CURRICULUM VITAE

Name: Giuseppe Antonio Legname

Current Title and Department: Full Professor of Biochemistry, Neuroscience, SISSA

BIO/10 BIOCHIMICA, 05/E1

Date and Place of Birth:

Citizenships: Italian

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Education:

1982-1988 Biological Sciences Laurea (Doctoral Degree in Biochemistry and Molecular Biology), with a thesis entitled: "Produzione e caratterizzazione di anticorpi monoclonali anti tossina colerica e tossina tetanica", supervisor Professor Giuliana Zanetti at University of Milan, Milan, ITALY.

1989-1992 Advanced School of Applied Biotechnology Diploma (Specialist in Applied Biotechnology) with a final score of 50/50, supervisor Professor Bianca M. Ranzi at University of Milan, Milan, ITALY.

1993-1997 Doctor of Philosophy with a thesis entitled "Dianthin 30, a ribosome inactivating protein from *Dianthus caryophyllus*", supervisor Professor J. Michael Lord at University of Warwick, Coventry, UK.

Honors:

1989-1991	Visiting Fellow at Warwick University, Coventry, UK
1991-1996	Researcher and Senior Scientist at ITALFARMACO, S.p.A. research Center, Cinisello Balsamo, Milan, ITALY
1996-1999	Research Associate at National Institute for Medical Research, Medical Research Council, London, UK
1999-2000	Visiting Assistant Researcher at the Department of Neurology/Institute for Neurodegenerative Diseases, Professor Stanley B. Prusiner, University of California at San Francisco, USA.
2000-2006	Faculty at the Department of Neurology/Institute for Neurodegenerative Diseases, Director Professor Stanley B. Prusiner, University of California at San Francisco, USA.
2006-present	Faculty at the Department of Neuroscience, SISSA, Trieste, Italy.

Awards:

2004	Awarded 1st Place Best Poster Prize at the First International Conference of the European Network of Excellence NeuroPrion, PRION2004, May 24th-28th, Institute Pasteur, Paris, France. "*De novo* Generation of Mammalian Prions"
2008	Awarded Best Poster Prize at the Fifth International Conference of the European Network of Excellence NeuroPrion, PRION2008, October 8th-10th, 2008, Auditorium Hotel, Madrid, Spain. "Developmental role of the prion protein in the nervous system"
2011	Awarded Best Poster Prize at the Eighth International Conference on Prion Diseases and Related Disorders, New World, PRION2011, Montreal, Quebec, Canada, May 16th-19th. "Brain delivery of AAV9 expressing anti-PrP molecules delay prion disease onset in mice"
2012	*Premio Città Impresa ai 1.000 fabbricatori di idee del Nordest*, May 2nd, Fiera Vicenza, Vicenza, Italy
2012	Awarded Best Poster Prize at the Ninth International Conference on Prion Diseases and Related Disorders, PRION2012, May 9th-12th, 2012 Amsterdam, The Netherlands. "Nanobody stabilize the crystal structure of full-length human PrP"

Professional Activities:

2002	Scientific Advisory Member for the NIH-Sponsored Reagent Repository Workshop on Prions
2002	Scientific Member of the 2002 National Prion Research Program Review Panel, Department of Defense, United States Army Medical

	Research and Material Command, Congressionally Directed Medical Research Programs
2003	Member of the Board for evaluation of PhD candidates, Albert Einstein College of Medicine, Bronx, NY
2003-present	NIH Grant Reviewer, Manuscript Reviewer for several International Journals (including Science, Nature, Cell, Proceedings of National Academy of Sciences of the USA, Journal of Molecular Biology, Journal of Immunology, Journal of Clinical Investigation, Journal of Neurochemistry, Chemistry & Biology, FASEB Journal, FEBS Journal, Journal of Virology, Journal of General Virology, NeuroReports), EU Grant Reviewer, Italian Agency for Prion Research Reviewer, Polish Medical Research Council Reviewer
2007	Member and President of the Board for evaluation of PhD candidates, Università di Padova
2008	Scientific Advisory Board Member for EU projects, Scientific Organizer of the International Workshop on 'Human and Animal TSE', June 26-28, 2008, Grado, Italy
2008-2010	Evaluator at 'Concorsi per l'ammissione al primo anno dei Corsi Ordinari di primo livello della Scuola Superiore di Catania - a.a. 2008-2009 – 2009-2010 – 2010-2011. Classe delle Scienze Sperimentali.'
2008-2009	EU Grant Reviewer for Network of Excellence Neuroprion
2009	Member and President of the Board for evaluation of PhD candidates, Università di Trieste
2009-present	Reviewer for Public Library of Science One (PLoS One), Public Library of Science Biology (PLoS Biology) and Public Library of Science Pathogens (PLoS Pathogens)
2011-present	Guest Editor of Public Library of Science Computational Biology.
2011	*Ad hoc* reviewer for Italian Ministry of Education, Universities and Research for Programmi di Ricerca Scientifica di Rilevante Intersesse Nazionale (PRIN)
2011-present	Expert Scientific Evaluator, Skolkovo Foundation, Moscow, Russia http://www.sk.ru/en/
2011	Scientific Organizer of the 1st FVG Summer school on Molecular Biomedicine, Date: July 26-29, 2011, Università di Trieste, Trieste, Italy.
2012	Scientific Organizer of the 2nd FVG Summer school on Molecular Biomedicine, Date: July 9-13, 2012, Università di Udine, Udine, Italy.
2012-present	*Ad hoc* reviewer for the Polish National Science Centre.
2014	Academic Editor of Public Library of Science ONE (PLoS ONE).

2014	Organizer and Chair of the International Conference PRION2014: Epigenetics and Neurodegenerative Diseases – *Shaping the future of prion research.* Trieste May 27-30, 2014 (http://prion2014.org/).
2015	Organizer and Chair of the International Workshop "Single Molecule in Biology", Trieste, 23-24 Giugno 2015.
2015	Editorial Board Member of the Journal of Biological Chemistry, Editorial Board Member of Frontier in Bioengineering and Biotechnology.
2016	Editorial Board Member of Scientific Reports (Nature Publishing Group)
2016	Organizer of the International CECAM workshop on “Structural And Functional Annotation Of Bioinorganic Systems”, Scuola Normale Superiore, Pisa, May 23-25, 2016
2019	Review Editor and Editorial Board Member of Frontier of Aging Neuroscience
2020	Reviewer for the Swiss National Science Foundation (SNSF) within the Special Call on Coronaviruses
2020	Reviewer for the JPND call 2020 “Novel Imaging and Brain Stimulation Methods and Technologies Related to Neurodegenerative Diseases”.
2020	Reviewer for Biological Phychiatry.
2021	Evaluator at ‘Concorsi per l’ammissione al primo anno dei Corsi Ordinari di primo livello della Scuola Superiore di Catania - a.a. 2021-2022. Classe delle Scienze Sperimentali.’
2021	Presidente Local Organizing Committee and Chair, 56° Congresso AINPeNC Associazione ItalianaNeuropatologia e Neurobiologia Clinica46° Congresso AIRIC Associazione ItalianaRicerca Invecchiamento Cerebrale. Fully virtual conference, 28-30 ottobre 2021.

Career History

1982-1985	Research Assistant working on circadian rhythm of melatonin in man at the laboratory of the Chair of Chemotherapy, Professor F.Fraschini, at the "Istituto di Farmacologia e Chemioterapia Medica", University of Milan, ITALY.
1985-1988	Doctoral experimental thesis on production and characterization of monoclonal antibodies to bacterial toxins at the laboratory of Immunology, Dr. Y.M.Galante, RECORDATI S.p.A., Milan, ITALY.
1988-1989	One-year Fellowship on neurological diseases with an auto immune basis, laboratory of Neuroimmunology, Professor E.Nobile-Orazio, at the "Istituto di Clinica Neurologica", University of Milan, ITALY.

1989-1991	Visiting Fellow at the laboratory of Plant Biochemistry, Professor J.M.Lord, Department of Biological Sciences, University of Warwick, Coventry, UK, to study some aspects of the molecular biology of N-glycosidase enzymes.
1991-1994	Researcher at ITALFARMACO S.p.A. Research Center, Cinisello Balsamo (Milan), ITALY.
1994-1996	Senior Scientist at the ITALFARMACO S.p.A. Research Center, Cinisello Balsamo (Milan), ITALY.
1996-1999	Research Associate at the Dept. of Molecular Immunology at National Institute for Medical Research (N.I.M.R.), Medical Research Council, The Ridgeway, Mill Hill, London, UK
1999-2000	Visiting Assistant Researcher at the Department of Neurology/Institute for Neurodegenerative Diseases, Professor Stanley B. Prusiner, University of California at San Francisco, USA.
2000-2004	Assistant Adjunct Professor at the Department of Neurology/Institute for Neurodegenerative Diseases, Professor Stanley B. Prusiner, University of California at San Francisco, USA.
2004-2006	Associate Adjunct Professor at the Department of Neurology/Institute for Neurodegenerative Diseases, Professor Stanley B. Prusiner, University of California at San Francisco, USA.
2006-2018	Associate Professor at the Department of Neuroscience, SISSA, Trieste, Italy.
2006-present	Faculty of the PhD Program in Functional and Structural Genomics, SISSA, Trieste, Italy.
2011-2015	Coordinator of PhD Program in Functional and Structural Genomics SISSA, Trieste, Italy.
2012-2016	Member-elect of Academic Senate, SISSA, Trieste, Italy.
2014-present	Faculty of the PhD Program in Molecular Biology (JuMBo), SISSA, Trieste, Italy.
2015-present	Coordinator of the PhD Program in Molecular Biology (JuMBo), SISSA, Trieste, Italy.
2018-present	Full Professor of Biochemistry at the Department of Neuroscience, SISSA, Trieste, Italy.
2022-present	Member of the Board of Directors, SISSA, Trieste, Italy

Teaching Experience:

1982-1987	Part-time teaching Biology and Mathematics courses at Secondary Schools in Italy.

1987-1989	Teaching Biology courses at Independent Psychology School in Milan, Italy.
1989-1991	Taught students, visiting scientist, and new coworkers at Plant Biochemistry Laboratory, Warwick University, purification techniques (conventional and HPLC). Advised on protein sample purification, antibody purification and related techniques.
1991-1996	Taught research assistants and new coworkers molecular biology techniques in the Immuno-Oncology laboratory of Italfarmaco Research Center. Supervised British under-graduate students towards experimental thesis on molecular biology and biochemistry projects. Supervised post-graduate student in developing transgenic models of inflammation.
1996-1999	Advisor to postdoctoral fellows and Ph.D. students in several biochemistry and molecular biology projects at the Division of Molecular Immunology at MRC, London, UK
1999-2006	Manage research activities carried out by Technical Staff, advisor to postdoctoral scholars in biochemical approaches to identify novel proteins interacting with different form of prion protein.
2006-present	Advisor to PhD students in Neurobiology, Physics And Chemistry Of Biological Systems and in Structural and Functional Genomics at SISSA.
2006-2012	Teaching Courses on Biochemical Signaling in the Nervous System, Neuropathology, Neurobiology of Disease, Neurodegenerative Diseases, Physiology of Cellular Communication and Signal Transduction for PhD Program in Neurobiology at SISSA.
2006-present	Teaching Courses on Biochemical Signaling in the Nervous System, Neuropathology, Neurobiology of Disease, Neurodegenerative Diseases, Physiology of Cellular Communication and Signal Transduction, Biochemical Basis of Neurodegeneration and Neuropathology for PhD Programs in Functional and Structural Genomics at SISSA.
2006-2010	Advisor to PhD students in Neurosciences at the Università di Milano-Bicocca.
2007	Teaching Course on “Neuropathology of TSEs in man and animals” within the Master of "Diagnostic Applications of Biotechnology" Consorzio Universitario Internazionale - Facoltà di Medicina Veterinaria, Università di Udine.
2008/2016	Teaching Course on Neurodegenerative Diseases at University of Medicine and Parmacy at Ho Chi Minh City, Ho Chi Minh City, Vietnam.
2014-present	Advisor to PhD students in Molecular Biology (JuMBo) at SISSA.

2014-present	Teaching Course on Biochemical Basis of Neurodegeneration and Neuropathology within the Master of Neuroscience - Facoltà di Scienze della Vita, Università di Trieste.
2014-present	Teaching Courses on Biochemical Basis of Neurodegeneration within the PhD Program in Molecular Biology (JuMBo) at SISSA.

Invited presentations:

June 19, 1992	Oral presentation at the 3rd International Symposium on Immunotoxins. Sheraton World Resort, Orlando, Florida, USA. "In vitro expression, processing and activity of pre dianthin 30 and dianthin 30"
June 15, 1993	Oral presentation at the 6th European Congress on Biotechnology. Firenze, Italy. "Expression and activity of pre-dianthin 30 and dianthin 30"
July 9, 1993	Oral presentation at the 22nd FEBS Meeting, Stockholm, Sweden. "Molecular and structural studies on dianthin 30"
May 13, 1999	Oral presentation at the Infection and Immunity Series, National Institute for Medical Research, MRC, London, UK. "Thymopoiesis in lck inducible mice"
October 14, 2002	Lecture at Chiron Corporation, Emeryville, California, USA. "Prion and doppel proteins bind to granule neurons of the cerebellum"
November 27, 2002	Lecture at Istituto Scientifico San Raffaele, DIBIT, Segrate, Milan, Italy. "Ligands in the brain binding prion and doppel proteins"
November 28, 2002	Invited Lecture at the Istituto di Biologia e Biotecnologia Agraria del Consiglio Nazionale delle Ricerche, Palazzo L.I.T.A., Segrate, Milan, Italy. "Cooperative binding of prion protein to kringle domains"
May 30, 2003	Invited Lecture at the Centro de Estudios Avanzados, University of Santiago de Compostela, Santiago de Compostela, Spain. Frontiers in Prion Research. "*In vivo* efficacy of quinacrine in mice model of prion disease"
November 25, 2003	Invited Lecture at the Environmental Toxicology Department, University of California Santa Cruz, Santa Cruz, CA, USA. "Prion Protein: Function, Toxicity And Therapy"
February 12, 2004	Department of Physiology & Biophysics, Albert Einstein College of Medicine, Bronx, New York, NY, USA. "Prion Protein: Function, Toxicity And Therapy"
April 28, 2004	Invited Speaker at the Annual Meeting of the Biological Safety Affairs Forum, University of California San Francisco, San Francisco, CA, USA. "Recent Advances in Prion Research and Safety Management"

May 28, 2004	First International Conference of the European Network of Excellence NeuroPrion, Institute Pasteur, Paris, France. "*De novo* Generation of Mammalian Prions" (Oral presentation for 1st Place Best Poster Award)
October 4, 2004	Institute of Child Health Series Lectures, University College of London, UK. "Synthetic Mammalian Prions"
October 21, 2004	Special Lecture at the Department of Chemical Science, University of Catania, Italy. "Synthetic Mammalian Prions"
January 21, 2005	Invited Speaker at the Annual SOTAB 2005 (State of the Art in Biology), Masters Hall of the Georgia Center for Continuing Education on the University of Georgia Athens Campus, January 21-22, 2005, Athens, Georgia, USA. "Prion Protein: Infectivity, Function and Therapy"
February 14, 2005	Invited Speaker at the Cambridge Healthtech Institute's 9th Annual Transmissible Spongiform Encephalopathies, February 14-15, 2005, McLean, Virginia, USA. ""*De novo* Generation of Mammalian Prions"
April 7, 2005	Invited Speaker at the 2nd International Symposium on the New Prion Biology: Basic Science, Diagnosis and Therapy. Istituto Veneto di Scienze, Lettere ed Arti, April 7-9, 2005, Venice, Italy. "*De novo* Generation of Mammalian Prions"
October 26, 2005	Special Lecture at University of Turin, Dept. of Neuroscience, Turin, Italy. "Synthetic Mammalian Prions"
November 27-30, 2005	Invitation to attend and present at "Prion Biology: Puzzles and Paradoxes," Banbury Center, Cold Spring Harbor Laboratory, NY, USA. "Synthetic mouse prion transmission studies in mice"
December 19, 2005	Special Lecture at the Neuroscience Department, Istituto di Ricerche Farmacologiche "Mario Negri", Milan, Italy. "Synthetic Mammalian Prions"
December 20, 2005	Invited Lecture at CNR Conference on the interaction between prions and soil. Rome, Italy
April 28, 2006	Invited Lecture at ELETTRA - Sincrotrone Trieste S.C.p.A. di interesse nazionale - AREA Science Park – Trieste, ITALY
July 16, 2006	Invited Speaker at 'The 10th International Conference on Alzheimer's Disease and Related Disorders', July15-20, 2006, Madrid, Spain. "Transmission studies of mouse synthetic prions"
September 11, 2006	Invited Speaker at the XVIth INTERNATIONAL CONGRESS OF NEUROPATHOLOGY. September 10-15, 2006, San Francisco, CA, USA. "Synthetic Mouse Prions".
September 13, 2006	Invited Speaker at the 2006 Sterling Hendricks Memorial Lectureship Award presented to Stanley B. Prusiner at the AGFD Symposium. 232nd American Chemical Society National Meeting. September 10-

	14, 2006, San Francisco, CA, USA. “Mouse Synthetic Prions”
October 4, 2006	Invited Speaker at PRION2006. October 4-6, 2006, Turin, Italy. “Less stable prions replicate more rapidly in mice”
December 15, 2006	Invited Lecture at ICGEB, Padriciano - AREA Science Park – Trieste, ITALY. “Prion Biology and Disease”
December 21, 2006	Invited Lecture at NMR Center - National Institute of Chemistry, Ljubljana, SLOVENIA. “Structural Insight of Infectious Prions”
January 31, 2007	SISSA- Neurobiology Sector's seminars. Basovizza, Trieste. "Biosafety in prion diseases"
March 19, 2007	Invited Lecture at the MIR@W – Winter Term 2006/2007, Prions: Properties, Propagation and Pathology, University of Warwick, Coventry CV4 7AL, United Kingdom. “*In vitro* and *in vivo* mechanism of prion replication”
May 23, 2007	Workshop on “L’emergenza Mucca Pazza - Status e proposte di ricerca a tutela del comparto agroambientale” Villa Chiozza – Scodovacca (UD). “Mucche pazze, Prioni e Alimentazione”
September 14-15, 2007	Invited host at Workshop on IPRs and Transfer of Knowledge: from Research Institutions to the Market. University of Trieste, Italy.
October 4, 2007	Invited Speaker at Consortium of Biomolecular Medicine Retreat, Piancavallo (PN). “Mucche pazze, Prioni e Alimentazione: Necessita’ di nuovi interventi diagnostici”
November 12, 2007	Invited Speaker at Consortium of Biomolecular Medicine Workshop on Intrinsic Structural Disordered Proteins: Functional and Pathological Implications, Trieste, Italy. “Unstructured proteins in neurodegenerative disorders”
November 20, 2007	Invited Speaker at the conference on “Protezione e valorizzazione della proprietà intellettuale: fatti e miti, opportunità e pericoli”, Aula Magna della S.I.S.S.A. - Scuola Internazionale Superiore di Studi Avanzati, Via Beirut 2-4 – Trieste. "Gestione della proprietà intellettuale nel biotech in America e in Italia: due realtà a confronto"
December 10, 2007	Invited Lecture at the Facoltà di Medicina Veterinaria, Università di Udine, Udine, Italy. “Of Mad Cows and Mad Men: Is the TSE Epidemic Over?”
February 28, 2008	Invited Lecture at the National Institute for Medical Research, MRC, London, UK. “Prion biology and disease: novel paradigms in protein sciences”
March 4, 2008	Invited Lecture at the exhibition on “I segreti del corpo” (*I fogli di Windsor di Leonardo da Vinci e il lungo viaggio alla scoperta del nostro corpo*). Centro Trevi and the Università di Bolzano, Bolzano, Italy. “Invecchiamento e cervello”. La conferenza riproposta mercoledì 5 alle ore 10.45 presso l’aula magna del liceo scientifico “E.Torricelli” di Bolzano. http://www.leonardoeilcorpo.it

March 12, 2008 — Invited Lecture at the conference “La prevenzione nei Laboratori di Ricerca” organized by ICGEB (International Centre for Genetic Engineering and Biotechnology), Trieste, Aula Magna della Facoltà di Medicina e Chirurgia, Ospedale di Cattinara, Universita’ degli Studi di Trieste, Trieste, Italy. “La ricerca sui prioni : problematiche di sicurezza in laboratorio”

March 13, 2008 — Invited Lecture at the workshop on “Basi molecolari delle patologie neurologiche: possibili implicazioni diagnostiche e terapeutiche”, Meetings Clinico-Scientifici, Scuola di Specializzazione in Neurologia, Facolta’ di Medicina e Chirurgia, Universita’ degli Studi di Trieste, Trieste, Italy.

March 19, 2008 — Invited Lecture at Special Event Journal FEST organized within FEST: http://www.aliasfvg.it/tagnewsdett.php?nzid=1243&tag=giornalismo&tag=fiera&tag=trieste&

April 17, 2008 — Invited Lecture on “Mechanism of prion protein aggregation leading to infectious prions”, Kolloquien, Department of Virology and Immunology, Deutsches Primatenzentrum, Göttingen, Germany.

May 15, 2008 — Invited Lecture on “Prion Biology: a new paradigm in Protein Science”, at the Dipartimento di Biochimica, Dipartimento di Biologia Evoluzionistica Sperimentale, Scuola di Dottorato in Scienze Biologiche, Biomediche e Biotecnologiche, University of Bologna, Bologna, Italy

June 9, 2008 — Invited Lecture on “Structural requirements for mammalian prion replication”, Department of Chemistry and Biochemistry, University of California - Santa Cruz, Santa Cruz, CA 95064, USA.

June 25, 2008 — Invited Speaker on “*In vitro* prion replication and amplification” at Transmissible Spongiform Encephalopathies, 25-26 June 2008, Corinthia Towers Hotel, Prague, Czech Republic.

June 28, 2008 — Invited Speaker on “*In vitro* and *in vivo* generation of synthetic mammalian prions” at the International Workshop on ‘Human and Animal TSE’, June 26-28, 2008, Grado, Italy.

August 29, 2008 — Invited Speaker at 3° Corso Estivo di Orientamento - Scuola Superiore di Catania - Università degli Studi di Catania Summer School in Catania 25-30 agosto 2008, Catania, Italy.

September 18, 2008 — Invited Speaker at the workshop on “Aspetti Molecolari delle Malattie Neurodegenerative” organized by the ‘Accademia delle Scienze dell'Istituto di Bologna’, University of Bologna, Bologna, Italy.

October 8-10, 2008 — Selected Speaker at the Fifth International Conference of the European Network of Excellence NeuroPrion, PRION2008, October 8th-10th, 2008, Auditorium Hotel, Madrid, Spain. “Developmental role of the prion protein in the nervous system”
(Oral presentation for 1st Place Best Poster Award)

October 13-14, 2008 — Invited Speakear at "Modern Trends in Nanobiology and Nanomedicine" Workshop, October 13th-14th, 2008, ELETTRA Seminar Room, Area Science Park-Basovizza-Trieste.

November 5, 2008 — Invited Lecture "Structural insights into infectivity and stability of synthetic prions", MRC Prion Unit Department of Neurodegenerative Diseases, Institute of Neurology, University College London, London, UK.

November 26, 2008 — Invited Speaker on "Solving the prion puzzle with synchrotron radiation" at ELETTRA/Sincrotrone Trieste XVI Users' Meeting, November 24-26, 2008, I.C.T.P. – Adriatico Guest House, Kasteler Hall, Trieste.

November 27, 2008 — Invited Speaker at the 'XIIº Convegno degli Istituti Zooprofilattici Sperimentali sulle encefalopatie spongiformi animali', November 27-28, 2008, Sala Conferenze Istituto Zooprofiattico Sperimentale del Piemonte, Liguria e Valle d'Aosta, Torino, Italy.
'Meccanismo molecolare di replicazione dei prioni: una prospettiva strutturale'

February 10, 2009 — Invited Speaker at the Magnetic Moments Pre-Conference: Kick-Off Meeting: East-NMR EU-FP Project Conference venue: Otocec/Slovenia, February 10-11, 2009.

April 2-4, 2009 — Invited Speaker at the 3rd International Symposium On The New Prion Biology: Basic Science, Diagnosis And Therapy. Istituto Veneto di Scienze, Lettere ed Arti, April 2-4, 2009, Venice, Italy. "New Insights into Prion Structure: Exploring New Methods for the Generation of Prions"

April 28, 2009 — Invited Lecture at Institut fur Physikalische Biologie - Heinrich-Heine-Universitaet Duesseldorf, April 28, 2009, Duesseldorf, Germany.
"Prion Protein aggregation and infectivity: a structural perspective"

May 7, 2009 — SISSA COLLOQIUM May 7th, SISSA, Trieste Italy. "Aging, Neurodegeneration And The New Biology Of Prions"

May 29, 2009 — Invited Lecture at the VIB Department of Molecular and Developmental Genetics KULeuven - Center for Human Genetics, Leuven, Belgium.
"Prion biology and disease"

June 26, 2009 — Oral communication at the INFORMA - Transmissible Spongiform Encephalopathies 2009 conference, June 25-26, 2009, Cologne, Germany. "Investigation of selectively oriented prions confined by atomic force microscopy"

July 23, 2009 — Invited communication at the 3rd International Chronic Wasting Disease Symposium, July 22-24, 2009, Park City, Utah, USA. "Evidence for Soil Humic Substances Interaction with Prions"

September 4, 2009 — Oral communication at the MC2009, International Microscopy Conference, August 30 – September 4, 2009, Graz, Austria. "Modulation of alpha-synuclein aggregation by dopamine analogs"

October 6, 2009	Invited communication at the Summer School on Doapminergic Neurons. Leonardo Da Vinci Building, The Abdus Salam International Centre For Theoretical Physics (ICTP), Trieste, Italy. “Modulation of alpha-synuclein aggregation by dopamine analogs”
December 18, 2009	Invited Lecture at the University of Milan – Bicocca. Milan, Italy. “Prion Biology and Disease”
May 4, 2010	Invited Lecture at the The German Research School for Simulation Sciences (jointly RWTH Aachen University and Forschungszentrum Jülich). German Research School for Simulation Sciences Jülich, Germany. “Prion Biology and Disease”
June 10, 2010	Invited communication at the INFORMA - Transmissible Spongiform Encephalopathies 2010 conference, June 10-11, 2010, Cologne, Germany. “*In vitro* assay of prion infectivity: Potential applications in the manufacture of biologicals”
September 9, 2010	Keynote Lecture at the National Congress of the Italian Chemical Society, Biological Systems Division, San Vito di Cadore, 9-11 September 2010. “Prion Biology and Disease”
October 11, 2010	Invited Speaker at the Conference on Molecular Aspects of Cell Biology: A Perspective from Computational Physics, The International Centre for Theoretical Physics, 11-15 October 2010, Trieste. “Prion Biology and Disease”
November 25, 2010	Invited speaker at the “1st National Prion Congress of Spain” hosted by CIC Biogune. 25-26 November, 2010, Bilbao, Spain. “Structural determinants of genetic prion diseases”
December 22, 2010	Invited speaker at the “Round Table 2, Italy-Russia@Dubna, Space Physics and Biology. 19-23 December, 2010, Dubna, Russia. “Neurodegenerative diseases”
January 24, 2011	Invited Lecture at the University of Science- Ho Chi Minh City, Vietnam. “Molecular Biology of Prions”
March 18, 2011	Invited speaker at the Neurodegenerative and Phychiatric Diseases: New Frontiers in Neuroimmunology. Bergamo 16-19 Marzo 2011, Italy “Immunity and Prions”
April 30, 2011	Invited speaker at The NEURI 2011 – 1ST STUDENTSKI KONGRES NEUROZNANOSTI, 1st Student Neuroscience Congress of the School of Medicine, University of Rijeka, Croatia. “Prion Biology and Disease”
July 8, 2011	Invited speaker at the Workshop on Structural Bioinformatics and Computational Biophysics. SISSA, July 7-8, 2011. “Common structural traits across pathogenic mutants of the human prion protein”

October 14, 2011 — Invited speaker at the Conference on Nanotechnology for Biological and Biomedical Applications (Nano-Bio-Med) - (10-14 October 2011) the Abdus Salam International Centre for Theoretical Physics (ICTP) of UNESCO and the IAEA, 34151 Trieste, Italy.
"Structural Traits Of The Prion Protein Via Precise Interfacial Nanostructure Measurements"

November 10, 2011 — Invited Lecture at Seminari di Scienze Pre-Cliniche, Istituto Neurologico Carlo Besta, Sala Riunioni – Sede Di Via Amadeo, 42, Milan, Italy.
"Structural Studies on Prion Proteins and Prions"

December 14, 2011 — Invited presentation at the XIX World Congress on Parkinson's Disease and Related Disorders. Shanghai, China, December 11th – 14th, 2011.
"Human α-synuclein fibrils induce α-synuclein aggregation *in vitro* and behavioral alteration *in vivo* upon inoculation in wild-type mice"

January 11, 2012 — Invited speaker at the 4th International Conference on the Development of Biomedical Engineering in Vietnam, Ho Chi Minh City, Vietnam, January 8th – 12th, 2012. Computational Medicine Conference.
"Synthetic infectious prions"

April 5, 2012 — Invited Lecture at NMR Center - National Institute of Chemistry, Ljubljana, SLOVENIA. "Sailing unexplored compartments: the tale of anchorless prions"

April 11, 2012 — Invited Lecture at Institute of Computational Science, Università della Svizzera Italiana (USI) - Lugano Campus, Lugano, SWITZERLAND. "Structural determinats of infectious prions"

April 20, 2012 — Speaker and Chair at the XIV Congress of the Italian Society of Neuroscience – 1st Joint Meeting with the Israel Society of Neuroscience, Catania, Italy, April 19th - 22nd, 2012. Workshop on *Prions as a model for neurodegenerative conditions*. "Synthetic Prions, Anchorless Prion and Structural Determinants of Prion Conversion"

May 19, 2012 — Speaker at BIT's 3rd Annual World Conference of Neurotalk-2012 – Open the Black Box of Nervous System. May 18th – 20th, Beijijng International Convention Center, Beijijng, China. "Synthetic Prions, Anchorless Prion and Structural Determinants of Prion Conversion"

May 22, 2012 — Scientific Organizer and Speaker at the International Workshop on on Essential Metals in Brain Development and Neurodegeneration. May 21st – 22nd, 2012, SISSA, Trieste, Italy. "Prion Protein, Prions and Copper"

October 3, 2012 — Speaker at BrainTrain Workshop on Functional Genomics of Neurodegenerative Diseases - October 3rd, 2012. SISSA, Trieste, Italy.

October 10, 2012 Invited Lecture at the Department of Neuroscience, Karolinska Institutet. October 10, 2012 - Stockholm, Sweden. ”Structural determinants of mammalian prion conversion”.

October 19, 2012 Invited Lecture at the CIC Biogune. October 19, 2010, Bilbao, Spain. “Structural determinants of genetic prion diseases”

October 26, 2012 Invited Lecture at the Riken Brain Science Institute. October 26, 2012, Tokyo, Japan. ”Structural determinants of mammalian prion conversion”

December 6, 2012 Invited Lecture at INSERM, Montpellier, France. “Structural determinants of mammalian prion conversion”

February 8, 2013 Invited Seminar at Colorado State University, Fort Collins, Colorado, USA. “Structural determinants of prion conversion in the full-length prion protein”

May 26-29, 2013 Speaker at PRION 2013, Banff, Canada. "Synthetic human alpha-synuclein prions"

October 29, 2013 Invited Seminar at RIKEN Center for Life Science Technologies, Japan "Structural Determinants of Prion Infectivity"

November 25, 2013 Invited Speaker at the STN Symposium “Examining the scientific basis of therapies for prion diseases”, The Roslin Institute, Edinburgh, UK. “Molecular pharmacology of prion diseases”.

December 2-3, 2013 Invited Speaker at the 2nd Iberian Congress on Prions, Institute for Biotechnology and Bioengineering, University of Algarve, Faro, Portugal. “Prion Structure and Biology”

December 10, 2013 Seminar at the University of Udine, Italy (Dipartimento di Scienze Mediche e Biologiche) “Structural determinants of prion formation and replication”

December 14, 2013 Invited Speaker at the University Medical Center, Ho Chi Minh City, Vietnam. “Progresses in Neurodegenerative Diseases”

June 14, 2014 Invited Speaker at the University of Science, Ho Chi Minh City, Vietnam. “Neurodegenerative Diseases: novel mechanism of transmission”

June 18, 2014 Invited speaker at the 5th International Conference on the Development of Biomedical Engineering in Vietnam, Ho Chi Minh City, Vietnam, June 16th – 18th, 2014.
“Novel approaches to diagnosis and therapy in neurodegenerative diseases”

July 7, 2014 Invited speaker at the 14th Human Frontiers Science Program Awardees Meeting – Lugano, Switzerland.
“Characterization of conformational transitions in prion proteins using single-molecule techniques”

September 23, 2014	Invited Lecture at the Scuola Normale Superiore, Sala degli Stemmi, Palazzo della Carovana, Pisa, Italy. “Prion and Prion-like disorders”
November 6, 2014	Invited speaker at the EU-Russia Year of Science, A window of Physics, Biology and Technology conference – The Abdus Salam International Centre for Theoretical Physics (ICTP). SISSA/ICTP co-organized conference. Trieste 4-6 November 2014, Italy “The prion switch uncovered”
November 21, 2014	Invited Lecture at the University of Milan – Bicocca. Milan, Italy. “Synthetic Prion-like α-Synuclein Molecular Assemblies”
January 19, 2015	Invited Lecture at the University Medical Center, Ho Chi Minh City, Vietnam. “Neurodegenerative Diseases: The Road To Early Diagnosis”
July 6-8, 2015	Invited speaker at the Conference Neurological Disorders Summit, Double Tree by Hilton Hotel San Francisco Airport, San Francisco, USA. “Alpha-synuclein amyloid interaction with prion protein: a putative overlap of two neurodegenerative diseases”
August 30 September 4, 2015	Invited Lecturer at the First Summer School on “Prion and Prion-like Neurodegenerative Disorders”. Cittadella dei Musei, Cagliari, Italy.
Settembre 15-18, 2015	Invitation to attend and present at “Therapeutic Approaches to Prion Disease and Other Neurodegenerative Conditions Associated with Protein Misfolding”, September 15-18, 2015, Banbury Center, Cold Spring Harbor Laboratory, NY, USA. “Tackling prion diseases with multi-target and theranostic small molecules”
October 8-11, 2015	Invited speaker and Symposium Chair at the XVI Congress for the Italian Society for Neuroscience (SINS), October 8th -11th, 2015, Cagliari. Italy. Symposium on Prion And Prion-Like Meachanims In Neurodegenerative Disorders. A Molecular And Cellular View On Neurodegeneration. “Alpha-synuclein amyloid interaction with prion protein: a putative overlap of two neurodegenerative diseases”
February 25, 2016	Invited speaker at the 7th Healthy Ageing Research Centre Workshop on “Molecular Pathology of the Nervous System”, February 25-26, 2016. Didactic Centre of the Medical University of Łódź, Łódź, Poland. “Synthetic Prions”
May 10-13, 2016	Invited Speaker at the PRION 2016 International Congress, Tokyo, Japan. May 11, 2016. "Molecular determinants of prion infectivity"
May 23-25, 2016	Organizer and Speaker at the International Workshop on “Structural and Functional Annotation of Bioinorganic Systems: Perspectives and Challenges from Theory to Experiments”. Location: CECAM – IT – SNS. Pisa, Italy. "Molecular determinants of prion infectivity"

September 23, 2016	Invited Speaker at the International Meeting "The pursuit of ignorance for better understanding Prion diseases". 23 September, 2016, Turin, Italy. "Molecular determinants of prion infectivity: towards a mechanism of prion conversion"
September 24 October 1, 2016	Invited Lecturer at the Second Summer School on "Prion and Prion-like Neurodegenerative Disorders". Carloforte, Cagliari, Italy.
November 28, 2016	Invited Plenary Lecturer at the 5th Iberian Congress on Prions. November 28-29, 2016. Barcelona, Spain. "Prion protein facilitates uptake of alpha-synuclein amyloid *in vitro* and *in vivo*"
April 10-12, 2017	Invited Speaker at the First International Conference on Multiscale simulations in complex biomolecular systems: linking computations to experimental validation. April 10th–12th, 2017, at the VNU University of Science, Hanoi, Vietnam. "Alpha-synuclein amyloids inhibit prion propagation"
April 14, 2017	Invited Speaker at the International Workshop on Recent Advances in Computational and Experimental Molecular Biophysics. April 14th, 2017, at the University of Science, Ho Chi Minh City, Vietnam. "Structural Determinants of the Prion Protein Function and Prion Conversion"
May 20, 2017	Invited Speaker at the 43° Congresso Nazionale Associazione Italiana Ricerca Invecchiamento Cerebrale - 53° Congresso Nazionale Associazione Italiana Neuropatologia e Neurobiologia. 18-20 May, 2017. Padova, Italy. "L'amiloide alfa sinucleina blocca la replicazione prionica"
May 24, 2017	Selected Speaker at PRION 2017 International Congress, Deciphering Neurodegenerative Disorders - Edinburgh, Scotland, Great Britain. "α-Synuclein Amyloids Bind To Prion Protein to Facilitate Cell Entry, Cell-To-Cell Spreading And Inhibit Prion Replication"
September 13, 2017	Plenary Lecture at the XXVI Congresso Nazionale della Società Chimica Italiana. Centro Congressi Hotel Ariston, Paestum (SA), 10-14 September 2017. "Of Prions and Other Tales"
October 20, 2017	Keynote Lecture at the Melbourne 2017 Asia Pacific Prion Symposium. Organized by the Asian Pacific Society of Prion Research. October 20th – 21st, Ian Potter Auditorium, Kenneth Myer Building University of Melbourne, Parkville, Melbourne, Australia. "Synthetic prions: successes and contentions"
November 27, 2017	Invited Lecture at the Biomedicum Helsinki Seminar Series. University of Helsinki, Helsinki, Finland. "Prion diseases: from scrapie to CWD – Molecular biology of prion protein and prions"

	http://lpb.sissa.it/prion-diseases-scrapie-cwd-giuseppe-legname-helsinki-27112017
January 12, 2018	Invited Lecture at the Ciclo di Conferenze Scientifiche "Black Fridays" at the Fondazione IRCCS Istituto Neurologico Carlo Besta, Milano. “Synthetic prions: successes and contentions”
May 25, 2018	Selected Speaker at PRION 2018 International Congress, Santiago de Compostela, Spain, May 22-25, 2018. “Serpina3n plays a critical role in prion infection”
June 27, 2018	Invited Speaker at the KeyLab International Workshop on "Recent computational and experimental advances in molecular medicine", Ho Chi Minh City, Vietnam, June 27-29, 2018. “Replacement of residue H95 with charged amino acids in the prion protein decreases prion conversion propensity”
October 11, 2018	Invited Lecture at Hanyang University, Seoul, South Korea. “Prion Biology and Disease”
November 14, 2018	Invited Speaker at CJD Foundation Family Forum, Burlingame, CA, USA
November 15, 2018	Invited Lecture at the Institute for Neurodegenerative Diseases, University of California San Francisco @ Mission Bay, San Francisco, USA. “Serpina3n plays a critical role in prion infection”
August 18-24, 2019	Invited Speaker at the International Seminars on Planetary Emergencies. 52nd Session: Science for Peace the World Over. Session on: Research on Neurodegeneration And Dementia; Chair A. Zichichi – Co-chair B. Ghetti. ERICE, Sicily, Italy. “Prion and prion-like disorders: from physiological functions to mechanisms of pathogenesis”
December 13, 2019	Invited Lecture at the Forschungszentrum Jülich GmbH, Jülich, Germany. “Prions and Prion Diseases: A Journey of Scientific Discovery”
January 17, 2020	Invited Lecture at the Dipartimento di Farmacologia e Biotecnologie, University of Bologna. “A novel approach for the treatment of prion diseases through enhanced clearance”
May 21, 2020	Invited Virtual Lecture at the Italian Institute of Technology (Fondazione Istituto Italiano di Tecnologia). “Biology of mammalian prions”.
November 3, 2020	Invited Virtual Lecture at the PreHealthShadowing student conference (www.prehealthshadowing.com). “Molecular biology of prions”.
September 20, 2021	Invited Lecture at the Dipartimento di Scienze del Farmaco e della Salute, University of Catania. “A novel approach for the treatment ofneurodegenerative diseases through enhanced clearance of pathological proteins”

September 27, 2021 Invited Speaker at the Flagship Workshop Innovative strategies for neurodegenerative diseases: a perspective from molecular simulation, machine learning and experiment on September, 27 – 29, 2021. Scuola Normale Superiore, Pisa, Italy.

October 29, 2021 Invited Speaker at the 56° Congresso AINPeNC Associazione Italiana Neuropatologia e Neurobiologia Clinica 46° Congresso AIRIC Associazione ItalianaRicerca Invecchiamento Cerebrale, Virtual Conference. Trieste, 28-30 Ottobre 2021. “Enhanced clearance strategies for neurodegenerative diseases”.

November 1, 2021 Invited Speaker at the Chemistry and Biochemistry Seminar at University of California, Santa Cruz. “Single substitution of Histidine 95 by Tyrosine at non-OR copper-binding site of prion protein causes spontaneous neurodegeneration in transgenic mice”.

September 23, 2022 Trieste NEXT – Fetival della Ricerca Scientifica – Invecchiamento e Neurodegenerazione: Limiti e Prospettive. 23 Settembre 2022, Piazza Unita’ d’Italia, Trieste.

November 26, 2022 Invited Speaker - incontro di aggiornamento e comunicazione con le associazioni Ricerca di Base, Diagnosi e Terapia nelle Malattie da Prioni, Sabato 26 Novembre 2022 Centro Interdipartimentale di Scienze Mediche (CISMED) Università di Trento Via S. Maria Maddalena 1, Trento (TN)

Memberships and Associations

AAAS American Association for the Advancement of Science
ACS American Chemical Society
ASBMB American Society for Biochemistry and Molecular Biology
SINS Società Italiana di Neuroscienze
The Biochemical Society
The Protein Society

Most Significant Publications (since 2000):

G.Legname, B.Seddon, M.Lovatt, P.Tomlinson, N.Sarner, M.Tolaini, K.Williams, T.Norton, D.Kioussis, R. Zamoyska (2000) Inducible expression of a p56Lck transgene reveals a central role for Lck in the differentiation of CD4 SP thymocytes. Immunity 12(5), 537-546.

B.Seddon, **G.Legname**, P.Tomlinson, and R.Zamoyska (2000) Long-term survival but impaired homeostatic proliferation of naïve T cells in the absence of $p56^{lck}$. Science 290(5489), 127-131.

D.Peretz, R.A.Williamson, K.Kaneko, J.Vergara, E.Leclerc, G.Schmitt-Ulms, I.R.Mehlhorn, **G.Legname**, M.R.Wormald, P.M.Rudd, R.A.Dwek, D.R.Burton, S.B.Prusiner (2001) Antibodies inhibit prion propagation and clear cell cultures of prion infectivity. Nature 412(6848), 739-743.

G.Schmitt-Ulms, **G.Legname**, M.A.Baldwin, H.L.Ball, N.Bradon, P.J.Bosque, K.L.Crossin, G.M. Edelman, S.J. DeArmond, F.E.Cohen, S.B.Prusiner. (2001) Binding of neural cell adhesion molecules (N-CAMs) to the cellular prion protein. J. Mol. Biol. 314(5), 1209-1225.

I.V.Baskakov, **G.Legname**, M.A.Baldwin, S.B.Prusiner, F.E.Cohen (2002) Pathway complexity of prion protein assembly into amyloid. J Biol. Chem. 277(24), 21140-21148.

C.Ryou, S.B.Prusiner, **G.Legname** (2003) Cooperative binding of dominant-negative prion protein to kringle domains. J. Mol. Biol. 329(2), 323-333.

G.Legname, I.V.Baskakov, H.-O.B.Nguyen, D.Riesner, F.E.Cohen, S.J.DeArmond, S.B.Prusiner (2004) Synthetic mammalian prions. Science 305, 673-676.

G.Legname, H.-O.B.Nguyen, I.V.Baskakov, F.E.Cohen, S.J.DeArmond, S.B.Prusiner (2005) Strain-specified characteristics of mouse synthetic prions. Proc. Natl. Acad. Sci. USA 102, 2168-2173.

J.Kanaani, S.B.Prusiner, J.Diacovo, S.Baekkeskov, **G.Legname** (2005) Recombinant prion protein induces rapid polarization and development of synapses in embryonic rat hippocampal neurons *in vitro*. J.Neurochem. 95, 1373-1386.

G.Legname, H.-O.B.Nguyen, D.Peretz, F.E.Cohen, S.J.Dearmond, S.B.Prusiner. (2006) Continuum of prion protein structures enciphers a multitude of prion isolate-specified phenotypes. Proc. Natl. Acad. Sci. U S A 103(50): 19105-10.

D.W.Colby, J.Zhang, S.Wang, D.Groth, **G.Legname**, D.Reisner, S.B.Prusiner (2008) Prion detection by amyloid seeding. Proc Natl Acad Sci U S A 2008 Feb 5; 105(5):1774.

D.W.Colby, K.Giles, **G.Legname**, H.Wille, I.V.Baskakov, S.J.DeArmond, S.B.Prusiner (2009) Design and construction of diverse mammalian prion strains. Proc Natl Acad Sci U S A. 2009 Dec 1; 106(48):20417-22. Epub 2009 Nov 13.

D.W.Colby, R.Wain, I.V.Baskakov, **G.Legname**, C.G.Palmer, H.O.Nguyen, A.Lemus, F.E.Cohen, S.J.DeArmond, S.B.Prusiner (2010) Protease-sensitive synthetic prions. PLoS Pathog. 2010 Jan 22; 6(1):e1000736.

J.Stöhr, J.C.Watts, **G.Legname**, A.Oehler, A.Lemus, H.-O.B.Nguyen, J.Sussman, H.Wille, S.J. DeArmond, S.B.Prusiner, K.Giles (2011) Spontaneous generation of anchorless prions in transgenic mice. Proc Natl Acad Sci U S A, 2011 Dec 27;108(52):21223-8. Epub 2011 Dec 12.

R.N.Abskharon, G.Giachin, A.Wohlkonig, S.H.Soror, E.Pardon, **G.Legname**, J.Steyaert (2014) Probing the N-terminal β-sheet conversion in the crystal structure of the human prion protein bound to a nanobody. J Am Chem Soc. 2014 Jan 22;136(3):937-44. doi: 10.1021/ja407527p. Epub 2014 Jan 8.

L.Gasperini, E.Meneghetti, B.Pastore, F.Benetti, **G.Legname** (2015) Prion protein and copper cooperatively protect neurons by modulating NMDA receptor through S-nitrosylation. Antioxid Redox Signal. 2015 Mar 20;22(9):772-84. doi: 10.1089/ars.2014.6032. Epub 2015 Feb 4. [Epub ahead of print]

U.Slapšak, G.Salzano, L.Amin, R.N.Abskharon, G.Ilc, B.Zupančič, I.Biljan, J.Plavec, G.Giachin, **G.Legname** (2016) The N Terminus of the Prion Protein Mediates Functional Interactions with the Neuronal Cell Adhesion Molecule (NCAM) Fibronectin Domain. J Biol Chem. 2016 Oct 14;291(42):21857-21868.

L.Amin, X.T.Nguyen, I.G.Rolle, E.D'Este, G.Giachin, T.H.Tran, V.Č.Šerbec, D.Cojoc, **G.Legname** (2016) Characterization of prion protein function by focal neurite stimulation. J Cell Sci. 2016 Oct 15;129(20):3878-3891.

S.Aulić, L.Masperone, J.Narkiewicz, E.Isopi, E.Bistaffa, E.Ambrosetti, B.Pastore, E.De Cecco, D.Scaini, P.Zago, F.Moda, F.Tagliavini, **G.Legname** (2017) α-Synuclein Amyloids Hijack Prion Protein to Gain Cell Entry, Facilitate Cell-to-Cell Spreading and Block Prion Replication. Sci Rep. 2017 Aug 30;7(1):10050. doi: 10.1038/s41598-017-10236-x.

G.Legname (2017) Elucidating the function of the prion protein. PLoS Pathog. 2017 Aug 31;13(8):e1006458. doi: 10.1371/journal.ppat.1006458. eCollection 2017 Aug.

I.Prada, M.Gabrielli, E.Turola, A.Iorio, G.D'Arrigo, R.Parolisi, M.De Luca, M.Pacifici, M.Bastoni, M.Lombardi, **G.Legname**, D.Cojoc, A.Buffo, R.Furlan, F.Peruzzi, C.Verderio (2018) Glia-to-neuron transfer of miRNAs via extracellular vesicles: a new mechanism underlying inflammation-induced synaptic alterations. Acta Neuropathol. 2018 Jan 4. doi: 10.1007/s00401-017-1803-x.

E.Meneghetti, L.Gasperini, T.Virgilio, F.Moda, F.Tagliavini, F.Benetti, **G.Legname** (2019) Prions Strongly Reduce NMDA Receptor S-Nitrosylation Levels at Pre-symptomatic and Terminal Stages of Prion Diseases. Mol Neurobiol. 2019 Feb 1. doi: 10.1007/s12035-019-1505-6.

E.De Cecco, L.Celauro, S.Vanni, M.Grandolfo, E.Bistaffa, F.Moda, A.Aguzzi, **G.Legname** (2020) The uptake of tau amyloid fibrils is facilitated by the cellular prion protein and hampers prion propagation in cultured cells. J Neurochem. 2020 May 11. doi: 10.1111/jnc.15040.

C.Scialò, T.H.Tran, G.Salzano, G.Novi, C.Caponnetto, A.Chiò, A.Calvo, A.Canosa, F.Moda, P.Caroppo, V.Silani, N.Ticozzi, A.Ratti, B.Borroni, L.Benussi, R.Ghidoni, G.Furlanis, P.Manganotti, B.Senigagliesi, P.Parisse, R.Brasselet, E.Buratti, **G.Legname** (2020) TDP-43 real-time quaking induced conversion reaction optimization and detection of seeding activity in CSF of amyotrophic lateral sclerosis and frontotemporal dementia patients. Brain Commun. 2020 Sep 14;2(2):fcaa142. doi: 10.1093/braincomms/fcaa142. eCollection 2020.

List of Publications

Original Articles

1) P. Lissoni, M. Resentini, R.Mauri, D.Esposti, D.Rossi, **G.Legname** and F.Fraschini (1986) Effects of tetrahydrocannabinol on melatonin secretion in man. Hormone Metab. Res. 18, 77-8.

2) P.Lissoni, M.Resentini, R.Mauri, C.Demedici, F.Morabito, D.Esposti, L.Di Bella, G.Esposti, D.Rossi, **G.Legname** and F.Fraschini (1986) Effect of an acute injection of melatonin on the basal secretion of hypophyseal hormones in prepubertal and pubertal healthy subjects. Acta Endocrinol. 111, 305-311.

3) Y.M.Galante and **G.Legname** (1988) Purificazione di proteine di mammifero in biotecnologia. Chimica-Oggi 1/2, 67-72.

4) G.Racchetti, R.Comitti, G.Fossati, D.Modena, S.Putignano, P.Gnocchi, **G.Legname** and Y.M.Galante (1988) Strategy for the production of murine monoclonal antibodies to polypeptide hormones and to bacterial toxins. Chimica-Oggi 10, 41-50.

5) E.Nobile-Orazio, E.Francomanno, R.Daverio, M.Carpo, S.Barbieri, P.Marmiroli, E.Manfredini, M.Carpo, M.Moggio, **G.Legname**, L.Baldini and G.Scarlato (1989) Anti-MAG IgM titers in neuropathy associated with macroglobulinemia. Ann. Neurol. 26, 543-550.

6) E.Nobile-Orazio, **G.Legname**, R.Daverio, M.Carpo, A.Giuliani, S.Sonnino and G.Scarlato (1990) Motor neuron disease in a patient with a monoclonal IgMk directed against GM1, GD1b and high molecular weight neural-specific glycoproteins. Ann. Neurol. 28, 190-194.

7) E.Nobile-Orazio, M.Carpo, **G.Legname**, N.Meucci, S.Sonnino and G.Scarlato (1990) Anti-GM1 IgM antibodies in motor neuron disease (MND) and neuropathy. Neurology 40, 1747-1750.

8) **G.Legname**, P.Bellosta, G.Gromo, D.Modena, J.N.Keen, L.M.Roberts and J.M.Lord (1991) Nucleotide sequence of dianthin 30 cDNA: a ribosome inactivating protein from *Dianthus caryophyllus*. Biochem. Biophys. Acta 1090, 119-122.

9) M.R.Hartley, **G.Legname**, R.Osborn, Z.Chen and J.M.Lord (1991) Single chain ribosome inactivating proteins from plants depurinate Escherichia coli 23S ribosomal RNA. FEBS Lett. 290, 65-68.

10) **G.Legname**, G.Gromo, J.M.Lord, N.Monzini and D.Modena (1993) Expression and activity of pre-dianthin 30 and dianthin 30. Biochem. Biophys. Res. Comm. 192, 1230-1237.

11) N.Monzini, **G.Legname**, F.Marcucci, G.Gromo and D.Modena. (1994) Identification and cloning of human chaperonin 10 homologue. Biochem. Biophys. Acta 1218, 478-480.

12) G.Bravi, **G.Legname** and A.W.E. Chan (1995) Substrate recognition by ribosome-inactivating protein studied by molecular modelling and molecular electrostatic potential. J. Mol. Graph. 13, 83-88.

13) A.Bolognesi, P.L.Tazzari, **G.Legname**, F.Olivieri, D.Modena, R.Conte and F.Stirpe (1995) Anti-CD30 immunotoxins with native and recombinant dianthin 30. Cancer Immunol. Immunother. 40, 109-114.

14) M.A.Bonardi, E.Giovanetti, **G.Legname**, G.Fossati, G.Porro, G.Gromo, D.Modena and F.Marcucci (1995) Cochaperonins are histone-binding proteins. Biochem. Biophys. Res. Comm. 206, 260-265.

15) **G.Legname**, G.Fossati, G.Gromo, N.Monzini, F.Marcucci and D.Modena (1995) Expression in Escherichia coli, purification and functional activity of recombinant human chaperonin 10. FEBS Lett. 361, 211-214.

16) **G.Legname**, G.Fossati, N.Monzini, G.Gromo, F.Marcucci, P.Mascagni and D.Modena (1995) Heterologous expression, purification, activity and conformational studies of different forms of dianthin 30. Biomed. Pept. Proteins Nucl. Acids 1, 61-68.

17) G.Fossati, P.Lucietto, P.Giuliani, A.M.R.Coates, S.Harding, H.Coelfen, **G.Legname**, E.Chan, A.Zaliani and P.Mascagni (1995) Mycobacterium tuberculosis chaperonin 10 forms stable tetrameric and heptameric structures: implication for its diverse biological activities. J. Biol. Chem. 270, 26159-26167.

18) **G.Legname**, P.Buono, G.Fossati, N.Monzini, P.Mascagni, D.Modena and F.Marcucci (1996) Evidence for GroES acting as a transcriptional regulator. Biochem. Biophys. Res. Comm. 229, 412-418.

19) S.Fabbrini, E.Rappociolo, D.Carpani, M.Solinas, B.Valsasina, U.Breme, U.Cavallaro, A.Nykjaer, E.Rovida, **G.Legname** and M.Soria (1997) Characterization of a saporin isoform with lower ribosome-inhibiting activity. Biochem. J. 322, 719-727.

20) M.Minto, G.Galli, I.Eberini, **G.Legname**, G.Fossati, D.Modena, F.Marcucci, P.Mascagni, P.Ghezzi, and M.Fratelli (1998) Mycobacterial cpn10 promotes recognition of the mammalian homologue by a mycobacterium-specific antiserum. Biochem. Biophys. Acta 1403, 151-157.

21) **G.Legname**, B.Seddon, M.Lovatt, P.Tomlinson, N.Sarner, M.Tolaini, K.Williams, T.Norton, D.Kioussis, R. Zamoyska (2000) Inducible expression of a p56Lck transgene reveals a central role for Lck in the differentiation of CD4 SP thymocytes. Immunity 12(5), 537-546.

22) I.Lorenzetti, A.Meneguzzi, G.Fracasso, C.Potrich, L.Costantini, E.Chiesa, **G.Legname**, G.Menestrina, G.Tridente, M.Colombatti (2000) Genetic grafting of membrane-acting peptides to the cytotoxin dianthin augments its ability to de-stabilize lipid bilayers and enhances its cytotoxic potential as the component of transferrin-toxin conjugates. Int. J. Cancer 86(4), 582-589.

23) M.A.Basson, T.J.Wilson, **G.A.Legname**, N.Sarner, P.D.Tomlinson, V.L.Tybulewicz and R.Zamoyska (2000) Early growth response (Egr)-1 gene induction in the thymus in response to TCR ligation during early steps in positive selection is not required for CD8 lineage commitment. J. Immunol. 165(5), 2444-2450.

24) B.Seddon, **G.Legname**, P.Tomlinson, and R.Zamoyska (2000) Long-term survival but impaired homeostatic proliferation of naïve T cells in the absence of $p56^{lck}$. Science 290(5489), 127-131.

25) S.Supattapone, T.Muramoto, **G.Legname**, I.Mehlhorn, F.E.Cohen, S.J. DeArmond, S.B. Prusiner, and M.R. Scott (2001) Identification of two prion protein regions that modify scrapie incubation time. J.Virol. 75(3), 1408-1413.

26) E.Leclerc, D.Peretz, H.Ball, H.Sakurai, **G.Legname**, A.Serban, S.B.Prusiner, D.R.Burton, R.A.Williamson (2001) Immobilized prion protein undergoes spontaneous rearrangement to a conformation having features in common with the infectious form. EMBO J. 20(7), 1547-1554.

27) I.V.Baskakov, **G.Legname**, S.B.Prusiner, F.E. Cohen (2001) Folding of prion protein to its native α-helical conformation is under kinetic control. J Biol. Chem. 276(23), 19687-19690.

28) J.R.Requena, D.Groth, **G.Legname**, E.R.Stadtman, S.B.Prusiner, R.L. Levine (2001) Copper-catalyzed oxidation of the recombinant SHa (29-231) prion protein. Proc. Natl. Acad. Sci. USA. 98(13), 7170-7175.

29) D.Peretz, R.A.Williamson, K.Kaneko, J.Vergara, E.Leclerc, G.Schmitt-Ulms, I.R.Mehlhorn, **G.Legname**, M.R.Wormald, P.M.Rudd, R.A.Dwek, D.R.Burton, S.B.Prusiner (2001) Antibodies inhibit prion propagation and clear cell cultures of prion infectivity. Nature 412(6848), 739-743.

30) R.C.Moore, P.Mastrangelo, E.Bouzamondo, C.Heinrich, **G.Legname**, S.B.Prusiner, L.Hood, D.Westaway, S.J.DeArmond, P.Tremblay (2001) Doppel-induced cerebellar degeneration in transgenic mice. Proc. Natl. Acad. Sci. U S A. 98(26), 15288-15293.

31) G.Schmitt-Ulms, **G.Legname**, M.A.Baldwin, H.L.Ball, N.Bradon, P.J.Bosque, K.L.Crossin, G.M. Edelman, S.J. DeArmond, F.E.Cohen, S.B.Prusiner. (2001) Binding of neural cell adhesion molecules (N-CAMs) to the cellular prion protein. J. Mol. Biol. 314(5), 1209-1225.

32) P.J.Bosque, C.Ryou, G.Telling, D.Peretz, **G.Legname**, S.J.DeArmond, S.B.Prusiner (2002) Prions in skeletal muscle. Proc. Natl. Acad. Sci. USA. 99(6), 3812-3817.

33) I.V.Baskakov, **G.Legname**, M.A.Baldwin, S.B.Prusiner, F.E.Cohen (2002) Pathway complexity of prion protein assembly into amyloid. J Biol. Chem. 277(24), 21140-21148.

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