### **Funding**

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### **Organisers**

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### **Web Page**





The Institute of Mathematical Sciences (IMSc), Chennai and

M. S. Swaminathan Research Foundation (MSSRF), Chennai



# Computational workshop on Soil - Microbial - Plant Genomics

27 - 30 January 2025

### **Invited Speakers**

Prof. Soumya Swaminathan (Chairperson, MSSRF)

Prof. Usha Vijayraghavan (Dean Biological Sciences, IISc Bengaluru)

**Prof. Subhra Chakraborty** (Former Director, NIPGR New Delhi)

**Prof. R. Sowdhamini** (Senior Professor, NCBS Bengaluru)

Prof. Ajit K. Shasany (Director, CSIR-NBRI Lucknow)

Prof. Pradip Dey (Director, ICAR-ATARI Kolkata) Prof. Aundy Kumar (Principal Scientist, ICAR-IARI New Delhi)

Prof. Smita Srivastava (Professor, IIT Madras)

Prof. K. Ramu (Scientist F, NCCR Chennai)

Computational Course Instructor

**Dr. Vipin Singh** 

#### Venue

Ramanujan Auditorium and ECG Sudarshan Hall The Institute of Mathematical Sciences (IMSc) Chennai. India

Sambasivan Auditorium, M. S. Swaminathan Research Foundation (MSSRF) Chennai. India





## Workshop Schedule

			AAOLVELIO
Monday, January 27, 2025	08:45 - 09:45	Registration	IMSc, Chennai
	09:45 - 09:50	Prof. V. Ravindran Welcome address	Ramanujan Auditorium, IMSc Chennai
	09:50 - 09:55	Prof. V.R. Prabavathy Welcome address	Ramanujan Auditorium, IMSc Chennai
	09:55 - 10:35	Prof. Soumya Swaminathan One Health: Research priorities	Ramanujan Auditorium, IMSc Chennai
	10:35 - 11:15	Prof. Subhra Chakraborty Beyond a bird's eye view towards One Health: Demystifying proteogenomic landscape and organeller control of health to disease linking multi-host response	Ramanujan Auditorium, IMSc Chennai
	11:15 - 11:30	Coffee Break	IMSc, Chennai
	11:30 - 12:10	Prof. Ajit Kumar Shasany Internal Immunity and Secondary Metabolites	Ramanujan Auditorium, IMSc Chennai
	12:10 - 12:50	Prof. Pradip Dey Managing soil health and food security through biointensive plant nutrient management strategies	Ramanujan Auditorium, IMSc Chennai
	12:50 - 14:00	Lunch Break	IMSc, Chennai
	14:00 - 14:40	Prof. Usha Vijayraghavan Genomics studies of rice floret development transcription factors unravels functional diversification of evolutionarily conserved regulators	Ramanujan Auditorium, IMSc Chennai
	14:40 - 15:20	Prof. R. Sowdhamini How do plants defend against fungal attack? - early glimpse and future directions	Ramanujan Auditorium, IMSc Chennai
	15:20 - 16:00	Coffee Break	IMSc, Chennai
	16:00 - 18:00	Dr. Vipin Singh Computational Genomics Course - I	ECG Sudarshan Hall, IMSc Chennai
Tuesday, January 28, 2025	09:30 - 11:00	Dr. Jegan Sekar Hands on wet lab session - I	MSSRF Chennai
	11:00 - 11:15	Coffee Break	MSSRF, Chennai
	11:15 - 12:45	Dr. Jegan Sekar Hands on wet lab session - II	MSSRF Chennai
	12:45 - 14:00	Lunch Break	IMSc, Chennai
	14:00 - 16:00	Dr. Vipin Singh Computational Genomics Course - II	ECG Sudarshan Hall, IMSc Chennai
	16:00 - 16:15	Coffee Break	IMSc, Chennai
	16:15 - 18:00	Dr. Vipin Singh Computational Genomics Course - III	ECG Sudarshan Hall, IMSc Chennai

	09:30 - 11:00	Dr. Vipin Singh Computational Genomics Course - IV	ECG Sudarshan Hall, IMSc Chennai
)25	11:00 - 11:15	Coffee Break	IMSc, Chennai
ary 29, 20	11:15 - 12:45	Dr. Vipin Singh Computational Genomics Course - V	ECG Sudarshan Hall, IMSc Chennai
anı	12:45 - 14:00	Lunch Break	IMSc, Chennai
Wednesday, January 29, 2025	14:00 - 15:45	Dr. Vipin Singh Computational Genomics Course - VI	ECG Sudarshan Hall, IMSc Chennai
Ved	15:45 - 16:00	Coffee Break	IMSc, Chennai
>	16:00 - 18:00	Dr. Vipin Singh Computational Genomics Course - VII	ECG Sudarshan Hall, IMSc Chennai
	09:30 - 11:00	Dr. Vipin Singh Computational Genomics Course - VIII	ECG Sudarshan Hall, IMSc Chennai
	11:00 - 11:15	Coffee Break	IMSc, Chennai
125	11:15 - 12:45	Dr. Vipin Singh Computational Genomics Course - IX	ECG Sudarshan Hall, IMSc Chennai
, 20	12:45 - 14:00	Lunch Break	IMSc, Chennai
Thursday, January 30, 2025	14:15 - 14:45	Prof. Smita Srivastava Rational metabolic engineering of Nothapodytes nimmoniana plant cells for enhanced production of Camptothecin	Sambasivan Auditorium, MSSRF Chennai
าursday, J	14:45 - 15:15	Prof. K. Ramu Genomic approach for characterization of microbial communities in coastal waters	Sambasivan Auditorium, MSSRF Chennai
F	15:15 - 15:45	Coffee Break	MSSRF, Chennai
	15:45 - 16:15	Prof. Aundy Kumar Plant Microbiomes for climate resilient agriculture	Sambasivan Auditorium, MSSRF Chennai
	16:15 - 16:30	Closing & Valedictory Session	Sambasivan Auditorium, MSSRF Chennai