

STREAM



Funding Newsletter from the Office of Research Grants

Issue 11 | August 2021



Dear Researchers,

We are delighted to share another edition of **STREAM**. In addition to information on grant calls, we have an engaging "In Conversation" interview with Dr. Sanjeev K Varshney (International Cooperation at Department of Science and Technology) and Mr. Sanjiva de Silva (Counsellor, New Delhi, Department of Industry, Science, Energy and Resources, Australian High Commission). These conversations discuss challenges and areas of bilateral research cooperation between various countries, and the consequences of the pandemic on some of these partnerships. The interviews also put into perspective the principal focus areas for an ongoing bilateral calls with the Australian government.

We are sorry to bid adieu to Dr Monika Sharma who joined ORG in March, 21 and wish her the best.

Please do drop us a line for any grants related queries or any comments/ feedback and do watch this space for more conversations in the future. Happy reading!

With best wishes, ORG Team.

For queries, write to us at office.org@iisc.ac.in

For more information, visit https://org.iisc.ac.in/

Follow us <u>@ORGIISc</u>

SEPTEMBER 2021						
S	M	Т	W	Т	F	S
			<u>1</u>	2	3	4
<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	9	<u>10</u>	11
12	<u>13</u>	<u>14</u>	<u>15</u>	<u>16</u>	<u>17</u>	18
19	<u>20</u>	21	<u>22</u>	<u>23</u>	24	<u>25</u>
26	27	<u>28</u>	29	<u>30</u>		

IN CONVERSATION

with Dr. S. K. Varshney

COVID has impacted the timelines of ongoing bilateral, multilateral projects. What are the measures taken by DST to permit costed, no-costed grant extensions? Any foreseeable policy changes impacting international research partnerships, challenges with bilateral areas of cooperation when mobility could become an issue?

We recognize that many Institutes and Universities in India did not allow laboratories to continue working due to the lockdown. As a result, only the theoretical part of research seems to have progressed for many DST funded projects. We have considered grant extension requests from PIs for projects and made a decision based on the requirement of the project. No-costed grant extensions were given for a period of six months to one year on a case-to-case basis for the initial one year of the project. Since the pandemic is not over, and research work continues to suffer in projects where there is a requirement to conduct wet lab experiments and travel, we request PIs to redefine research proposals. We are open to

consider field visits, travel to international labs, and support PIs whenever it is safe to travel, and a majority of people are vaccinated. In cases where there is co-funding involved from a different Indian funder, the finance departments of the respective agencies should agree to the decision. For international funders, we again seek the consent of the partner country involved before making a decision on grant extensions.

How are different countries prioritized as a part of the bilateral cooperation? Are there country wise dedicated budgets or are the various bilateral calls announced based on the research expertise of a particular country?

We have intergovernmental agreements with about 80 countries and active cooperation with 44 countries. We have regional and multilateral partnership with EU, ASEAN and as a member of SAARC, BIMSTEC, BRICS etc. There are three different approaches/ models we follow:

- 1) Technology Synergy- This is parity based bilateral relationship based on mutuality, where both the sides co-fund and co-create generate to knowledge. We follow this principle for several of the European, American, and advanced countries like Japan, Korea, China, Australia etc.
- 2) Technology Diplomacy-Here we encourage Indian research strength to be utilized for the purpose of diplomacy thereby investing into promoting S&T base and capacity building, improving infrastructure, designing of new course curriculum for developing

and neighboring countries. For example- many Asian and African countries.

3) Technology Development- Industrial and Applied R&D collaboration in fostering innovation and technoentrepreneurship using PPP (Public Private Partnership) model. Programmes are given to private companies with partnership from academic or research institutions to develop new products in a stipulated time.

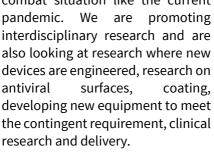
We run workshops, look into exploratory visits, joint R&D programmes, etc to map the scientific strengths of different countries. Based on the recommendations made by the scientific committee, and the advice we get from our embassies, we identify programmes with the respective countries and announce bilateral calls accordingly. Certain countries have a larger remit in terms of science and technology programmes than other countries.

Any new bilateral calls in the pipeline and your focus research areas in a post- COVID world?

On a multilateral platform, such as BRICS, our focus last year was entirely on COVID research. There is a new call which will be announced in late August with BRICS countries. We have just announced a <u>call</u> with Australia under the Australia-India Strategic Research Fund (AISRF), an Indo-Belgian <u>call</u> to support networking activities is also open. An Indo-Japan call to support Joint Research Projects and Joint Workshops/Seminars under India-Japan Cooperative Science Programme (IJCSP) is also open. The binational Indo-U.S. Science and Technology Forum (IUSSTF) has launched its ambitious flagship initiative called U.S - India Artificial Intelligence (USIAI).

In the post COVID world, one of our priority areas is to prepare for future pandemics and direct our focus on virology and epidemiology studies. Simultaneously, we are also encouraging research from different frontiers of science to

> combat situation like the current surfaces,



Is there a plan to further simplify the ePMS portal for the online grant proposal and UC, submission?

We hope to move towards digitalization and are working towards a single project format for all the Indian funding agencies. Based on the feedback we receive; we are improving our grant

management system. We have come to realize that all the Indian funding agencies need a common platform and are hoping to achieve this in the coming years. Presently, for any new scheme of DST we are trying to make 70 % of the project information to be common and only 30% be towards scheme specific requirements.

Dr. Varshney, thank you for your time and the very useful information you shared. We really appreciate that you accepted the offer to have this conversation with us. We are confident that our research community will benefit from the information you shared, and we look forward to continued interactions with you and DST in the coming months.

If the readers have any queries or observations on international S&T cooperation in general and for DST in specific, they can directly approach Dr Varshney at skvdst@nic.in.



Dr. Monika Sharma also spoke with Mr. Sanjiva de Silva, Counsellor, New Delhi, Department of Industry, Science, Energy and Resources, Australian High Commission to get some inputs about the Australia-India Strategic Research Fund (AISRF). This is a successful programme which has built strong and productive research partnerships between the two countries. Since its establishment (2006), the two governments have committed more than \$100 million (Rs 500 crore) to AISRF and the programme has supported more than 330 collaborative activities, including joint projects, workshops, and fellowships. AISRF supports high performing young researchers to undertake early and midcareer fellowships in India, and the Government of India provides reciprocal support for fellows from India to travel and undertake research in Australia. Mr. de Silva emphasized that the AISRF funded projects in IISc were considered among the high impact projects of this programme. The primary goals of this call are to support the high impact projects with commercial value as part of AISRF, and leverage the research funded under AISRF to implement in areas like processing of critical minerals, renewable energy particularly battery manufacturing/ advanced batteries with improved efficiencies.

Artificial Intelligence, developing m-RNA vaccines, low emission technology, hydrogen carbon capture and storage, soil carbon measurements, electricity storage, environment protection and biodiversity are the priority areas of the Australian government.

Please note that the call for round 14 of AISRF application is now open. The priority areas for collaborative research projects with <u>DST</u> are - quantum technologies, earth observation remote sensing, groundwater resources management, downstream processing, recycling and tailings reclamation of critical minerals. With <u>DBT</u> the priority areas are - COVID-19 long-term health impacts, infection prevention and control, digital health, telemedicine and biomaterials including bioplastics.

UPCOMING DEADLINES

FELLOWSHIPS

<u>USIEF Fulbright-Kalam Climate Fellowships for</u> <u>Academic and Professional Excellence</u>

Overview: Supports faculty/professionals to teach, conduct research, or carry out a combination of both at a U.S. institution.

Submission Deadline: 15 September, 2021.

TRAINING FELLOWSHIPS

ASEAN-India Research Training Fellowship (AI-RTF)

Overview: Facilitates exchange of information and contacts between the researchers of India and ASEAN member countries for research collaborations.

Submission Deadline: 30 September, 2021.

RESEARCH GRANTS

<u>DST- Fund for Improvement of S&T Infrastructure in Universities and Higher Educational Institutions (FIST)</u>

Program – 2021

Overview: Provides basic infrastructure and facilities for promoting R&D activities in new and emerging areas in universities & other educational institutions.

Submission Deadline: 6 September, 2021.

<u>SFARI Autism Rat Models Consortium - Request for Applications</u>

Overview: Funding to examine the biological basis of complex behaviors and the neural circuits relevant driving autism.

Submission Deadline: 7 September, 2021.

British Ecological Society's Research Grant

Overview: Funding for early career ecologists for new and innovative ecological research and establish an independent research career.

Submission Deadline: 10 September, 2021.

Sony Focused Research Award Program

Overview: Opportunity for university faculty and Sony to conduct collaborative research in biologically-inspired nextgen AI methods, spatial omics technology and deep learning. **Submission Deadline: 15 September, 2021.**

Sony Faculty Innovation Award Program

Overview: Funds to conduct pioneering research in the areas of Machine learning, Robotics, Human sensing, computer vision, Data mining, etc.

Submission Deadline: 15 September, 2021.

<u>Sree Ramakrishna Paramahamsa Research Grant for</u> Translational Biomedical Research 2021

Overview: Grant for cutting-edge "Bench to Bedside" translational projects in any branch of science that improve the health of individuals and public.

Submission Deadline: 15 September, 2021.

BIRAC Biotechnology Ignition Grant Big Scheme

Overview: BIG supports individual entrepreneurs/ start-ups from ideation to Proof of Concept (PoC).

Submission Deadline: 15 September, 2021.

<u>DST- Science Technology and Innovations (STI) Hubs for</u> <u>Development of Scheduled Caste (SC) and Scheduled Tribe</u> Communities (ST)

Overview: To ensure the development of S&T hubs for equity empowerment and socio-economic development of SC&ST population in the country.

Submission Deadline: 15 September, 2021.

<u>DST-Water Technology Initiative (WTI) call 2021 on</u> <u>Desalination Technologies</u>

Overview: Proposals are invited for R& D activities in areas of desalination, test beds and pilot-scale demonstrations for

emerging and futuristic technologies.

Submission Deadline: 16 September, 2021.

Primate Conservation, Inc. (PCI) Grant Program 2021

Overview: Supports conservation programs for wild populations of primates.

Submission Deadline: 20 September, 2021.

<u>Simons Foundation Mathematics and Physical Sciences</u> **Targeted Grants to Institutes**

Overview: Funding to established institutes or centers in mathematics, theoretical physics and theoretical computer science to strengthen contacts within the international scientific community.

Submission Deadline: 23 September, 2021.

SERB-TETRA (Technology Translation Award)

Overview: Supports scientists executing SERB grants to establish effective working collaboration with an industry partner to catalyze entrepreneurial ventures (TRL level 5).

Submission Deadline: 30 September, 2021.

Azim Premji Foundation Research Funding Program

Overview: Invites research proposals in the areas of climate change, local democracy, labour, livelihoods and employment.

Submission Deadline: 30 September, 2021.

BILATERAL RESEARCH GRANTS

NIH Technology Development for Single-Molecule Protein Sequencing and Single-Cell Proteome Analysis

Overview: To catalyze major advances in single-molecule protein sequencing and single cell proteome analysis through technology development.

Submission Deadline: 1 September, 2021.

NIH Dissemination and Implementation Research in Health

Overview: Support innovative approaches to identify, understand, and develop strategies for sustainability of evidence-based interventions, tools, policies, and guidelines.

Submission Deadline: 5 September, 2021.

NIH Alzheimer's Clinical Trials Consortium (ACTC) Clinical Trials

Overview: To develop and implement Phase Ib to III clinical trials of pharmacological and non-pharmacological interventions for prevention of Alzheimer's disease (AD) symptoms.

Submission Deadline: 5 September, 2021.

NIH BRAIN Initiative: Secondary Analysis and Archiving of BRAIN Initiative Data

Overview: Encourages secondary analysis of existing datasets relevant to the goals of the BRAIN Initiative.

Submission Deadline: 7 September, 2021.

NIH Program on the Origins of Gastroesophageal Cancers

Overview: To address significant understanding of cancer genomics, and advances in stem cell research for gastroesophageal cancers and how these cancers initially evolve at the cellular level.

Submission Deadline: 8 September, 2021.

India-Japan Cooperative Science Programme (IJCSP)

Overview: Call invites proposals for mobility program in areas such as physical science, chemical science, life science, agriculture, mathematical science, computational science, astronomy and earth science, materials and engineering, and COVID-19 (Pre and post COVID.)

Submission Deadline: 8 September, 2021.

NIH HEAL Initiative: Team Research for Initial Translational Efforts in Non-addictive Analgesic Therapeutics Development

Overview: To support the development of safe, effective, and non-addictive therapeutics to treat pain.

Submission Deadline: 13 September, 2021.

NIH HEAL Initiative: Planning Studies for Analgesic Development

Overview: To establish a research team to strategize preliminary data collection and link putative therapeutic targets for pain indication.

Submission Deadline: 13 September, 2021.

NIH-NIA BRAIN Initiative: Research on the Ethical Implications of Advancements in Neurotechnology and Brain Science

Overview: Supports complementary and integrative with the transformative, breakthrough neuroscience discoveries supported through the BRAIN Initiative.

Submission Deadline: 13 September, 2021.

NIH HEAL Initiative: Novel Targets for Opioid Use Disorders (OUDs) and Opioid Overdose

Overview: Funding for identification of druggable new targets and discovery of optimizable probes for development of safe and efficacious medications to prevent and treat OUDs.

Submission Deadline: 13 September, 2021.

NIH- Exploratory Studies to Investigate Interrelationship Between Sleep and Substance Use Disorders

Overview: Supports developmental and exploratory projects to expand knowledge on basic neurobiology of the interrelationship between sleep and substance use disorders.

Submission Deadline: 14 September, 2021.

NIH-Large Scale Mapping and/or Molecular Profiling of Ensembles and/or Cell-Types Mediating Opioid Action in the Rodent Brain

Overview: Supports innovative scalable technologies to identify, map, and profile cellular assemblies identified as targets or primary sources of opioids in the brain.

Submission Deadline: 15 September, 2021.

Indo-Belgian Joint Networking Call 2021

Overview: The call invites applications with focus areas specific to DBT (Marine Biotechnology and Life science focused on micro-organisms) and DST (Space, including astronomy, solar physics and remote sensing, Marine sciences, Geology and Cybersecurity).

Submission Deadline: 17 September, 2021.

NIH-Prevention and Intervention Approaches for Fetal Alcohol Spectrum Disorders

Overview: To support research that reduce prenatal alcohol exposure, incidence, and interventions for fetal alcohol spectrum disorders (FASD).

Submission Deadline: 19 September, 2021.

NIH-Development of New Technologies and Bioengineering Solutions for the Advancement of Cell Replacement Therapies for Type 1 Diabetes

Overview: To develop and test novel and supportive technologies for the improvement of cell interventions Type 1 (T1D) diabetes treatment.

Submission Deadline: 20 September, 2021.

NIH-NIA Primary Care-Based Screening and Development for Prevention of Abuse in the Context of Alzheimer's Disease

Overview: Supports development of primary care screening tools to prevent abuse in at-risk older and vulnerable adults. **Submission Deadline: 20 September, 2021.**

NIH Aging Research in Animals (ARIA): Promoting Rigorous Research on Behavioral and Social Processes

Overview: To develop and strengthen animal models for behavioral and social research that contribute to aging processes and the etiology of age-related conditions and diseases.

Submission Deadline: 20 September, 2021.

NIH-Data Enhancements and Analyses to Clarify the Relationship between Education and Cognitive Function

Overview: Invites applications that add enhanced measures to existing studies on the relationship between education, cognition, and risk of Alzheimer's disease and Alzheimer's disease-related dementias.

Submission Deadline: 20 September, 2021.

NIDCD Research Grants for Translating Basic Research into Clinical Tools

Overview: Provide an avenue for scientists/clinicians to jointly initiate and conduct translational research projects which translate basic research findings into clinical tools for better human health.

Submission Deadline: 20 September, 2021.

Indo-Finnish Joint Call-Funding for Researcher Mobility

Overview: Call for funding for international researcher mobility based on bilateral agreements.

Submission Deadline: 23 September, 2021.

National Eye Institute (NEI) Vision Research Epidemiology Grant

Overview: To support new and innovative ocular epidemiology research.

Submission Deadline: 25 September, 2021.

NIH- Planning Grant for Global Infectious Disease Research Training Program

Overview: To design a Global Infectious Disease (GID) research training program in collaboration with U.S. collaborators and institutions in low- and middle-income countries (LMICs).

Submission Deadline: 28 September, 2021.

NIH-Role of Adaptive Immunity in Etiology of Alzheimer's Disease (AD)

Overview: Funding support to understand brain immune surveillance, CNS-directed immune responses in neurodegenerative disorders and adaptive immunity in AD/ADRD onset and progression.

Submission Deadline: 28 September, 2021.

NIH- High Resolution Mapping of Biomolecules in Brain Cells in Aging and Alzheimer's Disease

Overview: Support novel molecular imaging approaches to establish high-resolution mapping of biomolecules in brain cells.

Submission Deadline: 28 September, 2021.

NIH- Leveraging Existing Databases and Cohorts to Better Understand the Risks and Benefits of Long-Term Osteoporosis Therapy and Drug Holiday

Overview: To provide evidence for long-term osteoporosis therapies to better understand their risks and benefits. **Submission Deadline: 28 September, 2021.**

POST DOCTORAL FELLOWSHIPS

The European Molecular Biology Laboratory (EMBL) interdisciplinary Postdoctoral fellowship program

Overview: Fellowship for researchers with diverse educational backgrounds to pursue interdisciplinary research projects in an international setting.

Submission Deadline: 7 September, 2021.

<u>USIEF 2022-2023 Fulbright-Nehru Postdoctoral Research</u> Fellowships

Overview: Opportunity for early stage researchers to strengthen their research capacities.

Submission Deadline: 15 September, 2021.

USIEF Fulbright-Kalam Climate Fellowships

Submission Deautine. 15 September, 2021.

Overview: Fellowship for researchers to strengthen their research capacities and to build long-term collaborative relationships with U.S. faculty.

Submission Deadline: 15 September, 2021.

Facebook Fellowship Grant

Overview: Support doctoral students engaged in innovative and relevant research in areas related to computer science and engineering.

Submission Deadline: 20 September, 2021.

The Banting Postdoctoral Fellowships program

Overview: Fellowship for the best postdoctoral applicants, both nationally and internationally, who will positively contribute to the country's economic, social, and research-based growth.

Submission Deadline: 22 September, 2021.

ICGEB Arturo Falaschi Postdoctoral Fellowship

Overview: Fellowships for scientists in Life Sciences to pursue postdoctoral research in a world-class scientific environment.

Submission Deadline: 30 September, 2021.

ICGEB Short-Term Postdoctoral Fellowships

Overview: Funds for ongoing collaborative research between scientists from ICGEB Member States and research groups at ICGEB laboratories with the aim of facilitating access to the latest research techniques.

Submission Deadline: 30 September, 2021.

ICGEB Smart Fellowships

Overview: To promote collaboration among researchers in ICGEB Member Countries through mobility of researchers between ICGEB Member States.

Submission Deadline: 30 September, 2021.

ICGEB EMPOWER Fellowships

Overview: Offers early-career female scientists to perform research work on biotechnology and related fields, including Health (Infectious Diseases and Non-Communicable Diseases), Sustainable and Effective Agriculture, Industrial Biotechnology and Renewable Energy in ICGEB member states.

Submission Deadline: 30 September, 2021.

RESEARCH ENRICHMENT GRANTS

Wellcome Trust Research Enrichment-Public engagement Grant

Overview: Support Wellcome grant holders to engage the public with their research.

Submission deadline: 28 September, 2021.

ACADEMIC EXCHANGE PROGRAMS

ICGEB Short-Term PhD Fellowships

Overview: Funds for ongoing collaborative research between scientists from ICGEB Member States and research groups at ICGEB laboratories (Trieste, Italy, New Delhi, India and Cape Town, South Africa) to facilitate access to the latest research techniques and strengthen capacity building.

Submission Deadline: 30 September, 2021.

