

PERSONAL INFORMATION

Roberto Codella



📍 Università degli Studi di Milano, Department of Biomedical Sciences for Health, Via Fratelli Cervi 93, 20090, Segrate (Milano), Italy.

☎ +39 02 503 30300

✉ roberto.codella@unimi.it

🌐 <http://www.unimi.it/chiedove/ENG/schedaPersonaXML.jsp?matricola=16611>

Sex Male | Date of Birth 03/08/1977 | Nationality Italian

POSITION

Assistant Professor in Sport Sciences and Methodology (SSD: M-EDF/02)
Università degli Studi di Milano
Department of Biomedical Sciences for Health
School of Exercise and Sports Sciences

WORK EXPERIENCE

22/12/2008 - present

Researcher and Assistant Professor

Università degli Studi di Milano, Milano (Italy)

Department of Biomedical Sciences for Health, School of Exercise and Sports Sciences.

- *In vivo* studies of human and animal metabolism, differently-modulated, to prevent/cure/revert typical morbid conditions affecting present-day society: insulin resistance, inflammation, obesity and diabetes.

2019 - present

Coordinator post-doc - type A fellowship

Università degli Studi di Milano, Milano (Italy)

Department of Biomedical Sciences for Health.

Research lines: "Impaired metabolism and muscular atrophy: therapeutic effects of combining nutraceuticals, metformin, and physical exercise in the murine model".

2016 - present

Co-investigator

FIDAL - Federazione Italiana di Atletica Leggera (Italian Federation of Athletics)

Progetto "Lotta al Doping" ("Fight against Doping").

2013 - present

Co-investigator

CONI – (Italian Olympic Committee) of Lombardy, Milano (Italy)

Joint project between Lombardy Region and CONI-Lombardia: "Lombardia in gioco – a Scuola di Sport".

2013 - present

Research Consultant

IRCCS - Policlinico San Donato, San Donato Milanese (Italy)

Exercise prescription in chronic diseases.

2017 - present

Animal research

IRCCS - Ospedale San Raffaele, Milano (Italy)

Senior research in the design and animal experiments related to the project; "Nutraceutical action of the lupin protein extract on insulin-resistance and muscular impairment" (IACUC n. 787).

- 2016 - 2017 **Coordinator post-doc - type B fellowship**
Università degli Studi di Milano, Milano (Italy)
Department of Biomedical Sciences for Health
Project title: "Murine studies on *in vivo* glucose metabolism: toxicity and inflammation".
- 2014 - 2014 **Principal Investigator**
Università degli Studi di Milano, Milano (Italy)
Department of Biomedical Sciences for Health
Intramural grant (Linea B): "Validation of the measurements on the glucose-insulin regulatory system in the murine models".
- 2011 - 2013 **Post-doc Research fellow**
University of Miami, Miami, FL (USA)
Leonard Miller School of Medicine, Diabetes Research Institute (DRI). (Professors Camillo Ricordi, Luca Inverardi).
Immuno-modulatory effect of exercise in type 1 diabetes (human and animal models).
- 2007 - 2008 **Post-doc Research fellow**
YALE University School of Medicine – Howard Hughes Medical Institute, New Haven, CT (USA)
Department of Internal Medicine, Endocrinology (Prof. Gerald Shulman, Prof. Richard Kibbey) e Magnetic Resonance Research Center.
Mitochondrial bioenergetics.

EDUCATION AND TRAINING

- 2005 - 2008 **Ph.D. in Exercise Sciences** Level 8 QEQ
Università degli Studi di Milano, Milano (Italy)
Thesis: "*In vivo* magnetic resonance spectroscopy studies of muscle mitochondrial function in transgenic mice".
- 10/2005 - 12/2008 **Visiting PhD Student**
YALE University School of Medicine, New Haven, CT (USA)
Howard Hughes Medical Institute - Department of Internal Medicine, Endocrinology - (Prof. Gerald Shulman).
In vivo animal models to study metabolism by means of magnetic resonance spectroscopy.
- 12/2004 - 09/2005 **Visiting PhD Student**
H. San Raphael Scientific Institute, Milano (Italy)
Nutrition and Metabolism Unit - (Prof. Livio Luzi).
Studies on exercise physiology in chronic diseases.
- 2000 - 07/2004 **Master's degree, *magna cum laude*, in Exercise and Sports Sciences,** Level 7 QEQ
Faculty of Exercise Sciences, Università degli Studi di Milano, Milano (Italy)

- 11/2003 - 07/2004 **Student internship**
 H. San Raphael Scientific Institute, Milano (Italy)
 Division of Infectious Diseases and Outpatient Clinic of Metabolic Diseases - (Prof. Adriano Lazzarin).
 Thesis title: "Cross-sectional and retrospective questionnaire-trial to evaluate exercise habits in a sample of HIV-infected individuals with type 2 diabetes mellitus".

- 11/2001 - 04/2002 **Student internship**
 CNR - Sports Medicine and Exercise Physiology Lab, Milano (Italy)
 Training in maximal and submaximal tests - (Prof. Pierangelo Mogroni).

- 1998 **The British Council Diploma**
 Harrow House International College, Swanage (United Kingdom)

- 1991 - 1996 **Scientific diploma** Lieve 4 QEQ
 Liceo Scientifico "E. Fermi", Cantù (Italy)

PERSONAL SKILLS

Mother tongue (s) Italian

Foreign language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken Interaction	Spoken Production	
English	C2	C2	C2	C2	C2
French	B1	B1	A2	A2	A2

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
 Common European Framework of Reference for Languages

- Organisational / managerial skills**
 - 2017/18 - present Tutor for the bachelor's degree in "Exercise, Sport and Health Sciences", School of Exercise and Sports Sciences, Università degli Studi di Milano.
 - 2011/12 - present Supervisor for the trainees (stages) of the bachelor's degree in "Exercise, Sport and Health Sciences", School of Exercise and Sports Sciences, Università degli Studi di Milano.
 - 2014/15 Member of the Joint Committee of the School of Exercise and Sports Sciences, Università degli Studi di Milano.
 - 2010 - 2014 Member of the Board Panel for the 1st level Master program in "Nutrition and Sports Fitness" - Università degli Studi di Milano.

- Boards**
 - 2010/11 - present School of Exercise and Sports Sciences, Department of Biomedical Sciences for Health, Università degli Studi di Milano.
 - 2018/19 - present Doctorate School in Translational Medicine, Università degli Studi di Milano.

- Job-related skills**
 - Good writing skills for scientific articles.
 - Author and co-author of several scientific publications.
 - <http://orcid.org/0000-0003-1608-1899>
 - https://www.researchgate.net/profile/Roberto_Codella2
 - Peer review activity for several international scientific journals.

Experimental studies

- Functional evaluation and monitoring of physiological parameters in human performance testing.
- Studies on insulin-sensitivity in normal and modified (transgenic) animal models by means of euglycemic-hyperinsulinemic clamps.
- Differential tissue extraction protocols for further analysis through magnetic resonance and mass spectroscopy.
- Functional application of indirect calorimetry in humans.
- Studies of magnetic resonance spectroscopy:

In vivo

- Transgenic models investigated via hydrogen (¹H-NMR), phosphorus (³¹P-NMR) and carbon (¹³C-NMR) studies in a 9.4 Tesla magnet.
- Imaging studies (MRI).
- Metabolic fluxes analyzed by monitoring ¹³C-enriched molecules in animal models.
- Programming of basic NMR sequences (water suppression, decoupling, shimming).
- Calibration of longitudinal relaxation constant (T₁) by “Inversion Recovery” method.

In vitro

- High field analysis of tissue extracts in 500-MHz magnet equipped for hydrogen (¹H-NMR), phosphorus (³¹P-NMR) and carbon (¹³C-NMR).
- Perfusion studies in mouse skeletal muscle.
- Cell culture studies.
- Assessment of absolute concentration of metabolites in animal tissue extracts.
- Calibration of 5 e10 mm Ø probes.

Training

- Basic Principles of Magnetic Resonance Spectroscopy. Advanced course directed by Prof. R. De Graaf e Prof. G. Mason on NMR theory, experimental design and metabolic models.
- Laboratory chemical safety.
- Radiation safety orientation.
- Medical surveillance program for animal handlers.
- Hazardous waste management.
- Basic principles in rodent handling, collection and injection techniques.
- Rodent inhalation anesthesia.
- Aseptic rodent survival surgery.

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient	Proficient	Independent	Independent	Independent

Levels: Basic user - Independent user - Proficient user

Digital competences - Self-assessment grid

- Good command of office suite (word processor, spread sheet, presentation software)

Driving licence B

ADDITIONAL INFORMATION

Publications <http://orcid.org/0000-0003-1608-1899>

National Scientific Qualification Obtained Italian scientific qualification to function as associate professor in:

- Code: 06/N2 - Physical Training and Sports Sciences (from 10/04/2017 to 10/04/23)
- Code: 06/D2 - Endocrinology, Nephrology, Food and Wellness Sciences. (from 21/10/2018 to 21/10/24)

Memberships

2005	European College of Sport Sciences
2008 - present	American Diabetes Association
2010 - present	European Association for the Study of Diabetes
2010 - present	Società Italiana di Diabetologia
2011	Cell Transplant Society
2016 - present	Società Italiana delle Scienze Motorie e Sportive

Conferences Speaker at several international and national scientific conferences.

Courses

2017/18 - present	"Nutrition applied to Sports and Health" (2 CFU, 6 hours). Master's degree program in "Individual and Team Sport Science". School of Exercise and Sports Sciences, Università degli Studi di Milano.
2016/17 - present	"Sport, wellness and special users" (1 CFU, 4 hours). Master in "Sport Management". Department of Public Health, Forensic and Experimental Medicine, Università degli Studi di Pavia.
2010 - 2015	"Theory, technique, teaching and organization of physical activity preventive for wellness", Master's degree program in "Exercise science for healthy life" (LM-67), (3 CFU, 18 hours). Faculty/ School of Exercise and Sports Sciences, Università degli Studi di Milano.
2010 - 2014	"Diet integrators, supplementation and doping", 1 st level Master program in "Nutrition and Sports Fitness", (1 CFU, 5 hours), Faculty/School of Exercise and Sports Sciences, Università degli Studi di Milano.
2011/12 - present	"Fitness and Sports Technologies", Bachelor's degree program in "Exercise, Sport and Health Sciences", (8 CFU, 70 hours). School of Exercise and Sports Sciences, Università degli Studi di Milano.

Grants

2009	Intramural fund "PUR" (University Programme for Research)
2010 - 2014	Marie Curie Action: FP7-PEOPLE-2009-IRSES (International Research Staff Exchange Scheme). Title: "Immunomodulatory effects of exercise in type 1 diabetes". Co-investigator.
2010 - 2014	Marie Curie Action: FP7-PEOPLE-2009-IRG (International Reintegration Grant). Title: "In vivo magnetic resonance spectroscopy studies of muscle mitochondrial function in mice". Principal Investigator.
2010 - 2012	Italian Ministry of Health. Antidoping Campaign. Title: "Winning in sports, winning doping". Co-investigator.

Honours and awards

2017	"Health Careers Award 2017" – Prize assigned by Italian Society of Diabetes.
2008	Young investigator award for distinguished research and technology transfer abroad (Prize assigned by Province of Milan).

Personal Data I authorize the use of my personal data in compliance with the Italian Legislative Decree n° 196/03 and in accordance to the GDPR 679/16 - "European regulation on the protection of personal data".