

# CV Francesca Fanelli

## Education

**1989:** Master degree in Medicinal Chemistry with full marks from the University of Bari.

**1994:** PhD in Medicinal Chemistry in the area of Computational Medicinal and Biophysical Chemistry from the University of Bari. Almost two years were spent at the Department of Chemistry, University of Modena, Italy.

## Employment and Research Experience

**1994-2001:** postdoctoral fellow at the University of Modena and Reggio Emilia (UNIMORE) supported by the Pharmaceutical Company Recordati S.p.A. During the eight post-doctoral years she made frequent visits at the University of Lausanne (Switzerland) in the context of a scientific collaboration.

**2000-2005:** external consultant of Serono Pharmaceutical Research Institute (Geneva, Switzerland) on structure-based optimization of selected GPCR ligands.

**2002-2006:** Assistant Scientist of the Dulbecco Telethon Institute (DTI), hosted by the Department of Chemistry, UNIMORE. DTI is a program of personal awards conceived to avoid "Brain Drain" or allow "Brain Gain".

**2007-2011:** Associate Scientist of DTI hosted by the Department of Chemistry, UNIMORE.

**2007-November 2019:** Associate Professor of Biochemistry, Department of Life Sciences, UNIMORE.

**December 2019-present:** Professor of Biochemistry, Department of Life Sciences, UNIMORE.

**2002-present:** FF leads a research laboratory of Computational Structural Biology (<https://www.csbl.unimore.it/>).

## Awards

Dulbecco Telethon Institute Career award, Call 2001

## Editorial Boards and Scientific Committees

-Member of the Editorial Boards of *Receptors and Signal Transduction Research* (<https://www.tandfonline.com/loi/irst20>);

-January and April 2019, August 2022, April and August 2024: guest Editor of PLOS Computational Biology;

-2015-2017: member of the Technical Scientific AIRC Fellowship Committee;

-Vice-Chair of the Scientific Committee of the International Center for Translational Eye Research (ICTER), Warsaw (Poland).

## Faculty member in PhD Programs

**2007-2014:** PhD Program in Neuroscience, UNIMORE;

**2015-present:** PhD Program in Molecular and Regenerative Medicine, UNIMORE.

## Institutional roles

**January 2013-October 2018:** member of the Life Science Department Council (Giunta del Dipartimento);

**September 2014-present:** member and coordinator (since January 2019) of the departmental Research Committee;

**Since December 2019:** member of UNIMORE Research Observatory;

**Since January 2020:** member of UNIMORE Research Committee;

**Since March 2022:** member of the departmental Quality Committee.

## RESEARCH GRANTS

1. MUR PRIN2022 (20229HBYSP) - Molecular mechanisms that integrate protein quality control and transport in the early secretory pathway (FF PI).

2. MUR PNRR - Centro Nazionale #3, National Center for Gene Therapy and Drugs based on RNA Technology (FF participates in Spoke #1, as a Partner #5).
3. MUR PNRR – Partenariato Esteso #6, Diagnostica e Terapie Innovative Nella Medicina di Precisione (FF is one of the investigators in Spoke #6, WP #4).
1. FAR Mission-Oriented 2022 *“Integrated in silico, in vitro, and in vivo approaches to develop therapeutic small chaperones for Retinitis Pigmentosa linked to dominant rod opsin mutations”*.
2. PRIN2017 (2019-2023) *“Hyponatremia and syndrome of inappropriate antidiuresis in cancer: integrated in silico, in vitro, and in vivo approaches towards the discovery of therapeutic agents targeting vasopressin signaling”* (FF is coordinator of a pentacentric grant and PI of a Research Unit);
3. Fondo di Ateneo per la Ricerca 2018 (2018-2021) *“Computational tools to infer the structural determinants of conformational diseases and discover/design small chaperones with therapeutic potential”* (FF was coordinator of two Research Units);
4. Fondazione Roma Grant (2015-2019) Genomic and pharmacological therapeutic approaches to target dominant mutations in Rhodopsin (FF was PI of a Research Unit);
5. AIRC grant N. IG14811 (2014-2018) "Structure-based development of anti-cancer agents inhibiting the oncogenic activity of AKAP-Lbc" (Single-Investigator grant);
6. Telethon Italy Grant N. GGP13227 (2013-2018) "Gain-of-function mutations of the V2 vasopressin receptor in nephrogenic syndrome of inappropriate antidiuresis (NSIAD): molecular characterization and in silico identification of potential therapeutic agents" (bi-centric grant, FF was PI of a Research Unit);
7. Telethon Italy Grant N. GGP11210 (2011-2014), "Integrated in Silico, in Vitro, and in Vivo Studies Towards the Design of Molecules with Therapeutic Potential for Retinitis Pigmentosa" (Bicentric grant; FF was both Coordinator and PI of a Research Unit);
8. AIRC grant N. IG10740 (2010-2013), "Structural investigation of Rho GTPase activation in cancer: implication for drug design" (Single-Investigator grant);
9. Telethon-Italy grant N. S00068TELU (2007-2011), "G protein-coupled receptors: structure-functional analysis of disease-causing mutations" (Single-Investigator grant);
10. NIH grant N. DK33973 (2003-2007), *“hCG-LH/CG Receptor Binding and Activation”* (PI: J. D. Puett, UGA University, Athens GA, USA; FF was a collaborator);
11. Compagnia S. Paolo grants N. S00068CSPA-D (2003-2007), "Role of G protein-coupled receptors (GPCRs) in the ontogenesis of hereditary diseases" (FF got support for four years as a PI of DTI);
12. Telethon-Italy grant N. S00068TELA (2002-2006), "G protein-coupled receptors: structure-functional analysis of disease-causing mutations" (Single-Investigator grant).

The full list of publications and the relative citations can be found at <https://scholar.google.com/citations?user=tkFT9g4AAAAJ&hl=en>

Modena, September 2024

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