



Annual Meeting of School of Biological Sciences (SBS), IACS

19th January, 2024

CV Raman Hall

Invited Speakers:

Umesh Varshney, IISc, Bengaluru- “Initiator tRNA-centric mechanisms of faithful translation in bacteria” (Keynote lecture)

Ranjan Sen, IACS, Kolkata- “Bacterial transcription terminator, Rho: mechanism of action, physiology and inhibition” (Plenary Lecture 1)

Dipyaman Ganguly, CSIR-IICB, Kolkata- “Physical cues for immune regulation: Piezo1 mechanosensors” (Plenary Lecture 2)

Rupa Mukhopadhyay, IACS, Kolkata- “Improved nucleic acid sensing using the xeno nucleic acids”

Ritesh R Pal, IACS, Kolkata- “Mammalian cell free infection model of Enteropathogenic *Escherichia coli*”

Student Speakers:

Kumarjeet Banerjee- “Unraveling the influence of non-coding RNAs in controlling mechanoresponsive NM IIC expression”

Sudeshna Pal- “Supramolecular nanogel: competent host for proficient enzymatic hydrolysis of water insoluble substrates by lipase”

Jayita Biswas- “Role of direct recognition between the ectodomains of E-cadherin and nectin-4 in a cell adhesion mechanism”

Anirban Naha- “Exchange of Antibiotic Resistance in Enteropathogenic *Escherichia coli*”

Tanushree Mondal- “Cationic, amphiphilic peptides with antibacterial and anticancer activities: A case study”

Saini Basu- “PRMT5-mediated arginine methylation facilitates human DNA Topoisomerase 1 catalytic activity: a novel approach for co-targeting cancer treatment”

Subhojit Paul- “Illuminating thrombin-mediated induction of chemoresistance: a comprehensive exploration of pro-survival protein MCL1 upregulation and post translational stabilization”

Dipanjan Ray- “Exploring the dynamic interplay: actin-vimentin crosstalk shaping anisotropic rheological properties of the cytosol”



Patron:

Dr. Ranjan Sen
Director, IACS

Organising Committee:

Prof. Prasanta K Das,
Chair-SBS

Prof. Arindam Banerjee

Prof. Rupa Mukhopadhyay

Prof. Siddhartha S Jana

Prof. Somdatta Ghosh Dey

Prof. Prosenjit Sen

Prof. Benu Brata Das

Prof. Deepak K Sinha

Dr. Ritesh R Pal



Program Schedule

CV Raman Hall, IACS; 19th January, 2024

Welcome Note: Prasanta K Das, Chair-SBS; 10:00-10:05

Opening Remark: Ranjan Sen, Director, IACS; 10:05-10:10

Session 1: Chair: Ranjan Sen

Speaker	Title	Time
Umesh Varshney IISc, Bengaluru (Keynote Lecture)	Initiator tRNA-centric mechanisms of faithful translation in bacteria	10:15-10:55

Session 2: Chair: Arindam Banerjee

Ranjan Sen IACS, Kolkata (Plenary Lecture 1)	Bacterial transcription terminator, Rho: mechanism of action, physiology and inhibition	11:00-11:40
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Tea Break: 11:40-12:00

Session 3: Chair: Benu Brata Das

Dipyaman Ganguly CSIR-IICB, Kolkata (Plenary Lecture 2)	Physical cues for immune regulation: Piezo1 mechanosensors	12:00-12:40
Kumarjeet Banerjee	Unraveling the influence of non-coding RNAs in controlling mechanoresponsive NM IIC expression	12:40-12:55
Sudeshna Pal	Supramolecular nanogel: competent host for proficient enzymatic hydrolysis of water insoluble substrates by lipase	12:55-13:10

Lunch: 13:10-14:30

Session-4: Chair: Raja Paul

Rupa Mukhopadhyay IACS, Kolkata (Invited Lecture 1)	Improved nucleic acid sensing using the xeno nucleic acids	14:30-15:00
Jayita Biswas	Role of direct recognition between the ectodomains of E-cadherin and nectin-4 in a cell adhesion mechanism	15:00-15:15
Anirban Naha	Exchange of antibiotic resistance in Enteropathogenic <i>Escherichia coli</i>	15:15-15:30
Tanushree Mondal	Cationic, amphiphilic peptides with antibacterial and anticancer activities: A case study	15:30-15:45

Tea Break: 15:45-16:15

Session 5: Chair: Jyotirmayee Dash

Ritesh R Pal IACS, Kolkata (Invited Lecture 2)	Mammalian cell free infection model of Enteropathogenic <i>Escherichia coli</i>	16:15-16:45
Saini Basu	PRMT5-mediated arginine methylation facilitates human DNA Topoisomerase 1 catalytic activity: a novel approach for co-targeting cancer treatment	16:45-17:00
Subhojit Paul	Illuminating thrombin-mediated induction of chemoresistance: a comprehensive exploration of pro-survival protein MCL1 upregulation and post translational stabilization	17:00-17:15
Dipanjan Ray	Exploring the dynamic interplay: actin-vimentin crosstalk shaping anisotropic rheological properties of the cytosol	17:15-17:30

Vote of Thanks: Siddhartha S Jana: 17:30