

Gianni Soldati, PhD

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CURRENT AND PREVIOUS POSITIONS

- 1991-1992 Post Doc at the Zentrum für Lehre und Forschung and Friedrich Miescher Institut, Basel, Switzerland
- 1992-1993 Post Doc at the Institute of Child Health, London, England.
- 1993-1997. Post Doc at the Oncological Service, Locarno, Switzerland
- 1998-2008. Director of the Molecular Diagnostic Laboratory, Lugano, Switzerland
- 2007-2011. CSO of Swiss Stem Cells Bank, Lugano, Switzerland
- 2008-2012. Director of the Cell Therapy Unit, Cardiocentro Ticino, Lugano, Switzerland
- 2008-present. CEO, of the Molecular Diagnostic Laboratory, Lugano, Switzerland
- 2008-present. President of the Swiss Stem Cell Foundation, Lugano, Switzerland
- 2008-present. Director of Research of the Swiss Stem Cell Foundation, Lugano, Switzerland
- 2024-present. CSO of Ambrose Cell Therapy, Los Angeles, Ca, USA.

Teaching activities

- 1986-1990. Teacher at the Laboratory Technician School, Locarno, Switzerland.
- 2000-2001. Lecturer at the University of Fribourg, Switzerland.
- 2002-2005. Lecturer at the University of Varese, Uninsubria, Italy.

Supervision of graduate students and postdoctoral fellows

- 1998 – 2008 1 Postdocs, 2 PhD and 4 Master Students at the Molecular diagnostic Laboratory, Lugano, Switzerland.
- 2008 – 12 Postdocs, 12 PhD and 27 Bachelor and Master Students at the Swiss Stem Cell Foundation, Lugano, Switzerland.

Organisation of scientific meetings

- 2002. President of the organizing Committee of the USGEB in Lugano
- 2003/2004/2005. Organizer of the USGEB Asirb Symposium
- 2008/2010/2012. Organizer of the Stem Cell Meeting in Lugano
- 2015-present. Organizer of the annual iCAST, International Congress on Adipose Stem Cells Treatments meeting.
- 2023-present. Organizer of the Stem Cell Academy for Medical doctors.

Professional background

- **1976-1979** Teaching Diploma, Lugano, Switzerland.
- **1981-1986** Undergraduate studies at the University of Geneva, Geneva, Switzerland. Diploma in Biology. (Laboratory of Dr. A. Kato, CMU Dpt. of Pharmacology, Resp. Prof. Y. Dunant. "Une amélioration de la méthode de l'immunisation in vitro pour la production d'anticorps monoclonaux").
- **1986-1991** Ph.D. study at the University of Basel, Frauenklinik laboratories, Prof. U. Eppenberger. Pharmacological Institute, University of Basel, Prof. H.H. Linde and Reproductive Endocrinology Center, "La Carità" Hospital, Locarno, Switzerland, Dr. M. Balerna. "Biological activities of a partially purified albumin-bound factor from human peritoneal fluids able to immobilize spermatozoa".
- **1991-1993** Post-Doc study at the University of Basel, Zentrum für Lehre und Forschung, (Prof. U. Eppenberger, Dr. H. Müller, Dr. W. Küng) and Friedrich Miescher Institut (Dr. Y. Nagamine). Characterization of a new purified substance from breast cancer cell lines. Effects on the expression of the estrogen- and epidermal growth factor-receptor mRNA.
- **1993-1998** Post-Doc at the Oncological Service, Locarno, Switzerland. Setup of the Fluorescent in situ Hybridization for lymphoma patient screening.
- **1998-present** Founder and CEO of the Molecular Diagnostic Laboratory in Lugano, Switzerland.

- **2005-2012** Founding of the Swiss Stem Cells Bank, a cord blood bank for collection, processing and storage of cord blood samples.
- **2007-2009** Construction of a clean room, designed for human cell therapies (stem cells), authorized by Swissmedic in September 2009.
- **2009-present** Founding of the Swiss Stem Cell Foundation (SSCF), Lugano, Switzerland with the aim to develop stem cell therapies for patients.
- **2013** Acquisition of a clean room at the Technopark Zurich and accreditation for stem cell therapies by Swissmedic.
- **2014-present** Construction of the Swiss Regenerative Institute, Lugano, Switzerland
- **2021** Agreement with Swiss Medical Network for the construction of a Regenerative Medicine Institute in Lugano, Switzerland.

List of publications in International peer-reviewed Journals.

1. Erkman L., Soldati G., James R.W. and A.C. Kato. (1987). *Partial purification of lymphoblasts after in vitro immunization increases the yield in Ig-producing hybridomas. J. Immunol. Meth. 98:43-52.*
2. Balerna M., Soldati G., Piffaretti-Yanez A. and Campana A. (1989). *Immunological factors in female infertility. Biochemical aspects on the immunopathology of reproduction. Acta Medica Press 175-193.*
3. Soldati G., Piffaretti A.Y., Campana A., Marchini M., Luerti M. and Balerna M. (1989). *Effect of peritoneal fluid on sperm motility and velocity distribution using objective measurements. Fertil. Steril. 52:113-119.*
4. Rosselli M., Marchini M., Soldati G., Campana A and M. Balerna. (1990). *Removal of sperm-coat from human spermatozoa by interaction with cervical mucus or a capacitating medium. Andrologia 22:543-547.*

5. Falcone L., Soldati G., Piffaretti-Yanez A., Marchini M., Balerna M. and U. Eppenberger (1991). Follicular fluid enhances sperm motility and velocity in vitro. *Fertil. Steril.* 55(3):619-623.
6. Soldati G., Piffaretti-Yanez A., Balerna M., Eppenberger U. (1991). Purification of a sperm motility inhibiting factor from human peritoneal fluids. *Prog. Reprod. Biol. Med.* 15 (11): 1-5.
7. Revelli A., Soldati G., Stamm J., Massobrio M., Piffaretti-Yanez A. and Balerna M. (1992). Effect of volumetric mixtures of peritoneal and follicular fluid from the same woman on sperm motility and acrosomal reactivity in vitro. *Fertil. Steril.* 57(3):654-660.
8. Soldati G., Piffaretti-Yanez A., Balerna M., and Eppenberger U. (1992). Purification of a sperm motility inhibiting factor from human peritoneal fluids. *Prog. Reprod. Biol. Med. Basel, Karger*, 15:86-93.
9. Guidi F., Revelli A., Soldati G., Stamm J., Massobrio M., Piffaretti-Yanez A. and Balerna M. (1993). Influence of peritoneal fluids from spontaneous and stimulated cycles on sperm motility in vitro. *Andrologia* 25:71-76.
10. Soldati G., Piffaretti-Yanez A., Balerna M. and U. Eppenberger (1993). Purification of a factor from human peritoneal fluids able to immobilize spermatozoa. *Human Reprod.* 8(3): 428-436.
11. Zucca E, Soldati G., Schlegelberger B., Booth M.J., Weber-Matthiesen K., Cavalli F. and Cotter F.E. (1995). Detection of the t(11;14) translocation in blood and bone marrow by interphase cytogenetics in mantle cell lymphoma. *British J. Hematol.*89:665-668.
12. F. Keller, G. Togni, G. Soldati, T. Balmelli, G. Medici, K. Rose and M. Balerna. (1997). Nature's motility blockers: controlling human sperm motility machinery from outside. Chemical characterization of a peritoneal fluid lipid that induces sperm immobilization. *Mol. Hum. Reprod.* 3(3):241-248
13. G. Filippini, S. Griffin, M. Uhr, H.M. Eppenberger, P. Bonilla, F. Cavalli and G. Soldati (1998). A novel flow cytometric method for the quantification of p53 gene expression. *Cytometry* 31: 180-186.

14. G. Filippini, T. Balmelli, H. Eppenberger, and G. Soldati (1999). Flow cytometric detection of p53 protein after incubation of a pre-B cell line with anti-tumor agents. *Cytometry* 35: 267-273.
15. A. Revelli, G. Soldati, C. Costamagna, O. Pellerey, E. Aldieri, M. Massobrio, A. Bosia, and D. Ghigo (1999). Follicular fluid proteins stimulate nitric oxide synthesis in human sperm: a possible role for NO in acrosomal reaction. *J. Cell. Physiol.* 178: 85-92.
16. H. Stricker, G. Soldati, T. Balmelli and G. Mombelli (2001). Homocysteine, vitamins and gene mutations in peripheral arterial disease. *Blood Coagulation and Fibrinolysis.* 12: 469-475.
17. Giuseppe Astori, Francesca Vignati, Silvana Bardelli, Monica Tubio, Mauro Gola, Veronica Albertini, Franco Bambi, Giancarlo Scali, Damiano Castelli, Valeria Rasini, Gianni Soldati and Tiziano Moccetti (2007). "In vitro" and multicolor phenotypic characterization of cell subpopulations identified in fresh human adipose tissue stromal vascular fraction and in the derived mesenchymal stem cells. *Journal of Translational Medicine* Vol 5, 55.
18. Alex M Garvin, Michel Bottinelli, Mauro Gola, Ario Conti and Gianni Soldati (2009). DNA Preparation from Sexual Assault Cases by Selective Degradation of Contaminating DNA from the Victim. *Journal of Forensic Sciences*, Nov; 54(6): 1297-1303.
19. Soncin S., Lo Cicero V., Astori G., Soldati G., Gola M., Sürder D. and Moccetti T. (2009). A practical approach for the validation of sterility, endotoxin and potency testing of bone marrow mononucleated cells used in cardiac regeneration in compliance with good manufacturing practice. *Journal of Translational Medicine*, Sep, 8;7:78.
20. Giuseppe Astori, Sabrina Soncin, Viviana Lo Cicero, Francesco Siclari, Daniel Sürder, Lucia Turchetto, Gianni Soldati, and Tiziano Moccetti. (2010). Bone marrow derived stem cells in regenerative medicine as Advanced Therapy Medicinal Products. *Am J Transl Res* 2010;2(3):285-295
21. Sürder D., Schwitter J., Moccetti T., Astori G., Lo Cicero V., Soncin S., Soldati G., Windecker S., Moschovitis A., Erne P., Jamshidi P., Plein S., Manka R., Landmesser U., Lüscher TF., Corti R. (2010). Cell-based therapy for myocardial repair in patients with acute myocardial infarction: The Swiss multicenter Intracoronary

Stem cells Study in Acute Myocardial Infarction (SWISS-AMI). *American Heart Journal*, Am Heart J. Jul;160(1):58-64.

22. Silvana Bardelli, Giuseppe Astori, Daniel Sürder, Tiziano Tallone, Andre Terzic, Gianni Soldati, Tiziano Moccetti. (2010). *Stem Cell Update: Highlights from the 2010 Lugano Stem Cell Meeting*. *J Cardiovasc Transl Res*. 2010 Oct 30.
23. Tiziano Tallone, Andreas Böhmler, Christopher Kornfeld, Giuseppe Vassalli, Tiziano Moccetti, Silvana Bardelli and Gianni Soldati (2011). *Adult human adipose tissue contains several types of multipotent cells*. *J Cardiovasc Transl Res*. 2011 Apr;4(2):200-10.
24. Tiziano Tallone, Giovanna Turconi, Gianni Soldati, Giovanni Pedrazzini, Tiziano Moccetti, Giuseppe Vassalli. (2010). *Heterogeneity of Human Monocytes: An Optimized Four-Color Flow Cytometry Protocol for Analysis of Monocyte Subsets*. *J. Cardiovasc. Translat. Res*. Apr;4(2):211-9.
25. Giorgio Bronz and Gianni Soldati. (2011). *Storage of Adipose Stem Cells*. A chapter in: *Adipose Stem Cells and Regenerative Medicine* by Y. G. Illouz and A. Sterodimas. Springer-Verlag Berlin Heidelberg Editions, Germany.
26. G. Astori, F. Bambi, G. Soldati, D. Sürder and T. Moccetti. (2011). *Autologous bone marrow mononucleated cell preparation for the clinical treatment of acute myocardial infarction and peripheral arterial disease*. *Cytotherapy* 13: 1031–1035.
27. Moccetti T, Sürder D, Klersyc C, Vassalli G, Crljenica C, Rossi MG, Pasotti E and Soldati G (2012). *Sustained improvement in left ventricular function after bone marrow-derived cell therapy in patients with acute ST elevation myocardial infarction. A 5-year follow-up from the Stem Cell Transplantation in Ischaemic Myocardium Study*. *Swiss Med Wkly*.142:w13632.
28. Alex M Garvin, Andrea Fischer, Jutta Schnee-Griese, Andrea Jelinski, Michel Bottinelli, Gianni Soldati, Monica Tubio, Vincent Castella, Nathalie Monney, Naseem Malik, Michelle Madrid. (2012). *Isolating DNA from sexual assault cases: a comparison of standard methods with a nuclease-based approach*. *Investigative Genetics* 3:25.
29. Minonzio G, Corazza M, Mariotta L, Gola M, Zanzi M, Gandolfi E, De Fazio D and Soldati G (2014). *Frozen adipose-derived mesenchymal stem cells maintain high*

capability to grow and differentiate. *Cryobiology* 69:211-216.

30. Cristina Pirrone, Alessandra Gobbetti, Christian Caprara, Giovanni Bernardini, Rosalba Gornati, and Gianni Soldati (2017). Ultramicroscope evaluation of chondrogenic differentiation of hASCs expanded in a hollow-fiber bioreactor. *Stem Cell Res. and Med.* Vol 2(2): 1-10.
31. Deborah Stanco, Christian Caprara and Gianni Soldati (2017). Adipose-derived mesenchymal stem cells cultured in tenogenic serum-free medium express tendon-specific markers. *European Cell and Materials* 33: Suppl.2, P343.
32. Gianni Soldati, Luca Mariotta, Greta Minonzio, Mauro Gola and Christian Caprara (2018). GMP cryopreservation of adipose-derived mesenchymal stem cells as a service for future medical needs. *Cryobiology* 80:172.
33. Petra C. Schwalie, Hua Dong, Magda Zachara, Julie Russeil, Daniel Alpern, Nassila Akchiche, Christian Caprara, Kai-Uwe Schlaudraff, Gianni Soldati, Christian Wolfrum and Bart Deplancke (2018). A novel stromal cell population that inhibits adipogenesis in mammalian fat depots. *Nature* 559: 103-108.
34. Deborah Stanco, Christian Caprara, Gianluca Ciardelli, Luca Mariotta, Mauro Gola, Greta Minonzio and Gianni Soldati, (2019). Tenogenic differentiation protocol in xenogenic-free media enhances tendon-related marker expression in ASCs. *PlosOne* 14(2).
35. Sara Nava, Valeria Sordi, Luisa Pascucci, Carlo Tremolada, Emilio Ciusani, Offer Zeira, Moris Cadei, Gianni Soldati, Augusto Pessina, Eugenio Parati, Mark Slevin (2019). Long lasting anti-inflammatory activity of human micro-fragmented adipose tissue. *Stem Cell International* Feb 19;2019:5901479. doi: 10.1155/2019/5901479. eCollection 2019.
36. Sophie Menkes, Luca Mariotta, Gianni Soldati and Luigi Polla (2020). Subcutaneous Injections of Nanofat Adipose-derived Stem Cell Grafting in Facial Rejuvenation. *Plast. Reconstr. Surg. Glob. Open* 2020;8:e2550; doi: 10.1097/GOX.0000000000002550; Published online 21 January 2020.
37. Deborah Stanco, Monica Boffito, Alessia Bogni, Luca Puricelli, Josefa Barrero, Gianni Soldati and Gianluca Ciardelli (2020). 3D bioprinting of human adipose-derived stem cells and their tenogenic differentiation in clinical grade medium. *Int.*

J. Mol. Sc. 21: 8694; 2-23.

38. Pauline François, Giulio Rusconi, Laurent Arnaud, Luca Mariotta, Laurent Giraud, Greta Minonzio, Julie Veran, Baptiste Bertrand, Chloé Dumoulin, Fanny Grimaud, Luc Lyonnet, Dominique Casanova, Camille Giverne, Audrey Cras, Guy Magalon, Françoise Dignat-George, Florence Sabatier, Jeremy Magalon and Gianni Soldati (2021). Inter-center comparison of good-manufacturing-practices compliant stromal vascular fraction and proposal for release acceptance criteria: a review of 364 productions. *Stem Cell Research and Therapy* 12:372; 1-11.
39. Giulio Rusconi, Giuseppe Cusumano, Luca Mariotta, Reto Canevascini, Mauro Gola, Rosalba Gornati and Gianni Soldati (2022). Upgrading monocytes therapy for critical limb ischemia patient treatment: pre-clinical and GMP-validation aspects. *Int. J. Mol. Sci.* 23(20): 12669. <https://doi.org/10.3390/ijms232012669>.
40. Martina Cremona, Giulio Rusconi, Alessandro Ferrario, Luca Mariotta, Mauro Gola and Gianni Soldati (2023). Processing Adipose Tissue Samples in a GMP Environment Standardizes the Use of SVF in Cell Therapy Treatments: Data on 302 Patients. *Biomedicines* 11, 2533. <https://doi.org/10.3390/biomedicines11092533>.
41. Giulio Rusconi, Martina Cremona, Luca Mariotta, Mauro Gola, Eugenio Gandolfi, Matteo Malacco and Gianni Soldati (2024). GMP-compliant cryopreserved and thawed native adipose tissue ready for fat grafting. *J. Clin. Med.* 13, 3028. <https://doi.org/10.3390/jcm13113028>.