

BIOGRAPHICAL SKETCH

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NAME: Natascia Ventura

eRA COMMONS USER NAME (credential, e.g., agency login):

POSITION TITLE: Group Leader (Assistant Professor), MD, PhD, Habilit,

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Start Date MM/YYYY	Completion Date MM/YYYY	FIELD OF STUDY
University of Tor Vergata, Rome, Italy	Medical Doctor Degree (110/110 cum Laude)	09/1993	09/1999	Mitochondrial Medicine
Tor Vergata Hospital, Rome, Italy	Medical Doctor Habilitation			Internal Medicine
University of Tor Vergata, Rome, Italy	PhD degree	01/2000	02/2004	Mitochondria-modulated cell death
University of Colorado at Boulder, CO, USA	Post-doc fellow	04/2004	07/2007	Mitochondria-regulated aging
Heinrich Heine University of Düsseldorf	Habilitation			Molecular Medicine

A. Personal Statement

I have a long-standing experience in studying the role of mitochondria and mitochondrial stress responses in different pathophysiological processes, ranging from inborn mitochondrial pathologies to aging and age-associated (neuro)pathologies. My lab primarily (but not only) uses the nematode *C. elegans* as an *in vivo* multicellular model organism for genetic and interventions studies. We pioneered the concept of "mitochondrial hormesis", which we have systematically characterized at biochemical, cellular and behavioral level, and which we are exploiting to identify health modifiers. This knowledge are/will be applied in my research to investigate age- and genetic-associated neuromuscular pathologies in *C. elegans* and for translational studies in mammalian systems.

B. Positions, Scientific Appointments and HonorsPositions and Appointments

2003 Professional Research Assistant (6 months), University of Colorado at Boulder, CO, USA
 2004 – 07 Post-doc fellow, University of Colorado at Boulder, CO, USA
 2007 – 11 Research Associate, Medical Faculty, University of Rome Tor Vergata, Italy
 Since 2012 Group Leader, HHU of Düsseldorf and the Leibniz Research Institute for Environmental Medicine
 2012 – 15 Visiting Scientist, Medical Faculty, University of Rome Tor Vergata, Italy
 Since 2018 Italian Habilitation for Full Professor in: Applied Biology; General and Clinical Pathology; Biochemistry; Physiology; Italian Habilitation for Assistant Professor in: Molecular Biology; Comparative Anatomy and Cytology
 2021 German Habilitation: Molecular Medicine, Medical Faculty, Heinrich Heine University of Düsseldorf

Supervised Theses and Steering committees since 2010

- BSc: 5 completed, 1 ongoing
- MSc: 17 completed, 1 ongoing
- BSs+MSc: 4 completed + 1 ongoing
- PhD: 5 completed, 2 ongoing
- Steering committees: 12 PhD thesis and 1 junior professor

Fellowships and Awards

- 2000 – 04 PhD fellowship (4 years), University of Tor Vergata, Rome, Italy
2000 Award for Young Investigator, University of Rome Tor Vergata, Italy
2001– 09 10 Travel Scholarships to conferences, workshops and training courses
2004 Short Term Fellowship, European Molecular Biology Organization (EMBO)
2004 – 07 Post-Doctoral Fellowship (3 years), Italian Foundation for Cancer Research (FIRC)
2006 Research Fellowship Award (1 year), National Ataxia Foundation (NAF)
2006 – 07 2 Faculty Research Team Award (1 year each), University of Colorado at Boulder, US
2007 – 11 4 Post-doctoral Research Fellowships (1 year each), University of Tor Vergata, Rome, Italy
2015 – 21 4 Group Leader Awards, Medical Faculty, Heinrich Heine University of Düsseldorf, Germany

Grants as Principal Investigator (2012 – 22)

Completed

- Italian Association for Cancer Research (AIRC, MFAG11509), PI, € 150.000 for 3years
- Strategic Research Funding, Heinrich-Heine-University of Düsseldorf, PI, € 59.495 for 1year
- Research Commission of the Medical Faculty, Heinrich-Heine-University of Düsseldorf, PI, € 94.800 for 2 years
- German Research Foundation (DFG, VE663/3-1), PI, € 415.850 for 3 years
- Federal Ministry of Education and Research (JPI-HDHL, Grant no. 01EA1602), Project Coordinator and PI, Total amount for the consortia: € 782.600. Amount for my team € 277.752 for 3 years
- Research Commission of the Medical Faculty, Heinrich-Heine-University of Düsseldorf, PI, € 80.077 for 1 year
- German Research Foundation (DFG, VE663/6-1), PI, € 316.000 for 3 years
- German Research Foundation (DFG, VE663/8-1), PI, € 356.550 for 3 years
- Leibniz Collaborative Excellence (SAW-2020; Proj n. K246/2019), PI, Total amount for the consortia: € 969.138. Amount for my team € 239.945 for 3 years

Ongoing

- University of Urbino Carlo Bo (MARTHA), External Financed Collaborator, € 60.000 for 2 years
- German Research Foundation (DFG, VE663/3-4), PI, € 514.750 for 3 years
- Research Commission of the Medical Faculty, Heinrich-Heine-University of Düsseldorf, Co-PI, € 120.000 for 2 years

C. Contributions to Science

Presentations

- 15 Posters and 12 oral presentations
- 39 Invited presentations at conference and seminar series
- 9 Job talk

Selection of Peer-review Scientific Journals (more than 20): Aging, Aging Cell, Antioxidants & Redox Signaling, Autophagy, Communication Biology, Current Biology, FASEB Journal, Journal of Pharmacy and Pharmacology, Journal of the American Aging Association, Mechanism of Aging and Development, Pharmaceuticals, Plos Genetics, etc.

Reviewer for Funding Agencies: ERC, ANR, DFG, FWO, FWF, SNF, BBSRC, PNCRC, MIUR, FoKo-HHU

Editorial Board Member: Frontiers in Aging Neuroscience, Peer J, Mechanisms of Ageing and Development, Cells, Antioxidants, Frontiers Molecular Neuroscience, Gerontology

Memberships: German Genetic Society (GfG), German Association for Aging Research (DGfA), European Mitochondrial Society (E-mit)

Publications: total 60, h-index: 28, citations ca. 2,000

- 42 Original research articles: 5 first/co-first author (2 as corresponding); 18 last/co-last and corresponding author; 19 middle author
- 18 Miscellaneous: 11 Reviews, 3 Commentaries, 3 Editorial, 1 Book chapter