INSPIRING EXCELLENCE

IndiaAlliance
DBT wellcome

ANNUAL REPORT 2021-22

Contents

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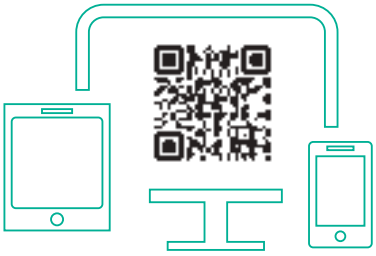


1

INDIA ALLIANCE: ADVANCING DISCOVERY AND INNOVATION

Scientific and technological innovation is key to a nation's socio-economic development. In this direction, India Alliance was established in the year 2008 as a charitable trust, funded by the Department of Biotechnology (Government of India) and Wellcome Trust (UK). India Alliance is advancing India's capacity for conducting ground-breaking research in partnership with the scientific community.

We, at India Alliance, are focussed on creating a world-class research and innovation environment. To this end, we consistently support the best scientific talent across the country and fund research that pushes the frontiers of human knowledge. India Alliance conducts three types of fellowship programmes that support researchers at different stages of their career — early, intermediate, and senior — under the tracks of 'Basic Biomedical Research' and 'Clinical and Public Health Research'. Further, as finding solutions to the problems of modern society requires inter-disciplinary and collaborative science, the 'Team Science Grants' and 'Clinical/Public Health Research Centres' provide the much-needed thrust to collaborative research. These funding initiatives also provide us the opportunity to support and enable policy implementations and interventions to bring about systemic change. Through the 'India Research Management Initiative', we have also invested in building capacity for research management, an essential but often neglected ingredient in strengthening a nation's research ecosystem. India Alliance's mandate of enabling high-quality and internationally-acclaimed research is upheld by the core organisational values of working with integrity to capture the power of collaboration and innovation in everything we do.

With the completion of 13 years now, India Alliance continues to spearhead activities that build excellence in Indian science, establish a globally-recognised research ecosystem, and empower researchers to drive policy and solve critical health problems for India.

2008
Fellowship Programme
Early, Intermediate, Senior

Clinical & Public Health
Research Fellowships
2013

2019
Clinical/Public Health Research Centres
Clinical Research Training Programme
Team Science Grants

2nd Phase of India Alliance
2019-2024

Our Sphere of Action

India Alliance has evolved from the role of a funder to an influencer, working towards establishing a research environment of international standards in India. Our sphere of action, in addition to research funding, includes capacity-building for researchers through workshops, training researchers for leadership roles, informing science and health policy, facilitating international and inter-disciplinary collaborations, improving research assessment policies and making science accessible. India Alliance also supports scientific meetings, public engagement initiatives and organises professional skill-building workshops with an aim of strengthening the Indian research ecosystem. One of our key mandates is to promote scientific education, create awareness, and strengthen public engagement with science in India.

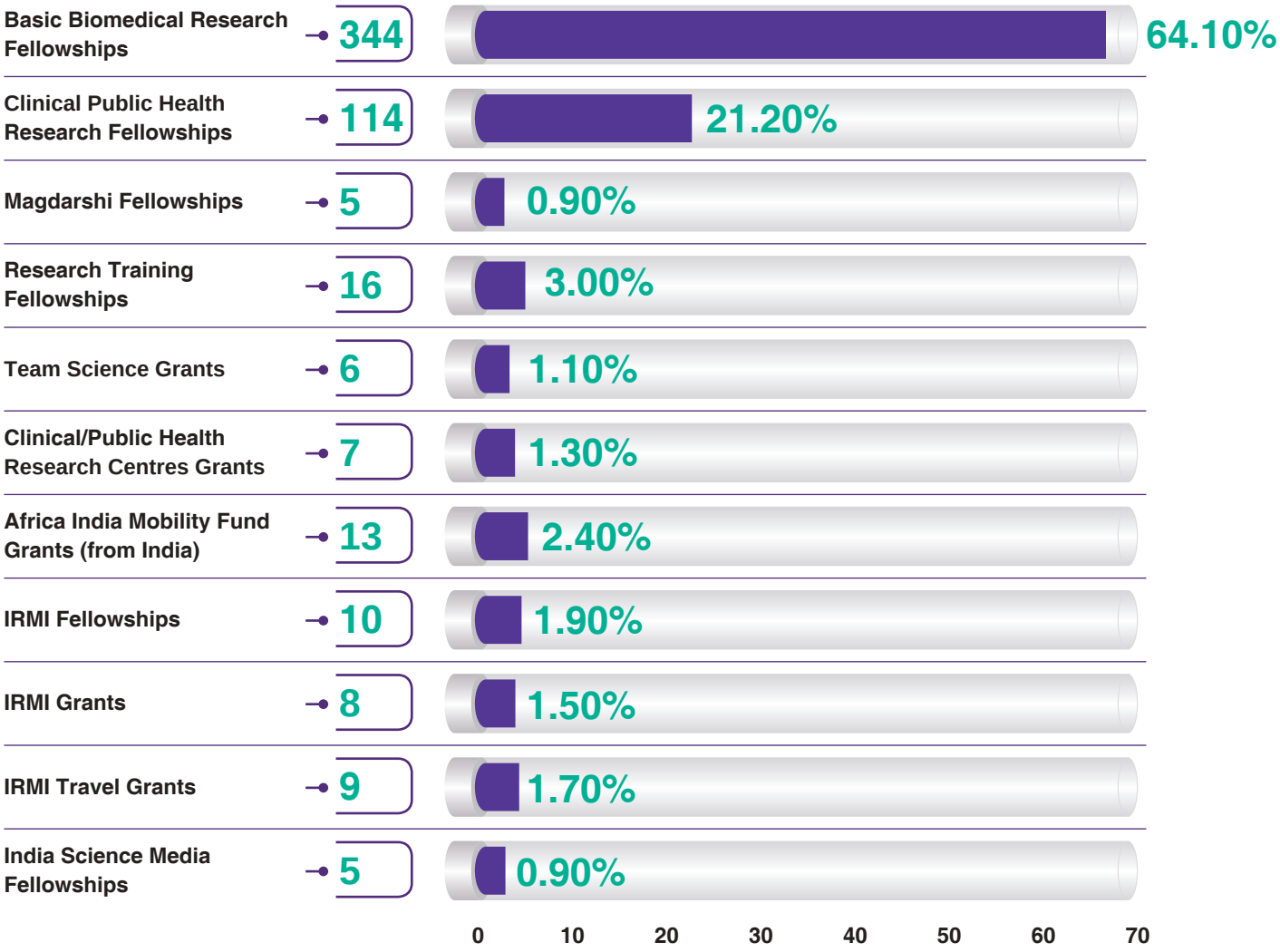
- To **Support** Education, Training and Research in Science and Technology
- **Building Capacity** in Biomedical and Health Research
- **Strengthening** Research Ecosystems in India
- **Fostering** Inter-disciplinary and International Collaborations
- Making Science **Accessible**

Transforming the Research Ecosystem in India

With a commitment to build research capacity in India and catalyse internationally-competitive research, India Alliance successfully steers ahead with a variety of funding opportunities. We promote inclusiveness to build a diverse work culture. India Alliance acknowledges the fact that for more than a decade, inclusiveness has worked to shape a dynamic research ecosystem and foster inter-disciplinary, international collaborations, making science accessible to all. In this direction, India Alliance proudly showcases the natural gender balance being maintained amongst our awardees, with 47% women and 53% men receiving the honour.

IA-Recommended Awards

2009 - March 2022



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LEADERSHIP REVIEW

Message from the CEO

> Our growing funding footprint across the country continues to empower research innovation and collaboration.

Dr Debashis Mitra

Chief Executive Officer in Interim,
DBT/Wellcome Trust India Alliance

Inspiring Excellence defines India Alliance's 14-year journey. As a funder and influencer of the scientific ecosystem, India Alliance (IA) continued to set new benchmarks, bringing international standards in the realm of Indian research funding.

As I begin my journey at India Alliance, I am both in awe of, and inspired by the passion as well as dedication of our stakeholders. They work tirelessly and seamlessly, pushing forward the mandate of providing support, international recognition and propitious ecosystem to ground-breaking researchers in India. This is an exemplary organisation, that follows internationally recognised processes, flourishing in the continued oversight of the Trustees nominated by Department of Biotechnology, Government of India and Wellcome Trust, UK. The unfathomable support and recognition from our funders have allowed us to strengthen the foundation of Indian research ecosystem. We are also deeply grateful to our distinguished Committee members from all across the globe for their untiring efforts to uphold India Alliance's endeavour to strengthen scientific capacity in India.

Since IA's inception, the biomedical, clinical, and public health research in India has seen tremendous growth. We take extreme pride in our awardees who have continued to make key advances to improve the health and welfare of our society. Our growing funding footprint across the country continues to empower research innovation and collaboration.

As an organisation, we actively work to help bring more diversity and inclusion into science & health, and fund urgently needed research to drive action, translation and policy change. Our aspiration is to be the best possible standard for a funding organisation. I am thankful for the incessant efforts of our team at India Alliance towards achieving this vision. Over the years, India Alliance's funding portfolio has diversified to push the boundaries of research and research administration in India. Going forward, we seek to nurture translational science and innovation, continue to drive discovery, and engage with stakeholders to improve health for all.

Message from the Secretary, Department of Biotechnology

> IA has continued to support researchers through successful fellowship programmes that supports basic biomedical, clinical and public health researchers at different career levels.

Dr Rajesh S Gokhale

Secretary, Department of Biotechnology,
Ministry of Science & Technology, Government of India

It gives me immense pleasure to reflect upon DBT's decade-long association with the Wellcome Trust, UK, that led to the genesis of DBT/Wellcome Trust. The India Alliance (IA) is committed to enhance biomedical research capacity in India. IA has successfully catalysed a productive ecosystem of innovation and scientific temper.

IA has continued to support researchers through successful fellowship programmes that support basic biomedical, clinical and public health researchers at different career levels. I extend my best wishes to all the recipients and wish them a stellar career ahead.

I congratulate IA for keeping pace with the needs of modern research, and introducing new initiatives. The India Research Management Initiative (IRMI) has been a commendable effort in this perspective where its beneficiaries receive grants, fellowships and necessary support for better research management.

DBT congratulates IA for its achievements and wishes IA all the glory and success in future.

Message from Trustees

Dr Alka Sharma

Department of Biotechnology, Government of India

Dr Dinakar Salunke

Department of Biotechnology, Government of India

Ms Sheri Adigun

Wellcome Trust, UK

Dr Branwen Hennig

Wellcome Trust, UK

> With a renewed focus on the mission, advancing discovery and innovation, we are confident that the organisation's work will continue to improve health in the region and expand India's impact on health and wellbeing globally.

We joined as Trustees in 2021, during one of the most disruptive periods for global health due to inequities in the response to the COVID-19 pandemic. There is no hiding from the devastating consequences of COVID-19. Despite the challenges, we have witnessed huge scientific progress.

This progress has been particularly evident in India, where we have seen major advances in vaccine production to which DBT has made immense contributions. DBT has been at the forefront while overcoming COVID-19 pandemic crisis and is now gearing up for the post-pandemic challenges.

Wellcome itself has also undergone change and is implementing a new strategy. Wellcome is taking on the biggest health challenges facing us all – climate and health, infectious diseases, and mental health – whilst continuing to support discovery research across all health disciplines.

This has been a period of change for India Alliance. We thank Dr Vasan Sambandamurthy and subsequently Dr Jyotsna Dhawan for their commitment and leadership of the organisation through challenging times. Now, we warmly welcome Dr Debashis Mitra as CEO in interim, who brings more than 20 years of expertise in research leadership.

The remarkable and continued success of India Alliance lies in the organisation's staff. We are inspired by their commitment to foster a vibrant research ecosystem in India. With a renewed focus on the mission, advancing discovery and innovation, we are confident that the work of the organisation will continue to not only make improvements to health in the region, but also will expand India's impact on health and wellbeing globally.

We are proud of our longstanding commitment and are looking forward to continuing engagement with a thriving and evolving India Alliance.

Perspective on India Alliance

> IA is unique in covering the wide range of sciences relevant to health and disease – also making awards from early career to senior fellowships for five years.

Professor Shah Ebrahim

London School of Hygiene and Tropical Medicine, London, United Kingdom

Chair, Clinical and Public Health Funding Committee

The Indian Government Department of Biotechnology has played a remarkable role in catapulting Indian biomedical science into the 21st century. In partnership with Wellcome Trust, India Alliance (IA) was created. India Alliance has been incredibly successful, funding fellowships and capacity building grants to over 200 Indian institutions. IA has also enabled Indians working outside of India to conduct research in India and build collaborations between Indian and their overseas institutions. This increased reach and depth of research capacity is 'money in the bank' for India's ability to play a world-class role in biomedical research.

IA is unique in covering the wide range of sciences relevant to health and disease – also making awards from early career to senior fellowships for five years. This approach has resulted in a growth of talent and has produced synergies between sciences that previously were siloed. I am particularly excited by the fellowships IA has funded on Indian One Health research which is only possible by trans-disciplinary research.

IA has managed to overcome the COVID-19 pandemic, successfully conducing international funding committees online. Our committees depend on a highly motivated group of grant advisors, managers and administrative staff, the knowledge of many peer reviewers who provide invaluable advice and the committee members who make the decisions. I hope that face-to-face meetings (including the Annual Conclave) will be possible next year. The more subtle aspects of understanding and supporting IA, fellows, committee members and other interested partners can never be replaced by Microsoft Teams or Zoom.

> India Alliance has revolutionised life science research in India. It has enabled outstanding young researchers to pursue premier research, leading to institutional excellence across India.

Professor Shankar Subramaniam

University of California San Diego

Chair, Team Science Grants and Clinical/Public Health Centres Committee

India Alliance has revolutionised life sciences research in India and has enabled outstanding young researchers pursue premier research, leading to institutional excellence across India. Three major factors have contributed to this success. The first is the generous funding from Wellcome Trust and the Department of Biotechnology, which enabled young researchers from across the world move to India to start their career. The second is the protocol for peer review involving international experts with the final interviews being conducted by a panel of outstanding researchers across the world – this peer review process has been instrumental in the success of IA. The third factor is the cross-interactions between the IA-funded investigators through the Annual Meetings as well as other auspices. If life science research must thrive in India, it is imperative going forward, that DBT and other Indian Government funding agencies maintain the strong peer-review system without fear or favour to ensure best practices for research.

Two major developments in Indian science research funding happened over the lifetime of IA. The first is the recognition that clinical and translational research is critical to bridge the life-health sciences divide in India for addressing innovative and exciting approaches to improving the quality of life in the Indian context. The second is the introduction of Team Science Grants which has been missing in Indian science making it difficult to make strong contributions to collaborative research. Both these initiatives warrant strong commitment from the Indian Government. With the long-time involvement with IA, I have come to realise that there is a strong potential for highest quality research in India. However, this must be predicated on several factors. In addition to strict peer review, leadership in academic research institutions in India have to step up to ensure the highest standards of research and strongly encourage young researchers and students to enthusiastically pursue quality research. Training and mentorship form a crucial factor, which has only been minimal in the past.

> The IRMI program, championed by the IA, is literally and figuratively changing Indian science. IRMI has helped to make science administration a respected and sought-after career choice for PhD graduates.

Dr Rashna Bhandari

Centre for DNA Fingerprinting and Diagnostics, Hyderabad, India
Committee Member, Early Career Fellowship

My association with India Alliance (IA) began at the organisation's inception. In May 2009, I was among the first batch of fellows to be interviewed. The interviews were held in London where the new Grants Advisors were being trained by the Wellcome Trust at that time. I was lucky for not only getting to do some sightseeing in London, but also because I cleared the interview for a Senior Fellowship that day. This marked the beginning of my long association with the IA. The very generous IA fellowship helped my lab sail through the start-up phase. Soon, I became part of a very vibrant community of IA Fellows.

At the early annual Fellows Meetings in 2010-12, each one of us knew everyone else. The excitement of being able to do the best research one possibly could, without worrying about our purse-strings, was infectious. I was able to set up two very rewarding research collaborations during these meetings.

Some years later, as the IA entered adolescence, I was appointed to the Early Career Fellows Selection Committee. This perspective from the 'other' side has been equally rewarding. I now get to see how the IA makes a difference in the Indian scientific landscape. I see young investigators, starting out with a PhD under their belt, with their brains buzzing and their eyes shining, being awarded these career transformational fellowships. When I see some of our Early Career Fellows doing an outstanding work in Indian labs (proving that you don't have to do a 'foreign' postdoc), and their progress on to faculty positions, I feel really happy and proud to be a part of this transformation.

Another very important contribution of the IA has been to alter our appreciation of Research Management. The Grants Advisors and Grants Managers at IA have shown us how science administration is done. The IRMI programme, championed by the IA, is literally and figuratively changing Indian science. IRMI has helped to make science administration a respected and sought-after career choice for PhD graduates. Moreover, it has also made senior scientists realise what they were missing all this while.

As the IA enters into mid-teens, I look back and see how far we have come. Several hundred IA fellows have contributed to Indian science. Many early career researchers have been nurtured, facilitating excellence in science administration. With the IA supporting basic research and focusing on team science and clinical research, the future looks bright. I am hopeful that the IA will continue to set standards for excellent and ethical research in India for many years to come.

> Credit must go to the untiring efforts of the IA team, and also to the reviewers who have ensured that scientific proposals from Indian researchers are judged to international standards.

Professor Roop Mallik

Indian Institute of Technology, Bombay
India Alliance Senior Fellow

It will not be an overstatement to say that IA has changed the face of Indian Science, certainly so in the area of Biomedical research. The award of an IA fellowship is a milestone and a recognition for many colleagues who aspire to do world-class research in India. Credit must go to the untiring efforts of the IA team, and also to the reviewers who have ensured that scientific proposals from Indian researchers are judged to international standards.

I have had the privilege of associating with the IA/Wellcome Trust as a Fellow for 15 years. Much has changed over this period, and many goals that appeared impossible not so long ago have been achieved. We have grown vastly as a scientific community. We aspire for better, for more. It is therefore, even more important that less traditional sources for funding are now identified, both at the basic and translational ends of the spectrum. Engagement with the industry and/or philanthropists is perhaps the way to go. This works, and can pay rich dividends, as we have already seen through the experience of the IITs. Perhaps the IA, with the organisation's international visibility and established mechanisms of supporting outstanding Science, can lead this challenge. Such efforts would need whole-hearted support from those who have engaged with the IA and benefited from the same. Together, we can go places.

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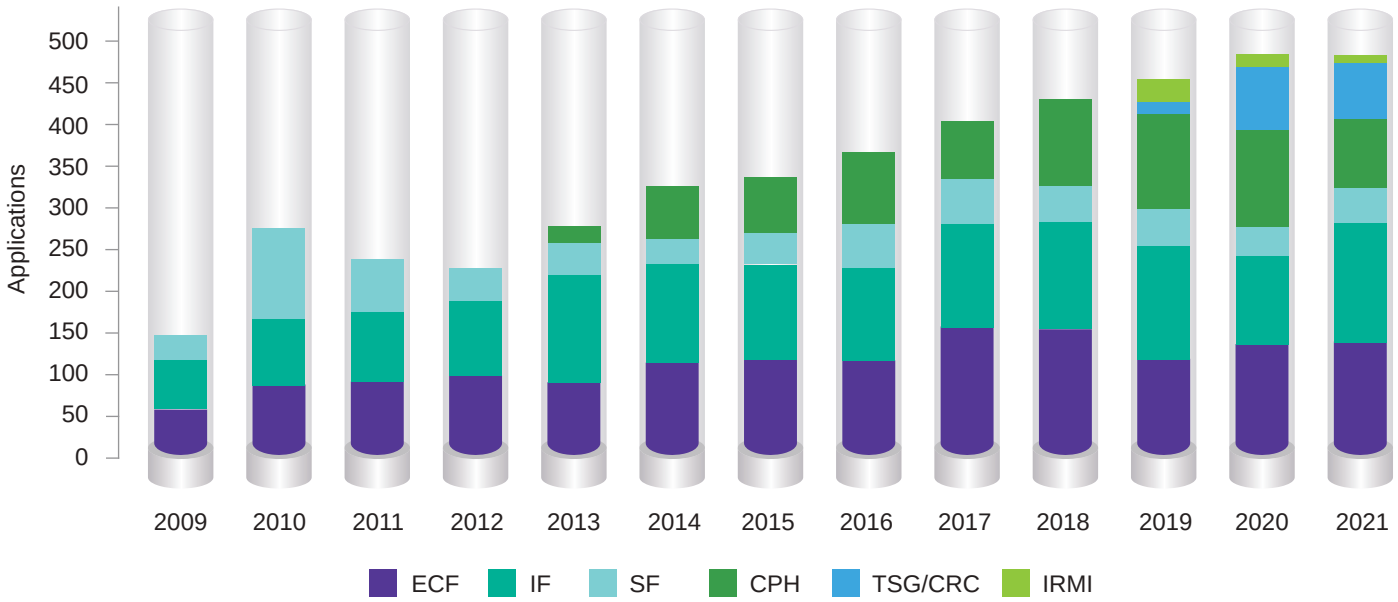
INDIA ALLIANCE AWARDS AT A GLANCE

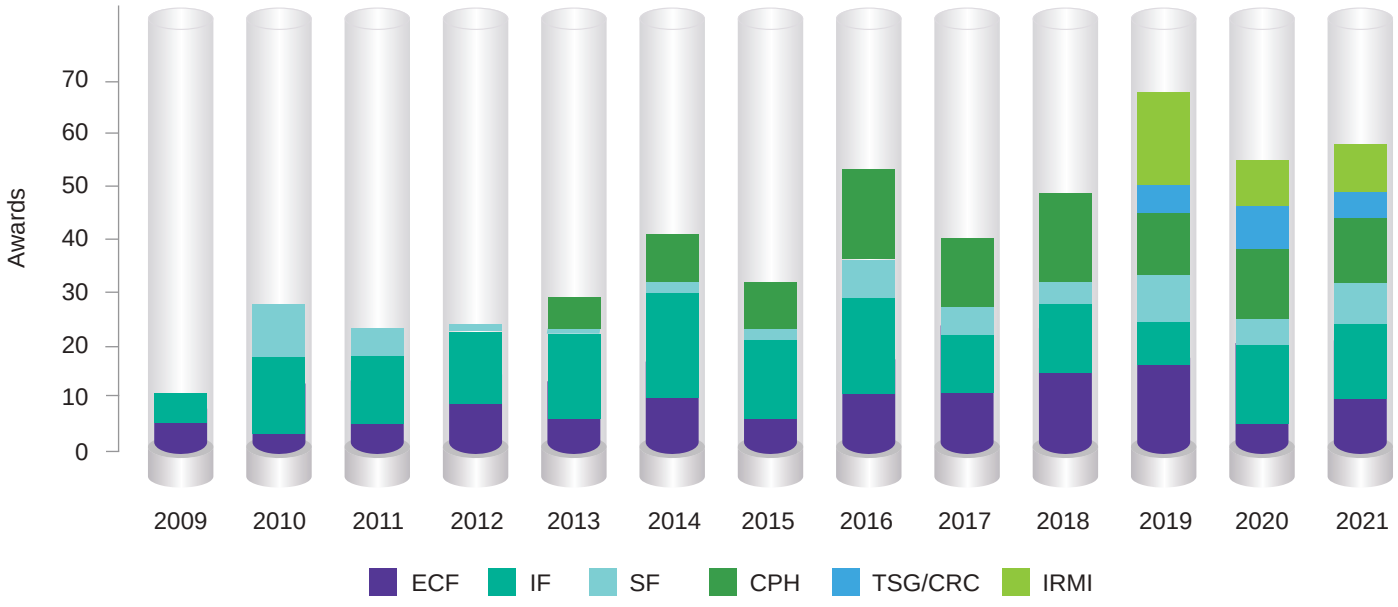
To nurture a supportive, responsible research and innovation in the country, India Alliance offers an array of fellowship and grants schemes to researchers who are seeking to develop their careers.

The number of applications received at India Alliance and the awards of various fellowships/grants made annually since 2009, are shown below. The figures show a steady growth in the number of applications and the awards over the years.

Number of Applications Received



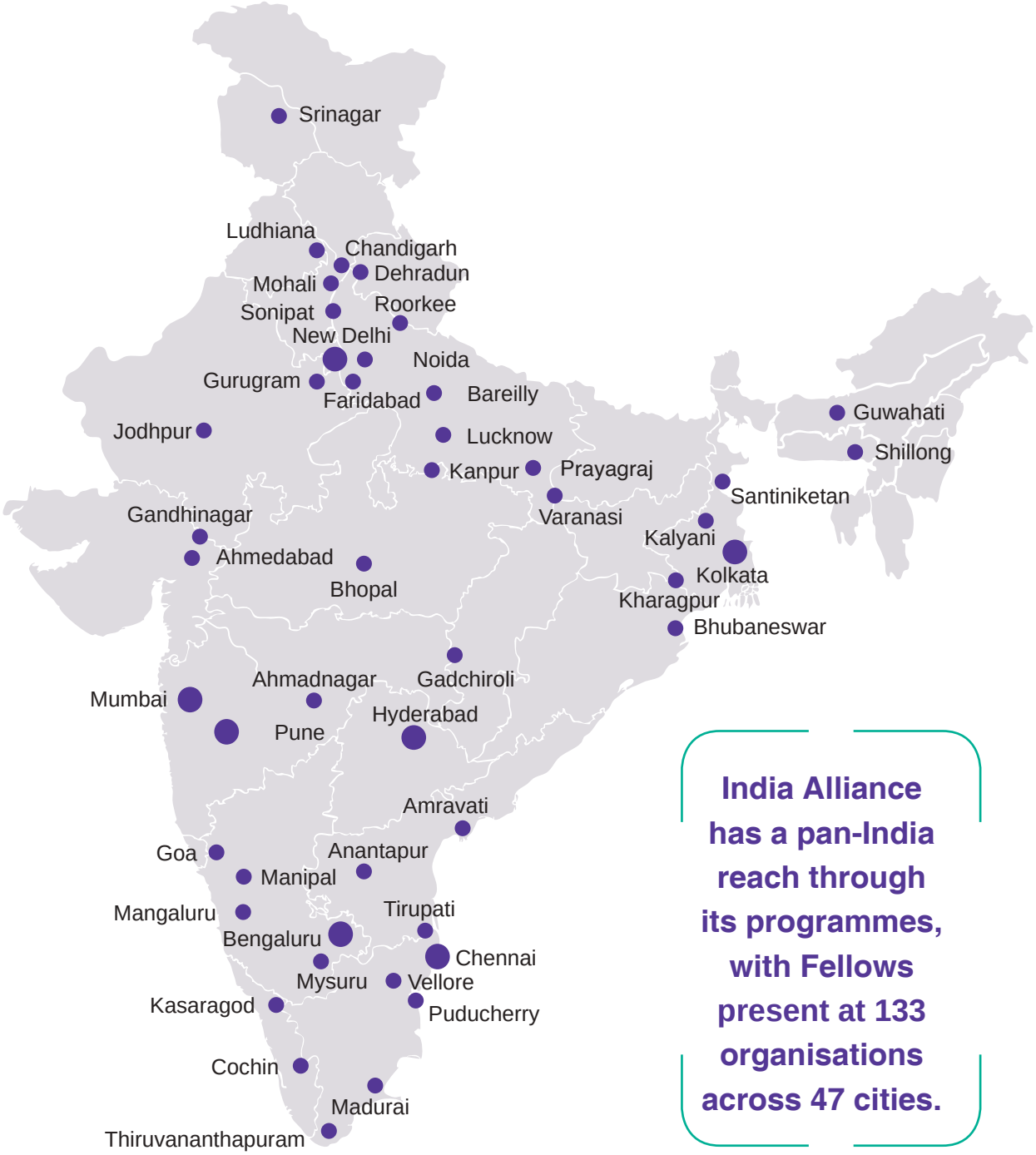
Number of Awards



Fellowship Schemes

India Alliance primarily offers three types of Fellowships based on career levels of applicants – Early Career, Intermediate and Senior Fellowships. These Fellowships are offered under both, the Basic Science stream and the Clinical & Public Health stream. The focus of our Fellowship programmes is on setting the funded researchers on a leadership track through a continuous system of engagement and mentoring. Generous and flexible research funds, support for international mobility along with an efficient and transparent application process, are among IA Fellowship hallmarks. Moreover, the Fellowships are not restricted by age or nationality of the applicant. However, the research work must be carried out at a not-for-profit institution in India. The Fellowship period is of five years. India Alliance has a pan-India reach through its programmes, with Fellows present at 133 organisations across 47 cities.

Distribution of IA Fellows across India

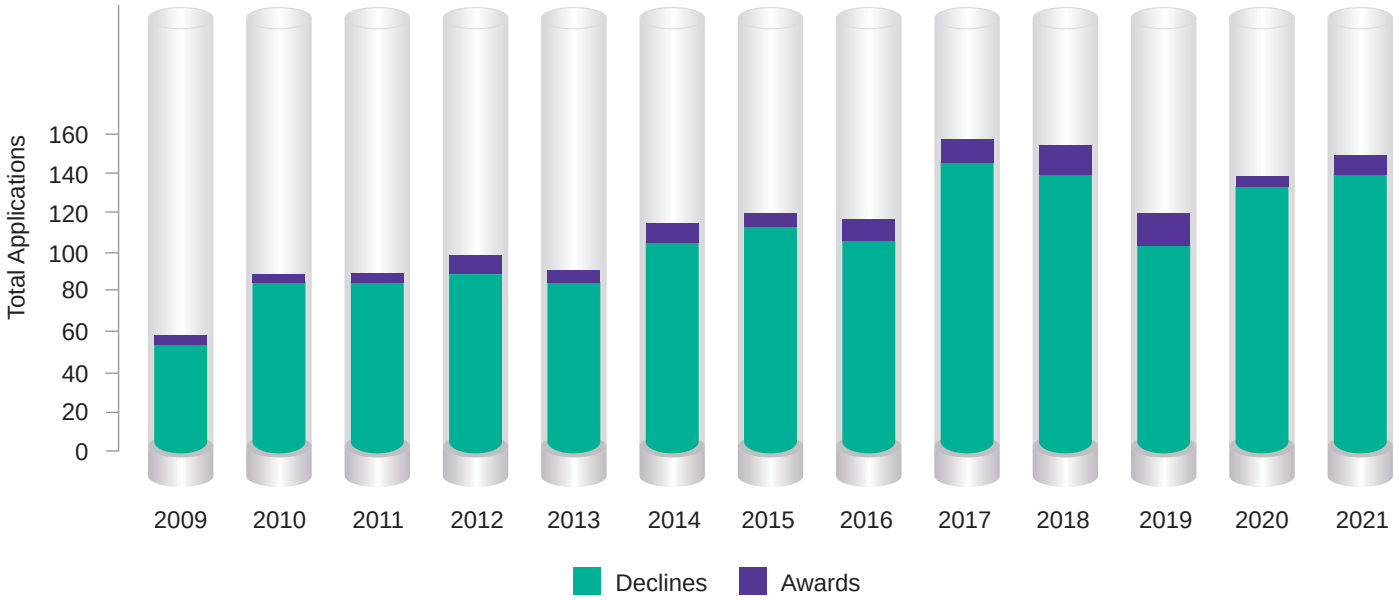


India Alliance has a pan-India reach through its programmes, with Fellows present at 133 organisations across 47 cities.

Basic Biomedical Research Fellowships

Early Career Fellowships (ECF)

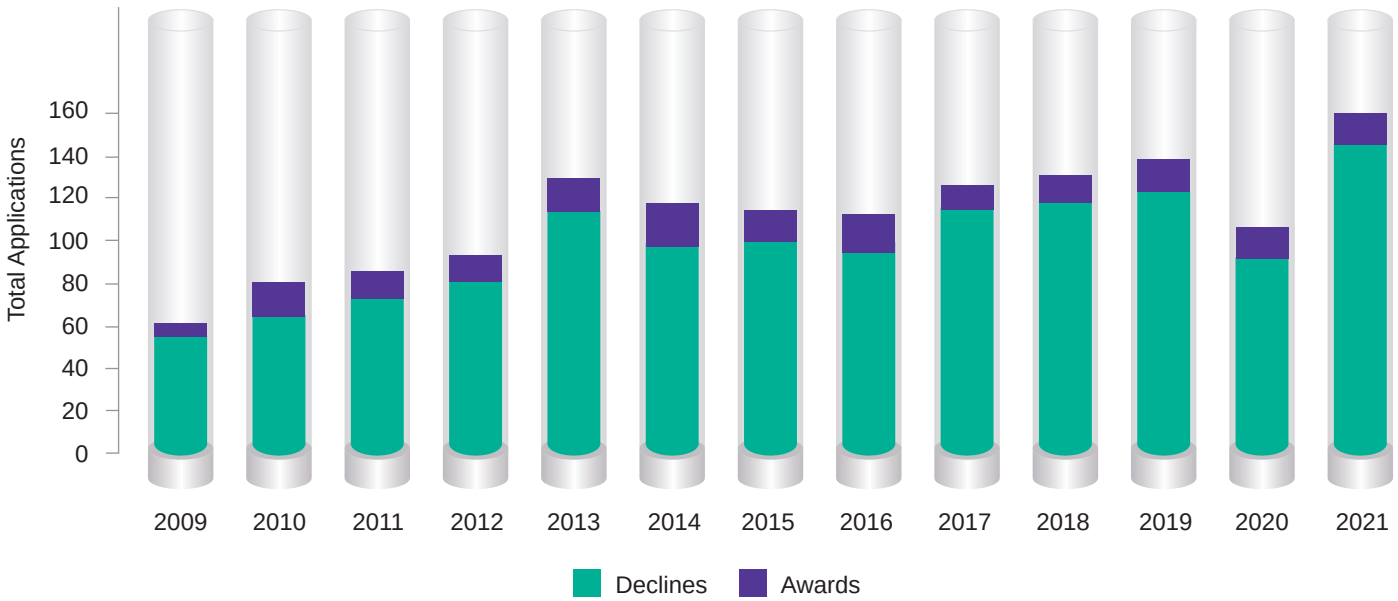
Early Career Fellowships are designed to be independent post-doctoral awards, and are given to researchers within four years of obtaining their PhD degree.



Basic Biomedical Early Career Fellowship

Intermediate Fellowships (IF)

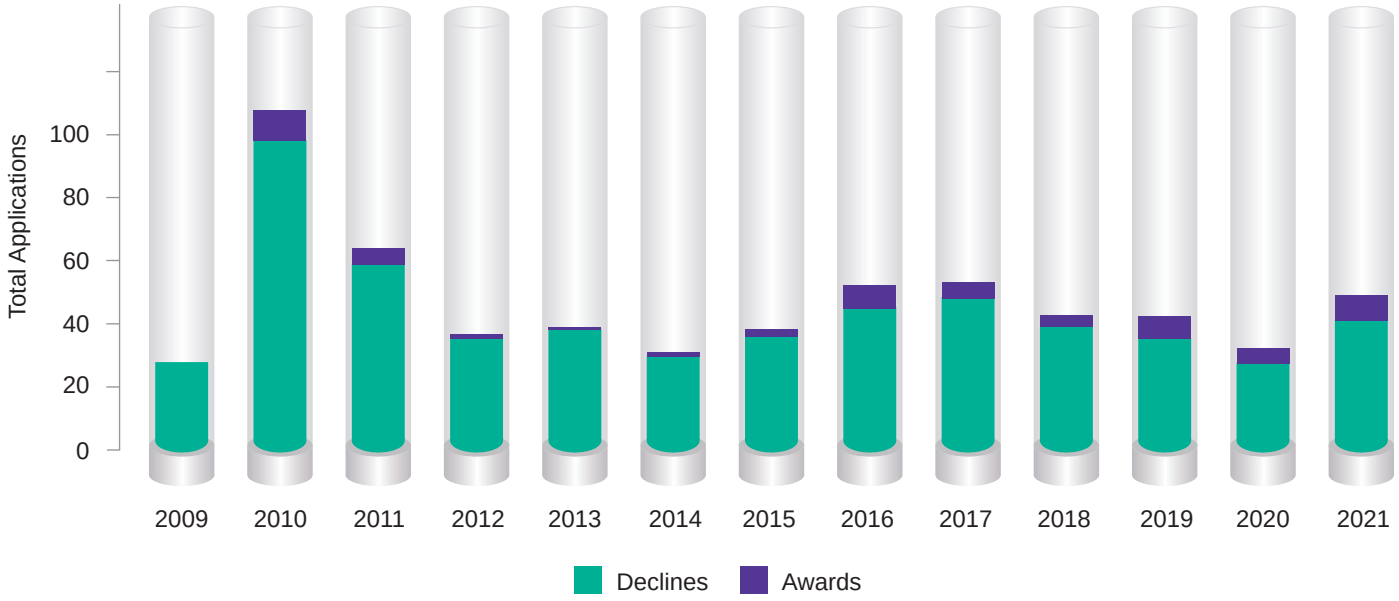
Intermediate Fellowships are for researchers who wish to establish an independent laboratory with a high-quality research programme in India. These are usually for those researchers who have 4 to 15 years of post-PhD research experience.



Basic Biomedical Intermediate Fellowship

Senior Fellowships (SF)

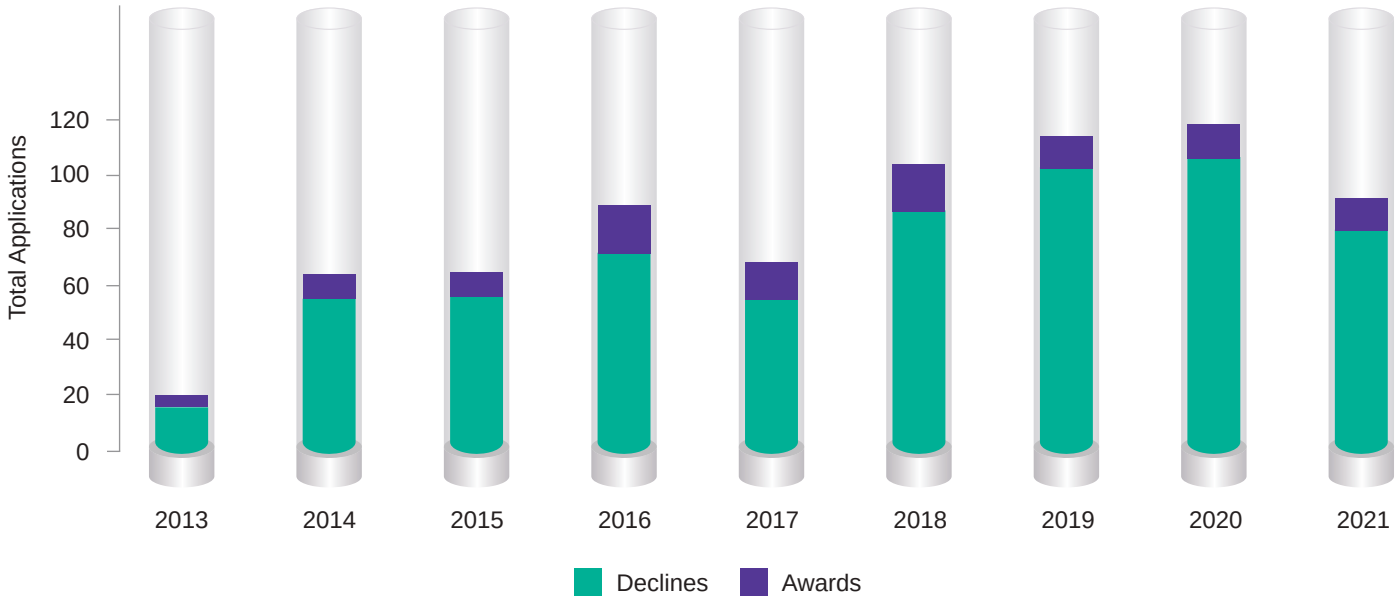
Senior Fellowships are for outstanding scientists with up to 15 years of post-PhD experience to expand their research programme in India.



Basic Biomedical Senior Fellowship

Clinical and Public Health (CPH) Research Fellowships

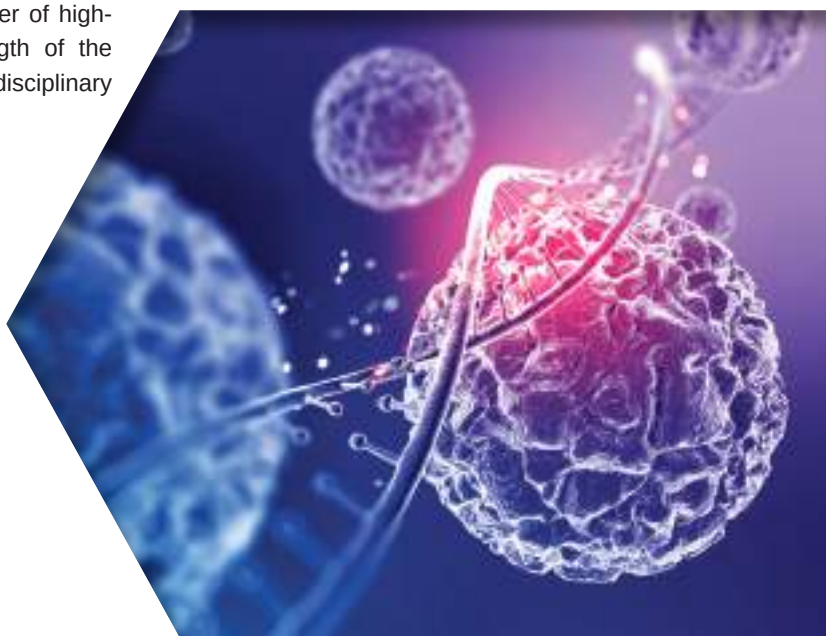
To improve the life and health of society, it becomes essential to nurture research in both basic sciences and clinical & public health researchers. The CPH Fellowships aim to build capacity in health research by supporting the clinicians & public health researchers. This sets us apart as a funder. Over the years these fellowships have been successful in promoting research in this domain.

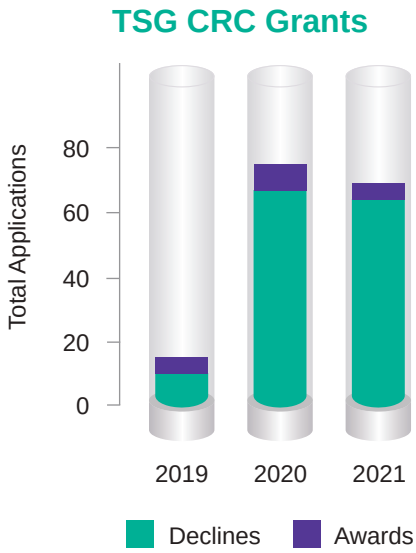


Clinical and Public Health Fellowship

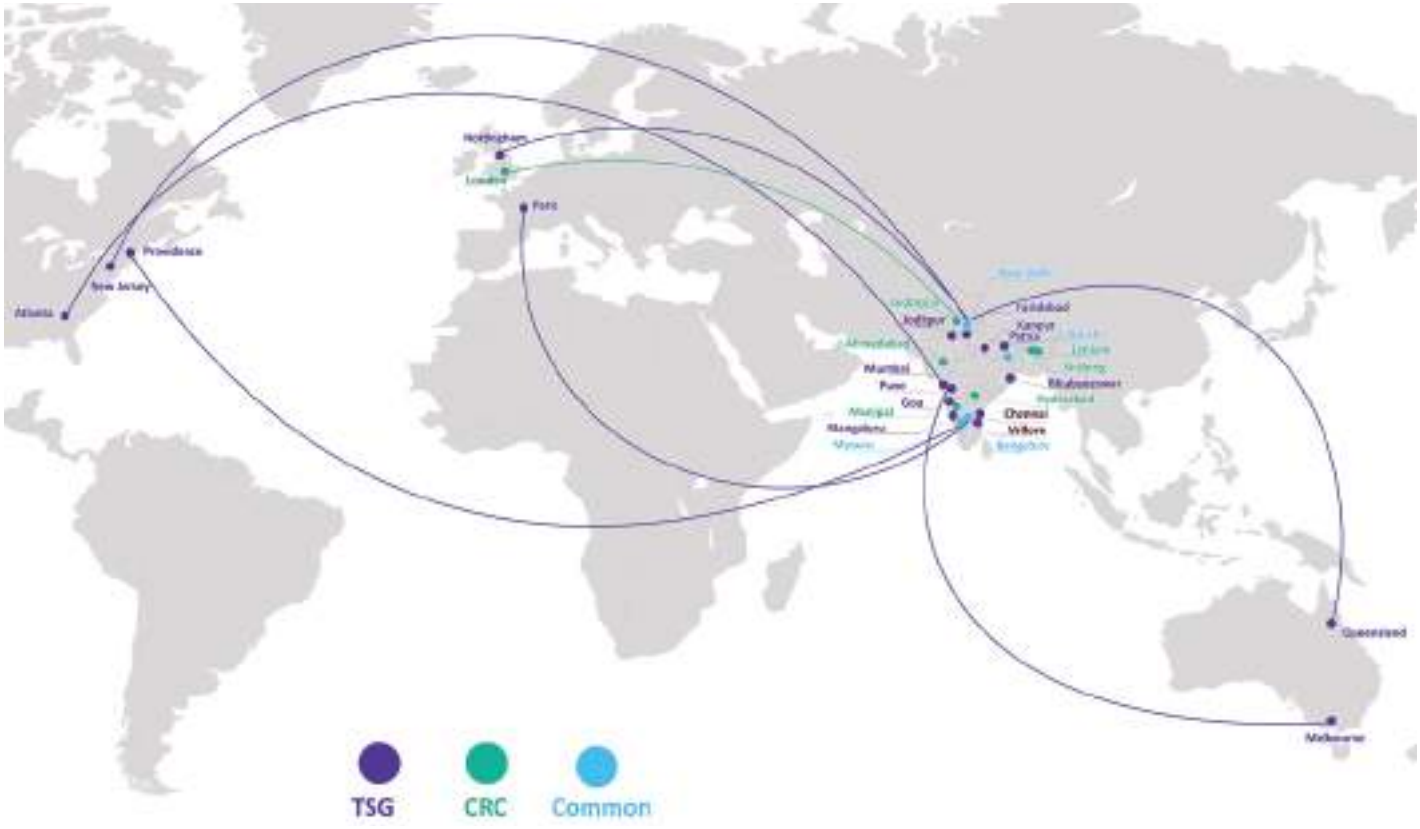
Team Science Grants and Clinical/Public Health Research Centres

Collaborative Research Projects and Clinical Research Training through our Team Science Grants (TSG) and Clinical Research Centres (CRC) have been a success with increasing number of high-quality applicants and awards. Further proving the strength of the design of these grant schemes. It's a unique model for interdisciplinary collaboration and strengthening the research ecosystem.





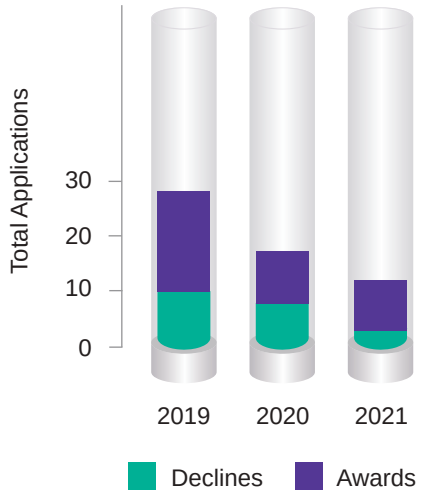
The map below showcases the various international collaborations set up under the aegis of the Team Science Grants and Clinical/Public Health Research Centres.



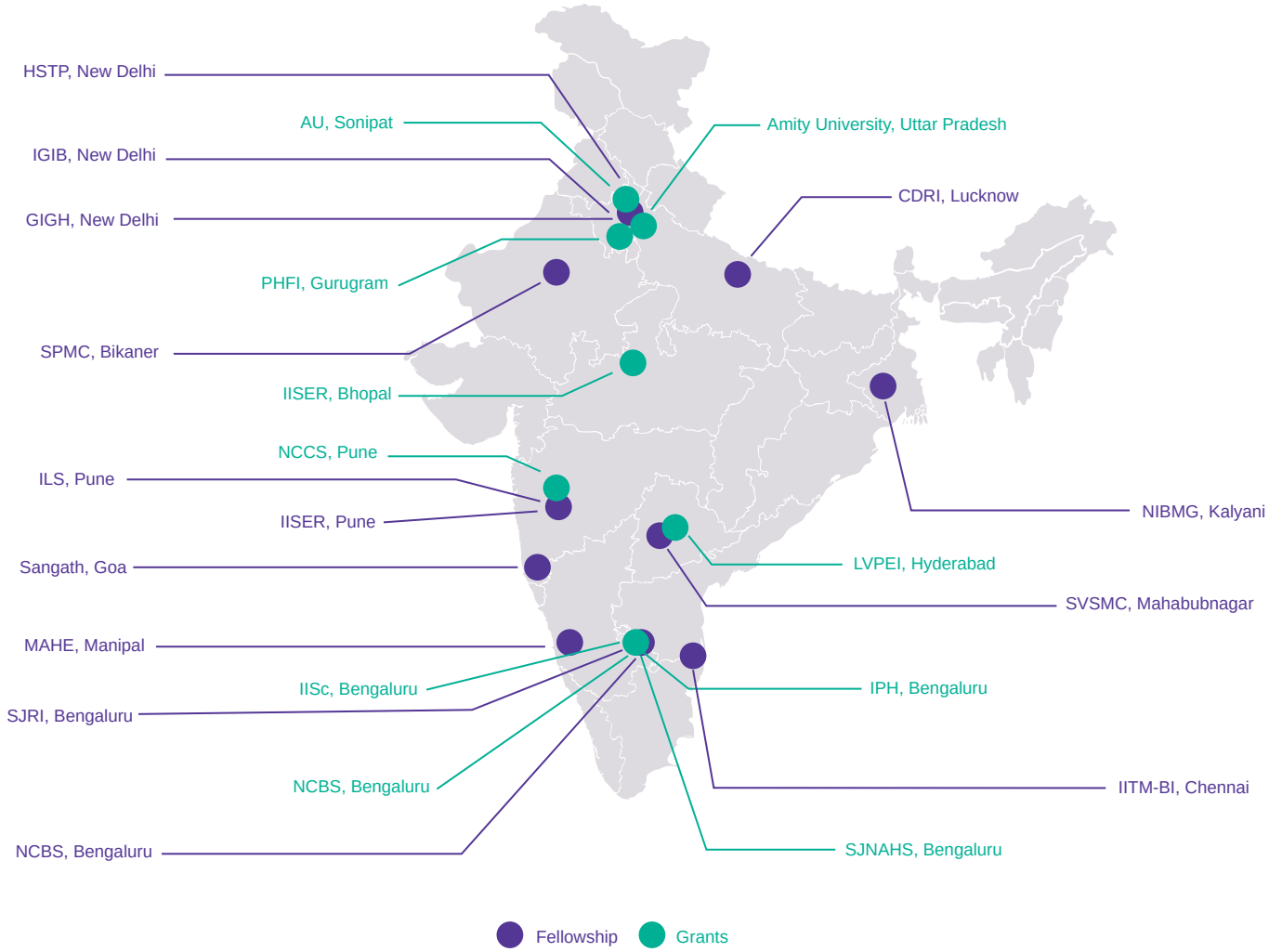
India Research Management Initiative (IRMI)

IRMI is strengthening institutional ecosystems by facilitating the setting up of research management systems through funding, training and mentoring. The initiative is gaining traction with increasing number of high-quality applicants. Its flagship funding programmes and community activities are strengthening the capacity and network of research managers across India.

IRMI Fellowships, Grants & Travel Grants



The map below showcases the pan-India reach of the India Research Management Initiative (IRMI) awardees.



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IA-RECOMMENDED AWARDS

(JANUARY 2021 - MARCH 2022)

Clinical and Public Health Research Fellowships

CPH Early

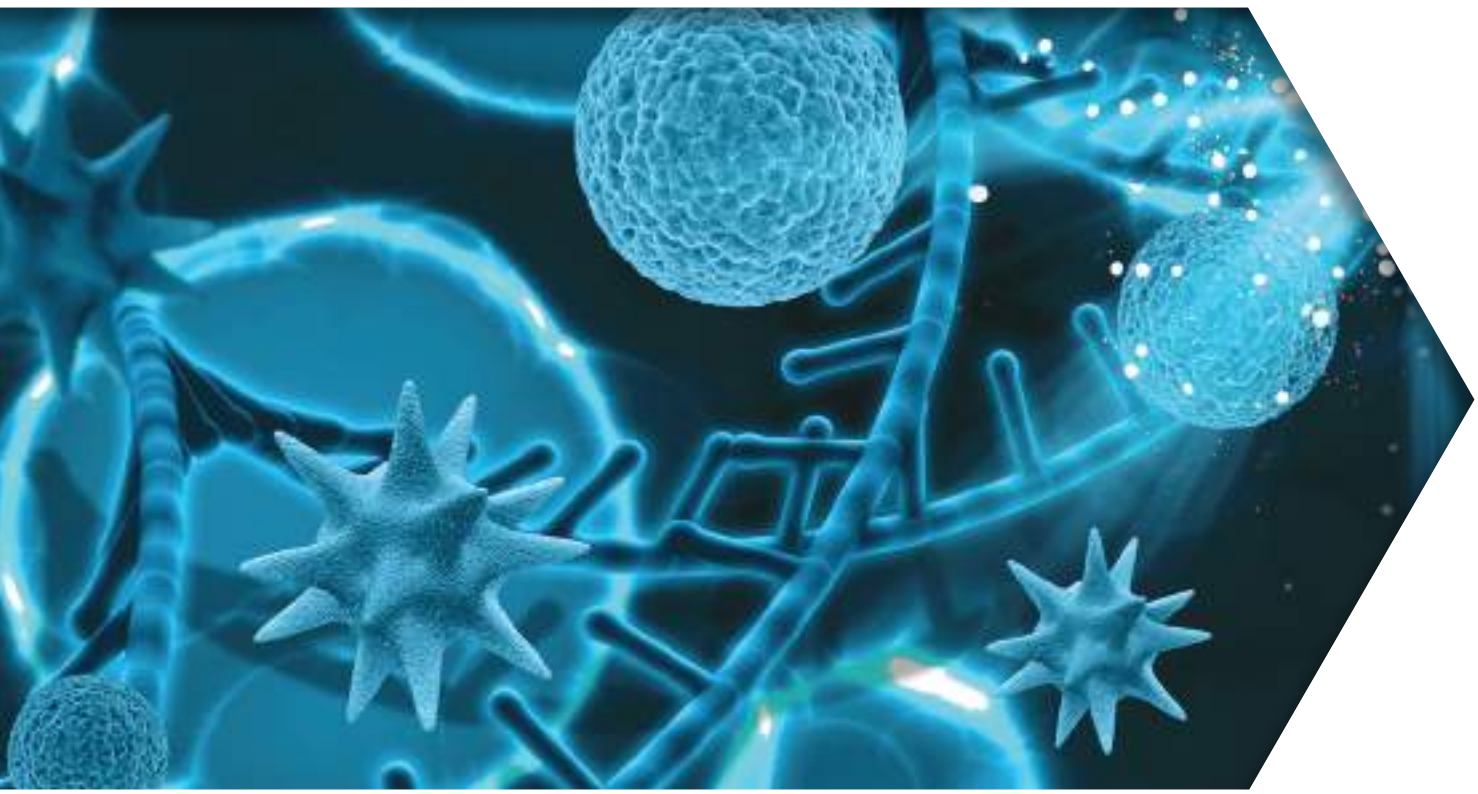
Dr Jaya Kshatri	Regional Medical Research, Bhubaneshwar
Dr Sravya Palavalasa	National Institute of Mental Health and Neurosciences
Dr Shweta Prasad	National Institute of Mental Health and Neurosciences
Dr Swati Singh	L V Prasad Eye Institute, Hyderabad
Dr Abi Manesh	Christian Medical College
Dr Hemant Bhargav	National Institute of Mental Health and Neurosciences
Dr Nishant Kumar	Wildlife Institute of India

CPH Intermediate

Dr Srinivas Marmamula	L V Prasad Eye Institute, Hyderabad
Dr Harish Tiwari	College of Veterinary Science, Khanapara
Dr Arpita Ghosh	The George Institute for Global Health, Delhi

CPH Senior

Dr Nikhil Patkar	Tata Memorial Centre - Advanced Centre for Treatment, Research and Education in Cancer
Dr Pallab Kumar Maulik	The George Institute for Global Health, Delhi



Basic Biomedical Research Fellowships

Basic Early

Dr Richa Karmakar	Indian Institute of Technology Madras
Dr Shanaya Patel Bakeri	Ahmedabad University
Dr Kamlesh Ganesh Pawar	Shiv Nadar University
Dr Tanmay Nath	Indian Institute of Technology Madras
Dr Ajith Kumar	Indian Institute of Science
Dr Balaganesh Janakiraman	Tata Institute of Fundamental Research
Dr Poonam Mishra	National Centre for Biological Sciences
Dr Ann Catherine Archer	JSS Academy of Higher Education & Research
Dr Mithu Baidya	Indian Institute of Technology Kanpur
Dr Ananth Prasad Burada	Indian Institute of Science

Basic Intermediate

Dr Mahul Chakraborty	Tata Institute for Genetics and Society
Dr Sai Prasad Pydi	Indian Institute of Technology Kanpur
Dr Shobhna Kapoor	Indian Institute of Technology Bombay
Dr Anjana Badrinarayanan	National Centre for Biological Sciences
Dr Saravanan Palani	Indian Institute of Science
Dr Vijayalakshmi (Viji) Subramanian	Indian Institute of Science Education and Research, Tirupati
Dr Abhishek Mazumder	Centre for DNA Fingerprinting and Diagnostics
Dr Arunkumar Dhayalan	Pondicherry Central University
Dr Lipi Thukral	Institute of Genomics and Integrative Biology
Dr Mahipal Ganji	Indian Institute of Science
Dr Santhosh Sethuramanujam	Indian Institute of Technology Madras
Dr Aneesh Tazhe Veetil	Tata Institute of Fundamental Research
Dr Anupama Sathyamurthy	Indian Institute of Science
Dr Shovamayee Maharana	Indian Institute of Science

Basic Senior

Dr Kausik Chakraborty	Institute of Genomics and Integrative Biology
Dr Ranjana Pathania	Indian Institute of Technology Roorkee
Dr Raghav Rajan	Indian Institute of Science Education and Research, Pune
Dr Varsha Singh	Indian Institute of Science
Dr Rachna Chaba	Indian Institute of Science Education and Research, Mohali
Dr Sunil Laxman	Institute for Stem Cell Science and Regenerative Medicine
Dr Poonkuzhali Balasubramanian	Christian Medical College
Dr Janesh Kumar	National Centre for Cell Science

Team Science Grants and Clinical/ Public Health Research Centres

Team Science Grants

Team Science Grant Awardees - 2020

Dr Giridhara R Babu	Indian Institute of Public Health, Bengaluru
Dr Arkasubhra Ghosh	Narayana Nethralaya Foundation
Dr Gagandeep Singh	Dayanand Medical College
Dr CS Pramesh	Tata Memorial Centre - Advanced Centre for Treatment, Research and Education in Cancer
Dr Pramod Pullarkat	Raman Research Institute

Team Science Grant Awardees - 2021

Dr Suparna Ghosh-Jerath	Indian Institute of Public Health, Delhi
Dr Thomas Pucadyil	Indian Institute of Science Education and Research, Pune
Dr Sandhya Visweswariah	Indian Institute of Science
Dr Pushkar Sharma	National Institute of Immunology
Dr Sapna Desai	Population Council Institute

Clinical and Public Health Research Centres

Clinical and Public Health Research Centres Awardees - 2020

Dr Katta Girisha	Manipal Academy of Higher Education
Dr Prashanth N Srinivas	Institute of Public Health
Dr Melari S Nongrum	Indian Institute of Public Health, Shillong

India Research Management Initiative (IRMI)

IRMI Research Management Fellowships

IRMI Research Management Fellowship Awardees - 2020

Dr Alpana Dave	National Institute of Biomedical Genomics
Dr Bhawana George	Central Drug Research Institute
Ms Pooja Shanbagh	Manipal Academy of Higher Education

IRMI Research Management Fellowship Awardees - 2021

Dr Suhasini Padugupati	SVS Medical College
Dr Divya Goswami	Sardar Patel Medical College
Ms Shilpa John	Health Systems Transformation Platform

IRMI Research Management Grants

IRMI Research Management Grant Awardees - 2020

Dr Geetha AV	Public Health Foundation of India
Dr Anirban Chakraborty	Ashoka University
Dr Namrata Gundiah	Indian Institute of Science
Dr Ajay Pillai	National Centre for Cell Science

IRMI Research Management Grant Awardees - 2021

Dr Ankur Sarswat	Indian Institute of Science Education and Research, Bhopal
Dr Vandana Gambhir	Indian Institute of Science Education and Research, Pune
Ms Shafali Kashyap	Amity University, Noida

IRMI Research Travel Management Grants

IRMI Research Management Travel Grant Awardees - 2020

Dr Deepika Bhaskar	Indian Institute of Technology, Delhi
Dr Sheikh Raisuddin	Jamia Hamdard

IRMI Research Management Travel Grant Awardees - 2021

Dr Madhuri Dutta	The George Institute for Global Health, Delhi
Ms Aruna MC	National Centre for Biological Sciences
Mr Godwin Fernandes	Sangath, Goa

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INDIA ALLIANCE ANNUAL CONCLAVE 2021

India Alliance organised the 10th Annual Meet for fellows and grantees, the 'India Alliance Annual Conclave (IAAC) 2021' from 25 to 28 October, 2021. It was a virtual event that provided a platform for grantees to present their research, share ideas, interact with other India Alliance Fellows, committee members and Alumni, among others. The theme for the conclave was **'Science Systems Solutions'**.

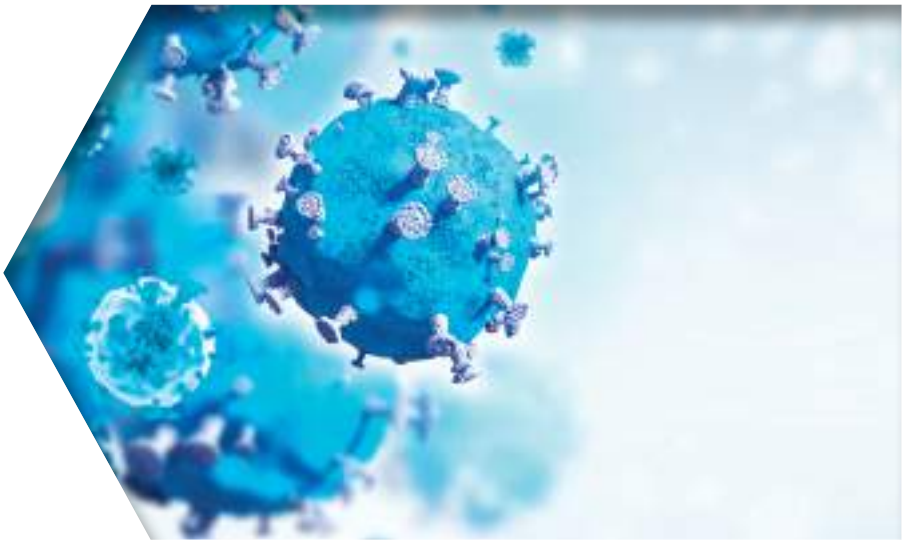
Talk by **Dr Renu Swarup**, Secretary, Department of Biotechnology

Talk by **Dr Branwen Hennig**, Wellcome Trust

The event featured eminent guest speakers from the fields of science, arts and policy-making, while the India Alliance fellows and grantees spoke about their research initiatives.

It started with reflecting on the key highlights of the last 13 years by Dr Vasan Sambandamurthy, the then-CEO India Alliance. This was followed by a speech by Dr Renu Swarup, the then-Secretary, Department of Biotechnology. Herein, she highlighted the role of India Alliance in capacity-building and propelling biomedical research. Next Dr Branwen Hennig, Acting Head of International Operations, Wellcome Trust, spoke about the mission and funding initiatives in science by the Wellcome Trust. Following this, poster sessions were conducted and broadcasted on the virtual platform, covering a wide range of research topics undertaken by the IA fellows and grantees.

Invited Lectures



'Lessons from the Pandemic' by
Dr Soumya Swaminathan,
Chief Scientist, World Health Organisation

'The World of Colour'
Dr Semir Zeki,
Neurobiologist, University College London (UCL)

'The Creative Arts, an Essential Ingredient in Science'
Dr Monica Lakhanpaul,
Professor, Integrated Community Child Health, UCL

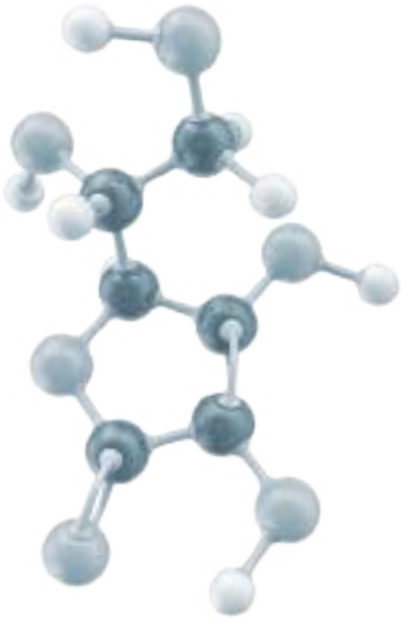
'Frugal Science in the Age of Curiosity'
Dr Manu Prakash,
Associate Professor of Bioengineering at Stanford University

'Storing Memory in Amyloids'
Dr Kausik Si,
Professor, The Graduate School, Stowers Institute for Medical Research

'Novel and Counter-intuitive Non-covalent Interactions in Proteins'
Dr Ramasubbu Sankararamakrishnan,
IIT Kanpur

'Challenges in Suicide Prevention Research in India: A Silent Crisis?'
Dr Soumitra Pathare,
Psychiatrist and Director, Centre for Mental Health Law and Policy, Indian Law Society

'Path-breaking Innovations for Health'
Dr Devi Prasad Shetty,
Cardiac Surgeon and Chairman of Narayana Health



Panel Discussions

A panel discussion was held on a survey conducted by Dr Deepa Subramanyam from NCCS Pune and Dr Hansika Kapoor on the impact of COVID-19 pandemic on STEM researchers. The discussion panel included Dr Bushra Ateeq, Dr Vivekanand Jha and Dr Vidita Vaidya.

'Creating Robust Research Ecosystems in India', a panel discussion was conducted as part of the India Research Management Initiative (IRMI), led by panelists Dr Savita Ayyar, Dr Madhuri Dutta and Dr Vineetha Raghavan.

Sessions by IA Fellows and Grantees

India Alliance Fellows and Grantees conducted sessions to present their research:

- **Dr Arnab Barik**, Indian Institute of Science, Bengaluru
- **Dr Swagata Dey**, National Brain Research Centre, Manesar
- **Dr Nishith Gupta**, Birla Institute of Technology & Science Pilani, Hyderabad
- **Dr Jahnavi Joshi**, Centre for Cellular & Molecular Biology, Hyderabad
- **Dr Jayanta Bhattacharyya**, Translational Health Science and Technology Institute (THSTI), Faridabad
- **Dr Vipin Gupta**, University of Delhi, New Delhi
- **Dr Gaurab Sircar**, Visva Bharati University, Santiniketan
- **Dr Rahul Gajbhiye**, National Institute for Research in Reproductive Health, Mumbai
- **Dr Sivaranjani Gali**, MS Ramaiah University of Applied Sciences, Bengaluru
- **Dr Venkatasubramanian Ganesan**, National Institute of Mental Health and Neurosciences, Bengaluru
- **Dr Anup Padmanabhan**, Ashoka University, Sonepat
- **Dr Melari Nongrum**, Martin Luther Christian University, Shillong
- **Dr Mahesh PA**, JSS Medical College, JSSAHER, Mysuru
- **Dr Venkatesan Chakrapani**, The Humsafar Trust, Mumbai
- **Dr Prashanth Nuggehalli Srinivas**, Institute of Public Health, Bengaluru

The conclave gave a platform to Newton International Fellows (Dr Sudha Shankar, University of Glasgow; Dr Ashutosh Rai, Queen Mary University of London and Dr Sarwar Beg, University of Central Lancashire) supported by Academy of Medical Sciences (AMS) in collaboration with the Department of Biotechnology (DBT), Government of India to present their research.

The final event of the conclave featured two public engagement projects supported by India Alliance – the THETA Project and a podcast by Scrolls and Leaves aiming to bridge the gap between Science and Society. The conclave concluded with the closing remarks from Dr Sambandamurthy on the way forward for India Alliance.

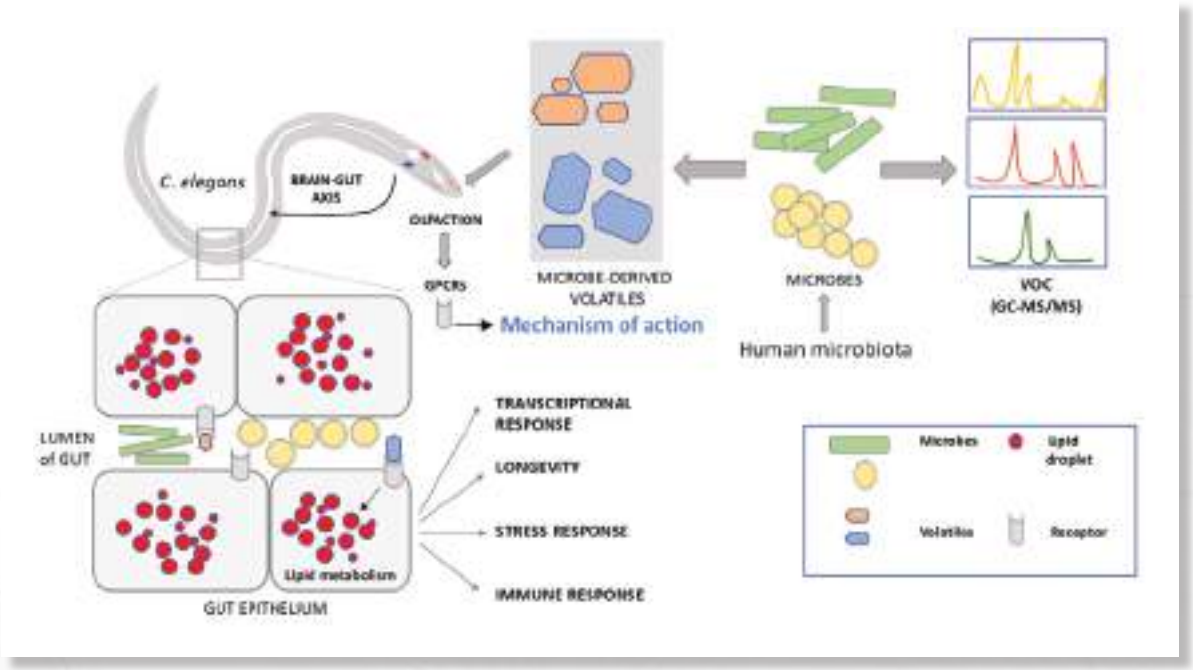
6 RESEARCH HIGHLIGHTS

Microbe-derived olfactory signals as regulators of lipid metabolism, innate immunity and longevity in Caenorhabditis elegans

Dr Varsha Singh

Indian Institute of Science,
Basic Biomedical Research Senior Fellow

Dysbiosis is believed to be one of the major contributing factors for intestinal and metabolic disorders as well as inflammatory conditions and behaviour in mammals. There is an intimate link between the complexity of gut microbiota and human health, but the interaction between the host and the microbiota is poorly understood at the cellular and molecular levels. Specific microbes are linked to various pathological conditions and some of these microbes produce volatiles in abundance. In Caenorhabditis elegans, a bacterivore, many orphan G protein-coupled receptors (GPCRs) have been shown to be involved in the immune response during infection with bacteria. We utilise this nematode to ask whether volatiles produced by some members of human gut microbiota regulate metabolism and immune response via the activation of specific olfactory receptors in this animal host. Using a combination of genetics in C. elegans, behavioural assays and analyses of secondary metabolites of various gut microbiota, we investigate the effect of microbial volatiles on lipid metabolism, immune response and longevity.



Effect of volatiles from microbes on lipid metabolism in C. elegans via their action in the gut or the activation of brain-gut axes: Receptors for volatiles could be present in olfactory neurons, cell body indicated in red and blue, or in the gut epithelium and could regulate lipid metabolism and lipid droplet homeostasis in the gut of nematodes. Some volatiles can activate the transcriptional programme for longevity and immune response. New odours are identified by gas chromatography-mass spectrometry (GC-MS/MS) analyses of Volatile Organic Compounds (VOC) from microbes.

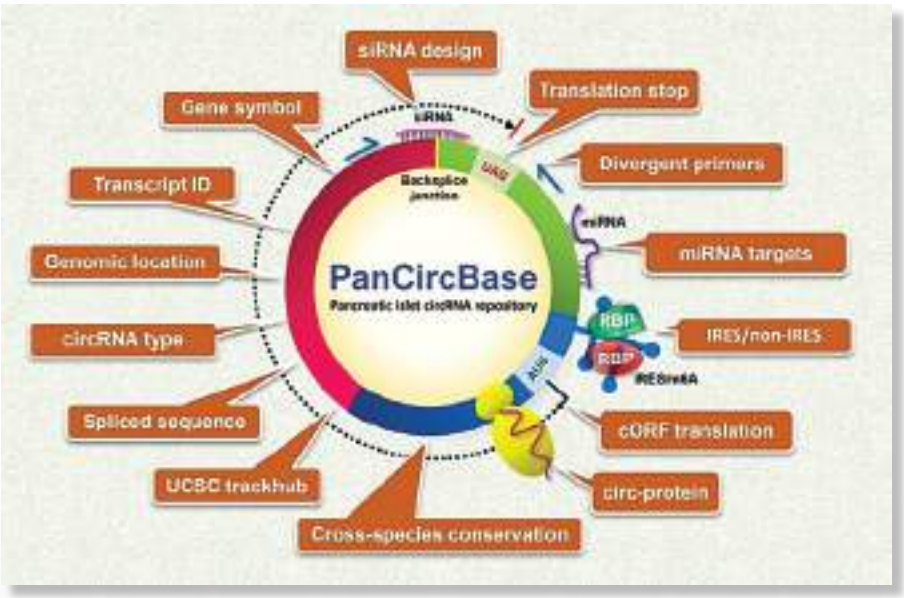
Circular RNAs in the regulation of pancreatic β-cell physiology

Dr Amaresh Chandra Panda

Institute of Life Sciences Bhubaneswar,
Basic Biomedical Research Intermediate Fellow

Diabetes is one of the world's most common diseases caused by the dysregulation of insulin synthesis/ secretion and uptake by target tissues. Pancreatic β-cells synthesise and secrete insulin hormone, which maintains glucose homeostasis in the body. High-throughput RNA sequencing studies performed in animal cells, including pancreatic β-cells, revealed that most RNA molecules do not encode a protein but could regulate protein-coding gene expression. While the role of noncoding RNAs such as rRNAs, tRNAs, and microRNAs is well established, newly discovered circular RNAs (circRNAs) in diabetic pancreatic β-cell remain understudied.

In this study, we are investigating the expression and functions of circRNAs in pancreatic islets and β-cells to better understand the mechanisms of circRNAs in the development of diabetes. This study is one of the first to explore the functions of circRNAs in diabetes. Since the knowledge of all circRNAs expressed in pancreatic β-cells or islets and their possible function is not readily available, we have developed PanCircBase, a comprehensive database for exploring the potential functions of circRNAs expressed in pancreatic islets or β-cells. In addition, we have further identified nutrient-regulated circRNAs and their mechanisms that influence β-cell gene expression. Going forward, we expect to discover novel ways to control the expression of insulin and other genes in pancreatic β-cells and to develop novel therapeutic venues for diabetes.



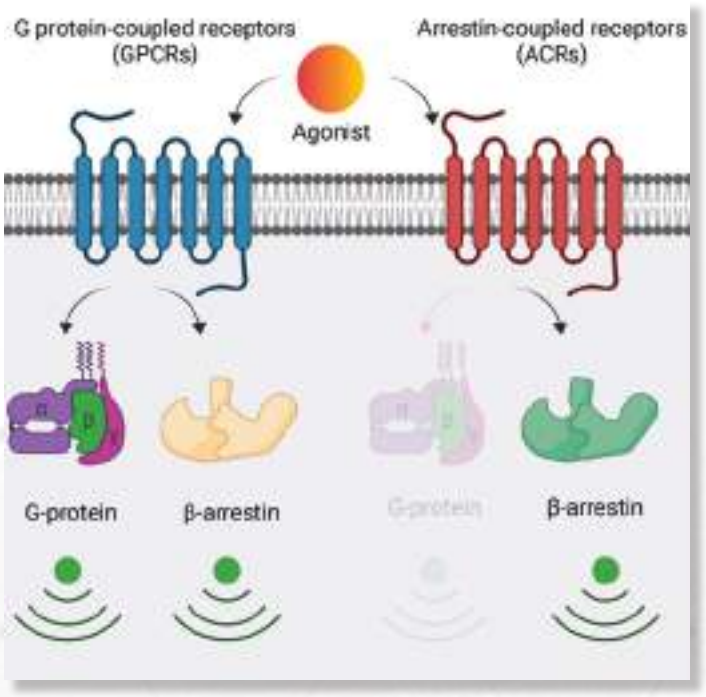
PanCircBase web tool for exploring functional circular RNAs in pancreatic islets

Discovery and characterisation of intrinsically-biased Arrestin-Coupled Receptors (ACRs)

Dr Arun Shukla

Indian Institute of Technology Kanpur,
Basic Biomedical Research Senior Fellow

G-protein-coupled receptors (GPCRs), also known as seven transmembrane receptors (7TMRs), typically interact with two distinct signal-transducers, i.e., G-proteins and β-arrestins (βarrs). Interestingly, there are some non-canonical 7TMRs that lack G-protein coupling but interact with βarrs, although an understanding of their transducer coupling preference, downstream signalling, and structural mechanism remains elusive. Here, we characterise two such non-canonical 7TMRs, namely, the decoy D6 receptor (D6R) and the complement C5a receptor subtype 2 (C5aR2), in parallel with their canonical GPCR counterparts. We discover that D6R and C5aR2 efficiently couple to βarrs, exhibit distinct engagement of GPCR kinases (GRKs), and activate non-canonical downstream signalling pathways.



We also observe that βarrs adopt distinct conformations for D6R and C5aR2, compared to their canonical GPCR counterparts, in response to common natural agonists. Our study establishes D6R and C5aR2 as βarr-coupled 7TMRs and provides key insights into their regulation and signalling with direct implications for biased agonism.

Our study establishes D6R and C5aR2 as 'arrestin-coupled receptors' (ACRs) with a lack of detectable G-protein-coupling and potential signalling through non-canonical pathways. Moreover, we also establish that βarrs adopt distinct conformations upon interaction with these receptors compared to their prototypical GPCR counterparts, which highlights the conformational diversity of 7TMR-βarr complexes. Our findings underscore the distinct functional capabilities of 7TMRs, and they have broad implications to better understand the framework of biased agonism at these receptors.

Prototypical GPCRs contain seven transmembrane (7TM) architecture and they couple to, and signal through, G-proteins and β-arrestins. We discover that some 7TM receptors couple exclusively to β-arrestins but not G-proteins and thus, represent natural examples of β-arrestin-biased 7TMRs.

Finding functional partners for cellular phosphatases

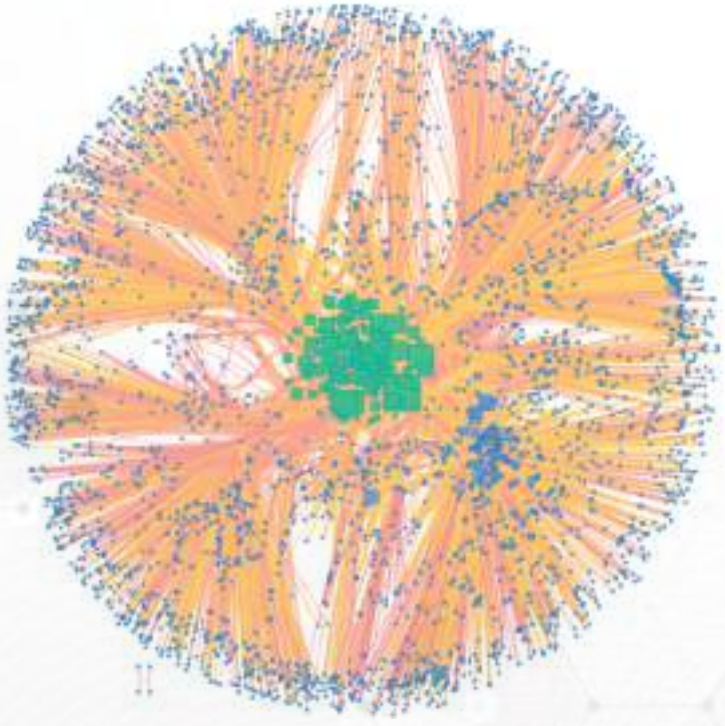
Dr Subba Reddy Maddika

Centre for DNA Fingerprinting and Diagnostics,
Basic Biomedical Research Senior Fellow

Our group at Centre for DNA Fingerprinting and Diagnostics (CDFD) has identified several new functions for a set of cellular enzymes, called Phosphatases.

Proteins, in general, are synthesised as inactive molecules in the cells. Once synthesised, they need to be modified to mediate their functions. Phosphorylation (attachment of a chemical group of phosphate) is one such protein modification required for them to function in the cell. Kinases are the enzymes which add phosphate group to the proteins, while phosphatases are enzymes that oppose this process.

Phosphatases are so far studied in isolation to assess their function in the cell, but in reality, they work in a network of protein complexes. As an old saying 'Show me your friends, and I will know who you are', finding interaction partners for these proteins can reveal their function better. To that end, here we proposed and identified the networks of human phosphatase interacting proteins. Based on the partners, we mapped several new functions for these enzymes in cells. Since phosphatases are involved in various human diseases such as cancer, and neurodegenerative disorders, finding their partners will help us design better future therapies for these diseases.



Network of interacting proteins with human phosphatases identified by proteomics

Strategies to optimise the treosulfan/ thiotepa/fludarabine regimen and post-transplantation cyclophosphamide regimen in hematopoietic stem cell transplantation

Dr Poonkuzhali Balasubramanian

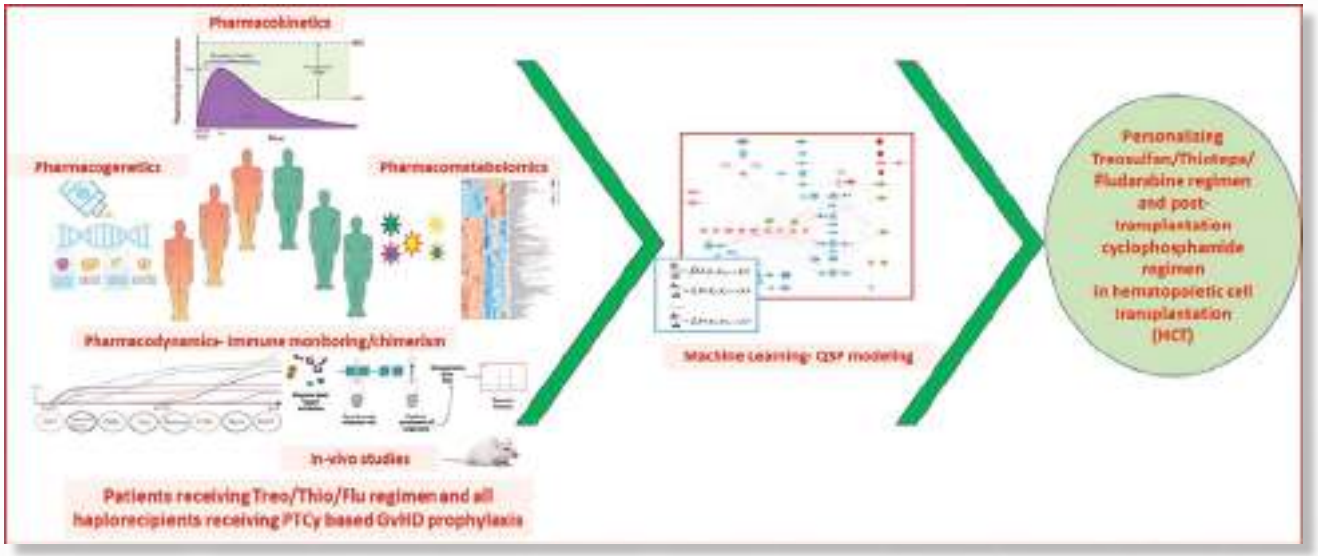
Christian Medical College,
Basic Biomedical Research Senior Fellow

Hematopoietic Cell Transplantation (HCT) is a curative modality for various hematological diseases. Our group has been working on personalising conditioning regimens for HCT as a goal to improve outcomes in HCT. In this study, we propose to address two major areas:

Personalising conditioning regimen for children with high-risk ß-thalassemia: A toxicity-reduced conditioning regimen containing treosulfan-fludarabine-thiotepa (Treo/ Flu/TT) has greatly improved HCT outcomes. We would evaluate the role of the pharmacokinetics (PK) of Treosulfan (Treo)/its epoxy metabolite (EBDM), post-conditioning metabolomic changes as well as early immune reconstitution (eIR) pattern in predicting the incidence of non-rejection mortality (NRM) and graft rejection in patients with high-risk β-thalassemia receiving the Treo/Flu/TT regimen.

Personalising graft-versus-host disease (GVHD) prophylaxis in Haplo-identical transplants (Haplo): Use of post-transplant cyclophosphamide (PTCy) as GVHD prophylaxis has led to improved access to haplotransplants. However, NRM, graft rejection, GVHD, and relapse still pose major challenges.

We would evaluate the role of cyclophosphamide/ metabolite PK and T-cell response pattern post HCT in reducing the incidence of graft rejection/ NRM in patients receiving PTCy-based GvHD prophylaxis. Further, animal model experiments would be conducted to validate the impact of the metabolomic changes. A quantitative systems pharmacology model incorporating all the variables to identify biomarker signatures that could predict NRM and graft rejection/relapse would be developed.



Overview of the proposed study

mHealth Technology-enabled Collaborative Care Model for heart failure management in India (TIME-HF)

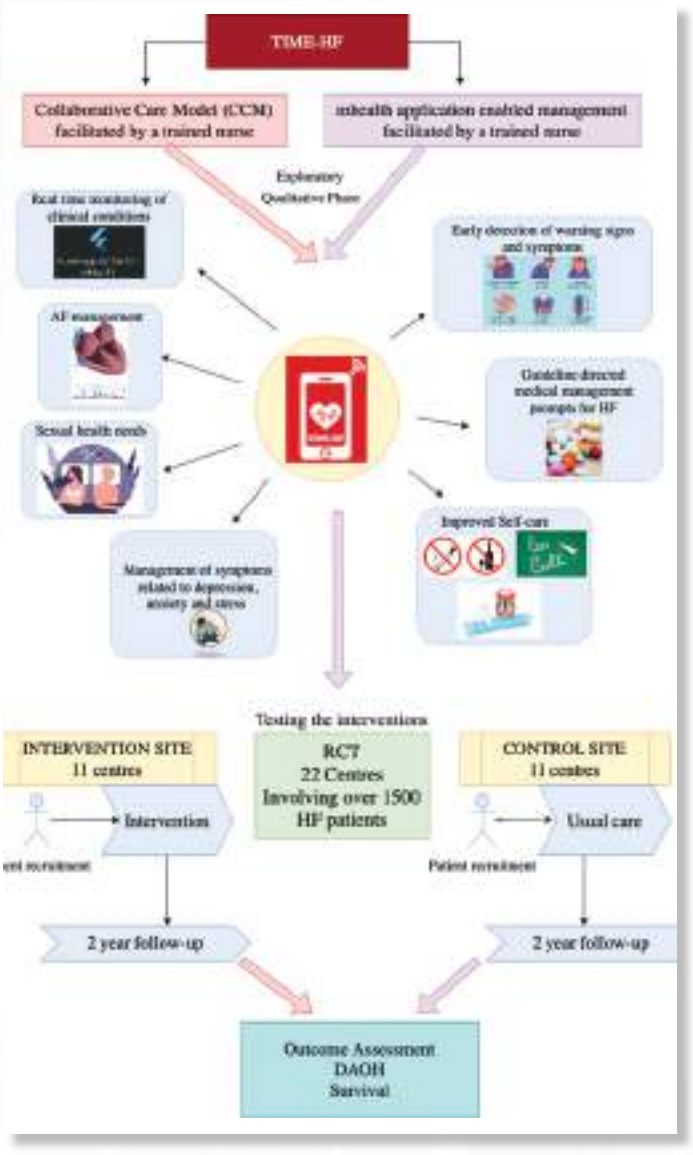
Dr Jeemon Panniyammakal

Sree Chitra Tirunal Institute For Medical Science & Technology,
Clinical and Public Health Senior Fellow

The impact of Heart Failure (HF) on human health is vast. It is associated with high mortality, frequent hospital re-admissions, and poor quality of life. Management requires frequent follow-up and attention to many health goals. Achievement of health goals is often sub-optimal. Optimal therapy, timely care for warning signs/symptoms and better adherence will improve patient survival and quality of life. It will require a team-based approach of engaging different cadres of health care providers, patients and their caregivers.

We propose to test the impact of an affordable and culturally appropriate quality improvement model for the management of HF in India. The team-based Collaborative Care Model (CCM), facilitated by a trained nurse to rationalise the management of heart failure as proposed in our study, may improve the uptake of guideline-directed therapies, and reduce hospital re-admissions and mortality. The project is likely to impact the practice of management of HF in low resource settings.

Currently, as there is paucity of hard evidence to support low-cost and resource-sensitive interventions to improve heart failure outcomes in low and middle-income country settings, high-quality research is needed to resolve this problem as proposed under the new model. The proposed project directly builds on and expand findings from four ongoing heart failure registry studies. The scale-up of the intervention model to national and regional levels could have a substantial health impact by improving survival and quality of life.



Abbreviations:
RCT: Randomised Controlled Trial
DAOH: Days Alive and Out of Hospital

A randomised controlled trial to evaluate a technology-enabled platform to manage depression with or without behavioural activation in patients with cancer in India

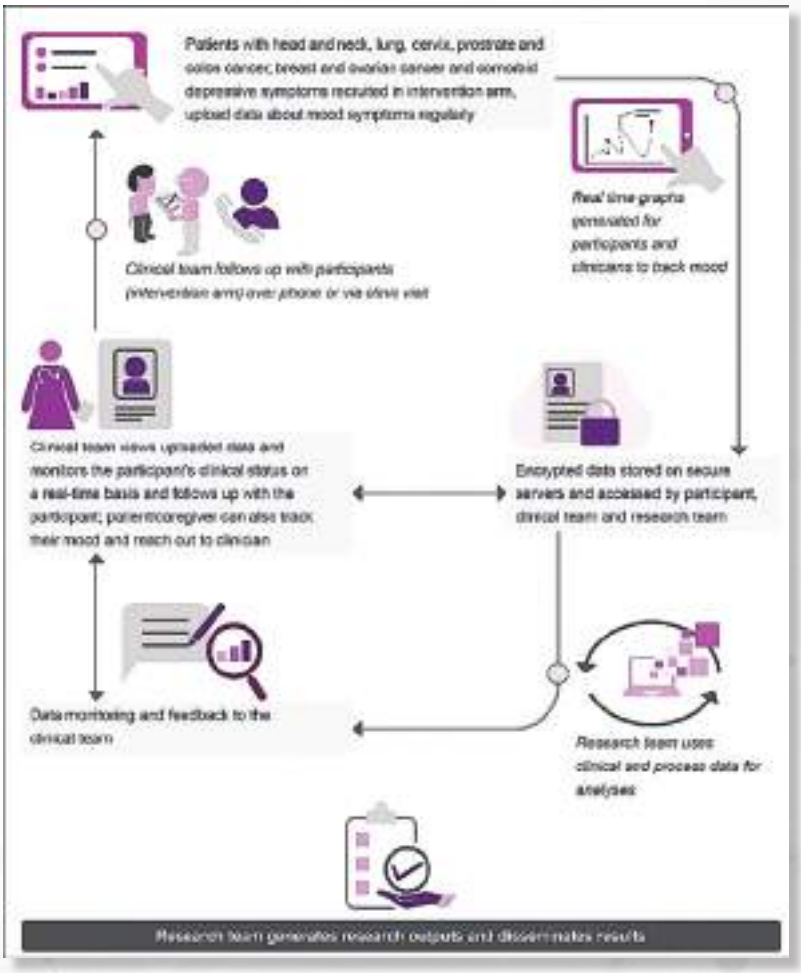
Dr Pallab Kumar Maulik

The George Institute for Global Health,
Clinical and Public Health Senior Fellow

About 30% cancer patients suffer from depression. Integrated management of both conditions is poor even in tertiary centres in India. Self-monitoring mood fluctuations in patients and electronic decision support systems to inform clinicians to optimise services to individual needs, can be beneficial. Additionally, behavioural activation is effective in reducing depression related to cancer. This study proposes a 3-arm parallel design, randomised controlled trial for 12-months to manage depression in patients with breast, cervix, ovarian, lung, prostrate, colon and head and neck cancer, in India.

The primary hypotheses are that compared to usual care, both interventions will show improved depression scores on Patient Health Questionnaire-9 and improved psychological wellbeing as on WHO-5 questionnaire at 3-months.

The proposed study is unique for India and particularly relevant as it helps to empower cancer patients with depression to manage their own health and seek care using a person-centred approach complemented by appropriate healthcare support. Use of technology should help offset stigma related to help-seeking for mental disorders to some extent, as most of the mental health care will be online. The results should inform clinical guidelines for appropriate management of depression in cancer patients and modify existing Government policies under National Cancer Control Programmes.



Schematic conceptual diagram of the self-monitoring and integrated referral system

Not just blood cells: the blood stem cell niche can sense infection

Dr Lolitika Mandal

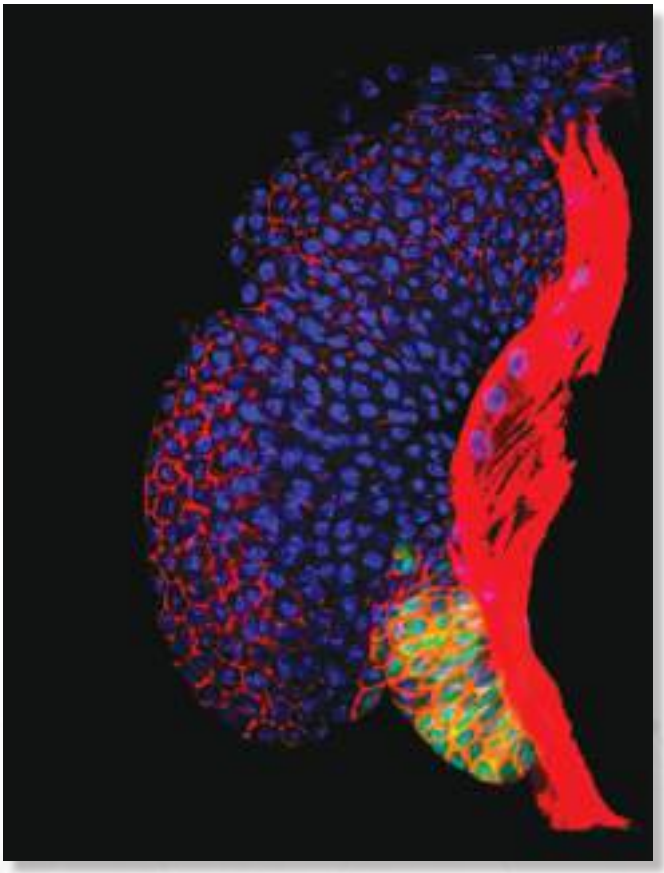
Indian Institute of Science Education and Research Mohali,
Basic Biomedical Research Senior Fellow

Whenever microorganisms like bacteria and viruses attack us, our immune system puts up a strong fight to eliminate these intruders. This fight translates into producing lots of White Blood Cells (WBCs). These professional scavengers are then recruited to clear up the invaders. The enhanced production of WBC during infection, therefore, demands a shift of the ongoing blood cell formation to a crisis mode. Interestingly, this tilt from steady state to emergency blood cell development is poorly understood.

Since many aspects of the blood cell development of vertebrates can be evidenced in fruit flies, we used the larval blood-forming organ to unravel this phenomenon. Blood progenitors proliferate within this organ and are maintained by molecular messages sent from the stem cell microenvironment/niche. This group of naïve blood cells does not participate in larval immune surveillance but is saved for post-larval life. Employing molecular and genetic analyses, we demonstrate that niche via Relish (NF-κB like factor), a major player assigned to immune responses in Drosophila and mammals, safeguards the reserve population from responding to all common threats during development.

Interestingly, the niche locally downregulates the NF-κB factor Relish during infection to swing the ongoing blood cell development to emergency mode. The downregulation of Relish alters the niche cell architecture, preventing them from dispersing the maintenance signal to the blood progenitors. Lack of maintenance signal pushes the progenitors towards early maturation, generating an extra bunch of mature blood cells, ready to fight out the intruders.

This developmental circuit, identified in our study, needs to be explored in mammals where emergency hematopoiesis is a well-observed phenomenon. It will be essential to investigate whether this differential regulation on NF-κB members identified through this study is also active in the vertebrate bone marrow niches during infection. With the identification of this dynamic regulation on NF-κB, this study becomes relevant for readers and investigators in the field of hematopoiesis, immunity, and stem cell biology.



The Drosophila larval hematopoietic organ and its niche (green) upon loss of Relish

Regulation of gene transcription by non-coding genome

Dr Dimple Notani

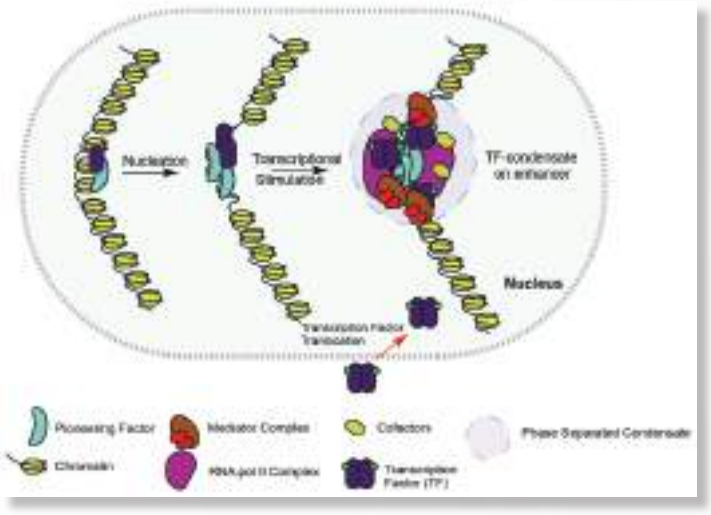
National Centre for Biological Sciences,
Basic Biomedical Research Intermediate Fellow

We all start life as a single cell. The process of developing from a single cell to an organism requires the precise coordination of tens of thousands of coding genes in space and time. This coordinated gene regulation is tightly controlled by DNA elements that are away from the genes known as enhancers. Enhancers being highly cell type-specific, locate their cognate promoter in the dense 3D space of the nucleus and deliver transcriptional machinery to promoters for their activation. They act as a single unit (singleton enhancer) or in a group (clustered enhancers) to activate target genes. In addition, mutations in enhancers have been linked with defects in development and disease outcomes. Therefore, understanding enhancer functions is crucial in developing therapeutic strategies that target enhancers. However, though discovered four decades ago, enhancer functions and their mechanism of actions remain poorly understood.

My laboratory uses cutting-edge genomic and single-cell approaches along with common and rare population genetic variations within enhancers to uncover the following aspects of this conundrum:

(I) Unlike development, the altered transcriptional response during signalling is rather dynamic - induced genes go to their native state at the end of a signalling response. Surprisingly, how enhancers govern these dynamic signalling responses is not known, an important step in understanding the signalling pathways involved in development and diseases. (II) How is the specificity between an enhancer and the corresponding promoter defined? (III) What is the role of enhancers in setting up the three-dimensional chromatin architecture and its alterations during signalling cascades? (IV) How do eRNAs function? What are the eRNAs-associated distinct protein cargos and their mechanisms in the enhancer-mediated activation events?

We have found that the transcriptional response to estrogen signalling is pre-seeded a priori under basal signalling itself. The clustered enhancers emerge upon estrogen stimulation in a region where one or some enhancers are bookmarked by estrogen receptor-alpha (ER□) Transcription factor even before stimulation. Though, clusters that emerge upon signalling, disappear at the end of signalling, they leave behind the same pre-marked enhancer still bound by the receptor for next round of ligand exposure for reproducible signalling response. The understanding of these mechanisms has a profound role in developing therapies against pathological signalling pathways that drive cancer and its development.



Nucleation and growth of transcription factor condensates on enhancers

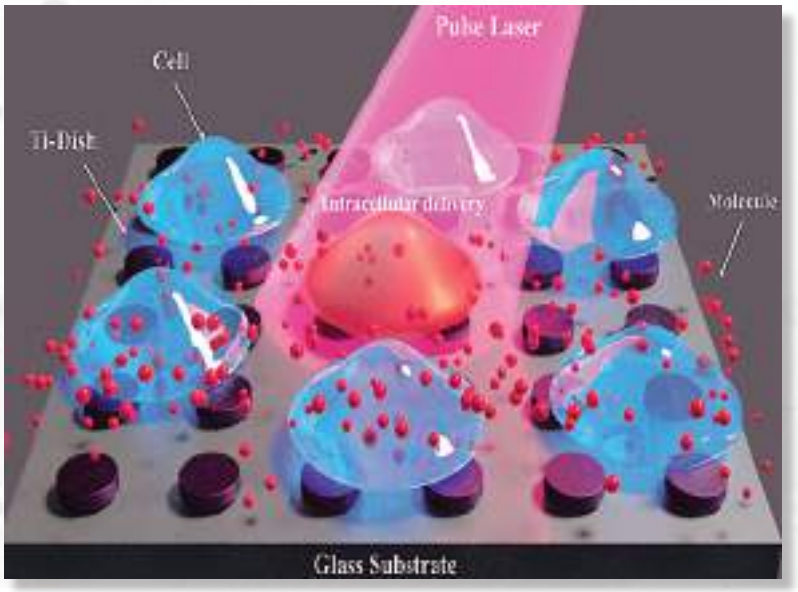
Massively parallel highly efficient uniform intracellular delivery using light pulses

Dr Tuhin Subhra Santra

Indian Institute of Technology Madras,
Basic Biomedical Research Early Career Fellow

The introduction of foreign biomolecules into living cells with high transfection efficiency and cell viability is of great interest for biological research, therapeutics, and diagnostic purposes. Many transfection techniques have been developed to deliver biomolecules into cells. These include viral vectors, chemical methods, and physical methods such as electroporation, microinjection, mechanoporation, and sonoporation. However, most of these techniques are cell-specific gene delivery and induce high toxicity resulting in low cell viability. To overcome these limitations, we proposed an alternative strategy to achieve small to large biomolecular delivery into different cell types with high transfection efficiency and high cell viability.

We have fabricated various micro/nanostructure devices using micro/nano-fabrication techniques such as nano-corrugated mushroom-shaped gold-coated polystyrene nanoparticles (nm-AuPNPs), titanium micro-dish, titanium micro-ring, and titanium micro-concave nonagon devices to achieve massively parallel and uniform intracellular delivery. Using the photoporation technique, an infrared light pulse was scanned onto the cell membrane and fabricated device surface interfaces resulting in the formation of photothermal/plasmonic bubbles. These bubbles grow rapidly and collapse, thus, producing strong fluid flow surrounding the cell membrane surface, resulting in transient membrane pores forming and delivering biomolecules into cells. Our fabricated micro/nanodevices have improved the fundamental transfection method, where small to large biomolecules are delivered into diverse cell types. Our approach performed massively parallel intracellular delivery with high transfection efficiency and cell viability. Moreover, the delivery is performed at a parallel single-cell level. Thus, our platform has solved fundamental problems such as throughput limitations and has provided precise uniform intracellular transfection.



Schematic of the highly efficient intracellular delivery platform using the photoporation technique; the titanium micro-dish device was exposed to an IR pulse laser, creating transient membrane pores to deliver biomolecules into cells

Implementation research informing scale-up of tobacco control policies in India

Dr Pragati Hebbar

Institute of Public Health,
Clinical and Public Health Early Career Fellow

Tobacco use kills approximately eight million people globally and over one million adults in India each year and is a single preventable cause of such huge morbidity and mortality burden. In India, a comprehensive tobacco control law - the Cigarettes and Other Tobacco Products Act (COTPA), 2003 exists. However, implementation remains varied and suboptimal. COTPA has worked in some settings, and not in others.

Over the years, there has been a growing interest in unpacking the black-box of implementation. Realist evaluation is a form of theory-driven inquiry that attempts to explain the underlying mechanisms which brings about the proposed change. Our team conducted a realist synthesis of published literature to explain how tobacco control policies work in low and middle-income countries published in BMJ Global Health. We found 30 mechanisms that could lead to varying implementation outcomes, such as normalisation of smoking in public places, stigmatisation of the smoker, citizen participation in the programme, fear of public opposition, feeling of kinship among violators, manipulation and intimidation by the industry, among others. This is the first realist synthesis with an Indian first author. Next, we conducted in-depth interviews with implementers across three Indian states and observations followed by two regional consultations covering participants from 20 Indian states. These data helped us with the theory development and refinement stages of our realist evaluation study to explain policy implementation. In the course of the research, we engaged policy makers through inside implementation webinar series, researchers through realist evaluation workshops and public through print media and social media.

It is crucial to systematically understand how and why the implementation of this law has occurred the way it did to help scale best practices. This research will contribute to the field of implementation science, furthering theory-driven evaluation of public health policies in India, building capacity of researchers, and provide actionable inputs to strengthen tobacco control policy implementation to policy makers and implementers.

Conducting a group discussion with Government officials of various states as part of a regional consultation

Early and mid-career researchers who were part of the first cohort of the realist evaluation workshop series

Research team at district level Government offices to collect primary data

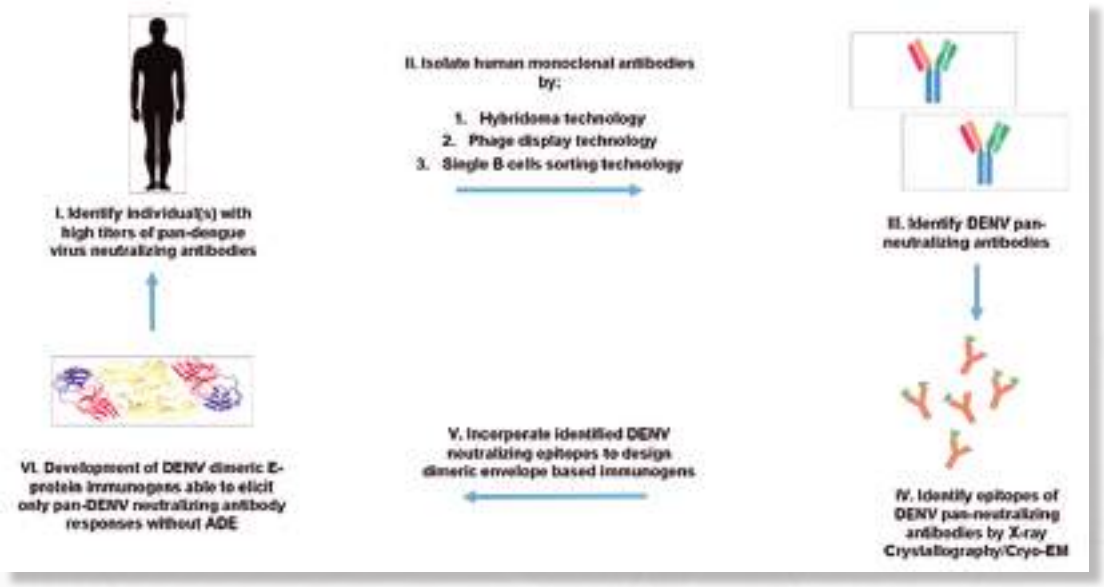
Rational design and development of dengue envelope immunogens using reverse vaccinology 2.0

Dr Sanjeev Kumar

International Centre for Genetic Engineering and Biotechnology, Basic Biomedical Research Early Career Fellow

A major goal of the dengue virus (DENV) vaccine is to induce pan-neutralising antibodies (pnAbs), without eliciting antibodies that are non-neutralising and potentially enhancing infectivity with antibody-dependent enhancement (ADE) activity. To achieve this, an insight of the pnAbs response to DENV during natural infection is required. In virtually all infections, select individuals are able to develop highly potent pnAbs responses. Thus, serving as potential donors for the isolation of pnAbs which will contribute towards structure-guided immunogen design. For this, we will make human DENV pnAbs from memory B cells derived from individuals that have multi-serotype neutralising antibody responses. This will then be used for the reverse vaccinology 2.0 approach to design and develop effective native-like DENV dimeric E-protein envelope-based immunogens.

This study will result in production of DENV neutralising mAbs that can potentially be exploited for monoclonal antibody-based therapeutics, and development of novel vaccine candidates that will be capable of eliciting correlates of protection (pan-DENV neutralising antibody response without antibody dependent enhancement) against DENV infection. The panel of DENV neutralising mAbs and native-like soluble and stable DENV dimeric E envelope protein immunogens can be tested in small animal models/non-human primates, for their usage as passive immunotherapy and as vaccine candidates, respectively.



Reverse Vaccinology 2.0 approach to design and develop dengue virus envelope-based vaccine design

Setting-up a Research Office at a Central Government institute

Dr Alpana Dave

National Institute of Biomedical Genomics,
IRMI Research Management Fellow

National Institute of Biomedical Genomics is a relatively young institute and has huge potential for growth. With increasing collaborations and research grants, the management of the same is becoming a challenge. The Faculty Members also require assistance in identifying suitable grant opportunities, both national and international, academic as well as in collaboration with the industry. I believe there is a need to set up new processes and develop policies for structured Research Management at NIBMG. The IRMI fellowship has given me the opportunity to set up a Research Office at the institute which will facilitate grant management. Regular grant advice, updates on funds utilisation and administrative assistance provided by the research office will ensure efficient management. An institutional grants database will be helpful in creating institutional memory of all the applied grants and in documenting the success rates of grant applications from the institute and individual members. Further, the new office will contribute towards expanding the funding landscape and initiating new national and international collaborations along with developing partnerships with the industry. The office will also support the research at the institute by providing assistance in organising trainings and preparing reports. This will assist in popularising the prevailing cutting-edge research at NIBMG.

As a Research Management Fellow, I am responsible for implementing grant programmes from the application stage, to approval and utilisation. I work with the existing staff in the Administrative and Finance departments of all grant-related jobs. My training has enabled me to assist faculty members in managing the overall grant efforts. I am also responsible for developing processes and performing due diligence for grant submissions. Additionally, I am involved in popularisation of the research being conducted at the institute.

The figure shows the different areas where the Research Office plays an important role at the Institute

Research Administration: An Academic Perspective

Dr Ajay Pillai

National Centre for Cell Science,
IRMI Research Management Grant Recipient

I am interested in using research management tools to facilitate administrative activities for the smooth conduction of research. Research administration requires the office to function in a concerted manner through well-coordinated activities. The job offers you a plethora of opportunities to liaise with the Ministries and contribute to policy decisions, legal agreements, human resource development, national mission flagship programmes and their sustainability, technology transfer strategies, and much more. The avenue to network with other leaders and experts teaches you to rewind and relearn several aspects of administration to facilitate your institutional programmes. Although very demanding at times, goal-oriented and focused efforts are essential to set up an effective Grants office for other stakeholders to collaborate and leverage the institutional strengths, for joint research programmes. You might also get opportunities to participate in major institutional discussions with world leaders wherein, you observe, learn and enhance your leadership skills. Although research administrators work remotely from the laboratory workbench, they must be indebted for this unique opportunity in hand to push the limits and support researchers by offering sound governance of research administrative activities. The goal is to empower your staff by instilling confidence and imparting a culture that is ethical, accountable, and responsive, which is appreciated across the scientific fraternity.

Apart from routine laboratory management, scientists also liaise with external stakeholders such as funding agencies for the financial management of projects, other corporate and legal bodies to protect and showcase their science, and collaborators to forge collaborations through discussions and agreements. A Grants office must be able to facilitate these and similar activities for its timely initiation and closure. Hence, creating a pool of highly trained and ambitious individuals inclined to facilitate research programmes and ready to operate from uncomfortable zones is essential for the optimum functioning of a Grants office. Moreover, the individuals must be trained to digest failures and welcome critical suggestions regarding the services they offer which bring in a reality check of the efficiency and usefulness of the system in place. The digitalisation of the working platform also saves time and ease of managing grants. To this end, the India Research Management Initiative (IRMI) was an ideal platform that awarded the IRMI grant to NCCS for setting up an Online Grants Management System which is in the final stages of validation.

Activities led / coordinated by the Project Management Cell at NCCS, Pune

‘Research management experiences and needs of researchers in India’ - EARMA Conference

Mr Godwin Fernandes

Sangath, Bhopal,
IRMI Research Management Travel Grant Recipient

My early experience with grant management began while working as Project Coordinator for the Community Orientated Non-Specialist Treatment for Alcohol Dependence (CONTAD) project, with Addictions Research Group, Sangath. During this period, I pursued opportunities to develop my management skills and got first-hand experience in budget management, coordinating multiple project sites, assessing data quality, supervising staff, etc.

Presently, I work as the Research Group Manager of the Addictions Research Group and provide grant management support to a range of projects. This has been an essential step in my career as it brought me closer to understanding and influencing research and grant management processes. This managerial experience has helped strengthen my leadership and management skills, and most importantly, helped me understand the gaps in grant management.

Most of my current knowledge of grant management has been acquired by informal on-the-job training. The learning opportunities that come with IRMI Fellowship, helped me in taking further steps to build my skills as well as my organisation’s capacities to manage a Research office.

I had the opportunity to attend and present at the European Association of Research Managers and Administrators (EARMA) conference held in Oslo, Norway. I presented a poster on the findings of a research management survey conducted among researchers from eight research organisations in India. Through a brief online survey, 103 researchers provided insights into their research management needs and experiences working in India. We collected experiences related to grant writing, management and expectations from a research office.

Presenting the findings of this study was a very unique experience for me as this was the first international conference I attended. My study was the only study to be presented from India, and the response was encouraging. Interacting with Research Managers from different European Associations and relating the finding of my study to their situation lead to enriching conversations. Also, being the first in-person conference after a gap of almost two years, added to everyone’s excitement.

This learning exposure was possible as I was awarded the IRMI Travel Grant which helped me to travel to Norway and interact with experts in the field of research management. I am grateful for the capacity-building opportunities provided by India Alliance, through the IRMI fellowship.

Presenting at the European Association of Research Managers and Administrators (EARMA) conference held in Oslo, Norway

Zoonotic and Vector-Borne Diseases (ZVBD) Research and Training Centre

Dr Melari S Nongrum **(Principal Investigator)**

Indian Institute of Public Health, Shillong,
Clinical and Public Health Research Centres

India, and especially the North-Eastern Region (NER), is endemic for zoonotic and vector-borne diseases (ZVBDs) due to its unique cultural practices and predominantly non-vegetarian food habits. Consumption of bush-meat, along with mixed-farming practices result in close contact of humans with livestock and other domestic animals, with little awareness of disease risks. The interaction of humans or livestock with wildlife exposes people and their domestic animals to sylvatic disease cycles and the risk of pathogen spill-over - which may go undetected due to the paucity of infectious diseases surveillance.

A consortium of institutions from the NER will combine their research and training expertise in public health, clinical medicine, veterinary sciences, laboratory methods, and social sciences to improve understanding of key ZVBDs in North-East India. The overarching goals of this proposal are to: (1) develop a regional research hub for collaborative, trans-disciplinary research and training that will support evidence-based public-health decision making; and (2) conduct trans-disciplinary research to improve understanding on transmission dynamics of ZVBDs and the threat from transboundary animal diseases (TAD).

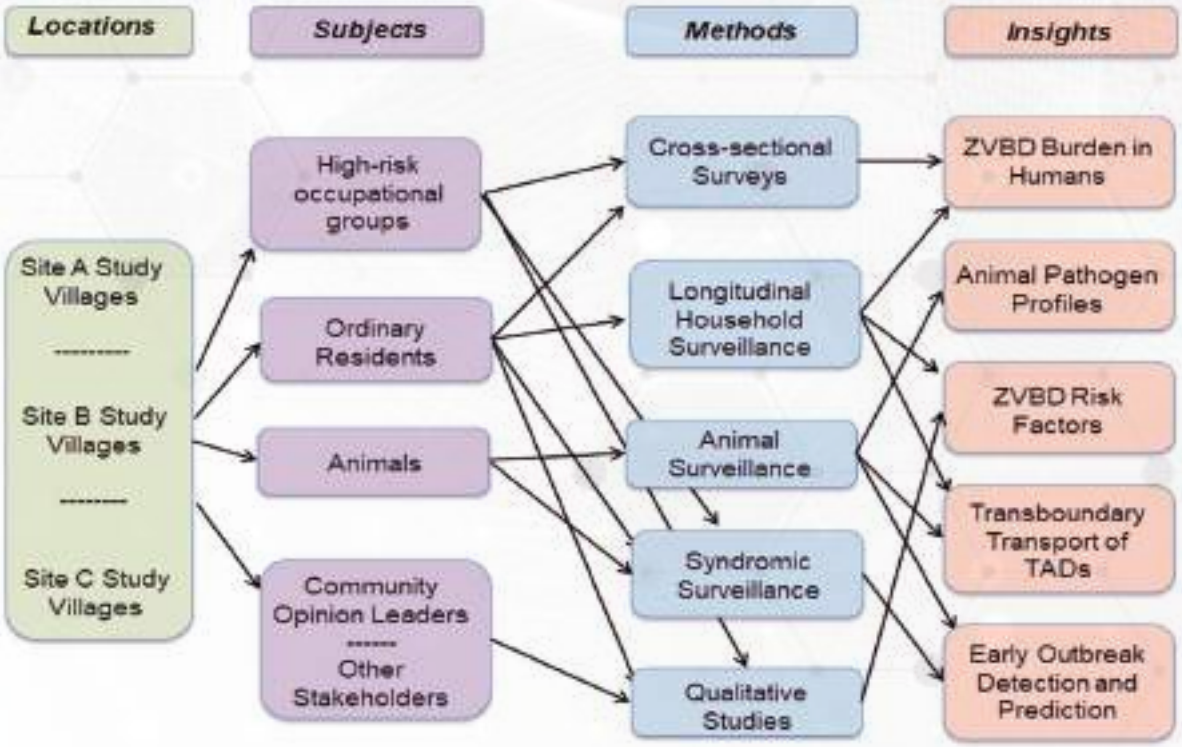
It is anticipated that the ZVBD research and training centre will help monitor and forecast disease trends to enhance early cross-species detection of ZVBD outbreaks, and TAD threats through syndromic surveillance, genetic identification of pathogens and simulation modelling of transmission dynamics. This trans-disciplinary centre will address the key research gaps in ZVBD epidemiology, besides enhancing research capacity in NER by training an interdisciplinary group of researchers. A stakeholder and public engagement plan, prepared as part of this initiative, will generate awareness among local communities about risks and prevention of ZVBDs. The locally-recruited field staff will be trained in different aspects of public health with skills to contribute to their communities.

Co-Principal Investigators:

Dr Sandra Albert

Dr Arnab Sen

Dr Rajiv Sarkar



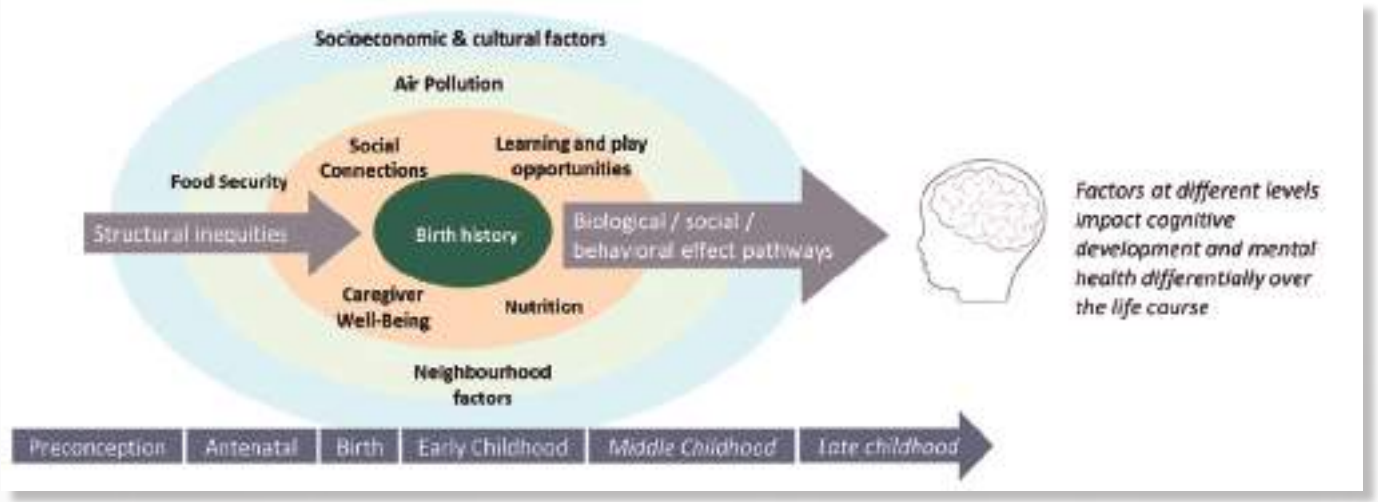
Study Design

Nutritional, Psychosocial and Environmental Determinants of Neurodevelopment and Child Mental Health (COINCIDE)

Dr Giridhara R Babu (Principal Investigator)

Indian Institute of Public Health Bangalore,
Team Science Grants

Over 250 Million children, including 65 Million in India, are at risk of sub-optimal brain development due to exposure to a wide range of adversities (nutritional, psychosocial, environmental pollutants). Although evidence on individual effects of key determinants on neurodevelopment and child mental health (CMH) are available, these are mostly for the first 1,000 days, and their interaction and cumulative effects remain unexplored. Further, specific pathways through which these exposures interact with socio-economic factors to result in differential outcomes, remain unclear. Using team science approach, we aim to overcome these lacunae by evaluating the independent, cumulative and interaction effects of nutritional, psychosocial and environmental exposures on concurrent and prospective measures of neurodevelopment and CMH, from pregnancy till the children are 9-year-old, in two diverse settings in India. By synchronising the investments in two cohorts, we will assess the comprehensive range of exposures on childhood neurodevelopment and mental health. This evidence will inform the design of a multi-component intervention for the first decade of life by highlighting important intervention targets and their sensitive periods. The COINCIDE study will address three important knowledge gaps. First, although India has the highest number of under-5 children developing sub-optimally, the evidence on the effects of multiple co-occurring exposures is minimal, especially beyond the first 1,000 days. Second, although adult mental health disorders have their origins in childhood and adolescence, there are limited prospective studies directly investigating determinants of child and adult mental health. Third, little is known about the pathways through which social vulnerability factors interact with exposures lead to specific neurodevelopmental outcomes. Evidence from our research will inform a theoretical model of the biological, social and economic origins of neurodevelopmental and mental health impairments.



The COINCIDE study will enable developing tailored interventions for different age groups and diverse settings for optimising children's neurodevelopment

Co-Principal Investigators:

Dr Prashanth Srinivas

Dr Poornima Prabhakaran

Dr Gauri Divan Sangath

Dr Prashanth Thankachan

Dr Supriya Bhavnani

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NOTABLE ACHIEVEMENTS OF INDIA ALLIANCE FELLOWS

Honours and Awards

Lead Applicant	Organisation	Major Achievements
Professor Ranjana Pathania	Indian Institute of Technology Roorkee	NASI-UK-Late Smt Malti Purohit Memorial Award 2021
Dr Kausik Chakraborty	CSIR-Institute of Genomics and Integrative Biology	CSIR First Grant 2021
Radhakrishnan Mahalakshmi	Indian Institute of Science Education and Research, Bhopal	Fellow Biology, National Academy of Sciences India 2021
Professor Arun Shukla	Indian Institute of Technology Kanpur	Shanti Swarup Bhatnagar Award, Biological Sciences, CSIR, 2021
Professor Bushra Ateeq	Indian Institute of Technology Kanpur	Sun Pharma Science Foundation Research Award (2021) in the Medical Sciences - Basic Research category Elected Fellow of the Indian Academy of Sciences (IASc), Bangalore and National Academy of Sciences, India (NASI) 2021 OPPI Scientist Award – 2021 by the Organisation of Pharmaceutical Producers of India (OPPI)
Professor Ambarish Ghosh	Indian Institute of Science	SERB-High Risk High Reward 2020
Professor Roop Mallik	Indian Institute of Technology Bombay	Indian National Science Academy (INSA) Fellowship Associate Membership of European Molecular Biology Organisation (EMBO) The G.D. Birla Award for Scientific Research 2019
Professor Ruchi Anand	Indian Institute of Technology Bombay	Indian Academy of Science (IASc) Fellow 2022
Dr Mahak Sharma	Indian Institute of Science Education and Research, Mohali	SERB-POWER Grant 2022 Young Affiliate, The World Academy of Sciences (TWAS) 2021
Professor Jyotirmayee Dash	Indian Association for the Cultivation of Science	Fellow of the Indian Academy of Sciences (FASc), Bangalore 2021
Dr Lolitika Mandal	Indian Institute of Science Education and Research, Mohali	SERB POWER 2021 Award
Dr Geetanjali Chawla	Regional Centre for Biotechnology	Ben Barres Spotlight Award 2021
Dr Dhiraj Kumar	International Centre for Genetic Engineering and Biotechnology	Elected Fellow, National Academy of Sciences India, Prayagraj 2021
Dr Subba Reddy Maddika	Centre for DNA Fingerprinting and Diagnostics	Indian Academy of Science (IASc) Fellow 2021 CDRI Award for Excellence in Drug Research 2022

Lead Applicant	Organisation	Major Achievements
Dr Amit Singh	Indian Institute of Science	Shanti Swarup Bhatnagar Award, Biological Sciences, CSIR 2021
Dr Shobhna Kapoor	Indian Institute of Technology Bombay	SERB Women in Excellence Award for Chemistry received in 2021
Dr Nishad Matange	Indian Institute of Science Education and Research, Pune	Ben Barres Award for Biology by eLife in 2021
Dr Samay Pande	Indian Institute of Science	Har Gobind Khorana, Innovative Young Biotechnologist Award 2021
Dr Basudev Roy	Indian Institute of Technology Madras	Har Gobind Khorana, Innovative Young Biotechnologist Award 2021
Dr Kartik Sunagar	Indian Institute of Science	Merck Young Scientist Award 2021
Dr Bhavana Muralidharan	Institute for Stem Cell Science and Regenerative Medicine	Har Gobind Khorana, Innovative Young Biotechnologist Award 2021
Dr Baskar Bakthavachalu	Indian Institute of Technology Mandi	SERB-STAR Award 2021
Dr Shashank Tripathi	Indian Institute of Science	Global Scholar Award by American Society for Virology in 2022
Dr Tamal Das	TIFR Centre for Interdisciplinary Sciences, Hyderabad	Human Frontier Science Programme Research Award
Dr Sarit Agasti	Jawaharlal Nehru Centre for Advanced Scientific Research	Merck Young Scientist Award 2021
Dr Sridharan Devarajan	Indian Institute of Science	DST-SERB Swarna Jayanti Fellowship
Dr Jeemon Panniyammakal	Sree Chitra Tirunal Institute for Medical Science & Technology	SS Bhatnagar Award 2021
Professor George M Varghese	Christian Medical College, Vellore	Appointed Trustee of the Royal Society of Tropical Medicine & Hygiene, UK, from 2021-2024
Dr Jyothi Prabhu	St John's Research Institute, St John's National Academy of Health Sciences	STS Science Award Signal Transduction Society 2021
Dr Rahul Gajbhiye	National Institute for Research in Reproductive Health	Professor N R Moudgal Oration Award (2022) of Indian Society for the Study of Reproduction and Fertility (ISSRF)
Dr Prashanth Nuggehalli Srinivas	Institute of Public Health	TN Khoshoo Memorial Award - Health & Environment, Ashoka Trust for Research in Ecology & Environment 2022

Selected Publications

01	Sachdev, Harshpal Singh; Porwal, Akash; Acharya, Rajib; Ashraf, Sana; Ramesh, Sowmya; Khan, Nizamuddin; Kapil, Umesh; **Kurpad, Anura V**; Sarna, Avina (2021). Haemoglobin thresholds to define anaemia in a national sample of healthy children and adolescents aged 1-19 years in India: A population-based study. Lancet Glob Health, 10.1016/s2214-109x(21)00077-2
02	Maria, Joseph Linju; Anand, TN; Dona, Boban; Prinu, Jose; Prabhakaran, Dorairaj; **Jeemon, Panniyammakal** (2021). Task-sharing interventions for improving control of diabetes in low-income and middle-income countries: A systematic review and meta-analysis. Lancet Glob Health, 10.1016/s2214-109x(20)30449-6
03	**Prabhu, JS**; Patil, S; Rajarajan, S; Ce, A; Nair, M; Alexander, A; Ramesh, R; Bs, S; Sridhar, T (2021). Triple-negative breast cancers with expression of glucocorticoid receptor in immune cells show better prognosis. Ann Oncol, 10.1016/j.annonc.2021.03.052
04	Sengupta, Antara; Roy, Shuvra Shekhar; **Chowdhury, Shantanu** (2021). Non-duplex G-Quadruplex DNA Structure: A Developing Story from Predicted Sequences to DNA Structure-Dependent Epigenetics and Beyond. Acc Chem Res, 10.1021/acs.accounts.0c00431
05	Wilson, Kenneth A; Chamoli, Manish; Hilsabeck, Tyler A; Pandey, Manish; Bansal, Sakshi; **Chawla, Geetanjali**; Kapahi, Pankaj (2021). Evaluating the beneficial effects of dietary restrictions: A framework for precision nutrigeroscience. Cell Metab, 10.1016/j.cmet.2021.08.018
06	**Aggarwal, Shilpa**; Borschmann, Rohan; Patton, George C (2021). Tackling stigma in self-harm and suicide in the young. Lancet Public Health, 10.1016/s2468-2667(20)30259-0
07	Mishra, Richa; Yadav, Vikas; Guha, Madhura; **Singh, Amit** (2021). Heterogeneous Host-Pathogen Encounters Coordinate Antibiotic Resilience in Mycobacterium tuberculosis. Trends Microbiol, 10.1016/j.tim.2020.10.013
08	George, Anjana; Ravi, Roshika; Tiwari, Pankaj Bharat; Srivastava, Shashank Ranjan; Jain, Vikas; **Mahalakshmi, Radhakrishnan** (2022). Engineering a Hyperstable Yersinia pestis Outer Membrane Protein Ail Using Thermodynamic Design. J Am Chem Soc, 10.1021/jacs.1c05964

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10	Maharana, Jagannath; **Shukla, Arun K** (2021). Feeling at home: Structure of the NTSR1-G complex in a lipid environment. Nat Struct Mol Biol, 10.1038/s41594-021-00581-x
11	Aggarwal, Mohit; Bansal, Anubhuti; Desiraju, BapuKoundinya; Singh, Shailendra; **Agrawal, Anurag** (2021). Determinants of Adolescent Lung Function in Indians: Race, Nutrition, and Systemic Inflammation. Am J Respir Crit Care Med, 10.1164/rccm.202104-0879le
12	Illath, Kavitha; Kar, Srabani; Gupta, Pallavi; Shinde, Ashwini; Wankhar, Syrpailyne; Tseng, Fan-Gang; Lim, Ki-Taek; Nagai, Moeto; Santra, **TuhinSubhra** (2022). Microfluidic nanomaterials: From synthesis to biomedical applications. Biomaterials, 10.1016/j.biomaterials.2021.121247
13	**Chakrapani, Venkatesan** (2021). Need for transgender-specific data from Africa and elsewhere. Lancet HIV, 10.1016/s2352-3018(20)30344-1
14	Rashida, Zeenat; Srinivasan, Rajalakshmi; Cyanam, Meghana; **Laxman, Sunil** (2021). Kog1/Raptor mediates metabolic rewiring during nutrient limitation by controlling SNF1/AMPK activity. Sci Adv, 10.1126/sciadv.abe5544
15	**Dhandapany, Perundurai S**; Kang, Soojeong; Kashyap, Deepak K; Rajagopal, Raksha; Sundaresan, Nagalingam R; Singh, Rajvir; Thangaraj, Kumarasamy; Jayaprakash, Shilpa; Manjunath, Cholenahally N; Shenthar, Jayaprakash; Lebeche, Djamel (2021). Adiponectin receptor 1 variants contribute to hypertrophic cardiomyopathy that can be reversed by rapamycin. Sci Adv, 10.1126/sciadv.abb3991

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24 Kolapalli, Srinivasa P; Sahu, Rinku; Chauhan, Nishant R; Jena, Kautilya K; Mehto, Subhash; Das, Saroj K; Jain, Ashish; Rout, Manaswini; Dash, Rupesh; Swain, Rajeeb K; Lee, David Y; Rusten, Tor Erik; **Chauhan, Santosh**; Chauhan, Swati (2021). RNA-Binding RING E3-Ligase DZIP3/hRUL138 Stabilises Cyclin D1 to Drive Cell-Cycle and Cancer Progression. Cancer Res, 10.1158/0008-5472.can-20-1871

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27 Kumar, Gaurav; Chawla, Prateek; Dhiman, Neha; Chadha, Sanya; Sharma, Sheetal; Sethi, Kanupriya; **Sharma, Mahak; Tuli, Amit** (2022). RUFY3 links Arl8b and JIP4-Dynein complex to regulate lysosome size and positioning. Nat Commun, 10.1038/s41467-022-29077-y

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28 Pothapragada, Shilpa P; Gupta, Praver; Mukherjee, Soumi; **Das, Tamal** (2022). Matrix mechanics regulates epithelial defence against cancer by tuning dynamic localisation of filamin. Nat Commun, 10.1038/s41467-021-27896-z

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30 Goel, Sakshi; Bhatia, Vipul; Kundu, Sushmita; Biswas, Tanay; Carskadon, Shannon; Gupta, Nilesh; Asim, Mohammad; Morrissey, Colm; Palanisamy, Nallasivam; **Ateeq, Bushra** (2021). Transcriptional network involving ERG and AR orchestrates Distal-lessÂ homeobox-1 mediated prostate cancer progression. Nat Commun, 10.1038/s41467-021-25623-2

31 Arumugam, Senthil; Schmieder, Stefanie; Pezeshkian, Weria; Becken, Ulrike; Wunder, Christian; Chinnapen, Dan; Ipsen, John Hjort; Kenworthy, Anne K; Lencer, Wayne; **Mayor, Satyajit**; Johannes, Ludger (2021). Ceramide structure dictates glycosphingolipid nanodomain assembly and function. Nat Commun, 10.1038/s41467-021-23961-9

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33 Pidathala, Shabareesh; Mallela, Aditya Kumar; Joseph, Deepthi; **Penmatsa, Aravind** (2021). Structural basis of norepinephrine recognition and transport inhibition in neurotransmitter transporters. Nat Commun, 10.1038/s41467-021-22385-9

34 Jacob, Georgin; Pramod, RT; Katti, Harish; **Arun, SP** (2021). Qualitative similarities and differences in visual object representations between brains and deep networks. Nat Commun, 10.1038/s41467-021-22078-3

35 **Appadurai, Rajeswari**; Nagesh, Jayashree; Srivastava, Anand (2021). High-resolution ensemble description of metamorphic and intrinsically disordered proteins using an efficient hybrid parallel tempering scheme. Nat Commun, 10.1038/s41467-021-21105-7

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37 Mehdiratta, Kritee; Singh, Shubham; Sharma, Sachin; Bhosale, Rashmi S; Choudhury, Rahul; Masal, Dattatraya P; Manocha, Alzu; Dhamale, Bhushan Dilip; Khan, Naseem; Asokachandran, Vivekanand; Sharma, Pooja; Ikeh, Melanie; Brown, Amanda C; Parish, Tanya; Ojha, Anil K; Michael, Joy Sarojini; Faruq, Mohammed; Medigeshi, Guruprasad R; Mohanty, Debasisa; Reddy, D Srinivasa; Natarajan, Vivek T; **Kamat, Siddhesh S**; Gokhale, Rajesh S (2022). Kupyaphores are zinc homeostatic metallophores required for colonisation of Mycobacterium tuberculosis. Proc Natl Acad Sci U S A, 10.1073/pnas.2110293119

38 **Sanghavi, Paulomi**; Kumar, Pankaj; Roy, Ankit; Madhusudhan, MS; **Mallik, Roop** (2021). On and off controls within dynein-dynactin on native cargoes. Proc Natl Acad Sci U S A, 10.1073/pnas.2103383118

39 **Anand, Kushi**; Tripathi, Ashutosh; Shukla, Kaustubh; Malhotra, Nitish; Jamithireddy, Anil Kumar; Jha, Rajiv Kumar; Chaudhury, Susmit Narayan; Rajmani, Raju S; Ramesh, Arati; Nagaraja, Valakunja; Gopal, Balasubramanian; Nagaraju, Ganesh; Narain Seshayee, Aswin Sai; **Singh, Amit** (2021). Mycobacterium tuberculosis SufR responds to nitric oxide via its 4Fe-4S cluster and regulates Fe-S cluster biogenesis for persistence in mice. Redox Biol, 10.1016/j.redox.2021.102062

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40	Dayanand, Divya; Irudhayanathan, Indhuja; Kundu, Debasree; Manesh, Abi; Abraham, Vinod; Abhilash, Kundavaram Pp; Chacko, Binila; Moorthy, Mahesh; Samuel, Prasanna; Peerawaranun, Pimnara; Mukaka, Mavuto; Joseph, Jayaraj; Sivaprakasam, Mohanasankar; **Varghese, George M** (2022). Community seroprevalence and risk factors for SARS-CoV-2 infection in different subpopulations in Vellore, India, and their implications for future prevention. Int J Infect Dis, 10.1016/j.ijid.2021.12.356
41	Bhanuprasad, Kundakarla; Manesh, Abi; Devasagayam, Emily; Varghese, Lalee; Cherian, Lisa Mary; Kurien, Regi; Karthik, Rajiv; Deodhar, Divya; Vanjare, Harshad; Peter, Jayanthi; Michael, Joy S; Thomas, Meera; Samuel, Prasanna; **Varghese, George M** (2021). Risk factors associated with the mucormycosis epidemic during the COVID-19 pandemic. Int J Infect Dis, 10.1016/j.ijid.2021.08.037
42	**Babu, Giridhara R**; Khetrapal, Sonalini; John, Daisy A; Deepa, R; Narayan, K M Venkat (2021). Pandemic preparedness and response to COVID-19 in South Asian countries. Int J Infect Dis, 10.1016/j.ijid.2020.12.048
43	Kumar, Ram; Afsar, Mohammad; Khandelwal, Nitin; Chander, Yogesh; Riyesh, Thachamvally; Dedar, Ramesh Kumar; Gulati, Baldev R; Pal, Yash; Barua, Sanjay; Tripathi, Bhupendra N; **Hussain, Tanweer**; Kumar, Naveen (2021). Emetine suppresses SARS-CoV-2 replication by inhibiting interaction of viral mRNA with eIF4E. Antiviral Res, 10.1016/j.antiviral.2021.105056
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Click here to access the full list of publications: **https://dbtindiaalliancenew.s3.ap-south-1.amazonaws.com/mfgcgrtjwxowwne1713351297855/Publications-(Jan-2021-Mar-2022).pdf**

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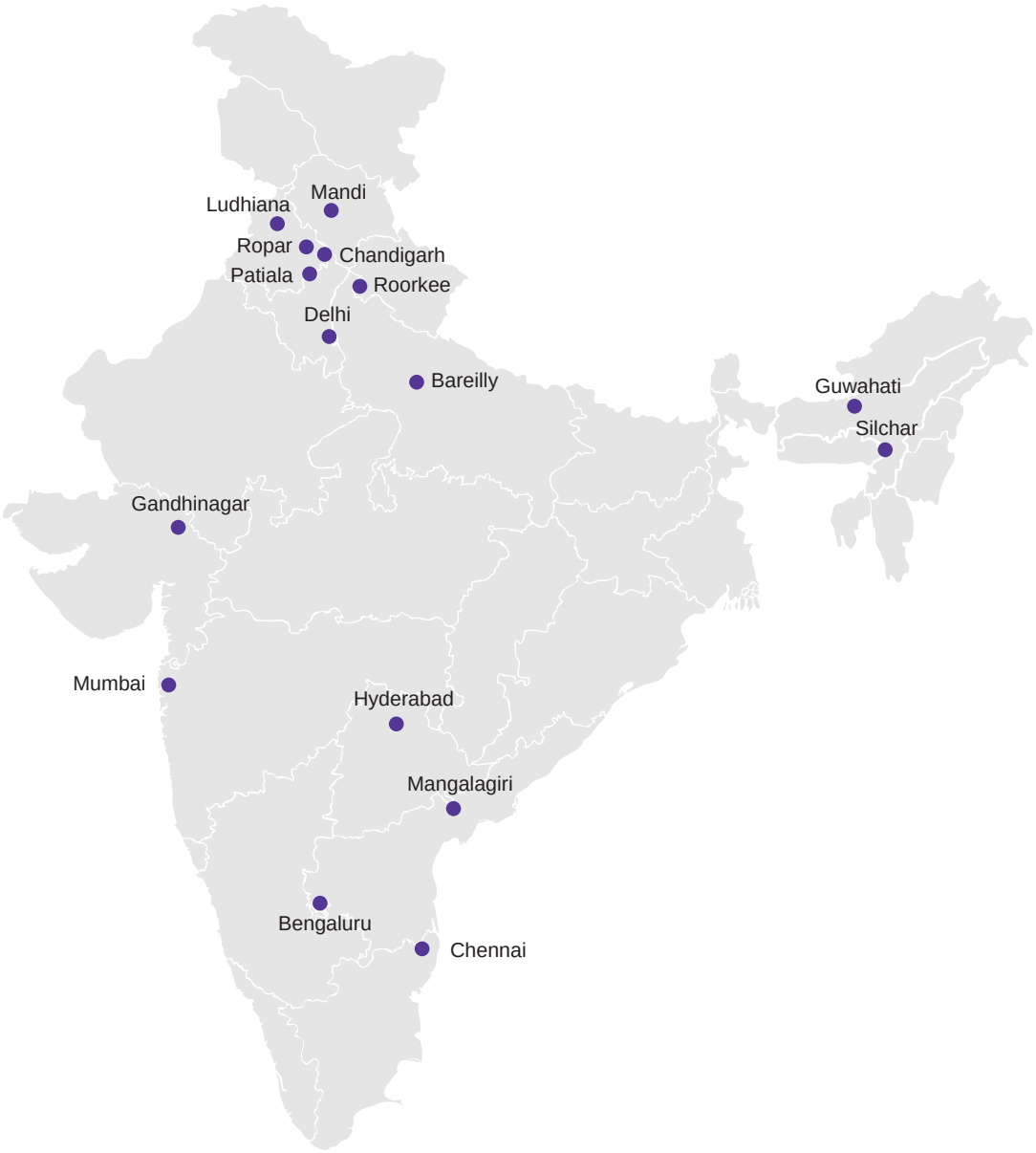
SCIENCE COMMUNICATION AND PUBLIC ENGAGEMENT (SCoPE)

To enhance our reach and spread knowledge on science communication, the SCoPE team leveraged online tools to reach more than 25,000 people through virtual workshops, events and outreach. We bridged the gap between science and society on global platforms, with a prominent pan-India reach. Our diverse portfolio of public engagement programmes, anchored and supported over the past year, include innovative initiatives that bring the scientific community and the public together to share, debate, and deliberate on important matters of science, which have implications for the society.

India Alliance (IA) launched its podcast (Science Together) and video (Science Stories) series, to steer public interest towards Indian Biomedical Research. The India Alliance e-Newsletter 'News and Views' published every month, keeps everyone up-to-date about our activities, fellowship programmes and events.

Scicomm and Outreach Map: January 2021- March 2022



Science Communication Workshops

IA engages students, researchers, and faculty in universities and institutions throughout India via science communication (Scicomm) workshops. These workshops aim to equip participants with the essential know-how of scientific writing, grantsmanship, science communication and ethics in research communication.

8 Scicomms

108 Institutions

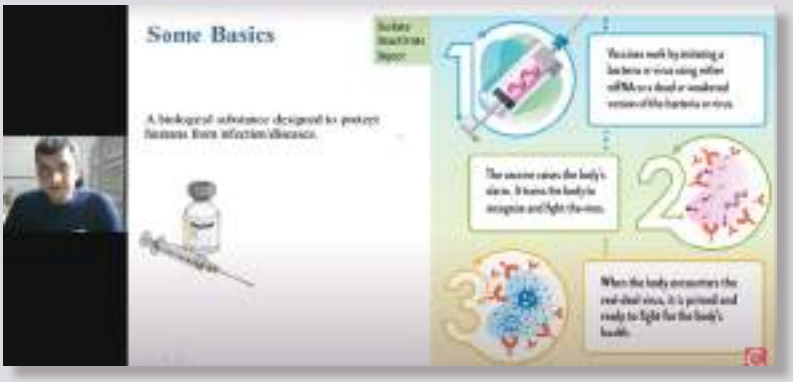
1,400+ Participants

Outreach

India Alliance actively organises outreach programmes to create awareness about the Company's funding schemes. Outreach workshops are organised for individual institutes and universities, along with participation in several national and international scientific meetings.

Recently, IA organised the '**Continue Biotechnology Education (CBE) Lecture Series'**, exploring diverse range of specialised topics in biotechnology and IA funding opportunities, in partnership with Guru Angad Dev Veterinary and Animal Sciences University (GADVASU) and IIT Roorkee.

IA actively organised COVID-19-centred webinars and discussions to increase public awareness of the devastating pandemic. Webinars centred on '**Discussion on Vaccine Equity in India'** with India COVID SOS and a **Live Q&A session** with Prof Gagandeep Kang, Virologist and Professor of Microbiology, CMC Vellore to dispel misinformation about COVID-19 vaccines.



Lecture on Genetically Engineered Vaccines by Dr Sachin Kumar, IIT Guwahati as part of CBE Lecture Series

Live Q&A session with Prof Gagandeep Kang (right) and Ms Devi Leena Bose, IAVI (left)

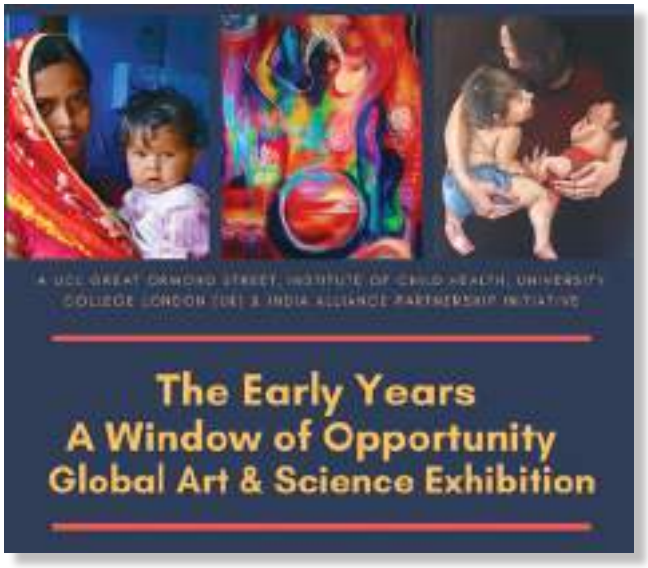
***Online Discussion on Vaccine Equity in India**; In frame: Ms Gunjan Sharma, Science Journalist (top) and Ms Uma Mahadevan, IAS, Principal Secretary, Panchayat Raj, Govt of Karnataka*

Public Engagement

India Alliance aims to increase the public understanding of science through its public engagement activities. The need for scientific public engagement in India was re-emphasised in a survey conducted by India Alliance amongst its grantees which was published in 2021. We have always strived to promote engagement between science and society.

Additionally, we are investing in building partnerships with organisations working towards public engagement. For instance, through the project '**The Early Years: A Window of Opportunity'**, a global art and science exhibition organised in partnership with Prof Monica Lakhanpaul (UCL Great Ormond Street Institute of Child Health) that explores art in public health with an aim to raise awareness on child health in India. IA also collaborated with Monk Prayogshala and Dr Deepa Subramanyam, NCBS to conduct a **survey on Indian scientists' experiences during the coronavirus pandemic**.

India Alliance launched its homegrown web video series named '**Science Stories**' and podcast '**Science Together**', featuring fellows' and grantees' work of November 2021. Through the podcast and video series, we feature the best/inspiring science of our Awardees in simple, jargon-free language that's easy for non-specialist audiences to understand. Four episodes for both, the video and podcast, were released during this time.



*Public Engagement Partnership with UCL '**The Early Years**'*

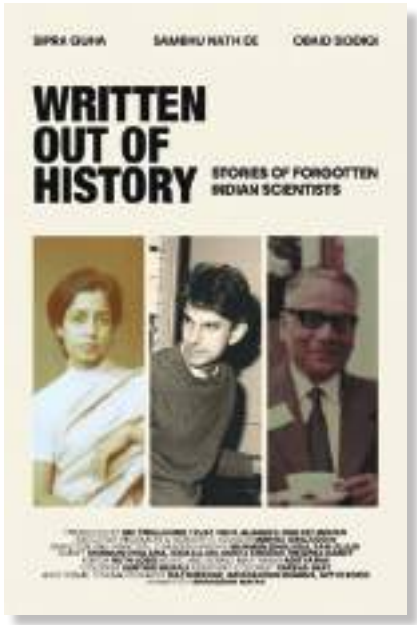
In commemoration of National Science Day 2021, a virtual photo exhibit titled '**Advancing Discovery and Innovation to Improve Health**' celebrated the ongoing research of India Alliance's Fellows and Grantees.

Public Engagement Seed Funding is another initiative by India Alliance to enable and promote public engagement. We believe that a society that understands and participates in science is better equipped to meet present and future challenges. Glimpses of public engagement projects funded by IA include:

- **Written Out Of History** - Forgotten Indian Scientists, a documentary funded by DBT/Wellcome Trust and DBT-inSTEM on the life and times of unsung heroes from the Indian scientific community;
- **A series of podcasts by Nature India**;
- **Planet Divoc-91** – a participatory COVID-19-inspired webcomic project with teams from the UK, India (led by India Alliance) and South Africa – follows the adventures of Sanda and Champo, zapped to an Earth-like planet for their own protection;

Perspectives on Public Engagement with Science in India

India Alliance Podcast '***Science Together***'



Written Out of History*: Forgotten Indian Scientists, a Documentary Produced as Part of India Alliance Public Engagement Fund*

India Alliance Virtual Photo Exhibit

Developing Indian Physician Scientists (DIPS) Workshops

Launched in 2017, the DIPS workshops aim to ignite scientific curiosity in young doctors while promoting an understanding of the frontiers of medicine and related sciences. Led by Dr Anurag Agrawal, CSIR-IGIB, and Prof Rakesh Aggarwal, JIPMER-Pondicherry, these workshops provide training in quantitative methods, research methodology, and present an opportunity to young clinicians to discuss the relevance of biomedical research and career options. Participants from 34 clinical, public health and medical institutions took part in the workshop, held in March 2021.

Supporting External Events

The India Alliance supports scientific conferences, workshops, symposia, and meetings providing a platform to network with scientists and celebrate the diversity of science. Some of the key events in this category are:

- Scientific Illustration and Communication Workshop by TRICORD, Miranda House, University of Delhi
- Contagion – a virtual Exhibition by Science Gallery, Bengaluru
- Second National Symposium on LGBTQI+ Health by the Humsafar Trust and Partners
- National Conference on CRISPR/Cas: From Biology to Technology by SRM University

India Research Management Initiative (IRMI)

The IRMI Annual Conference held virtually from 1-5 February 2021 brought together research leaders, research managers and administrators, funders and private sector professionals, for discussions, learning and networking in the field of research management.

As part of IRMI, a series of webinars are also organised to focus on various aspects of research management. A few important webinars conducted during this conference focused on the following topics:

- Capacity building within grants offices at universities and research institutions
- Research development: Contextual and relational approaches to institutional research support
- Managing statutory compliances in human research
- Coffee and conversations sessions, informal virtual get-togethers for all members of the IRMI network

IRMI Annual Conference 2021

IRMI Online Workshop

IRMI Outreach

9

FINANCIALS

(APRIL 2021 - MARCH 2022)

Independent Auditor's Report

TO THE TRUSTEES OF,
DBT/WELLCOME TRUST INDIAALLIANCE,

Report on the Financial Statements

Opinion

We have audited the accompanying standalone financial statements of **DBT/WELLCOME TRUST INDIA ALLIANCE**, registered as public charitable trust in India which comprises the balance sheet as at 31 March 2022, the Statement of Income & Expenditure Flows for the year ended on that date, and Cash Flow Statement for the year then ended on that date and Notes to the financial statements, including a summary of the significant accounting policies and explanatory information annexed hereto.

In our opinion and to the best of our information and according to the explanations given to us, the aforesaid financial statements, give a true and fair view in conformity with the accounting principles generally accepted in India;

a) In the case of the Balance Sheet, of the state of affairs of the trust as at March 31, 2022;

b) In the case of the Receipt and Payment Account for the year ended on that date;

c) In the case of the Statement of Income & Expenditure Account, of the Excess of Income Over Expenditure the year ended on that date; and

d) In the case of the Cash Flow Statement, of the cash flows for the year ended on that date.

Basis for Opinion

We conducted our audit in accordance with the Standards on Auditing generally accepted in India. We are independent of the Trust in accordance with the Code of Ethics issued by the Institute of Chartered Accountants of India together with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement and we have fulfilled our other ethical responsibilities in accordance with these requirements and the Code of Ethics.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the financial statements.

Emphasis of Matter

The trust has evaluated the implications arisen on account of COVID-19 on financial reporting of Trust's financial statements pursuant to guidelines issued by Institute of Chartered Accountants of India. Due to pandemic situation some fellow have faced difficulties in achieving work progress. This has been mainly because of Institutional and general lockdown which has caused delays in procurement, recruitment of project staff, pre-planned 'Work outside Host Institution" trips, field visits etc. The Trust does not foresee any significant impact of outbreak of COVID-19 on the financial statements of the trust as on 31st March'2022. However, the impact assessment of COVID-19 is a continuing process given the uncertainties associated with its nature and duration and accordingly the impact may be different from that estimated as at the date of approval of these financial results. The trust will continue to monitor any material changes to future economic conditions.

Management's Responsibility for the Financial Statements

Alliance's Management is responsible with respect to the preparation of these financial statements that give a true and fair view of the financial position, financial performance, and cash flows of the Trust in accordance with the accounting principles generally accepted in India, including the Accounting Standards. This responsibility also includes the maintenance of adequate accounting records for safeguarding of the assets of the Trust and for preventing and detecting the frauds and other irregularities; selection and application of appropriate accounting policies; making judgements and estimates that are reasonable and prudent; and design, implementation and maintenance of internal financial controls th.at were operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

In preparing the financial Statements, the Management is responsible for assessing the Trust's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting.

Independent Auditor's Report (Contd.)

The Management is also responsible for overseeing the Trust's financial reporting process.

Auditor's Responsibility

Our objectives are to obtain reasonable assurance about whether the Financial Statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these standalone financial Statements.

As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the standalone Financial Statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of the Management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Trust's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the Financial Statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Trust to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial Statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant Ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

We report that

1. We have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purpose of our audit.
2. In our opinion, proper books of account as required by law have been kept by the Trust so far as appears from our examination of those books.
3. The Balance Sheet, Statement of Profit and Loss, and Cash Flow Statement dealt with by this Report are in agreement with the books of account.

For **TR Chadha & Co LLP,**
Chartered Accountants
Firm Registration Number. 006711.N/N500028

Avinash Kumar Gupta
Partner
Membership No. 530900
UDIN: 22530900AZYNSY9705
Place: Hyderabad
Date: 29/09/2022

Balance Sheet

AS ON 31 MARCH, 2022

Particulars	Sch	31 March, 2022		31 March, 2021	
		Amount (INR)	Amount (INR)	Amount (INR)	Amount (INR)
Sources of Funds:					-
Reserve Fund	1		15,20,61,134		12,53,83,670
Current Liabilities & Provisions					
Current Liabilities	2	45,67,27,205		40,77,71,935	
Provisions	3	1,47,89,717		1,17,66,411	
Unspent Grant Amounts	4	29,21,239		30,46,30,802	
			47,44,38,161		72,41,69,149
Deferrals					
Retention Money Payable	5	5,55,73,174		6,30,59,740	-
			5,55,73,174		6,30,59,740
			68,20,72,469		**91,26,12,559**
Application of Funds:					
Fixed Assets	6				
Gross		3,18,12,969		2,99,71,989	
Block					
Less: Accumulated Depreciation		2,24,94,426		2,23,58,607	
Net Block			93,18,543		76,13,382
Current Assets					
Cash & Bank Balances	7	9,47,87,114.65		75,11,58,538	
Other Current Assets	8	57,79,66,810.90		15,38,40,639	
			67,27,53,926		90,49,99,177
			68,20,72,469		**91,26,12,559**

Notes forming parts of Financial Statements 14

Schedules referred above forms integral part of accounts
Subject to our report of even date

For **TR Chadha & Co LLP**
Chartered Accountants
Firm Registration No.006711N/N500028

Mr Avinash Kumar Gupta
Partner
Membership No. 530900

UDIN: 22530900AZYNSY9705
Place: Hyderabad

DBT/Wellcome Trust India Alliance

Dr Debashis Mitra
CEO

Mr B.Nataraj
FM

Income & Expenditure Account

FOR THE YEAR ENDED 31 MARCH, 2022

(All amts in INR)

Particulars	Sch	31 March, 2022	31 March, 2021
Incomes:			
Grants Income	9	1,44,79,55,755	1,16,54,35,580
Other Income - Interest	10	43,10,315	1,14,13,220
		1,45,22,66,070	**1,17,68,48,800**
Expenses:			
Scientific Costs	11	1,35,15,83,460	1,09,37,06,223
Employee Cost	12	5,65,47,063	4,88,04,612
Admin Costs	13	1,48,47,502	1,85,13,261
Depreciation	6	26,10,582	17,01,647
		1,42,55,88,607	**1,16,27,25,743**
Surplus / (Deficit) transferred to Balance Sheet		**2,66,77,463**	**1,41,23,056**

Notes forming parts of Financial Statements 14

Schedules referred above forms integral part of accounts
As per our report attached

For **TR Chadha & Co LLP**
Chartered Accountants
Firm Registration No.006711N/N500028

Mr Avinash Kumar Gupta
Partner
Membership No. 530900

UDIN: 22530900AZYNSY9705
Place: Hyderabad

DBT/Wellcome Trust India Alliance

Dr Debashis Mitra
CEO

Mr B.Nataraj
FM

10

STAFF AND COMMITTEE

Strategic Advisory Council

Professor Ajit Lalvani (Chair)	Imperial College London, London, United Kingdom
Dr Sam Kinyanjui	Head of Training and Capacity Building, KEMRI-Wellcome Trust, Kenya
Dr Roger Glass	Head, Fogarty International Center, NIH, USA
Ms Valerie Conn	President, Science Philanthropy Alliance, USA
Mr Kris Gopalkrishnan	Axilor Ventures; ex-President, CII, India
Dr Syed Sabahat Azim	Physician and ex-IAS, health technology enthusiast; Founder CEO of Glocal Hospitals, India
Dr Anil Ananthaswamy	Author; former staff writer for New Scientist
Ms Deepanwita Chattopadhyay	Chairman & CEO, IKP Knowledge Park
Dr Debashis Mitra	CEO In Interim, India Alliance

Finance & Audit Committee

Mr Vishwajit Sahay	Additional Secretary (Finance and Audit), Department of Biotechnology, New Delhi, India
Mr S N Narain	Deputy Secretary, Vigilance, Department of Biotechnology, New Delhi, India
Dr Manish Rana	Scientist 'F' Overall Coordination of International Partnership Policy and Strategy), Department of Biotechnology, New Delhi, India
Dr Abhishek Singh	Scientist 'C', Nominees, Department of Biotechnology, New Delhi, India
Mr David Sriyoheswaran	Senior Finance Business Partner, The Wellcome Trust, UK
Mr Bruce May	Finance Business Partner, The Wellcome Trust, UK
Dr Debashis Mitra	CEO In Interim, India Alliance
Mr Pravin Gupta	Company Secretary, India Alliance

Early Career Fellowship Selection Committee

Professor Manuel Salmeron Sanchez (Chair)	University of Glasgow, Glasgow, United Kingdom
Professor Gautam I Menon (Deputy Chair)	Ashoka University, Sonepat, India
Professor Amitabha Chattopadhyay	CSIR-Centre for Cellular & Molecular Biology, Hyderabad, India
Professor Xin Lu	Ludwig Institute for Cancer Research, University of Oxford, Oxford, United Kingdom
Professor K Muniyappa	Indian Institute of Science, Bangalore, India
Professor Sandhya Koushika	Tata Institute of Fundamental Research, Mumbai, India
Professor R Sowdhamini	National Centre for Biological Sciences, Bangalore, India
Professor Rashna Bhandari	Centre for DNA Fingerprinting and Diagnostics, Hyderabad, India
Professor Pradip Sinha	Indian Institute of Technology, Kanpur, India
Professor Alessandro Marcello	International Centre for Genetic Engineering and Biotechnology, Trieste, Italy
Professor Murali Krishna Kaja	Emory University, Georgia, USA
Professor Mukund Thattai	National Center For Biological Sciences, Bangalore, India
Professor Shivani A Patel	Emory University, Georgia, USA
Professor Kausik Si	Stowers Institute for Medical Research, Kansas City, USA
Professor Neelam Taneja	Post Graduate Institute of Medical Education and Research, Chandigarh, India
Professor Angus Lamond	University of Dundee, UK
Professor Robert Brown	Imperial College London and The Institute of Cancer Research, UK
Professor Roman Biek	University of Glasgow, UK

Intermediate and Senior Fellowship Selection Committee

Professor Utpal Banerjee (Chair)	University of California, Los Angeles, United States of America
Professor Arshad Desai (Deputy Chair)	Ludwig Cancer Research, San Diego, United States of America
Professor Ramasubbu Sankararamakrishnan	Indian Institute of Technology Kanpur, India
Professor Pandurangan Vijayanand	La Jolla Institute for Immunology, La Jolla, United States of America
Professor Jyothi Rengarajan	Emory University, Atlanta, United States of America
Professor Rajan Sankaranarayanan	CSIR-Centre for Cellular and Molecular Biology, Hyderabad, India
Professor Uttiya Basu	Columbia University, New York, United States of America
Professor Jayesh R Bellare	Indian Institute of Technology Bombay, Mumbai, India
Professor Sabine Kastner	Princeton Neuroscience Institute, Princeton University, Princeton, United States of America
Professor Renu Wadhwa	National Institute of Advanced Industrial Science & Technology, Biomedical Research Institute, Japan
Professor Baron Chanda	University of Wisconsin-Madison, United States
Professor Subhash Vasudevan	Duke-NUS Medical School, Singapore
Professor David Sherman	University of Washington, United States
Professor Julia Gorelik	Imperial College London, United Kingdom
Professor Shiladitya Sengupta	Brigham and Women's Hospital and Harvard Medical School, United States
Professor David Strutt	University of Sheffield, United Kingdom
Professor Ramesh Shivdasani	Dana Farber Cancer Institute and Harvard Medical School, United States
Professor Scott Dessain	Lankenau Institute for Medical Research, United States
Professor Will Wood	University of Edinburgh, United Kingdom

Clinical & Public Health Selection Committee

Professor Shah Ebrahim (Chair)	London School of Hygiene and Tropical Medicine, London, United Kingdom
Professor Indira Tendolkar (Deputy chair)	Radboud University, Nijmegen, Netherlands
Professor Matthew Burton	London School of Hygiene and Tropical Medicine, London, United Kingdom
Professor Nithya Gogtay	King Edward Memorial Hospital, Mumbai, India
Professor Madhulika Kabra	All India Institute of Medical Sciences, New Delhi, India
Professor Purnima Menon	International Food Policy Research Institute, New Delhi, India
Professor Carol Brayne	University of Cambridge, Cambridge, United Kingdom
Professor Suneeta Krishnan	Gates Foundation, New Delhi, India
Professor Nimalan Arinaminpathy	Imperial College London, London, United Kingdom
Professor Monica Lakhanpaul	University College London, London, United Kingdom
Professor Robert Read	University of Southampton, Southampton, United Kingdom
Professor Stephen Gordon	Liverpool School Of Tropical Medicine, Liverpool, United Kingdom
Professor Victoria L Seewaldt	City of Hope Comprehensive Cancer Center, California, United States of America
Professor Paul Newton	University of Oxford, Oxford, United Kingdom
Professor Prashant Mathur	National Centre for Disease Informatics and Research, Bengaluru
Professor Shakila Thangaratinam	Institute for Translational Medicine, University of Birmingham, UK
Dr Arokiasamy Periyanayagam	International Institute for Population Sciences, Mumbai
Professor Ramanan Laxminarayan	University of Washington USA
Professor Mahesh Parmar	The Institute of Clinical Trials and Methodology, University College London, UK

Grants Committee

Grants Screening Committee

Professor George Griffin	St. George's, University of London, UK Chair, Clinical/Public Health Research Centres Screening Committee
Professor Sanjeev Krishna	St. George's, University of London, UK Co-Chair, Team Science Grants Screening Committee
Professor B S Ramakrishna	SRM Institutes for Medical Science, Chennai, India
Professor Chetan Chitnis	Institut Pasteur, Paris, France
Professor Claudio Sunkel	Instituto de Biologia Molecular e Celular, Universidade do Porto, Porto, Portugal
Professor Gyanu Lamichhane	Johns Hopkins School of Medicine, Baltimore, USA
Professor Helen Skaer	University of Cambridge, Cambridge, UK
Professor Kara Hanson	London School of Hygiene & Tropical Medicine, London, UK
Professor Mohan Balasubramanian	University of Warwick, Coventry, UK
Professor Sudipta Maiti	Tata Institute of Fundamental Research, Mumbai, India
Professor Sukhvinder Shergill	King's College London, London, UK
Professor Sarah Lewington	Nuffield Department of Population Health University of Oxford, UK
Dr Vas Ponnambalam	University of Leeds, UK
Professor Andrew Day	University of Otago, Christchurch, New Zealand

Grants Funding Committee

Professor Shankar Subramaniam	University of California San Diego, USA
Professor Irwin Nazareth	University College London, UK

Grants Funding Committee is composed of existing Members of CPH (Clinical and Public Health Selection Committee) and SIF (Intermediate and Senior Fellowships Selection Committee)

IRMI Grant Funding Committee

Dr Simon Kerridge	University of Kent, UK
Ms Silke Blohm	(GIZ) GmbH, Germany
Ms Katrina Lawson	Oxford University Clinical Research Unit, Ho Chi Minh City, Vietnam
Dr Jose Jackson-Malete	Michigan State University, USA
Dr Sunil Khare	Indian Institute of Technology, Delhi, India
Dr Arindam Maitra	National Institute of Biomedical Genomics, Kalyani, India

India Alliance Staff

Dr Debashis Mitra	CEO In Interim
Dr Dipanwita Sengupta	Consultant (Grants & Fellowships)
Dr Devendra Singh	Grants Adviser
Dr Surender Mohan	Grants Adviser
Dr Aritri Dutta	Grants Adviser
Dr Aritraa Lahiri	Grants Adviser
Dr Divya Singh	Grants Adviser
Ms Isha Goel	Grants Adviser
Dr Soumya Kanti Ghosh	Grants Adviser
Dr Reelina Basu	Grants Adviser
Ms Priyanka Pandya	Grants Adviser
Mr Santosh Bastiya	Sr Executive – Graphics Design
Ms Himashree Bhattacharyya	Sr Executive – Science Communications
Ms Saritha Vincent	Manager – Admin
Mr Mohd. Abdul Rahman	Sr Executive
Mr Sathish Kumar Ramatenki	Executive – Admin
Mr Ravi Maddili	Office Attendant
Mr Nataraj Bollam	Finance Manager
Mr Ravi Kumar Bade	Accounts Officer
Ms Vineela Kakani	Accounts Officer
Ms Chandana D	Sr Executive Assistant
Mr Ramu Burra	Sr Accounts Executive
Mr Narsing Rao Kurelli	Sr Accounts Executive
Mr Ravi Chandra Vasa	IT Manager
Mr Lav Kumar	Lead – System Administrator
Mr Saikumar Kanathala	IT Administrator
Dr Savita Ayyar	Lead, India Research Management Initiative (IRMI)

IndiaAlliance
DBT wellcome

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