

## BIOGRAPHICAL SKETCH

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### EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Bangalore University (Garden City College), India	BS	2004-2007	Genetics, Microbiology, Chemistry
University of Kalyani, India	MS	2007-2009	Microbiology
University of Kalyani, India	PhD	2010-2014	Cell and Molecular Biology
Chittaranjan National Cancer Institute (CNCI), India	Research Associate	2015-2017	Cell and Molecular Biology in Head and Neck Cancer
Tata Medical Center (TMC), India	Biobank-Technician	2017-2018	DNA damage response (DDR) in Cervical Cancer
Northern Institute for Cancer Research(NICR), Newcastle University, United Kingdom	UICC Fellow	2017	Radiosensitization with DDR inhibitors in Cervical Cancer
Northern Institute for Cancer Research(NICR), Newcastle University, United Kingdom	Newton International Fellow	2019-till date	Radiosensitization and renal protection studies with PARP inhibitor in Cervical Cancer

### A. POSITIONS AND HONORS:

#### EMPLOYMENT

August'2011 – July'2013: Junior Research Fellow, University of Kalyani, India  
February –May'2014: Research Associate, Institute of Life Sciences, India  
January'2015 – December'2016: Research Associate, Chittaranjan National Cancer Institute, India  
November-December, 2017: Visiting Researcher of UICC, NICR, Newcastle University, United Kingdom  
April'2017- April'2018: Bio-bank Technologist, Tata Medical Center, India  
February'2019- till date: Academy of Medical Sciences Newton International Fellow, NICR, UK

#### AWARDS AND HONORS

2009: Qualified Graduate Aptitude Test (GATE) conducted by Indian Institute of Technology (IIT)  
2011: Junior Research Fellowship sponsored by Boiron Laboratories, Lyon, France  
2015: Department of Biotechnology (DBT), India funded Research Associate fellowship on project entitled "Analysis of Hyaluronan-CD44 mediated signaling in head and neck squamous cell carcinoma"  
2016: Invited speaker on "Department of Biotechnology Star College Sponsored Lecture" at Department of Zoology, Moulana Azad College, Kolkata, India  
2017: UICC-Technical fellowship on project entitled "Investigating radiosensitisation in cervical cancer using DNA damage response pathway inhibitors" at NICR, Newcastle University, United Kingdom.  
2018: Life member of the Association of UICC Fellows (AUF)  
2019: Academy of Medical Sciences Newton International Fellowship on project entitled "Investigating therapeutic application of PARP inhibitor as chemo-radiosensitiser in cervical cancer and its effect on renal protection" at NICR, Newcastle University, United Kingdom

### B. PEER-REVIEWED PUBLICATIONS (SELECTED):

Research ID: [orcid.org/0000-0003-0416-0688](https://orcid.org/0000-0003-0416-0688)

H-index:10 i-10 index: 10 Total citations: 274

#### Research Articles (Selected)

- (1) **Saha, S.K.** and Khuda-Bukhsh, A.R., 2014. Berberine alters epigenetic modifications, disrupts microtubule network, and modulates HPV-18 E6-E7 oncoproteins by targeting p53 in cervical cancer cell HeLa: a mechanistic study including molecular docking. **European Journal of Pharmacology** 744, 132-146.

- (2) **Saha, S.K.,** Sikdar, S., Mukherjee, A., Bhadra, K., Boujedaini, N., Khuda-Bukhsh, A.R., 2013. Ethanolic extract of the Goldenseal, *Hydrastis canadensis*, has demonstrable chemopreventive effects on HeLa cells in vitro: Drug-DNA interaction with calf thymus DNA as target. **Environmental Toxicology and Pharmacology** 36, 202-14.
- (3) Patra, A., **Saha, S.K.,** Sen, T.K., Carrella, L., Musie, G.T., Khuda-Bukhsh, A.R., Bera, M., 2014. Water Soluble Heteronuclear [NaCu<sub>11</sub>] Metallomacrocyclic Sandwich Complexes: Synthesis, Structure, Properties and *in vitro* Biological Studies. **European Journal of Inorganic Chemistry** 30, 5217-5232.

#### Review Articles (Selected)

- (1) **Saha, S.K.,** Maiti, G, Roychoudhury, S, Panda, C.K., 2017. Molecular progression of Head and Neck Squamous Cell Carcinoma. **Nucleus** 60, 111-119. DOI: 10.1007/s13237-017-0212-9.
- (2) **Saha, S.K.,** and Khuda-Bukhsh, A.R., 2013. Molecular approaches towards development of purified natural products and their structurally known derivatives as efficient anticancer drugs: Current trends. **European Journal of Pharmacology** 714, 239-248.

#### Book Chapter

- (1) Khuda-Bukhsh, A.R, **Saha, S.K.** and Das, S., 2013. **Cancer: Oxidative Stress and Dietary antioxidants.** ISBN: 978-0-12-405205-5 Chapter 8, 77-88.

#### D. TEACHING/MENTORSHIP

- 2015: Research mentor of Mr. Subhrangsu Chakraborty, a student of Biotechnology at GITAM Institute of Science, GITAM University, Visakhapatnam, India for completion of his MS Dissertation
- 2016: Research mentor of Mr. Arindam Sain, a student of Physiology at University of Calcutta, India, for completion of his MS short term research training.
- 2016: Research mentor of Mr. Gourab Mallick, a student of Pharmacy at Bengal School of Technology, West Bengal, India for completion of his MPharm Dissertation
- 2018: Research mentor of Ms. Arpita Maity, Data Manager at Tata Medical Center, Kolkata, India on clinical sample bio-banking and laboratory skills and techniques

#### E. SKILLS AND TECHNIQUES

- (1) Cell Biology: (I) Animal Cell Culture, (II) Cytotoxicity (MTT) assay, (III) Cell Migration assay, (IV) Immunocytochemistry, (V) Cell Cycle Analysis by Fluorescence Activated Cell Sorter (FACS), (VI) TUNEL assay by FACS, (VII) Isolation of Mitochondria from Animal Cell Culture, (VIII) Isolation of Hyaluronan from tissue and “HA-assay”, (IX) si-RNA mediated gene silencing, (X) Comet Assay.
- (2) Molecular Biology: (I) Westernblot, (II) Immunohistochemistry, (III) PCR, (IV) Quantitative Real Time-PCR, (V) ELISA, (VI) Immunoprecipitation, (VII) Microsatellite marker based deletion analysis (Allelotyping), (VIII) Methylation Sensitive Restriction Enzyme based PCR assay.
- (3) Microbiology: (I) Bacterial culture, (II) Transformation, (III) Bacteriophage phi X174 culture maintenance and titer assay.
- (4) Radiobiology: (I) Handling of Gulmay Irradiator, (II) 2D radiobiological clonogenic assay, (III) radiobiological SRB assay, (IV) radiobiological  $\gamma$ H2AX-RAD51 foci formation assay to determine Homologous Recombination Repair (HRR) status.
- (5) Bio-banking and Clinical Data Management: (I) clinical sample bio-banking of- fresh tissue (biopsy specimens and surgical specimens), body fluids (ascetic fluid, vaginal swab), formalin fixed paraffin embedded (FFPE) blocks and blood samples from Cervical cancer and Ovarian cancer patients by application of “LabVantage Software”. (II) Maintaining clinical database and data capture system with dedicated workforce to study the epidemiology of disease and accurate information on disease demographics, treatment history (surgery/ radiotherapy/ chemotherapy), pathology and follow up details of the patients by application of “Redcap Software”.
- (6) Complementary Skills: (I) Excellent verbal and written communication skills, including the ability to write scientific manuscripts and grant applications. (II) Good interpersonal skills with the ability to interact effectively with collaborators. (III) Good organizational skills. (IV) Proven ability to work to deadlines. (V) Demonstrable ability to design and implement experiments with cell lines and clinical samples. (VIII) Ability of team leadership / management / task coordination / conflict resolution in research teams.