review journals. Dr Chazenbalk's previous work pertaining to the molecular mechanisms involved in different disorders including thyroid autoimmunity (Grave's disease and Hashyomot's thyroiditis) and polycystic ovary syndrome (PCOS). Dr Chazenbalk have developed a novel technology for generating new preadipocytes based on the cross-talk between between fat cells and inflammatory cells. Recently, Dr Chazenbalk has discovered a novel population of stem cells with pluripotent characteristics isolated from human adipose tissue under severe cellular stress. These cells termed Multilineage Stress Enduring (Muse-AT) cells have the potential to be applied in the realm of regenerative medicine and cell therapy.

Position and honors

Appointments:

1985-1986	Assistant Investigator, National Research Council of Argentina
1986-1989	Postdoctoral Research Fellow, University of California San Francisco; Thyroid Molecular Biology Unit, Veterans Administration Medical Center
1989-1995	Assistant Research Endocrinologist, University of California San Francisco
1995-1998	Associate Research Endocrinologist, University of California San Francisco
1998-2004	Associate Professor of Medicine, University of California Los Angeles, School of Medicine
2004-2006	Professor of Medicine, University of California Los Angeles, School of Medicine
2006-2010	Research Scientist III, Department of Obstetrics and Gynecology, Cedars-Sinai Medical Center Professor of Obstetrics and Gynecology, Professor of Medicine, University of California Los Angeles, School of Medicine.
2010	Associate Research Scientist, University of California Los Angeles, School of Medicine

Honors and Awards

1980-1981	Scholarship; Argentine Foundation of Endocrinology
1981-1985	Scholarship; National Research Council of Argentina
1985	Prof. Roberto E. Mancini Award by the Argentine Endocrinology Foundation
1986	Dr. Luis Schwarzstein Award by the Argentine Society of Endocrinology and Metabolism and the Argentine Jewish Foundation.
2000	Latin-American Thyroid Association Award

Services to Professional Societies

1994	American Thyroid Association, Program Committee, Annual meeting session chairman.
1996-1999	American Thyroid Association, Research Committee
1999	American Thyroid Association, Program Committee, Annual meeting session chairman.
1999-2005	American Thyroid Association, Membership Committee

Professional Societies:

American Thyroid Association
Endocrine Society
Endrogen Excess Society
International Federation for Adipose Therapeutics and Science

Invited lectures

Veterans Administration Hospital in San Francisco, USA; University of Bochum, Germany; University of Udine, Italy; University of Madrid, Spain; University of Buenos Aires, Buenos Aires, Argentina; Atomic Commission of Energy,Buenos Aires, Argentina; American Thyroid Association, Colorado, USA; Argentine Society of Endocrinology and Metabolism, Buenos Aires, Argentina; Endocrine Society Meeting, New Orleans, USA; Latin American Thyroid Association, Foz Iguazu, Brasil; Hospital Ramos Mejia, Buenos Aires, Argentina; Cedars-Sinai Medical Center, Los Angeles, USA; International Thyroid Meeting, Kyoto, Japan; Veterans Administration Hospital in Los Angeles, USA; University of California San Francisco, California; University of Catanzaro, Catanzaro, Italy; University of Sapienza, Rome, Italy; International Thyroid Meeting, Buenos Aires, Argentina Symposium on Thyroid Autoimmunity, Mendoza, Argentina; Latin American Society of Endocrinology, Tucuman, Argentina; Department of Plastic Surgery, Cedars-Sinai Medical Center Los Angeles, USA; Sabatier University, Toulouse, France; Tohoku Universtiy, Sendai, Japan; Dept of Plastic Surgery, University of Tokyo, Japan; World Stem Cell Submit, San Diego, USA

Most relevant Selected Peer-reviewed Publications (10 selected from a total of 98 total publications)

1. Chazenbalk G, Magnusson R P, Rapoport B. TSH stimulation of cultured thyroid cells increases steady state levels of the messenger RNA for thyroid peroxidase. Mol Endocrinol 1:913-917, 1987
2. Chazenbalk G, Wadsworth HL, Rapoport B. Transcriptional regulation of ferritin H mRNA levels in FRTL5 rat thyroid cells by thyrotropin. J. Biol. Chem. 265:666-670, 1990
3. Wadsworth HL, Chazenbalk G, Nagayama Y, Russo D, Rapoport B. An 8 amino acid "insertion" in the human TSH receptor is critical for high affinity TSH binding. Science 249:1423-1425, 1990
4. Chazenbalk G, Portolano S, Hutchison JS, Rapoport B, McLachlan SM. Human organ-specific autoimmune disease: molecular cloning and expression of an autoantibody gene repertoire for a major autoantigen reveals restricted immunoglobulin gene usage and an antigenic immunodominant region. J. Clin. Invest. 92(1):62-74, 1993
5. Chazenbalk G, Rapoport B. Expression of the extracellular region of the thyrotropin receptor in a baculovirus vector using a promoter active earlier than the polyhedrin promoter: Implications for the expression of functional highly glycosylated proteins. J. Biol. Chem. 270:1543-1549, 1995
6. Chazenbalk G, Juame JC, McLachlan SM, Rapoport B. Engineering the human thyrotropin receptor ectodomain from a non-secreted form to a secreted, highly immunoreactive glycoprotein that neutralizes autoantibodies in Graves' patients' sera. J. Biol. Chem. 272:18959-18965, 1997
7. Chazenbalk G,Pichurin P, Chen C-R, Latrofa F, Johnstone AP, McLachlan SM, Rapoport B. The free A subunit, not the holoreceptor, is preferentially recognized by thyroid stimulating autoantibodies in Graves' disease. J. Clin. Invest. 110:209-217, 2002
8. Goodarzi M, Dumesic DA, Chazenbalk G, R Azziz. Polycystic Ovary Syndrome: etiology, pathogenesis and diagnosis. Nature Reviews Endocrinology. 7: 219-231, 2011
9. Chazenbalk G, Bertolotto C, Heneidi S, Jumabay M, Trivax B, Aronowitz J, Yoshimura K, Simmons C, Dumesic D, Azziz R. Novel pathway of adipogenesis through cross-talk between adipose tissue macrophages, adipose stem cells and adipocytes: evidence of cell plasticity. PlosOne 6:17834, 2011
10. Heneidi S, Simerman A, Keller E, Singh P, Dumesic DA, G Chazenbalk. Awakened by cellular stress: isolation and characterization of a novel population of pluripotent stem cells derived from human adipose tissue. PlosOne, e-864752, 2013

Patents

1- Chazenbalk G, Bertolotto C, Simmons C, Azziz R. Production of adipocytes and proliferation of adult stem cells after co-culture. Cedars Sinai Medical Center

2- Pluripotent Human Adipose Adult Stem Cells: Isolation, Characterization And Clinical Implications Chazenbalk G. University of California Los Angeles