

# EUROPEAN CURRICULUM VITAE FORM T

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## PERSONAL INFORMATION

Name

**NONNO ROMOLO**

Address

Telephone

Fax

E-mail

Nationality

Date of birth

## WORK EXPERIENCE

### CURRENT POSITION

- Dates (from- to)
- Name and address of employer
- Type of business or sector
- Occupation or position held
- Main activities and responsibilities

From 2001 to date

Istituto Superiore di Sanità, Viale Regina Elena 299, 00161, Rome

Public Health

Senior Scientist

Surveillance

2002 onward. Developed molecular methods for the discrimination of prion strains and for comparing human and animal strains.

2004-2018 Lead the Unit of TSE strain characterization of the Italian Reference Laboratory for genetics and strain typing of animal TSEs, responsible for the primary molecular testing of TSE surveillance

2016 onward. Member of the EFSA BSE Network

2017 onward. Member of the EURL-STEG

2019 onward: Member of the EURL-TSE

Assessment and Advice:

2002 onward. Scientific assessment and advice for Ministry of Health, Italian National Health Council and the National Health Services on issues related to public health aspects of animal prion diseases

2012 onward. Member of the working group on TSEs of the JSS (GESTISS)

2015. Member of the WG-EFSA Biohazard on Zoonotic Potential of Scrapie

2018-2019. Member of the WG-EFSA Biohazard on update on Chronic wasting disease (CWD) in cervids

Research:

2000 onward. Research activities supported by national (Italian Ministry of Health) and international (EU, Food Standard Agency) research projects, leading to internationally recognized outputs in the TSE field: speaker in national and international meetings, 53 articles in peer-reviewed international journals, H index 28.

Prominent experience in the research on the pathobiology of prions in model systems and natural hosts.

Reviewer for several international journals.

Member of the Neuroprion association.

Main scientific interests: molecular basis of prion strains and transmission barrier; animal models for TSEs; pathogenesis, diagnostics and epidemiology of TSEs; genetic basis of susceptibility/resistance; in vitro replication of prions.

Other:

2003-2006. Responsible for the Quality Assurance Unit of the Department and Auditor for laboratories involved in rapid tests for TSEs surveillance (UNI GEI EN ISO/IEC 17025)

## EDUCATION AND TRAINING

- Dates (from – to)
- Name and type of organisation providing education and training
- Principal subjects/occupational skills covered

- Title of qualification awarded

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## MOTHER TONGUE

## OTHER LANGUAGES

- Reading skills
- Writing skills
- Verbal skills

- Reading skills
- Writing skills
- Verbal skills

January 1994 – August 1998

Department of Pharmacology, Chemotherapy and Medical Toxicology, University of Milano

Molecular Pharmacology and Toxicology.

Distribution and functioning of melatonin receptors in the CNS. Cloning of human melatonin receptors and their distribution in CNS. Molecular pharmacology of the human receptor subtypes. Mechanisms of G protein-coupled receptors signal transduction.

PhD, dissertation on Melatonin human receptors in heterologous expression systems

October 1985 - July 1992

School of Veterinary Medicine, University of Milano

Veterinary science

DVM

ITALIAN

ENGLISH

EXCELLENT

GOOD

GOOD

FRENCH

GOOD

BASIC

BASIC

## MOST RELEVANT PUBLICATIONS

- Otero A, Hedman C, Fernández-Borges N, Eraña H, Marín B, Monzón M, Sánchez-Martín MA, Nonno R, Badiola JJ, Bolea R, Castilla J. A Single Amino Acid Substitution, Found in Mammals with Low Susceptibility to Prion Diseases, Delays Propagation of Two Prion Strains in Highly Susceptible Transgenic Mouse Models. *Mol Neurobiol*. 2019 Mar 7.
- Nonno R, Notari S, Di Bari MA, Cali I, Pirisinu L, d'Agostino C, Cracco L, Kofskey D, Vanni I, Lavrich J, Parchi P, Agrimi U, Gambetti P. Variable Protease-Sensitive Prionopathy Transmission to Bank Voles. *Emerg Infect Dis*. 2019 Jan;25(1):73-81.
- Pirisinu L, Tran L, Chiappini B, Vanni I, Di Bari MA, Vaccari G, Vikøren T, Madslie KI, Våge J, Spraker T, Mitchell G, Balachandran A, Baron T, Casalone C, Rolandsen CM, Røed KH, Agrimi U, Nonno R, Benestad SL. Novel Type of Chronic Wasting Disease Detected in Moose (*Alces alces*), Norway. *Emerg Infect Dis*. 2018 Dec;24(12):2210-2218.
- Babelhadj B, Di Bari MA, Pirisinu L, Chiappini B, Gaouar SBS, Riccardi G, Marcon S, Agrimi U, Nonno R, Vaccari G. Prion Disease in Dromedary Camels, Algeria. *Emerg Infect Dis*. 2018 Jun;24(6):1029-1036.
- Rossi M, Saverioni D, Di Bari M, Baiardi S, Lemstra AW, Pirisinu L, Capellari S, Rozemuller A, Nonno R, Parchi P. Atypical Creutzfeldt-Jakob disease with PrP-amyloid plaques in white matter: molecular characterization and transmission to bank voles show the M1 strain signature. *Acta Neuropathol Commun*. 2017 Nov 23;5(1):87.
- Galeno R, Di Bari MA, Nonno R, Cardone F, Sbriccoli M, Graziano S, Ingrosso L, Fiorini M, Valanzano A, Pasini G, Poleggi A, Vinci R, Ladogana A, Puopolo M, Monaco S, Agrimi U, Zanusso G, Pocchiari M. Prion Strain Characterization of a Novel Subtype of Creutzfeldt-Jakob Disease. *J Virol*. 2017 May 12;91(11)
- Espinosa JC, Nonno R, Di Bari M, Aguilar-Calvo P, Pirisinu L, Fernández-Borges N, Vanni I, Vaccari G, Marín-Moreno A, Frassanito P, Lorenzo P, Agrimi U, Torres JM. PrPC Governs Susceptibility to Prion Strains in Bank Vole, While Other Host Factors Modulate Strain Features. *J Virol*. 2016 Nov 14;90(23):10660-10669.
- Pirisinu L, Di Bari MA, D'Agostino C, Marcon S, Riccardi G, Poleggi A, Cohen ML, Appleby BS, Gambetti P, Ghetti B, Agrimi U, Nonno R. Gerstmann-Sträussler-Scheinker disease subtypes efficiently transmit in bank voles as genuine prion diseases. *Sci Rep*. 2016 Feb 4;6:20443.
- Konold T, Nonno R, Spiropoulos J, Chaplin MJ, Stack MJ, Hawkins SA, Cawthraw S, Wilesmith JW, Wells GA, Agrimi U, Di Bari MA, Andréoletti O, Espinosa JC, Aguilar-Calvo P, Torres JM. Further characterisation of transmissible spongiform encephalopathy phenotypes after inoculation of cattle with two temporally separated sources of sheep scrapie from Great Britain. *BMC Res Notes*. 2015 Jul 24;8:312



Maestrale C, Cancedda MG, Pintus D, Masia M, Nonno R, Ru G, Carta A, Demontis F, Santucciu C, Ligios C. Genetic and Pathological Follow-Up Study of Goats Experimentally and Naturally Exposed to a Sheep Scrapie Isolate. *J Virol*. 2015 Oct;89(19):10044-52.

Orrú CD, Groveman BR, Raymond LD, Hughson AG, Nonno R, Zou W, Ghetti B, Gambetti P, Caughey B. Bank Vole Prion Protein As an Apparently Universal Substrate for RT-QuIC-Based Detection and Discrimination of Prion Strains. *PLoS Pathog*. 2015 Jun 18;11(6):e1004983.

Chianini F, Cosseddu GM, Steele P, Hamilton S, Hawthorn J, Siso S, Pang Y, Finlayson J, Eaton SL, Reid HW, Dagleish MP, Di Bari MA, D'Agostino C, Agrimi U, Terry L, Nonno R. Correlation between infectivity and disease associated prion protein in the nervous system and selected edible tissues of naturally affected scrapie sheep. *PLoS One*. 2015 Mar 25;10(3):e0122785.

Nicot S, Bencsik A, Migliore S, Canal D, Leboindre M, Agrimi U, Nonno R, Baron T. L-type bovine spongiform encephalopathy in genetically susceptible and resistant sheep: changes in prion strain or phenotypic plasticity of the disease-associated prion protein? *J Infect Dis*. 2014 Mar;209(6):950-9.

Pirisinu L, Nonno R, Esposito E, Benestad SL, Gambetti P, Agrimi U, Zou WQ. Small ruminant nor98 prions share biochemical features with human gerstmann-sträussler-scheinker disease and variably protease-sensitive prionopathy. *PLoS One*. 2013 Jun 24;8(6):e66405.

Di Bari MA, Nonno R, Castilla J, D'Agostino C, Pirisinu L, Riccardi G, Conte M, Richt J, Kunkle R, Langeveld J, Vaccari G, Agrimi U. Chronic wasting disease in bank voles: characterisation of the shortest incubation time model for prion diseases. *PLoS Pathog*. 2013 Mar;9(3):e1003219.

Cosseddu GM, Nonno R, Vaccari G, Bucalossi C, Fernandez-Borges N, Di Bari MA, Castilla J, Agrimi U. Ultra-efficient PrP(Sc) amplification highlights potentialities and pitfalls of PMCA technology. *PLoS Pathog*. 2011 Nov;7(11):e1002370.

Migliore S, Esposito E, Pirisinu L, Marcon S, Di Bari M, D'Agostino C, Chiappini B, Conte M, Sezzi E, De Grossi L, Agrimi U, Vaccari G, Nonno R. Effect of PrP genotype and route of inoculation on the ability of discriminatory Western blot to distinguish scrapie from sheep bovine spongiform encephalopathy. *J Gen Virol*. 2012 Feb;93(Pt 2):450-5.

Fragkiadaki EG, Vaccari G, Ekateriniadou LV, Agrimi U, Giadinis ND, Chiappini B, Esposito E, Conte M, Nonno R. PRNP genetic variability and molecular typing of natural goat scrapie isolates in a high number of infected flocks. *Vet Res*. 2011 Sep 30;42:104

Bucalossi C, Cosseddu G, D'Agostino C, Di Bari MA, Chiappini B, Conte M, Rosone F, De Grossi L, Scavia G, Agrimi U, Nonno R, Vaccari G. Assessment of the genetic susceptibility of sheep to scrapie by protein misfolding cyclic amplification and comparison with experimental scrapie transmission studies.

J Virol. 2011 Aug;85(16):8386-92.

Pirisinu L, Migliore S, Di Bari MA, Esposito E, Baron T, D'Agostino C, De Grossi L, Vaccari G, Agrimi U, Nonno R. Molecular discrimination of sheep bovine spongiform encephalopathy from scrapie. *Emerg Infect Dis*. 2011 Apr;17(4):695-8.

Pirisinu L, Di Bari M, Marcon S, Vaccari G, D'Agostino C, Fazzi P, Esposito E, Galeno R, Langeveld J, Agrimi U, Nonno R. A new method for the characterization of strain-specific conformational stability of protease-sensitive and protease-resistant PrP<sup>Sc</sup>. *PLoS One*. 2010 Sep 14;5(9):e12723.

Mazza M, Iulini B, Vaccari G, Acutis PL, Martucci F, Esposito E, Peletto S, Barocci S, Chiappini B, Corona C, Barbieri I, Caramelli M, Agrimi U, Casalone C, Nonno R. Co-existence of classical scrapie and Nor98 in a sheep from an Italian outbreak. *Res Vet Sci*. 2010 Jun;88(3):478-85.

Vaccari G, Scavia G, Sala M, Cosseddu G, Chiappini B, Conte M, Esposito E, Lorenzetti R, Perfetti G, Marconi P, Scholl F, Barbaro K, Bella A, Nonno R, Agrimi U. Protective effect of the AT137RQ and ARQK176 PrP allele against classical scrapie in Sarda breed sheep. *Vet Res*. 2009 May-Jun;40(3):19.

Colussi S, Vaccari G, Maurella C, Bona C, Lorenzetti R, Troiano P, Casalnuovo F, Di Sarno A, Maniaci MG, Zuccon F, Nonno R, Casalone C, Mazza M, Ru G, Caramelli M, Agrimi U, Acutis PL. Histidine at codon 154 of the prion protein gene is a risk factor for Nor98 scrapie in goats. *J Gen Virol*. 2008 Dec;89(Pt 12):3173-6.

Di Bari MA, Chianini F, Vaccari G, Esposito E, Conte M, Eaton SL, Hamilton S, Finlayson J, Steele PJ, Dagleish MP, Reid HW, Bruce M, Jeffrey M, Agrimi U, Nonno R. The bank vole (*Myodes glareolus*) as a sensitive bioassay for sheep scrapie. *J Gen Virol*. 2008 Dec;89(Pt 12):2975-85.

Bruce ME, Nonno R, Foster J, Goldmann W, Di Bari M, Esposito E, Benestad SL, Hunter N, Agrimi U. Nor98-like sheep scrapie in the United Kingdom in 1989. *Vet Rec*. 2007 May 12;160(19):665-6.

Vaccari G, D'Agostino C, Nonno R, Rosone F, Conte M, Di Bari MA, Chiappini B, Esposito E, De Grossi L, Giordani F, Marcon S, Morelli L, Borroni R, Agrimi U. Prion protein alleles showing a protective effect on the susceptibility of sheep to scrapie and bovine spongiform encephalopathy. *J Virol*. 2007 Jul;81(13):7306-9.

Vaccari G, Di Bari MA, Morelli L, Nonno R, Chiappini B, Antonucci G, Marcon S, Esposito E, Fazzi P, Palazzini N, Troiano P, Petrella A, Di Guardo G, Agrimi U. Identification of an allelic variant of the goat PrP gene associated with resistance to scrapie. *J Gen Virol*. 2006 May;87(Pt 5):1395-402.

Nonno R, Di Bari MA, Cardone F, Vaccari G, Fazzi P, Dell'Omo G, Cartoni C, Ingrosso L, Boyle A, Galeno R, Sbriccoli M, Lipp HP, Bruce M, Pocchiari M, Agrimi U. Efficient transmission and characterization of Creutzfeldt-Jakob

disease strains in bank voles. PLoS Pathog. 2006 Feb;2(2):e12.

Nonno R, Esposito E, Vaccari G, Conte M, Marcon S, Di Bari M, Ligios C, Di Guardo G, Agrimi U. Molecular analysis of cases of Italian sheep scrapie and comparison with cases of bovine spongiform encephalopathy (BSE) and experimental BSE in sheep. J Clin Microbiol. 2003 Sep;41(9):4127-33.

Rome, 24/05/19