Guhathakurta, Sukanya, PhD

Institution: Max Planck Institute of Immunobiology and Epigenetics
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Position: Minerva Fast Track Group Leader

Academic education including academic degrees

2010-2013 B.Sc Major in Microbiology, Minor in Physics and Chemistry
St. Xavier's College, University of Calcutta, India

2013-2015 M.Sc in Biotechnology (thesis under the supervision of Prof. Dr. Rinti Banerjee)
Department of bioscience and bioengineering
Indian Institute of Technology, Mumbai, India

Scientific graduation

2016-2022 Ph.D under the supervision of Prof. Dr. Asifa Akhtar
Department of Chromatin Regulation
Max Planck Institute for Immunobiology and Epigenetics, and
Faculty of Biology, University of Freiburg, Germany

Employment

Since 2024 Minerva Fast Track Fellow, Max Planck Society Biomedical Section

2022-2024 Bridging Postdoctoral Fellow, Department of Chromatin Regulation
Max Planck Institute for Immunobiology and Epigenetics

2016-2022 Ph.D, International Max Planck Research School for Immunobiology, Epigenetics and Metabolism

Other activities, awards and honours

2024 SFB1381 Young Investigator award
CIBSS (DFG funded) InteGREATor award for doctoral first-author publication

2023 Minerva Fast Track Fellowship for establishing independent project
Selected talk and chair at the Fusion 2nd Mitochondria Conference, Portugal
Selected talk at the CIBSS International Symposium

2022 Selected talk at the Cell Symposia on Multifaceted Mitochondria, Spain
Invited talk at FASEB conference on Acetylation dynamics in health and disease, Puerto Rico
'NK and Irene Cheung Family Scholar' scholarship, Keystone Symposia, USA
CIBSS "Advancement and Travel Grant for Early Career Researchers"
Selected talk at Keystone Symposia, USA
Recognition award at 50th school anniversary for contribution to the institution

2021 Invited talk at Cell Signaling Technology webinar series

2019 Travel grant from International Graduate Academy, Freiburg
Best poster presentation award at Cold Spring Harbor Conference, China
Best poster presentation award at EMBL Conference, Heidelberg

2015 Institutional silver medal and INSPIRE fellowship, Gov. of India

Ten most important publications

Guhathakurta, S., Erdogdu, N.U., Hoffmann, J.J., Grzadzielewska, I., Schendzielorz, A., Martensson, C.U., Corrado, M., Karoutas, A., Seyfferth, J., Warscheid, B., Pfanner, N., Becker, T. & Akhtar, A. **COX17 acetylation via MOF-KANSL complex promotes mitochondrial function and integrity.** *Nature Metabolism (2023).* Featured in News & Views by Natalie Niemi (Nat. Met.) and by Dimitris Typas (Nature Structural and Molecular Biology).

Sheikh, B. N., **Guhathakurta, S.**, Tsang, T.H., Schwabenland, M., Renschler, G. V., Herquel, B., Bhardwaj, V., Holz, H., Stehle, T., Bondareva, O., Aizarani, N., Mossad, O., Kretz, O., Reichardt, W., Chatterjee, A., Braun, L., Thevenon, J., Sartelet, H., Blank, T., Grün, D., Elverfeldt, D., Huber, T.B., Vestweber, D., Avilov, S., Prinz, M., Buescher, J.M., & Akhtar, A. **Neural metabolic imbalance induced by MOF dysfunction triggers pericyte activation and breakdown of vasculature.** *Nature Cell Biology* 22, pp. 828-841 (2020).

Karoutas, A., Szymanski, W., Rausch, T., **Guhathakurta, S.**, Rog-Zielinska, E.A., Pyronnet, R., Seyfferth, J., Chen, H.R., Leeuw, R., Herquel, B., Kimura, H., Mittler, G., Kohl, P., Medalia, O., Korbel, J.O., & Akhtar, A. **The NSL complex maintains nuclear architecture stability via lamin A/C acetylation**. *Nature Cell Biology* 21, pp. 1248-1260 (2019). *Featured in News & Views by Varvara V. Papova & Jerry L. Workman.*

Sheikh, B. N., Bondareva, O., **Guhathakurta, S.**, Tsang, T.H., Sikora, K., Aizarani N., Sagar, Holz, H., Grün, D., Hein, L., & Akhtar, A. (2019). **Systematic identification of cell-cell communication networks in the developing brain**. *iScience* 21, pp. 273-287 (2019).

Sheikh, B. N.*, **Guhathakurta, S**.*, & Akhtar, A. (2019). **The non-specific lethal (NSL) complex at the crossroads of transcriptional control and cellular homeostasis**. *EMBO Reports* 20, p. e47630 (2019). *Equal contribution