

CV  
MARIA CATERINA MIONE  
MD, PhD

**Professional address :** Laboratory of Experimental Cancer Biology  
Department of Cellular, Computational and Integrative Biology (Cibio)  
University of Trento  
Via Sommarive 9, 38123 Trento  
[REDACTED]  
[REDACTED]  
Web : [www.cibio.unitn.it/465/laboratory-of-experimentalcancer-biology](http://www.cibio.unitn.it/465/laboratory-of-experimentalcancer-biology)  
OrcID: 0000-0002-9040-3705

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### Education

1991 PhD – University College London, London, UK  
1986 Diploma Clinical Neurology, University Hospital of Rome, Italy  
1980 Degree in Medicine & Surgery, University of Rome, Italy

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### Professional experience

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| from Dec 2021  | Full Professor, Biologia Applicata, CIBIO, University of Trento, Italy                           |
| from Sept 2021 | Dean, Faculty of Medicine, University of Trento, Italy   |
| 2016-2021      | Associate Professor, Biologia Applicata, CIBIO, University of Trento, Italy                      |
| 2012-2016      | Group Leader at Institute of Genetic and Toxicology, Karlsruhe, Institute of Technology, Germany |
| 2005-2011      | Group Leader at FIRC Institute of Molecular Oncology (IFOM), Milan, Italy                        |
| 2000-2004      | Senior Research Fellow, University College London, UK  |
| 1998-1999      | Visiting Scholar, University of California at San Francisco, USA                                 |
| 1994-1998      | Wellcome Trust Development Career Research Fellow, University College London, UK                 |

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### National Habilitation

|                              |  |
|------------------------------|--|
| 1. 05/F1 Biologia Applicata  | Professore seconda fascia da Dicembre 2015 |
| 2. 05/E2 Biologia Molecolare | Professore prima fascia da Settembre 2019  |
| 3. 05/F1 Biologia Applicata  | Professore prima fascia da Settembre 2019  |

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### University Teaching and Committees

- Titolare corso: Fisiologia della Cellula e degli Organismi (LT) 2017-2020
- Titolare corso: Cancer Metabolism (LM) 2017-
- Titolare corso: Animal Models of Cancer (Doctoral degree) 2016-2020
- Titolare corso: Biologia Generale (LM41) 2020-

Member of the Collegio Docenti Doctoral School in Biomolecular Sciences since 2017  
President CdS LM 41 UniTrento from 2021

Departmental Delegate for Tutorate Activities

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### **Patent:**

Rubenstein, J., Mione, M., Anderson, S., Stuehmer, T., Yun, K. (2003) Production of GABAergic cells, US Patent #6,602,680.

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### **Coordinator functions:**

|             |  |
|-------------|--|
| 2005 - 2009 | Director of the Zebrafish Platform for the European Vascular Genetic Network (EVGN), EU-FP6 founded  |
| 2009 - 2012 | Vice-Chair of COST Action EufishBiomed BM804   |
| 2011 - 2013 | Steering Committee Zebrafish P.I. Meetings, Asilomar, USA  |
| 2009 - 2018 | Organizer, Zebrafish Disease Model Meetings  |
| 2014 -      | Board of Directors, Zebrafish Disease Model Society,<br>Executive Board from 2019 ( <a href="http://www.zdmsociety.org/executiveofficers">www.zdmsociety.org/executiveofficers</a> ) |
| 2018 – 2020 | European Representative at the International Zebrafish Society<br>Board of Directors   |

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### **Editor and Reviewer Activities**

Associate Editor

- Frontier in Cell and Developmental Biology

[http://community.frontiersin.org/people/Maria\\_CaterinaMione/59273](http://community.frontiersin.org/people/Maria_CaterinaMione/59273)

- International Journal of Molecular Sciences, section Molecular Oncology

[https://www.mdpi.com/journal/ijms/sectioneditors/molecular\\_oncology](https://www.mdpi.com/journal/ijms/sectioneditors/molecular_oncology)

Ad hoc reviewer for:

Genes & Development, Oncogene, Inter. J. of Cancer, PLoS Biol, PLoS

One, Journal of Neuroscience, Zebrafish, Disease Models & Mechanisms, Current Biology, Leukemia, Developmental Neuroscience, Development, Developmental Biology, Molecular & Cellular Biology, J. Comp. Neurology, Jove, Nature Communications.

Grant reviewer for:

WWCR (2018), BBSRC (2005, 2014, 2018), FWO (2016, 2018), Wellcome Trust (2006-2010), MRC (2007), DFG (2012-2014), Marie Curie Action (2014); Netherland Organization for Scientific Research – Vidi (2015), Israeli Research Council (2016)

Panel reviewer for the Research Council of Norway (2006, 2007); External Reviewer for Tenure Position Evaluation (Australian Research Council), External Reviewer for EMBO fellowships Inserm (2018)

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## **Publications**

Total 103; Citations without self-citations 5543 (Scopus), H-index 35

### **Selected publications from 2010 (\*corresponding author)**

- Rosello M, Voungny J, Czarny F, Mione MC, Concordet JP, Albadri S, Del Bene F. Precise base editing for the *in vivo* study of developmental signaling and human pathologies in zebrafish. *Elife*. 2021 Feb 12;10:e65552. doi: 10.7554/eLife.65552.

- Idilli AI, Pazzi C, Dal Pozzolo F, Rocuzzo M, Mione MC. Rad21 Haploinsufficiency Prevents ALT-Associated Phenotypes in Zebrafish Brain Tumors. *Genes (Basel)*. 2020 Nov 30;11(12):1442. doi: 10.3390/genes11121442.

- Lefkopoulos S, Polyzou A, Derecka M, Bergo V, Clapes T, Cauchy P, Jerez- Longres C, Onishi-Seebacher M, Yin N, Martagon-Calderón NA, Potts KS, Klaeylé L, Liu F, Bowman TV, Jenuwein T, Mione MC, Trompouki E. Repetitive Elements Trigger RIG-I-like Receptor Signaling that Regulates the Emergence of Hematopoietic Stem and Progenitor Cells. *Immunity*. 2020 Nov 17;53(5):934-951.e9. doi: 10.1016/j.immuni.2020.10.007.

- Misselbeck K, Parolo S, Lorenzini F, Savoca V, Leonardelli L, Bora P, Morine MJ, Mione MC, Domenici E, Priami C. A network-based approach to identify deregulated pathways and drug effects in metabolic syndrome. *Nat Commun*. 2019 Nov 18;10(1):5215. doi: 10.1038/s41467-019-13208-z.

- Idilli AI, Cusanelli E, Pagani F, Kerschbamer E, Berardinelli F, Bernabé M, Cayuela ML, Piazza S, Poliani PL, Mione MC \* Expression of telomerase prevents ALT and maintains telomeric heterochromatin in juvenile brain tumors *BioRxiv* 718551; doi: <https://doi.org/10.1101/718551>

- Gómez-Abenza E, Ibáñez-Molero S, García-Moreno D, Fuentes I, Zon LI, Mione MC, Cayuela ML, Gabellini C, Mulero V. Zebrafish modeling reveals that SPINT1 regulates the aggressiveness of skin cutaneous melanoma and its crosstalk with tumor immune microenvironment. *J Exp Clin Cancer Res*. 2019 Sep 13;38(1):405. doi: 10.1186/s13046-019-1389-3.

- Precazzini F, Pancher M, Gatto P, Tushe A, Adami V, Anelli V, Mione MC\*. Automated *in vivo* screen in zebrafish identifies Clotrimazole as targeting a metabolic vulnerability in a melanoma model. *Dev Biol*. 2019 Apr 15. pii: S0012-1606(18)30734-6. doi: 10.1016/j.ydbio.2019.04.005. [Epub ahead of print]

- Dickmeis T, Feng Y, Mione MC, Ninov N, Santoro M, Spaink HP, Gut P. Nano-Sampling and Reporter Tools to Study Metabolic Regulation in Zebrafish.

Front Cell Dev Biol. 2019 Feb 19;7:15. doi: 10.3389/fcell.2019.00015.

- Salama M, Benitez-Riquelme D, Elabd S, Munoz L, Zhang P, Glanemann M, Mione MC, Goldin R, Soussi T, Davidson G, Blattner C. Fam83F induces p53 stabilisation and promotes its activity. *Cell Death Differ*. 2019 Oct;26(10):2125-2138. doi: 10.1038/s41418-019-0281-1.

- Cayuela ML, Claes KBM, Ferreira MG, Henriques CM, van Eeden F, Varga M, Vierstraete J, Mione MC\*. The Zebrafish as an Emerging Model to Study DNA Damage in Aging, Cancer and Other Diseases. *Front Cell Dev Biol*. 2019 Jan 10;6:178. doi: 10.3389/fcell.2018.00178.

- Anelli V, Ordas A, Kneitz S, Sagredo LM, Gourain V, Scharl M, Meijer AH, Mione M.\* Ras-Induced miR-146a and 193a Target Jmjd6 to Regulate Melanoma Progression. *Front Genet*. 2018 Dec 18;9:675. doi: 10.3389/fgene.2018.00675.

- Zizioli D, Mione M, Varinelli M, Malagola M, Bernardi S, Alghisi E, Borsani G, Finazzi D, Monti E, Presta M, Russo D. Zebrafish disease models in hematology: Highlights on biological and translational impact. *Biochim Biophys Acta Mol Basis Dis*. 2019 Mar 1;1865(3):620-633. doi: 10.1016/j.bbadis.2018.12.015

- Piragyte I, Clapes T, Polyzou A, Klein Geltink RI, Lefkopoulos S, Yin N, Cauchy P, Curtis JD, Klaeylé L, Langa X, Beckmann CCA, Wlodarski MW, Müller P, Van Essen D, Rambold A, Kapp FG, Mione M, Buescher JM, Pearce EL, Polyzos A, Trompouki E. A metabolic interplay coordinated by HLX regulates myeloid differentiation and AML through partly overlapping pathways. *Nat Commun*. 2018 Aug 6;9(1):3090. doi: 10.1038/s41467-018-05311-4.

- Schorch B, Heni H, Zahaf NI, Brummer T, Mione M, Schmidt G, Papatheodorou P, Aktories K. Targeting oncogenic Ras by the *Clostridium perfringens* toxin TpeL. *Oncotarget*. 2018 Mar 27;9(23):16489-16500. doi: 10.18632/oncotarget.24740.

- Chia K, Mazzolini J, Mione M, Sieger D. Tumor initiating cells induce Cxcr4-mediated infiltration of pro-tumoral macrophages into the brain. *Elife*. 2018 Feb 21;7. pii: e31918. doi: 10.7554/eLife.31918.

- Idilli AI, Precazzini F, Mione MC, Anelli V. Zebrafish in Translational Cancer Research: Insight into Leukemia, Melanoma, Glioma and Endocrine Tumor Biology. *Genes (Basel)*. 2017 Sep 20;8(9).

- Ibarra MS, Borini Etichetti C, Di Benedetto C, Rosano GL, Margarit E, Del Sal G, Mione M, Girardini J. Dynamic regulation of Pin1 expression and function during zebrafish development. *PLoS One*. 2017 Apr 20;12(4):e0175939.

- Mayrhofer M, Gourain V, Reischl M, Affaticati P, Jenett A, Joly JS, Benelli M, Demichelis F, Poliani PL, Sieger D, Mione M.\* A novel brain tumour model in zebrafish reveals the role of YAP activation in MAPK- and PI3K-induced malignant growth. *Dis Model Mech*. 2017 Jan 1;10(1):15-28.

- Anelli V, Mione M\*. Melanoma niche formation: it is all about melanosomes making CAFs. *Pigment Cell Melanoma Res*. 2016 Oct 23. doi: 10.1111/pcmr.12545.

- Schutera M, Dickmeis T, Mione M, Peravali R, Marcato D, Reischl M, Mikut R, Pylatiuk C. Automated phenotype pattern recognition of zebrafish for high-throughput screening. *Bioengineered*. 2016 Jul 3;7(4):261-5.
- Mayrhofer M, Mione M\*. The toolbox for conditional zebrafish cancer models. *Adv Exp Med Biol*. 2016; 916:21-59.
- Arbizzani F, Mayrhofer M, Mione M\*. Novel transgenic lines to fluorescently label clathrin and caveolin endosomes in live zebrafish. *Zebrafish*. 2015 Apr;12(2):202-3
- Mione M\*, Bosserhoff A. MicroRNAs in melanocyte and melanoma biology. *Pigment Cells & Melanoma Research* 2015 May;28(3):340-54
- Anelli V, Zettler N, Mione M\*. Insights from Genetic Models of Melanoma in Fish. *Curr Pathobiol Rep*, DOI 10.1007/s40139-014-0043-1
- Ogrunc M, Di Micco R, Lontos M, Bombardelli L, Mione M, Fumagalli M, Gorgoulis V, d'Adda di Fagagna F: Oncogene-induced reactive oxygen species fuel hyperproliferation and DNA damage response activation. *Cell Death and Differentiation*, 2014 Feb 28. doi: 10.1038/cdd.2014.16.
- Vacaru AM, Unlu G, Spitzner M, Mione M, Knapik EW, Sadler KC: In vivo cell biology in zebrafish: providing insights into vertebrate development and disease. *J Cell Science*, 2014 Feb 1;127(Pt 3):485-95.
- Colombo A, Palma K, Armijo L, Mione M, Signore IA, Morales C, Guerrero N, Meynard M, Perez R, Suazo J, Marcelain K, Briones L, Härtel S, Wilson SW, Concha ML: Daam1a mediates asymmetric habenular morphogenesis through regulating dendritic and axonal outgrowth. *Development*, 2013, 140(19):3997-4007
- Alghisi E, Distel M, Malagola M, Anelli V, Santoriello C, Herwig L, Krudewig A, Henkel C, Russo D, Mione MC\* Targeting oncogene expression to endothelial cells induces proliferation of the myeloerythroid lineage by repressing the notch pathway. *Leukemia*, 2013, 27(11):2229- 41 IF: 9.59
- Tran LD, Hino H, Quach H, Lim S, Shindo A, Mimori-Kiyosue Y, Mione M, Ueno N, Winkler C, Hibi M, Sampath K. Dynamic microtubules at the vegetal cortex predict the embryonic axis in zebrafish. *Development*. 2012; 139(19):3644-52. IF: 6.60
- Mione M\*, Armant O. Fishing for melanoma markers through comparative transcriptome analysis. *Pigment Cell and Melanoma Research*, 25: 709–710 (2012) IF:5.059
- Mione M\*, Zon LI: Cancer and inflammation: an aspirin a day keeps the cancer at bay. *Curr Biol*. 2012 Jul 10;22(13):R522-5. IF:10.881
- Francia S, Michelini F, Saxena A, Tang D, de Hoon M, Anelli V, Mione M, Carninci P, d'Adda di Fagagna F. Site-specific DICER and DROSHA RNA products control the DNA damage response. *Nature*. 2012 Aug 9;488(7410):231-5 IF:36.280

- York AG, Parekh SH, Nogare DD, Fischer RS, Temprine K, Mione M, Chitnis AB, Combs CA, Shroff H. Resolution doubling in live, multicellular organisms via multifocal structured illumination microscopy. *Nat Methods*. 2012 May 13;9(7):749-54. IF:19.276
- Strähle U, Bally-Cuif L, Kelsh R, Beis D, Mione M, Panula P, Figueras A, Gothilf Y, Brösamle C, Geisler R, Knedlitschek G. EuFishBioMed (COST Action BM0804): A European Network to Promote the Use of Small Fishes in Biomedical Research. *Zebrafish*. 2012 Jun;9(2):90-3. IF:3.084
- Santoriello C, Anelli V, Alghisi E, Mione M\*. Highly penetrant melanoma in a zebrafish model is independent of ErbB3b signaling. *Pigment Cell Melanoma Res*. 2012 Mar;25(2):287-9 IF:5.59
- Du S, Draper BW, Mione M, Moens CB, Bruce A. Differential regulation of epiboly initiation and progression by zebrafish Eomesodermin A. *Dev Biol*. 2012 Feb 1;362(1):11-23. IF:4.407
- Bassi A, Fieramonti L, D'Andrea C, Mione M, Valentini G. In vivo label-free threedimensional imaging of zebrafish vasculature with optical projection tomography. *J Biomed Opt*. 2011 Oct;16(10):100502. IF:3.157
- Guarani V, Deflorian G, Franco CA, Krüger M, Phng LK, Bentley K, Toussaint L, Dequiedt F, Mostoslavsky R, Schmidt MH, Zimmermann B, Brandes RP, Mione M, Westphal CH, Braun T, Zeiher AM, Gerhardt H, Dimmeler S, Potente M. Acetylation-dependent regulation of endothelial Notch signalling by the SIRT1 deacetylase. *Nature*. 2011 May 12;473(7346):234-8 IF: 36.280
- Richardson J, Zeng Z, Ceol C, Mione M, Jackson IJ, Patton EE. A zebrafish model for nevus regeneration. *Pigment Cell Melanoma Res*. 2011 Apr;24(2):378-81 IF:5.059
- Bernardi E, Deflorian G, Pezzimenti F, Diaz VM, Mione M, Blasi F. Characterization of the regulatory region of the zebrafish *Prep1.1* gene: analogies to the promoter of the human *PREP1*. *PLoS One*. 2010 Dec 22;5(12):e15047 IF:4.351
- Feng Y, Santoriello C, Mione M\*, Hurlstone A\*, Martin P.\* Live imaging of innate immune cell sensing of transformed cells in zebrafish larvae: parallels between tumor initiation and wound inflammation. *PLoS Biol*. 2010 Dec 14;8(12):e1000562. IF: 11.45
- Santoriello C, Gennaro E, Anelli V, Distel M, Kelly A, Köster RW, Hurlstone A, Mione M.\* Kita driven expression of oncogenic HRAS leads to early onset and highly penetrant melanoma in zebrafish. *PLoS One*. 2010 Dec 10;5(12):e15170. IF:4.351
- Mione MC\*, Trede NS. The zebrafish as a model for cancer. *Dis Model Mech*. 2010 Sep-Oct;3(9-10):517-23. IF:4.94

## Curriculum Vitae

**PERSONAL INFORMATION**

Name: Luca Tiberi

Language skills: Italian, mother tongue; English, fluent; French, basic knowledge

**EDUCATIONS**

| INSTITUTION AND LOCATION                  | DEGREE              | DATE      | FIELD OF STUDY               |
|---|---------------------|-----------|------------------------------|
| University of Bologna, Bologna, Italy     | M.Sc                | 02/2004   | Medical Biotechnology        |
| University of Trieste, Trieste, Italy     | Ph.D                | 05/2008   | Molecular Oncology           |
| University of Brussels, Brussels, Belgium | PostDoc             | 2008-2015 | Brain Cancer and Development |
| University of Trento, Trento, Italy       | Associate Professor | Current   | Brain Cancer Aging           |

**CURRENT POSITIONS**

**Group Leader**, Armenise-Harvard Laboratory of Brain Disorders and Cancer, University of Trento, Italy  
**Associate Professor** in Applied Biology, CIBIO, Department of Cellular, Computational and Integrative Biology, University of Trento, Italy

**PREVIOUS POSITIONS**

**2008-2015** PostDoc (EMBO Fellowship), Laboratory of Pr. Vanderhaeghen, ULB, Belgium  
**2004-2008** Ph.D (2008), Laboratory of Prof. Del Sal, University of Trieste, Italy

**FUNDINGS and AWARDS**

**2020** EMBO Young Investigator 2021-2024  
**2019** Winner of the BioItaly Investment Forum with the StartUP "Organoo"  
**2019-2021** CARITRO Grant - Drug Discovery with Human Organoids (300.000 euro)  
**2018-2022** My First AIRC Grant - Establishment and Analysis of Patient Specific Medulloblastoma mouse models (450.000 euro)  
**2016-2022** Armenise-Harvard Career Development Award - Studying neurogenesis to unveil the molecular and cellular basis of brain cancer (1.000.000 dollars).  
**2015** Prix Alvarenga, de Piauhy, Académie royale de Médecine de Belgique, Belgium  
**2013-2015** Televiè Grant for PostDoctoral Research, Belgium  
**2009-2013** PostDoctoral Fellow, FNRS, Belgium  
**2009-2010** PostDoctoral Fellow, EMBO Long Term Fellowship

**SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS**

2016-2022 supervision at University of Trento, Italy: 4 Postdoctoral fellows (1 Marie Skłodowska-Curie Actions); 5 PhD students (International PhD Program in Biomolecular Sciences); 7 Master students in Science in Cellular and Molecular Biotechnology; 4 Bachelor students in Biomolecular Sciences and Technologies.

2008-2016 supervision at ULB, Belgium: 1 PhD student in International IRIBHM PhD Program; 2 Master students.

**TEACHING ACTIVITIES****Undergraduate Lectures**

- Human Cancer Organoid (Master students)
- Molecular Biology of the Cell (Master students)
- Laboratory Hazards and Risks (Master students)

**Ph.D Students Lectures**

- Modeling Brain Cancer *in vivo*
- Modeling Brain Cancer with human Organoids

**INSTITUTIONAL RESPONSIBILITIES**

Since 2017 I oversee the CIBIO Department website for the teaching activities and relation with students.

**MEMBERSHIPS OF SCIENTIFIC SOCIETIES**

2020 Society for Neuro-Oncology (SNO)

2017 American Association for Cancer Research (AACR)

**MAJOR COLLABORATIONS**

**Prof. Bassem Hassan** - Scientific Director of ICM, Brain & Spine Institute, Paris, France.

**Prof. med. Stefan Pfister** - Director "Preclinical Pediatric Oncology" Hopp Children's Cancer Center Heidelberg. Division head Pediatric Neuro-oncology, DKFZ, Heidelberg, Germany.

**Prof. Marcel Kool** - Prinses Máxima Centrum – Utrecht, Netherlands.

**Prof. Pierre Vanderhaeghen** - Group Leader, VIB-KU Leuven Center for Brain & Disease Research, Leuven, Belgium.

**Prof. Felice Giangaspero** - Department of Radiological, Oncological, and Anatomic-Pathological Sciences, Sapienza University of Rome, Rome, Italy.

**SCIENTIFIC REVIEWER**

Nature Chemical Biology, Cell Reports, Stem Cell and Development, Cell Death and Differentiation, Mechanisms of Development, Molecular and Cellular Biology, Science Advances.

**PATENTS**

- PCT EP2012/063853 Generation of mesodermal cells from pluripotent stem cells.

- PCT EP2012/070025 BCL6-mediated modulation of cortical differentiation of neuronal progenitor cells.

- Pending - 1/20 AB/0010/IT/PRI – Genetic ablation of quiescent cancer cells.

**SELECTED PRESENTATIONS** - *Ten presentations that are representative of my career:*

Milan - **IFOM** - International Workshop on Cancer Stem Cells - 2nd Edition (2007)

Boston - **Harvard** - Abcam Events – New Avenues for Brain Repair (2013)

Brussel - **UCL** - Televie Cancer Meeting (2013)

Ventura - **Gordon Research Conferences** - Stem Cell & Cancer (2015)

Berlin - **Max Delbruck Center** - Brain Tumor Meeting (2015)

London - **Imperial College** - Brain Tumor Modeling (2016)

Milan - **BioInItaly Investment Forum** - Winner with the start-UP “**Organoo**” (2019)

Obergurgl (Austria) - **Medulloblastoma in Mountains 2020** (2020)

Online – **EMBO YIP Meeting** (2021)

Online – **EANO – European Association of Neuro-oncology Meeting** (2021)



**PUBLICATIONS** - *Ten manuscripts that are representative of my career work:*

1) Aiello G, Sabino C, Pernici D, Antonica F, Audano M, Ganesello M, Quattrone A, Mitro N, Romanel A, Soldano A and **Tiberi L\***. Lifespan can be extended during a specific time-window early in life. **Under Revision. BioRxiv**, <https://doi.org/10.1101/2022.02.18.480980>

\* Corresponding author

2) Ballabio C, Ganesello M, Lago C, Okonechnikov K, Anderle M, Aiello G, Antonica F, Gianni F, Giangaspero F, Hassan B, Pfister S, **Tiberi L\***. Notch1 switches progenitor competence in inducing medulloblastoma. **Science Advances**. 2021 Jun 23;7(26):eabd2781. doi: 10.1126/sciadv.abd2781.

\* Corresponding author

3) Ballabio C, Anderle M, Ganesello M, Lago C, Miele E, Cardano M, Aiello G, Piazza S, Caron D, Gianni F, Ciolfi A, Pedace L, Matronuzzi A, Tartaglia M, Locatelli F, Ferretti E, Giangaspero F and **Tiberi L\***. Modeling Medulloblastoma in vivo and with human cerebellar organoids. **Nature Communications**. 2020 Feb. doi: 10.1038/s41467-019-13989-3.

\* Corresponding author

4) Aiello G, Ballabio C, Ruggeri R, Fagnocchi L, Anderle M, Morassut I, Caron D, Garilli F, Gianni F, Giangaspero F, Piazza S, Romanel A, Zippo A, **Tiberi L\***. Truncated-Brpfl cooperates with Smoothed to induce adult Shh Medulloblastoma. **Cell Rep**. 2019 Dec 17;29(12):4036-4052.e10. doi: 10.1016/j.celrep.2019.11.046.

\* Corresponding author

5) Quan XJ, Yuan L, **Tiberi L**, Claeys A, De Geest N, Yan J, van der Kant R, Xie WR, Klisch TJ, Shymkowitz J, Rousseau F, Bollen M, Beullens M, Zoghbi HY, Vanderhaeghen P, Hassan BA. Post-translational Control of the Temporal Dynamics of Transcription Factor Activity Regulates Neurogenesis. **Cell**. 2016 Jan 28;164(3):460-75. doi: 10.1016/j.cell.2015.12.048.

6) **Tiberi L**, Bonnefont J, van den Aemele J, Herpoel A, Bilheu A, Baron B, Vanderhaeghen P. A BCL6/BCoR/Sirt1 complex Triggers Neurogenesis and Suppresses Medulloblastoma by Repressing Sonic Hedgehog Signalling. **Cancer Cell**. 2014 Dec 8;26(6):797-812. doi: 10.1016/j.ccell.2014.10.021.

7) **Tiberi L\***, van den Aemele J\*, Dimidschstein J, Piccirilli J, Gall D, Herpoel A, Bilheu A, Bonnefont J, Iacovino M, Kyba M, Bouschet T, Vanderhaeghen P. BCL6 induces neurogenesis through Sirt1-dependent epigenetic repression of selective Notch transcriptional targets. **Nat Neurosci**. 2012 Dec;15(12):1627-35. doi: 10.1038/nn.3264.

\* These authors contributed equally to this work

8) van den Aemele J\*, **Tiberi L\***, Bondue A\*, Paulissen C, Herpoel A, Iacovino M, Kyba M, Blanpain C, Vanderhaeghen P. Eomesodermin induces Mesp1 expression and cardiac differentiation from embryonic stem cells in the absence of Activin. **EMBO Rep**. 2012 Apr;13(4):355-62. doi: 10.1038/embor.2012.23.

\* These authors contributed equally to this work

9) **Tiberi L**, Vanderhaeghen P, van den Aemele J. Cortical neurogenesis and morphogens: diversity of cues, sources and functions. **Curr Opin Cell Biol**. 2012 Apr;24(2):269-76. doi: 10.1016/j.ceb.2012.01.010.

10) Rustighi A\*, **Tiberi L\***, Soldano A, Pece S, Nuciforo P, Capobianco A, Di Fiore P.P. and G. Del Sal. Notch1 and Pin1 establish a positive feedback loop to enhance tumor growth. **Nat Cell Biol**. 2009 Feb;11(2):133-42. doi: 10.1038/ncb1822.

\* These authors contributed equally to this work

# CURRICULUM VITAE



## PERSONAL INFORMATION

Name **Tommaso Pecchia**

E-mail **[REDACTED]**

## WORK EXPERIENCE

- Date **07.2013 –**
  - Name and address of the employer **University of Trento, Via Calepina 14**
  - Occupation or position held **Technician at the CIMeC Centre for Mind/Brain Sciences, Rovereto**  
**7.2013 – 5.2014 Corso Bettini 31**  
**5.2014 – Piazza Manifattura 1**
    - Laboratory planning, cooperating with professors, designers and engineers, to define the main organization of spaces and facilities.
    - Laboratory realization (procurement procedures of both furniture and laboratory equipment).
    - Laboratory management (Consumable material supply; Scheduling and conclusion of maintenance intervention contracts; Basic maintenance of laboratory equipment; Inventory - particularly for current laboratory needs, but also in relation to chemical risk, cooperating with relevant departments; Access policy management on both physical spaces and digital supports; Webmaster of the [ABC research group](#) website; Laboratory mailing lists and calendars updates).
    - Technical support on research (Identification of needs and appropriate solution on the market, both autonomously and in cooperation with colleagues among the technical Staff; Design and realization of custom apparatus for behavioral observations);
    - Promotion of efficient tools for good administrative practice within the laboratory members and technical development of the lab, in close cooperation with computer technicians;
  - Main activity and responsibilities
- 
- Date **04.2009 – 06.2013**
  - Name and address of the employer **CIMeC Centre for Mind Brain Sciences, University of Trento, ACN Laboratory**  
**Corso Bettini 31, 38068 Rovereto (TN)**
  - Occupation or position held **Post-doctoral fellowship**
- 
- Date **02.2013 – 05.2013**
  - Name and address of the employer **Dept. of Psychology, University of Trento, Corso Bettini 31, 38068 Rovereto (TN)**
  - Occupation or position held **(20 h) Temporary Adjunct Professor (Bachelor degree class entitled "Introduction to Neuroscience" – M-PSI/01 - Psychological Science Course)**
- 
- Date **02.2006 – 04.2009**
  - Name and address of the employer **Dept. of Psychology, University of Trieste, Via S. Anastasio n°12**
  - Occupation or position held **Doctoral Fellowship**

- Date **03.2006 – 03.2010**
- Name and address of the employer Consortium Nettuno, Corso Vittorio Emanuele II 39, 00186, Roma
- Occupation or position held Tutor
- Main activity and responsibilities
  - Educational support and Examiner for Biology and Psychological physiology (Bachelor degree class in Psychology)
  
- Dates **1.07.2006 – 10.2008**
- Name and address of the employer Dept. of Psychology, University of Trieste, Via S. Anastasio n°12
- Occupation or position held Web-Master of TACS - a web-site inspired by the Boston Neurotalks <http://tacs.psico.units.it/>
- Main activity and responsibilities
  - Notify members for seminars, lectures and events organized in Trieste concerning Cognitive Neuroscience
  - Web-site updating
  - Users administration
  
- Dates **02.2006 – 07.2007**
- Name and address of the employer Dept. of Psychology, University of Trieste, Via S. Anastasio n°12
- Occupation or position held Tutor
- Main activity and responsibilities
  - Temporary lecturer
  - Teaching, tutoring and research supervision of undergraduate students
  
- Date **8.2005 – 9.2005**
- Name and address of the employer Dept. of Psychology, University of Trieste, Via S. Anastasio n°12
- Occupation or position held Dept. of Ethology, Ecology and Evolution of the University of Pisa.
- Main activity and responsibilities
  - Research planning in homing pigeons
  - Data collection in naturalistic settings
  - GPS technology

## EDUCATIONAL AND TRAINING EXPERIENCE

- Date **02.04.2009**
- Title of qualification awarded Ph.D. degree, with the Thesis entitled: "Basic tools for navigation: use of landmarks in the Domestic chicks (*Gallus gallus*)"
- Name and type of organization providing education and training Dept. of Psychology, University of Trieste, Via S. Anastasio n°12
  
- Date **22.11.2004**
- Title of qualification awarded Degree in Psychology (106/110), with the Thesis entitled: "Asimmetrie funzionali del sistema olfattivo nel Colombo viaggiatore: effetti di lesioni unilaterali alla corteccia piriforme e di occlusioni unilaterali del recettore olfattivo sulle prestazioni navigazionali"
- Name and type of organization providing education and training University of Trieste, Psychology, V. S. Anastasio 12, Trieste
  
- Date **06.08.2006 – 06.10.2006**
- Name and type of organization providing education and training Laboratory of Animal Behaviour and Intelligence, Department of Biology, Faculty of Science, Hokkaido University, Japan

- Principal subjects
  - Single unit recording in vivo
  - Surgical technique
  - Brain fixation and staining
  
- Date **03.2006**
- Name and type of organisation providing education and training
  - Principal subjects
    - Nikon
    - Digital photography in microscopy
  
- Date **05.03.2016**
- Title of qualification awarded
  - Driver / guardian license of living animals in accordance with CE 1/2005
- Name and type of organization providing education and training
  - Breeder Associations (AAFVG) and Carrier Association (FAI) of Friuli Venezia-Giulia

MOTHER TONGUE **ITALIAN**

OTHER LANGUAGE **ENGLISH**

OTHER SKILLS Program languages: Matlab®, C, C++, Genuino™ - Arduino®

I devised a computer controlled Operant Chamber sepcifically designed to investigate visual discrimination abilities in birds and other vertebrate species (see below a publication based on this technology Chiandetti C. *et al* 2014). Other software competences: Spike2 (Single Unit recording applications), Ethovision (Behavioural applications), ZEN-Pro (Bight-field and Dark-field Microscope applications, Zeiss)

## SCIENTIFIC PUBLICATIONS

- Selected Posters:
- Pecchia T.,** lezzi F., Gagliardo A., Vallortigara G. (2012). Hippocampal lesions do not prevent geometry-based learning in homing pigeons under conditions that facilitates an egocentered strategy for spatial reorientation. COGEVO, Rovereto workshop on cognition and evolution, Rovereto, June 28-1, 2012.
- Chiandetti C., **Pecchia T.** Hierarchical stimuli and lateralization in Domestic chick. Kanisza Lecture, Trieste, October 23-24, 2009.
- Pecchia T.,** Vallortigara G. Evidence for a view matching strategy of orientation in the domestic chick (*Gallus gallus*). 31<sup>st</sup> International Ethological Conference, Rennes, August 19-24, 2009.
- Pecchia T.** Basic tools for navigation: use of landmarks in the Domestic chick (*Gallus gallus*). COGEVO, Rovereto workshop on cognition and evolution, Rovereto, June 11-13, 2009.
- Pecchia T.,** Vallortigara G. Reorienting strategies of the domestic chick in a rectangular array of landmark. Spatial Cognition VI, Freiburg, September 15-19, 2008.
- Pecchia T.,** Castellan C., Della Chiesa A., Vallortigara G. Effects of metric transformations of an array of local landmarks on the orientation strategies of the domestic chick. 39th EBBS Annual General Meeting, Trieste, September 15-19, 2007
- Pecchia T.,** Gagliardo A., Ialò P., Odetti F., Savini M., Vallortigara G. Olfactory Lateralization in Homing Pigeons: Navigational Performance after Unilateral Treatment to the Olfactory System. 5thFENS forum, Vienna, July 8-12, 2006.
- Della Chiesa, A., Speranza, M., **Pecchia, T.,** Rollo, B., Tommasi, L., Vallortigara, G. (2004). Orientamento spaziale basato su geometria e landmark nel pulcino domestico. 21° Convegno Nazionale della Società Italiana di Etologia, Padova, 15-17 Settembre 2004, Riassunti delle Comunicazioni, pp. 39, Cleup: Padova.

- Communications: **Pecchia T.** Invited speaker at Behaviour 2013, a joint meeting of the 33rd International Ethological Conference (IEC) and the Association for the Study of Animal Behaviour (ASAB). Title of the symposium: "*Comparative cognition: shared and unique solutions for spatial behaviour*". Organizer: Antoine Wystrach. 4 - 8 August 2013 - The Sage Gateshead, Newcastle Gateshead, UK.
- Pecchia T., Gagliardo A., loale' P., Vallortigara G.** Olfactory lateralization in homing pigeons: navigational performance after unilateral treatments on the olfactory system. Evolution and development of cognitive, behavioural and neural lateralization meeting, Chieti, May 31 – June 1 2007.
- Pecchia T., Gagliardo A., loale' P., Matsushima T., Vallortigara G.** Olfactory lateralization in homing pigeons: navigational performance after unilateral treatments on the olfactory system. Zoological meeting of Japan, Matsue, September 22-24 2006.
- Pecchia T., loalè P., Odetti F., Savini M., Vallortigara G., Gagliardo A.** Prestazioni navigazionali di colombi rilasciati con una narice occlusa. XXII Congresso Nazionale S.I.E, Erice, 18-22 Settembre 2006.

- Peer reviewed full-length papers: Mayer, U., **Pecchia, T.**, Bingman, V.P., Flore, M., Vallortigara, G. (2016) Hippocampus and medial striatum dissociation during goal navigation by geometry and features in the domestic chick: an immediate early gene study. *Hippocampus* 26, 27-40.
- Chiandetti, C., **Pecchia, T.**, Patt, F., Vallortigara, G. (2014) Visual hierarchical processing and lateralization of cognitive functions through domestic chick's eyes. *PLoS ONE* 9(1): e84435.
- Pecchia, T., Vallortigara, G.** (2012) Spatial reorientation by geometry with freestanding objects and extended surfaces: a unifying view. *Proceedings of the Royal Society B: Biological Sciences*. 279, 2228-2236.
- Tommasi, L., Chiandetti, C., **Pecchia, T.**, Sovrano, A., Vallortigara, G. (2012) From natural geometry to spatial cognition. *Neuroscience and Biobehavioral Reviews*. 36, 799-824.
- Pecchia, T., Gagliardo, A., Vallortigara, G.** (2011) Stable panoramic views facilitate snap-shot like memories for spatial reorientation in homing pigeons. *PLoS ONE* 6(7): e22657.
- Gagliardo, A., Filannino, C., loalè, P., **Pecchia, T.**, Wikelski, M., Vallortigara, G. (2011) Olfactory lateralization in homing pigeons: a GPS study on birds released with unilateral olfactory inputs. *The Journal of Experimental Biology* 214, 593-598.
- Pecchia, T., Vallortigara, G.** (2010) View-based strategy for reorientation by geometry. *The Journal of Experimental Biology* 213, 2987-2996.
- Pecchia, T., Vallortigara, G.** (2010) Re-orienting strategies in a rectangular array of landmarks by domestic chicks (*Gallus gallus*). *Journal of Comparative Psychology* 124, 147-158.
- Gagliardo, A., **Pecchia, T.**, Savini, M., Odetti, F., loalè, P., Vallortigara, G. (2007) Olfactory lateralization in homing pigeons: initial orientation of birds receiving a unilateral olfactory input. *European Journal of Neuroscience* 25, 1511-1516.
- Della Chiesa A., **Pecchia T.**, Tommasi L., Vallortigara G. (2006) Multiple landmarks, the encoding of environmental geometry and the spatial logics of a dual brain. *Animal Cognition*; 9, 281-293.
- Gagliardo A., Odetti F., loalè P., **Pecchia T.**, Vallortigara G. (2005) Functional asymmetry of left and right avian piriform cortex in homing pigeons' navigation. *European Journal of Neuroscience* 22, 189-194.

Citation Indexes: hc-index: 8; overall citations: 210; Cites/year: 19.09 (13.05.2016)

- Peer-reviewed chapters of books: **Pecchia, T., Filannino, C., Gagliardo, A., loalè, P., Vallortigara, G.** (2012) Navigating through an asymmetrical brain: lateralization and homing in pigeon. In: Behavioural lateralization in vertebrates: two sides of the same coin. (Eds: Csérmely D., Regolin L.). Springer

- Reviewer for: *Developmental Psychology*, a scientific journal publishing seminal contribution on development across the life span.
- Reviewer ad hoc for: AIP congress (Italian Association of Psychology), Sassari, September 18-24 2005  
*Laterality*, a scientific journal publishing research on the psychological, behavioural and neurological aspects of lateralization
- General Public Talks: Invited speaker at the 57th Neuroscience Café, a series of encounters organized by the B.R.A.I.N Centre for Neuroscience, University of Trieste
- Collaborations: Anna Gagliardo, Dept. of Biology, University of Pisa, Italy (lateralization, homing)  
Verner Peter Bingman, Dept. of Psychology, Bowling Green State University, Ohio, USA (IEG expression in small scale spatial tasks)  
Cinzia Chiandetti, Dept. of Life Sciences, University of Trieste

