

## PERSONAL DATA

Last name: TAMMA  
First name: GRAZIA

Current Position: Associate Professor of Physiology (BIO09) at the Department of Bioscience, Biotechnology and Pharmacological Science and Qualified for Full Professorship (05/D1)

## EDUCATION

-October 1999: Degree in Biological Sciences, 110/110 , University of Bari (ITALY)  
-8 April 2003 PhD in " Cellular and Molecular Technologies in Physiology"  
-2000 qualified for biologist career

**Specialization Course:** Biology of Nutrition

## SCIENTIFIC TRAINING AND PROFESSIONAL ACTIVITY

June-August 1998:

Stage at the Forschungsinstitut fuer Molekulare Pharmakologie, directed by Prof. Walter Rosenthal (in Berlin-Germany)

January 2001-December 2001

Stage at the Forschungsinstitut fuer Molekulare Pharmakologie, directed by Prof. Walter Rosenthal (in Berlin-Germany)

December 2002

Stage at the Forschungsinstitut fuer Molekulare Pharmakologie, directed by Prof. Walter Rosenthal (in Berlin-Germany)

May 2004-May 2006

Postdoc in "Biochemistry and Physiology of Nutrition".

July 2006-July2008

Postdoc at Department of General and Environmental Physiology

## FELLOWSHIP AND VISITING

March 2006-August 2006

**Visiting Scientist** at the Department of Physiology and Medical Physics, Medical University of Innsbruck, (Austria) in the laboratory directed by Prof. Markus Paulmichl

October 2006-June 2008

**Visiting Scientist** at the Department of Cell Physiology at the Nijmegen Center of Molecular Life Science (NCMLS) of the Radboud Medical University of Nijmegen (the Netherlands) in the laboratory directed by Prof. Peter Deen within the program entitled MARIE CURIE RESEARCH TRAINING NETWORKS Call: FP6-2005-Mobility-1

March 2008-June 2008

**ERA-EDTA** (European Renal Association-European Dialysis and Transplant Association) **Fellowship** at the Department of Cell Physiology at the Nijmegen Center of Molecular Life Science (NCMLS) of the Radboud Medical University of Nijmegen (the Netherlands) in the laboratory directed by Prof. Peter Deen

July 2009-September 2009

**Visiting Scientist** at the Forschungsinstitut fuer Molekulare Pharmakologie, directed by Prof. Walter Rosenthal (in Berlin-Germany)

## ORGANIZING ACTIVITY

22 September 2006

Member of the scientific committee organizing: Notte dei Ricercatori at Labo-Biotec, Puglia, faculty of Biotechnology, University of Bari

11-14 September 2007

Member of the scientific committee organizing the “European Young Physiologists Symposium” promoted by the European Federation of Physiology (FEPS), Bratislava, Czech Republic

23 September 2011

Member of the scientific committee organizing: Notte dei Ricercatori at Labo-Biotec, Puglia, faculty of Biotechnology, University of Bari

2018

Member of the scientific Committee organizing the Summer School in Physiology and Biophysics of water and Ion Channel

## **AWARDS**

-Italian Society of Physiology Award (SIF 2007). Annual award for the research activity given to a young researcher

### *Travel Grants*

-Congress of Nephrology (WCN), Berlino, Germania, 2003

-4th International conference on Aquaporins, Brussels, Belgio, 2005

-45th Annual Meeting of The American Society for Cell Biology, San Francisco, USA, 2005

-5th International conference on Aquaporins, Nara (Japan), 2007

-World Congress of Nephrology 2009, Milan (Italy)

## **GRANT RESPONSIBILITY**

2019-2022

Principal investigator of a scientific unit on a project funded by the Italian Ministry (PRIN) and entitled: 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

2018-2020

-Principal investigator of a scientific unit on a project funded by Regione Puglia (Call Innonet) entitled: DOMINA APULIAE. Donne, vino ed età: i vini autoctoni pugliesi ad elevato contenuto antiossidante per un invecchiamento più sano

2017-2020

-Principal investigator of a scientific unit on a project funded by the European Union entitled: LEgume GENetic RESources as a tool for the development of innovative and sustainable food TEchnological system

2012-2013

-Principal investigator

Call 2011: “Programma idea Giovani” entitled: Transduction signals in vasopressin regulated water reabsorption: Involvement of cyclin dependent kinases

2013-2014

-Principal investigator of a scientific unit on a national project funded by University of Bari: Grazia Tamma (Coordinator Prof. Loreto Gesualdo PRIN 2009)

Title project: Renal aquaporins in hypertension associated with IgA nephropathy: from cells to humans

2014-2016

-Co-PI: Grazia Tamma of a scientific unit (Coordinator Prof. Ferdinando Sasso)

Title project: Funzione Endoteliale e risposte Iternali, vascolari e neuroendocrine durante la Sincope Ortostatica e il recovery: studio di comparazione tra sessi (ERoS)

Funded by: Italian Space Agency(ASI)

2008

-Principal investigator

ERA-EDTA (European Renal Association-European Dialysis and Transplant Association) Grant Fellowship: Regulation of the plasma membrane expression of AQP2 by phosphorylation and ubiquitylation

#### 2000-2001

Principal investigator

National Project "Giovani Ricercatori" entitled: "La fosforilazione quale segnale di trasduzione che regola il traffico di proteine canale per l'acqua attraverso il controllo dello stato di polimerizzazione del citoscheletro di actina".

#### **NATIONAL AND INTERNATIONAL GRANT PARTICIPATION (Here only the participation in the last ten years)**

2018-2020 Participant in a project entitled: Role of mitochondria in nephropathic cystinosis: the control of cyclic AMP funded by the Cystinosis Research Foundation

2017-2019 Participant in a project entitled: Effects of phytochemicals in animal model of colon cancer funded by the National Institute of Gastroenterology De Bellis

2016-2019 Participant in a project entitled: Sustainability of the Olive-oil System – S.O.S. and funded by AGER

#### 2013-2016

Participant in a Telethon Project (Coordinator Prof. Susanna Cotecchia)

Title project: 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.

#### 2010-

Participant in a project funded by University of Bari entitled: Aquaporins in physiopathology. PI: Prof. Maria Svelto

#### 2006-2009

Participant in a regional project (Strategico), entitled: "Caratterizzazione molecolare e funzionale delle AQP's renali in cellule staminali renali adulte". PI: Prof.ssa Giovanna Valenti

#### 2009-

Participant in a project funded by University of Bari entitled: Le acquaporine tra fisiologia e patologia. PI: Prof. Maria Svelto

#### 2008-2009

Participant in a national project PRIN entitled: Aquaporin and Chloride Transporters Interactome PI: Prof.ssa Maria Svelto

#### 2008-

Participant in a project funded by University of Bari entitled: Le Acquaporine: dalla fisiologia alla patologia. PI: Prof. Maria Svelto

#### 2005-2008

Participant in an austrian national project entitled: "HSPC038 -structure and function". PI: Prof. Markus Paulmichl

#### **PATENT**

(Patent Number: 102017000079551) entitled:

ASSOCIAZIONE DI ANTAGONISTI DEL RECETTORE DELLA VASOPRESSINA E CALCIOMIMETICI, COMPOSIZIONE E LORO USO PER IL TRATTAMENTO DEL RENE POLICISTICO.

Inventori: Giovanna Valenti, Grazia Tamma, Annarita Di Mise, Marianna Ranieri.

#### **REFEREEING FOR NATIONAL AND INTERNATIONAL GRANT PROPOSALS**

-Member of the commission for "Agence Nationale della Recherche" (ANR)

-MIUR national committees from 17/02/2012

#### **REVIEWER ACTIVITY**

Associate editor for Frontiers in Renal and epithelial Physiology

Review editor for Archives of Clinical Nephrology

Associated editor of Faculty of 1000

**Referee for numerous scientific journals with impact**

- ✓ Member of the scientific committee for the publication of the **Encyclopedia of Molecular Pharmacology (2nd edition)**" <http://www.springer.com/gp/book/9783540389163>
- ✓ Member of the scientific committee for the publication of the **Aquaporins in Health and Disease: New Molecular Targets for Drug Discovery** CRC Press <https://www.crcpress.com/Aquaporins-in-Health-and-Disease-New-Molecular-Targets-for-Drug-Discovery/Soveral-Nielsen-Casini/p/book/9781498707831> (ISBN: 9781498707831)

#### MEMBERSHIP

Member of the Italian Society of Nephrology (SIN ID 2983)  
 Member of the Italian Society of Physiology  
 Member of the American Society of Nephrology (ASN ID 144283)  
 Associated Member of Faculty of 1000 Biology  
 Member of the Italian Association of Cellular Biology and Differentiation (abcd Society)

#### PARTICIPATION TO PhD SCHOOL PROGRAM

##### 2009-up to now

Member of the PhD School in Genomics and Proteomics (Cellular and Molecular Physiology and Biotechnology) University of Bari.

##### 2013-2017

Member of the commission of the international program of PhD in "Life Sciences, with a specialization in Cardiovascular Research and Metabolism" a Losanna (Svizzera).

#### INVITED COMMUNICATIONS

**TAMMA G, STRAFINO A, ADDABBO F, SVELTO M, VALENTI G**

Functional Involvement of Annexin 2 in cAMP-Induced AQP2 Exocytosis in Renal Cells.

**Minisymposium: "Trafficking and Vesicular Transport" The American Society for Cell Biology** (San Francisco 10-14/12/2005)

##### **TAMMA**

**56° Congresso Nazionale della Società Italiana di Nefrologia** (Rimini, 1-4/10/2015). Communication entitled: Alterazioni dell'aquaporina 2 e rene policistico

##### **TAMMA**

**"2016 Congress of the Spanish Endocrine Society"** (Malaga, 19/10/2016). Communication entitled: Aquaporins, vasopressin and water balance

##### **"TAMMA"**

**The Fourth International Cardioneurology and Hypertension** (Ribarska Banja- Serbia 19/05/2019) Aquaporins and Vasopressin V2 receptor-related disorders: Nephrogenic Diabetes Insipidus and Syndrome of inappropriate secretion of ADH

##### **"TAMMA"**

**Functional and Healthy Foods for Longevity: Bioactive Compounds and Biomarkers in Age-Related Diseases 28th International Conference of FFC - 16th International Symposium of ASFFBC; Virtual/live Online event** (29/08/2020) Olive Leaf Extract (OLE) prevented the trafficking of the vasopressin regulated aquaporin-2 through the activation of the calcium-sensing receptor

#### TEACHING ACTIVITY

Grazia Tamma is member of the teaching and the educational program of Science and Biotechnology Faculties and the Department of Biosciences, Biotechnologies and Biopharmaceutics. She also is teaching physiology in numerous master and postgraduate courses.