NAME, PLACE AND DATE OF BIRTH
VENTURIN Marco
Milan, 23/06/1973

POSITION
Assistant Professor of Applied Biology (BIO/13) (since 2006)

ORCID ID: 0000-0002-5871-9689
Researcher ID: J-8735-2017
Scopus Author ID: 6506773141

EDUCATION/TRAINING

1999	M.Sc. Biology (University of Milan), field: genomics
2004	Ph.D. Neurology, Psychiatry and Neurogenetics (University of Genoa), field: molecular genetics
2006	Master in Bioinformatics (University of Turin), field: bioinformatics, comparative genomics
2017	National Scientific Qualification as Associate Professor of Applied Biology

POSITIONS AND EMPLOYMENT

2004-2005	Postdoctoral Fellow, University of Milan
2006-present	Assistant Professorof Applied Biology, University of Milan

OTHER EXPERIENCE AND PROFESSIONAL MEMBERSHIPS

2000	1st Bioinformatics Course, European School of Genetic Medicine (European Genetics Foundation sponsored Fellowship)
2003 (Jul-Sept)	EMBO Short Term Fellowship, EMBL Computational Biology Unit, Heidelberg, Germany
2005-present	Member of Italian Association of Biology and Genetics (AIBG)
2009-present	Board of training scientists, Ph.D. School in Biological and Molecular Sciences (University of Milan)
2014 (Sept)	Visiting scientist at CIBIO (Centre for Integrative Biology) of University of Trento in the Laboratory of RNA Biology and Biotechnology (director: dr. Michela A. Denti)
2018-present	Review Editor, Frontiers in Molecular Neuroscience

RESEARCH ACTIVITY
His primary research activity is focused on the understanding of the mechanisms of post-transcriptional regulation of gene expression mediated by RNA-binding proteins and non-coding RNAs (miRNA, lncRNAs), and on their possible involvement in the pathogenesis of cognitive disorders and neurodegenerative diseases (Alzheimer's disease). Further research interests concern the study of the molecular basis underlying human genetic diseases.

RESEARCH SUPPORT
RBFR-0895DC, FIRB (Basic Research Investment Fund) 2008 Grant - MIUR (Italian Ministry of Education, University and Research)
Title: Mechanisms of post-transcriptional regulation of gene expression in dementias
Project duration: 4 years (12/01/2010-11/30/2014)
Role in the project: Scientific coordinator of the Research Unit 2 (University of Milan)
Amount: € 168.200

Research Support Grant 2015, Dept. BioMeTra, University of Milan
Title: The role of transcriptional and post-transcriptional regulation of CDK5R1 expression in aging and Alzheimer's disease
Project duration: 1 year (01/01/2016-12/3/2016)
Role in the project: Principal Investigator
Amount: € 18.000

TEACHING

- Bachelor programmes: Medical Biotechnologies (Bioinformatics, Molecular and cellular methodologies)
- Master programmes: Medical Biotechnology and Molecular Medicine (Molecular and genetic bases of diseases)
- Specialisation Schools: Medical Genetics (Database for medical genetics)

PUBLICATIONS

24 publications in peer-reviewed journals (**6** as a first author, **6** as last/corresponding)
h-index (WOS/Scopus) = **10**
h-index (Google Scholar) = **12**

1. Corrado L.*, Riva P.*, **Venturin M.**, Bentivegna A., Gervasini C. and Larizza L. - Mapping of genes and ESTs assigned to 17q11.2 to a YAC contig centered on the NF1 gene. *Gene Screen*, 1: 21-27, 2000.

2. Bentivegna A., **Venturin M.**, Gervasini C., Corrado L., Larizza L. e Riva P. - FISH with locus-specific probes on stretched chromosomes: a useful tool for genome organization studies. *Chromosome Res,* 9: 167-170, 2001.

3. Bentivegna A.*, **Venturin M.***, Gervasini C., Corrado L., Larizza L. and Riva P. - Identification of duplicated genes in 17q11.2 by using FISH on stretched chromosomes and DNA fibers. *Hum Genet*, 109: 48-54, 2001.

4. Gervasini C.*, Bentivegna A.*, **Venturin M.**, Corrado L., Larizza L. and Riva P. - Tandem duplication of the NF1 gene detected by high-resolution FISH in the 17q11.2 region. *Hum Genet*, 110: 314-321, 2002.

5. **Venturin M**.*, Guarnieri P.*, Natacci F., Stabile M., Tenconi R., Clementi M., Hernandez C., Thompson P., Upadhyaya M., Larizza L. and Riva P. - Mental retardation and cardiovascular malformations are significantly present in NF1-microdeleted patients and point to candidate genes. *J Med Genet*, 41: 35-41, 2004.

6. **Venturin M.***, Gervasini C.*, Orzan F., Bentivegna A., Corrado L., Colapietro P., Friso A., Tenconi R., Upadhyaya M., Larizza L. and Riva P. - Evidence for nonhomologous end joining and non allelic homologous recombination in atypical NF1 microdeletions. *Hum Genet*, 115: 69-80, 2004.

7. Gervasini C., **Venturin M.**, Orzan F., Friso A., Clementi M., Tenconi R., Larizza L. and Riva P. - Uncommon Alu-mediated NF1 microdeletion with a breakpoint inside the NF1 gene. *Genomics,* 85: 273-279, 2005.

8. **Venturin M.,** Bentivegna A., Moroni R., Larizza L. and Riva P. - Evidence by expression analysis of candidate genes for congenital heart defects in the NF1 microdeletion interval. *Ann Hum Genet*, 69: 508–516, 2005.

9. Portera G., **Venturin M**., Patrizi A., Martinoli E., Riva P. and Dalprà L. - Characterization of a non-recurrent familial translocation t(7;9)(q11.23;p24.3) points to a recurrent involvement of the Williams-Beuren syndrome region in chromosomal rearrangements. *J Hum Genet*, 51: 68-75, 2006.

10. **Venturin M.***, Moncini S.*, Villa V., Russo S., Bonati M.T., Larizza L. and Riva P. - Mutations and novel polymorphisms in coding regions and UTRs of CDK5R1 and OMG genes in patients with nonsyndromic mental retardation. *Neurogenetics*, 7: 59-66, 2006.

11. Moncini S.*, Bevilacqua A.*, **Venturin M.**, Fallini C., Ratti A., Nicolin A. and Riva P. - The 3' untranslated region of human Cyclin-Dependent Kinase 5 Regulatory subunit 1 contains regulatory elements affecting transcript stability. *BMC Mol Biol*, 8: 111, 2007.

12. Orzan F.*, Stroppi M.*, **Venturin M.**, Valero M.C., Hernández C. and Riva P. - Breakpoint characterization of a novel NF1 multiexonic deletion case showing expression of the mutated allele. *Neurogenetics*, 9: 95-100, 2008.

13. Salvi A., Sabelli C., Moncini S., **Venturin M.**, Arici B., Riva P., Portolani N., Giulini S.M., De Petro G. and Barlati S. - MicroRNA-23b mediates urokinase and c-met down modulation and a decreased migration of human hepatocellular carcinoma cells. *FEBS J*, 276: 2966-82, 2009.

14. Martinoli E., Zuccotti G.V., Pogliani L., Volonte' M., **Venturin M.**, Fortina P., Ertel A., Redaelli S., Riva P. and Dalpra' L. - A tandem duplication of chromosome 21 in a newborn showing a phenotype inconsistent with Down syndrome. *Am J Med Genet A*, 152A: 1043-5, 2010.

15. Longoni M.*, Moncini S.*, Cisternino M., Morella I.M., Ferraiuolo S., Russo S., Mannarino S., Brazzelli V., Coi P., Zippel R., **Venturin M.** and Riva P. - Noonan Syndrome associate with both a new Jnk-activating familial SOS1 and a de novo RAF1 mutation. *Am J Med Genet A*, 152A: 2176-84, 2010.

16. Moncini S., Salvi A., Zuccotti P., Viero G., Quattrone A., De Petro G., Barlati S., **Venturin M.** and Riva P. - The role of miR-103 and miR-107 in regulation of CDK5R1 expression and in cellular migration. *PLoS ONE* 6(5): e20038, 2011.

17. Zuccotti P.*, Cartelli D.*, Stroppi M.*, Pandini V., **Venturin M.**, Aliverti A., Battaglioli E., Cappelletti G. and Riva P. - Centaurin-α_2 interacts with β-tubulin and stabilizes microtubules. *PLoS ONE* 7(12): e52867, 2012.

18. Moncini S.*, Bedeschi M.F.*, Castronovo P., Crippa M., Calvello M., Garghentino R.R., Scuvera G., Finelli P., **Venturin M.** - ATRX mutation in two adult brothers with non-specific moderate intellectual disability identified by exome sequencing. *Meta Gene*, 1: 102-108, 2013.

19. **Venturin M.***, Carra S.*, Gaudenzi G.*, Brunelli S., Gallo G.R., Moncini S., Cotelli F.* and Riva P.* - ADAP2 in heart development: a candidate gene for the occurrence of Cardiovascular Malformations in NF1 Microdeletion Syndrome. *J Med Genet*, 51: 436-443, 2014.

20. Zuccotti P., Colombrita C., Moncini S., Barbieri A., Lunghi M., Gelfi C., De Palma S., Nicolin A., Ratti A., **Venturin M.*** and Riva P.* - hnRNPA2/B1 and nELAV proteins bind to a specific U-rich element in CDK5R1 3'-UTR and oppositely regulate its expression. *BBA-Gene Regul Mech*, 1839: 506-516, 2014.

21. Moncini S., Castronovo P., Murgia A., Russo S., Bedeschi M.F., Lunghi M., Selicorni A., Bonati M.T., Riva P. and **Venturin M.** - Functional characterization of CDK5 and CDK5R1 mutations identified in patients with Non-Syndromic Intellectual Disability. *J Hum Genet*, 61: 283-293, 2016.

22. Riva P., Ratti A. and **Venturin M.** - The long non-coding RNAs in neurodegenerative diseases: novel mechanisms of pathogenesis. Review. Curr Alzheimer Res, 13: 1219-1231, 2016.

23. Moncini S., Lunghi M., Valmadre A., Grasso M., Del Vescovo V., Riva P., Denti M.A. and **Venturin M.** - The miR-15/107 family of microRNA genes regulates CDK5R1/p35 with implications for Alzheimer's disease pathogenesis. Mol Neurobiol, 54: 4329-4342, 2017.

24. Spreafico M., Grillo B., Rusconi F., Battaglioli E. and **Venturin M.** - Multiple layers of CDK5R1 regulation in Alzheimer's disease implicate long non-coding RNAs. *Int J Mol Sci*, 19(7): E2022, 2018.