

Enrica Capelli

Senior researcher (MED/46)

Department of Earth and Environmental Sciences, University of Pavia, via Ferrata 7,
27100, Pavia, Italy.

Member of the scientific board of the Centre for Health Technologies/CHT and of Cancer Centre at the University di Pavia.

Member of the teaching board of the Advanced School of Clinical Pathology and Pathological Anatomy, Medical School, University of Pavia. Member of the International Centre of Experimental Research for Human Microbiome (CERMH), Ludes Foundation, HEI.

Member of the working group on CFS/ME, National Agency for Health Regional Service (Age.na.s) of the Italian National Institute of Health.

Italian Coordinator (MC member) of the European project (EU, COST Action CA15111 “European Network on Myalgic Encephalomyelitis/Chronic Fatigue Syndrome, under Horizon 2020 EUROMENE (2016-2020).

Founding member of the Italian Mesenchymal Stem Cell Group (IMSG)

Member of Italian association of Developmental and Comparative Immunobiology (SIICS).

Since 2005 Professor at the School of Science (Recombinant and Microbial Techniques, Immunology, Immunological methods, Technologies and laboratory applications).

1990-2005. Research assistant at the Genetics Department (Immunogenetics Laboratory) of the Pavia University dedicated to cell cultures management, immune assays, differentiation of lymphoid cell subsets *in vitro*, HLA gene expression. Research topics: genetic studies in Northern Italy populations in collaboration with the bone marrow donors association (ADMO) of Emilia Romagna region and participation to collaborative international studies and workshops for the definition of new genes involved in HLA donor-recipient compatibility (Qa-Tla, HLA-G) and in the activation of immune anti-tumour responsiveness.

1982-1990. Research grant at the Italian Research National Council (CNR) Institute of Pavia, collaborating on the following research topics: 1. DNA damages induced by chemical and physical agents and repair mechanisms 2. Genome mapping by means of somatic human-mouse hybrids and cytogenetic analyses.

1980-1982 post-doc fellowship, funded by Lombardia region, at the CNR Institute (IGBE) of Pavia studying the effects of TCDD exposure on lymphocyte activation and DNA repair in Seveso's inhabitants.

1978-1980: attendance of the post-graduate school in Genetics.

1976-1978: internship for the experimental thesis in Biology at the cytogenetics laboratory of the "Istituto di Genetica, Biochimica ed Evoluzionistica" (IGBE-CNR, Pavia) working on the development of mutagenesis tests using human cultured cells.

RESEARCH ACTIVITY

Coordinator of a research unit at the Department of Earth and Environmental Sciences, Section of Animal Biology (University of Pavia), working on gene expression in *in vitro* and *ex vivo* models. The main research topics include the evaluation of epigenetic modifications induced by exogen factors (i.e. environmental agents, drugs, food components) and the analysis of biodiversity on samples from different biological matrices. These studies are carried out using molecular methods based on genetic approaches and applying the last generation approaches technologies (i.e. NGS sequencing, metagenomics approaches).

Co-author of about 80 scientific papers on peer-reviewed journals.

SCIENTIFIC COLLABORATIONS: IRCCS Policlinico San Matteo Hospital, Pavia; Università degli studi di Verona /scuola di Medicina e chirurgia; London School of Hygiene and Tropical Medicine;

Riga-Stradins University, Riga-Latvia; Universidad del País Vasco / Euskal Herriko Unibertsitatea, Departamento de Zoología y Biología Celular Animal; Universitat de Barcelona, Dept. Biologia Evolutiva, Ecologia I Ciències Ambientals. “Beato Matteo” Hospital Institute (Vigevano, Pavia-Italy).

Università Cattolica del Sacro Cuore of Piacenza (Laboratorio di Entomologia-DI. PRO.VE.S (Dipartimento di Scienze delle produzioni vegetali sostenibili) and DiSTAS (Dipartimento di Scienze e Tecnologie Alimentari per una filiera agro-alimentare Sostenibile)

ACTIVE RESEARCH PROJECTS:

- Application 016_FC_2015 funded by AIC (Associazione Italiana Celiachia): Study of the microbiota composition in adult celiac disease
- COST action CA15111, European Network on Myalgic Encephalomyelitis/Chronic Fatigue (MC member)
- Identification of miRNA biomarkers for lung tumors in subjects at risks, funded by LILT
- Characterization of microbiota composition of patients diagnosed for CFS/ME, funded by AMCFS Charity (Italy)
- Characterization of biodeteriogenic microorganisms in the biological patina of historic architectural surfaces using metagenomic approaches (under the supervision of Soprintendenza Archeologica, Belle Arti e Paesaggio, Lecce (Italy)
- Monitoring evolution of wildlife mammalian populations by means DNA based methods using faecal samples (in collaboration with Universidad del País Vasco)
- Participation to the project ATTIV-Aree (Cariplo Founds 2107-2018 Dept. Earth and Env Science_ UNIPV Prof. Meisina) with assignment of “profiling of microbial biodiversity in soils of vineyards conducted under different managing protocols”
- Project “Episistenze” funded by Regione Lombardia D.G. Agricoltura, alimentazione e sistemi verdi Bando 2018 d.d.s. n. 4403 del 28/03/2018) two-years activity 2019-2021 (Dept. Earth and Env Science_ UNIPV Prof. Brusoni).

PUBLICATIONS:

https://scholar.google.it/citations?hl=it&user=ERdruDgAAAAJ&sortby=pubdate&citft=1&citft=2&em ail_for_op=enrcap04%40unipv.it