

Vincenzo A. Gennarino, Ph.D.
Assistant Professor, Department of Genetics & Development
Columbia University Irving Medical Center

1) Date of preparation of CV: March, 2026

2) Academic Appointments, Hospital Appointments, and Other Work Experience

Jan 2022– *Faculty member*, Columbia RNA Initiative, Columbia University Irving Medical Center, New York, NY, USA

Jan 2021– *Faculty member*, The Edward P. Evans Center for Myelodysplastic Syndrome (MDS), Columbia University Irving Medical Center, New York, NY, USA

Jan 2019– *Faculty member*, Initiative for Columbia Ataxia and Tremor (ICAT), Columbia Irving University Medical Center, New York, NY, USA

Jan 2019– *Faculty member*, Columbia Stem Cell Initiative, Columbia University Irving Medical Center, New York, NY, USA

Jan 2018– *Assistant Professor*, Department of Genetics and Development, Columbia University Irving Medical Center, New York, NY, USA

3) Education

Jan 2006–Jun 2009: Ph.D. in Medical Genetics, Telethon Institute of Genetics and Medicine (TIGEM) with the Second University of Naples, Italy.
Thesis title: HOCTAR: a new approach for miRNA target prediction.
Advisor: Sandro Banfi, MD

Sept 2000–Dec 2005: M.S. in Biological Sciences, *summa cum laude*, Department of Biology & Development, University of Palermo.
Thesis title: DNA analysis of *Actinomyces* strains producing molecules with antibiotic activity against *Mycobacterium* MDR.
Advisor: Fara Misuraca, PhD, Department of Biology & Development, University of Palermo. *Co-Advisors:* Fabrizio Vitale, DVM and Stefano Reale, PhD, Experimental Zooprophyllactic Institute of Sicily.

4) Training

Jul 2010–Dec 2017: *Postdoctoral Associate*, Department of Molecular and Human Genetics at Baylor College of Medicine and the Jan and Dan Duncan Neurological Research Institute at Texas Children’s Hospital, Houston, Texas. Advisor: Huda Y. Zoghbi, MD

Jan 2005–Dec 2006: *Bioinformatics Research Fellow*, Telethon Institute of Genetics and Medicine (TIGEM) University of Milan. Advisors: Elia Stupka, PhD and Graziano Pesole, PhD

Jan 2003–Oct 2005: Research assistant, Experimental Zooprophyllactic Institute of Sicily, with Fabrizio Vitale, DVM and Stefano Reale, PhD

Jan 2003–Dec 2004: *Manager*, Chemical Analysis Laboratory at Calatrasi Domaine Neferis S.A. Winery, Tunis, Tunisia; won Premiere Cru for the “Selian Carignan” in 2004

5) Explanation of any gaps in work/training/education: N/A

6) Licensure and Board Certification: N/A

7) Honors & Awards

- 2026 *Invited Keynote Speaker*, SISSA, Trieste, Italy. March Symposium with The Word Academy of Sciences – for the advancement of science in developing countries (TWAS), UNESCO and TITO
- 2025 CSCI Seed Fund Competition, CUIMC
- 2023 NIH T32 Trainee-Invited Speaker, Department of Biochemistry and Biophysics (DBB), University of Rochester Medical Center, Rochester, NY, USA
- 2023 Invited Plenary Session Keynote Speaker at 148th Annual Meeting of the American Neurological Association, Philadelphia, PA, USA
- 2022 Academic Keys *Who’s Who in Medicine Higher Education*
- 2022 TIGER Grant Award from the Taub Institute, CUIMC
- 2021 TIGER Grant Award from the Taub Institute, CUIMC
- 2021 Precision Medicine Mouse Models of Human Disease Pilot Awards
- 2021 CSCI Seed Fund Competition, CUIMC
- 2020 Precision Medicine Mouse Models of Human Disease Pilot Awards
- 2020 Nominated for the Young Investigator 2020 Innovators in Science Award in Rare Diseases (Takeda Pharmaceutical Company and New York Academy of Science)
- 2019 Keynote Speaker at the 8th Neapolitan Brain Group Meeting, Naples, Italy, December 12
- 2018 Paul A. Marks Scholar, Columbia University Vagelos College of Physicians and Surgeons, New York, NY, USA

- 2018 “Hot chair” travel award (invited speaker) to the 7th Ataxia Investigators Meeting (AIM), April 1-5, Philadelphia, PA
- 2018 Young Investigator Research Grant 2018, The National Ataxia Foundation. “Delineating the PUM1 functional network in mice and humans.”
- 2018 NARSAD Young Investigator Award 2018, The Brain & Behavior Research Foundation. “PUMILIO1 mutations cause two new neurological disorders understanding its role in Mice and Humans.”
- 2017 Young Investigator Research Grant 2017, The National Ataxia Foundation. “*PUMILIO1* deficiency understanding a new ataxia gene and its role in cerebellar dysfunction in mice and humans.”
- 2016 Best Speaker Prize, 6th Ataxia Investigators Meeting (AIM) at Caribe Royale, April 1, Orlando, Florida
- 2016 “Hot Chair” travel award to attend the 6th Ataxia Investigators Meeting (AIM) at Caribe Royale, March 29-April 1, Orlando, Florida
- 2016 First prize, “Best Paper” in the Department of Molecular and Human Genetics, Baylor College of Medicine Retreat, January 14-15, Galveston, TX
- 2015 Winner, “Scientific Storytelling,” Pediatric Research & Fellows’ Symposium, March 26, Department of Pediatrics, Texas Children’s Hospital, Houston, TX
- 2012 National Scientific Qualification as Associate Professor in Experimental Biology, Ministry of Education, Universities and Research (MIUR), Italy
- 2009 Invited “Young speaker” to Keystone Symposia on Molecular and Cellular Biology – The Biology of RNA Silencing Meeting, April 25-30, Victoria British Columbia, Canada
- 2007 One of 150 applicants selected to attend “Advanced Topics in Molecular Medicine,” July 15-18, at AREA Science Park (CBM-CEI) in Trieste, Italy.
- 2007 One of 100 applicants selected to attend the Accademia Nazionale dei Lincei Meeting, “The world of small non-coding RNAs,” June 11-12, Rome, Italy.
- 2006 Early Researcher Career Development Award provided by the Italian Ministry of Education, Universities and Research (MIUR) at the University of Milan
- 2005 Early Researcher Career Development Award provided by the Italian Ministry of Education, Universities and Research (MIUR) at the University of Milan
- 2004 Won Premier Cru for the wine “Selian Carignan.”

8) Administrative Leadership and Academic Service.

- 2026– *Reviewer*, Cellular and Molecular Biology of Neurodegeneration Study Section (CMND), NIH, Study Section, USA
- 2025– *Reviewer*, Pre-Doctoral Fellowship to Promote Diversity in Ataxia Research, National Ataxia Foundation, USA
- 2025– *Reviewer*, Graduate Research Fellowship, National Ataxia Foundation, USA

- 2025– *Reviewer*, Post Doctoral Fellowship, National Ataxia Foundation, USA
- 2025– *Reviewer*, Early Career Investigator Award, National Ataxia Foundation, USA
- 2025– *Reviewer*, Pioneer SCA Translational Research Awards, National Ataxia Foundation, USA
- 2024– *Reviewer*, Telethon Foundation, Telethon Institute of Genetics and Medicine for Telethon Multiround Research Projects, Italy.
- 2024– *Reviewer*, Telethon Foundation, Telethon Institute of Genetics and Medicine for Biomedical Research on Rare Genetic Diseases Grants Program, Italy
- 2023– *Reviewer*, Columbia Precision Medicine Joint Pilot Grants Program, CUIMC, NY
- 2023 *Reviewer*, Research Seed Money Awards, National Ataxia Foundation, USA
- 2023– *Reviewer*, Myelodysplastic Syndromes Pilot Awards, Herbert Irving Comprehensive Cancer Center (HICCC), CUIMC, NY
- 2022– *Member*, Ataxia Global Initiative (AGI) Working Group on Clinical Outcome Assessments (COAs) and Registries, Institute of Medical Genetics and Applied Genomics, Tübingen, Germany
- 2022– *Reviewer*, United States – Israel Binational Science Foundation (BSF), Israel
- 2022– *Reviewer*, supplemental funding for mouse models of human disease, Columbia Precision Medicine Initiative, CUIMC, NY
- 2022– *Member*, Review Panel, PURA Syndrome Cure Roadmap – Jack’s Tomorrow, NY
- 2022 *Reviewer*, Florida Department of Health Ed and Ethel Moore Alzheimer’s Disease Research Program 22-23, Peer Review-Alzheimer’s Disease Panel
- 2021– *Course Director*, Ethics and Policy of Scientific Research, Columbia University Irving Medical Center, NY
- 2021– *Advisory Board*, *STAR Protocols* Cell Press
- 2021– *Director*, Genetics & Developmental Seminar Series, Dept. Dept. of Genetics & Development, CUIMC, NY
- 2020– *Organizer*, Genetics & Developmental Department Retreat, CUIMC, NY
- 2020 *Reviewer*, Pioneer SCA Translational Research Awards, National Ataxia Foundation, USA
- 2020– *Reviewer*, Young SCA Investigator and Post-doctoral Awards, National Ataxia Foundation, USA
- 2020 *Co-organizer*, Ethics and Policy of Scientific Research, Columbia University Irving Medical Center, NY
- 2018 *Reviewer*, Scientific Board of the 8th Neapolitan Brain Group Meeting, Naples, Italy
- 2018– *Member*, Graduate student admissions committee for Genetics & Development,

MD/PhD, Biochemistry, Umbrella and Biomedical Sciences PhD programs at
CUIMC, NY, USA

- 2018 *Reviewer*, AIRETT Onlus Associazione Italiana RETT Syndrome
- 2018 *Judge*, Postdoc Research Symposium, CUIMC, NY
- 2016– *Member*, selection committee for the Paola Campese Award, Italian Scientists and Scholars of North America
- 2016 *Member*, Italian Scientists and Scholars of North America Award
- 2011 *Member*, Italian Ministry of Education Universities and Research

9) Professional Organizations and Societies:

Memberships and Positions: RNA Society; American Neurological Association

Journal Reviewer:

<i>Neuron</i>	<i>Science Translational Medicine</i>
<i>Journal of Clinical Investigation (JCI)</i>	<i>EMBO J</i>
<i>PLOS Biology</i>	<i>Molecular Cell</i>
<i>Genome Research</i>	<i>American Journal of Medical Genetics</i>
<i>Nucleic Acid Research (NAR)</i>	<i>American Journal of Human Genetics</i>
<i>Cell Genomics</i>	<i>Cell Reports</i>
<i>eLife</i>	<i>Aging</i>
<i>PNAS</i>	<i>BMC Developmental Biology</i>
<i>BMC Genomics</i>	<i>Human Molecular Genetics</i>
<i>Parkinsonism & Related Disorders</i>	<i>Cells</i>
<i>Cardiovascular Research</i>	<i>Molecular Therapy (Cell Press)</i>
<i>npj Parkinson's Disease</i>	<i>npj Laboratory Investigation</i>
<i>Human Mutations</i>	<i>Oncotarget</i>
<i>Jour. of Pediatric Neurol. & Neurosc.</i>	<i>Cellular and Molecular Life Sciences</i>
<i>Gene</i>	<i>STAR Protocols (Cell Press)</i>
<i>Bioinformatics</i>	<i>Evolution & Development</i>

11) Educational Contributions:

Direct Teaching

Columbia University Irving Medical Center

2020– Lecturer, Advanced Eukaryotic Molecular Genetics (GEND 4050)

2018– Lecturer and Course Director, Research Ethics, CUIMC (G4010/CMBS)

2018– Lecturer, Genetics Approach to Biological Problems I (GEND 6210),

2018– Lecturer, Genetics Approach to Biological Problems II (GEND 6211)

12) Report of Clinical and Public Health Activities and Innovations: N/A

13) Patents and Inventions

- 2022 **Vincenzo A. Gennarino**, Salvatore Botta, Alexei Chemiakine. High Resolution 3D Imaging of Neurons. IR CU22200. Licensing Contact: Jerry Kokoshka.
http://innovation.columbia.edu/technologies/CU22200_high-resolution-3d-imaging-of
- 2020 Huda Y. Zoghbi, Larissa Nitschke, **Vincenzo A. Gennarino**, Ambika Tewari.
MiR760 regulates ATXN1 levels via interaction with its 5' untranslated region

14) Publications in reverse chronology

Indicate with an asterisk (*) all senior author publications.

Submitted

Yu T, Yoon J, Zhu Y, Li A, Lee BJ, Moakley DF, Duan J, Deng Q, Hou F, Yan M, **Gennarino VA**, Zhang K, Chen L, Zha S, Zhang C. Primate-specific adaptation of Ku protects transcriptomic integrity by suppressing Alu-mediated alternative splicing. *Science submitted*

Regan-Fendt K, Gehin C, Knerr I, D'Angelo G, **Gennarino VA**. Ceramide Transporter (CerTra) Syndrome. *Gene Reviews Chapter. Invited submission*

Peer-Reviewed Research Publications (journal IF provided; download/citation info provided where available)

- *1. Cabaj M, Mazzara PG, Gaertner ZA, Randolph LK, Roque CG, Feeney S, de Prisco N, Chemiakine A, Wang X, Singh RK, Rajasekaran S, Miles W, Baldwin K, Khurana V, Hengst U, Awatrami R, **Gennarino VA**. Alpha-synuclein abundance and localization are regulated by the RNA-binding protein PUMILIO1. *Cell Reports*, (IF 6.9), 2025 August 13;44(8):116145. (cited 3 times)
2. Wood TWP, Henriques WS, Cullen HB, Romero M, Blengini CS, Sarathy S,

- Sorkin J, Bekele H, Jin C, Kim S, Chmiakine A, Khondker RC, Isola JVV, Stout MB, **Gennarino VA**, Mogessie B, Jain D, Schindler K, Suh Y, Wiedenheft B, Berchowitz L. The retrotransposon-derived capsid genes PNMA1 and PNMA4 maintain reproductive capacity. *Nature Aging (IF 17.0)*, 2025 May;5(5):765-779. (cited 2 times, article downloaded 2291 times on BioRxiv)
- *3. Botta S, de Prisco N, Chmiakine A, Brandt V, Cabaj M, Patel P, Doron-Mandel E, Treadway C, Jovanovic M, Brown N, Soni RK, **Gennarino VA**. Dosage sensitivity to Pumilio1 variants in the mouse brain reflects distinct molecular mechanisms. *EMBO J (IF 13.79)*. 2023 Jun 1;42(11): e112721. (cited 6 times, article downloaded 2780 times, 3889 downloads of previous version on BioRxiv, in top 10% of all research outputs according to Altmetric)
- *4. Gehin C, Lone MA, Lee W, Capolupo L, Ho S, Adeyemi A, Gerkes E, Stegmann APA, López-Martín E, Bermejo-Sánchez E, Martínez-Delgado B, Zweier C, Kraus C, Popp B, Strehlow V, Gräfe D, Knerr I, Jones ER, Zamuner S, Abriata LA, Kunnathully V, Moeller BE, Vocat A, Rommelaere S, Bocquete JP, Ruchti E, Limoni G, Van Campenhoudt M, Schieving JH, Leonardi E, Soli F, Murgia A, Guo H, Zhang Q, Xia K, Fagerberg CR, Bejer CP, Larsen MJ, Valenzuela I, Fernández-Álvarez P, Xiong S, Śmigiel R, López-González V, Armengol L, Morleo M, Selicorni A, Torella A, Blyth M, Cooper NS, Wilson V, Oegema R, Herenger Y, Garde A, Bruel AL, Mau-Them FT, Maddocks AB, Bain JM, Bhat MA, Costain G, Kannu P, Marwaha A, Champaigne NL, Friez MJ, Richardson EB, Gowda VK, Srinivasan VM, Gupta Y, Lim TY, Sanna-Cerchi S, Lemaitre B, Yamaji T, Hanada K, Burke JE, Jakšić AM, McCabe BD, De Los Rios P, Hornemann T[#], D'Angelo G[#], and **Gennarino VA[#]**. *CERT1* mutations perturb human development by disrupting sphingolipid homeostasis. *Journal Clinical Investigation (JCI) (IF 15.9)*. 2023 May 15;133(10): e165019. ([#]Co-Corresponding authors.). (cited 34 times, 5839 downloads, in top 5% of all research outputs according to Altmetric)
- *5. de Prisco N, Ford C, Elrod N, Lee W, Tang L, Huang KL, Lin A, Ji P, Boyle L, Cabaj M, Botta S, Öunap K, Reinson K, Wojcik MH, Rosenfeld JA, Bi W, Tveten K, Prescott T, Gerstner T, Schroeder A, Fong CT, George-Abraham JK, Buchanan CA, Hanson-Khan A, Bernstein JA, Nella AA, Chung WK, Brandt V, Jovanovic M, Targoff K, Yalamanchili HK, Wagner E, **Gennarino VA**. Alternative polyadenylation alters protein dosage by switching between intronic and 3'UTR sites. *Science Advances. (IF 13.6)*. 2023 Feb 17;9(7): eade4814. (cited 28 times downloaded 9243 times; in top 10% of all research outputs according to Altmetric)
6. Hisamori S, Mukohyama J, Sanjay K, Hayashi T, Rothenberg ME, Maeda M, Isobe T, Salazar LEV, Qian X, Johnston DM, Qian D, Lao K, Asai N, Kakeji Y, **Gennarino VA**, Sahoo D, Dalerba P, and Shimono Y. Upregulation of BMI1-suppressor miRNAs (*miR-200c*, *miR-203*) during terminal differentiation of colon epithelial cells. *Journal of Gastroenterology. (IF 6.3)*. 2022 Jun;57(6):407-422.

(cited 11 times)

7. Matrood S, de Prisco N, Wissniowski TT, Wiese D, Jabari S, Griesmann H, Wanzel M, Stiewe T, Neureiter D, Klieser E, Mintziras I, Bucholz M, Bartsch DK, **Gennarino VA** and Di Fazio P. Modulation of pancreatic neuroendocrine neoplastic cell fate by autophagy mediated death. *Journal of Neuroendocrinology*. (IF 4.65). 2021;111(10):965-985. (cited 17 times)
8. Nitschke L, Tewari A, Coffin SL, Xhako E, Pang K, **Gennarino VA**, Johnson JL, Blanco FA, Liu Z, Zoghbi HY. MiR760 regulates ATXN1 levels via interaction with its 5' untranslated region. *Genes & Development* (IF 11.7). 2020 Sep 1;34(17-18):1147-1160. (cited 41 times, in top 5% of all research outputs according to Altmetric)
[See comment by Xie M, Swanson MS, *Genes & Development* 2020 Sep 1;34\(17-18\):1107-1109](#)
9. Uyhazi KE, Yang Y, Liu N, Qi H, Huang XA, Mark W, Weatherbee SD, de Prisco N, **Gennarino VA**, Song X, Lin H. Pumilio proteins utilize distinct regulatory mechanisms to achieve complementary functions required for pluripotency and embryogenesis. *PNAS* (IF 11.1). 2020 Apr 7;117(14):7851-7862. (Downloaded 5337 times, cited 50 times)
10. Suh J, Romano DM, Nitschke L, Herrick SP, DiMarzio BA, Dzhalala V, Bae JS, Oram MK, Zheng Y, Hooli B, Mullin K, **Gennarino VA**, Wasco W, Schmahmann JD, Albers MW, Zoghbi HY, Tanzi RE. Loss of Ataxin-1 potentiates Alzheimer's pathogenesis by elevating cerebral BACE1 transcription. *Cell* (IF 66.85). 2019 Aug 22;178(5):1159-1175.e17. (cited 71 times)
11. De Maio A, Yalamanchili HK, Adamski CJ, **Gennarino VA**, Liu Z, Qui J, Jung SY, Richman R, Orr H, Zoghbi HY. RBM17 interacts with U2SURF and CHERP to regulate expression and splicing of RNA-processing proteins. *Cell Reports* (IF 9.99). 2018 Oct 16;25(3):726-736.e7. (cited 77 times)
- *12. **Gennarino VA**[#], Palmer EE, McDonnell LM, Wang L, Adamski CJ, Koiré A, See L, Chen CA, Schaaf CP, Rosenfeld JA, Panzer JA, Moog U, Hao S, Bye A, Kirk EP, Stankiewicz P, Breman AM, McBride A, Kandula T, Dubbs HA, Macintosh R, Cardamone M, Zhu Y, Ying K, Dias KR, Cho MT, Henderson LB, Baskin B, Morris P, Tao J, Cowley MJ, Dinger ME, Roscioli T, Caluseriu O, Suchowersky O, Sachdev RK, Lichtarge O, Tang J, Boycott KM, Holder JL, and Zoghbi HY[#]. A mild *PUM1* mutation is associated with adult-onset ataxia, whereas haploinsufficiency causes developmental delay and seizures. *Cell* (IF 66.85). 2018 Feb 22;172(5):924-936.e11. (*Co-corresponding authors). (cited 150 times)
[Recommended by T. Hall and A. Durr in F1000Prime. See also comment in *Epilepsy Curr.* 2019 Mar-Apr;19\(2\):122-123.](#)
13. **Gennarino VA**, Alcott CA, Chen CA, Chaudhury A, Rosenfeld JA, Parikh S,

- Wheless JW, Roeder ER, Horovitz DDG, Roney EK, Smith JL, Cheung SW, Li W, Nailson JR, Schaaf CP, Zoghbi HY. NUDT21-spanning CNVs lead to neuropsychiatric disease and altered MeCP2 abundance via alternative polyadenylation. *eLife (IF 7.7)*. 2015 Aug 27;4:e10782. (2686 views, cited 90 times)
14. Han K, Chen H, **Gennarino VA**, Richman R, Lu H, and Zoghbi HY. Fragile X-like behaviors and abnormal cortical dendritic spines in Cytoplasmic FMR1-interacting protein 2-mutant mice. *Human Molecular Genetics (HMG) (IF 5.12)*. 2015 Apr 1;24(7):1813-23. (cited 86 times)
 15. **Gennarino VA**, Singh RK, White JJ, De Maio A, Han K, Kim JY, Jafar-Nejad P, di Ronza A, Kang H, Sayegh LS, Cooper TA, Orr HT, Sillitoe RV and Zoghbi HY. Pumilio1 haploinsufficiency leads to SCA1-like neurodegeneration by increasing wild-type Ataxin1 Levels. *Cell (IF 66.85)*. 2015 Mar 12;160(6):1087-98. (cited 181 times)
[This paper was highlighted in an ALZ forum press release.](#)
 16. Han K[#], **Gennarino VA**[#], Lee Y, Pang K, Hashimoto-Torii K, Choufani S, Raju CS, Oldham MC, Weksberg R, Rakic P, Liu Z, and Zoghbi HY. Human-specific regulation of MeCP2 levels in fetal brains by microRNA miR-483-5p. *Genes & Development (IF 11.7)*. 2013 Mar 1;27(5):485-90. ([#]Co-first authors). (cited 132 times)
[This paper was selected for the journal cover.](#)
 17. **Gennarino VA**, D'angelo G, Dharmalingam G, Fernandez S, Russolillo G, Sanges R, Mutarelli M, Belcastro V, Ballabio A, Verde P, Sardiello M, Banfi S. Identification of microRNA-regulated gene networks by expression analysis of target genes. *Genome Research (IF 11.09)*. 2012 Jun;22(6):1163-72. (cited 226 times)
 - *18. **Gennarino VA**[#], Sardiello M, Mutarelli M, Dharmalingam G, Maselli V, Lago G and Banfi S. HOCTAR database: a unique resource for microRNA target prediction. *Gene (IF 3.91)*. 2011 Jul 1;480(1-2):51-8. ([#]Corresponding author). (cited 71 times)
 19. Karali M, Peluso I, **Gennarino VA**, Bilio M, Verde R, Lago G, Dollé P, Banfi S. miRNeye: a microRNA expression atlas of the mouse eye. *BMC Genomics (IF 4.4)*. 2010 Dec 20;11:715. (cited 196 times)
 20. Licastro D[#], **Gennarino VA**[#], Petrera F, Sanges R, Banfi S[§] and Stupka E[§]. Promiscuity of enhancer, coding and non-coding transcription functions in ultraconserved elements. *BMC Genomics (IF 4.4)*. 2010 Mar 4;11:151. ([#]Co-first author). (cited 39 times)
 21. Grillo G, Turi A, Licciulli F, Mignone F, Liuni S, Banfi S, **Gennarino VA**, Horner

DS, Pavese G, Picardi E, Pesole G. UTRdb and UTRsite (release 2010): a collection of sequences and regulatory motifs of the untranslated regions of eukaryotic mRNAs. *Nucleic Acids Research (IF 14.9)*. 2010 Jan;38 (Database issue):D75-80. (cited 371 times, in top 25% of all research outputs by Altmetric)

22. Sardiello M, Palmieri M, di Ronza A, Medina DL, Valenza M, **Gennarino VA**, Di Malta C, Donaudy F, Embrione V, Polishchuk RS, Banfi S, Parenti G, Cattaneo E, Ballabio A. A gene network regulating lysosomal biogenesis and function. *Science (IF 63.71)*. 2009 Jul 24;325(5939):473-7. (cited 2884 times, downloaded 7,163 times, in top 5% of all research outputs according to Altmetric)

[This paper was Recommended by S. Di Donato in F1000Prime.](#)

23. **Gennarino VA**, Sardiello M, Avellino R, Meola N, Maselli V, Anand S, Cutillo L, Ballabio A and Banfi S. MicroRNA target prediction by expression analysis of host genes. *Genome Research (IF 11.09)*. 2009 Mar;19(3):481-90. (cited 228 times, downloaded 5,696 times)

Peer-Reviewed Methods Publications

- *24. Botta S, Chemiakine A, and **Gennarino VA**. Dual antibody strategy for high-resolution imaging of murine Purkinje cells and their dendrites across multiple layers. *STAR Protocols Cell Press*, 10;3(2):101427, June 10, 2022. (cited 4 times)
- *25. de Prisco N, Chemiakine A, Lee W, Botta S, and **Gennarino VA**. Protocol to assess the effect of disease-driving variants on mouse brain morphology and primary hippocampal neurons. *STAR Protocols Cell Press*, 15;3(2):101244, March 17, 2022. (cited 14 times)
- *26. Wang Q, de Prisco N, Tang J, and **Gennarino VA**. Protocol for recording epileptiform discharges of EEG and behavioral seizures in freely-moving mice. *STAR Protocols Cell Press*, Mar 14;3(2):101245, March 17, 2022. (cited 7 times)
- *27. de Prisco N, Botta S, Lee W, Rezazadeh S, Chemiakine A, and **Gennarino VA**. Determining the effects of loss of function mutations in human cell lines. *STAR Protocols Cell Press*, Mar 15;3(2):101232, March 17, 2022. (cited 3 times)
- *28. Lee W, de Prisco N, **Gennarino VA**. Identifying patients and assessing variant pathogenicity for an autosomal dominant disease-driving gene. *STAR Protocols Cell Press*, Feb 2;3(1):101150, February 3, 2022. (cited 6 times)

Reviews, Chapters, Monographs, Editorials

29. Klockgether T, Synofzik M, & AGI Working Group and Registries. Consensus Recommendations for Clinical Outcome Assessments and Registry Development in Ataxias: Ataxia Global Initiative (AGI) Working Group Expert Guidance. *The Cerebellum (IF 3.5)*, 2023 Apr 5. doi: 10.1007/s12311-023-01547-z. (cited 15 times)

30. Öz G, Coccozza S, Henry PG, Lenglet C, Deistung A, Faber J, Schwarz AJ, Timmann D, Van Dijk KRA, Harding IH, & AGI Working Group and Registries. MR Imaging in Ataxias: consensus recommendations by the Ataxia Global Initiative Working Group on MRI biomarkers. *The Cerebellum (IF 3.5)*, 2023 Jun 6. doi: 10.1007/s12311-023-01572-y. (cited 15 times)
31. Meola N, **Gennarino VA** and Banfi S. MicroRNAs and genetic diseases. *Pathogenetics (BMC) Review (IF 3.5)*. 2009 Nov 4;2(1):7. (cited 184 times)

Other Peer-Reviewed Publications in Print or other Media

- *32. Attanzio A. & **Gennarino VA**. Biomolecular investigations on *Salmonella* strains isolated from food referred to antibiotic resistance. *Chirone*. Anno XII – n. 1 – March 2006:14-15.
- *33. **Gennarino VA**. Molecular studies of new antibiotic-producing *Actinomyces* strains. *Chirone*. Anno XII no. 1, March 2006: 17-18.

Other Media

34. Lee W, de Prisco N, **Gennarino VA**, Buttery S. Backstory: “How to expand the method details in your Cell Press paper with step-by-step *STAR Protocols*.” 16;3(3):101550, July 14 2022, *STAR Protocols Cell Press* (<https://pubmed.ncbi.nlm.nih.gov/35809237/>).
35. Katrinli S. “Vincenzo Alessandro Gennarino on curiosity, hard work, and passion for helping other.” Genes to Genomes, a blog from Genetics Society of America, May 28 (<https://genestogenomes.org/vincenzo-alessandro-gennarino-on-curiosity-hard-work-and-passion-for-helping-others/>).
36. **Gennarino VA**, Palmer EE, Holder JL. “*PUM1*-Associate Diseases” in Human Disease Genes (https://humandiseasegenes.nl/pum1?fbclid=IwAR2Ngc5uMwnBMzLIMzjBZ931hZMTSE_vGgcpiS_2xvcClR-xP7PCoEVyQk).
37. **Gennarino VA**. “Researching ataxia with passion,” profile in *Generations* Summer 2018, National Ataxia Foundation Vol. 46, No. 2, p.21. (https://www.gennarinolab.com/_files/ugd/3e23fb_e2ab5f897f0146f48ca8487cccc621a2.pdf).
38. **Gennarino VA**, Zoghbi HY. “Image of the Month: SCA1-like neurodegeneration,” *Baylor College of Medicine*, May 1 2018 (<https://blogs.bcm.edu/2018/05/01/from-the-labs-image-of-the-month-sca1-like-neurodegeneration/>).
39. **Gennarino VA**, Zoghbi HY. “When protein regulators go awry, neurological disease may follow,” *Baylor College of Medicine*, April 19 2018 (<https://blogs.bcm.edu/2018/04/19/when-protein-regulators-go-awry-neurological->

[disease-may-follow/](#)).

40. **Gennarino VA, Zoghbi HY.** “Defects on regulators of disease-causing proteins can cause neurological disease,” EurekaAlert! AAAS, February 22, 2018. (<https://www.eurekaalert.org/news-releases/910760>).
41. **Gennarino VA, Zoghbi HY.** “Changes in Pumilio1 levels linked to distinct neurological disorders,” Jan and Dan Duncan Neurological Research Institute, Texas Children’s Hospital, February 22, 2018 (<https://www.texaschildrens.org/content/media/changes-pumilio1-levels-linked-distinct-neurological-disorders>).
42. **Gennarino VA, Zoghbi HY.** “RNA-Binding proteins control ataxin-1 expression,” *ALZFORUM*, March 13 2015 (<https://www.alzforum.org/news/research-news/rna-binding-protein-controls-ataxin-1-expression>).
43. **Gennarino VA, Zoghbi HY.** “Many paths to degeneration for neurons,” *Baylor College of Medicine*, March 6 (<https://blogs.bcm.edu/2015/03/16/many-paths-to-degeneration-for-neurons/>).
44. **Gennarino VA, Zoghbi HY.** “MicroRNA helps unravel mystery of Rett protein (MeCP2),” Texas Children’s Hospital (<https://www.texaschildrens.org/content/news/micrna-helps-unravel-mystery-rett-protein-mecp2>).

15) Invited and/or Peer Selected Presentations at Regional, National or International Levels

International

1. *Selected Speaker*, The Molecular Codes of Cell Identify and Recognition, Session: (Glyco)Sphingolipids: Key Players in Cellular Processes, Gordon Research Conference, Lucca, Italy. “Expanding the Genetic and Functional Landscape of Ceramide Transporter (CerTra) Syndrome.” (Mar 22-27, 2026)
2. *Invited Keynote Speaker*, SISSA, Trieste, Italy. March Symposium with The World Academy of Sciences – for the advancement of science in developing countries (TWAS), UNESCO and TITO. “Where, when, and how much: understanding failures of proteostasis in human diseases.” (Mar 17, 2026)
3. *Invited Speaker*, EPFL, Lausanne, Switzerland. “RNA Regulation, Protein-Protein Interaction, and Protein Autoregulation in Human Neurological Diseases.” (Nov 19, 2024)
4. *Selected Speaker*, EMBO Workshop RNA Meets Protein Decay, Hotel Croatia, Cavtat, Croatia. “Altering the Abundance of PUM1, an RNA-Binding Protein, dysregulates both its Targets and its Interactors in the Brain.” (May 23-26, 2023)
5. *Invited Speaker*, The Institute of Genetics and Biophysics of the National Research

Council (IGB-CNR), Naples, Italy. “Neurological disease: it’s not just about genes anymore.” (Sep 26, 2022)

6. *Invited Speaker*, The Functional and Structural Genomics PhD program of SISSA, Trieste, Italy. “Neurological disease: it’s not just about genes anymore.” (Jul 7, 2020)
7. *Invited Keynote Speaker*, 8th Neapolitan Brain Group Meeting, Naples, Italy. “Neurological disease: it’s not just about genes anymore.” (Dec 12, 2019)
8. *Invited Speaker*, The Institute of Genetics and Biophysics Adriano Buzzati-Traverso of the National Research Council (CNR) in Naples, Italy. “Protein Dosage and Neurological Disorders.” (Jun 25, 2018)
9. *Invited Speaker*, Masaryk University (MU), Brno, Czech Republic. “Protein Dosage: A New Lens on Neurological Disorders.” (Jun 21, 2018)
10. *Selected Speaker*, Keystone Symposia on Molecular and Cellular Biology – The Biology of RNA Silencing Meeting, Victoria British Columbia, Canada. “MicroRNA target prediction by expression analysis of host genes.” (Apr 25-30, 2009)
11. *Selected Speaker*, TIGEM Annual Retreat, Città di Castello, Italy. “Improved microRNA target prediction by analysis of the expression behaviour of their host genes.” (May 19-21, 2008)
12. *Selected Speaker*, Department of Biology and Development Annual Congress, Palermo, Italy. “Characterization of new *Actinomyces* strains with antibiotic activity against multidrug-resistant tuberculosis (MDR TB) strains of *Mycobacterium bovis* and *Mycobacterium avium*.” (Dec 18-19, 2003)

National/Regional

13. *Invited Speaker*, Seminar Series to Highlight Innovative Work at the Intellectual and Developmental Disabilities Research Center (IDDRC), Children’s Hospital of Philadelphia, Philadelphia, PA. “From Genes to Proteins: A New Lens for Understanding Neurological Disease.” (October 14, 2025)
14. *Selected Speaker*, Eukaryotic mRNA Processing, Cold Spring Harbor Laboratory (CSHL), Cold Spring Harbor, NY. “PUMILIO1 and the post-transcriptional regulation of alpha-synuclein.” (Aug 19-23, 2025)
15. *Invited Speaker*, Department of Biological Sciences at the St. John’s University, New York, NY. “Neurological disease: it’s not just about genes anymore.” (January 29, 2025)
16. *Invited Speaker*, Department of Pharmacological and Pharmaceutical Sciences

(PPS) at the University of Houston, TX. “From Genes to Proteins: A New Lens for Understanding Neurological Disease.” (October 10, 2024)

17. *Invited Speaker*, The Ken and Ruth Davee Department of Neurology, Research Seminar Series, Northwestern University, Feinberg School of Medicine, Chicago, IL. “From Genes to Proteins: A New Lens for Understanding Neurological Disease.” (May 14, 2024)
18. *Invited Speaker*, Department of Pharmacological and Pharmaceutical Sciences (PPS) at the University of Houston, TX. “From Genes to Proteins: A New Lens for Understanding Neurological Disease.” (October 10, 2024)
19. *Invited Speaker*, The Ken and Ruth Davee Department of Neurology, Research Seminar Series, Northwestern University, Feinberg School of Medicine, Chicago, IL. “From Genes to Proteins: A New Lens for Understanding Neurological Disease.” (May 14, 2024)
20. *Invited Speaker*, Department of Pharmacology at UNC School of Medicine Seminar Series, Chapel Hill, NC. “From Genes to Proteins: A New Lens for Understanding Neurological Disease.” (Mar 26, 2024)
21. *Selected Speaker*, The Role of Sphingo- and Glyco-Lipids in Physiology and Diseases, Session: The Latest Discoveries in Glycolipid and Sphingolipid Biology, Gordon Research Conference, Galveston, TX. “The Clinical Manifestations of CERT1 Mutations.” (Feb 18-23, 2024)
22. *Invited Speaker*, Department of Biochemistry, Molecular Biology, and Biophysics, and the Minnesota RNA Supergroup Seminar Series at the University of Minnesota, Minneapolis, MN. “RNA Regulation, Protein-Protein Interaction, and Protein Autoregulation in Human Neurological Diseases.” (Nov 28, 2023)
23. *Invited Speaker*, NIH T32 trainee-invited Speaker in the Department of Biochemistry and Biophysics (DBB), University of Rochester Medical Center, Rochester, NY, USA. “From genes to proteins: a new lens for understanding neurological disease.” (Oct 18, 2023)
24. *Invited Keynote Speaker*, 148th Annual Meeting of the American Neurological Association, session, The role of RNA-Binding Proteins and RNA metabolism in Neurological Development and Disease, Philadelphia, PA. “Same gene, different variants, different phenotypes: the puzzling case of the RNA-binding protein Pumilio1 (SCA47)”. (Sep 09-12, 2023)
25. *Invited Speaker*, Epilepsy Genetic Conference, Department of Pediatrics, The University of Chicago Medicine, Chicago, IL. “A new approach to studying human neurological diseases.” (Aug 3, 2023)

26. *Invited Speaker*, Department of Pathology, UC San Diego School of Medicine, San Diego, CA. “A new approach to studying human neurological diseases.” (Jun 6, 2023)
27. *Invited Speaker*, Chan Zuckerberg Science Initiative (CZI), Neurodegeneration Challenge Network 2023 Annual Meeting, San Diego, CA. “PUM1-related disease severity is driven by the loss of either mRNA target binding or protein interactions.” (Jun 5-9, 2023)
28. *Invited Speaker*, Center for RNA Biology Seminar, The Ohio State University, Columbus, OH. “Neurological disease: it’s not just about genes anymore.” (Nov 8, 2022)
29. *Invited Speaker*, Rutgers Medical School Seminar, Newark, NJ. “Protein Dosage: A New Lens on Neurological Disorders.” (Dec 3, 2018)
30. *Invited Speaker*, 7th Ataxia Investigators’ Meeting (AIM), Philadelphia, PA. “Pumilio1 insufficiency causes two distinct neurological disorders.” (Apr 1-5, 2018)
31. *Invited Speaker*, 6th Ataxia Investigators’ Meeting (AIM), Orlando, FL. “Brain region resolved protein-protein interaction network of Spinocerebellar ataxia type 1 (SCA1) disease.” (Mar 29-Apr 1, 2016)
32. *Selected Speaker*, Cold Spring Harbor Laboratory, Eukaryotic mRNA processing, NY. “*NUDT21* is a dosage-sensitive gene encoding an RNA-binding protein that regulates levels of MeCP2.” (Aug 18-22, 2015)
33. *Selected Speaker*, The American Society of Human Genetics annual meeting, San Diego, CA. “Haploinsufficiency of *Pumilio1* leads to SCA1-like neurodegeneration by increasing wild-type Ataxin1 levels in a miRNA-independent manner.” (Oct 18-22, 2014)
34. *Selected Speaker*, Cold Spring Harbor Laboratory – Regulatory & Non-Coding RNAs, NY. “Human-specific regulation of MeCP2 levels in fetal brain by imprinted microRNA miR-483-5p.” (Aug 28-Sep 1, 2012)
35. *Invited Speaker*, Work-In-progress (WIP), Columbia Stem Cell Initiative, CUIMC, NY. “Same gene, different variants, different phenotypes: the puzzling case of the RNA-binding protein Pumilio1.” (Apr 4, 2024)
36. *Selected Speaker*, Afternoon of Science, Department of Genetics & Development, CUIMC, NY. “A new approach to studying human neurological diseases.” (Jun 22, 2023)
37. *Selected Speaker*, CSCI Retreat, Edith Macy Retreat Center, New Jersey.

“Unravelling the Links between RNA Homeostasis, Dysregulated Protein Turnover, and Neurological Disorders: Insight from RNA-Binding Proteins.” (Apr 04-05, 2023)

38. *Selected Speaker*, CSCI Retreat, Edith Macy Retreat Center, New Jersey. “Understanding post-transcriptional regulation of mitochondrial function and its relation to neurological and neuropsychiatric symptoms.” (Apr 04-05, 2023)
39. *Invited Speaker*, Institute for Genomic Medicine (IGM) and the Center for Precision Medicine and Genomic (CPMG), CUIMC, NY. “Neurological disease: it’s not just about genes anymore.” (Oct 19, 2022)
40. *Invited Speaker*, Neurology Grand Rounds, CUIMC, NY. “Protein Dosage: A New Lens on Neurological Disorders.” (Jan 11, 2019)
41. *Invited Speaker*, Ophthalmology Grand Rounds, CUIMC, NY. “Neurological disease: it’s not just about genes anymore.” (May 23, 2019)
42. *Invited Speaker*, Division of Movement Disorders, CUIMC, NY. “Protein Dosage: A New Lens on Neurological Disorders.” (Jul 19, 2018)
43. *Invited Speaker*, Pediatric Research Grand Round, CUIMC, NY. “Protein Dosage: A New Lens on Neurological Disorders.” (Mar 2, 2018)

Autorizzo il trattamento dei miei dati personali contenuti nel mio CV ai sensi del D.Lgs. 196/2003 e del Regolamento UE 2016/679 (GDPR).