

TARANA NIGAM

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EDUCATION

- 2019- now **PhD in Neuroscience**
International Max Planck Research School for Neurosciences, Georg-August University, Göttingen
Thesis: *Feedback as the way forward: Sensory predictions in primate face processing hierarchy*
Dr. Caspar Schwiedrzik; German Primate Center and the European Neuroscience Institute - Göttingen, Germany
- 2017 – 2019 **MSc in Neuroscience**
International Max Planck Research School for Neurosciences, Georg-August University, Göttingen
Thesis: *Gaze and dyadic interactions in social-decision making in monkeys & humans*
Dr. Sebastian Moeller, Igor Kagan, Alexander Gail; German Primate Center, Göttingen
- 2013- 2017 **B.Tech. in Biotechnology**
VIT University, Vellore Institute of Technology, Vellore, India
Thesis: *Adult Hippocampal Neurogenesis: Molecular regulation and implications on spatial memory*
Dr. Hiyaa Ghosh; National Centre for Biological Sciences, Bengaluru, India

PUBLICATIONS

1. **Nigam, T.**, Schwiedrzik, C.M. (2023), Predictions enable top-down pattern separation in the macaque face-processing hierarchy. <https://doi.org/10.1101/2023.10.02.560497>
2. Caruso, N., Zimmermann, A., **Nigam, T.**, Becker, C., Lipson, K., Helmbacher, F. (2022), An intragenic FAT1 regulatory element deleted in muscular dystrophy patients drives muscle and mesenchyme expression during development. <https://doi.org/10.1101/2022.09.14.507898>
3. **Nigam, T.**, Schwiedrzik, C.M. (2022), High-level prediction signals cascade through the macaque face-processing hierarchy, Peer-Reviewed Conference Proceedings of Computational and Systems Neuroscience (COSYNE) 2022
4. Lehr, A., Henneberg, N., **Nigam, T.**, Paulus, W., & Antal, A. (2019). Modulation of Conflict Processing by Theta-Range tACS over the Dorsolateral Prefrontal Cortex. *Neural plasticity*, 2019, 6747049. <https://doi.org/10.1155/2019/6747049>

RESEARCH EXPERIENCE

- July - Sep, 2022 **Sensory predictions in the macaque face-processing network using fMRI**
Dr. Winrich Freiwald, The Rockefeller University, New York, USA
- Oct 2018 - Apr 2019, **Gaze and dyadic interactions in social decision making in primates**
Drs. Sebastian Moeller, Igor Kagan, Alexander Gail, German Primate Center, Göttingen
- May - July 2018 **Role of temperature and TRPV1 channel on sharp-wave ripples in hippocampus**
Dr. Camin Dean, European Neuroscience Institute, Göttingen
- Jan – March 2018 **Effect of transcranial alternating current stimulation (tACS) on conflict processing using conflict-based decision making models**
Dr. Andrea Antal, University Medical Center, Göttingen
- June - Aug 2016 **Effect of stress & glucocorticoid receptor in prefrontal cortex on task switching**
Dr. Francois Tronche, University Pierre et Marie Curie, Paris, France
- June - July 2015 **Tissue-specific expression of a modified gene enhancer implied in muscular dystrophy in mice embryos**
Dr. Francoise Helmbacher, Aix-Marseille University, Marseille, France

CONFERENCES ORGANIZED

- May 2021-
June 2022;
**Neurizons 2022 – Conference,
Max Planck Institute for Multidisciplinary Sciences, Göttingen**
Main role: General coordinator, leading multiple teams, inviting speakers, organizing career fair, workshops and acquiring funds through Boehringer Ingelheim Foundation
- May 2019 –
May 2022
**Neurizons 2020 – Conference, Multidisciplinary virtual neuroscience conference,
Max Planck Institute for Biophysical Chemistry, Göttingen**
Main role: Leading the panel discussion team- Natural vs Artificial Intelligence, inviting speakers
- Oct 2018-
Sep 2019
**Horizons in Molecular Biology Conference,
Max Planck Institute for Biophysical Chemistry, Göttingen**
Main role: Co-moderated the panel discussion with Prof. Mary Osborn on mental health awareness, work-life balance in academia and science communication; Acquiring funds for conference organization

TALKS

- Sep 2022 The Rockefeller University, New York, USA (Dr. Winrich Freiwald)
- Aug 2022 Princeton Neuroscience Institute, Princeton University, USA (Dr. Timothy Buschman)
- Aug 2022 Brain and Cognitive Sciences, Massachusetts Institute of Technology (MIT), USA (Dr. Mehrdad Jazayeri)
- Aug 2022 Neuroscience Institute, NYU Langone Health, New York University, USA (Dr. Jayeeta Basu)
- Apr 2020 Intracranial Electrophysiology Symposium, University Medical Center Goettingen, Germany

GRANTS AND FELLOWSHIP AWARDS

- May 2022 Outgoing Fellows Grant from The Leibniz ScienceCampus Primate Cognition for Exchange Program at The Rockefeller University, New York, USA
- Dec 2021 **Grant for organizing scientific conference awarded by Boehringer Ingelheim Foundation** (Amount: 5700 €) Applied along with Delane Espinueva (as a part of Neurizons organizing team) for supporting junior scientists, speakers at the Neurizons 2022 conference with the aim to *promote inclusivity and diversity in academia*.
- July 2019 Full financial support award from Cold Spring Harbor Asia for Cognitive and Computational Neuroscience Summer School, Suzhou, China
- June 2019 Full financial support award from National Institute of Mental Health (USA) and Wellcome Burroughs Funds for Cellular, Computational and Cognitive Neuroscience Summer Program- Princeton Neuroscience Institute, USA
- June 2018 Travel award from Abcam- Adult Neurogenesis Conference, TU Dresden, Germany
- Sep 2017 –
May 2019 **Scholarship from International Max Planck Research School (IMPRS), Germany for Masters in Neuroscience**
- June - Aug 2016,
June - Aug 2015 Scholarship from Centre National de la Recherche Scientifique (CNRS), France for summer research internships
- June 2015 Accepted for Summer Research Fellowship of Indian Academy of Sciences (declined)
- 2009 Young environmentalist award, Regional Museum of Natural History, Government of Madhya Pradesh, India

ADDITIONAL TRAINING & CONFERENCES

March 2023	Poster Presentation- Primate Neurobiology Meeting, 2023, Goettingen
Nov 2022	Poster Presentation- Society for Neuroscience Meeting, 2022, San Diego, USA
March 2022	Dorothea Schlözer Mentoring Program for young women scientists (1 year program)
March 2022	Poster Presentation - Computational and Systems Neuroscience (COSYNE) 2022, Lisbon and Cascais, Portugal
March 2021	Poster Presentation - 14th Göttingen Meeting of the German Neuroscience Society
Nov 2019	Blackrock Microsystems European Hands-on Electrophysiology Workshop, Göttingen
July 2019	Cognitive and Computational Neuroscience Summer School, Cold Spring Harbor Asia, Suzhou, China
June 2019	Cellular, Computational and Cognitive Neuroscience Summer Program, Princeton Neuroscience Institute, Princeton, USA
May 2019	ELECTRAIN - Extended Methods Course in Electrophysiology, European Neuroscience Institute, Göttingen, Germany

TEACHING EXPERIENCE

Dec 2022;	Invasive electrophysiology in humans
Dec 2021;	Tutor for methods course for MSc IMPRS Neuroscience program
Dec 2020;	Instructor: Dr. Caspar Schwiedrzik
Nov 2019	

SCIENCE COMMUNICATION/OUTREACH

July 2022;	Night of Science, Göttingen - Along with Cognitive Neuroscience Department at the
Jan 2019	German Primate Center, Göttingen
Dec 2019	Invited Talk: Cognitive Neuroscience and Career-based Interaction Session for Bachelor and Graduate-level students in Cognitive Science and Psychology at Dayalbagh Educational Institute, Agra, India
Oct 2019	Science goes City, Göttingen - Science Speed-Dating event organized by the Göttingen Campus Postdoc Network <i>Role: Headed a team of fellow artists; Made minimalist sketches to explain research projects of ~20 scientists from various scientific and humanities fields to general public</i>

LANGUAGES

English (Bilingual proficiency), Hindi (Bilingual proficiency), German (B1), French (beginner)

HOBBIES AND INTERESTS

Painting, Calligraphy, Swing Dance, Badminton, Astrophysics, Improv Theatre