

Curriculum Vitae 2021

NAME: DOMENICO TRICARICO, Ph.D.

CURRENTLY:

Associate Prof. of Pharmacology and Toxicology, Univ. of Bari, Italy.
Habilitation to Full Professor in:
Pharmacology, Clinical Pharmacology and Pharmacognosy (BIO14)

BUSINESS ADDRESS:

Sec. of Pharmacology, Dept. of Pharmacy-Pharmaceutical Science (Dip. Farmacia-Scienze del Farmaco), Univ. of Bari, Via Orabona, 4 – Campus 70125 BARI – ITALY
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ROLE AND RESPONSABILITY:

Chair director of Clinical Pharmacy UNIBA.

P.I. Labs: Canc. Mutag. Teratog. (C.M.T. 318); “In vitro” evaluation of biological activity of drugs (Lab. 319), Dept. of Pharmacy-Pharmaceutical Science, UNIBA.

Monitor of Animal Investigation Dept. of Pharmacy-Pharmaceutical Science
Component O.P.B.A (Org. Per Benessere Animale), UNIBA.

Pharmacologist of Ethical Committee for Human Clinical Investigation Univ. Hosp. Polyclinic, Bari, S.S.N.
Component Dept. Unit, UNIBA.

Pharmacologist Med. Council of Periodic Paralysis Int. foundation <http://hkpp.org/about-us/medical-council>.

MEMBERSHIP: Società Italiana di Farmacologia (SIF), Biophysical Society (BS), American Society of Pharmacology and Experimental Therapeutic (ASPET), Association for the Study of Diabetes (EASD) (Germany)

EDUCATION:

1991-1993 PhD in Biochemistry and Cellular Pharmacology, Dept o Pharmaco-biology,
Faculty of Pharmacy, Univ. of Bari, Italy

1987 Degree in Med. Chemistry-Pharmacy (110/110 cum Laude), Univ. of Bari, Italy

COMPETENCY:

-Molecular target characterization: pharmacology of ion channels involved in neuromuscular, metabolic acquired and genetic diseases, and in proliferative disturbances.

-Toxicological and pharmacological investigation in animal models of muscle disuse, aging and metabolic stress.

-Risk/benefit/cost analysis of experimental drugs and post-marketing surveillance: Toxicological, Pharmacovigilance and Pharmacoeconomic investigations

Physiology/ Pharmacology/ Toxicology: Advanced ion channel biophysics, molecular biology and pharmacology. Skeletal muscle pathophysiology, pharmacology and toxicology. Disorders affecting neuromuscular apparatus. Ion channel related diseases. Insulin/glucose dis-metabolisms.

Drug Development: Principles of drug development, evaluation of experimental protocols in various therapeutic area (diabetes, oncology, viral infections, neurodegenerative disorders and neuropsychiatry) regulatory pharmacology and toxicology, principle and methodology of drug evaluation under investigation, medical writing and biostatistics,

pharmacovigilance.

GRADUATE, POSTGRADUATE LEVEL TRAINING, EXPERIENCES AND INTERESTS:

Basic Sciences: Inorganic and organic chemistry, biochemistry, protein chemistry, medicinal and natural product chemistry, analytical biochemistry, principles of pharmacology and toxicology, pharmacokinetics, drug metabolism, intermediary metabolism and anti-metabolites, physiology, principle of immunology and molecular biology, pharmacognosy, electrophysiology.

1985-87 Chemistry, biochemistry, pharmaceutical and pharmacological laboratories of the Faculty of Pharmacy, University of Bari, Italy

1987-88 Fellow at laboratories of General Physiology, Univ. of ULM, Germany, directed by prof. R. Rüdell sponsored by DGBM (Deutsche Gesellschaft Bekämpfung der Muskelkrankheiten e.v.).

Physiology/ Pharmacology/ Toxicology:

1988-91 Fellow at laboratories of Prof. D. Conte Camerino, Dept of Pharmacobiology, Faculty of Pharmacy, Univ. of Bari, Italy

1991-92 Fellow at laboratories of Prof. S.H. Bryant Dept. of Pharmacology and Cell Biophysics, College of Medicine, University of Cincinnati (OH), U.S.A.

1991-93 PhD course in Biochemistry and Cellular Pharmacology, Dept of Pharmacobiology, Faculty of Pharmacy, Univ. of Bari, Italy.

1999 Visiting professor at laboratories of General Physiology, Univ. of ULM, Germany (prof. F. Lehmann-Horn)

2006 Visiting professor at Laboratory of Biophysics and Molecular Physiology and Molecular Biology, Centro de Estudios Científicos and Universidad Austral de Chile, Valdivia, Chile. (Prof. Ramon Latorre)

2017 Visiting professor at Laboratory of Biophysics and Molecular Physiology, CECS, Valparaiso, Chile. (Prof. Ramon Latorre)

Clinical Pharmacology and Drug Development:

2007-11 Consultant pharmacologist for the Ethical Committee for the Clinical Investigations of the AUSL Lecce, Italy.

2007-11 Clinical monitor in neurodegenerative disorders and psychiatry for Azienda Ospedaliera Policlinico, Bari.

2005-21 Pharmacologist of the Ethical Committee for the Clinical Investigations of the Azienda Ospedaliera Policlinico, Bari.

2013-17 Consultant pharmacologist for A.R.E.S Puglia on novel antiviral drugs

2011-21 Component Pharmacologist of the Medical Council of Periodic Paralysis International no profit foundation <http://hkpp.org/about-us/medical-council>.

EMPLOYMENTS AND TEACHING ACTIVITY:

1994-05 Technical position assistant professor, Department of Pharmacobiology, UNIBA

1995-05 Researcher in Pharmacology, Faculty of Pharmacy, UNIBA

1999-2014 Prof. of Biology and Pharmacognosy, Course of Medicinal Chemistry, Faculty of Pharmacy, UNIBA

2003-05 Prof. of Pharmacology, Course of Biotechnology, Univ. of Lecce

2005-18 Associate prof. of Pharmacology, Faculty of Pharmacy, UNIBA

2005-18 Prof. of Pharmacology and Toxicology, Course of Pharmacy, Fac. of Pharmacy, UNIBA

2010-18 Prof. of Clinical Investigation, Pharmacovigilance, Pharmaco-utilization, Pharmacoeconomic and European Pharmaceutical System, Faculty of Pharmacy, UNIBA

1995-14 Tutorial activity for students of the Courses of Medicinal Chemistry, Pharmacy and Biotechnology.

1995-2014	Tutorial activity for PhD students of Cellular Biochemistry and Cellular Pharmacology
2009-21	Tutor responsible for PhD students of Pharmacological and Biochemical Science, Functional and Applied Genomics and Proteomics
2010-14	Teaching Course in Clinical Pharmacy directed to professional Hospital pharmacists
2018-21	National Habilitation to Full Professor Position in Pharmacology, Clin. Pharmacol. and Pharmacognosy (BIO14)
2018-21	Prof. of General Pharmacology and Pharmaco-therapy, Univ. Cattolica Nostra Signora del Buon Consiglio, Tirana

Prof. D. Tricarico is also invited speaker in several seminars and professional E.C.M. courses organized from professional organizations of Pharmacists, Medical Doctors and Scientific Society.

SCIENTIFIC COLLABORATIONS WITH INSTITUTIONS:

Univ. Hosp. Polyclinic, Bari, S.S.N.; Dipartimento Farmacochimico, Università di Bari (prof. Vincenzo Tortorella). Clinica Neurologica, Università Cattolica S. Cuore, Roma (prof. P. Tonali, S. Servidei). Divisione di Neurologia, Università di Milano - Istituto Policlinico San Donato (Prof. Giovanni Meola). Sezione di Fisiologia Umana, Dip. Medicina Sperimentale, Università di Pavia (Prof. R. Bottinelli). Abteilung Allgemeine Physiologie, Universitat Ulm, Germany (prof. Reinhardt Rüdel). Department of Pharmacology, Division of Genetic Medicine, School of Medicine, Vanderbilt University Medical Center, Nashville, TN, USA (prof. Alfred L. George Jr). Laboratory of Physiology, Oxford University, UK (Dr. France M. Ashcroft). Department of Physiology and Cell Biophysics, Univ. of Cincinnati, OHIO, USA (Prof. Judy Heiny). Laboratory of Biophysics and Molecular Physiology, Centro de Estudios Científicos and Universidad Austral de Chile, Valdivia, Chile. (Prof. Ramon Latorre). Prof. Colin Nichols Washington Univ. St Louis, USA Dr . Said Bendahhou, Université Côte d'Azur, Nice.

RESEARCH ACTIVITY:

Investigation on the effects and mechanisms of action of novel drugs targeting skeletal muscle voltage dependent sodium channels and chloride channels involved in the abnormal hyper-excitability of the skeletal muscle fibers in myotonia.

Investigation on the modulation of skeletal muscle chloride channels by second messengers.

Evaluation of the potential toxicological effects of statins in skeletal muscle: alteration of the membrane excitability and ionic conductance. Evaluation of the neuromuscular effects of the exposure of new born rats to carbon monoxide.

Investigation on the effects of taurine and taurine derivatives on fibers excitability and ionic conductance.

Pathophysiology of the ischemia-reperfusion process in skeletal muscle and pharmacological interventions.

Investigation on the pathophysiology of muscle disuse and atrophy, aging in disease conditions: role of the calcium-activated potassium channel and ATP-sensitive potassium channels in the fibers phenotype transition and muscle atrophy in diabetes type II.

Biophysical and pharmacology properties of the calcium activated potassium channel and ATP-sensitive potassium channels in aged rat skeletal muscle. Investigation of the pathophysiology of the hypokalemic periodic paralysis: involvement of the inwardly rectifying potassium channels in disease pathogenesis. Drug investigation on novel modulators of ATP-sensitive potassium channels potentially effective in the periodic paralysis. Evaluation of the mechanism of action of acetazolamide and related drugs in the hypokalemic periodic paralysis and related diseases. Study on the biophysical- pharmacological properties and molecular composition of the ATP-sensitive potassium channels and calcium-activated potassium in different skeletal muscle phenotypes. Investigation on novel small molecules hypoglycemic drugs targeting the pancreatic ATP-sensitive potassium channels potentially effective in the treatment of the congenital neonatal diabetes.

Investigation on Cantu' syndrome. Investigation of Kir channels function and pharmacology in bone.

Investigation on the effects of ion channel targeting drugs on cell proliferation.

“In vitro” and “in vivo” toxicology investigations.

Preclinical and clinical development of innovative drugs.

Risk/benefit analysis and cost/benefit analysis of drugs.

PROGRAMS:

Co-Investigator of “Pathogenesis and Drug Treatment of Ischemia-reperfusion in skeletal muscle 1992-94” supported by Italian Miur (Principal Investigator: prof. D. Conte);

Co-Investigator of “Aging process in skeletal muscle 1992-2011” supported by Italian Miur (Principal Investigator: prof. D. Conte); -Co-Investigator and scientific coordinator of “Pathogenesis and Drug Treatment of Periodic Paralysis 1999-2012” supported by Italian Telethon (Principal Investigator: prof. D. Conte);

Co-Investigator for the development of dichlorphenamide as orphan drug in the treatment of the Primary Periodic Paralysis, 09-02-2010. Sponsored by NIH program P.I. prof. R. Griggs University of Rochester Medical Center School of Medicine and Dentistry Rochester, NY 14642, and Taro Pharmaceuticals, Skyline Drive-Hawthorne, NY 10532 USA

Principal Investigator of “Drug-Drug interaction in Oncology 2008-2011” supported by EISAI S.r.l. Mi;

Co-Investigator of “Pathogenesis of Muscle Disuse and Atrophy in Skeletal Muscle 2005-2011” supported by ASI (Principal Investigator: prof. D. Conte);

Principal Investigator of “Alert 2012” supported by EISAI S.r.l. Mi;

Principal Investigator of “Market Access Strategy” program on novel biological drugs by MSD Italia S.r.l. (2011-16);

Principal Investigator, section of Pharmacology, for the Development of novel F-DOPA formulations for the diagnosis and treatment of cancer and neurodegenerative disorders “Progetti di Ricerca Industriale nell’ambito del Programma Operativo Nazionale R&C 2007-2015 – Project “Research, Application, Innovation, Services in Bioimaging (R.A.I.S.E.)” code PON01_03054 promoter ItelPharma Ruvo di Puglia BA;

Principal Investigator, section of Pharmacology, for the development of novel Biphosphonates drugs “Cluster Tecnologico 2017 promoter ItelPharma Ruvo di Puglia BA;

Principal Investigator, section of Pharmacology, for the development of novel minoxidil formulations supported by Farmalabor S.r.l., Canosa (BA) (2015-18);

Principal Investigator, section of Pharmacology for the development of novel protective anti-mycotoxin compounds produced by CNR-ISPA: PD/PK investigations (2017-20).

Principal Investigator: Studio Osservazionale/Esplorativo Prospettico Multicentrico Indirizzato alla Valutazione dell’Efficacia e Sicurezza della Terapia Farmacologica in Pazienti Dipendenti da Oppioidi in Mantenimento: Fattori che Influenzano la Risposta alla Terapia nell’ Area Sud Est Meridionale (TOSSDIP-DDI) Molteni S.p.a. (2018-21)

EDITORIAL ACTIVITY:

Associate editor of Frontiers in Pharmacology, Current Diabetes Review; Topic Editor for : Pharmaceutics, Frontiers in Pharmacology, Cells.

Reviewer of Mol Pharmacol, PlosOne, J Apply Physiol, J Pharmacy and Pharmacology, J Pharmacology and Exp. Therapeutics, Frontiers in Pharmacology, Cells, Int J Mol Science, Pahraceutics. Author and co-author of 94 peer review publications on international journals including articles, review, short communications (h index 25, 1798 citations), and 35 abstracts published on peer review journals listed; 50 abstracts presented at national and international meetings not published. Co-inventor of 2 Patents.

BIBLIOMETRIC DATA

<http://apps.webofknowledge.com/>.

www.scopus.com