PERSONAL INFORMATION

Family name, First name: GROSS, Cornelius Thilo

Researcher unique identifier (ORCID): 0000-0001-9129-1322

Date of birth: September 15, 1965

Nationality: USA, France

Web site: https://www.embl.it/research/unit/gross/index.html

Google Scholar: https://scholar.google.com/citations?hl=en&user=lHwmMhIAAAAJ&view op=list works

X: https://x.com/cornhelix

• EDUCATION

1998-2002 **Postdoctoral Fellow** with R. Hen, Center for Neurobiology & Behavior, Columbia

University, NY – identified serotonin receptor that mediates the behavioral effects of antidepressants (Santarelli, Saxe, Gross et al., Science [2003] 301, 805-809 – 4849 citations); showed that this receptor controls anxiety behavior via a developmental

programming mechanism (Gross et al., [2002] Nature 416, 396-400 - 1039 citations; Gross

& Hen, [2004] *Nature Rev Neurosci* 5, 545-552 – 632 citations)

1995 **Ph.D.** with W. McGinnis, Dept. of Mol. Biophys. & Biochemistry, Yale University, USA;

PhD thesis: "DEAF-1, a novel protein which binds an essential region in a *Dfd* response element" – addressed the problem of poor homeodomain DNA binding specificity by identifying, cloning, and validating a cofactor that bound to a genetically defined regulatory

target (Gross & McGinnis, [1996] EMBO J 15:1961-1970 – 191 citations).

1988 **B.A.**, Dept. Biophysics, University of California, Berkeley, USA

• CURRENT POSITIONS

2020-present Interim Head of Unit

Epigenetics & Neurobiology Unit (formerly Mouse Biology Unit), European Molecular

Biology Laboratory, EMBL Rome, Italy

2009-present Senior Scientist

Mouse Biology Unit, European Molecular Biology Laboratory, EMBL Rome, Italy

2003-present Group Leader

Mouse Biology Unit, European Molecular Biology Laboratory, EMBL Rome, Italy

• FELLOWSHIPS AND AWARDS

2023	ERC Advanced Grant Investigator (2023-2028)
2023	Falaschi Lecture award
2022	elected EMBO Member
2020	promoted to Interim Head of Unit, EMBL Rome
2016	Adjunct Professor, Monash University, Melbourne, Australia
2014	EMBL Insight Lecturer
2013	ERC Advanced Grant Investigator (2014-2019)
2009	promoted to Deputy Head of Unit, EMBL Rome
2009	awarded tenure (Open-Ended Contract, currently held by 7% of EMBL staff)
2009	appointed member of EMBL Scientific Strategy and Management Advisory Committee
2002-2003	NIH K01 Career Development Award
1999-2001	NIH F32 Postdoctoral Fellowship
1998-1999	NIH Institutional Postdoctoral Fellowship
1990-1993	NSF Predoctoral Fellowship

SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

2003-present Mentored 16 Postdocs/16 PhD students/over 50 Master Students

• ORGANISATION OF SCIENTIFIC MEETINGS

Jun 2020	Principal organizer, "EMBL-ESRF Meeting on X-ray Imaging", Heidelberg/Grenoble,
	Germany/France
Mar 2018	Principal organizer, "Microglia 2018", EMBO Workshop, Heidelberg, Germany
Mar 2014	Principal organizer, "Microglia - Guardians of the Brain", EMBL Conference, Heidelberg,
	Germany
Nov 2009	Principal organizer, "Translating Behavior", EMBL Workshop, Heidelberg, Germany

Chair of Steering Committee, EMBL Partnership Conference

• INSTITUTIONAL RESPONSIBILITIES

2022

2023	led External Facilities Review, Epigenetics & Neurobiology Unit, Rome (held every 4 years)
2020-2024	led External Scientific Review, Epigenetics & Neurobiology Unit, Rome (held every 4 years)
2020	Chair, Faculty Search Committee for Neurobiology Faculty, Epigenetics & Neurobiology
	Unit, Rome – hiring of Ana Boskovic, first female group leader to be hired at EMBL Rome
2020-present	Member of the EMBL Directorate, since 2022 EMBL Extended Directorate
2019-present	Co-Chair (with Helen Parkinson, EBI & Olivier Stegle, EMBL Heidelberg), EMBL Human
	Ecosystems Transversal Theme
2017-2019	Chair, EMBL Equality & Diversity Committee – during my tenure % female faculty at
	EMBL rose from 14% to 29%, introduced Helping Hands program,
2014-present	Chair, EIPOD Postdoctoral Fellow recruitment panel
2015-2020	Co-Chair, Search Committee for Neurobiology Faculty, Epigenetics & Neurobiology Unit,
	Rome
2013-present	Founder and organizer of the EMBL Neurobiology Retreat (cross site participation, held every 2 years)

Member on various EMBL Search Committees – Developmental Biology faculty search, European Bioinformatics Institute faculty search, EMBL Hamburg faculty search, Administration

Member on various EMBL committees – Graduate Program, EMBL/EMBO Symposia/Courses & Conferences, Grants Office, Strategy & Communications, COVID-19 Contract Extension Evaluation Committee, EM Facility, Monoclonal Antibody Facility

NOTE: As the senior neurobiology researcher at EMBL I have overall responsibility for drafting and spearheading the strategy of the neurobiology program across all six sites of the institute and its presentation in the EMBL 5-year Scientific Programme; as Head of Unit I have wide responsibility for initiating and hosting events and representing EMBL and the Italian site at activities across Europe (e.g chairing Faculty and PhD recruitments, Scientific Programme drafting, Indicative Scheme/budget Working Groups, scientific workshops, fundraising activities, promotional events) as well as managing and mentoring a staff of >70 persons, including 12 faculty members (6 group leaders, 6 facility heads)

Frankfurt, Germany

• REVIEWING & ADVISORY ACTIVITIES (last 10 years only)			
Ad hoc reviewer for Science, eLife, Nature, Nat Neurosci, Neuron, PNAS, Curr Biol, Mol Psych, etc.			
2021-present	Chair, ERC Consolidator Grant Neuroscience study section		
2022	SAC Member, Neuroscience Institute, Alicante, Spain		
2020-present	SAC Member, DANDRITE, Danish Institute for Translational Neuroscience, Aarhus,		
	Denmark		
2019-present	Chair, International Scientific Committee, Braincity, EMBL-Nencki Partnership, Poland		
2019	Member, Neurogenetics Search Committee, Human Technopole, Milano, Italy		
2017	Simons Foundation for Research in Autism (SFARI) grant study section member		
2017-2019	ERC Consolidator Grant Neuroscience study section member		
2017	Member, French National Scientific Review Board (hCERES) 5-year review & site visit –		
	IGBMC, Strassbourg, France		
2017	Chair, Lundbeck Foundation 5-year review & site visit – DANDRITE, Aarhus, Denmark		
2016	Chair, EMBL-Poland Twining Proposal Committee		
2013	Search committee member, DANDRITE, Aarhus, Denmark		
2012	ERC Synergy Grant study section member		
2012	Search committee member for Neurophysiology faculty search, University of Basel, CH		
2012	Member, Max Planck Society Presidential Private Colloqium, Future of Psychiatry,		

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2012 Member, Lundbeck Foundation selection committee for Danish EMBL Node, Copenhagen, Denmark

<u>Publications</u> (H-index 47 with 73 senior author papers since 2003 [lead publication: Paolicelli et al. *Science* 2011, 3779 citations]

Top-10 invited presentations to peer-reviewed, internationally established conferences and/or international advanced schools (of 77 invited scientific talks at academic institutions):

EMBO Workshop - Microglia 2020, Heidelberg, Germany, postponed to 2022

Australian Neuroscience Meeting - Adelaide, Australia, 2019

Neural Circuits of Emotions - Shenzhen, China, 2019

NeuroFrance2019 - Symposium speaker, Marseille, France, 2019

Keystone Meeting – Neuroinflammation, Keystone, CO, USA, 2018

Gordon Research Conference – Predator-Prey Interactions, Ventura, CA, USA, 2018

Nature Conference – Neural Circuits of Emotion Meeting, Shenzhen, China, 2016

Keystone Meeting – Microglia, Keystone, CO, USA, 2016

Bordeaux Neurocampus Conference – Beyond Glia, Bordeaux, France, 2016

SfN Annual Meeting – Minisymposium, San Diego, CA, USA, November 2015

Mentoring of early career researchers (not including >50 Masters trainees)

Mentored PhD fellows (years at EMBL, position if departed):

Michela Caliari (2023-present

Celeste Turchetta (2021-present)

Sukrita Deb (2019-present)

Irene Ayuso (2018-present)

Piotr Krzywkowski (2015-2020) Senior Data Scientist, IQVIA, Cambridge, UK

Emmy Tsang (2016-2019) Innovation Community Manager, eLife, Cambridge, UK

Livia Marrone (2015-2018) Senior Project Officer, AstraZeneca Pharma, Milano, Italy

Laetitia Weinhard (2012-2017) postdoctoral fellow in Gan/Littman Laboratories, NYU, USA

Bianca Silva (2011-2015), Assistant Professor, ERC Investigator, and Kavli Fellow, Sophie Antipolis, Nice, France

Rosa Paolicelli (2007-2011) Assistant Professor and ERC Investigator, University of Lausanne, CH

Apar Jain (2006-2010) Elected politician, City Government of Heidelberg, Heidelberg, Germany

Tiago Ferreira (2004-2008) Senior Fellow, Janelia Farm Research Campus, Auburn, USA

Luisa LoIacono (2003-2007) Staff Researcher, Santa Lucia Foundation, Rome, Italy

Theodoros Tsetsenis (2003-2007) Assistant Professor, University of Pennsylvania, Philadelphia, USA Olivier Mirabeau (2003-2007) Senior Research Engineer, Curie Institute, Paris, France

 $Mentored\ postdoctoral\ fellows/technicians\ (fellowship\ funding,\ years\ at\ EMBL,\ position\ if\ departed):$

Valeria Mussetto (2023-present)

Sofia Torchia (data scientist, 2023-present)

Dorian Battivelli (EIPOD fellow, 2020-present)

Rahul Sureka (2019-2023) Postdoctoral Fellow, UPenn, Philadelphia, USA

Senthilkumar Deivasigamani (NARSAD Young Investigator/EIPOD fellow, 2016-present) Postdoctoral Fellow, Imperial College, London, UK

Maria Esteban Masferrer (technician, 2014-2023) on job market

Daniel Rossier (SNF Fellow, 2016-2020) Senior Researcher, Biotech incubator, Geneva, Switzerland Angelo Raggioli (technician, 2013-2019) Head of Vectorology, Reithera Pharmaceuticals, Rome, Italy Alessandro Ciccarelli (2014-2017) Light Sheet Microscopy Specialist, Francis Crick Inst., London, UK Tamara Franklin (SNF fellow, 2012-2016) Associate Professor, Dalhousie University, Halifax, Canada Urte Neniskyte (MC fellow, 2013-2016) Group Leader, University of Vilnius Biocenter, Vilnius, LT Yang Zhan (EIPOD fellow, 2010-2013) Assistant Professor, Shenzhen Inst. of Advanced Technology, Shenzhen, China

Noelia Madroñal (MC fellow, 2010-2013) Project Officer, Roche Pharmaceuticals, Basel, Switzerland Enrica Audero (technician, 2003-2011) Senior Lab Manager in Mainen laboratory, Champalimaud Neuroscience Center, Lisbon, Portugal; now independent entrepreneur

Olga Ermakova (2006-2010) Staff Scientist, CNR, Monterotondo, Italy

Laura Maggi (EMBO fellow, 2004-2006) Associate Professor, Sapienza University, Rome, Italy

Valeria Carola (Thyssen Foundation, 2004-2009) Associate Professor, Sapienza University, Rome, Italy Amaicha Depino (2005-2007) Associate Professor, University of Buenos Aires, Argentina Giovanni Frazzetto (Branco Weiss fellow, 2004-2007) science writer/novelist

Competitive Research Funding Support (in addition to EMBL core funding)

- 2023-2028 **ERC Advanced Grant (2.5M EUR)** "TERRITORY," PI: Gross; circuit mechanisms of the territorial modulation of social defense and aggression in mice
- 2022-2025 **EC ITN International Training Network (264K EUR)** "Serotonin & Beyond"; funds Celeste Turchetta; role of serotonin in social defeat induced brain plasticity
- 2014-2019 **ERC Advanced Grant (2.4M EUR)** "COREFEAR," PI: Gross; functional description of the hypothalamic defensive instinct behavior system
- NIH R21 Grant (120K USD) "Pharmacogenetic tool for the manipulation of functional brain connectivity," PIs: C. Gross and J. Gordon (Columbia University, NY, USA); funded the design, construction, and validation of a novel hM4D receptor trafficked exclusively to axons as a pharmacogenetic tool to rapidly inhibit neurotransmitter release in genetically defined neurons in behaving mice
- 2010-2012 **IRSF Grant (100K USD)**, "A mouse model of CDKL5 Rett Syndrome," PI: C. Gross; funded the construction, validation, and phenotying of a *Cdkl5* conditional knockout mouse, production of monoclonal antibodies against Cdkl5, and a biochemical screen for Cdkl5 targets
- 2008-2013 **EC FP7 Multi-PI Collaborative Grant (340K EUR)** NEUROCYPRES, Co-PI: C. Gross; funded the production and validation of mice expressing a novel FRET-based genetically encoded chloride ion sensor
- 2008-2012 **EC FP7 Multi-PI Collaborative Grant (534K EUR)** DEVANX, Co-PI: C. Gross; funded a series of experiments to dissect hippocampal and amygdala circuits controlling anxiety and fear using the Htr1a/8-OH-DPAT pharmacogenetic tool