Johan Ajnabi

Cell Biologist | Imaging, Cell-Based Assays and Mouse Models
Bengaluru, India | +91 80164 70893
contact@johanajnabi.com Google Scholar johanajnabi johanajnabi.com

WORK EXPERIENCE

BRIC-Institute for Stem Cell Science and Regenerative Medicine, India

Research Scholar (PhD) .....*Aug 2019 – Present*

Project leadership: mechanobiology and epigenetics:

- Led a multi-year project from hypothesis to first-author manuscript *(bioRxiv:* Ajnabi *et al.,* 2026), demonstrating that actin shortening drives ERK1/2 inactivation via DUSP6, unmasking a phospho-regulated NLS on DNMT3a (pS255) to promote nuclear import.
- Dissected the pathway using pharmacological perturbations, DNMT3a phospho-mutants (S255A/S255D) and FRAP.
- Presented the work as a talk at ICMMB 2026, Singapore, and four other meetings.

Assay development and *in vivo* work:

- Contributed to two stemness studies: endosomal αM-integrin/STAT3 and autocrine Mindin/CD11b/Src-STAT3 sustaining the stem state and attenuating cSCC (Badarinath et al.) (*Cell Communication and Signaling:* Dam *et al.,* 2026; *Cell Reports:* Badarinath *et al.,* 2022).
- Contributed to a SNAI1-transgenic mouse study: Mindin drives fibroblast collagen and cytokine deposition, reproducing cutaneous systemic sclerosis (*Journal of Investigative Dermatology:* Rana *et al.,* 2023).
- Contributed to pseudovirus transduction assays (Caco-2, flow cytometry) showing niacinamide potentiates LL-37-mediated SARS-CoV-2 disruption (*Frontiers in Immunology:* Bhatt *et al.,* 2023).

Translational biology:

- Contributed to a NanoString GeoMx spatial study of vitiligo pre- and post-NB-UVB; found IFN-γ/CXCL10 suppression and CD8+ TRM depletion (*Clinical & Translational Immunology:* Dutta *et al.,* 2026).

Collaboration and mentoring:

- Contributed experimental design, data generation, and analysis to six multi-author studies spanning fundamental and translational biology.
- Trained five junior researchers in cell culture, molecular techniques, experimental design, and data presentation.

ICAR-National Institute for Plant Biotechnology, India

M.Sc. Dissertation .....*Jul 2017 – Jul 2019*

- **Identification of the *cis*-regulatory region of a promoter:**

Identified *cis*-regulatory elements controlling stress-responsive PM19 gene expression in wheat *(Master's Thesis:* Ajnabi, 2019)

PUBLICATIONS

- First-author preprint (bioRxiv, 2026) and six co-authored papers, including *Cell Reports* and *Journal of Investigative Dermatology*; full list on Google Scholar.

PRESENTATIONS

- Talk: "Mechanoregulation of DNMT3a during wound healing", ICMMB 2026, Singapore, October 2026

AWARDS

- National fellowship exams: CSIR-NET JRF (All India Rank 20), ICAR AICE-JRF/SRF (Rank 3), GATE XL (Rank 8), ICAR AIEEA-PG (Rank 1)
- Paeonia Travel Award, MBI Conference 2023, NUS, Singapore

SUMMARY

Cell biologist with seven years of hands-on experience in primary cell culture, quantitative imaging, and mouse models. Led a project from hypothesis to first-author manuscript and contributed to six other studies in skin biology, fibrosis, immune profiling, and antiviral mechanisms. PhD thesis submission expected in March 2027. Seeking a research scientist role.

SKILLS

- **Cell-based assays:** mammalian cell culture, genetic perturbation (transfection, knockdown, overexpression), pseudovirus assays
- **Quantitative imaging:** live-cell and fluorescence microscopy (confocal, multiphoton), image analysis in FIJI/ImageJ and CellSense
- **Flow cytometry and molecular readouts:** FACS, qPCR, Western blotting, immunofluorescence
- ***In vivo* work:** mouse wound-healing and fibrosis models, colony management
- **Software:** GraphPad Prism, MATLAB, R and Python (data analysis and plotting), Adobe Illustrator

EDUCATION

BRIC-inStem ..... **Bengaluru, India**
PhD *Aug 2019 – Present*
Thesis: Regulation of DNMT3a localization in the cutaneous wound healing response.
Advisor: Prof. Colin Jamora · Submission: March 2027

ICAR-IARI ..... **New Delhi, India**
MSc *Jul 2017 – Jul 2019*
Molecular Biology and Biotechnology
Advisor: Prof. Monika Dalal GPA: 8.51/10

BCKV ..... **Mohanpur, India**
BSc *Jul 2013 – Jul 2017*
Agriculture GPA: 7.92/10

LANGUAGES

- Bengali (Native) • English (Advanced)

SERVICES

- Peer Reviewer, *Frontiers in Physiology* (October 2026)
- Volunteer, COVID-19 diagnostic testing, Bangalore Life Science Cluster (BLiSC), 2020–2021