



2 Days Workshop on

Taking Med-Tech Startups Beyond Prototyping:

Regulations, IP monetization & Funding

- Organized by Venture Center and BIRAC -

	Overview of medical device industry and markets		
	• Planning funding and investment after POC and prototyping; Funding la	ndscapes and	
	Investor perspectives; Seeking post proof-of-concept funds for scaling a	ind sustaining	
	ventures	-	
	<ul> <li>Planning and developing technology/IP: IP strategy, FTO analysis, Co</li> </ul>	llaborative IP	
LEARN	development. Licensing/technology transfer in medical device domain; Unde		
	negotiating licensing/technology transfer agreements; Valuating IP in medical device sector		
	<ul> <li>Planning for medical regulations. Risks in medical device technologies: start-</li> </ul>		
	ups/entrepreneurs point of view; Regulations and changing regulatory environment; Recent		
	changes in Indian regulations	intent, necent	
	Venture Center		
ORAGANIZED BY	Biotechnology Industry Research Assistance Council (BIRAC)		
	Entrepreneurs/Start-ups and Inventors in Medical Device sector		
	<ul> <li>Research/ Science Managers/ CTOs/ CSOs in Research/ Technology</li> </ul>	Organizations/	
	Technology Incubators/Universities focusing on Medical Electronics and Device	25	
FOR WHOM	<ul> <li>Technology/IP Managers/Patent Professionals/ Innovation Officers</li> </ul>		
	• Students of IPR, Business Management, Commercial Law Other law disciplines including		
	Pharma/ Biotech		
WHEN	9-10 February 2018   Friday- Saturday   Time: 9:00 AM- 5:30 PM		
EVENT LEAD	Dr. Roshan D. Yedery, Ex-Venture Center, Pune		
	Lecture Theater, Venture Center, 100 NCL Innovation Park,		
WHERE	Dr. Homi Bhabha (Pashan) Road, Pune-411008		
	General queries:		
CONTACT	Ms. Lipika Biswas   +91-20-25865877   eventsdesk@venturecenter.co.in		
CONTACT	Technical queries		
	Dr. Roshan D. Yedery  +91-7722015062   <u>roshan@ipface.org</u>		
	Category	Fees	
	Large companies	Rs 8000/-	
	Micro, Small & Medium Enterprises; Non-profit Organizations; Academic	Rs 5000/-	
	Institutions; Individuals	D- 2500/	
	BIRAC grantees (includes all BIRAC schemes) Venture Center incubatees; Students with valid ID cards	Rs 2500/- Rs 2500/-	
	WOS-C trainees; Student members of NCL-TEC and IISER-Pune-EIC; Fellows of	Rs 1500/-	
COST	EIR/ PRAYAS/SIIP	113 13007	
	Register soon! Seats limited to 50. First-come-first-serve.	11	
	Register here: http://bit.ly/2FL4fK0 (Registration closes on 7 Feb 2018)		
	· · ·		
	Fees paid is not refundable and non transferable under any circumstances		
	Group discount: 10% discount for groups of 3 from a single Institution/Company		
	<ul> <li>Organizers reserve the right to select participants so as to maximize learning and networking opportunities</li> </ul>	s for the group	





### Introduction

A recent report has suggested healthcare, especially MedTech, as an attractive emerging market in India. This has created a great opportunity for Indian companies to make the most in this domain. Reports also suggest that the Indian healthcare industry is to reach USD 50 billion by 2050 and specifically the medical device industry is set to reach a market of USD 25-30 billion by 2030. However currently multinational companies are dominating the scene with almost top 40 medical device companies having a presence in India and about 75% of the sold medical devices are imported. Even from IP point of view only 17% of over 4700 patents filed at Indian Patent Office between 2009-2013 were of Indian origin.

However recent initiatives by the Government of India including 'Make in India', 'Startup India' and drafting of new policies/acts including the 'Medical Devices Rules 2017' and 'Drugs and Cosmetics Amendments Bill' are enabling Indian companies to gradually develop innovative medical devices and related healthcare products. In this regard the efforts of Biotechnology Industry Research Assistance Council (BIRAC) via BIG, SBIRI and BIPP programs and the recently announced National Biopharma Mission are greatly commendable. One critical need in commercialization of these innovative products is knowing how to manage IP. Indian companies need to know to how to create and monetize IP effectively to develop and expand their business in the MedTech sector in India while competing with global majors as well as enter global markets.

This 2-day workshop will focus on some important issues facing Med Tech startups after the prototyping stage – rising money, regulations and IP strategy.

## Why attend this workshop?

This workshop will help you learn about technology management and commercialization in the MedTech space with a *focus on practical insights*. Venture Center events are known for their practical insights and usefulness for entrepreneurs and practitioners of technology management.

The event is being organized by two organizations shaping the MedTech innovation ecosystem in India and known for thought leadership in the field. Venture Center (technology business incubator located on CSIR-NCL campus) is India's leading inventive enterprises incubator established by CSIR-NCL (the only Indian organization listed in the WIPO's 'Top 100 Inventive Clusters' of the world. It won the National Award for TBIs in 2015 from the President of India. Venture Center is home to one of the leading BIRAC BioNest/ BioIncubator and is also home to MSME-funded IP facilitation center (IPFACE). BIRAC is a pioneering organization that has single-handedly shaped India's biotech and biomed innovation and entrepreneurship landscape through innovative funding programs. BIRAC's BIG, BIPP and SBIRI programs have supported and nurtured a large number of healthcare and biotech related enterprises towards developing relevant innovative technologies for improving the quality of human life.

#### **Course includes**

- Access to restricted website with online compilation of resources
- Certificate of Participation issued by Venture Center and BIRAC
- Course includes tea, refreshments and lunch at the Innovation Cafe at Venture Center
- Free one-year reference membership for Venture Center Library ( http://www.vcenterlibrary.org )

## \* Please note the participants will have to arrange for their own travel, local transport and accommodation.

For more information on hotels, transport options etc: <u>http://www.venturecenter.co.in/puneguide/</u>





# Workshop Schedule

TIME	SESSION	LEAD	VENUE
<u>9 Feb 2018</u> 0900-0930	Registration for the event		Foyer area
0930-1100	<ul> <li>Session 1: Introduction, Industry Overview &amp; emerging trends</li> <li>Introduction to organizers, faculty, participants and workshop</li> <li>Industry/market overview and investment trends in Med Tech</li> <li>How to access capital for very early stage Med - Tech ventures</li> </ul>	V. Premnath & BIRAC Official Vishy Chebrolu Anil Gudibande	LT
1100-1130	Tea break networking		FOYER
1130-1300	Session 2: Panel Discussion on Sustaining and scaling your Med-Tech venture through fund-raising Panelists: Anil Gudibande, Vishy Chebrolu, Avinash Shejale, Nitin Deshmukh ;Head of Investments, BIRAC (TBD)	Moderator: V Premnath	LT
1300-1400	Lunch and group photograph		CAFE
1400-1500	<ul> <li>Session 3: IP Strategy for Medical Technologies</li> <li>Overview of IP strategy (includes issues in entering into joint development arrangements)</li> <li>Overview of IP in medical device industry in India (including various types of IP)</li> </ul>	Roshan Yedery Suchita Markan	LT
1500-1530	Tea break networking		FOYER
1550-1720	<ul> <li>Session 3 (contd): IP Strategy for Medical Technologies</li> <li>FTO analysis in strategizing R&amp;D and commercialization of medical devices</li> </ul>	Abhishek Pandurangi	LT
1720-1800	<ul> <li>Importance of designs in protecting IP in medical devices</li> <li>Session 4: Panel discussion on Case studies and best practices in IP in medical device industry (Opening comments—10 min – Planning for IP due diligence – Investor perspective – Avinash Shejale)</li> <li>Panelists: Suchita Markan, Abhishek Pandurangi, Anand Mahurkar, Avinash Shejale, V. Premnath</li> </ul>	Anand Mahurkar Moderator: Nitin S Tewari ( <mark>TBC)</mark>	LT
<u>10 Feb 2018</u> 0930-1100	<ul> <li>Session 5: IP Licensing and Technology Transfer, Valuation of IP and technology</li> <li>Licensing and technology transfer in medical device domain – an overview</li> <li>Determining royalty rates in Med-Tech sector</li> <li>Negotiating licensing and tech transfer agreements in medical device commercialization (Part 1)</li> </ul>	Yogesh Shelke Mayuresh Mukadam Nihal Kothari	LT
1100–1130	Tea break networking		FOYER
1130-1200	Negotiating licensing and tech transfer agreements in medical device commercialization (Part 2)	Nihal Kothari	LT
1200-1300	Valuation of IP in Med-Tech - R&D organization perspective	Magesh N/ Premnath V	LT
1300-1400	Lunch break		CAFE
1400- 1500	<ul> <li>Session 6: Regulatory issues and its implications in med tech commercialization</li> <li>Overview of Regulatory approval process in India (TBD)</li> <li>Medical Device Rules 2017: Implications on medical device commercialization (TBD)</li> </ul>		LT
1500-1530	Tea break networking		FOYER
1530-1700	Session 7: Panel discussion on First-hand experience in obtaining regulatory approvals: Insights from entrepreneurs		LT
1700-1800	and Med-Tech peers Panelists: Jayant Khandare, Aditya Ingalhalikar, Nilay Lakhkar, Sambuddha Ghosh Closing session Vote of Thanks & Distribution of Certificates	Moderator: Premnath V	LT





Construction states to at	and an of the two and a little in the second s
Speakers(in alphabetical	
Vishy Chebrolu	<ul> <li>Vishy Chebrolu</li> <li>Managing Director, InvAscent, Mumbai</li> <li>Vishy is an experienced investment advisor with over several years of experience. He previously worked with SilverCreek Capital - a USD 5 billion fund of hedge funds, where he headed the risk management group and was also involved in structuring and conducting due diligence on direct investments. He also worked at the McKinsey Investment Office, where he led the initiative for direct investments in select sectors and focused on assisting clients improve operational efficiency. He holds an MBA from Indian Institute of Management, Lucknow and a doctorate from Case Western Reserve University where his research focused on pricing derivatives and real options.</li> </ul>
Nitin Deshmukhh	
Anil Gudibande	Anil Gudibande Co Founder, 1Crowd, Mumbai Anil Gudibande has over 24 years of experience in Banking. He spent 17 years with Citigroup and was most recently with Royal Bank of Scotland - initially as Managing Director & Co-Head of the Investment Bank, and subsequently as Managing Director. He has also spent a year with AIG Private Equity. Anil has worked on a number of marquee deals in M&A, acquisition financing, IPOs, Ioan and bond issuances. He was also a senior business approver with credit approval authority. Anil is an angel investor who mentors a few start-ups. He is a member of the Institute of Chartered Accountants of India and the Institute of Cost & Works Accountants of India and holds a Master's degree in Commerce from
Sambuddha Ghosh	<ul> <li>Bangalore University.</li> <li>Sambuddha Ghosh</li> <li>Founder Director, ABEL Biosolutions Private Limited, Pune</li> <li>Sambuddha Ghosh's startup, incubated at Venture is a vaccine and bioprocess industry solution provider and is currently focused on development of preventive health care technology platforms for infectious diseases and is a one stop solution provider from biologics innovation to manufacturing. Currently ABEL is involved in setting up bacterial and viral vaccine projects in Western and Eastern African countries, as a part of global vaccine initiatives. He has functioned in senior management positions of various multinational organizations and vaccine operations for more than 15 years. In a variety of industry environments he spearheaded many projects through the evolving global markets. He has spearheaded International collaborative projects on validation studies pertaining to various assay systems in conjunction with the World Reference Laboratory on infectious diseases in UK. He is a doctorate in Virology, with a wide experience in the areas of vaccine production, quality control as well as developmental and translational research.</li> </ul>
Nihal Kothari	Nihal Kothari Associate Partner, LegaLogic Consulting, Pune Nihal leads the global commercial contracts team and advisory practice at LegaLogic. He has eleven years of hands on experience and has negotiated wide range of international and domestic commercial contracts, negotiating intellectual property licensing deals, and has advised on various legal aspects related to human resources, real estate and dealing with issues related to intellectual property right. He previously worked with Persistent Systems Ltd., based in Pune and Geometric Limited, based in Mumbai and Pune. He is also a member of Bar Council of Maharashtra and Goa.
	Nilay Lakhkar           Founder and CEO of SynThera Biomedical, Pune           Nilay's startup Synthera, incubated at Venture Center, is India's first and only bioactive glass company, focused on R&D, manufacture and commercialization of proprietary bioactive glass products for the





Nilay Lakhkar	healthcare sector. SynThera is currently gearing up to launch its flagship products SynOst <sup>®</sup> and PoroSyn <sup>®</sup> , which are synthetic bone graft substitutes used in orthopaedic and dental surgeries to combat bone loss caused by injuries or diseases. Nilay has a doctorate in Biomaterials and Tissue Engineering from University College London, UK, followed by a postdoctoral stint at the Institute of Biomaterials, Helmholtz Zentrum Geesthacht, Germany. He brings 10 years of experience in development of bone repair technologies, with 15 academic papers and patents to his name.
Anand Mahurkar	Anand Mahurkar Partner and Head, Pune Branch, Krishna & Saurastri Associates, Pune Adv. Anand Mahurkar is a Partner and head of the Pune branch office of Krishna & Saurastri Associates, one of the leading law firms in India. He is member of the Bar Council of Maharashtra and Goa. He is has more than 13 years of overall experience including Legal industry, academics and manufacturing. Anand has a B.E in Mechanical Engineering from B. N. College of Engg., Pusad. He later pursued his masters' degree in Manufacturing Systems from BITS, Plain (Raj) and an LLB degree from the University of Pune (M.S).
	Dr.Suchita Markan Asstt. General Manager, Biotech Consortium India Limited, New Delhi Currently working as Asst.General manager in BCIL, a Department of Biotechnology, Gol promoted company, Dr. Markan has extensive and rich experience in project management, intellectual property management, technology-transfer and strategic collaborations including inter-institutional, industry- academia, industry-academia-government partnerships in healthcare sector, primarily medical devices. She has successfully managed multi-institutional programs of global repute including the Stanford India Biodesign program, School of International Biodesign Fellow program and Wellcome Trust supported CPR device development programs to name a few. Dr.Markan holds a doctorate in Biotechnology from PGIMER and Executive General Management from IIM Lucknow.
Suchita Markan	
Mayuresh Mukadam	Mayuresh Mukadam Assistant Manager (Valuation & Advisory Services), Aranca, Mumbai Mayuresh has diverse experience of over 9 years across business valuations, corporate finance, and transaction advisory, and assurance services. At Aranca, Mayuresh handles valuation engagements for tax compliance, litigation, and other purposes. He is also responsible for feasibility studies and other advisory engagements related to M&A and funding transactions. Prior to joining Aranca, Mayuresh worked with Price Waterhouse Coopers India at their Mumbai office, where he led several assurance engagements related to companies in the financial services sector. Mayuresh is a Chartered Financial Analyst (CFA®) Charter holder and a member of the Institute of Chartered Accountants of India. He also holds Master's degree in Commerce from the University of Mumbai.
Magesh Nandagopal	Magesh Nandagopal Scientist, NCL Innovations, CSIR-NCL, Pune Magesh works as a Scientist and Technology Manager in NCL Innovations – a division of CSIR's National Chemical Laboratory, Pune. He manages the large pool of technologies resulting from this lab, works with partners in taking technologies to the market, and is involved in creating technology based start- ups. He has advised over 100 innovators and entrepreneurs in funding, start-up creation, business planning and other issues. Magesh has a PhD (in Polymer Science) and an MBA (in Finance) - both from the University of Connecticut, USA. And recently attended the Chevening Rolls-Royce Science and Innovation Leadership Fellowship (CRISP) 2017.
	Abhishek Pandurangi Partner & Attorney-at-law at Khurana & Khurana Advocates & IP Attorneys, Mumbai Presently a partner at Khurana & Khurana Advocates, Abhishek has worked in different areas of IPR over a stretch of 7 years as an IP practitioner, entrepreneur, legal expert and a trainer. Abhishek has dealt with various types of IPR matters including Patent Searches, Patent Drafting, Patent Prosecution, Patent Commercialization, Trademark Litigation, Domain Name Dispute Resolution with UDRP, Copyright and Database Infringement Counseling. Prior to this he has worked with Evalueserve and Netscribes India. He also had started his own IP firm closer2patents which supported over 300 clients in 16 countries having completed over 1000 IPR projects, and is now a part of Khurana & Khurana after a strategic acquisition. Abhishek holds a B.Tech-Chemical from UDCT(Mumbai) and a practicing lawyer





	and a registered patent agent.
Abhishek Pandurangi	
Avinash Shejale	Dr. Avinash Shejale Director - Lifesciences at Ainvent Capital, Mumbai Avinash is currently heading the Lifesceinces section at Ainvent Capital. The firm currently is focusing on mergers and acquisitions, private equity, venture finanncing in pharmaceutical biotechnology, medical devices, healthcare and food/agri-biotechnology. Earlier he was heading the Lifesciences doman at Pioneer Investcorp and heading the pharma & lifesciences division at SBI Capital Markets Ltd. He holds an M.B.B.S from Grant Medical College, Mumbai and an M.B.A in Finance and Marketing from Jamanlal Bajaj Institue of Management Studies.
Yogesh Shelke	Dr. Yogesh Shelke Assistant Manager, ARANCA, Mumbai Currently Yogesh consults a broad range of clients focusing on healthcare products for business development, project execution and client deliverables, marketing strategy, and knowledge management. Also a registered patent agent, he has been to deliver strategic IP and business solutions for companies working in broad areas of healthcare including medical devices. Prior to working with ARANCA Yogesh worked as a patent engineer with Franks International NV and had stints with GeneRation and OrthoCAD Networking Labs. Yogesh holds a M.B.B.S from Government Medical College, Miraj and later pursued an M.Tech in Biomedical Engineering from IIT-Mumbai.
Nitin S Tewari	Nitin S Tewari Scientist, NCL Innovation, CSIR-NCL, Pune Dr. Nitin holds a doctoral degree in Biomedical Research and is a registered patent agent. She has been awarded earlier with the Woman Scientist Scheme under DST for training in IPR. Currently as Scientist at NCL Innovations she oversees patent drafting & prosecution, IP portfolio planning, management and value addition of inventions developed at CSIR-NCL.
Premnath Venugopalan	Dr. Premnath Venugopalan Head, NCL Innovations, CSIR-NCL, Pune Director, Venture Center, Pune Dr V Premnath is currently the Head, NCL Innovations – the group within National Chemical Laboratory (NCL) charged with the responsibility of championing the cause of technology innovation within NCL. Dr Premnath also provides leadership for the Intellectual Property Group at NCL and is also the Founding Director of the Venture Center – a technology business incubator on NCL campus. Dr Premnath is also a Scientist, Polymer Science & Engineering Division at NCL with an interest in technology development for biomedical products. He holds a B.Tech. from the Indian Institute of Technology - Bombay and a Ph.D. from the Massachusetts Institute of Technology, USA. He has also been a Chevening Technology Enterprise Fellow with the Centre for Scientific Enterprises, London Business School and Cambridge University, UK.
Roshan Yedery	<ul> <li>Dr. Roshan D Yedery</li> <li>Ex- Manager, Innovation Management Team, Venture Center, Pune</li> <li>Dr. Roshan Yedery holds a Ph.D in Biochemistry from University of Mumbai. His areas of interest have been human infectious diseases, development of novel anti-microbial technologies and commercialization of innovations developed in labs. He has worked at Uniformed Services University of Health Sciences and interned at Technology Transfer Office of Henry M Jackson Foundation for Advancement of Military Medicine, both located in Bethesda, United States. He also holds a certificate in Technology Transfer Program from FAES at NIH, Bethesda, United States. Before joining IPFACE he was heading the IP team at National Innovation Foundation-India located in Gandhinagar, Gujarat.</li> </ul>
Additional Speakers	
RIPAC or Vonturo Contor S	neakers as needed (vet to be added)

BIRAC or Venture Center Speakers as needed (yet to be added)





About the Organizers		
<b>VENTURE</b>	Entrepreneurship Development Center (Venture Center) – a CSIR initiative – is a Section 25 company hosted by the National Chemical Laboratory, Pune. Venture Center strives to nucleate and nurture technology and knowledge-based enterprises by leveraging the scientific and engineering competencies of the institutions in the Pune region in India. The Venture Center is a technology business incubator supported by the Department of Science & Technology's National Science & Technology enterprises offering products and services exploiting scientific expertise in the areas of materials, chemicals and biological sciences & engineering.	
birac ignite Innevate Incubate	Biotechnology Industry Research & Assistance Council is a new industry-academia interface and implements its mandate through a wide range of impact initiatives, be it providing access to risk capital through targeted funding, technology transfer, IP management and handholding schemes that help bring innovation excellence to the biotech firms and make them globally competitive.         For more information about BIRAC: www.birac.nic.in	