

CURRICULUM VITAE

Personal details

Name Cotrufo Tiziana
Place of birth Taranto (Italy)
Nationality Italian
E-mail tcotrufo@ub.edu
tiziana.cotrufo@univr.it
Work addresses -Department of Cell Biology, Physiology and Immunology, Faculty of Biology, University of Barcelona, Av.Diagonal 643, 08028 Barcelona, Spain.
-Department of Neurosciences, Biomedicine and Movement Sciences, Anatomy and Histology Section, University of Verona, Strada Le Grazie 8, 37134 Verona, Italy

ACADEMIC EDUCATION/QUALIFICATION

2013 **Favourable report issued by AQU** (Agència per a la Qualitat del Sistema Universitari de Catalunya) for tenure-track Lecturer Qualification in Spain.
2012 **Favourable report issued by ANECA** (Agencia nacional de evaluación de la calidad y acreditación) for public or private University Teaching Qualification in Spain.
2000 **Biologist training achievement, Italy.**
1999- 2002 **Ph.D. in Neurobiology** at Scuola Normale Superiore of Pisa, 70/70 cum laude, Pisa, Italy.
1993-1998 **Bachelor degree in Biology** with honours, 110/110 cum laude, University of Pisa, Italy.
1988-1993 **Baccalaureate**, Liceo Scientifico "G. Battaglini", score 60/60 cum laude, Taranto, Italy.

PROFESSIONAL ACTIVITIES/RESEARCH EXPERIENCE

2019 **Assistant Professor, University of Barcelona.**
2017-2018 **Visiting Professor, University of Verona.**
2016 Member of the **Association of Italian Researchers in Spain (ARIS).**
2016 Technical expert of **DNV GL – Business Assurance** for R+D+I certification.
2013-2017 **UNIVERSITY OF BARCELONA, BARCELONA, SPAIN.**
Post-Doctoral Researcher.
2012 Ad hoc Reviewer of **PLoS One.**
2010-2011 **UNIVERSITY COUNCIL OF CATALONIA, GENERALITAT DE CATALUNYA (SPAIN).**
Member of committees for the college entrance tests (PAU): Biology.
2008-2012 **INSTITUTE FOR RESEARCH IN BIOMEDICINE (IRBBARCELONA), SPAIN**
Post-doctoral Researcher
2008 **NATIONAL PUBLIC EDUCATION ADMINISTRATION (ANEP), SPAIN**
Research Project Evaluation- Ad hoc Reviewer.
2006-present **UNIVERSITY OF BARCELONA, BARCELONA, SPAIN**
Assistant Professor
2006- 2008 **UNIVERSITY OF BARCELONA, BARCELONA, SPAIN**
Post-doctoral Researcher
April-July 2004 **SOUTHWESTERN MEDICAL CENTER AND CENTER FOR BASIC NEUROSCIENCE, DALLAS, TEXAS (USA).**
Visiting Scientist
Collaboration project with Dr. Jose Rizo and Dr. Thomas Sudhof.
2004-2006 **PARC CIENTÍFIC DE BARCELONA, SPAIN**
Post-doctoral Researcher
2002- 2004 **UNIVERSITY OF BARCELONA, SPAIN**
Post-doctoral Researcher
1999-2002 **SCUOLA NORMALE SUPERIORE, PISA, ITALY**
Pre and Post-doctoral Researcher

AWARDS AND FELLOWSHIPS

2012 Premi divulga la recerca Marató TV3: https://youtu.be/zr_EiLm2nH4
2003- 2004 Winner of a postdoctoral fellowship "Estancias de Doctores y tecnólogos extranjeros en España". Ministerio de Educación, Cultura y Deporte, Madrid.

2003	Winner of a European selection to attend the ESTRIS master (Esperti per il Trasferimento dell'Innovazione Tecnologica in Sanità: Technological Innovation Transfer Experts in Health), Cittadella della Ricerca, Brindisi.
2002	Boehringer Ingelheim Fonds (B.I.F.) travel grant for Europeans working in Europe and overseas.
2000	The Bruce and Betty Alberts Endowed Scholarship in Physiology: this endowed fund provides support for students participating in the Physiology course at the MBL (Massachusetts, USA).
1999- 2001	Scuola Normale Superiore Scholarship.
1998	Winner of a European selection to attend the Neurobiological Ph.D. program at the Scuola Normale Superiore , Pisa (Italy).
1998	Degree Award for the best students. University of Pisa
1993-1998	University of Pisa Scholarship.

TEACHING EXPERIENCE

2007- present: Degree in Biology, Biomedicine, Biotechnology and Biochemistry at the University of Barcelona:

Neurobiology

Neurobiology laboratory practices. In 2015 and 2016 responsible for coordination.

Cytology laboratory practices

Biology 2 laboratory practices

Cellular Biology laboratory practices

2007-present: Master of Neuroscience;

Cellular and Molecular Biology of Neurons

Advanced techniques in histology and cell engineering

2007- present: Member of PhD and final degree committees, University of Barcelona

2011-present: Supervisor of final degree projects and master's degree thesis in Biology, Biomedicine, Biotechnology and Biochemistry at the University of Barcelona

2011, 2013 Supervisor of 2 PhD thesis

LIST OF PUBLICATIONS

M. Bentivoglio, **T. Cotrufo**, S. Ferrari, C. Tesoriero, S. Mariotto, G. Bertini, A. Berzero, P. Mazzarello. "The original histological slides of Camillo Golgi and his discoveries on neuronal structure" *Front Neuroanat.* 2019

G. Fuschini, **T. Cotrufo***, O. Ros, A. Muhaisen, R.M. Andrés, J. X. Comella and E. Soriano "Syntaxin-1/TI-VAMP SNAREs interact with Trk receptors and are required for neurotrophin-dependent outgrowth" *Oncotarget*, **2018** Nov 13;9(89):35922-35940

O. Ros*, P. Barrecheguren*, **T. Cotrufo***, F. Ulloa, S.J. Araújo, E. Stoeckli, E. Soriano "A conserved role for Syntaxin-1 in pre- and post-commissural midline axonal guidance in fly, chick, and mouse." *Plos Genetics* 2018, Jun 18;14(6):e1007432. doi: 10.1371/journal.pgen.1007432. [Epub ahead of print].

F. Ulloa, **T. Cotrufo**, D. Ricolo, E. Soriano, SJ Araújo. SNARE complex in axonal guidance and neuroregeneration. *Neural Regen Res.* 2018 Mar; 13(3):386-392. doi: 10.4103/1673-5374.228710. Review.

C. Laperchia, Y.Z. Xu, D. Mumba Ngoyi, **T. Cotrufo**, M. Bentivoglio. Neural Damage in Experimental Trypanosoma brucei gambiense Infection: Hypothalamic Peptidergic Sleep and Wake-Regulatory Neurons. *Front Neuroanat.* 2018 Feb 27;12:13. doi: 10.3389/fnana.2018.00013. eCollection 2018.

S. Mariotto, M. Bentivoglio, **T. Cotrufo**, A. Berzero, S. Monaco, P. Mazzarello, S. Ferrari. Clinical Neuropathology image 1-2018: Golgi silver staining, the black reaction. *Clin Neuropathol.* 2018 Jan/Feb;37(1):4-5. doi: 10.5414/NP301087.

F. Roset, J.Urena, **T. Cotrufo**, J. Carreras, P. Pérez de la Ossa, F. Climent. Treatment of rat hearts to be transplanted with FLIP (FADD-like interleukin beta-converting enzyme (FLICE)-like inhibitory protein) decreases apoptosis and total tyrosine phosphorylation levels. *Annals of transplantation*, 2018 Feb 27;23: 144-152.

P.J. Barrecheguren, O. Ros, **T. Cotrufo**, B. Kunz, E. Soriano, F. Ulloa, E.T. Stoeckli, S.J. Araújo. SNARE proteins play a role in motor axon guidance in vertebrates and invertebrates. *Dev Neurobiol.* 2016 Dec 29. doi: 10.1002/dneu.22481.

F. Ulloa, A. Gonzalez-Juncà, D. Meffre, P. Barrecheguren, R. Martinez, I. Pazos, N. N. Olivé, **T. Cotrufo**, J. Seoane, E. Soriano "Blockade of the SNARE protein Syntaxin 1 inhibits glioblastoma tumor growth." *Plos One*, 2015 Mar 24;10(3):e0119707. doi: 10.1371/journal.pone.0119707. eCollection 2015.

O. Ros, **T. Cotrufo**, R. Martínez-Marmol, E. Soriano "Regulation of patterned dynamics of local exocytosis in growth cones by Netrin-1" *Journal of Neuroscience*, 2015 Apr 1;35(13):5156-70. doi: 10.1523/JNEUROSCI.0124-14.2015.

A. La Torre, M. Masdeu, **T. Cotrufo**, R. S. Moubarak, J. A. del Río, J. X. Comella, E. Soriano, J. M. Ureña. "A role for the tyrosine kinas ACK1 in neurotrophin signaling and neuronal extension and branching." *Cell Death & Disease* 2013 Apr 18;4:e602. doi: 10.1038/cddis.2013.99.

T. Cotrufo, R.M. Andrés, O. Ros, F. Pérez-Brangulí, A. Muhaisen, G. Fuschini, R. Martínez, M. Pascual, Comella JX, Soriano E. "Syntaxin 1 is required for DCC/Netrin-1-dependent chemoattraction of migrating neurons from the lower rhombic lip." *Eur J Neurosci*. 2012 Nov; 36(9):3152-64.

K. E. Horn and T. E. Kennedy Putting flesh on the bones: DCC combines membrane insertion with cytoskeletal reorganization to promote chemoattraction (commentary on Cotrufo et al.). *Eur J Neurosci*. 2012 Nov; 36(9):3151

T. Cotrufo, F. Pérez-Brangulí, A. Muhaisen, Ros O, R. Andrés, T. Baeriswyl, G. Fuschini, T. Tarrago, M. Pascual, J. Ureña, J. Blasi, E. Giralt, E. T. Stoeckli, E.Soriano. "A signaling mechanism coupling netrin-1/deleted in colorectal cancer chemoattraction to SNARE-mediated exocytosis in axonal growth cones." *Journal of Neuroscience*, 2011 Oct 12;31(41):14463-80.

Botella-López, I. Cuchillo-Ibáñez, **T. Cotrufo**, S.S. Mok, Q.X. Li, M.S. Barquero, M. Dierssen, E. Soriano, J. Sáez-Valero: "Beta-amyloid controls altered Reelin expression and processing in Alzheimer's disease." *Neurobiology Disease*, 2010 Mar 37(3):682-91.

T. Cotrufo, A. Viegi, L. Mascia, N. Berardi and L. Maffei: "Effects of neurotrophins on synaptic protein expression in the visual cortex of dark reared rats." *Journal of Neuroscience*, 2003, 23 (9), 3566-71.

A. Viegi, **T. Cotrufo**, N. Berardi, L. Mascia and L. Maffei: "Effects of dark rearing on phosphorylation of neurotrophin Trk receptors." *The European Journal of Neuroscience*, 2002, 16, 1925-1930.

L Mascia, **T. Cotrufo**, M. Cappiello, and P. L. Ipata: "Ribose 1-phosphate and inosine activate uracil salvage in rat brain." *Biochim. Biophys. Acta* 1999, 1472 (93-98).

R. Martínez-Mármol, A. Muhaisen, **T. Cotrufo**, F. Pérez-Brangulí, C. Roselló-Busquets, R.M. Andrés, M. Pascual, O. Ros, E.Soriano "Syntaxin 1 is required for UNC5H-mediated Netrin-1 dependent chemorepulsion." In Preparation.

BOOKS AND CHAPTERS

Tiziana Cotrufo "Meravigliosa Mente", Gribaudo Edizioni, 2019

Tiziana Cotrufo "El cerebro y las emociones", Descubrir la ciencia, published by El País in Spain, and "Il cervello e le emozioni", Scoprire la Scienza" published by Hachette in Italy, 2017.

Tiziana Cotrufo "En la mente del niño. El cerebro en sus primeros años", Descubrir la ciencia, published by El País in Spain, and Nella mente del bambino. Il cervello nei suoi primi anni", Scoprire la Scienza" published by Hachette in Italy, 2016.

Viegi and **T. Cotrufo** "La Neurochimica nello studio del sistema visivo." In: "Fisiopatologia del sistema visivo", p. 40-45. Ed. A. Fiorentini, L. Maffei. Primula Edizioni, 2001.

INVITED LECTURES

- "Synaptic transmission" Biotechnology, University of Verona, April, 23, 2018.
- "Synaptic transmission" Biotechnology, University of Verona, March, 23, 2017.
- "Putting flesh on the bones: netrin-1 receptor combines membrane insertion with cytoskeletal reorganization to promote axonal guidance" INN – Open Neuroscience Forum, University of Verona, January 19th, 2018.
- "Role of SNARE proteins in brain development", University of Verona, June 24th, 2016.
- "Atypical SNARE complex in brain development" IDIBELL Seminars, Universitat de Barcelona (Campus Bellvitge), September 26th, 2014.
- "Trophic factors and their signalling mechanisms" Master in Neuroscience, University of Barcelona, October 2006.
- "Netrin 1 in axonal guidance and neuronal migration." Elba Neuronal Migration Meeting, Elba, Italy, September 17-19, 2004.

LANGUAGES

Perfect knowledge of Italian, English, Spanish and Catalan.