

biroc e3

Ignite • Innovate • Incubate

Innovate for excellence
in bioTECH space



birac
Ignite Innovate Incubate

Biotechnology Industry Research Assistance Council
(A Government of India Enterprise)



September **2019**

No. 3 | Vol. 6

In this issue

Leader's Message	3
Chief Editor's Take	4
BIRAC Feature	
DBT-BIRAC Leadership Dialogue Series	5
BIRAC Awards	
Skoch Award	7
BIRAC Reports	
Bio-convention Philadelphia	10
National Bio-entrepreneurship boot camp	11
5th BIG Conclave	12
Indian Leaders Program	14
IGNITE	15
First Hub	16
Workshop on Bio-entrepreneurship, IP&TEM at IIT, Indore	16
BIRAC Awareness workshop on IP&TEM in life Science	17
Jaipur-Idea Exposition	17
Chandigarh-Idea Exposition	17
BIRAC Social Innovation Programme Graduate "Ageing & Health" Batch of Social Innovator	18
National Workshop on Regulatory Compliance for Accelerating Innovation	19
BIRAC Activities	
HR & Admin	20
Partnerships	
Grand Challenges India	21
Social Alpha	23
National Programmes	
National Biopharma Mission	24
Call launches & Event Flyers	8,9,26,27

Editorial Committee

Dr. Shirshendu Mukherjee
Mission Director, Grand Challenges India

Dr. Hafsa Ahmad
Consultant (Comm.)
National Biopharma Mission

Ms. Ginny Bansal
Consultant (Comm.)
Grand Challenges India

Dr. Varsha Sirohi
Officer, Make in India Cell

Dr. Chhaya Chauhan
Manager (Incubation)

Ms. Anjana Seshadri
Manager (Policy), Grand Challenges India

Design and Production:
Chiranjn Advertising, E-170, East of Kailash, New Delhi, Email : chiranjn@hotmail.com

Leader's Message



Dr. Renu Swarup
Secretary DBT
& Chairperson BIRAC



डॉ. रेणु स्वरूप
DR. RENU SWARUP

सचिव
भारत सरकार
विज्ञान और प्रौद्योगिकी मंत्रालय
जैव प्रौद्योगिकी विभाग
ब्लॉक-2, 7वां तल, सी0 जी0 ओ0 काम्पलेक्स
लोधी रोड, नई दिल्ली-11003
SECRETARY
GOVERNMENT OF INDIA
MINISTRY OF SCIENCE & TECHNOLOGY
DEPARTMENT OF BIOTECHNOLOGY
Block-2, 7th Floor, C.G.O. Complex
Lodhi Road, New Delhi-110003

Message

India today is clearly positioned as a Biotech Hub with more than 2000 biotech start-ups and the Bioeconomy at US\$50 billion in 2018 which is expected to grow to US\$100 billion by 2025. This unprecedented growth has been as a consequence of government support, enabling policies and a growing demand. These factors became the driving force for the rapid growth of innovation in the biotech space.

BIRAC has been DBT's major instrument in facilitating innovation excellence pan India. BIRAC is committed to stimulate, foster and enhance the strategic research and innovation capabilities of the Indian biotech industry, particularly start-ups and SMEs with an aim to deliver high and innovations with translational potential. In the 7 years of its existence BIRAC has been able to give a tremendous fillip to the biotech-based enterprises in India. It has been instrumental in generating measurable outcomes in terms of products and technologies in healthcare, agriculture, nutrition and well-being and other allied areas. BIRAC has strived to pave a way for moving technology very quickly through the product development cycle and to take innovations from bench to bedside and from lab to market.

As a nation our primary goal is to create a robust Innovation Ecosystem which can then deliver indigenous solutions for our multiple challenge of Healthcare, Agriculture, Energy through its various funding mechanisms has created a tremendous impact on the biotech space in terms of innovative solutions. About 133 products and technologies have successfully been developed with BIRAC support.

To excel in this space, it is imperative that we look at new innovative models of partnership and collaboration between Academia, Research Institutes & Start-ups and Industry. Moving from Institutional Clusters to knowledge Translational Clusters to Technology Clusters with flexible models of Governance and operation is now the next step forward.

BIRAC remains committed to generation of new knowledge and development of affordable products. I am confident that we will continue to innovate for excellence to take biotech sector to newer heights and move closer towards our dream of a US\$100 billion Bioeconomy.


(Renu Swarup)

Secretary, DBT & Chairperson, BIRAC

Tele : 24362950/24362881 Fax : 011-24360747 Email: secy.dbt@nic.in

Chief Editor's Take



Dr. Mohd. Aslam

Advisor DBT
& MD BIRAC

Innovation is at the forefront of Biotechnology and is crucial to solving problems faced by mankind as a whole. India is in the midst of an innovation movement and is working to transform the areas of innovation, whether it is science, technology, health and other sectors. India is now ranked 52nd on the Global Innovation Index (GII) 2019, with a jump of 5 places from 2018, and 29 places in the last five years.

The potential for biotechnology to change and improve the health and quality of lives of our fellow countrymen is full of promise, and it is one that we should harness. The Department of Biotechnology (DBT) and the Biotechnology Industry Research Assistance Council (BIRAC) have played a pivotal role in promoting the culture of innovation in the field of biotechnology through various programs and initiatives. BIRAC supports start-ups from incubation, ideation, early-stage/late-stage and mentors them to take the products from laboratory to market. Over the years, BIRAC has supported more than 500 startups and has led to the creation of more than 40 Bio-incubators. More than 100 products & technologies have evolved through BIRAC's support and are in different stages of development and commercialization.

Several government policies and programs, including Make in India, Start-up India, Innovate India, Swachh Bharat Abhiyan and Digital India have also fueled this innovation drive and are helping create a conducive environment to solve some of the biggest challenges faced by India. BIRAC is actively working to promote these programs in biotechnology by creating affordable products and innovations that have the potential to change lives and catapult India towards a better future.

We at BIRAC are committed to encourage and support innovations to leave an imprint on the international biotech stage. I am hopeful that we will continue to take action oriented-steps to innovate for excellence in biotechnology and carve the success stories for the Indian people and economy.

Dr. Mohd. Aslam
Advisor DBT & MD BIRAC

DBT-BIRAC Leadership Dialogue Series

The Department of Biotechnology (DBT) and the Biotechnology Industry Research Assistance Council (BIRAC) have made tremendous efforts in promoting biomedical research, translational research education and entrepreneurship development. Recently, DBT and BIRAC initiated the “**Leadership Dialogue Series**”. The main aim of this platform is to bring together leaders from various domains across the world to share their experiences to motivate and inspire the next generation of leaders in science in the country.

This series is designed to engage the scientific community and students, and provide them the opportunity to learn from the vast experiences of stalwarts in various fields. It is envisioned that this series would be held in partnership with leading research and academic institutions across the country.

The series was launched in July 2019, with the first lecture by Bharat Ratna Prof. CNR Rao at the Indian Institute of Science, Bengaluru. The second lecture was delivered by Dr. Trevor Mundel, President, Global Health, Bill & Melinda Gates Foundation at the All India Institute of Medical Sciences, in New Delhi.

Leadership Dialogue Series-First Chapter at Indian Institute of Science, Bengaluru, 18th July 2019

The first edition of the Leadership Series was held on 18th July 2019, in partnership with the Indian Institute of Science, Bengaluru and this lecture was delivered by Bharat Ratna Professor C.N.R Rao on “**Climbing the limitless ladder of excellence**”. Dr. Renu Swarup, Secretary DBT & Chairperson BIRAC, introduced the distinguished speaker and the DBT-BIRAC Leadership Dialogue Series.

This talk saw an audience of nearly 700 students, academicians, researchers and luminaries of the scientific community from IISc, and neighbouring research and academic institutions. Prof. Rao’s talk took the audience through the scientists and visionaries who had inspired his journey in science, and he provided engaging anecdotes of his interactions with these stalwarts.

After his inspiring talk, Prof. Rao took questions from the students in the audience. Prof. Anurag Kumar, Director, IISc, Bengaluru presented the closing remarks and the vote of thanks on behalf of the organizers. Dr. Shirshendu Mukherjee, Mission- Director, Grand Challenges India (GCI), Dr. Kakali Dey Dasgupta, Scientist ‘E’, DBT and Ms. Anjana Seshadri, Manager-Policy, GCI attended the meeting as part of the organizing committee



Dr Renu Swarup, Secretary DBT & Chairperson BIRAC felicitating Bharat Ratna Prof C.N.R. Rao at the first chapter of the Leadership Dialogue Series at IISc, Bengaluru.

Leadership Dialogue Series-Second Chapter at All India Institute of Medical Sciences, New Delhi, 29th July 2019

The second lecture in the Leadership Dialogue Series was delivered by Dr. Trevor Mundel, President, Global Health, Bill & Melinda Gates Foundation on **“Innovating for Impact: How India can lead in helping solve some of the world’s toughest health challenges”**. The event was held on 29th July at J L Auditorium, in partnership with the All India Institute of Medical Sciences, New Delhi.

The session started with a welcome address by Dr. Randeep Guleria, Director, AIIMS followed by an introduction of the speaker and the series by Dr. Renu Swarup, Secretary DBT& Chairperson BIRAC. The event was attended by a large number of dignitaries from scientific & industry sectors, academicians, representatives from DBT, BIRAC and students from various institutes in and around New Delhi.

Dr. Mundel in his talk highlighted how India’s efforts in innovation and research and development in medicine and health will determine the future of the global health agenda. He took the audience through a series of exciting innovations that the Foundation was funding and also laid out the main challenges for health in India that need attention.

The lecture was followed by Q & A session with active participation from the audience who were very appreciative of the talk and his understanding of issues and challenges in public health and development in India. Dr. Chitra Sarkar, Dean, AIIMS delivered the vote of thanks.



Dr Trevor Mundel, President, Global Health, Bill & Melinda Gates Foundation along with Dr Renu Swarup, Secretary DBT & Chairperson BIRAC at the second chapter of the Leadership Dialogue Series at AIIMS, New Delhi.

Skoch Award

"BIRAC 3i Portal" (Investment for Industry Innovation Research) is a dedicated portal developed for effective management of all BIRAC schemes. BIRAC 3i Portal manages the proposals from submission, to evaluation, monitoring of project proposals, report generation, and financial disbursements, to ensure transparency in public funding. The portal is a robust, advanced, and secure system, audited by auditing agencies.

BIRAC's 3i portal received the SKOCH Order of Merit and Governance Bronze Award at the Skoch Summit, 28th-29th Aug 2019 held in New Delhi. SKOCH Award is the highest civilian honour in the country conferred by an independent organization, which encourages the best efforts in the area of digital, financial and social inclusion.



BIRAC receives the order of merit at SKOCH Summit



BIRAC receives the Governance Award (Bronze) at SKOCH Summit



DEPARTMENT OF BIOTECHNOLOGY
Ministry of Science & Technology
Government of India



Biotechnology Industry Research Assistance Council
(A Govt. of India Enterprise)



Power to Transform Lives

Bioscience to Bioeconomy - USD 100 Bn by 2025

Led by Department of Biotechnology, Govt. of India

21-23 November 2019: Aerocity, New Delhi

Biotechnology sector is recognized as the key driver for contributing to India's USD 5 Trn economy target by 2024. As India progresses on this transformational journey, Global Bio-India 2019, the largest Bio event, would showcase opportunities to the world.

Department of Biotechnology (DBT), Ministry of Science & Technology, Government of India and its Public Sector Undertaking, Biotechnology Industry Research Assistance Council (BIRAC) are organizing Global Bio-India Summit 2019, a mega international congregation of biotechnology stakeholders, including international bodies, regulatory bodies, Central and State Ministries, SMEs, large industries, bioclusters, research institutes, investors, and the startup ecosystem.

Destination India

#1 Supplier of DPT, BCG and measles vaccines globally

#2 Producer of BT cotton globally

#3 Producer of the recombinant Hepatitis B vaccine

2nd Highest number of US Food & Drug Administration (USFDA)-approved manufacturing plants outside the US

2700+ Startups

3rd Largest biotech destination in the Asia Pacific Region

3% Share in the global biotechnology industry

100+ Biotechnology incubators

Event at a glance

- | | | | |
|--------------------------|---------------------|---|--|
| ▶ 30+ Countries | ▶ Media Interaction | ▶ CEO Roundtable | ▶ State Pavilions |
| ▶ 200+ Exhibitors | ▶ Awards | ▶ Global Regulators Meet | ▶ Start-up Biotechnology Grand Challenge Program |
| ▶ 3500+ Delegates | ▶ Policy Dialogues | ▶ Investors Roundtable | ▶ Workshops/Bootcamp |
| ▶ 250+ Startups | ▶ Bio-Partnering | ▶ Country Pavilions | ▶ Startup Pavilion |
| ▶ B2B, B2G, G2G Meetings | ▶ Key Global Giants | ▶ Ministries and Department's Pavilions | |

Who should attend?



Bio-Pharma



Bio-Agri



Bio-Industrial



Bio-Energy



Bio-Services

- | Large Industries, SMEs, Startups, Entrepreneurs, Innovators in Bio-Pharma, Bio-Agri, Bio-Industrial, Bio-Energy, Bio-Services, Med-Tech, Bio-IT, CROs, and CMOs
- | Enterprises looking for business partners and distributors in India and other global markets
- | Investors seeking opportunity to invest in Biotechnology Sector
- | International and Domestic Public officials, Regulatory agencies, Patenting offices, Clinicians, Bio-engineers, Translational Research Institutions, Technology Transfer Offices, Experts and Mentors
- | International Biotechnology Industry Associations

A billion reasons to invest in India

India's Bioeconomy of
USD 50 Bn
in 2018 is expected
to grow to
USD 100 Bn
by 2025

270+
Incubators &
200+
Biotech Research
and Teaching
Institutions

2700+
Biotech Startups
to grow upto
10,000+
by 2024

600+
Core Biotech
Companies

57th
rank in Global
Innovation Index

#1
EODB ranking
in South Asia

For more information, contact:

Secretariat
Global Bio-India 2019
Make in India Cell, BIRAC 1st Floor, MTNL Building,
9, CGO Complex, Lodhi Road, New Delhi-110003

Dr. Manish Diwan
info@globalbioindia.com
www.globalbioindia.com

BIO-US, 2019

BIOUSA 2019 was hosted by Biotechnology Innovation Organization (BIO) at the Pennsylvania Convention Center, Philadelphia, Pennsylvania, U.S. with the theme “It starts with one” during 3rd to 6th June 2019. More than 17,000 visitors in biotechnology field gathered, more than 8,400 corporations, more than 315 academic institutions, from 49 U.S. states and regions and 65 other countries and regions attended this great convention.

BIRAC team participated in the conference. On 4th June 2019 the India Pavilion was inaugurated by Dr. Dhananjay K Tiwari, Counsellor (S&T) Embassy of India, Washington (DC) USA in the presence of representatives from BIRAC, IKP, Pandorum, Aurigene and ABLE. After the inauguration Pavilion was open for the interactions with the BIO USA visitors. There were 6 booths under the India Pavilion. Dr. Dhiraj Kumar and Dr. Sanjay Saxena from BIRAC interacted with the visitors and informed them about different initiatives of the BIRAC and DBT. Visitors had queries regarding what are the opportunities present in India for startups and what capacity BIRAC can help the Indian researchers to come back India and open their own startups. Representatives from BIRAC answered these queries.

Various events were held at the international pavilions. Dr. Sanjay Saxena and Dr. Dhiraj Kumar participated in the sessions/meetings and also delivered talk as invited speakers. Dr. Sanjay Saxena delivered a talk on Driving India's Competitiveness in Biotechnology in “A bilateral meeting between Indian and US stakeholders from the Public and private sectors”. He also participated in a panel discussion on “India's Contribution in Global Biotech R&D”. Dr. Saxena from BIRAC informed the audience about the different initiatives of DBT and BIRAC for the promotion of the Biotech in India which finally leads to the contribution towards Global Biotech. In another talk Dr. Sanjay Saxena from BIRAC deliberated upon “India Bioeconomy: Global Innovation Hub. He informed the audience about that how the India became a Global Innovation hub today. He discussed about the biotech opportunities and the government initiatives towards the promotion of biotechnology in India. Dr. Dhiraj Kumar attended the session “The State of the Vaccine Industry: Stimulating Sustainable Growth”. This session focused on the various ways vaccine companies and partners can stimulate continued growth of the vaccine business by fostering innovation with new target vaccines, new technology and solutions to access issues that will increase immunization rates.

Panelists identified three trends that will need to be addressed to reinvigorate the vaccines sector:

1. Heightened costs for mid- and late-stage R&D and manufacturing
2. Higher opportunity costs as the investment attractiveness of vaccines converge with that of other biologic products
3. Greater technical complexity and commercial uncertainty compared with other recent innovations

Regulators can also play a role in speeding up vaccine development. Regarding regulatory approvals it was agreed in the meeting that the industry has an opportunity to go deep on their products and completely understand their products, to characterize them in novel ways using the technologies to bring to regulators options supported by data that are convincing and validated that show there are alternate ways of determining efficacy – correlates of course is the most obvious example – but ideally industry would have similar measures for safety, because determining safety is what drives a huge amount of the cost of clinical trials.”

On the last day of convention Jim Greenwood, CEO of Biotechnology Innovation Organization (BIO) stated that: The world is beginning to grasp that we've entered the dawn of a golden age of medicine. It's an age of hope. It's an age of possibility and it's an age of healing. No disease will escape our scientists anymore.”

On 6th June 2019 the convention formally closed and the attendees took with them newfound motivation, learnings and connections for delivering biotechnology innovations and solutions to the world's toughest challenges.



BIRAC participated in BIO USA 2019 at Philadelphia, 3rd-6th June 2019.

National Bio-Entrepreneurship Boot Camp 2019

BIRAC's Regional Entrepreneurship Centre (BREC) organized the 3rd National Bio-Entrepreneurship Boot Camp from 16th -19th July 2019 at Royal Orchid Resort and Convention Centre, Yelahanka, Bangalore. The Boot Camp was attended by a cohort of 80 start-ups which includes 15 BIRAC TiE Biotech WInER awardees. This 4-day residential Boot Camp was aimed to mentor start-ups (at > TRL-3 & up) for business, IP, legal and go to market strategies.

The introductory remark from BIRAC was made by Dr. Manish Diwan, Head, Strategic Partnerships & Entrepreneurship Development which emphasized majorly on various BIRAC funding schemes, international collaborations and the impact created so far. The event focussed an interaction among the various National and International Faculties, Govt. Officials and Start-ups' Founders/Co-founders to understand several business aspects.

On the first day Guest of Honour, British Deputy High Commissioner Mr. Dominic McAllister shed light upon Indo-UK Opportunities for promoting deep science entrepreneurship and UK government's role in promoting innovation through financial scaling up of start-ups. International Faculties Dr. Shailendra Vyakarnam, Visiting Professor in Entrepreneurship, Cranfield University and Dr. Uday Phadke, Chief Executive, Carteza and Founding Chairman, Accelerator India, Cambridge, UK explained the entrepreneurs the significance of business outlook, market space, business model development and pitching, technology deployment and mapping the maturity of a business etc.

On the 2nd day of the event several informal fireside chats were being conducted by Dr. Anand Kumar, CEO & MD, Bug works and Dr. Jugnu Jain, CEO, Sapien Biosciences & Saarum Sciences to enhance interaction with the participants. The 3rd day was graced by the presence of Dr. Renu Swarup, Secretary DBT & Chairperson BIRAC. She encouraged the participants to celebrate each step of success during their entrepreneurial journey. Dr. Swarup reiterated Government's commitment of energizing and nurturing the Biotech Innovation Ecosystem. The participants were also enlightened about the regulatory pathways by Dr. Rubina Bose, Deputy Drugs Controller General, CDSCO and Dr. Dhananjay K. Sable, Assistant Drugs Controller, CDSCO.

On the last day of the event a panel discussion on the various stages of fund raising and identification of a correct investor was also organized and Dr. Bhuvnesh Shrivastava, Manager, Make In India Cell, BIRAC participated in the same. Towards the closing of the event, participants were given an opportunity to pitch their business before the mentors and were provided an outcome of their discussions.



Cohort of 80 innovators at BIRAC's National Bio Entrepreneurship Boot Camp 2019 organized by BREC



BIRAC TiE Biotech WInER awardee women entrepreneurs



Panel Discussion for Fundraising and Investor identification

5th BIG Conclave

5th Edition of BIRAC's BIG Conclave, **an annual gathering of BIG grantees and mentors** was organized at IKP, Hyderabad, one of the BIG Partners. The theme for this year's conclave was **"Industry Connect"**. More than 100 entrepreneurs and 40 mentors participated in the event. The conclave began with an inspiring Key Note address by Mr. Khalil Ahmed, Co-Founder and former Executive Director of Shantha Biotechnics (now Sanofi). He is presently director of KSK Group of Companies and is a serial entrepreneur. The event included case studies of successful BIG grantees. Focused interactions with mentors from Industry was the highlight of the event, wherein BIG grantees got an opportunity to talk to specialized Industry experts and receive first hand guidance. Senior experts from Industry including Indian Immunologicals, Globion India, ITC Life Sciences and Technology Centre, Genotypic Technology DuPont, USP India, Stryker Global, Medtronic, GE had face to face interactions with cohorts of BIG grantees.



The BIG grantees got an opportunity to get their queries resolved through an open house discussion with BIRAC. Dr. Manish Diwan, Head, SPED; Ms. Shilpy Kochhar, Sr. Manager, Entrepreneurship Development, Ms. Taranjeet Kaur, Deputy Manager, Entrepreneurship Development and Mr. Utkarsh Mathur, Manager, Business Development represented the BIRAC panel and addressed queries including future engagement with BIRAC for funding support and mentoring after BIG, new initiatives like LEAP, PCU, Field Validation, Friday Success Stories, lab 2 market, access to certification packaging, microbial repository, regulatory support etc.

During the conclave, two BIG grantees working in the area of waste water treatment, REVY Environmental Solutions Pvt. Ltd., Vadodara & Innotech Interventions Pvt. Ltd., Guwahati signed a MoU aimed at technology collaboration and cross geographical promotion of the solutions developed by each other. This is an excellent example of early stage startups leveraging each other's strengths to create a high value proposition.

The innovators also showcased their products/technologies during the event. The exhibition was visited by several technical and business mentors as well as investors.



Day 2 of the event had a BIRAC-Startup India **"Investor Connect"** event, open to startups and investors by invite only. Investor Connect brought together a rich pool of start-ups, Incubators, Investors & Industry leaders from various enterprises and institutions. The event provided a connect between biotech Start-ups ready for pre-series, series A & upto series B investments and investors seriously looking for deals in technology driven startups. Investors participation in the event included representation from Somerset Indus Healthcare India Fund, NABVENTURES Funds, Menterra Venture Advisors, HealthQuad Advisors Pvt. Ltd., Ankur Strategic Advisors LLP, Stakeboat capital, Plataforma Ventures Pvt Ltd, SBICAP Ventures Limited, Jhunjhunwalas, Bharat Innovation Fund, Endiya Partners and Bharat Innovation Fund. Three types of interaction

opportunities were provided including one on one meeting, Pitching opportunity before a pool of investors and Exhibition. Out of 110 startups and 25 investors applications, 30 shortlisted startups were given an opportunity to have one on one meeting with at least 3 investors among a shortlisted pool of 18 investors.



Mr. Khalil Ahmed delivering Key note address at 5th BIG Conclave



BIG Grantees exhibiting their product prototypes



BIG Partners' Panel Discussion



Open House with BIRAC at 5th BIG Conclave



Signing of MoU between Revy Environmental and Innotech Interventions at the 5th BIG Conclave

INDIAN LEADERS PROGRAMME 2019: 7th EDITION

“ENTREPRENEURSHIP & START-UPS”

7th Edition of Indian Leaders Programme of the **Spain India Council Foundation (SICF)** was held from 1st-6th July, 2019 with a focus on “Entrepreneurship and Start ups”. The Spain-India Council Foundation is a non-profit private entity, which aims to foster mutual understanding between the two countries. It brings together the efforts of a broad range of sectors to promote India-related interests, such as science, technology, research, culture and academy, as well as financial, trade and business cooperation, acting as a civil society platform.

Ms. Shilpy Kochhar, Senior Manager, Entrepreneurship Development, BIRAC represented BIRAC along with Dr. Anil Wali, Managing Director, FITT, New Delhi; Ms. Ananya Chandra, Assistant Vice President, AGNI, Invest India, New Delhi; Dr. Sanjay Pal, Senior Faculty, EDII, Ahmedabad and Dr. H Purushotham, Chairman & Managing Director, NRDC. The 5 days programme included discussions meetings with City Councils & financial institutions, interaction with officials from relevant Ministries, visit to incubators, business school and meeting startups as well as established MNCs. The programme overall provided a broad overview of the Startup ecosystem in Spain, particularly in cities including Madrid, Valladolid and Barcelona. Some of the important institutions visited include:

- CDTI, a Public Business Entity under the Ministry of Economy, Industry and Competitiveness, which fosters the technological development and innovation of Spanish companies.
- Ministry of Science, Innovation and Universities responsible for fostering research and innovation, and management of international relations in this area and the Spanish representation in programs and international organizations, and the EU.
- Madrid City Council, a local body promoting entrepreneurship
- La Nave, an innovation space (incubator) in the city of Madrid, supported by Madrid City Council.
- ACCIONA, a leader in providing sustainable solutions for infrastructure and renewable energy projects across the world with a presence in more than 40 countries.
- Casa de la India, a centre for the promotion and dissemination of Indian culture in Spain.
- Boecillo Technological Park, a Biotech Incubation Centre with high technology equipped laboratories designed to support research activities and biotechnology developments.
- Scientific Park/Business Incubator at University of Valladolid (UVA)
- Barcelona Tech City, a local body promoting entrepreneurship in the 5th largest startup city of EU (Barcelona)
- CaixaBank, a financial group with a socially responsible, long-term universal banking model, based on quality, trust, and specialization.

The programme provided an excellent opportunity to explore potential areas of collaboration between Spain and India, particularly for start up and entrepreneurs.



Visit to Boecillo, a Biotech Incubator



Visit to a startup, Creatica, incubated at La Nave



Discussion meeting at “dayone”, an initiative of CaixaBank



Visit to Ministry of Science, Innovation and Universities

BIRAC Startups at IGNITE, Judge Business School, University of Cambridge, UK

IGNITE is an intensive, one week training programme for the early stage ventures to help assess and validate the commercial feasibility of their business plans and better define and shape its potential for success. Five startups supported under Biotechnology Ignition Grant (BIG) scheme attended one week residential boot camp, IGNITE at Judge Business School (JBS), University of Cambridge, UK. Ms Taranjeet Kaur, Deputy Manager-Entrepreneurship Development from BIRAC also attended the programme. This year, the boot camp was scheduled from 30th June to 5th July, 2019 and witnessed around 50 participants from across the world. The week comprised of lectures, workshops and one to one practical mentoring sessions. There were set themes for each day, covering various areas of entrepreneurship such as Value Proposition, Preparation of Business Models, Teams, Defining Marketing Strategy, One to one mentoring clinics, Finance and Business Negotiations. The networking events were also held during the evenings enabling delegates to continuously communicate, refine and validate their ideas with other innovators, successful entrepreneurs, investors, bankers, corporate and business professionals. The programme provided excellent opportunity to the startups and helped them learn various aspects of entrepreneurship, refine their business plans, global IP prospects, exposure to Cambridge startup ecosystem and networking. The following BIRAC entrepreneurs attended the programme:



BIRAC startups at IGNITE, JBS, Univ. of Cambridge, UK

1. Sreekar Kothamachu, Nesa Medtech Pvt Ltd: Nesa Medtech is developing an affordable & scar-less solution to treat symptomatic uterine fibroids.
2. Manoj Sanker P R, Nemocare Wellness Pvt Ltd: The Nemocare Raksha, an IoT enabled smart wearable on the baby's foot which monitors vital parameters like SpO2, Heart Rate, Respiration Rate, Body Temperature, Body Position that will give the complete picture of the baby's health.
3. Habib Ali, BeAble Health Pvt Ltd: BeAble aims to be the next generation connected Rehabilitation Platform. Their first product ArmAble, An gamified Arm Rehabilitation Device is addressing the rehabilitation of Upper limb post Stroke.
4. Dr. Sumona Karjee Mishra, Prantae Solutions Private Limited, OPC:Prantae Solutions, a socially responsible enterprise addressing the gap in early disease prognostics with a focus on Maternal Health. Their products are i) EyeRa®- plasmonic nanoparticles, ii) EyeRa®-Sense iii) ProFlo-U and iv) EmbarGo®- Dynamic Light scattering device.
5. Shilpa Malik, Bioscan Research Pvt. Ltd: Bioscan Research has developed Cerebo™, a handy, non-invasive, fully computerized system for detecting intracranial haemorrhage within 2 min. and can be carried around easily, and also can be deployed onsite.



Entrepreneurs and innovators at IGNITE, JBS, Univ. of Cambridge, UK

FIRST HUB

FIRST HUB has successfully completed first year of its operations. FIRST HUB is a Facilitation Cell to address the queries of Start –ups, Entrepreneurs, Researchers, Academicians, Incubation Centres, SMEs. Dr. Swarup, Secretary-DBT and Chairman BIRAC congratulated members of the participating organisations CDSCO, NIB, ICMR, BIS, DBT and BIRAC on the success.

As per the analysis of the 220 queries received/resolved in a year of operations, major queries were for Funding and Regulatory Facilitation followed by Testing and Standardisation. In one year close to 20 queries were addressed per month against 5-7 queries as mandated by NITI Aayog. BIS and NIB included as FIRST HUB partners.

FIRST HUB was launched on 10th August 2018 and within a short time has received huge response from Innovators across Country. The FIRST HUB is a platform to solve the queries of Innovators through face to face meetings, Telecon or E-mail. As future action plans, FIRST HUB Centres will be created in different regions of nation.



FIRST HUB completes one year of its operations

Workshop on Bio-Entrepreneurship, Intellectual Property Rights & Technology Management at IIT Indore

A two day workshop on Bio-Entrepreneurship, Intellectual Property Rights & Technology Management was jointly organized by Biotechnology Industry Research Assistance Council (BIRAC) and Biosciences & Biomedical Engineering Department, at IIT-Indore campus, Madhya Pradesh on 23rd and 24th July 2019. An overwhelming response was received from the participants. Total 60 participants were benefitted in the workshop which included Post graduate students, Faculties as well as Research scholars from IIT Indore, Devi Ahilya Vishwavidyalaya, Indore & various other institutes around the city.

The young minds were made aware of BIRAC's role in creating a start up culture and available funding opportunities with BIRAC. The speakers explained the role of Intellectual property, Technology transfer, IP portfolio and its importance in Techno –Entrepreneurship.



Workshop on Bio-Entrepreneurship, IPR & TM at IIT Indore

BIRAC Awareness workshop

Vellore- Workshop on IP&TM in Life Science

BIRAC organized one day workshop on “Intellectual Property & Technology Management in Life Sciences” in association with VIT-TBI, Vellore on 6th August, 2019. The objective of the workshop was to sensitize the Start-ups, Academia and SMEs on importance of Intellectual Property, Technology Transfer and Commercialization process and also on different funding opportunities available at BIRAC.

The workshop was well represented by about 50 participants from academic institutes, start-ups and aspiring entrepreneurs engaged in life science area. The workshop was focused on imparting the IP & Technology Management related knowledge to the audience. The workshop covered the topics such as key elements for effective grant writing, regulatory requirements for medical devices and diagnostics and the strategies to be considered by start-ups, academia while filing patent applications. Last session was focused on the overview of Technology Transfer and Product Commercialization.



BIRAC Awareness Workshop on IP & TM in Life Science at Vellore

Jaipur - Idea Exposition

Jaipur – Idea Exposition

Jaipur –Idea exposition was organized by BIRAC Regional Innovation Center (BRIC) in association with Dr. B. Lal Institute of Biotechnology on July 12th & 13th, 2019. Theme for the Jaipur-Idea Exposition was Biotechnology and Green Technology. A total of 29 entries were received for the Idea Exposition and 15 teams were shortlisted for mentorship to refine their ideas on the basis of prototype design, clinical need, business plans, IP and regulatory compliance. Out of these 15 teams, 5 winners were selected for Innovator Exposure Award.



Jaipur Idea Exposition

Chandigarh - Idea Exposition



Chandigarh Idea Exposition

Chandigarh-Idea Exposition

Chandigarh-Idea exposition was organized by BIRAC Regional Innovation Center (BRIC) in association with Chitkara University on July 19th & 20th, 2019. Entries for the Chandigarh-Idea exposition were invited in the area of Pharma and Diagnostics. A total of 29 entries were received for the Idea Exposition and 15 teams were shortlisted for mentorship to refine their ideas on the basis of prototype design, clinical need, business plans, IP and regulatory compliance. Out of these 15 teams, 4 winners were selected for Innovator Exposure Award.

BIRAC Social Innovation Programme Graduate “Ageing & Health” Batch of Social Innovator

SPARSH is the social innovation program of BIRAC aimed towards finding innovative solutions to society's most pressing social problems through biotechnological interventions. SIIP (Social Innovation Immersion Program), a component of SPARSH scheme, is BIRAC's social Innovation fellowship/award program aimed at creating a pool of biotech “Social Innovators” who could identify the needs & gaps within communities and then can help bridge the gaps either through an innovative product development or services.

15 Social Innovators working in the area of “Ageing and Health” under Social Innovation Immersion program completed their 18 months fellowship and successfully developed alpha – prototypes for most pressing problems of society in the area of geriatrics. The fellows after undergoing rigorous clinical and rural immersion for four months had come up with more than 50 problem statements each. These ideas are then refined and filtered to one idea with highest social impact and commercial potential by each fellow. The SPARSH Implementation Centres (Entrepreneurship Development Center, C-CAMP, SCTIMST – TIMED, and KIIT – TBI) along with SPARSH knowledge partner TISS, Mumbai and BIRAC mentored the fellows throughout the program.



SIIP-Social Innovators complete their fellowship



Few prototypes developed by the innovators

Under the program, 35 social innovators in three thematic areas namely, “Maternal and Child Health” “Ageing and Health” and “Waste to value” have been mentored, and several novel and interesting ideas to tackle related problems were generated. Some of these ideas were further refined and presently, around 30 prototypes are in various stages of product development cycle. Most of the Social Innovators who were mentored through the program have been successful in raising follow-on funding or starting their own enterprise.

National Workshop on Regulatory Compliance for Accelerating Innovation

The Department of Biotechnology (DBT) and Central Drugs Standard Control Organization (CDSCO) along with Biotechnology Industry Research Assistance Council (BIRAC), National Biopharma Mission and Clinical Development Services Agency (CDSA) have organized a series of workshops on "Regulatory Compliance for Accelerating Innovation". Four of these were held at New Delhi (ICGEB), Pune (NCL-VC), Bengaluru (C-CAMP), Hyderabad (NIPER).

The fifth workshop in this series was held at Guwahati (NIPER) on June 13th 2019. This workshop was attended by senior representatives from Government organizations, industry and academia. The panel discussions in the workshop were aimed to resolve the regulatory concerns in different product categories. These categories were medical devices, biosimilars, vaccines, blood derived products, new drugs and phytopharmaceuticals. The program witnessed 149 participants, 16 faculty members and 52 participating institutes, from across the country who benefited from this workshop by getting their regulatory queries clarified directly from CDSCO officials.



National workshop on regulatory compliances for accelerating innovation at NIPER Guwahati

The sixth workshop in this series was held on July 30th, 2019 at The Maharaja Sayajirao University of Baroda (MSU), Vadodara. This workshop was attended by senior representatives from Government organisations, academia, the medical device industry, in-vitro diagnostics, new drugs, biopharma, phytopharma representing various start-ups, hospitals, institutes etc. There was a total of 154 participants representing 87 institutes who attended this interactive meet. There were 16 faculties (mainly regulators) represented by senior experts, present and former regulators from CDSCO (Central Drugs Standard Control Organisation); BIS (Bureau of Indian Standards); CDSA, THSTI (Translational Health Science & Technology Institute); NABCB, QCI (National Accreditation Board for Certification Bodies, Quality Council of India) and NIB (National Institute of Biologicals). There were 3 major themes (medical devices; new drugs & phytopharma and biopharma) and all questions were addressed by the regulators.



National workshop on regulatory compliances for accelerating innovation at MSU-Baroda, Vadodara

HR & Admin Activities

Training & Development

Training & Development Conflict is inevitable in social and professional life of every individual. Different types of conflicts exist in interpersonal relationships and among the group or team members. An in-house training session has been organised for BIRAC employees on 16th July 2019 on Conflict Management by Fore School of Management. The training session helped employees understand significant aspects of conflict at workplace, explore the approaches to manage conflicts and learn to engage in a few crucial behaviours to effectively manage conflicts.



BIRAC officials attending a training session on Conflict Management

Fire Safety Drill

Fire Safety Drill was organised in BIRAC 22nd August 2019 by DRDO wherein a lecture was delivered about types of fire and how to respond quickly, calmly, and safely in case of fire. Employees were also briefed about the best way to minimize the risk of fire and to understand the potential threats and put in place preventive measures. The purpose of this fire drill was to ensure that everyone knows how to exit safely as quickly as possible if a fire or other emergency occurs. BIRAC employees were also educated on the principles and practices of using a fire extinguisher and the hazards associated with fighting small or developing fires with hands on training.



Fire safety drill organized at BIRAC

Grand Challenges India



of fostering this collaboration. Stanford and DBT leadership teams met in India for a 3-day meeting from 25th June -27th June 2019 to discuss and clarify primary objectives of setting-up the data repository and identify categories (e.g. biological, genetic, clinical) of health-related data which are of great interest to government bodies.

The three day meeting was inaugurated by Dr. Renu Swarup, Secretary, DBT on 25th June 2019. This meeting aimed at structuring the setting up of 'National Data Repository' in India for the very first time.

The Genome India project and Human microbiome project, which have resulted in immense quality data sets were discussed. It was reiterated that developing a strong ecosystem for data systems inclusive of capacity building, infrastructure, long term sustainability, continuous financial support and digitization that can be achieved as a team and in collaboration with all the stakeholders.

The DBT Funded Cohorts like GARBH-Ini cohort, Indian Chronic Kidney Disease Cohort Study and Regional Prospective Observational Research for TB (RePORT) India Consortium snapshots were presented by the Principal Investigators and their teams. The grantees mentioned how the well documented and stored data is useful in developing new collaborations with other Universities for developing algorithms to assess maternal risks. The overview of BDSASP (Biological Data Access and Sharing Policy of India) was presented by Dr. Binay Panda from Ganit Labs, Bangaluru. The Stanford, PHS team provided with an overview of PHS and its data capabilities/services and deep-dive into two use cases/examples.

The second day of the meeting started with a presentation by Vishak Subramoney from Certara Strategic Consulting. He gave an overview of the Grand Challenges India's ki (Knowledge Integration) initiative which is a program designed to collect, curate, analyze data in Maternal & Child Health (MCH) space from across the globe to answer key research questions to improve maternal and child health. All the stakeholders (Stanford PHS, NIC, Cohort experts, PIs, DBT and IFMR) had cross-table discussions for setting up the National Data Centre like operations, training, data sharing and access etc. Dr. M. K. Bhan said that there is a lot of sensitivity among research groups in contributing old data and it is indeed a very difficult task to collect high-quality data. He stressed upon the use of a consortium approach and its feasibility. He suggested that a committee be established with experts who have experience of working in this area.



Dr Shirshendu Mukherjee, Mission Director, Grand Challenges India, addressing the participants at the DBT-Stanford National Data Centre Meeting.

DBT- Stanford National Data Centre Meeting

The Government of India through Department of Biotechnology recently announced 'Biological Data Storage, Access and Sharing Policy of India (BDSASP)' aiming at broad research use of biological data that enhances public benefits by facilitating speedy discoveries in biosciences directly associated with the human being.

Towards this, at the invitation of Department of Biotechnology (DBT), the Stanford Centre for Population Health Sciences (PHS) agreed to provide strategic guidance for the creation of a national health data repository/ecosystem that will allow diverse stakeholders across India to securely access, share, and link a rich pool of high-quality health-related data. BIRAC along with DBT was entrusted with the task



Dr Renu Swarup, Secretary DBT & Chairperson BIRAC addressing the participants at the DBT-Stanford National Data Centre Meeting.

driven model rather than a research Institute. This will be a participatory activity steered by DBT and shall include contributions from various Ministries and Institutions. She emphasized that now is an opportune time to have an India centric model in terms of providing access to right architecture for this data Centre.

The Stanford team visited Translational Health Science Technology Institute (THSTI), on June 27th 2019, to see biorepository and imaging data to the project site and to gain understanding of the parent cohort/ study from which biorepository has emerged and learned about the sub-studies that had been/ are being proposed from the ongoing study.

Dr. Shinjini Bhatnagar and her team updated the Stanford team on the multi-institutional interdisciplinary program on preterm birth (PTB), which is the parent cohort/study from which biorepository study has emerged and about various sub-studies being proposed from biorepository. The Stanford team and Mission Director GCI also planted trees at THSTI campus.

Grand Challenges Exploration-India

The Grand Challenges Exploration (GCE)-India is a unique fast pace program that intends to provide seed funding to the highly innovative ideas at pre-proof of concept stage to address challenges specific to the Indian public health domain. Since inception (August 2015) five calls have been launched under the GCE-India platform. The Round 5 call was launched on 15th January - 28th February 2019 with focus on 11 problem statement. The call mandates were specifically drawn from the diverse domain of maternal and child health (MCH), health or behaviour change wearables, diagnostics and devices, cervical cancer, antimicrobial resistance (AMR), agriculture and nutrition, geriatric care and sanitation. The initiative basically seeks to validate ideas from talented and motivated individuals that lend themselves to be incubated in start-ups across India with the aim to encourage entrepreneurship in India.

The program received an exceptionally overwhelming and high-quality response (703 applications under 11 different mandates) in this round of GCE. The evaluation process is over and proposals have been recommended for funding support subject to further due-diligence processes.

Knowledge Integration and Translational Platform

Knowledge Integration and Translational Platform (KnIT) is a unique knowledge synthesis platform that was launched to address a particular set of challenges that the states in India face today, with respect to designing evidence-based policy for public health. The platform identifies gaps in our knowledge and policy and synthesizes currently available evidence to improve our understanding of current or new interventions or packages of interventions to address the major health issues in our country. The platform works by conducting extensive systematic reviews and will conduct workshops and other meetings to widely share the findings of these studies.

After deliberations of the Scientific Advisory Committee (SAC) the KnIT is currently focusing on two specific areas of public health: (i) Maternal and Child Health (MCH) issues and (ii) Nutrition

The Nutrition track is examining public health and medical interventions to mitigate stunting, wasting, severe malnutrition, low birth weight, optimal body composition and metabolic unfitness or obesity. The nutrition domain has worked on areas where there are important questions to be addressed such as low-birth-weight babies, anaemia, complementary feeding and diarrhea among others.



Experts & GCI Team at Knit SAC Meeting



Technical Advisory Group Meeting for GCE program

The MCH domain is focusing on identifying the health system challenges that are barriers to effective, equitable, impactful delivery of health services and identifies strategies on how to overcome them. It also focuses on designing delivery strategies based on evidence, and piloting and evaluating programs aimed at improving program delivery. Further, it also directs implementation research to optimize primary and secondary level healthcare and generating evidence-based, human resource linked strategies relevant to MCH.

The KnIT platform also has State Interaction Unit (SIU), whose prime mandate is to interact/support the state governments and policymakers. So far, the platform has supported the governments of Rajasthan, Himachal Pradesh, Haryana and Odisha.

The progress so far and the scope of work for both the domain centres were reviewed by the SAC in person. In the SAC meeting held on 3rd September both the domain centres were invited to make a technical presentation on the outputs and outcomes of their designated work and proposed plan for the next year.



Ki data challenge Round 2.0-GCI Mandate Exploration Meeting

Ki data challenge Round 2.0- Grand Challenges India

Mandate Exploration Meeting

A brainstorming session was organized on 31st July at BIRAC office with all the relevant experts from various relevant scientific fields (including DBT scientists, BMGF experts, Pediatricians, Data scientists, Community medicine clinicians, nutrition experts, economists and program management team) to discuss the scientific questions to be explored in Round 2.0 of ki data challenge call. This call is second in the specific data analytics funding program targeted towards solving problems in maternal and child health space. The purpose of the meeting was to discuss and shortlist the topics that will be included in the RFP and these challenges are pertaining to our country-specific priorities.

Social Alpha

Launch of BIRAC-Social Alpha Quest for Assistive Technologies supported by Mphasis

BIRAC has partnered with Social-Alpha to foster an ecosystem to develop Assistive Technologies (AT) solutions. The 'BIRAC-Social Alpha Quest for Assistive Technologies—supported by Mphasis (industrial partner)' was launched on 27th June 2019 at Indian Habitat Centre in New Delhi with a view to identify start-ups working in the AT sector and to support their innovations focussed on enabling and empowering solutions for Persons-with-Disabilities (PwDs). The event showcased the need of an 'Assistive Technology Program' which would cover affordable, innovative, assistive, adaptive, and rehabilitative devices/solution deployment for PwDs or elderly population. The quest launched will select 10 start-ups working towards independent living for PwDs and these selected innovators will be facilitated towards an accelerator program. Additionally, these start-ups will be financially assisted for clinical validation for designing, manufacturing & certification support as well as towards the go to market facility and commercial deployment of their products. A seed investment will be further granted to the finally selected cohort of the start-ups. This BIRAC-Social-Alpha partnership will encourage national & international stakeholders to join hands in scaling AT sector and would provide a platform for start-ups to create and deploy innovative assistive technologies across the country. The speakers at the launch included, Manoj Kumar, CEO and Co-founder, Social Alpha, and Head of Innovation and Entrepreneurship, Tata Trusts, Meenu Bhambhani, Vice President & Head-Corporate Social Responsibility, Mphasis, and Dr. Manish Diwan, Head Strategy, Partnership & Entrepreneurship Development, BIRAC.



Launch of BIRAC-Social Alpha Quest for Assistive Technologies supported by Mphasis



Dr. Manish Diwan, Head SPED, BIRAC addressing the audience at the launch event

National Biopharma Mission



Discussion Forum on Platform and Health Technologies for Infectious Diseases with Epidemic Potential

The Ind-CEPI Mission of Department of Biotechnology, “Epidemic preparedness through rapid vaccine development: Support of Indian vaccine development aligned with the global initiative of the Coalition for Epidemic Preparedness Innovations (CEPI)” is to be implemented by BIRAC. The Ind-CEPI Mission aims to strengthen the development of vaccines and associated technologies for the diseases of epidemic potential in India as well as build coordinated preparedness in the Indian regulatory system, public health system and vaccine industry to address existing and emergent infectious threats in India.

In view of the same, BIRAC hosted a discussion forum of CEPI officials, DBT and THSTI representatives from industry & academia on 1st August 2019 in Delhi. The representatives of industry & academia briefly deliberated upon the following points:

1. Various platform technologies currently being worked on, without sharing any proprietary knowledge (Understanding of platform technology: A system that uses the same basic components as a backbone, but can be adapted for use against different pathogens by inserting new sequences.
2. Seek Inputs on new/novel platform technologies that industry/academia would like to be supported through different mechanisms.
3. Recommendations on the key R&D areas and the disease to be considered for better epidemic preparedness.

The intent of soliciting these presentations was to seek inputs towards developing the R&D portfolio of Ind-CEPI.



Dr Renu Swarup, Secretary DBT & Chairperson BIRAC, Dr Gagandeep Kang, Executive Director, THSTI, Dr Kavita Singh, Mission director National Biopharma Mission at the Discussion Forum on Platform & Health Technologies for Infectious Diseases with epidemic Potential in New Delhi.

National Biopharma Mission

Technology Transfer and Commercialization Training-2019

The National Biopharma Mission with an aim to strengthen technology transfer capability in India launched the technology transfer and commercialization training. The participants of this training program would be eligible to qualify for RTTP CE credits. The first training in this series was held in Pune during September 08-12, 2019 while the second was held at Hyderabad, September 13-17, 2019. The sessions and practice exercises were conducted by national and international experts across two modules.

Dr. Richard S. Cahoon, President, BioProperty Strategy Group, Inc. Visiting Fellow, Cornell University, Dr John A Fraser, Founder, Burnside Development, LLC, Dr Vijayraghavan Kannan, Founder and Chairman of Sathguru Management Consultants and Dr Pushpa Vijayaraghavan, Director & Practice Lead Healthcare Advisory, Sathguru Management Consultants were the lead trainers for this program besides other experts from industry.

Participants were given insights into various aspects of Technology Prospecting, Invention Disclosure, Evaluation and Selection, IP Tools, Convergence of Tech/IP/Market, Models for New Technology Commercialization, Start-ups & Spin-outs, Technology Valuation, Technology Marketing, Licensing Experiences, Lessons Learned, License Elements, License Agreement Details, Research & Collaboration Contracts, License Negotiation, Agreement Monitoring and TTO Operations.



Dr Shirshendu Mukherjee, Mission Director, Grand Challenges India
along with the faculty and participants at the National Biopharma Mission sponsored "Technology Transfer and Commercialization Training-2019" at Hyderabad, 13th-17th Sep 2019



Dr Kavita Singh, Mission Director, National Biopharma Mission
along with the faculty and participants at the National Biopharma Mission sponsored "Technology Transfer and Commercialization Training-2019" at Pune, 8th-12th Sep 2019



Biotechnology Industry Research Assistance Council (BIRAC)

(A Govt. of India Enterprise)

Call for Proposals under **SITARE**

**Students Innovations for
Translation & Advancement
of Research Explorations**

SITARE scheme
provides Orientation, Training and Funding
for young students to embrace translational research for
development of innovative products and technologies
addressing unmet needs.

1. BIRAC SITARE-Gandhian Young Technological Innovation Grant Award (SITARE-GYTI)

Eligibility: Student pursuing Masters/PhD in any discipline

- Project should have commercial potential leading to formation of a biotech start-up

For SITARE-GYTI

Apply before 31st October, 2019 (05:30 p.m.)

Upto
INR 15 Lakh
Funding
support

2. BIRAC SITARE-Appreciation Grant Award

Eligibility: Student pursuing Graduation in any discipline

Up to 50 Students each are selected for fully funded residential BIIS* workshops
Top 10 Students from each BIIS workshop are awarded SITARE-Appreciation Grant Award

Upcoming BIIS: 13th November to 03rd December, 2019, Venue: Gandhinagar, Gujarat

For BIIS

Apply before 11th October, 2019 (05:30 p.m.)

INR
1 Lakh
Grant
Award

*Biotech Innovation Ignition School (BIIS)

Students from Tier II/III cities are encouraged to apply

Apply online only under "SITARE" at BIRAC website (www.birac.nic.in)

BIRAC's SITARE Partner:

Society for Research and Initiatives for Sustainable Technologies and Institutions (SRISTI)
www.sristi.org, email: gyti.techpedia@sristi.org, contact: +91 9925320793

Guidelines, FAQs link: https://www.birac.nic.in/desc_new.php?id=581

For further queries: spedo2.birac@nic.in





**Biotechnology Industry Research Assistance
Council (BIRAC)**
(A Govt. of India Enterprise)



41

**TOTAL
BIOINCUBATORS
SUPPORTED**

**440000+
SQFT**

**TOTAL
BIOINCUBATION
SPACE CREATED**

600+

**INCUBATEES
SUPPORTED**



**Would you like to be a Biotech startup
ecosystem enabler?**

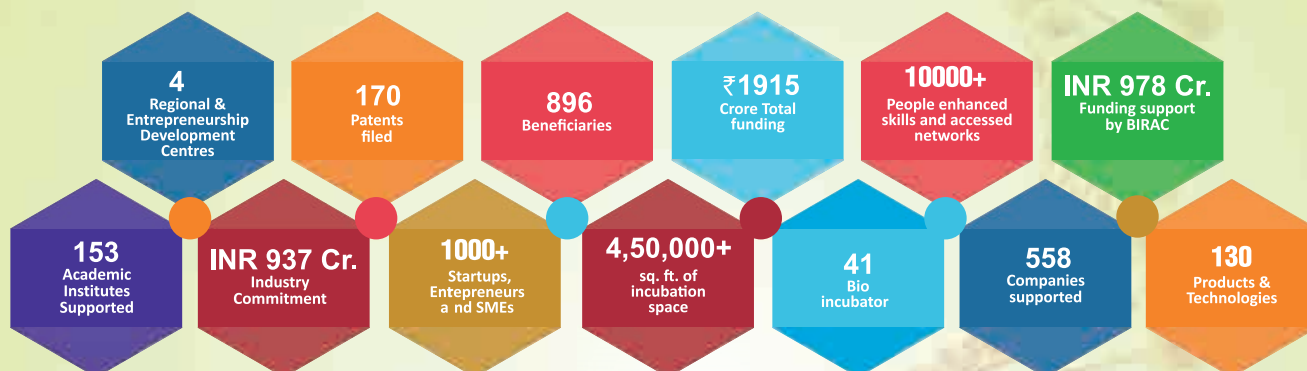
*Partner with BIRAC to establish a BioNEST-Bioincubator at
your facility and help startups grow into successful
enterprises*

Who can apply:

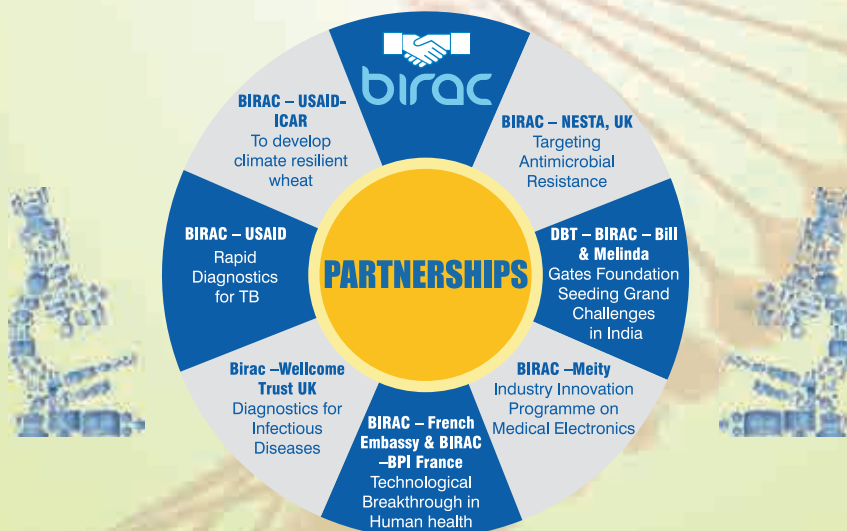
**Research Institutes/Universities/Research Hospitals/Organizations
fostering Innovation & Entrepreneurship in Lifesciences/Existing
Incubation Centres**

For programme details please visit <https://www.birac.nic.in/bionest.php> or
Contact: Dr. Chhaya Chauhan, Manager Incubation (sped4.birac@nic.in) or
Dr. Manish Diwan, Head SPED (sped.birac@gov.in)

BIRAC IMPACT



Aligning Partnerships for National & Global Impact



Partnerships For Networks, Platforms & Market Access

WISH – BIRAC – Lords Education and Health Society (LEHS), Through its WISH Initiative : Scaling Innovations through Testing Beds

BIRAC – Business Finland : Enhancing Competitiveness

BIRAC – TISS - (Tata Institute of Social Sciences) : Mentoring innovators and Assessing impact

BIRAC – ICMR (Indian Council of Medical Research) :

BIRAC AcE Fund Partners : Funding Oxygen for the Next Level

BIRAC – TIE (The Indus Entrepreneurs) : Platform for Global Networking

BioCubaFarma : Transfer of technologies and commercialization of innovative healthcare products

BIRAC – ALEAP, BIRAC – TIE : Promote Women Entrepreneurship

For further information please contact:

Biotechnology Industry Research Assistance Council (BIRAC)

1st Floor, MTNL Building, 9, CGO Complex, Lodhi Road, New Delhi-110003, INDIA

Tel: + 91-11-24389600 | Fax: + 91-11-24389611

E-mail: birac.dbt@nic.in | Web: www.birac.nic.in

Follow us on : [BIRAC_2012](https://twitter.com/BIRAC_2012)