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EDUCATION

2012-2017	Ph.D. in Functional and Structural Genomics, International School of Advanced Studies (SISSA), Trieste, Italy. Passed cum laude
2010-2012	Master's Degree in "Neuroscience", University of Trieste, Trieste, Italy. 110/110 cum laude
2007-2010	Bachelor's Degree in "General and applied Biology", curriculum "Cellular and molecular biology", University of Naples Federico II, Naples, Italy. 110/110 cum laude

RESEARCH POSITIONS

2022-present	Assistant Professor and Group Leader at SISSA, Trieste, Italy
2018-2021	Post-doctoral scholar at UC Davis, "Shriners Hospitals for Children", Sacramento, CA, US (With a maternity leave from May to July 2021)
2017	Post-doctoral fellow at SISSA, Trieste, Italy
2012-2017	PhD student in Functional and Structural Genomics at SISSA, Trieste, Italy
2011-2012	Undergraduate student, Neuroscience Department, SISSA, Trieste, Italy
2010-2010	Undergraduate student, Biology Department, University of Naples Federico II, Italy

AWARDS, GRANTS AND FELLOWSHIPS

2021	Human Technopole Early Career Fellowship (as PI) – 1,000,000 € for 5 years
2019	Best Poster award at UC Davis Postdoctoral Research Symposium – 600 \$
2018	UC Davis Health Science Communication Fellowship – 100 \$
2016-2017	SISSA Postdoctoral Research Fellowship at SISSA – 21,600 € for 1 year
2016	Travel award for ISDN 2016 – 400 €
2016-2017	Co-operation Scholarship in Functional and Structural Genomics at SISSA – 1,545 €
2015-2016	Co-operation Scholarship in Functional and Structural Genomics at SISSA – 1,545 €
2016	Fellowship for "JCom masterclass: Facilitating the debate on the scientific and technological progress", Jan 11-15, 2016
2014	Travel award for ISDN 2014– 400 €
2014	Co-operation Scholarship in Functional and Structural Genomics at SISSA – 1,545 €
2012	SISSA Undergraduate Fellowship at SISSA – 3,000 €

PEER-REVIEWED PUBLICATIONS

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1. Ciani C., Pistorio G., Mearelli M., **Falcone C.*** "An immunofluorescence protocol applicable across mammalian model and non-model organisms" (2023). STAR Protocols (*corresponding author) (Epub Aug 2023)
 2. Charvet C., Ofori K., **Falcone C.**, Rigby-Dames B. A. "Transcriptomics, connectomics, and organoids translate time across the lifespan of humans and great apes" (2023). PNAS Nexus (Epub July 2023)
 3. Hong T., McBride E. L., Dufour B., **Falcone C.**, Thuy Doan M. T., Noctor S.C., Martínez-Cerdeño V. "Synaptic boutons are smaller in chandelier cell cartridges in autism" (2023). PLoS ONE. Apr 25;18(4):e0281477
 4. **Falcone C.*** "Evolution of Astrocytes: From invertebrates to vertebrates" (2022), invited review for the special issue "Cell Biology of Brain Development and Evolution" in Frontiers in Cell and Developmental Biology. Aug 15;10:931311 (*corresponding author)

5. Santo M., Rigoldi L., **Falcone C.**, Tuccillo M., Calabrese M., Martínez-Cerdeño V., Mallamaci A. "Spatial control of astrogenesis progression by cortical arealization genes" (2023). *Cerebral Cortex*. Mar 10;33(6):3107-3123.
6. **Falcone C.**, Martínez-Cerdeño V. "Astrocytes evolution and human specificity" (2023). invited Perspective article, *Neural Regeneration Research*. Jan;18(1):131-132
7. Vakilzadeh G., **Falcone C.**, Dufour B., Hong T., Martínez-Cerdeño V. "Decreased number and increased activation state of astrocytes in grey and white matter of the prefrontal cortex in ASD" (2022). *Cerebral Cortex*. Oct 20;32(21):4902-4912
8. **Falcone C.**, McBride E. L., Hof P. R., Hopkins W. D., Manger P., Sherwood C. C., Noctor S. C., Martínez-Cerdeño V. "Redefining varicose-projection astrocytes in primates" (2022). *Glia*. Jan;70(1):145-154
9. **Falcone C.***, Mevises N. Y.*, Hong T., Dufour B., Chen X., Noctor S. C., Martínez-Cerdeño V. (* Equally contributing authors) "Neuronal and glial cell number is altered in a cortical layer-specific manner in autism" (2021). *Autism*. Nov;25(8):2238-2253
10. Amina S., **Falcone C.**, Hong T., Wolf-Ochoa M., Vakilzadeh G., Allen E., Perez Castro R., Karger M., Noctor S. C., Martínez-Cerdeño V. "The number of chandelier cartridges is reduced in the prefrontal cortex in autism" (2021). *Cerebral Cortex*. May 10;31(6):2944-2951
11. **Falcone C.**, Penna E., Hong T., Tarantal A.F., Hof P. R., Hopkins W. D., Sherwood C. C., Noctor S. C., Martínez-Cerdeño V. "Cortical Interlaminar Astrocytes Are Generated Prenatally, Mature Postnatally, and Express Unique Markers in Human and Nonhuman Primates" (2021). *Cerebral Cortex*. Jan 1;31(1):379-395
12. Hong T., **Falcone C.**, Dufour B., Amina S., Perez Castro R., Regalado J., Pearson W., Noctor S. C., Martínez-Cerdeño V. "GABA_ARα2 is decreased in the axon initial segment of pyramidal cells in specific areas of the prefrontal cortex in autism" (2020). *Neuroscience*. Jun 15;437:76-86
13. **Falcone C.**, Vakilzadeh G., Noctor S. C., Martínez-Cerdeño V. "Fundamental building blocks of cortical development are established in exencephaly" (2019). *Pediatric Research*. Apr;87(5), 868-871
14. **Falcone C.**, Santo M., Liuzzi G., Cannizzaro N., Grudina C., Valencic E., Peruzzotti-Jametti L., Pluchino S., Mallamaci A. "Foxg1 antagonizes neocortical stem cell progression to astrogenesis" (2019). *Cerebral Cortex*. Dec 17;29(12):4903-4918
15. **Falcone C.**, Wolf-Ochoa M., Amina S., Hong T., Vakilzadeh G., Hopkins W. D., Hof P., Sherwood C. C., Manger P. R., Noctor S. C., Martínez-Cerdeño V. "Cortical interlaminar astrocytes across the therian mammal radiation" (2019). *Journal of Comparative Neurology*. Jul 1;527(10):1654-1674
16. **Falcone C.**, Daga A., Leanza G., Mallamaci A. "Emx2 as a novel tool to suppress glioblastoma" (2016). *Oncotarget*. Jul 5;7(27):41005-41016.
17. **Falcone C.** and Mallamaci A. "Tuning of neocortical astrogenesis rates by Emx2" (2015). *Neural Regeneration Research* Apr;10(4), 550-551.
18. **Falcone C.**, Filippis C., Granzotto M., Mallamaci A. "Emx2 expression levels in NSCs modulate astrogenesis rates by regulating Egfr and Fgf9." (2015). *Glia*. Mar;63(3), 412-422

PREPRINTS

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1. Charvet C., Ofori K., **Falcone C.**, Rigby-Dames B. A. "Transcriptomics, structure and organoids translate time across the lifespan of humans and great apes", preprint at BioRxiv
 2. Mayrhofer F., Hanson A. M., **Falcone C.**, Xiang Y. K., Navedo M. F., Deng W., Chechneva O. "Oligodendrocytes are a lifelong source of nuclear and ribosomal material for neurons in the mouse brain", preprint at BioRxiv

MANUSCRIPTS IN PREPARATION

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1. Ciani C., Mearelli M., **Falcone C.** "Interlaminar astrocytes: towards a new understanding of the primate brain", in preparation
 2. Ciani C., Pistorio G., Mearelli M., Anza F., Bruno E., Cauzzo S., Hechavarria J., Graic J.M., Magliaro C., **Falcone C.** "Astrocyte diversity across mammals: a comparative analysis on distribution and single cell morphology" in preparation

TEACHING & MENTORSHIP

2022-present	Assistant professor at SISSA (Italy), full course for graduate students: "Evolution and development of macroglia"
2019-present	Visiting professor at University of Trieste (Italy), Master Degree in Neuroscience, full course: "Vertebrate brain evolution"
2022-present	Mentorship to 1 lab tech, 1 postdoc, 1 master student, 1 undergraduate student
2015-2021	Mentorship to 14 undergraduate students, 2 master students and 2 graduate students
2016	Teaching assistant for "Cortical astrogenesis" and "Cortical oligodendrogenesis" classes within Neuroembryology II course, AY 2016-2017, Neuroscience Master Degree, University of Trieste
2015	Teaching assistant for "Cortical astrogenesis" and "Cortical oligodendrogenesis" classes within Neuroembryology II course, AY 2015-2016, Neuroscience Master Degree, University of Trieste
2014	Teaching assistant for "Cortical astrogenesis" class within Neuroembryology II course, AY 2014-2015, Neuroscience Master Degree, University of Trieste

LEADERSHIP, ACADEMIC SERVICE & OUTREACH

2023	Guest Editor for the Special Issue "Morphological Heterogeneity of Astrocytes" at Frontiers in Cellular Neuroscience
2022-present	Review Editor at Frontiers in Cellular Neuroscience- Non-neuronal Cells
2022-present	Founder and organizer for "Astrocyte Café", a virtual seminar series focused on astrocyte research
2021	Scientific peer reviewer for ERC Consolidator Grant
2020-present	Ad hoc scientific peer reviewer for the journals: Science Advances, Pediatric Research (NPS), Current opinions in Neurobiology
2020-present	Member of Leadership in Research Team
2020-2021	Founder and organizer of BioRoom, a virtual seminar series during COVID19 pandemic
2020-2021	Webinar organizer for the association "SISSA Alumni"
2019-2021	Founder and organizer of "IPRM Postdoc Seminar Series" at Shriners Hospital for Children, UCD
2018-2021	Team leader of scientific outreach activities to K-12 school students, volunteer for the Ventricular Foundation, Sacramento, CA, US
2018	Science communication educator at "Meet a Scientist" day at Powerhouse Science Center, Sacramento, CA, US
2016	Vice-present at the SISSA club student association, Trieste, Italy
2013-2017	Scientific outreach to school students, in collaboration with SISSA Medialab, Trieste, Italy

ADVOCACY

2021	Co-author to a Correspondence on Nature: "Call to update US re-entry rules for international researchers" to advocate for the rights of international researchers in the US
2020-present	Founder and administrator of "International Scholars in the US" Slack group: a community of over 1,700 international scholars
2020-2021	Advocacy for International Scholars and Immigrants, volunteering at the Union for Postdoc & Academic Workers - International Scholar Working Group
2020-2021	Writer for UC Davis Seminar for Outreach and Minority Advocacy (SOMA)
2018-2021	Advocacy for education for minority groups in the Sacramento area with the Ventricular Foundation

PRESENTATIONS

Invited talk:	"The special features of interlaminar astrocytes", at "Honours in Neuroscience- University of the Witwatersrand, South Africa" hosted by Busi Maseko, Apr 11, 2023. Virtual.
Invited talk:	"The primate-specific features of interlaminar astrocytes and varicose-projection astrocytes" – Neuroloquia at Human Technopole, May 18, 2023. Milan, Italy
Invited talk:	"Cortical astrocytes across mammalian evolution: the special features of interlaminar astrocytes and varicose-projection astrocytes" – invited talk at NICO NeuroWebinar Series, Dec 15, 2022. Turin, Italy.
Invited talk:	"Evolution and development of interlaminar astrocytes in the mammalian cerebral cortex" –at the Australasian Developmental Neuroscience Forum, Aug 25, 2022. Virtual.
Moderator:	Session "Animal modeling in the anatomy of human disease" at IFAA 2022 (International Federation of Associations of Anatomists), Sep 6, 2022. Virtual.
Invited panelist:	"Becoming a PI- The stories of 3 Young Successful PIs"- MAPTA Seminar Series. Virtual.

Invited lecture: "Interlaminar astrocytes: Evolution and Development" – within the course "Evolutionary Neuroscience and the Origin of the Human Mind" hosted by Alexandra de Sousa, May 18, 2022. Virtual.

Invited lecture: "Interlaminar astrocytes: Evolution and Development" – "Honours in Neuroscience- University of the Witwatersrand, South Africa" hosted by Busi Maseko, April 14, 2022. Virtual.

Moderator: Session "Glia-Neuron Interaction", at SIBS conference, April 8, 2022. Virtual.

Invited talk: "Interlaminar astrocytes: evolution, development and role in neurodevelopmental disorders", University of Washington, Mar 1, 2022. Seattle, US.

Talk: "Redefining varicose-projection astrocytes in primates", talk at J.B. Johnston Club for Evolutionary Neuroscience meeting, Nov 11-12, 2021. Virtual.

Invited talk: "Evolution and development of a special type of astrocytes in mammals: Interlaminar Astrocytes" – invited talk for "Promising Scientist Seminar – Iowa University", Sept 24, 2021. Virtual.

Invited talk: "Evolution and development of interlaminar astrocytes in mammals" – invited talk at Taraballi Lab Journal Club – Houston Methodist, Sept 8, 2021. Virtual.

Organizer, Speaker and Chair of the Symposium "Where do glia come from? Evolution and diversification of CNS glia" at the XV European Meeting on Glial Cells in Health and Disease, 2021. Virtual.

Talk: "Cortical interlaminar astrocyte evolution and comparative development in mammals", XV European Meeting on Glial Cells in Health and Disease, 2021. Virtual.

Moderator: Session "Glial control of behavior" at Virtual Glia Trainee Symposium, Mar 12-13, 2021. Virtual.

Invited talk: "Interlaminar astrocytes development and evolution", MetaBio Seminar Series, Mar 1, 2021. Virtual.

Talk: "Varicose-projection astrocytes across evolution", IPRM Postdoc Seminar Series, Feb 4, 2021. Virtual.

Talk: "Cortical interlaminar astrocytes are generated prenatally, mature postnatally, and express unique markers in human and nonhuman primates", 3rd Symposium on Physiology and Pathology of Neuroglia, Universidad Nacional Autónoma de México, 2021. Virtual.

Talk: "Cortical interlaminar astrocytes are generated prenatally, mature postnatally, and express unique markers in human and nonhuman primates", J.B. Johnston Club for Evolutionary Neuroscience, Oct 23, 2020. Virtual.

Talk: "Cortical interlaminar astrocyte evolution and development", IPRM Seminar Series, Sep 4, 2020. Virtual.

Talk: "Evolution and development of astrocytes in mammals", BioRoom 2020, Apr 21, 2020. Virtual.

Invited talk: "Interlaminar astrocytes: evolution and development", Neural Repair & Glial Biology Seminar, Dec 13, 2019. UCLA, Los Angeles, US.

Talk: "Cortical interlaminar astrocytes in mammalian evolution and development", talk at Society for Neuroscience 2019, Oct 19-23, 2019. Chicago, US.

Talk: "Development of cortical interlaminar astrocytes across evolution", talk at J.B. Johnston Club for Evolutionary Neuroscience meeting, Oct 18, Chicago, US.

Talk: "Interlaminar astrocytes: evolution and development in mammals", talk at IPRM Annual Research Symposium, Sep 27, 2019. Sacramento, US.

Talk: "Cortical interlaminar astrocytes in mammalian evolution", talk at Society for Neuroscience 2018, Nov 3-7, 2019. San Diego, US.

Talk: "Emx2 role in corticocerebral astrogenesis and glioblastoma multiforme tumors", talk at The XVI Congress for the Italian Society for Neuroscience (SINS), Oct 8-11, 2015. Cagliari, Italy

Talk: "Emx2 expression levels in NSCs modulate astrogenesis rates by regulating Egfr", Students' workshop on research activities of ICGEB, SISSA, UniTS, UniUD, Jan 23, 2014. Trieste, Italy.

Talk: "Emx2 modulates astrogenesis in NSCs", 1st FVG PhD symposium, Oct 7-9, 2014. Grado, Italy.

POSTER PRESENTATIONS

Poster: "Development of interlaminar astrocytes in the primate cerebral cortex", poster at the Virtual Glia Trainee Symposium, Mar 12-13, 2021. Virtual.

Poster: "Interlaminar astrocytes have unique developmental trajectory and molecular markers in primates" Society for Neuroscience- Global Connectome, Jan 11-13, 2021. Virtual.

Poster: "Cortical interlaminar astrocytes: development and evolution", poster at CSHL Glia in Health and Disease, 2020. Virtual.

Poster: "Cortical interlaminar astrocytes in mammalian evolution and development", XIII European Meeting on Glial Cells in Health and Disease, Jul 10-13, 2019. Porto, Portugal.

Poster: "Fundamental building blocks of cortical development are established in exencephaly: a case report", Pathology Retreat, May 7, 2019. Sacramento, US.

Poster: "Interlaminar astrocytes in mammalian evolution", UC Davis Postdoctoral Research Symposium, Apr 15, 2019 Davis, US.

- Poster: "Interlaminar astrocytes in mammalian evolution", poster at IPRM Annual Research Symposium, Oct 10, 2018. Sacramento, US.
- Poster: "A new type of astrocyte: Cortical interlaminar astrocytes in mammalian development and evolution" poster at Cortical Evolution 2018, Jun 3-6, 2018. Gran Canaria, Spain
- Poster: "Astrocytes in mammalian evolution", UC Davis Postdoc Symposium, Apr 23, 2018. Davis, US.
- Poster: "Foxg1 expression levels in NSCs modulate astrogenesis rates", poster at XIII European Meeting on Glial Cells in Health and Disease, Jul 8-11, 2017. Edinburgh, UK.
- Poster: "Emx2 role in corticocerebral astrogenesis and glioblastoma multiforme tumors", poster at "ISDN: From stem cells to behaviour in the normal and diseased nervous system", May 11-14, 2016 (21st Biennial Meeting of ISDN). Antibes Juan les Pins, France.
- Poster: "Emx2 role in corticocerebral astrogenesis and glioblastoma multiforme tumors", The Biennial Congress of the Italian Association of Cell Biology and Differentiation, Sep 17-19, 2015. Bologna, Italy.
- Poster: "Emx2 expression levels in NSCs modulate astrogenesis rates by regulating Egfr and Fgf9" poster at XII European Meeting on Glial Cells in Health and Disease, Jul 15-18, 2015. Bilbao, Spain.
- Poster: "Emx2 expression levels in NSCs modulate astrogenesis rates by regulating Egfr and Fgf9", poster at Cortical Evolution 2015, May 18-21, 2015. Toledo, Spain.
- Poster: "Emx2 expression levels in NSCs modulate astrogenesis", poster at "ISDN: Development, functions and disorders of nervous system" (20th Biennial Meeting of ISDN), Jul 19-24, 2014. Montréal, Canada.

PROFESSIONAL NETWORKS

SfN (Society for Neuroscience); FENS (Federation of European Neuroscience Societies); SINS (Italian Society for Neuroscience); J. B. Johnston Club for Evolutionary Neuroscience; SISSA Alumni; AIRI (International Association of Italian Researchers)