

SHILPA PATIL, PHD

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SUMMARY

A forever student of science & a passionate Research Scientist specializing in translational research. Accomplished in managing multiple projects while fostering collaboration. Highly committed & eager to contribute, I'm actively seeking opportunities to collaborate with an enthusiastic team to drive innovation and advance cancer therapeutics research.

WORK EXPERIENCE

Freelancing Scientific consultant/Reviewer/Blogger August 2023 – Present

- Peer reviewed manuscripts & edited scientific documents.
- Self-learning: Nuclear medicine, Drug development, PK-PD data analysis, FDA updates

Post-Doctoral Research Fellow, University of British Columbia, Vancouver, Canada 2021 – 2023

- Lead two projects focussed on Cancer metabolism and Pancreas development.
- Developed and established Animal care protocols in the lab with Animal care facility.
- Preclinical studies: Developed in vivo animal model, study design, performed experiments & analysed data.
- Established protocols for ultrasound imaging in mice and trained students for in vivo imaging.
- Collaborated with 10X Genomics, BC cancer and other labs in UBC to develop protocols and projects.

Post-Doctoral Researcher, University of Goettingen, Germany 2020 – 2021

- Lead a mechanistic project investigating the NFATc1-EZH2 axis in pancreatic cancer.
- Established PDX mouse models in the department with clinicians, pathologists and fellow researchers.
- Provided guidance on planning, executing & analysing in vitro & in vivo preclinical studies.
- Wrote research papers & research grants (project ideas, budgeting).

Doctoral Researcher, University of Goettingen, Germany 2016 – 2020

- Headed a oncology-based translational research project, resulting in 2 first author papers.
- Established protocols for orthotopic transplantation and ultrasound imaging in the department.
- Designed and performed in vitro and in vivo pharmacokinetics and pharmacodynamic studies to evaluate potential therapeutic targets and their mechanism of action.
- Conducted correlation studies with clinical samples in collaboration with clinicians.
- Designed and executed preclinical studies to 5 collaborators resulting in publications.

Research Assistant, Molecular Biology and Genetics Unit, JNCASR, India 2014 – 2016

- Assisted in two different projects related to p300 autoacetylation.
- Developed and characterized antibodies.

Project Assistant, National Centre for Biological Sciences, India 2014 – 2014

- Developed a method to predict Imatinib drug response prior to treatment in CML patient.
 - Worked with clinicians to correlate clinical data to study results (n=30).
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EDUCATION

PhD, University of Goettingen, Germany 2016 – 2020

- *Characterizing the role of EZH2 in Pancreatic ductal adenocarcinoma (PDAC).*

Master of Science, Manipal Institute of Regenerative Medicine, India 2012 – 2014

- *Analysis of copy number variation in Chronic myeloid leukemia (CML)*

Bachelor of Science, Manipal Life Sciences Centre, India

2009 – 2012

- *Alterations in the extracellular matrix proteins under hypoxic conditions in HepG2 cells*
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SKILLS

Experimental:

- **Preclinical (in vitro):** efficacy & toxicity testing assays, cell-based assays, functional assays, gene/protein expression assays, immunological assays.
- **Preclinical (in vivo)** - Develop animal model – transgenic, orthotopic, syngenic and pdx mouse models; SC, IP and IV injections in mice, Abdominal ultrasound imaging for tumor detection in the mouse models, bioluminescence imaging, knowledge of PET/CT imaging, end-to-end study design, PK-PD studies.
- **Radioactivity Assays** – Autoradiography, Radioimmunoassays, scintillation counts
- **Flowcytometry** – Cell cycle analysis, FACS
- **Molecular Biology** – SDS-PAGE, Western Blot, qPCR, DNA & RNA isolations, Recombinant protein purification & quantification, Histone acetyltransferase assays, Immunoprecipitation, cloning, embryonic dissections
- **Histology** - Immunohistochemistry, Immunofluorescence, Microtomy, Cryosectioning
- **Cell culture** – Primary, stem cell, pdx , organoids, transfections, CRISPR Cas9 & chemoresistant cell lines.
- **Bioinformatics** - ChIP- and RNA- seq (library prep and analysis)
- **Softwares** – GraphPad, ImageJ, Adobe illustrator, R studio (basics)
- **Microscopy** – Electron, fluorescence & confocal microscopy

Mentorship: Guided students, provided workshops in conferences, provided practical courses.

Organizational: Volunteered in organizing conferences (Deutsche Pancreas Club, Germany – 2018, Pancreas spring meeting, Germany -2018, EKFS cancer symposium, Germany– 2017, Asian forum of Chromosome & Chromatin Biology Conference, India – 2015).

Presentation: Presented (Oral & Posters) at various meetings & conferences.

Collaboration: Multiple projects in collaborations with researchers, pathologists & clinicians.

Publications: ([View complete list of publications](#))

TRAINING & CERTIFICATIONS

- ICH Good Clinical Practice (E6), The Global Health Network, 2024.
 - Clinical Trials Analysis, Monitoring & Presentation, 2023
 - Drug Development - Specialization: Drug discovery, Drug development & Drug commercialization, 2023
 - Project Management, 2023
 - Tri-Council Policy statement: Ethical Conduct for Research involving Humans (course on Research ethics), 2021.
 - FELASA-B (Animal experimentation course for European Laboratory Animal Science Associations), 2016.
 - Trainee in Virology department in Manipal University, 2013.
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HONORS & AWARDS

- Abstract selected for oral presentation at European Pancreatic Club, Norway (2019).
 - Best Abstract award issued by Deutschen Pancreas Club, Ulm, Germany (2018).
 - Travel award issued by European Pancreatic Club, Budapest, Hungary (2017).
 - Gold Medal for best outgoing graduate student by Manipal University (2012).
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VOLUNTEERING

- Mentor in Freedom Employability Academy (FEA), empowering disadvantaged youth in India (2018-present).
- Volunteer in the Beayoutiful Foundation, empowering young women in Canada (2021-present).
- Cultural secretary of 'Nirmiti', a registered Indian fraternity in Goettingen, Germany (2016-2019).
- Volunteered in a NGO aimed to help street children access education and develop skills (2014-2016).