

# Lucia Corrado

## *Curriculum vitae*

### **BIO AND EDUCATION**

Academic degrees:

-1996: degree in Biological Sciences, Milan University, Italy.

-2001: PhD degree in Medical genetics, Genova University, Italy

-2011: Specialization degree in Medical Genetics with the score 50/50 cum laude, Pavia University, Italy

Present position: Since 2010 Researcher of Medical Genetics, University of Eastern Piedmont  
Research experiences

1996-2000 PhD student of Medical Genetics, Milan University. 2000-2004 post PhD fellow Milan University,

2004-2008 postdoctoral fellow University of Eastern Piedmont, Novara, Italy working in research project concerning the identification of genetic factors involved in Amyotrophic Lateral Sclerosis susceptibility.

2008-2009 fellow of Italian Associations Amico Canobio Association, Novara working in research projects concerning the identification of genetic factors involved in Amyotrophic Lateral Sclerosis pathogenesis.

2009-2010 training fellowship granted by Italian Multiple Sclerosis Foundation (FISM). Project: "Search for MS associated sequence variations in the HLA class I region by an approach based on massively parallel sequencing of DNA pools"

### **UNIVERSITY CAREER**

2010-2016	Assistant professor, Università del Piemonte Orientale
2004-2010	Postdoc, Università del Piemonte Orientale
2000-2004	Postdoc di ricerca, Università degli studi di Milano

## MAIN FIELDS OF INTEREST

1. Genetics
2. Neurodegenerative disease
3. Genetics of complex diseases
4. Genetic diagnosis

## CURRENT ISSUES OF RESEARCH

- 1) Analysis of genetic factors involved in Amyotrophic Lateral Sclerosis susceptibility

Amyotrophic lateral sclerosis (ALS) is an adult-onset fatal neurodegenerative disorder affecting mainly the motor system. Degeneration of upper and/or lower motor neurons in ALS leads to a progressive and severe muscular weakness with paralysis and death generally occurring within 2-3 years after disease onset because of respiratory failure. Familial forms represent 5-10% of cases, and several causative genes have been identified so far accounting for more than 60% of all inherited forms. Aims of the research activities are:

- 1) identification of causal genetic variants by whole genome sequencing
- 2) identification of susceptibility genetic variants
- 3) identification of disease- modifier variant

## CURRENT FUNDED PROJECTS

PROGRAMME	FUNDED PROJECT
ALSinteractome	High-throughput profiling of the protein interactome of C9ORF72 and ATXN2 repeat expansions in amyotrophic lateral sclerosis

## TOP FIVE PAPERS

1. Smith BN, Ticozzi N, Fallini C, Gkazi AS, Topp S, Kenna KP, Scotter EL, Kost J, Keagle P, Miller JW, Calini D, Vance C, Danielson EW, Troakes C, Tiloca C, Al-Sarraj S, Lewis EA, King A, Colombrita C, Pensato V, Castellotti B, de Bellerocche J, Baas F, ten Asbroek AL, Sapp PC, McKenna-Yasek D, McLaughlin RL, Polak M, Asress S, Esteban-Pérez J, Muñoz-Blanco JL, Simpson M; SLAGEN Consortium, van Rheenen W, Diekstra FP, Lauria G, Duga S, Corti S, Cereda C, Corrado L, Sorarù G, Morrison KE, Williams KL, Nicholson GA, Blair IP, Dion PA, Leblond CS, Rouleau GA, Hardiman O, Veldink JH, van den Berg LH, Al-Chalabi A, Pall H, Shaw PJ, Turner MR, Talbot K, Taroni F, García-Redondo A, Wu Z, Glass JD, Gellera C, Ratti A, Brown RH Jr, Silani V, Shaw CE, Landers JE Exome-wide rare variant analysis identifies TUBA4A mutations associated with familial ALS. *Neuron*. 2014 Oct 22;84(2):324-31. doi: 10.1016/j.neuron.2014.09.027.

2. International Multiple Sclerosis Genetics Consortium (IMSGC), Beecham AH, Patsopoulos NA, Xifara DK, Davis MF, Kempainen A, Cotsapas C, Shah TS, Spencer C, Booth D, Goris A, Oturai A, Saarela J, Fontaine B, Hemmer B, Martin C, Zipp F, D'Alfonso S, Martinelli-Boneschi F, Taylor B, Harbo HF, Kockum I, Hillert J, Olsson T, Ban M, Oksenberg JR, Hintzen R, Barcellos LF; Wellcome Trust Case Control Consortium 2 (WTCCC2); International IBD Genetics Consortium (IIBDGC), Agliardi C, Alfredsson L, Alizadeh M, Anderson C, Andrews R, Søndergaard HB, Baker A, Band G, Baranzini SE, Barizzone N, Barrett J, Bellenguez C, Bergamaschi L, Bernardinelli L, Berthele A, Biberacher V, Binder TM, Blackburn H, Bomfim IL, Brambilla P, Broadley S, Brochet B, Brundin L, Buck D, Butzkueven H, Caillier SJ, Camu W, Carpentier W, Cavalla P, Celius EG, Coman I, Comi G, Corrado L, Cosemans L, Courneau-Rebeix I, Cree BA, Cusi D, Damotte V, Defer G, Delgado SR, Deloukas P, di Sapio A, Dilthey AT, Donnelly P, Dubois B, Duddy M, Edkins S, Elovaara I, Esposito F, Evangelou N, Fiddes B, Field J, Franke A, Freeman C, Frohlich IY, Galimberti D, Gieger C, Gourraud PA, Graetz C, Graham A, Grummel V, Guaschino C, Hadjixenofontos A, Hakonarson H, Halfpenny C, Hall G, Hall P, Hamsten A, Harley J, Harrower T, Hawkins C, Hellenthal G, Hillier C, Hobart J, Hoshi M, Hunt SE, Jagodic M, Jelčić I, Jochim A, Kendall B, Kermode A, Kilpatrick T, Koivisto K, Konidari I, Korn T, Kronsbein H, Langford C, Larsson M, Lathrop M, Lebrun-Frenay C, Lechner-Scott J, Lee MH, Leone MA, Leppä V, Liberatore G, Lie BA, Lill CM, Lindén M, Link J, Luessi F, Lycke J, Macchiardi F, Männistö S, Manrique CP, Martin R, Martinelli V, Mason D, Mazibrada G, McCabe C, Mero IL, Mescheriakova J, Moutsianas L, Myhr KM, Nagels G, Nicholas R, Nilsson P, Piehl F, Pirinen M, Price SE, Quach H, Reunanen M, Robberecht W, Robertson NP, Rodegher M, Rog D, Salvetti M, Schnetz-Boutaud NC, Sellebjerg F, Selter RC, Schaefer C, Shaunak S, Shen L, Shields S, Siffrin V, Slee M, Sorensen PS, Sorosina M, Sospedra M, Spurkland A, Strange A, Sundqvist E, Thijs V, Thorpe J, Ticca A, Tienari P, van Duijn C, Visser EM, Vucic S, Westerlind H, Wiley JS, Wilkins A, Wilson JF, Winkelmann J, Zajicek J, Zindler E, Haines JL, Pericak-Vance MA, Iverson AJ, Stewart G, Hafler D, Hauser SL, Compston A, McVean G, De Jager P, Sawcer SJ, McCauley JL. Analysis of immune-related loci identifies 48 new susceptibility variants for multiple sclerosis. *Nat Genet.* 2013 Nov;45(11):1353-60. doi: 10.1038/ng.2770.
3. Corrado L, Del Bo R, Castellotti B, Ratti A, Cereda C, Penco S, Sorarù G, Carlomagno Y, Ghezzi S, Pensato V, Colombrita C, Gagliardi S, Cozzi L, Orsetti V, Mancuso M, Siciliano G, Mazzini L, Comi GP, Gellera C, Ceroni M, D'Alfonso S, Silani V. Mutations of FUS gene in sporadic amyotrophic lateral sclerosis. *J Med Genet.* 2010 Mar;47(3):190-4. doi: 10.1136/jmg.2009.071027.
4. Corrado L, Ratti A, Gellera C, Buratti E, Castellotti B, Carlomagno Y, Ticozzi N, Mazzini L, Testa L, Taroni F, Baralle FE, Silani V, D'Alfonso S. High frequency of TARDBP gene mutations in Italian patients with amyotrophic lateral sclerosis. *Hum Mutat.* 2009 Apr;30(4):688-94. doi: 10.1002/humu.20950.
5. Riva P, Corrado L, Natacci F, Castorina P, Wu BL, Schneider GH, Clementi M, Tenconi R, Korf BR, Larizza L. NF1 microdeletion syndrome: refined FISH characterization of sporadic and familial deletions with locus-specific probes. *Am J Hum Genet.* 2000 Jan;66(1):100-9.

## **AWARDS**

1. Winner of the 2015 EUA Best Paper