

CURRICULUM VITAE

Personal Information

Name: Nicole Amberg **Date of Birth:** November 01, 1984
Address: Department of Neurology, Division of Neuropathology and Neurochemistry, Medical University of Vienna
 Spitalgasse 23, 1090 Vienna, Austria **Date of PhD Defense:** 30.11.2016
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Research Expertise

Neuroscience, Developmental Neuroscience, Oncology, Neuro-oncology, Molecular Biology, Gene Analysis, Epigenetics

Membership in Scientific Societies

Since 2021 **FENS Member** through Membership of the Austrian Neuroscience Association (ANA)
 Since 2023 **EACR Member**

Education

11/2016 **PhD** in the doctoral college of the international PhD program “Inflammation and Immunity” in the lab of **Professor Maria Sibilica, Medical University of Vienna, Austria**
 2011 **BSc in Zoology** at the **University of Vienna, Austria**
 2010 **Diploma (equivalent to BSc + MSc) in Molecular Biology** at the **University of Vienna, Austria**, completed *summa cum laude*

Academic Positions

2022 – present **Senior postdoctoral researcher** in the Department of Neurology, Division of Neuropathology and Neurochemistry, **Medical University of Vienna, Austria**;
 2016 – 2022 **Postdoctoral researcher** in the lab of **Professor Simon Hippenmeyer, Institute of Science and Technology (IST) Austria, Klosterneuburg, Austria**;
 2012 – 2014 **Visiting researcher** in the lab of **Professor Cedric Blanpain, Université Libre Bruxelles, Belgium** (from August – October 2012, April 2013, March 2014)
 2011 – 2016 **PhD student** in the lab of **Professor Maria Sibilica, Medical University of Vienna, Austria**; **Thesis:** The role of inflammation on stem cells of the skin
 2009 – 2010 **Diploma thesis** (equivalent to Master thesis) for completion of Molecular Biology studies in the lab of **Professor Maria Sibilica, Medical University of Vienna, Austria**; **Thesis:** The role of Langerhans cells in skin cancer growth and immune response to Imiquimod
 2009 **Bachelor thesis** for completion of Zoology studies in the labs of **Professor Helge Hilgers and Professor Manfred Walzl, University of Vienna, Austria**; **Thesis:** The pectoral girdle of the salmonid *Oncorhynchus mykiss* – Comparison of three different developmental stages

Fellowships and Grants

07/2023 **Grant** for research project entitled “Identification of the cell-of-origin in brain tumors caused by germline mutations in DNA mismatch repair genes through integrative multimodal analysis of molecular profiles from patient tumor biopsies and the healthy developing human brain” provided by *Fellinger Krebsforschungs Verein (Fellinger Association for Cancer Research)*, **20,000 €**
 07/2023 **Four Grants at the “Talent Summer 2023” program** for summer intern projects, provided by *FFG (Austrian Research Promotion Agency)*, **total of 4,800 €**
 10/2022 **Travel Grant “International Communication”** for participation at the Development and 3D Models of the Human Brain CSHL Meeting, USA, provided by *OEFG (Austrian Science Association)*, **700 €**
 11/2021 **Science Communication Grant “WissKomm”** for the development of a Virtual Reality App allowing to experience stem cell research in neuroscience, provided by *FWF (Austrian Science Fund)*, **49,873.95 €**
 03/2020 **Travel Grant “International Communication”** for presentation of postdoctoral work at the 2nd Neuroepigenetics & Neuroepitranscriptomics Conference, Bahamas, provided by *OEFG (Austrian Science Association)*, **650 €**
 2018 – 2021 **Postdoctoral Hertha-Firnberg-Fellowship** for my postdoctoral project entitled “The role of *Eed* in neural stem cell lineage progression” provided by *FWF (Austrian Science Fund)*, **243,120 €**
 2005 – 2010 **Fellowship for excellent undergraduate studies** provided by *Prof. Dr. Zerweck-/Cassella-Foundation*, **13,750 €**

Prizes and Awards

09/2023	Young Investigator Award 2023 by the Medical Neuroscience Cluster of the Medical University of Vienna
03/2021	Poster Prize at the virtual SY-Stem Meeting at IMBA & IMP, Vienna, Austria
09/2020	Wissen schafft Zukunft Research Award of the State of Lower Austria in the category Call for Concept on “STEM fatale – Aiming at gender equality in leadership positions in STEM”
03/2020	Poster Prize at the 2 nd Neuroepigenetics & Neuroepitranscriptomics Conference, Bahamas
02/2016	Poster Prize at the 7 th International Workshop of the PhD Program IAI, Vienna, Austria
10/2015	Pfizer Poster Prize at the International Symposium Stem cells of the skin, Santander, Spain
11/2011	Young Scientist Award at the 12 th International Workshop on Langerhans cells, Innsbruck, Austria

Teaching and Supervision Experience

2023	Supervision/mentorship of 2 bachelor students and 4 summer interns
2023 – present	Coordinator of the MedUni graduate school Thesis Seminar “Neuro Progress Report”
2023	Coordinator of the MedUni graduate school Journal Club “Neurooncology & Neuroinflammation”
2023	Lecturer at the MedUni graduate school’s Lecture “CLINS Basic Lecture” (highest rating)
2021/2022	Lecturer at IST Austria graduate school’s Course /Lecture “Methods in Neuroscience” (highest rating)
2021	Lecturer at IST Austria graduate school’s Core Course for the part “Scientific Presentation”
2016 – 2022	Supervision/mentorship of 3 PhD students, 5 rotation students (as part of the curriculum of the graduate school at IST Austria), and 2 students of the “ISTern” summer internship program
2015 – 2016	Supervision/mentorship of 1 master student
2014 – 2015	Supervision/mentorship of 3 bachelor students and 8 scientific interns

Academic Service

2020 – present	Review activities for Development, STAR Protocols, Cell Community, Life Science Alliance
2020 – 2022	Occasional organizational responsibilities for weekly Neuroscience Data Talk series at IST Austria
2018 – 2021	Participation in the Postdoc Association at IST Austria, such as elected representative 2017-2018
2014 / 2015	Main coordinator of the organizing committee of the 4 th and 5 th “International Inflammation and Immunity (IAI) PhD Workshop”, Medical University of Vienna, Austria

Mentoring, Diversity & Inclusion Activities

03/2022	Invited speaker for a “Women in STEAM Careers” talk organized by the Austrian Embassy Manila, Philippines
10/2021	Invited speaker for a “Salongespräch” on Women in Science, a ‘culture meets science’ event organized by the Fraunhofer Institute IPK and the Austrian Embassy Berlin, Germany
2021	Participant in IST Austria’s “Women in Science – Change the world!” photo exhibition
2021	Committee member of “WoMen in Science” Event Focus 2021 at IST Austria
2019 – 2022	Development and host of “STEM fatale – Women on a Scientific Mission” lecture series at IST Austria

Outreach and Science Education Activities

07/2023	Active participation at public outreach and science communication events at the Medical University Vienna by giving lab tours or participating in science exhibitions: <i>Children’s summer university</i>
06/2023	Organizer of a creativity contest for 10-14y old teenagers on the topic “Women in Tech” with approximately 350 participants (http://stem-fatale.com/kreativwettbewerb-2023)
04/2023	Invited Speaker at the ‘Viennese Girls Day 2023’ in the Viennese Town Hall
05/2022	Winner at Viennese Science Slam 2022 during the <i>Long Night of Research</i> “Farbe ins Leben bringen”
04/2022	Role Model at the ‘Austrian Girls Day 2022’ at IST Austria, in IST Austria’s ‘Zoom a Scientist’, in various media interviews (Podcasts, Magazines, Newspaper articles), and public science events in Vienna
03/2022	Organizer of a creativity contest for 10-14y old teenagers on the topic “Women in Science” with approximately 600 participants (http://stem-fatale.com/kreativwettbewerb)
08/2021	Participant at the Science Outreach Workshop at FENS Regional Meeting 2021, virtual, Poland.
2016 – 2023	Active participation at annual public outreach and science communication events at IST Austria: lab tours, science exhibitions, science slam, jury for school contest: <i>Open Campus, A Night on Campus, Summer Campus, Summer University</i>
2012 – 2016	Active participation at public outreach and science communication events at the Institute of Cancer Research, Vienna by giving lab tours or participating in science exhibitions: <i>Long Night of Research, Open-door day, Viennese Cancer Day</i>

Previous collaboration partners

Prof. Johann Danzl, Institute of Science and Technology Austria
Prof. Gaia Novarino, Institute of Science and Technology Austria
Prof. Denis Jabaudon, Université de Genève, Switzerland
Prof. Laurent Nguyen, GIGA, Liege, Belgium
Prof. Bernhard Homey, Heinrich Heine University, Dusseldorf, Germany
Prof. Cédric Blanpain / Dr. Panagiota Sotiropoulou, Université Libre Bruxelles, Belgium
Prof. Patrizia Stoitzner / Prof. Nikolaus Romani, Medical University of Innsbruck

Current collaboration partners

Prof. Mariella Filbin, Dana Faber Cancer Institute, Boston, USA (gene expression analysis of pediatric brain tumors)
Dr. Parthiv Haldipur, Seattle Children's Research Institute, USA (mechanisms of cerebellar development)
Dr. Andreas Deuchert, University of Zurich, Switzerland (mathematical modelling of hindbrain development)
Prof. Doris Heinrich, Technical University Ilmenau, Germany (nano-scaffolding and cell culture systems)
Prof. Andreas Schober, Technical University Ilmenau, Germany (nano-scaffolding and cell culture systems)
Prof. Anna Grisold, Medical University of Vienna, Austria (patient consent for iPSC generation)
Dr. Sara Silvaieh, Medical University of Vienna, Austria (patient consent for iPSC generation)
Prof. Amedeo Azizi, Medical University of Vienna, Austria (patient consent for iPSC generation)
Prof. Johannes Gojo, Medical University of Vienna, Austria (patient consent for iPSC generation)
Prof. Katharina Wimmer, Medical University of Innsbruck, Austria (patient consent for iPSC generation)
Prof. Gerda Egger, Medical University of Vienna, Austria (organoid cultures and nanopore sequencing)

Invitations to Conference and Seminar Talks

2023

- **Austrian Neuroscience Wintermeeting 2023**, Vienna, Austria
Talk: Tissue-wide genetic and cellular landscape shapes the execution of sequential PRC2 functions in neural stem cell lineage progression

2021

- **Austrian Neuroscience Association (ANA) Meeting 2021**, Salzburg, Austria.
Talk: Distinct and sequential function of PRC2 in radial glia lineage progression
- **Horizons in Molecular Biology**, Career Fair, International virtual PhD Symposium organized by the MSc/PhD Molecular Biology Program - International Max Planck Research School at the University of Göttingen, Germany.
Talk: The STEM fatale Initiative – towards gender equality in leadership positions in STEM.

2020

- **Glia in Health and Disease**, virtual conference, Cold Spring Harbor Laboratories, USA
Talk: Mosaic Analysis with Double Markers (MADM) Reveals Sequential Functions of PRC2 in Radial Glia Lineage Progression and Essential Role in Cortical Astroglialogenesis
- **3rd Development and Stem Cells Regional Meeting**, IST Austria, Austria.
Talk: Genetic Dissection of PRC2 Core Component *Eed* in Neural Stem Cell Lineage Progression

2017

- **Anna Spiegel Center of Translational Research Seminar Series**, Department of Dermatology, Medical University of Vienna, Austria.
Talk: Epidermal EGFR controls hair shaft differentiation in a p53-dependent manner.

2015

- **1st Joint International IAI-CCHD Symposium**, Medical University of Vienna, Austria.
Talk: The role of EGFR signaling in skin stem cells.

2013

- **Inflammatory skin disease seminar series**, Department of Dermatology, Medical University of Innsbruck, Austria
Talk: Loss of epidermal EGFR signaling induces severe skin inflammation and hair loss.
- **Nature Cancer Symposium**, Madrid, Spain.
Talk: The role of EGFR in Hepatocellular Carcinoma.

Other Selected Conference Contributions

2023

- **1st Heidelberg Cancer Neuroscience Meeting**, Heidelberg, Germany
Poster: The power of the cellular microenvironment in governing neural stem cell behavior

2022

- **Development and 3D Modelling of the Human Brain**, Cold Spring Harbor Laboratories, USA
Poster: Meta-analysis of transcriptional and epigenetic profiles of tumors associated with germline mismatch repair disease across brain regions and developmental time
- **Cortical Development**, Sicily, Italy
Poster: Tissue-wide genetic and cellular landscape shapes the execution of sequential PRC2 functions in neural stem cell lineage progression

2021

- **FENS Regional Meeting**, virtual, Poland
Poster: Distinct and sequential function of PRC2 in radial glia lineage progression
- **SY-Stem** virtual Meeting, IMBA & IMP, Vienna, Austria
Poster: Distinct and sequential function of PRC2 in radial glia lineage progression

2020

- **EMBO Workshop Neuroepigenetics: from cells to behavior and disease**, Heidelberg, Germany
Poster: Distinct and sequential function of PRC2 in radial glia lineage progression
- **2nd Neuroepigenetics and Neuroepitranscriptomics Conference**, Nassau, Bahamas
Poster: Genetic dissection of PRC2 function in neural stem cell lineage progression.

2019

- **3rd AXON Meeting**: Circuits development and axon regeneration, Alicante, Spain
Poster: Role of PRC2 core component *Eed* in neural stem cell lineage progression

2020

- **7th International Workshop** of the PhD Program IAI, Medical University of Vienna, Austria.
Poster: The role of EGFR signaling in skin stem cells.

2015

- **Stem cells of the skin: target and cure for disease** - International Symposium, Santander, Spain.
Poster: Epidermal EGFR controls hair layer differentiation during morphogenesis.

2011

- **12th International Workshop on Langerhans cells**, Innsbruck, Austria.
Poster: Analysis of Imiquimod function in the absence of Langerin positive cells in the skin.