DEPARTMENT: Receptor Biology & Tumor Metastasis

HEAD OF THE DEPARTMENT: Dona Sinha, Ph.D
Senior Scientific Officer (SSO-I Grade)

email: donasinha2012@gmail.com

TEAM

<table>
<thead>
<tr>
<th>Name</th>
<th>Designation</th>
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<tbody>
<tr>
<td>Dr. Bornita Das</td>
<td>SERB National Post Doctoral Fellow</td>
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<tr>
<td>Ms. Nivedita Sarkar</td>
<td>DST WOS-A Scientist</td>
</tr>
<tr>
<td>Ms. Priyanka Prasad</td>
<td>ICMR- Senior Research Fellow</td>
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<tr>
<td>Ms. Suchisnigdha Datta</td>
<td>ICMR- Junior Research Fellow</td>
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OBJECTIVES OF THE DEPARTMENT:

- Health impact of chronic low level arsenic exposure on rural population of West Bengal
- Epithelial mesenchymal transition and cancer metastasis
- Redox signaling in cancer biology
- Exploration of chemopreventive and chemotherapeutic properties of phytochemicals

EXTRAMURAL PROJECTS

<table>
<thead>
<tr>
<th>PI/Mentor</th>
<th>Project Title</th>
<th>Funding Agency</th>
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<tbody>
<tr>
<td>Dr. Dona Sinha</td>
<td>Arsenic in groundwater, alterations in redox homeostasis and risk of carcinogenesis: A field study in West Bengal</td>
<td>Indian Council of Medical Research, New Delhi</td>
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<td>Modulation of NRF2 mediated redox homeostasis by green and black tea polyphenols in arsenic-induced oxidative stress</td>
<td>WOS-A scheme, Dept. of Science and Technology, New Delhi</td>
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<td></td>
<td>Redox regulation of nuclear factor erythroid-245 (NF-E2) related factor Nrf2 in lung cancer by green and black tea polyphenols: Implication in cancer therapeutics</td>
<td>Indian Council of Medical Research, New Delhi</td>
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<td>Exploration of the role of diallyl disulphide on EMT in A549 lung cancer cells</td>
<td>SERB, Dept. of Science and Technology, New Delhi</td>
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INTRAMURAL PROJECT

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SELECTIVE PUBLICATIONS


16. Sinha D*, Biswas J, Sung B, Aggarwal BB, Bishayee A. Chemopreventive and


*Corresponding author

ACADEMIC ACTIVITIES

Registered Ph.D Students: 4

Post Doctoral Fellow: 1

Short term UG/PG projects: 35

Integrative course work taught to Ph. D students:
- Cell structure and function and nuclear changes during carcinogenesis
- Nrf2, the redox transcription factor
- Cancer chemoprevention
- Epithelial Mesenchymal Transition
• Cell cycle

PATIENT CARE SERVICE:
Pulmonary function test performed for CNCI hospital patients