

SANDRO ORRU'
CURRICULUM
VITAE



PERSONAL INFORMATION

name **ORRU SANDRO**
address P.O. "BINAGHI", VIA IS GUADAZZONIS 3, 09126, CAGLIARI, ITALY
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nationality Italian

WORK EXPERIENCE

2019 Associate Professor of Medical Genetics (MED/03)
2019-2021 Director of the Specialization School in Medical Genetics at University of Cagliari
2019-2020 Acting Director, Medical Genetics Unit, Binaghi Hospital, ATS Sardegna, ASSL Cagliari
2005-2019 Researcher in Medical Genetics (MED03) at the Department of Medical Sciences and Public Health, University of Cagliari.
1986-2004 Group leader Section of Genetics - Department of Experimental Biology - University of Cagliari.

• Name and address of employer University of Cagliari

EDUCATION AND TRAINING

2017 National Scientific Qualification for Associate Professor of Medical Genetics (MED/03)
2002 Specialist in Medical Genetics at the Medical Genetics School - Faculty of Medicine - University of Cagliari.
1985 Bachelor's Degree in Biological Sciences, University of Cagliari

RESEARCH EXPERIENCE

His research primarily focuses on Immunogenetics, Cytogenetics, Clinical Genetics, and Molecular Genetics. Key research areas include:

- Human Population Genetics: Characterization of MHC and KIR loci in the Sardinian population
- Clinical and Medical Genetics: Genetic and cytogenetic characterization (CGH Arrays) of patients with complex syndromic patterns
- Clinical Immunogenetics: Genetic factors involved in hematopoietic stem cell transplantation; implementation of NGS technology for HLA typing in bone marrow donor registries
- Genetic Mapping: Identification of susceptibility genes for autoimmune and immuno-mediated diseases (Psoriasis, Psoriatic Arthritis)
- Neurogenetics: Genetic variability in amyotrophic lateral sclerosis in the Sardinian population; functional role of TDP-43 protein

INTERNATIONAL RESEARCH EXPERIENCE

1988-1989	Visiting scientist, Department of Human Genetics del Sylvius Laboratoria, Leiden (Holland), (supervisor: Prof. L. Bernini)
1989-1990	Visiting scientist, Centre d' Etude du Polymorphisme Humaine (CEPH) Paris (France),(supervisors: Prof. Daniel Cohen, Prof. Jean Dausset).
1992-1994	Laboratory advisor for the EUROGEM Project, a consortium of 21 European laboratory for the development of refined genetic map of human genome.
1995-1995	Visiting scientist, Department of Human Genetics, Hospital for Sick Children, Toronto (Canada) supervisor: Prof. Diane W. Cox.

TEACHING ACTIVITIES

2005-pres	Has continuously lectured in Medical Genetics at the Faculty of Medicine, University of Cagliari, across various degree programs, including:
2005-2014 2008-2009 2012-2015 2015-2019 2018-pres 2019-pres	<ul style="list-style-type: none">• Medicine and Surgery• Social and Health Assistance• Biomedical Laboratory Techniques• Obstetrics• Health Professions Sciences
2005-pres	Has also taught in Medical Specialization Schools, including Medical Genetics, Cardiology, Neurology, Psychiatry, Hygiene, Dermatology, Occupational Medicine, Legal Medicine, Pharmacology, and Food Sciences.

CLINICAL AND DIAGNOSTIC ACTIVITIES

- Diagnostic responsibilities as Laboratory Director, Molecular Genetics and Cytogenetics Laboratory, Binaghi Hospital, Cagliari
- Expertise in prenatal and postnatal cytogenetics (aCGH)
- Genetic diagnostics for hereditary cancer (breast/ovarian, colon) using Sanger sequencing, NGS, and MLPA
- Molecular diagnostics for Wilson's disease and hereditary hemochromatosis
- HLA typing via NGS

LANGUAGE SKILLS

English: B1 (Listening & Speaking), B2 (Writing)

PROJECT COORDINATION & RESEARCH GRANTS AND MANAGEMENT SKILLS

Scientific Coordinator of the CRP1_440 CUP project: F71J09000840002 "Search for susceptibility genes for psoriasis: fine mapping and characterization of candidate genes". RAS call for basic research - Annuality 2008, LR 7, 2007 Competitive call with peer review (Art 12 LR 7, 2007).

Scientific Coordinator of the project "Production and characterization of lines of motor neurons originating from pluripotent stem cells (iPSC) of patients suffering from amyotrophic lateral sclerosis". Prot. U1037.2014/AI.919.MGB Prat.2014.1685 Bando 2014 Fondazione Banco di Sardegna.

PARTICIPATION IN THE CREATION OF NEW BUSINESSES, DEVELOPMENT OF PATENTS

Research project bioeng s.r.l. convention(P.I.03122160926) with Sardegna Ricerca. Project title: Study of innovative applications for remote control of tools dedicated to molecular diagnostics (Acronym: CRLABMOLICT) 12 months of activity. P.O.R. Sardegna 2000/2006 Measure 3.13. Research and Technological Development in Companies and the Territory.

Project to develop new Bioinformatics methods for the research of the Genetic and Environmental Causes of Multifactorial Diseases in Ogliastra (Acronym: BIOINFORGENOGLIASTRA), Coordinator of the BCS BIOTECH S.r.l. Project (C.F. P.I.: 02827760923). Other Prtners in ATI, Nursing Home M.Tommasini S.r.l., Laboratory of Applied Informatics. Agreement with Consortium 21, ICISIAI Project 101 Framework Programme Agreement on Information. Total project amount€1,749,500 , consortium contribution 21 –RAS €1,224,650.

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Promotionof new enterprises (spin-offs), development, use and marketing of patents: Research project bioeng s.r.l. convention(P.I.03122160926) with Sardegna Ricerca. Project title: Study of innovative applications for remote control of tools dedicated to molecular diagnostics (Acronym: CRLABMOLICT) 12 months of activity. P.O.R. Sardegna 2000/2006 Measure 3.13. Research and Technological Development in Companies and the Territory.

Project to develop new Bioinformatics methods for the research of the Genetic and Environmental Causes of Multifactorial Diseases in Ogliastra (Acronym: BIOINFORGENOGLIASTRA), Coordinator of the BCS BIOTECH S.r.l. Project (C.F. P.I.: 02827760923). Other Prtners in ATI, Nursing Home M.Tommasini S.r.l., Laboratory of Applied Informatics. Agreement with Consortium 21, ICISIAI Project 101 Framework Programme Agreement on Information. Total project amount€1,749,500 , consortium contribution 21 –RAS €1,224,650. 31/07/2006 30/06/2009

Research and Technological Development project in companies and territory. Convention Bioanalysis Central South (C.F. P.I.:0 1866950924) with Consortium 21-RAS, POR Sardegna 2000/2006, Axis 3, measure 3.13. Start of project 17 October 2006. Project title: " Development of a system for the rapid identification of genotypes that give the sheep susceptibility and resistance to Scrapie". 16/04/2008

ICT SIAI 101 project for the creation of a pole of excellence of Bioinformatics Technology applied to Personalized Medicine. Title of the Project " Sussetcibility and genetic resistance to Type 1 Diabetes in Ogliastra . Association Studies on the Entire

Genome (GWA), using SNPe markers candidate genes (Acronym :GWADIABETEOGLIASTRA). BCS Biotech S.r.l. Convention (C.F. P.I.:0 2827760923) with Sardegna Ricerche and The Sardinian Autonomous Region. Framework Programme Agreement on the Information Society.

Research and Technological Development project in companies and territory. Convention Bioanalysis Central South (C.F. P.I.:0 1866950924) with Consortium 21-RAS, POR Sardegna 2000/2006, Axis 3, measure 3.13. Start of project 17 October 2006. Project title: " Development of a system for the rapid identification of genotypes that give the sheep susceptibility and resistance to Scrapie.

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PROFESSIONAL MEMBERSHIPS & EDITORIAL ACTIVITIES

1992-present
2009-present

2012-present
2015-present
2019-present
2020-present

Member of the Italian Society of Human Genetics (SIGU)

Member of the Regional Commission "Amyotrophic lateral sclerosis and other neurodegenerative diseases". Assessorato Sanità, Autonomous Region of Sardinia

MIUR reviewer member for immunogenetics and molecular genetics components

Editorial Board Member Journal of Stem Cells Research, Reviews & Reports

Experimental and therapeutic medicine.

International Journal of Molecular Sciences
Diagnostics

He has been collaborating continuously since 2005 as an auditor with the following scientific journals:

Anatomical record

Biochemical relationships

Experimental and therapeutic medicine

Human immunology

Immunological investigations

International journal of immunogenetics

Molecular and clincale oncology

Molecular medicine report

Neurochemical research

Cancer letters

Plos One

Toxicology and industrial health

BIBLIOMETRIC INDICATORS

He is the author of over 85 scientific papers indexed on Scopus

Scopus : h-index 22, 1793 citations

Google Scholar: h-index: i10-Index: 54 26 citations: 2385

I am aware that, in accordance with Article 26 of Law 15/68, false statements and the use of false documents are punishable under the Criminal Code and special laws.

Additionally, I authorize the processing of personal data as per Legislative Decree No. 196/2003.

Cagliari, 1/02/2024

A handwritten signature in blue ink, reading "Sandro Orrù". The signature is written in a cursive style with a large initial 'S' and 'O'.