**DEBJANI SAHA, Ph.D**

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|  | **SUMMARY**  A Ph.D in Immunology, currently, working as Senior Research Scientist in in-vitro and ex-vivo preclinical drug development and screening studies for Oncology platform in a global contract research and manufacturing unit. With 8+ years of post-Ph.D research experience in molecular and cellular biology, extensively trained in mammalian cell culture ( 2D and 3D) , primary cell line generation and stable cell line formation from patient tumour samples. Highly efficient in bioassay developments, data analysis and presentation.  **CURRENT POSITION**  Senior Research Scientist  In-Vitro Pharmacology,  TCG Life Science Pvt. Ltd, Kolkata, India  June 2019- Present  **CURRENT JOB RESPONSIBILITIES**   * Drug screening assays. * Biochemical and cell based assays. * Development of Bioassay methods for Oncology, pain and inflammation ( In-vitro/ Ex-vivo) * New target validation for Oncology. * Ex-vivo isolation and cell culture. |

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|  | **TECHNICAL SKILLS**  - **Cell Biology**  Mammalian cell culture including Primary cells. Isolation of Primary cells from Tissues  such as Breast, Pancreatic tumor tissue. Stem cell isolation, Ex vivo tissue culture of mouse neuronal ganglion, Transfection with sh and siRNA, Cell based assays like-proliferation, wound-healing, migration, viability, colony forming assays ( Methylcellullose).    **-Molecular biology**  DNA and RNA extraction and purification. PCR,  Quantitative Real‐Time PCR (qPCR) Gene cloning, Generation and cloning of cDNAs,,bacterial and fungal transformation, lentiviral production for transduction, Generation of overexpression and deletion mutants, Southern blotting, Northern blotting Reporter gene ( luciferase etc) and vector assay. Use of luminescence or fluorescence readers  **-Immunology**  Immunization, Raising of antibody and its purification and maintenance, ELISA, Dot blot,, Immunodiffusion., Western blotting, GST- pulldown, Immunoprecipitation, FACS staining.  -**Bio-chemical Methods**  Protein purification and estimation by several methods, Chemical modification of proteins  (including enzymes) like conjugation of haptens with carrier proteins to prepare immunogens and its purification, Enzyme assay (especially peroxidase)  **-Microscopy** ‐ Confocal, Fluorescence‐, phase contrast‐ and DIC‐microscopy: ScanR- Olympus, Zeiss AXIOSCOPE, Real time cell analysis    -**Chromatographic techniques, HPLC**  **TRANSFERABLE SKILLS**  Team Work  Project Management  Problem solving  Organization  Lab experience Presentation and Public Speaking |
|  | **PREVIOUS EXPERIENCE**  **08/2018-06/2019**  **Faculty In Charge, Biotechnology Department,**  Sister Nivedita University  Techno India Group, India    Focus- Establishment of undergraduate and postgraduate course in Biotechnology.    **Key achievements**-   * Setup of Biotechnology laboratory for undergraduate and postgraduate courses. * Prepared syllabus, designed theory and lab based experimental courses for undergraduate and postgraduate students.   **04/2017- 08/2018**  **Maternity Break**    **08/2015-04/2017**  **Staff Scientist**,  Zentrum für Translationale Zellforschung (ZTZ)  Universitätsklinik Freiburg, Freiburg,  Germany  Focus- Isolation and Drug screening on pancreatic cancer stem cells.  **Key Achievements**   * Generated primary cells lines and fibroblasts lines from pancreatic cancer patients for drug screening studies. * Initiated Cancer cell-stroma interaction studies.   **01/2012-07 /2015**  **Principal Investigator ( Temporary) ,**  Karlsruhe Institute of Technology  (Campus North). Karlsruhe, Germany    Focus - Characterization of Anterior gradient protein3 (AGR3) protein in  Prostate Cancer.  **Key Achievement**  Established the role of AGR3 protein in proliferation and migration of prostate cancer  cell.    **03/2009- 12/2011**  **Humboldt postdoctoral fellow**,  Institute for Applied Biosciences  Department of Microbiology, Karlsruhe  Institute of Technology, Karlsruhe,  Germany.    Focus- Identification of polyketide synthase (PKS) pathway in the fungus Alternaria  alternata.  **Key Achievements**  First ever identification of PKS gene cluster responsible for Alternriol and AME  production in A. alternata.gene cloning, overexpression and deletion mutant  construction |
|  | **EDUCATION**  **2/2003- 2/ 2008**  **Doctorate**  Department of Drug Developments and Diagnostics,  Indian Institute of Chemical  Biology, India  **Thesis:**  Rapid Non-instrumental Immunoassays for Mycotoxins.  **Key Achievements**:  Developed membrane based rapid detection methods for fungal toxins detection  in food sample including aflatoxin , Ochratoxin and T-2 toxin    **1999- 2001**  **Master of Science**  Zoology  Calcutta University, Kolkata, India  Subjects included: Cell biology Molecular Biology, Microbiology,Biochemistry,  Biophysics, Immunology. Genetics    **1996- 1999**  **Bachelor of Science**  Zoology, Chemistry, Botany  Calcutta University, Kolkata, India.  **1984-1996**  **School Education ( 10+2)**    **HONORS, FELLOWSHIPS AND AWARDS**  **2011** DFG grant for „Temporary Position for Principal Investigators  (DFG) from DFG, German Research Foundation, Germany.  **2008** Alexander Von Humboldt postdoctoral fellowship for  Postdoctoral esearchers from Alexander von Humboldt.  Foundation, Germany  **2003**  National Eligibility Test (NET) (CSIR-UGC) (Life Sciences),  conducted by Council of Scientific an Industrial Research. |
|  | **PUBLICATION**   1. Extracellular and intracellular functions of AGR3 in proliferation, migration and adhesion in prostate cancer.Debjani Saha, EraldShehu, Julia Chalupsky, Peter Bronsert, Huajie Bu, Antje Neeb, Rebecca Seeger, Laura Cato, Vanessa Drendel, Kathrin Schaal, Cordula A. Jilg, Helmut Klocker, Jochen Maurer, Andrew C. B. Cato (in preparation). 2. Pancreatic stellate cells in pancreatic cancer: In focus. Ahmed A Mohamed, Andreas R Thomsen,; Monika Gothwal,, **Debjani Saha**; Jochen Maurer, Thomas Brunner, Pancreatology, 2017.DOI: <http://dx.doi.org/10.1016/j.pan.2017.05.390>. IF: 2.763 3. **Saha, D**., Roy, D. and Dhar, T.K. (2013). Immunofiltration assay for aflatoxin B1 based on the separation of pre-immune complexes. J Immunol Methods. 2013 Jun 28; 392(1-2):24-8. IF: 2.190 4. **Debjani Saha**, Ramona Fetzner, Britta Burkhardt, Joachim Podlech, Manfred Metzler, Christopher Lawrence and Reinhard Fischer. Identification of two polyketide synthase gene clusters required for alternariol (AOH) and alternariol-methyl ether (AME) formation in Alternariaalternata. PLoS One. 2012; 7(7):e40564. IF: 3.234 5. Acharya D. **Saha D**, Roy, D, jain P. and Dhar T.K. (2008): Filtration-based staining of proteins on membranes.Anal Biochemistry. 379(1), 121-123. IF: 2.219 6. **Saha, D**., Acharya, D., Roy, D., Srestha, D. and Dhar, T.K. (2007): Development of a rapid analytical method for the simultaneous determination of aflatoxin B1 and ochratoxin A in chilies by simple flow-through enzyme. AnalyticaChimicaActa. 584(2), 343-349. IF: 4.513. 7. **Saha, D**., Acharya, D., Roy, D. and Dhar, T.K. (2007): Filtration-based tyramideamplification technique: A new simple approach for rapid detection of aflatoxinB1. Analytical Bioanalytical Chemistry 387(3), 1121-1130. IF: 3.436 8. **Saha, D**., Acharya, D. and Dhar, T.K. (2006): An improved method for homogeneous spotting of antibody on membranes and its application for sensitive detection of ochratoxin A without sample cleanup. Analytical Bioanalytical Chemistry 385(5) ,847-854. IF: 3.436 9. Pal, A., Acharya, D., **Saha, D**., Roy, D. and Dhar, T.K. (2005): In-Situ Sample Cleanup During Immunoassay: A Simple Method for Rapid Detection of Aflatoxin B1 in Food Samples. J Food Protect 68(10), 2169-2177. IF: 1.120 10. Pal, A., Acharya, D., Saha, D. and Dhar, T.K. (2004): Development of a Membrane- Based Immunofiltration Assay for the Detection of T-2 Toxin. Analytical Chemistry.76(14), 4237-4240. IF: 5.636 |
|  | **REFERENCES**  Dr. Jochen Maurer  Wissenschaftlicher Leiter Molekulare Gynäkologie  Klinik für Gynäkologie und Geburtsmedizin  Universitätsklinikum Aachen (UKA), Germany  Phone: +49 241 80 37051  Email: [jmaurer@ukaachen.de](mailto:jmaurer@ukaachen.de)  Prof. Andrew Cato  Institute of Toxicology and Gentics (ITG)  Karlsruhe Institute of Technology (KIT), Campus North  Hermann-von-Helmholtz-Platz 1  76344 Eggenstein-Leopoldshafen, Germany  Phone: +49 721 608 22146.  Contact: [Andrew.cato@kit.edu](mailto:Andrew.cato@kit.edu).  Prof. Reinhard Fischer  Institute for Applied Biosciences,Department of Microbiology,  Karlsruhe Institute of Technology, Karlsruhe, Germany  Karlsruhe,Germany.  Phone: +49 721 608 4630  Email: reinhard.fischer@kit.edu |