

CURRICULUM VITAE



Personal Information

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Marital Status: Single
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Education

- School of Medicine, University of Catania, Italy 1988-1994.
- Medical degree (MD) from the University of Catania with honours 1994
Title of the thesis: "Neurological study on 120 patients affected by Multiple Sclerosis"
- Licence to practice as a doctor-surgeon at the University of Catania, 1995
- Postgraduate School in Neurology at the University of Verona, Italy, (equivalent to the residency program) 1995-1999.
- Board with honours in Neurology at the University of Verona. Title of the thesis "Role of apoptosis in inflammatory myopathies", 1999
- PhD program in Neuroscience at the University of Verona, 1999-2003
- Research fellow under the Directorship of Valerie Askanas, MD, PhD at the USC Neuromuscular Center, Department of Neurology, University of Southern California Keck School of Medicine, Good Samaritan Hospital, Los Angeles (directed by Prof. W. King Engel and Prof. Valerie Askanas), 2001-2003.
- Fellow at the Department of Neurological and Visual Sciences (now Department of Neurological and Movement Sciences), Section of Clinical Neurology, University of Verona, 2003-2004

- PhD in Neuroscience. 2004. Title of the thesis: “Amyloid beta involvement in inclusion-body myositis” , University of Verona, Italy

Employment

- Assistant professor in Neurology at the Department of Neurological Sciences and Vision, Section of Clinical Neurology, University of Verona, 2005-2007
- Assistant professor in Neurology and clinical neurologist at the Section of Clinical Neurology, Department of Neurological and Movement Sciences, University of Verona, 2007- present
- Participates in the interpretation of diagnostic muscle biopsies at the Laboratory of Neuropathology, Department of Neurological and Movement Sciences, University of Verona
- Performs open muscle biopsies at the Section of Clinical Neurology, Department of Neurological and Movement Sciences, University of Verona

Scientific Activities

I have been involved in the field of muscle disorders from my graduation at the Medical School. At first I attended the Laboratory of Neuropathology directed by Prof. Nicolò Rizzuto where I was focusing on the pathogenesis of idiopathic and HIV-related inflammatory myopathies and particularly, on the pro- and anti-apoptotic signaling pathways that act on T cells. In those years, I have also evaluated the expression of antioxidant agents (manganese superoxide dismutase, copper-zinc superoxide dismutase, reduced glutathione) and of transcription factors (nuclear factor-kappa B and activator protein-1 transcription factor) in mitochondrial diseases.

From February 2001 to January 2003, while doing my PhD program, I was a Research Fellow at the USC Neuromuscular Center of the University of Southern California under the direction of Prof. Valerie Askanas and Prof. W. King Engel. During this period I was involved in scientific projects related to the pathogenesis of sporadic inclusion-body myositis (s-IBM). In particular, I evaluated the expression and possible involvement of the β - and γ -secretases and cystatin C, an endogenous cysteine protease inhibitor, in the processing of amyloid beta precursor protein (A β PP). I have also demonstrated that A β 42 is preferentially deposited in the muscle fibers of patients with s-IBM. Another important contribution related to my demonstrating endoplasmic reticulum stress in s-IBM muscle fibers. Through these studies I gained an experience in several techniques, including immunohistochemistry, immunoblotting, immunoprecipitation, and primary human muscle tissue cultures.

After my return to Italy, I spent three months in the Laboratory of Molecular Biology in the University of Siena directed by Prof. Pallini and Dr. Bini, where I learned 2D (two-dimensional) gel

electrophoresis, and started a fruitful collaboration of proteomic analysis of muscle tissue. My scientific activities are reflected in my bibliography.

Teaching and training experience

- Lectures to medical students
- Lab tutorial and teaching in muscle diseases for students in Medicine (preparation of M.D. dissertation, Italian *laurea*) and graduate students
- Courses in muscle diseases for residents in Neurology
- Training of graduate students: Member of the PhD Program ("*Dottorato di Ricerca*") in Neuroscience.

Fellowships and Membership of Professional Societies

- Research fellowship at the USC Neuromuscular Center, Department of Neurology, University of Southern California Keck School of Medicine, Good Samaritan Hospital, Los Angeles, 2001 -2003
- Visiting researcher at the Laboratory of Functional Proteomics, Department of Molecular Biology, University of Siena
- Member of the Italian Association of Myology (AIM)

Topics of scientific research

- Idiopathic inflammatory myopathies
- Sporadic inclusion body myositis (s-IBM)
- Myofibrillar myopathies
- Brody disease and Brody syndrome
- Mitochondrial diseases

Current research interests

- Identification of muscle specific antigens in patients with dermatomyositis, polymyositis and paraneoplastic myositis
- Involvement of RNAPII-Associated Proteins in muscle diseases
- The pathogenetic mechanism of Brody Disease and Brody Syndrome
- The fate of ragged-red fibers and the mechanisms of mitochondrial proliferation in mitochondrial diseases

Organizational activity

- Local organizer of the IX National Meeting of AIM (Italian Association of Myology), Verona, 13-15 June 2009.

Invited speaker

Immunobiology of muscle *XVII AINI Congress (Italian Society of Neuroimmunology) – XLIII AINP Congress (Italian Association of NeuroPathology) - XXXIII AIRIC Congress (Italian Association for Research on Brain Aging)*, Verona, 30 September - 3 October 2007

Inflammatory myopathies *5th Mediterranean Neuroscience Congress - 10th Etnean Epilepsy Workshop*, Catania, 26-29 September 2007

Neurological aspects of Pompe Disease (also called Glycogen Storage Disease type II) *XLVII SNO Congress (Scienze Neurologiche Ospedaliere)*, Turin, 14-17 November 2007

Mitochondrial diseases *6th Mediterranean Neuroscience Congress - 11th Etnean Epilepsy Workshop*, Catania, 5-8 October 2008

Proteomic analysis in inflammatory myopathies *IX National Meeting of AIM (Italian Association of Myology)*, Verona, 13-15 June 2009

Muscle biopsy findings in idiopathic inflammatory myopathies. *XLVII SIR Congress (Società Italiana di Reumatologia)*, Rimini, 24-27 November 2010

Dermatomyositis and Polimyositis *Updates on Neuromuscular disorders*, Brescia, 18 February 2011

Proteomic analysis in idiopathic inflammatory myopathies Montreal, 20 May 2011

Brody Disease: insights into biochemical features of SERCA1 and identification of a novel mutation Baltimore, 12 September 2012

Necrotizing immune myopathy Los Angeles, 18 September 2012

Get lost in the pathogenesis of muscle diseases Warsaw, 14 November 2013

Bibliography

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2. Richelli S., Buono R., Ferrari S., **Vattemi G.**, Monaco S. (2015). Acute inflammatory demyelinating polyneuropathy as a manifestation of chronic lymphoproliferative disorder of NK cells. *Neurological Sciences*, 2015 Mar 11. [Epub ahead of print]
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6. Rossi D., Vezzani B., Galli L., Paolini C., Toniolo L., Pierantozzi E., Spinozzi S., Barone V., Pegoraro E., Bello L., Cenacchi G., **Vattemi G.**, Tomelleri G., Ricci G., Siciliano G., Protasi F., Reggiani C., Sorrentino V. (2014). A mutation in the CASQ1 gene causes a vacuolar myopathy with accumulation of sarcoplasmic reticulum protein aggregates. *Human Mutation*, vol. 35; p. 1163-70
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