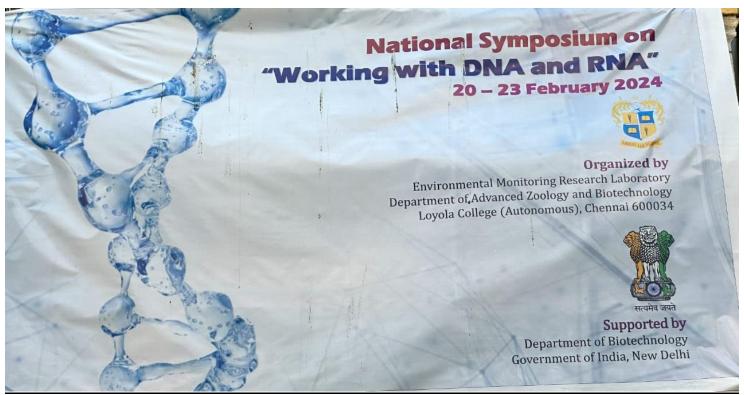
## National Symposium on "Working with DNA and RNA"

20th to 23rd February 2024 (4 days)

#### Organized by

Environmental Monitoring Research Laboratory
PG and Research Department of Advanced Zoology and Biotechnology,
Loyola College, Chennai 600 034

### **SYMPOSIUM REPORT**





Welcome Address by Dr. Mary Dorathy Anitha Sebastian, Co-convener



Dynamics of the Symposium by Dr. M. C. John Milton





Felicitations by Rev. Dr. A. Louis Arockiaraj SJ, Principal







Honoring the Guests



Release of Symposium proceedings



Inaugural Address by Dr. M. Balasubramanyam, ICMR Emeritus Scientist







Group activity and projects



















Valedictory Address and Distribution of certificates by Dr. Kavitha Sankaranarayanan, Coordinator, AU-KBC Research Centre, MIT Campus of Anna University, Chennai





Section of the participants





# National Symposium on "Working with DNA and RNA"

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#### **SCHEDULE OF EVENTS**

Date	Session	Theme	Time	Duration
		Registration	08.00 - 08.30am	30 min
Day 1		Inauguration	08.30 - 09.30am	60 min
Monday		(Venue : Zoology Smart Room JF 02)		
20.02.2024	1.	Biotechnological tools for animal conservation	09.30 - 10.15am	45 min
		Dr. Gopi Krishna		
		Research Scholar, Centre for Cellular &		
		Molecular Biology, Habsiguda, Uppal Road,		
		Hyderabad - 500 007.		
	2.	Cancer genomics	10.15 - 11.00am	45 min
		Dr. Ananda Mukherjee		
		Ramalingaswami Faculty Fellow		
		Rajiv Gandhi Centre for Biotechnology		
		Thiruvananthapuram 695 014, Kerala, India.		
		Coffee Break	11.00 - 11.30am	30 min
	3.	DNA Extraction methods	11.30 - 12.15pm	45 min
		Dr. M. Krishnaraj		
		Director, Apex Biotechnology Training and		
		Research Institute, TS. 89, Thiru Vi Ka Industrial		
		Estate, Ekkaduthangal, Guindy		
		Chennai 600 032, Tamil Nadu.		
	4.	Virology	12.15 - 01.00pm	45 min
		Dr. V. Stalin Raj		
		Associate Professor, Nodal Officer (COVID19)		
		School of Biology, IISER-Thiruvananthapuram		
		Maruthamala PO, Vithura		
		Thiruvananthapuram-695 551, Kerala, India.		
		Lunch Break	01.00 - 02.00 pm	60 min
	5.	Demonstration, training and group projects:	02.00 - 04.30pm	150 min
		(DNA from plant and animal tissues, Yeast and		
		Fungal Genomic DNA, Plasmid and bacterial		
		Genomic DNA, Chloroplast and mitochondrial		
		DNA)		
		Research Team, AU-KBC Research Centre, MIT		
		Campus of Anna University, Chennai 600 061		
		Tea	04.30pm	

	6.	Recombinant DNA Technology	09.00 - 10.00 am	60 min
Day 2	0.	Dr. K.N. Rajnish	09.00 - 10.00 am	00 111111
_		Associate Professor		
Tuesday 21.02.2024		Dept. of Genetic Engineering		
21.02.2024				
		SRM Institute of Science and Technology Kattankulathur - 603 203		
	7	Chengalpattu District, Tamil Nadu.	10.00 11.00	(Oi.a
	7.	Functional genomics	10.00 - 11.00am	60 min
		Dr. Tony Jose		
		CEO, Clevergene Biocorp Pvt. Ltd.		
		No. 617, 5th Main, Banaswadi		
		Bangalore - 560043, Karnataka, India.	44.00.44.20	20 :
		Coffee Break	11.00 - 11.30am	30 min
	8.	Plant genome editing and Plant metabolic	11.30 - 12.15pm	45 min
		engineering		
		Dr. M. Arun		
		Assistant Professor,		
		Department of Biotechnology,		
		Bharathiyar University, Coimbatore 641046.		
	9.	Mitochondrial genetic disorders	12.15 - 01.00pm	45 min
		Dr. P. Govindaraj		
		Head, Laboratory of Human Molecular Genetics,		
		Centre for DNA Fingerprinting and Diagnostics		
		(CDFD), Inner Ring Road, Uppal,		
		Hyderabad - 500039, Telengana.		
		Lunch Break	01.00 - 02.00 pm	60 min
	10.	Demonstration, training and group projects:	02.00 - 04.30pm	150 min
		(Phenol Chloroform Extraction of DNA, Ethanol		
		precipitation of DNA, Restriction Enzyme		
		Digestion of DNA and RNA from Bacterial Cells		
		and Plant Tissues).		
		Research Team, AU-KBC Research Centre, MIT		
		Campus of Anna University, Chennai 600 061		
		Tea	04.30pm	
	11.	Artificial Intelligence and Biotechnology	09.00 - 10.00 am	60 min
		Dr. Maziya Ibrahim		
Day 3		Post-Doctoral Fellow, Robert Bosch Center for		
Wednesday		Data Science and Artificial Intelligence, IIT,		
22.02.2024		Madras.		
	12.	Molecular pathogenesis of Diabetes	10.00 - 11.00am	60 min
		Dr. M. Balasubramanyam		
		ICMR Emeritus Scientist, Professor & Advisor		
		Madras Diabetes Research Foundation (MDRF)		
		4, Conran Smith Road, Gopalapuram,		
		Chennai - 600086.		
		Coffee Break	11.00 - 11.30am	30 min

	13.	Molecular genetics and DNA barcoding for	11.30 - 12.15pm	45 min		
		species authentication				
		Dr. D. Rex Arunraj				
		Associate Professor				
		Department of Biotechnology, Institute of				
		Science and Technology, SRM Nagar,				
		Kattankulathur 603203.				
	14.	Genetic basis of protective immunity	12.15 - 01.00pm	45 min		
		Dr. Luke Elizabeth Hanna				
		Scientist 'F', ICMR National Institute for				
		Research in Tuberculosis (NIRT), Chennai.				
		Lunch Break	01.00 - 02.00 pm	60 min		
	15.	Demonstration, training and group projects:	02.00 - 04.30pm	150 min		
		(Hot phenol and acid phenol Extraction of RNA				
		from plant tissues, Messenger RNA isolation, 16s				
		rRNA sequencing, Agarose Gel Electrophoresis				
		and SDS PAGE).				
		Research Team, AU-KBC Research Centre, MIT				
		Campus of Anna University, Chennai 600 061.				
		Tea	04.30pm			
		Poster presentation by particip	ants			
		(Venue : Jubilee Building Quadrangle from 09.00am - 05.30pm)				
	16.	Immunology and vaccinology	09.00 - 10.00am	60 min		
Day 4		Dr. Kaustauv Nayak				
Thursday		Senior Scientist				
23.02.2024		International Centre for Genetic Engineering and				
		Biotechnology- Emory Vaccine Centre,				
		New Delhi.				
	17.	Epigenetics and DNA amplification	10.00 - 11.00am	60 min		
		Dr. Felix Paul Joe				
		CEO, Genex Biotech India Private Limited				
		Chennai.				
		Coffee Break	11.00 - 11.30am	30 min		
	18.	Demonstration, training and group projects:	11.30 - 01.00pm	90 min		
		Southern, Northern, Western Blotting, ELIZA,				
		PCR and RAPD - PCR				
		Research Team, AU-KBC Research Centre, MIT				
		Campus of Anna University, Chennai 600 061				
		Lunch Break	01.00 - 02.00 pm	60 min		
	19.	Computational Genomics and Drug Target	02.00 - 02.45pm	45 min		
		Mining				
		Dr. V. Umashankar				
		Scientist E, ICMR National Institute for Research				
		in Tuberculosis (NIRT), Chennai.				

20.	Drug Discovery	02.45 - 03.30pm	45 min
	Molecular biology, Drug Discovery, Biosafety		
	Dr. Kavitha Sankaranarayanan		
	Coordinator - Bio Sciences Division,		
	Group Leader - Ion Channel Biology Laboratory		
	AU-KBC Research Centre, MIT Campus of Anna		
	University, Chennai 600 061.		
21.	Demonstration, training and group projects:	03.30 - 05.00pm	90 min
	(Bioinformatics Tools and Cheminformatics)		
	Research Team, AU-KBC Research Centre, MIT		
	Campus of Anna University, Chennai 600 061		
	Valediction, feedback, best poster awards and	05.00 - 05.30pm	30 min
	presentation of certificates		
	Tea	05.30pm	