

GLOBAL BIO- INDIA 2019
21-23 November 2019, Aerocity, New Delhi
PROGRAM - Day 1

DATE	TIME	Hall - ATGC	Hall - RNA	Hall - DNA	Hall - Electron	Hall - Proton			
21st November (Thursday)	10:00 am - 11:00 am	SUPER SESSION 1: Biosciences to Bio-Economy A Conversation with the Policy Leaders (Hall - ATGC)							
	11:00 am - 11:30 am	Coffee/ Tea Break							
	11:30 am - 01:00 pm	Inauguration of the Event (Hall - ATGC)							
		Inauguration of the Exposition (Hall - Atom/Molecule)							
	01:00 pm - 02:00 pm	Lunch							
	02:00 pm - 03:00 pm	SESSION 1: BioEconomy of India: Facts How India is Striving to become a \$ 100 billion BioEconomy by 2024? (Hall - ATGC)	SESSION 2: Destination India: The Vibrant Innovation Ecosystem (Hall - RNA)	SESSION 3: Clean Energy: Mission Innovation (Hall - DNA)				Bio-Partnering	
	03:00 pm - 04:00 pm	SESSION 4: India's Emergence as a Global Biological Manufacturing Giant (CEO Panel) (Hall - ATGC)	SESSION 5: State Showcase (Hall - RNA)		SESSION 6: State Connect (Hall - Electron)				
	04:00 pm - 04:30 pm	Coffee/ Tea Break							
	04:30 pm - 6:00 pm	SESSION 7: Biosimilars Regulatory: Indian & Global perspective (Regulators & CEOs Panel) (Hall - ATGC)	SESSION 8: Global Partnership Opportunities (Hall - RNA)	SESSION 9: Anti-Microbial Resistance (DBT/ BIRAC, ICMR, CARB- X, NESTA, Industry, Lead Innovations) (Hall - DNA)					
06:00 pm - 07:15 pm	SESSION 10: Emerging Technologies for Biologics Manufacturing & Analytics (Supplier, Regulator, Industry) (Hall - ATGC)	SESSION 11: Showcasing the Strength of International Partnerships (Hall - RNA)	SESSION 12: Global Examples of Big Data in Health (Hall - DNA)	CEO Round table By Invite only 5:30 pm - 7:00pm (Hall - Electron)					
				Compliance Program on Global Harmonization By invite only 6:15 pm - 8:15 pm (Hall - Proton)					

GLOBAL BIO INDIA 2019
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PROGRAM - Day 2

DATE	TIME	Hall - ATGC	Hall - RNA	Hall - DNA	Hall - Electron	Hall - Proton		
22nd November (Friday)	10:00 am - 11:00 am	SUPER SESSION 2: Vaccinating India and the World (Hall - ATGC)	SESSION 13: Product Launch - Startups Launch of Lab2Market Catalogue 2019 (Hall - RNA)	SESSION 14: India partnering to address Global Challenges (Gates foundation, Wellcome Trust, World Bank) (Hall - DNA)	Round table Meeting (PhRMA session) 10:00 - 11:30 am (Hall - Electron)		Bio-Partnering from 8:30 am ~	
	11:00 am - 11:30 am	Coffee/ Tea Break						
	11:30 am - 12:15 pm	SESSION 15: Next 10 years for Vaccinology (Hall - ATGC)	SESSION 16: Enablers for Startup Ecosystem & Market Access Facilitators (Hall - RNA)	SESSION 17: Biofuels (Hall - DNA)	SESSION 19: Know All About Startups, Incubators - (Institution Directors, Vice Chancellors ONLY) (Hall - Electron)	Medical Devices Workshop 10:00 am - 2:00 pm (Hall - Proton)		
	12:15 pm - 1:15 pm			SESSION 18: Waste to Value: Clean technologies (Hall - DNA)				
	01:15 pm - 02:15 pm	Lunch						
	02:15 pm - 03:30 pm	SESSION 20: Destination India: BioPharma R&D (Hall - ATGC)	SESSION 21: Healthcare Technologies from India to the world Startups to Industry Showcase (Hall - RNA)	SESSION 22: Agri-tech: Future Technologies, Scaling, Reaching out to ground level farmers (Hall - DNA)	SESSION 23: Regulatory Roadmap: Novel Preventive Vaccine & Advanced Therapeutics (Hall - Electron)	Capacity building Part 1: Indian Scenario: Current Status and Gap Analysis		
	03:30 pm - 04:30 pm	SESSION 24: Bio-Services Industry (Hall - ATGC)	SESSION 25: Startups scale to Global Markets through partner countries (Hall - RNA)	SESSION 26: Agri focus: Industry and Academia deploying new technologies (Hall - DNA)		Part 2: Enhancing Growth and Global Competitiveness 2:30 pm - 4:30 pm (Hall - Proton)		
	04:30 pm - 05:00 pm	Coffee/ Tea Break						
	05:00 pm - 06:00 pm	SESSION 27: Launch of Biotech Angel Network (Hall - ATGC)	SESSION 28: Innovations contributing to National Missions: Water Swachh Bharat Nutrition Ayushman Bharat (Hall - RNA)	SESSION 29: Intellectual Property Rights (Hall - DNA)				
	06:00 pm - 07:30 pm	GLOBAL BIO-INDIA 2019 AWARD CEREMONY BIRAC's Innovators Awards Launch of New Initiatives Celebrating 10 years of BEST (ABLE-DBT's Biotech Student Entrepreneurship Program from 2009 to 2018) DBT-Biotech Product Process Development and Commercialization Awards (Hall - ATGC)						

GLOBAL BIO INDIA 2019
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PROGRAM - Day 3

DATE	TIME	Hall - ATGC	Hall - RNA	Hall - DNA	Hall - Electron	Hall - Proton	
23rd November (Saturday)	9:30 am - 10:30 am	Super SESSION 3: Academia - Startup Policies <i>(Hall - ATGC)</i>	SESSION 30: Med-Tech Certification, Testing (CROs, CSIO, KIHT, BIS) <i>(Hall - RNA)</i>	SESSION 31: International Incubator Connect <i>(Hall - DNA)</i>	SESSION 32: FIRST HUB - Regulatory support for Startups <i>(Hall - Electron)</i>	Boot Camp Drug Development Risk Assessment through Data Analytics 9:00 am - 3:00 pm <i>(Hall - Proton)</i>	Bio-Partnering from 8:30 am ~
	10:30 am - 11:00 am	Coffee/ Tea Break					
	11:00 am - 12:30 pm	SESSION 33: Industry - Academia Cross Talk <i>(Hall - ATGC)</i>	SESSION 34: Next 10 years for Med-Tech Industry (CEO Panel) <i>(Hall - RNA)</i>	SESSION 35: Next 10 years for Industry - Advanced Technologies (AI, BIG Data, First-In-Class drug discovery, Cellular therapies) <i>(Hall - DNA)</i>	SESSION 32: FIRST HUB - Regulatory support for Startups <i>(Hall - Electron)</i>		
	12:30 pm - 1:15 pm	Lunch					
	1:15 pm - 2:45 pm	SESSION 36: Director's Forum: Academic Assets Showcase <i>(Hall - ATGC)</i>	SESSION 37: Med-Tech Regulatory: Indian & Global perspective (Case studies, Regulators - US, EU, Jpn, India) <i>(Hall - RNA)</i>		SESSION 38: Social Innovation <i>(Hall - Positron)</i>	Boot Camp Drug Development Risk Assessment through Data Analytics 9:00 am - 3:00 pm <i>(Hall - Proton)</i>	
	2:45 pm - 3:30 pm	Closing Ceremony					



Global Bio-India 2019
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Biosciences to Bio-Economy
A Conversation with the Policy Leaders
Super Session, Day 1

11:45 am -1:00 pm

High powered forum of Ministries/ Departments responsible for government initiatives that align and steer India towards USD 5 Trillion Economy by 2024. The forum would discuss Indian Bio economy current scenario, future Roadmap in light of USD 100 Billion Bio economy target of India by 2024-25 highlighting the action points, policy framework & implementation strategy for transforming lives through advances in Biosciences impacting billions.

Moderator:

Dr. Renu Swarup, Secretary DBT

Panellists:

Prof. Ashutosh Sharma, Secretary, DST

Dr. Balram Bhargava, DG, ICMR

Dr. Vinod Paul, Member Health, NITI Aayog



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BioEconomy of India: Facts
How India is striving to become a \$ 100 billion BioEconomy by 2024?

Session 1 Day 1
02:00 pm-3:00 pm

*Official release of **Indian Bio Economy Report (IBER)** will be done at this special forum. The consolidated report based on latest data representing the Biotech Sector contribution to the Bioeconomy. This release will be followed by regular updates unto 2024-25 to track the progress.*

*This would be followed by an overview presentation on **Roadmap for the Indian Biotechnology Industry Report**. Let's hear if there could be a room to accelerate through policy initiatives, what are the gaps and grey areas that can either accentuate or stump Indian Biotech Sector's USD 100 Billion Bioeconomy journey to 2025.*

Moderator:

Dr. Kiran Mazumdar Shaw, Chairperson & Managing Director, Biocon Ltd.

Panellists:

Prof. P M Murali, President, ABLE

Dr. Amit Kapoor, CEO, Institute of Competitiveness

Dr. Cyrus Poonawalla, Chairman, Serum Institute of India Pvt. Ltd. Pramod

Chaudhari, Founder & Executive Chairman, Praj Industries Dr. V. Sashi

Kumar, Managing Director Phoenix Medical Systems (P) Ltd Dr. Usha

Zehr Barwale, Director, Mahyco

Dr. Ajay Bhardwaj, Chief Executive Officer, Anthem Bioscience



GLOBAL BIO INDIA 2019
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Destination India: The Vibrant Innovation ecosystem
Session 2 - Day 1
02:00 pm – 3:00 pm

India is a recognized destination for Biotechnology Startups, data analytics, data management in the IT sector, Knowledge processing, chemical sciences etc. Various policy interventions and reforms have resulted India to achieve 1st Ease of Doing Business ranking in South Asia and 52nd rank in the Global Innovation index. Biotechnology as a chief contributory sector to the ambitious goal of 5 Trillion USD is aspired to make India a Startup nation witnessing rapid growth in numbers of Biotech Startups in the country.

This Session would deliberate upon what would make India as a favourite destination for Manufacturing Hub, Supply Chain Centre, Innovation Hub, Biotech Manufacturing, Knowledge source and Human Capital of the world besides contributing as a Global Market.

Panellists:

- Dr Samiran Mohapatra, Director, Open Innovation Asia, Unilever
- Dr. Abhay Jere, Chief Innovation Officer (CIO) | Innovation Cell , Ministry of HRD, Govt. of India
- Anurag Agrawal, Aavishkaar Group
- Dr. Harkesh Mittal, HEAD, Science & Engineering Research Council (SERC), DST



GLOBAL BIO INDIA 2019 **21-23 November, New Delhi**

Clean Energy: Mission Innovation

Session 3 Day 1
02:00 pm - 04:00 pm

Mission Innovation (MI) is a global initiative of 24 countries and the European Commission to reinvigorate and accelerate global clean energy innovation with the objective to make clean energy widely affordable. The panel would talk about various clean energy innovations to achieve cost reductions to provide widely affordable and reliable clean energy solutions that will revolutionize energy systems throughout the world over the next two decades and beyond. India's commitment, role and preparedness in this context will be discussed.

The session would also include views on Enabling Framework for Mission Innovation from clean energy business leaders, experts, policymakers, and other stakeholders. In addition, it would be deliberated upon how to collaborate in the area of Innovation and Incubation between MI members. In the session the panel members will share briefly their respective countries country and industry level priority areas and strength to promote possible co-operation and collaboration. What could be the existing mechanisms possible? Recommendations for new joint initiatives to support this global cause and collaborative efforts.

Moderator:

Dr. Ganesh Das, CEO CEIIC

Panellists:

- Dr. Klaus Känsälä, Senior Scientist, Industrial IoT/Smart Energy/VTT, Technical Research Centre of Finland
- Ms. Nina Jacoby, Senior Advisor, Business Finland Prof. Ole Gunnar Dahlhaug, Department of Energy and Process Engineering, The Norwegian University of Science and Technology, NTNU
- Mr Claus Meineche, Chief Project Manager hos CLEAN, University of Southern Denmark
- Mr Tom Ogaranko, Chief Innovation Officer, Trust BIX, William and Mary School of Law, Edmonton, Alberta, Canada
- Dr. Arokiaraj Jesudoss, Senior Technical Leader,3M



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India's Emergence as a Global Biological Manufacturing Giant
(CEO Panel)

Session 4 Day 1
03:00 pm-4:00 pm

This CEO's panel representing Vaccine and biotherapeutics manufacturing sector in India would deliberate on the sectoral strength of Indian Bio manufacturing and how India has emerged as a manufacturing leader to cater the need of the world. The session would provide insights of current and future strategy aimed to create India as a global hub of Biological manufacturing sector, disrupting and creating new supply chains for regulated and non-regulated market and, expansion plans

Moderator:

K. Vijayraghavan, Chairman, Sathguru Management Consultants

Panellists:

- Dr. K Anand Kumar, Managing Director, Indian Immunologicals Ltd.
- Dr. Pankaj Patel, Chairman & Managing Director, Cadila Healthcare
- Dr. Rajesh Jain, Managing Director, Panacea Biotec Ltd.
- Dr. Suresh Jadhav, Executive Director, Serum Institute of India Ltd.
- Dr Cyrus Karkaria President Biotechnology Division Lupin Ltd.
- Dr Sridevi K Vice President Intas pharmaceuticals
- Paul Thomas Chief Commercial Officer (CCO), Biocon Biologics



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State Showacse

(Sponsored by Gujrat and Karnataka)

Session 5- Day 1

Hall RNA

03:00 pm - 04:00 pm

This sponsored session would include Indian states registered for the event and willing to showcase its Innovative strength through no. of technologies developed, IPs generated, and No. of functional Biotech companies in the state etc. States may also use this platform to talk about its Startups, Entrepreneurs & SME policies to nurture existing entities and tax incentives & facilitation provided to attract investment in the states.

- **Moving Biotech Ecosystem in Karnataka from GOOD to GREAT**

(Sponsored by Karnataka: 3:00 pm – 3:30 pm)

- Dr. A. N. Bhadalkar, Joint Director-Gujarat State Biotechnology Mission (GSBTM) & Director- Savli Technology & Business Incubator (STBI)
- Dr. Taslimarif Saiyed, CEO and Director, C-CAMP
- Dr. Srisunder Subramaniam, CEO, Venture Studio, Ahmedabad University, Ahmedabad
- Mr. Arjun Goyal, CEO, Sristi-Bionest , Gandhinagar
- Mr. Rajneesh Prasad, Director, Revy Environmental Solutions Pvt. Ltd
- Mr. Hitesh Chauhan, MD, EDGE Labs

- **Start-up Ecosystem & Government Support in Gujarat**

(Sponsored by Gujrat: 3:30 pm – 4:00 pm)

- Dr. G S Krishnan, Ex-Chief , Novozymes
- Mr.Kshitish Acharya K, Scientist, IBAB
- Ms. Pooja Venkatesh, Next Big Innovation Labs Pvt. Ltd.
- Dr. Ezhil Subbianne, CEO, String bio
- Dr. Hrishikesh Damle,CEO,Atrimed
- Dr. Jitendra Kumar,MD,BBC

- **Closing Remarks- MII, BIRAC**



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State Connect Session

Session 6 - Day 1

Hall Electron

02:30 pm - 04:00 pm

Aligned with the National priorities, several states have formulated Biotech Policy. There are special incentives for setting up manufacturing facilities, single window clearance, tax rebates, Soft loans for SMEs, Startup funds, Incubation centres, SEED funding etc. that can be over and above the central government incentives as part of the overall facilitation under Make In India, Invest in India. Key officials from the states would talk about various state policies to nurture Startups, Entrepreneurs, SME's and large industry. States would pitch about their existing ecosystem strength and wish list to strengthen themselves by aligning with Central Agencies.

- Opening Remarks : Dr Mohd Aslam, Advisor DBT & MD BIRAC
 - Time: 2:30 pm - 2:35 pm
- Mr. Ashok Chandra Panda, Hon'ble Minister, S & T, Govt of Orissa
 - Time: 2:35 pm - 2:50 pm
- Dr Ajit Dua, CEO-PBTI & Director Punjab State Biotech Corporation
 - (MoU signing between DSTE-state of Punjab & BIRAC 2:50 pm - 3:10 pm)
- Mr. Jayesh Ranjan, IAS, Principal Secretary, Industries & Commerce Deptt, Govt of Telangana
 - Time: 3:10 pm - 3:40 pm
- Dr Rakesh K Arya, DG, MPCST, Govt of Madhya Pradesh
 - Time: 3:40 pm - 3:45 pm
- Dr Rajendra Kumar, IAS, EDII-Tamilnadu
 - Time: 3:45 pm - 3:50 pm

- Dr Girish Chandel, Professor & CEO, Chhattisgarh Biotech Promotion Society, Govt. of Chhattisgarh
 - *Time: 3: 50 pm - 3:55 pm*

- Dr. Lalchandami Tochwawng, Scientific Officer, Mizoram Science, Technology & Innovation Council
 - *Time: 3:55 pm – 4:00 pm*

- Closing Remarks



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Biosimilars Regulatory: Indian & Global perspective
(Regulators & CEOs Panel)

Session 7 Day 1
04:30 pm- 6:00 pm

Biosimilars are poised to transform healthcare sector. It has opened up tremendous opportunities for manufacturing investments in capex, highly skilled human resources and of course, a competitive field that has influenced Biotech Industry in India and South East Asia. However, the democratization of Biologicals accessibility through manufacturing of affordable Biosimilars has also posed certain regulatory challenges at the same time. Regulators and Industry CEOs would discuss the regulatory landscape in light of few under development/ developed products in India, SE Asian countries with Indian and Global regulatory authorities. Unlike small molecules not many regulatory filings have been made in the major jurisdictions such as the USA, EU and MHRA. Further, the regulatory pathway could be very complex, lengthy and unpredictable due to lack of precedent. It will be interesting to have a discussion between the industry and regulatory towards this growing sector.

The session will provide 3 case studies followed by a CEO panel.

Moderator:

Sujay Shetty, Chairman, Partner Oversight Committee, PwC

Panellists:

- Dr. V. G. Somani, Drug Controller General of India, CDSCO
- Dr. Ian Hudson, Former Chief Executive Medicines and Healthcare Products Regulatory Agency (MHRA), UK
- Dr. Vinay Ranade, CEO, Reliance Lifesciences
- Dr. Sudheendra Kulkarni Medical Product Safety Coordinator U S Food And Drug Administration
- Dr. Sundar Ramanan VP, Regulatory Biocon Mr Krishna Prasad General Manager M J Biopharm Ltd.
- Dr. Nitin Jain Scientist F-DBT (RCGM) Department of Biotechnology



Power to Transform Lives

Bioscience to Bioeconomy-USD 100 Bn By 2025
Led by Department of Biotechnology, Govt. of India

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Global Partnership Opportunities

Session 8 Day 1

04:30 pm - 06:00 pm

Hall RNA

This international partnership session will provide a forum to interact with national (government & private) and international representative. The forum would highlight the best practices, activities, initiatives and achievements of the partner country's Biotechnology sector viz. Healthcare, Lifesciences, Industrial Biotech, Agri-tech, Clean Energy & Bio-services, in this platform. This will be an opportunity to showcase representative countries as a sourcing and exporting destination to Indian as well as International Biotechnology industry. This session will help to attract government and private sector of both countries to do joint ventures and collaborations.

4:30 pm – 4:40 pm Address by Mohd Aslam – Managing Director, BIRAC and Advisor and In charge International Collaborations, Department of Biotechnology, Government of India

4:40 pm – 5:10 pm Partnership Announcement and MoU signing ceremony Cadila Pharmaceuticals Ltd, India – Wuhan, China

- Opening Remarks by **Mr. Li Baijun**, Minister for Economic and Commercial Affairs, Embassy of the People's Republic of China (8 mins)
- Remarks from DCGI / CDSCO / Indian Regulator – **Dr. S. Eswara Reddy** (5 mins)
- Remarks by **Mr. REN Jun** (Chairman, Shanghai Newsummit BioPharma Group) / **Mr. WANG Xiangwang** (Member of Standing Committee, CPC Wuhan Municipal Committee)
- Secretary of CPC Wuhan East Lake Hitech Development Zone Working Committee) about India-China Medical Park in Wuhan (5 mins)
- Cooperation agreement signing ceremony + group photo – (4 mins)

- 5:10 pm – 5:25 pm European Union – India partnership:** H.E. Mr. Ugo Astuto,
Ambassador, European Union to India
- 5:25 pm – 5:45 pm Lithuania – India partnership:** H.E. Mr. Julius Pranevicius,
Ambassador of Lithuania in India
- 5:45 pm – 5:50 pm South East Asia – India Collaboration:** Country representation
- 5:50 pm – 6:00 pm International collaborations -** CP Goyal, Joint Secretary, IAS,
DBT, Government of India



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Anti-Microbial Resistance
(DBT/ BIRAC, ICMR, CARB-X, NESTA, Industry, Lead Innovations)

Session 9 Day 1
04:30 pm-6:00 pm

Antimicrobial resistance (AMR) is a global public health challenge, and viewed as posing one of the most serious health threats. With majority of Global Pharma companies stepping back, newer antibiotic pipeline has gone dry. Antibiotic stewardness promoting judicious use of available antibiotic options; use of rapid, point-of-care diagnostic kits; building of discovery pipeline; therefore, innovations leaders from Industry, Academia, Government & Philanthropic organisations, Policy makers, NGOs, Ministries all need to join hands in addressing this imminent health challenge. How well are we prepared? What all needs to be done?

Moderator:

Mr. Anand Anandkumar, Co-Founder and CEO, Bugworks Research India Private Limited North Ventures

Panellists:

- Mr. Sachin Dubey, Director, Module Innovation
- Dr. Sundeep Sarin, Scientist 'G' DBT
- Mr. Richard Lawson, Director of Project Management Office, CARB-X
- Dr. Kamini Walia, Scientist E, ICMR
- Dr. Sumathi Nambiar, Director, Division of Anti-infective products, CDER FDA
- Dr. Manica Balasegaram, Head, GARDp



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**Emerging Technologies for Biologics Manufacturing &
Analytics
(Supplier, Regulator, Industry)**

Session 10 Day 1
06:00 pm-07:15 pm

The panel discussion would provide an understanding of integration of evolving manufacturing and analytical technological to address user requirements of development of robust Bio Processes at reduced costs and increased efficiencies, level of flexibility required for maximum adaptability for changing the processes and analytics.

This session aims to get insights from representative Indian Bio Manufacturers, global suppliers of analytical tools, manufacturing machinery and receptivity/ guidance/ readiness of the Regulatory frameworks to handle data originating from emerging technologies. Are we all prepared to catapult into the future?

Moderator:

Dr, Sanjay Singh, Chief Executive Officer and Executive Director, Genova Biopharmaceuticals Ltd.

Panellists:

- Dr. S.E. Reddy, JDC (I) CDSCO
- Mr. Himanshu Gadgil, Whole-time Director and CSO, Enzene Biosciences Ltd.
- Vinay Kanoje, Business Head – Biologicals, Shilpa Medicare Pvt Ltd
- Kapil Sood Sr. Director Thermo Fisher
- Mr. Binish Chudgar, Vice Chairman & Managing Director Intas Pharmaceuticals

- Sonjoy Mukerjee General Manager-Applications South Asia & India
GE Healthcare
- Sachin Indane VP - APAC Lab & India Pall Corporation
Vaibhav Patil, Senior Data Scientist Sartorius Stedim India



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Showcasing the Strength of international Partnerships

Session 11 Day 1

06:00 pm - 07:15 pm , Hall RNA

This forum would include members/delegations from Countries having collaborations, having partnerships with DBT & BIRAC. The GOI is increasingly trying to focus and promote collaborative research to solve a myriad of socio-economic as well as environmental challenges. This forum would majorly deliberate on various MoU driven joint activities and initiatives taken between countries, impact created, niche & overlapping areas and possible future activities. This session would help in understanding country wise priorities and thrust areas where extended cooperation would be required to co-create, co-develop and co-scale. India's role at international level and expectations of international community from India would be helpful in improvising existing and developing new strategies & implementation.

- | | |
|-------------------|--|
| 6:00 PM – 6:10 PM | Opening address by Dr. Mohd. Aslam,
Adviser DBT & MD BIRAC |
| 6:10 PM – 6:25 PM | Mr. Dominic Asquith, High Commissioner,
British High Commission New Delhi |
| 6:25 PM – 6:35 PM | Dr. Tirronen Mika, Counsellor of Education,
Embassy of Finland |
| 6:35 PM – 6:45 PM | Mr. Gautam Bhattacharyya,
Deputy Head of Mission, Sweden |
| 6:45 PM- 6:55 PM | Prof Srinivasa Kaveri, Director,
CNRS Office in India, Embassy of France |
| 6:55 PM – 7:05 PM | Mr. Chandan Atreya , Senior Advisor
(Science and Innovation) Australian High
Commission, New Delhi |
| 7:05 PM – 7:15 PM | Mr. Sanjeev Aiyer CEO,
ApKar Consulting Pte. Ltd Singapore |



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Global Examples of Big Data in Health

Session 12 Day 1

06:00 pm - 07:15 pm

Healthcare big data refers to collecting, analyzing and leveraging consumer, patient, physical, and clinical data that is too vast or complex to be understood by traditional means of data processing. Moreover, 1.3 Billion Indians represent 18% of world's population – 3rd most populous country with diverse genetic background than Europe and North America. The baseline data, clinical trials outcome of new drugs, response rates to new treatment modalities, sensitivity and adverse effect profile, reference materials, microbial strains, etc. are not identical to that of Europe and North America. Indigenous Big Data, National repositories, gene banks providing characterized cell lines, tissue samples and reference material of Indian population have been an invaluable resource.

Efficient utilization of the wealth of available healthcare data would allow health systems to create holistic views of patients, personalize treatments, improve communication, and enhance health outcomes. The session would provide an overview of India's readiness, execution plans and learnings from countries with experience in this area.

Moderator: Prof Partha Majumdar, Distinguished Professor, National Institute of Biomedical Genomics, West Bengal

Panellists:

- Dr. Suchita Ninawe Scientist `G, Department of Biotechnology
- Dr. Tavpritesh Sethi Assistant Professor, Computational Biology
Indraprastha Institute of Information Technology
- Dr. Suneeta Krishnan, Country Lead, Measurement, Learning and
Evaluation ICO-BMGF

- Dr. Shinjini Bhatnagar, Dean Clinical Research, Translational Health Science and Technology Institute
- Dr. Anurag Agarwal, Director, IGIB
- Dr. Binay Panda, Scientific Director, Ganit Labs
- Dr. Yogesh S. Shouche, Scientist 'G',NCCS
- Dr. Rukmini Kumar, Research Scientist, Vantage

Agenda



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



Confederation of Indian Industry



The collective face of the Indian Biotech Industry

CEO ROUNDTABLE MISSION 2025 – TOWARDS INDIA'S 100BN USD BIOECONOMY

Time: November 21, 2019 –5:30 to 07:00 Hrs.

Venue: Hall Electron

TIME	ACTIVITY
17:30 - 17:35 Hrs.	WELCOME & OPENING REMARKS <i>Mr. Siddharth Bhatia, Vice President, Invest India</i>
17:35 -17:40 Hrs.	SPECIAL ADDRESS <i>Dr. Renu Swarup, Secretary, Department of Biotechnology</i>
17:40 - 18:45 Hrs.	CEO INTERACTION <i>Moderated by Mr. Siddharth Bhatia, Vice President, Invest India (3 mins each company)</i>
18:45 - 18:55 Hrs.	NEXT STEPS AND WAY FORWARD <i>Dr. Renu Swarup, Secretary, Department of Biotechnology</i>
18:55 - 19:00 Hrs.	CLOSING REMARKS <i>Mr. Siddharth Bhatia, Vice President, Invest India</i>



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Compliance Program on Global Harmonization
Roundtable Discussion

November 21, 2019

6:15 PM to 8:15 PM

Round table topic: Achieving India pharma vision through compliance program harmonization with global standards

Brief description:

- India has achieved a prominent position in the global pharmaceutical industry
- Country's aspiration should be to achieve global leadership in generics and biosimilars
- For domestic market, focus should continue to improving access to affordable healthcare, product (drug) quality and patient safety
- For this, harmonization of India's pharma regulatory and compliance program with global standards and best practices will be key
- Round table is aimed at discussing strategies and benefits of driving harmonization
- Objective will be to get the key stakeholders together to discuss where we are today, what are the gaps, what should our aspirations be and discuss specific actionable steps towards harmonization

List of participants:

1. **Moderator:** Mr. Sujay Shetty, Health Industries Leader, PwC, India
2. Dr. V. G. Somani, Drug Controller General of India, CDSCO.
3. Dr. Ian Hudson, Former Chief Executive Medicines and Healthcare Products Regulatory Agency (MHRA), UK.
4. Dr. Sudheendra Kulkarni, Medical Product Safety Coordinator- U S Food And Drug Administration

5. Dr. Sundar Ramanan, Biocon Biologics
6. Mr. Sauri Gudlavaletti, Dr. Reddy's Laboratories Ltd.
7. Mr. Firas Abulaban, Sun Pharmaceutical Industries Ltd.
8. Mr. Sudarshan Jain, Indian Pharmaceutical Association (IPA).
9. Mr. Rajesh Kumar Singh, GM-Regulatory, Gennova (nominated by CII)
10. Dr. Alka Sharma, Dept. of Biotechnology (DBT).
11. Dr. Vijay Kumar, Scientist G, Indian Council of Medical Research (ICMR)
12. Dr. Manisha Shridhar, WHO Representative,

NBM Coordinator: Dr. Hardeep vora



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Vaccinating India and the World

Super Session 2 Day 2

10:00 am-11:00 am

“Immunization is one of the most cost-effective interventions to prevent the suffering that comes from avoidable sickness, disability and death” UNICEF. India is one of the largest producers and exporters of vaccines. Every 3rd child in the world is vaccinated by vaccines that are produced in India. World’s largest vaccine seekers & manufacturers would be brought to a common platform to discuss what has been the turning point of this journey in the past, what is in store for future, supply chain challenges, pricing, etc. This session would highlight the policy makers perspective, philanthropic organizations’ efforts steering the mass movement and manufacturers’ preparedness to produce and supply the required number of doses consistently.

Moderator:

Dr Rajesh Jain, Managing Director Panacea Biotec Ltd.

Panellists:

- Richard Dick Wilder, General Counsel & Head of Business Development, CEPI
- Dr. Pradeep Haldar, Deputy Commissioner (Immunization), National Technical Advisory Group on Immunization
- Dr. Suresh Jadhav, Executive Director, Serum Institute of India Ltd.
- Mr Lakshminarayana Neti Chief Operating Officer, Biological E. Ltd.
- Dr. G. V. J. A. Harshavardhan Director for the Viral Vaccines and International Affairs Bharat Biotech International Limited Dr Pankaj Bhatnagar, National Professional Officer (Immunization), WHO Country Office for India
- Dr Bhriagu Kapuria Immunization Specialist, UNICEF



Global Bio-India 2019
21-23 November 2019, Aerocity, New Delhi

**Product Launch - Startups, Launch of Lab2Market Catalogue
2019**

Session 13 Day 2
10:00 am-11:00 am

Over an existence of around 7 years, BIRAC under the aegis of DBT has immensely contributed for developing Start-up innovations ecosystem within the country through multiple stage wise funding schemes, mentoring support & incubation facilities.

This session would provide a unique opportunity to 10 selected BIRAC supported innovators to launch their product before global community.

In addition, to create opportunities and boost outreach of Start-ups in the commercialization phase, selected innovations will be featured through:

Launch of BIRAC's 2nd edition of "Lab to Market Catalogue 2019" through BIRAC's Make In India cell.



Global Bio-India 2019
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**India partnering to address Global Challenges (Gates Foundation,
Wellcome Trust, World Bank)**

Session 14 Day 2

10:00 am-11:00 am

With the present ecosystem strength India has volunteered to partner with various organizations in different countries to address globally relevant unmet challenges. This forum would discuss International partnership e.g. Wellcome Trust, UK, to scout and support innovations in translational medicine, Primary Healthcare system through the SCALE initiative of LEHS, CEFIPRA – the Indo-French Centre for Promotion of Advanced Research in India to support high quality bilateral research, PMU at BIRAC for Affordable Healthcare in India Grand Challenge India (GCI) program launched by the Bill & Melinda Gates Foundation.

Moderator:

Dr. Shirshendu Mukherjee, Mission Director, PMU-BMGF, BIRAC

Panellists:

- Dr. David D'argenio Senior Program Officer Bill & Melinda Gates Foundation
- Dr Sandhya Venkateswaran, Policy lead from the India office Bill & Melinda Gates Foundation
- Dr Suveera Dhup, Wellcome-DBT Alliance
- Dr. Neeraj Jain Country Director, India PATH
- Dr. Anushree Goyal, OSD to CEO, PM-JAY National Health Authority
- Dr. Mukesh Kumar, "Scientist 'G' & Head, International Health Division ICMR
- Dr. Harkesh Dabas, Managing Director, Clinton Health Access Initiative



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Next 10 years for Vaccinology

Session 15 Day 2

11:30 am-01:15 pm

Vaccine Development experts and leaders would be discussing about need for newer vaccines, developmental pipeline, vaccines for emerging and re-emerging infectious diseases, newer technologies for candidate selection and manufacturing, routes of immunization, and more. The next 10 years would be crucial for this Industry as the product pipeline expected to mature in this period would directly impact millions of lives and the public healthcare system in the following decade.

Moderator:

Dr. Gagandeep Kang, Executive Director Translational Health
Science and Technology Institute

Panellists:

- Richard Dick Wilder, General Counsel & Head of Business
Development CEPI
- Dr. Francis P. Crawley, Coordinator, European Fellowship in Research
Ethics (EFRE), Belgium
- Dr. Chetan Chitnis, Head- Malaria Parasite Biology and Vaccines Unit
at the Institut Pasteur in Paris, Pasteur Institute
- Dr. Sita Awasthi Research Associate Professor of Medicine
University of Pennsylvania, USA
- Dr Sourabh Sobti, Vice President – Vaccines Strategy &
Implementation Hilleman Labs., New Delhi
- Dr. Chris Karp, Director, Discovery & Translational Sciences, Bill and
Melinda Gates Foundation

BIRAC's - NBM Coordinator: Dr Shikha Mallik



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Session 16: Enablers for Startups Ecosystem & Market Access
Facilitators

Day 2: 22nd Nov 2019
Hall RNA
11.30 am - 01.15 pm

The Indian government has introduced special Start-up schemes in past few years which are missioned towards boosting the Indian Start-up ecosystem. This focussed panel discussion would primarily provide an overview of GOI's initiatives to promote Start-ups/Entrepreneurships and way forward to further nourish this ecosystem to achieve an ambitious target of 10,000+ Start-ups by 2025. The policy framework of India would be discussed with respect of promoting Startup ecosystem as a whole & for Biotech Sector and policy environment.

11:30 - 11:50 am: **Special Address by Dr. R. A. Mashelkar, FRS**
Title “‘Leap Frogging to Pole Vaulting: Creating the Magic of Radical yet Sustainable Biotransformation’

11:50 - 01:15 pm: **Panel Discussion**
Session Moderator: Padmaja Ruparel, Founder Director -
Indian Angel Network

Panel members:

- Dr. R. A. Mashelkar, FRS
- Rahul Nayar, Vice President - Accelerating Growth of New India's Innovations (AGNIi) | Invest India
- Dr Neeraj Sharma, Head - Technology Development Transfer, DST
- Ramanan Ramanathan, Mission Director - Atal Innovation Mission New Delhi
- Rajeev Kandpal, CFO - GeM



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Biofuels

Session 17 Day 2

11:30 am-12:15 pm

Current spikes in oil prices, depleting fossil fuels and global efforts to stave off the worst effects of climate change, have lent new urgency to the search for clean, renewable fuels & sustainable resources. Global biofuel output needs to triple by 2030 in order to meet the International Energy Agency's targets for sustainable growth. This power packed session would deliberate on India's current positioning, thrust & efficiency to match global race of developing renewable & sustainable alternative fuels. This congregation of national/international Biofuel Industry & Academic Fraternity would brainstorm to find ways to boost Indian Biofuel R&D through required policy inputs.

Moderator:

Dr. AK Panda, Director, NII

Panellists:

- Dr Sreenivas Rao Ravella, Senior Fermentation Scientist, BEACON"BioPilot UK, Institute of Biological, Environmental & Rural Sciences (IBERS), UK
- Mr. Subodh Kumar Executive Director (PC, AE & SD) Indian Oil Corporation Ltd.
- Mr ATUL MULAY PRESIDENT, Praj Industries Limited
- Dr Y B Ramakrishna, former Chairman Biofuels Working Group, Govt of India
- Sangeet Jain, Director, LanzaTech
- Pedro Ivo Ferraz da Silva Head of the Section - Energy, Environment and Science, Technology and Innovation Section , Embassy of Brazil, New Delhi



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Waste to Value: Clean technologies

Session 18 Day 2

12:15 pm-01:15 pm

Embracing sustainable and efficient processes is not really a choice. It's an economic imperative. A huge amount of waste including agricultural, MSW, Industry etc is produced during the cultivation various industrial, household & agricultural activities. This waste can be used for variety of applications to develop clean energy & value added products. These wastes through clean technology, can be recycled either by integrated waste utilization or simply returned to the place of their origin which greatly avoids waste burning and several environmental problems associated. This session would deliberate about how by designing and developing better waste-to-energy, bioenergy and resource recovery infrastructure, any country can make massive efficiency gains.

Panellists:

- Dr. Sharad Kale, Head of Technology Transfer and Collaboration, Bhabha Atomic Research Centre (BARC)
- Mr. Salman Zafar, CEO , BioEnergy Consult
- Dr. Kale Sandeep Bhaskar, Managing Director, QbD Purple Advanced Technologies Pune
- Dr. RR Sonde- Moderator, Thermax
- Dr. Vanita Prasad, Revy
- Dr. Srikanth Mutnuri, Bactreat



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**Know All About Startups, Incubators -
Institutions Directors, Vice Chancellors ONLY**

Session 19 Day 2

12:15 pm-01:15 pm

This session is aimed at providing basic knowledge and knowhow on establishing a successful and authentic incubation ecosystem. This will be attended by the leaders/representatives of institutions interested to establish Bioincubators.

Following four members will speak briefly on the content for 6 min each. Thereafter, 6 Startups will speak 2 min each on how they leveraged incubation ecosystem (on boarding, funding, mentoring and turning point)

Moderator:

Dr. Shriram Raghavan

Panellists:

Preparedness of the Host Institution (Dr. Sreedhara R Voleti, CEO-BioNEST, University of Hyderabad)

Institutional policy, Government agencies supporting establishment of Incubation centre, Thrust area selection, Legal status, Full time CEO, Building team, Different stages from Idea to Scaleup, Funding requirement, Sources of funding.

Bringing Life to Incubation Centre (Dr. Suresh Kumar, President-ISBA)

Authentic incubation, Pre-incubation, creating pipeline, virtual incubation, Co-Incubation, Selection process, mentoring, networking, services to industry, Fablabs, Makerslabs, Accelerator, CoE, International collaborations, Test beds

Research to incubation (Dr. Shriram Raghavan, Senior VP, Jananom Pvt Ltd)

IP policy, Student and faculty startup policy, technology transfer and commercialization, Collaborative product development (Academia & Industry partnership)

Sustaining an incubator (*Dr. Mrutyunjay Suar, CEO, KIIT-TBI*)

Revenue generation plan, Role of host institutions, Expansion plan, Leveraging CSR funding. Identifying the first client for startups.

Startup stories (2 min each): 6 startups

Mr. Priyangshu Sharma, Innotech Interventions

Ms. Shivani Gupta, Innochi care

Mr. Vishal Kateria, Bonayu Life Sciences

Mr. Surya Rao, Althion tech innovation

Ms. Pratyusha Paraddy, Nemocare Pvt Ltd

Mr. Hemachandra. MGH Labs



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Destination India: BioPharma R&D

Session 20 Day 2

02:15 pm – 03:25pm

Increasing costs of R&D, coupled with relatively fewer number of approvals of new drugs have made Pharma and Bio-Pharma industry strategize worldwide to embrace outsourcing of domain specific/ complementary activities as a routine rather than as a special case at all stages of drug discovery and development process. Frequently sourced out activities include preclinical development, manufacturing activities and Clinical Research and Data management services. India is also recognized as one of the leading cost-competitive and quality manufacturing hubs.

However, the preclinical discovery arm relatively is less active. Although there have been some examples where certain Major Pharma have chosen to created their discovery centres in India but there are not many unlike IT, Med-Tech sector. Why is it so? Let's try an understand from those who are running operations in India, those who are partly doing it through dedicated plug and play facilities, or through CROs set ups. The session would provide an insight on what has worked well for Discovery, Knowledge Process Contract Organizations but not for first-in-class discovery so far. The session would also be helpful for the industry stakeholders who are considering Destination India as an option in near future.

Moderator

Mr. Utkarsh Palnitkar, Independent Consultant & Former Partner, Head – Infrastructure, Government and Healthcare KPMG,

Panellists:

- Dr. Manjunath Ramarao, Group Director & Head of Discovery and Translational Medicine, Bristol-Myers Squibb
- Dr Murali Ramachandra, CEO, Aurigene Discovery Technologies Limited
- Dr. Vishal G Warke, R&D Director, Cell Culture & Bioprocess Div., Hi Media
- Dr. Manish Diwan, Head SPED, BIRAC & Former Associate Director, Daiichi Sanyko
- Dr. Albert Palomer, Chief Exec Officer, ABAC Therapeutics, Spain



Global Bio-India 2019
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**Healthcare Technologies from India to the world Startups to
Industry Showcase**

Session 21 Day 2
02:15 pm-03:30 pm

As India enters the Age of Start-ups, there's been great progress in the past decade in logistics, ecommerce and online consumer services, & healthcare. As healthcare in India continues to grow with the overarching technology, the ripple effect of tech advancements are likely to be felt all across the sector.

India through various government initiatives and innovation ecosystem strength is now poised to play a vital role in transforming healthcare sector by supported innovations across the sector e.g. Healthcare technologies Telemedicine, Online Pharmacy, Personal Health Management, Fitness & Wellness, Diagnostics, Biotech R&D, Medical Devices & IT/Data.

12 such exemplary Start-ups would showcase their innovation/technology before the global community.

12 Startups showcase - 5 min each

- AAYUSH
- Autoyos Private Limited
- Bagmo pvt ltd
- BeAble Health Pvt Ltd
- BiolMed Innovations Pvt. Ltd
- Bonenkar implants private limited
- Crimson Healthcare Pvt Ltd
- Flexmotiv
- Radical Health-Tech Private Limited
- Sensivision Health Technologies Pvt. Ltd.
- Valetude Primus Healthcare Pvt. Ltd.
- Voxelgrids Innovations Private Limited



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**Agri-tech: Future Technologies, Scaling, Reaching out to ground
level farmers**

Session 22 Day 2
02:15 pm-03:30 pm

A fire side chat with Industry leaders, Govt. agencies, private firms & philanthropic organizations over roles of various disruptive technologies destined to play a vital role in transforming Agri- Tech in India. The Panel members would chiefly deliberate upon application of Precision farming, Gene editing, RNAi, Digital agriculture, SPLAT (Specialized Pheromone and Lure Application Technology), and other emerging technologies.

Panellists:

- Prof. Neena Mitter, Director"QAAFI Centre for Horticultural Science and ARC Research Hub for Sustainable Crop Protection, Queensland Alliance for Agriculture and Food Innovation (QAAFI), The University of Queensland"
- Dinesh kumar Singh Group Leader TCS, Innovation, Lab,
- Prof Arjula Reddy, Chairman , ATGC Biotech Pvt. Ltd
- VR Rajesh, Regional Head - North & East India CropIn Technology
- Dr. C. S. Murthy, Scientist G & Head, NRSC, ISRO/DOS, Govt. of India
- Dr T. R. Sharma, Executive Director, National Agri-Food Biotechnology Institute (NABI), Mohali



GLOBAL BIO INDIA 2019

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Regulatory Roadmap: Novel Preventive Vaccine & Advanced Therapeutics”

(MHRA, EFRE, WHO (AFRO), CDSCO, WHO (India), ICMR, Industry and Academia)

Session 23: Day 2

02:15 pm - 04:30 pm

Novel Preventive Vaccine: Indian vaccine companies in the past, have majorly focussed in developing licensed vaccines that have been already, approved & marketed elsewhere, in the developed nations. However, in recent times, many novel vaccines are being developed by Indian companies, which can be used not only in India but also globally.

Clinical endpoint efficacy studies are usually necessary in situations where the vaccine is novel, the first of its kind administered to a target population, and when there is no accepted immune response or correlate of protection. If there is an immune response that correlates with protection, it's useful for interpreting trials with immune response endpoints. Identification of a correlate of protection, however, is not a requirement for licensure.

As a member of Developing Countries' Vaccine Regulators Network (DCVRN), CDSCO office is in the process of establishing appropriate regulatory mechanisms for licensing of novel vaccines.

In the session we will understand some of the learnings and challenges faced by Indian vaccine companies. In parallel it is critical to understand the approach of the regulators. Discussions between regulators & industry experts becomes essential in order to understand & appreciate each other's perspective. The Session will not only be an informative session but also promises to be an interesting one.

Moderator:

Dr Raj Long, Deputy Director - Integrated Development, Global Health, BMGF, UK

Panel members:

1. Chandrasekhar Ranga, CDSCO, Govt. of India
2. Diadie Maiga, WHO, Regional Office for Africa
3. Catheryn Tregunno, Medicines and Healthcare products Regulatory Agency (MHRA)
4. Madhur Gupta, WHO
5. Dr. Francis P. Crawley, European Fellowship in Research Ethics, Belgium



Global Bio-India 2019
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USP Session in Global Bio- India
“Building Capabilities for Quality Drug Development in the
Biopharma Industry”
Day 2
02:15 pm-04:30 pm

With the recent technological advancements, globalization and evolving regulatory framework, the biopharma industry continues to face disruptions. Capability building is critical for the Indian biopharmaceutical industry to adapt to the changing landscape and to ensure India's competitiveness in the global market.

USP is organizing a panel discussion on “Building Capabilities for Quality Drug Development in Biopharma Industry” on 22nd Nov 2019 in Global Bio-India event. The panel discussion will involve key stakeholders from Industry, Regulators and Government, to brainstorm, deliberate and debate on the current Government initiatives, policy framework, major challenges and road ahead to boost India’s technological and product development capabilities in biopharmaceuticals to enhance its global competitiveness.

The USP session will have two panel discussions:

Part I: Indian Scenario: Current Initiatives, policy frameworks and Future Directions

Part II: Enhancing Growth and Global competitiveness

The various components of capability building like training, knowledge sharing, and compliance will be discussed to find out solutions to some of the questions for Indian Industry to remain competitive globally in a burgeoning biopharma market. Some of the burning questions addressed would be:

- Are current Government skill development and funding programs able to address the skill gaps? What are the future directions?
- How to address the skills gaps to strengthen cGMP compliance, process robustness and quality control
- What are the major challenges and obstacles to building capabilities more quickly?
- What strategies should be considered for recruiting, training, and retaining skilled candidates in order to remain competitive globally?

- How to quickly adapt to bio manufacturing transformations like continuous manufacturing?

Participants: Department of Biotechnology (DBT)
Biotechnology Industry Research Assistance Council (BIRAC)
Industry/Academia stalwarts,
Manufacturers
Consultant /CRO
United States Pharmacopeia (USP)



Global Bio-India 2019
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Bio-Services Industry
(CRAM, Pre-Clinical and Clinical Development, Pharmacovigilance
& Genetic Testing)
Session 24 Day 2
03:30 pm-04:30 pm

The clinical contract research segment is steadily growing to a well recognize service sector in India and has currently reached to about \$8 billion. Bio-Services industry is providing a broad range of clinical research services including bio equivalence, bioavailability, pharmacokinetic studies and phase I to phase IV clinical studies including statistical analysis, data management, project management, clinical operations, regulatory affairs, quality assurance, training, medical writing, pharmacovigilance, medical consultancy and laboratory services. Panel members from the user/service sector would provide a critical overview of India's positioning in the sector compared to Europe and North America.

Moderator:

Dr.Guljit Chaudhri, Sr. Advisor ABLE, MD, Bioinnovat

Panellists:

- Dr Michael Richardson, Business Development, APJ Reproductive Health Thermofisher
- Dr. K.S. Rao, Scientist F, Eurofins Advinus Limited
- Dr.Vinaya Babu, Founder & Managing Director, Bioneds India Private Limited
- Dr. Dhananjay Patankar, Vice President, Development Services, Syngene International
- Dr. Ajoy Kumar, Country Head, JSS India
- Ram Yeleswarapu, President & CEO, Navitas Life Sciences, USA
- Dr. Dinesh Dua, Chairman, Pharmexcil



Global Bio-India 2019
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Startups scale to Global Markets through partner countries

Session 25 Day 2

03:30 pm-04:30 pm

This session would envisage the path of Indigenous technologies went global in due course of time. 5-6 Case studies would be presented by the innovators while elaborating about early to late phase challenges during commercialization within and outside the country. National & international innovators would leverage this platform to have F2F interaction with representatives from partner countries and to seek strategic entry to global market through mutual cooperation.

Startups: Case Study

- Axio Biosolutions Private Limited
- Cyclops Medtech
- GPS Renewables Pvt Ltd
- JC OrthoHeal Pvt. Ltd.
- OncoStem Diagnostics Pvt. Ltd



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Agri focus: Industry and Academia deploying new technologies

Session 26 Day 2

03:30 pm-04:30 pm

The agriculture sector is one of the largest employers in India with more than 265 million engaged in farming and 70 per cent of rural India depends on agriculture for livelihood. This Focussed session would consists of talk/demonstration of Agri technologies already deployed in fields through Industry Academia. These would mainly include innovations related to development of improved drought resistant varieties, Integrated farming, post-harvest technologies, AI, IoT, Biofortification, precision farming etc.

Panellists:

- Dr Ramanathan Vairamani, Chief Technology Officer, Metahelix Life Sciences Ltd
- Professor Kulvinder Gill, Professor, Washington State University
- Mr. Bert Van der Heide, Advisor International Innovation - Agri-food, Netherlands Enterprise Agency
- Dr Poorvi Mehta, Asia Lead- Agriculture, BILL & MELINDA GATES foundation
- Dr. Ajay Parida Director Institute of Life Sciences, Nalco Square, Chandrasekharapur, Bhubaneswar
- Dr. Ramesh V. Sonti Director National Institute of Plant Genome Research



Global Bio-India 2019
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Launch of Biotech Angel Network

Session 27 Day 2

05:00 pm-06:00 pm

Angel investors are great boon to the Indian Start-up ecosystem, leading Start-ups to scalability and success. The recent incentives launched in year 2019 has brought some relief for angel investors, with the government providing a simpler mechanism for Start-ups to claim exemption from angel tax retrospectively. As the government and ecosystem enablers unite to support angels, they, in turn, are helping through angel investments in the ecosystem.

*This session has 2 Components i.e Launch of Biotech Angel Network driven by IAN (Indian Angel Network) & other component provides & gives a unique opportunity to the investor Community for **Reverse Pitching** to discuss & talk about their Managed - funds, strategies for Identification & Investments Deals , Deals-Flow & how startups can approach investors etc.*

Panellists:

Padmaja Ruparel, Founder/Director, Indian Angel Network

Saurabh Shrivastav, Chairman, Indian Angel Network

Reverse Pitch:

- Mr. Shiva Shankar, Ankur Capital
- Dr. Ramesh B Byrapaneni - Endiya Partners
- Dr. Pinak Shrikhande, HealthQuad Capital
- Mr. Ayan Deb, Kotak Private Equity
- Mr Ankit Verma, Nab ventures
- Mr.Gaurav Chowdhry, Vice President (Investments) RVCF
- Mr. Kailash Nath, Bharat Innovation Fund

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Innovations Contributing to National Missions:
Water | Swachh Bharat |
Nutrition | Ayushman Bharat

Session 28 Day 2
05:00 pm-06:00 pm

Multiple schemes launched by the Government of India like Swachh Bharat, Ayushman Bharat, POSHAN Abhiyaan has achieved a great success in spreading awareness across the country to get rid of many unhealthy practices, understanding the importance of clean water and addressing malnutrition in India. Delegates from diverse background would discuss the innovative ways to deal with various health & Hygiene issues, socioeconomic challenges regulatory transformations and impact of numerous initiatives of Govt. of India, international agencies & Philanthropic organizations.

Startup Nominee:

Ayushman Bharat

- Janitri Innovations
- Parisodhana Technologies Pvt. Ltd.
- Bliss and Style Mobility

Nutrition

- AlgalR NutraPharms Pvt. Ltd.
- Innotech Agropostikam Private Limited

Swachh Bharat

- Clean India Ventures Private Limited

Water

- Taraltec Solutions Pvt Ltd



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Intellectual Property Rights

Session 29 Day 2

05:00 pm-06:00 pm

For any innovative company to invest in the country, it is important for them to consider the intellectual Property (IP) ecosystem in that country. Indian Patent Law is unique in more than one ways and has been in an evolutionary mode ever since India became fully compliant with the TRIPs effective January 1, 2005. The last few years have been particularly significant in terms of the various developments in this area and the country establishing the National IPR Policy which has boosted the innovators and incentivized IP for several entities. The progress made by the Indian Patent Office towards capacity building and modernization is astonishing. The Indian Courts have been very active in the area of enforcing patents especially in the pharma/biopharma sector. The commercialization and licensing of biotech/biopharma patents is also showing great progress. There are several challenges in terms of limitations on protection of biotech subject matter and biodiversity issues which the applicants face in India. However, considering the Government's bold ambitions and vision for the India as a hub for biotech, we can hope that these challenges will also be overcome as much as possible.

The panel discussion aims to give an overview of all this and showcase India as a great destination for investment in biotech research and IP protection."

Moderator:

Ms Deepa Tikku " Partner KNS Partners, Mumbai

Panellists:

- Justice Manmohan Singh Senior High Court Judge and Chairman (Retd.) Intellectual Property Appellate Board (IPAB)
- Dr. K.S. Kardam, Senior Joint Controller and Head (Retd.) Delhi Patent Office
- Pushpa Vijayraghavan, Chairman, Sathguru Management Consultants

- Dr. Vivek Kashyap, Senior Patent Counsel Roche
- Dr B N Manohar, Managing Director Stempeutics Research Pvt. Ltd.
- Dr. Malathi Lakshmikumaran, Executive Director and Practice Head
Lakshmikumaran & Sridharan



Global Bio-India 2019
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Super Session 3: Academia Startup Policies
Day 3: 23rd Nov 2019
Hall ATGC
9.30 am - 10.30 am

Academia-Start-up Policies are playing a crucial role in nurturing the innovation ecosystem of our nation. The focus of such policies is to encourage the academia to adopt entrepreneurial careers and launch their start-ups. The session will focus on various policies, programmes, interventions needed to boost Academia Start-ups innovation network. Stakeholders would also discuss and draw a strategic roadmap for creating enhanced harmony amongst different Academia –Startup ecosystems across the globe.

The session would highlight the successful model of IIT Madras and FITT Delhi that can be probed in context of Incubator models in Univ of Hyderabad, CCMB; the TBI network created through NSTEDB and with Startups selection committee representation by NII Director.

9:30 -09:45 am: Special Address by Prof. Ashok Jhunjunwala Professor IIT Madras & Hon. Board Member of BIRAC

9:45 -10:30 am: Panel Discussion

Session Moderator: Dr. Anil Wali, MD, FITT, IIT Delhi

Panel members:

Prof. Ashok Jhunjunwala Professor IIT Madras & Hon. Board Member of BIRAC

Dr. Harkesh Mittal Head, Science & Engineering Research Council, DST

Prof. P. Reddanna, School of Life Sciences, University of Hyderabad

Dr. Amulya K Panda, Director NII

Dr. Rakesh K Mishra, Director CCMB



Global Bio-India 2019
21-23 November 2019, Aerocity, New Delhi
Med-Tech Certification, Testing (CROs, CSIO, KIHT, BIS)
Session 30 - Day 3
09:30 pm-10:30 pm

The Medical Devices industry in India is presently valued at USD 5.2 billion and contributes 4-5% to the USD 96.7 billion Indian health care industry. Currently, India has about 750–800 medical device manufacturers and Indian medical devices market is predicted to grow to USD 50 billion by 2025. This continued surge in demand has created opportunities for accreditation/ certification services. Medical devices whether procured from leading companies or indigenously manufactured by SMEs and Startups all require accreditation, conforming to standards and compliance requirements. The devices could span from syringes, implants, non-invasive point of care testing, wearable monitoring units, non-contact remote sensing and other variations which all require different set of compliances, certifications to ensure superior and safe experiences to patients. Innovative new solutions pose additional challenge of identifying which all parameters must be tested for quality assurance and safety assessment.

The panel in this session will deliberate on certifications and standards in place at present and what are the plans to make it better for a robust Indian MedTech industry delivering products of highest standards.

Special Talk:

Dr. Alka Sharma, Scientist G, DBT

“Creating and strengthening Med Tech ecosystem in India: DBT efforts so far”

Panellists:

- Mr G. Kalyan Varma, Vice President, TÜV Rheinland
- Dr Rajesh Harsh, Head, Technology Innovation, Sameer Labs
- Mr. Himashu Baid, Managing Director, Poly Medicure Limited



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International Incubator Connect
Session 31- Day 3
09:30 am-10:30 pm

The agencies worldwide have launched various piloting initiative that seeks to bring together innovators, start-ups and incubators on a single platform. Aim of his session is to work towards an improved cooperation on innovation and technology development between global innovators and start-up ecosystems. Through this session Indian researchers, universities, and enterprises would be able to team up with global partners to participate in tackling global challenges and learn best practices from the international incubators.

Moderator:

Dr. Taslimarif sayed, CEO and Director at Centre for Cellular and Molecular Platforms (C-CAMP)

Panellists:

- Dr. Anand Govindaluri, Chairman & Board Directors, Govin Holdings Pte Ltd, Singapore
- Ms. Tania Friederichs, Counsellor, Head of Research & Innovation Sector, Delegation of European Union to India
- Mr. David Golding, Head of North America and Global Networks, Innovate UK – part of UK Research and Innovation



Global Bio-India 2019
21-23 November 2019, Aerocity, New Delhi
FIRST HUB - Regulatory support for Startups
Session 32 - Day 3
09:30 pm-12:30 pm

Biotechnology Industry Research Assistance Council, a PSU of Dept. of Biotechnology, Ministry of Science & Technology, GOI, has established a facilitation unit namely FIRST HUB. Primary objective of this unit is to address the queries of Startups, Entrepreneurs, Researchers, Academicians, Incubation Centres, SMEs etc. The FIRST HUB Session during the event would resolve queries related to Regulatory pathways and Regulation, Funding opportunities, Mentorship, Investment opportunities, Market access, Industry Academia partnerships, Intellectual Property and would provide an opportunity to interact with Officers from DBT, BIRAC, ICMR, CDSCO, BIS, NIB and other relevant government organisation.

Panellists:

- Dr. Vijay Kumar, Scientist – G, ICMR
- Dr. Prakash Bachani , Scientist E & Head (Medical Equipment & Hospital Planning Deptt.), Bureau of Indian Standards
- Dr. Reba Chhabra, Director In-charge, National Institute of Biologicals
- Dr. Kalaivani Ganesan, Scientist 'E' Dept. of Biotechnology
- Dr V K Paul Member Health, NITI Aayog
- Dr Anu Nagar, Joint secretary, DHR (For HTA), DHR
- Smt. S Radha Chauhan, CEO, GEM
- Dr Madhur Gupta, Technical Officer-Pharmaceuticals, WHO Country Office for India



DBT presents
BOOT CAMP on DRUG DEVELOPMENT
Risk Assessment through Data Analytics

Registration fee Rs.11,800 for Industry delegates and Rs. 8,850 for Academia

Date: 23rd Nov. 2019

Time: 10 AM to 4 PM

All participants will be certified by DBT and ABLE

Overview:

Boot Camp is an intensive interactive course directed towards participants who wish to expand or update their understanding of global regulations, the translational sciences and drug development. There will also be a discussion to address policies of health, disease and cost of development of therapies.

Drug development is at a turning point in human medicine. Efficiency and Quality compliance are critical to achieve innovation and affordability. This comprehensive course will provide an in-depth overview of the basics and multi-dimensional nature of drug development utilizing technology, statistical and quality considerations. The boot camp will focus on development of novel drugs, including recombinant proteins, monoclonal antibodies, fusion proteins, cell therapy, gene therapy and gene editing technologies.

Who should attend:

Attendees should have an understanding of the basic principles of biological science, and keen interest in practice. This course is developed for Industry, Academic and Research Professionals with minimum two year work experience or have completed their post-graduation in Biological Sciences. i) employees and management of biotechnology and pharmaceutical industry, ii) Faculty new to the discipline of drug development and iii) those seeking more information to complement their general biology, science, bioengineering, regulatory, legal or marketing training.

Agenda:

	Topic
Lecture 1	The drug development and risk assessment Boot Camp
Lecture 2	Defining the unmet need; disease pathology; and design of drugs
Lecture 3	Pharmacology and Toxicology
Lecture 4	Process development and manufacturing
Lecture 5	Clinical Trials and Regulatory Approval process
Statistical Concepts	Trend analysis, Comparability, management of change
Final Conclusion	Risk Assessment Summary and Conclusions
Award of Certificates	4:30 PM

Learning Objectives:

Upon completion of the course, the participants should be able to:

1. Become knowledgeable about the basic aspects of drug development, especially as it relates to application in various steps of the process.
2. The risks associated with the drug development process.
3. The understanding of social impact of cost of drug development.
4. Have the tools to develop methodologies to challenges faced during drug development.
5. The ability to read papers in the field of drug development.
6. Write and draw about complex multi-disciplinary nature of the drug development process which intersect with several other biological processes
7. Have a shared understanding of academic and industry requirements

Boot Camp Co-Chairs

- Dr. Narendra Chirmule, Senior Vice President, Head R&D, Biocon Research Labs
- Dr. Robert Poolman, Director, Discovery & Pre-clinical Products, Clarivate Analytics
- Dr. Mihaly Juhasz, Managing Director/CEO, Accelsiors, Hungary
- Dr. Amitabh Gaur, President, Innovative Assay Solutions, USA
- Dr. Tamal Raha, Sr. Partner, Bioinnovat Ltd.

Convener

Dr. Guljit Chaudhri, Managing Director, Bioinnovat Ltd., CEO, INNONATION, Sr. Advisor, ABLE



Global Bio-India
2019 21-23 November 2019, Aerocity, New Delhi
Industry-Academia Cross Talk: Focus on Technology Transfer
Session 33 - Day 3
11:30 am-12:30 pm

Industry-Academia collaboration is key to knowledge driven industries such as biotech. Academia creates new knowledge, tools and new knowledge workers. The Industry puts the new knowledge, tools and knowledge workers to use and deliver useful products and services for the Society. Industry also feeds back real world needs and knowledge gaps to the academia – thus making academic activity more aligned to real world, contemporary themes. This virtuous circle and invaluable collaboration has been shown to be key to building next generation industries, knowledge clusters and impactful technology. While India has some outstanding examples of Industry-Academia Collaborations and Knowledge Exchange, India needs to have many more and wide spread instances of Industry-Academia collaborations. This session will focus on an important dimension of Industry-Academia Collaborations, namely, Technology Transfer and Joint Development. This session will present a few outstanding case studies of technology transfer with application in health and agriculture, and explore how Industry-Academia collaborations can be improved in the Country to be more efficient, productive and mutually rewarding.

Session Coordinator:

- Dr V. Premnath, Head NCL Innovations (CSIR-NCL) and Director, Venture Center.

Special Address (Talk, 15 min):

- Prof. Tarun Khanna, Jorge Paulo Lemann Professor, Harvard Business School Director, Lakshmi Mittal and Family South Asia Institute, Harvard University

Panelists (Panel discussion, 75 min):

1. Mr Lalit Mahajan, Founder, J Mitra & Co
2. Mr Ganesh Srinivasan, CEO, Resil Chemicals

3. Dr. Purnima Sharma, MD, Biotech Consortium India Limited
4. (TBC) Ms. Bobbie Ann Mount, NCATS, NIH, US.)
5. Dr Vinay Agrawal, Founder, Biopore Surgicals
6. Mr Vijai Shankar Raja, Founder, Helyxon)
7. (TBC) Dr Sachin Kale, Associate Vice President – Vaccine R&D, Sun Pharma
8. Dr Parul Ganju, Founder, Ahammune Biosciences



Global Bio-India 2019
21-23 November 2019, Aerocity, New Delhi
Next 10 years for Med-Tech Industry (CEO Panel)
Session 34- Day 3
11:30 am-12:30 pm

India offers a unique and dynamic platform for nurturing medical device innovations to transform ideas into reality. Recognising the immense growth potential of medical device sector, the Government of India has identified the medical devices industry as an important sector for the Make in India initiative. There is a steady increase in the medtech demand and utilization through new policy initiatives, setting up of additional healthcare facilities across tiers for healthcare delivery to 1.3 billion people in India alone. Enhanced awareness on health, government schemes like Ayushman Bharat enhancing health coverage has inspired the sector to innovate, go aggressive and address the unmet need and increase production output. The MedTech industry thus is influenced favourably with advancements in scientific understanding, aspirations for higher quality of life and facilitation at the policy level for public procurement. It would be an exciting session deliberating about the strategic preparedness for next 10 years of Industry, Policy Makers bringing out both Indian and Global perspective.

Moderator:

Mr Ajay Pitre, Managing Director Pitre Business Venture LLP

Panellists:

- Mr Pavan Mocherla, Managing Director, BD India
- Mr Himanshu Baid, Managing Director & CEO - Medical Technology Division Polymedicure Ltd
- Mr Prabal Chakraborty, Co Chairman - Managing Partner IKIZIA
Advisor Mr. Gurmeet Chug, Managing Director, Translumina Therapeutics LLP
- Mr Manoj Madhavan, Managing Director, Boston Scientific India



Global Bio-India 2019

21-23 November 2019, Aerocity, New Delhi

Next 10 years for Industry - Advanced therapeutics (AI, BIG Data, First-In-Class drug discovery, Cellular therapies)

Session 35 - Day 3

11:00 am-12:30 pm

Advanced therapeutics is the solution for genetic, non-genetic, fatal and high-burden diseases. Next generation sequencing, together with large-scale RNAi interference and more recently CRISPR technology, have proved important for mechanistic biological exploration and identification of drug targets, especially in oncology. The enrichment of biological- and clinical-context-specific large-scale data has enabled computational inference more relevant to real-world biomedical research, particularly identification of therapeutic targets and drugs for specific diseases and clinical scenarios. This focussed session would elaborate upon (i) Implementation of AI & BIG data in health sector/diagnosis & monitoring of patients (ii) Development of new cells, like CAR-T cells to be used as therapeutics (iii) Regulatory perspectives

Moderator:

Vijay Chandru, Co-founder, Strand Life Sciences Pvt. Ltd.

Panellists:

- Alexander Zach, Senior Vice President - Market Access, Biocon Limited
- Dr. Saikatendu Kumar Singh, Associate Director, Global Research Externalization, Takeda California
- Prof. Amitabh Gaur, President, Innovative Assay Solutions, San Diego, CA
- Tuhin Bhowmik, Co-Founder, Pandorum Technologies Pvt. Ltd.
- Prof. Rahul Purwar, Associate Professor, Cart-T Cell, Indian Institute of Technology Bombay
- Satyen Sanghvi, Chief Scientific Officer, Regrow Biosciences Pvt Ltd.
- Dr. Robert Poolman, "Director of Discovery and Preclinical Products, Life Sciences, Clarivate Accelerating innovation

- Sh. Sanjeev Kumar, Dy Drugs Controller, Central Drug Standard Control Organization, Government of India (TBC)
- Dr. Susan D Costa, Head, Viral Vector Services, Thermo Fisher



Global Bio-India 2019
21-23 November 2019, Aerocity, New Delhi
Director's Forum: Academic Asset Showcase
Session-36 Day 3
01:15 pm – 02:45 pm

The technological change in the industry requires continuous innovation, which derives from academic research through a transformation process that converts science-oriented knowledge to marketable products. Extensive contribution of the scientists in various fields witnessing transformation of academic knowledge into products would be deliberated upon in this session.

Moderator:

Prof. G. Padmanabhan, Former Director of IISC & Chancellor of the Central University of Tamil Nadu (CUTN), (Tiruvarur)

Panellists:

- Prof. Akhilesh Tyagi, Hon'ble Board Member BIRAC, Former President National Academy of Agricultural Sciences & Former Director of National Institute of Plant Genome Research
- Dr. Dinakar M. Salunke Director, Health Innovation, International Centre for Genetic Engineering & Biotechnology (ICGEB), New Delhi
- Dr. T. R. Sharma, Executive Director, National Agri-Food Biotechnology Institute (NABI)



Global Bio-India 2019
21-23 November 2019, Aerocity, New Delhi

Med-Tech Regulatory: Indian & Global perspective
(Case studies, Regulators - US, EU, Japan, India)

Session 37 Day 3
01:15 pm-02:45 pm

A comprehensive, globally harmonized and predictable regulatory regime is imperative for the MedTech sector in India to realize its full potential and aspirations to become Medical device hub of the East. This will boost confidence of investors, provide a push for infrastructure development, setting-up of manufacturing facilities, and ancillary industry. To create coverage of the vast medical device spectrum what steps need to be taken to formulate regulations that would help industry to overcome these challenges. The session will discuss to identify sector priorities, gaps and the roadmap to address Regulations for the medical devices.

Case Study:

- Dr. Ravi Kant Sharma, DDC(I)
- Dr Balram Bhargava, Director General, ICMR
- Mr Rishi Baid, Executive Director, Poly Medicure Limited

Panellists:

- Mr. Ganesh Sabat, Chief Executive Officer, Sahajanand Medical Technologies (Pvt) Ltd.
- Mr. Probir Das, Managing Director, Terumo India Pvt. Ltd.
- Mr Manoj Madhavan, Managing Director, Boston Scientific



Global Bio-India 2019
21-23 November 2019, Aerocity, New Delhi
Social Innovation
Session 38 Day 3
01:15 pm-02:45 pm

Social Innovation is an integral arm of BIRAC wherein various programs like SPARSH, SRISTI, and “BIRAC-Social Alpha Quest for Assistive Technologies” are initiated to address the Country’s most pressing problems. Biotechnology Industry Research Assistance Council (BIRAC), through its Social Innovation Programme for Products: Affordable & Relevant to Societal Health (SPARSH) is trying to address some the problems faced by Start-ups and innovators in Social Innovation. SPARSH has been devised to create a pool of social innovators in biotechnology, who can identify gaps within communities, offer new ideas and develop high-impact innovations.

*This panel will highlight the ideas, visions and models necessary to manage and scale-up **innovative**, sustainable businesses which are designed for **social** good.*

Points for Discussion

- 1. To identify priority areas in India for national agencies*
- 2. To develop actionable points to utilise CSR funds in Social Innovation Research*
- 3. To create new Investment modalities in Social Domain Creating the required scale of social impact*

Panel members:

1. Prof. Satyajit Majumdar, Center for Social Entrepreneurship, TISS
2. Prof. Anil Gupta – SRISTI
3. Dr Manoj Kumar – Social Alpha
4. Siddarth Swarup, BMGF -ICO

7 Minute Story Telling:

- Dr. R P Joshi , Founder & CEO RI Instruments & Innovation India, Uttarakhand
- Kabir Udeshi (SPARSH Grantee) "Flycatcher Technologies
- Arun, Janitri (SIIP Fellow / IIPME / SBIRI Grantee) arun@janitri.in