

Prof. Guido Ferretti

CURRICULUM VITAE

PERSONAL DATA

FAMILY NAME : FERRETTI
FIRST NAME : Guido
NATIONALITY : Italian
PLACE AND DATE OF BIRTH : Torino, Italy, March 18th 1956
CIVIL STATUS : Married, three children

CONTACTS

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CURRENT POSITION

Professor of Physiology, Department of Molecular and Translational Medicine, School of Medicine, University of Brescia, Italy (part time)

and

Professor of Clinical Physiology, Departments of Anesthesiology, Clinical Pharmacology and Intensive Care, and of Basic Neuroscience, University of Geneva, Switzerland (part time)

EDUCATION

July 1974 : Maturità Classica, Liceo C. Beccaria, Milano, Italy.
July 1981 : Medicine Doctor, Università di Milano, Italy.
July 1984 : Medical Specilization in Sports Medicine (cum laude), Università di Milano, Italy.
January 1998 : Habilitation (Libera Docenza) in Human Physiology, School of Medicine, University of Geneva, Switzerland.

PROFESSIONAL EXPERIENCE

November 1981 - October 1983: Collaboratore Professionale, Department of Biomedical Technologies, School of Medicine, Università di Milano, Italy.

November 1983 - May 1985:	Assistant, Institute of Human Physiology, School of Medicine, Università di Brescia, Italy.
June 1985 - September 1988:	Assistant, Department of Physiology, School of Medicine, University of Geneva, Switzerland.
October 1988 - January 1992:	Maître Assistant, Department of Physiology, School of Medicine, University of Geneva, Switzerland
February 1992 – September 2003:	Maître d'Enseignement et de Recherche, Department of Physiology, School of Medicine, University of Geneva, Switzerland (part time since 2002)
November 2001 – October 2012:	Professor of Physiology, Department of Biomedical Sciences and Biotechnologies, School of Medicine, University of Brescia, Italy (part time)
October 2003 – December 2013:	Maître d'Enseignement et de Recherche, Department of Basic Neuroscience, School of Medicine, University of Geneva, Switzerland (part time since 2002)
November 2012 – January 2016:	Professor of Physiology, Department of Clinical and Experimental Science, School of Medicine, University of Brescia, Italy (part time)
January 2014 – November 2014:	Professor of Clinical Physiology, Department of Basic Neuroscience, School of Medicine, University of Geneva, Switzerland (part time)
December 2014 – to date	Professor of Clinical Physiology, Departments of Anesthesiology, Clinical Pharmacology and Intensive Care and of Basic Neuroscience, University of Geneva, Switzerland (part time)
February 2016 – to date	Professor of Physiology, Department of Molecular and Translational Medicine, School of Medicine, University of Brescia, Italy (part time)

SOJOURNS IN OTHER INSTITUTIONS

October 1979 - December 1979 :	"Student Visitor", Department of Physiology, State University of New York, Buffalo, USA.
September 1980 - December 1980 :	"Research Assistant", Department of Physiology, State University of New York, Buffalo, USA.

June 1990	:	"Research Visitor", Center for Research in Special Environments, State University of New York, Buffalo, USA.
March 1999 – February 2002		Honorary Professor (equivalent to Full Professor, without salary), Department of Exercise and Sport Science, Manchester Metropolitan University, Alsager UK.
July 2009 – December 2013		Honorary Professor, Istituto di Bioimmagini e Fisiologia Molecolare, Consiglio Nazionale delle Ricerche, Milano

LANGUAGES

Italian (mother tongue), English, French, Spanish (notions).

MEMBERSHIP

1. Società Italiana di Fisiologia.
2. Société Suisse de Physiologie
3. European College of Sport Science
4. Società Italiana di Scienze Motorie e dello Sport

Former member of the Physiological Society (1994 – 2010)

RESEARCH

Research fields

1. Regulation of cardiovascular and respiratory functions in resting and exercising humans.
2. Human adaptive responses to extreme environments (microgravity, diving, cold)
3. Energetics of muscular exercise in humans.
4. Energetics and biomechanics of human locomotion.

Research grants

- 1988 - 1990 "Ventilation and gas exchange during exercise transients in normal subjects and heart transplant recipient patients"
FNSRS, **FS 96,200**, together with Prof. P. Cerretelli.
- 1988 - 1990 "Effects of Solcoseryl® on extreme endurance exercise in humans"
Solco Basel SA, **SF 105,950**.
- 1990 - 1994 "Control of ventilation in heart and lung transplant recipients"
FNSRS, **SF 330,414**, together with Prof. P. Cerretelli.
- 1993 - 1996 "Factors limiting oxygen transport in humans"

- EFSM, **SF 60,000**.
- 1994 - 1995 "Regulation of cardiovascular response to exercise in humans"
ESA-PRODEX, for technical developments, **FS 540,000**.
- 1994 - 1997 "Gas exchange and cardiac regulation in heart transplant recipient children"
FNSRS, **SF 293,132**, together with Prof. P. Cerretelli.
- 1995 - 1998 "The effects of nicethamide on the ventilatory response to exercise in hypoxia"
Zyma AG, **SF 145,930**, together with Prof. P. Cerretelli.
- 1997 - 2000 "Cardiovascular oxygen transport in exercising humans"
FNSRS, **SF 184,500**.
- 1998 - 2001 "Evaluation of the energy cost of treadmill tests under varying speed and incline condition in patients with chronic obstructive arteriopathy and claudicatio intermittens"
Sigma-Tau, **SF 58,128**.
- 2000 – 2003 "Dynamics of oxygen transport in humans : posture, exercise and hypoxia"
FNSRS, **SF 133.000**.
- 2001 – 2003 "Energetic constraints of mounting running"
OFSPPO, **SF 78.540**.
- 2001 – 2003 "Cardiopulmonary consequences of prolonged bed rest in humans"
FNSRS, **SF 74.390**
- 2003 – 2006 " Effects of gravity acceleration on oxygen uptake, cardiac output and autonomic control of heart function during exercise in humans"
FNSRS, **SF 176.118**
- 2006 – 2008 "Determinants of running performance in top-level Kenyan athletes"
OFSPPO, **SF 83.060**
- 2006 – 2009 "Dynamics of pulmonary gas exchange and systemic oxygen delivery during exercise transients in humans"
FNSRS, **SF 260.000**
- 2008 – 2010 "Neurovegetative system and exercise in lung transplant recipients"
MIUR – PRIN, Italy, **€ 31.500**
- 2009 – 2010 "Safety in SCUBA diving : decompression, bubble formation and evaluation of physiological parameters"
CCM, Italy, **€ 200.000**
- 2009 – 2012 "Dynamics of pulmonary gas exchange and systemic oxygen delivery during exercise in patients affected by specific cardiopulmonary diseases"
FNSRS, **SF 375.000**
- 2012 – 2016 "Dynamics of cardio-pulmonary response to exercise in patients affected by essential hypertension"
FNSRS, **SF 412.267**
- 2013 – 2014 "Smart ECG. A miniaturized device with high energetic efficiency for very-long-term monitoring of ECG: technological, clinical and scientific aspects"
Fondazione EULO, **€ 23.200**

- 2016 – 2018 “#Studio per la vita”
Bando di Ateneo Health and Wealth at Unibs, € 18.200, together with Prof. Alessandra Flammini
- 2017 – 2019 “Elaborazione di un metodo di allenamento sicuro ed efficace in condizioni di atmosfera controllata”
ISOLCELL spa, € 37.000
- 2018 – 2021 “Arterial baroreflexes in dynamic conditions in humans: a closed-loop study”
FNSRS, SF 365.296

International research contracts

- 1994 - 1996 European Space Agency, jointly with Centre National d'Etudes Spatiales, France, for participation in the 1994 LT-HDT Bed Rest campaign, with experiment ESA/LT/023, entitled “Effects of long term bed rest on the biomechanical and the bioenergetic characteristics of human skeletal muscle and on the factors limiting maximal oxygen consumption”.
- 1994 - 1996 European Space Agency, for participation in the Euomir 95 programme, with experiment 21-CH, entitled “Regulation of cardiovascular response to exercise in humans”.
- 1998 - 2002 European Space Agency, for participation in the programme ESA-AO-97-LS-ARMS, as co-investigator of experiment 7-S (P. I. Prof. Dag Linnarsson, Karolinska Institute, Stockholm, Sweden), entitled “Cardiopulmonary and muscular adaptations during and after microgravity”.
- 2000 - 2003 European Space Agency, jointly with Centre national d'études spatiales, France, for participation in the programme ESA-AO-99-LS-BR, with the project 001, entitled "Respiratory, circulatory, muscular and bone consequences of inactivity and rehabilitation in humans".
- 2000 - 2003 European Space Agency, for participation in the programme ESA-AO-2000-LS-BR-SHORT, as co-investigator of project 002 (Principal Investigator : Prof. Carlo Capelli, Università di Udine), entitled "Cardiopulmonary consequences of short term bed rest".
- 2003 - 2006 European Space Agency, jointly with Karolinska Institute, Stockholm, Sweden, for participation in the programme ESA-RA-LS-01-LSRA, with the project 067, entitled "Effects of gravity acceleration on oxygen uptake during exercise in human".
- 2008 – 2009 Italian Space Agency, in collaboration with Primorska University, Kopar, Slovenia, for participation in the prolonged bed rest programme that the two institutions jointly organised in Ankaran, Slovenia, in association with the CCMC research group of the Italian Space Agency.

Editorial activities

September 2009 – to date Distributing editor for Environmental Physiology, European Journal of Applied Physiology

Muscular exercise at high altitude. Edited by G. Ferretti and P. Cerretelli. Int. J. Sports Med. Suppl. 1, 1990.

1. Guest Referee, The Journal of Physiology
2. Guest Referee, American Journal of Physiology
3. Guest Referee, Journal of Applied Physiology
4. Guest Referee, Pflügers Archiv.
5. Guest Referee, European Journal of Applied Physiology.
6. Guest Referee, Respiration Physiology and Neurobiology.
7. Guest Referee, Journal of Experimental Biology.
8. Guest Referee, International Journal of Sports Medicine.
9. Guest Referee, Undersea and Hyperbaric Medicine.
10. Guest Referee, Anesthesiology.

Organisation of meetings and symposia

European College of Sport Science, the Manchester Meeting, July 15-18, 1998. Symposium :
PHYSIOLOGY IN SPACE : HOW PHYSIOLOGICAL SYSTEMS DEGRADE.

Satellite Course, European College of Sport Science, the Rome meeting, July 13-14, 1999
INTEGRATIVE MUSCLE PHYSIOLOGY

Jointly organised by Roberto Bottinelli, Marco Ferrari , **Guido Ferretti** and Marco Narici

VII IOC World Congress on Sports Science, Athens, October 7-11, 2003
COUNTERMEASURES FOR MAN IN SPACE

Symposium

International Congress "Mountain and Sport", on the occasion of 10th anniversary of *Centro di Bioingegneria e Scienze Motorie*, Rovereto, Italy,

Jointly organised by Carlo Capelli, **Guido Ferretti**, Guido Fumagalli and Federico Schena

Numerous invited conferences in international and national meetings

ADMINISTRATION

In academic context

1999 – 2000 Member of Groupe de Travail Médecine et Sport, Faculté de Médecine, Université de Genève (chairman Prof. Jean-Philippe Bonjour)

1999 – to date Member of Comité de Programme pour les années 1 – 3, Faculté de Médecine, Université de Genève

2001 – to date Member of Consiglio di Corso di Laurea in Medicina e Chirurgia, Università di Brescia

2001 – to date Member of Scientific Council of Centro di Bioingegneria e Scienze Motorie, Rovereto, Italy

2002 – to date	Member of Consiglio di Corso di Laurea in Scienze Motorie, Università di Brescia
2010 – 2017	Coordinator, Aggregate School of Specialisation in Sport Medicine of the Universities of Brescia, Milano Bicocca and Pavia, Italy.
2012 – 2014	Member of “Giunta del Collegio dei Professori Ordinari di Fisiologia”, Italy
2013 – 2015	Member, Task Force of Health and Wealth at Unibs, University of Brescia
2014 – to date	Member of the Board of the Italian Physiological Society
2015 – 2016	Member of the “Commissione di Concorso di Primo Ricercatore”, National Research Council, Italy
2016 – to date	Member of the Nomination Committee, Federation of European Physiological Societies

Internal or external reviewer for professorial appointments in various universities in Switzerland, Italy and the United Kingdom.

At the Ministry of Health, Italy

2009 - 2013 Member of Commissione Interministeriale Sanità e Sport (president : Prof. Ferruccio Fazio, State Minister of Health), established by the Ministers of Health and of Sport of the Italian Republic, aimed at setting up a project for the introduction of exercise as a preventive and therapeutic tool in the Italian Health System.

2009 - 2011 Personal counsellor of the Minister of Health for sport items.

2011 – 2015 Consultant of Consiglio Superiore di Sanità, Minister of Health, Italian Republic, for sport issues.

Scientific functions for other institutions

Referee, Fonds national suisse de la recherche scientifique

Referee, Commission de recherche, Office fédéral du sport de Macolin.

Referee, Projets thématiques, Région Rhône-Alpes, France

Referee, Programmi di Ricerca di Interesse Nazionale, Ministero dell'Università e della Ricerca Scientifica, Italia

Referee, Netherlands Institute for Space Research

Member of reviewing committee, European Space Agency, ESA-AO-2004

Member of the panel of experts established by the European Space Agency for the definition of scientific priorities to be set in the Life Science 5-year Plan, ELIPSE, for the period 2009-2014.