



One of India's Biggest Evolutionary Movements in Biology



Initiators



About Somaiya Vidyavihar:

Padma Bhushan Karamshi Jethabhai Somaiya founded Somaiya Vidyavihar, an education trust in 1959, to provide quality holistic education. It was founded on the belief that education is an important pillar of nation building with the power to change lives, and education must innovate to encourage holistic development of youth. It is known as much for its Science, Technology, Engineering, Management, Social Sciences and Commerce programs, as for its programs for academic studies in various faiths and cultures of India. Somaiya Vidyavihar encompasses 35 institutions, with more than 39,000 students and 1,500 faculty. Its main campus is in Mumbai, but Somaiya Vidyavihar also operates six schools in

rural India i.e. in Dahanu, Sakarwadi, Laxmiwadi, Kopargaon, Sameerwadi, Kutch, Bagalkot and Bhopal.

With over six decades of rich experience in building and managing educational institutes of great repute, Somaiya Vidyavihar has become a Private University in 2019, bringing all of its self-financing higher education institutions and the selffinancing programmes at the undergraduate and postgraduate level under one umbrella. The University was enacted by an Act of the Maharashtra State Legislature, and approved by the University Grants Commission, Government of India.

ric

About riidl:

Research Innovation Incubation Design Laboratory Foundation (riidl) was set up in the year 2010, on its Mumbai campus, by Somaiya Vidyavihar and supported by Somaiya Trust. It was created to drive innovation & entrepreneurship and currently facilitates 39,000+ students and 1800+ faculty in the campus as well as outside.

- Department of Science & Technology
- Department of Biotechnology Ministry of Science & Technology
- Maharashtra State Innovation Society
- 4 BIRAC Department of Biotechnology



Labs:

In 2014 riidl became a Fablab affiliated with Fab Foundation MIT USA and after 2016 with the support from the above government departments, we set up a rapid prototyping facility, a DIY biolab and a Bio Incubator.

- Fablab Node https://www.fablabs.io/labs/riidl, Center for Bits and Atoms, Fab Foundation MIT USA
- India's First Do It Yourself Biolab called Bioriidl with support of instructors from Bio Academy and Fab Foundation
- XR riidl, where x means virtual / hyper / augmented reality

About Bioriidl:

Bioriidl, an extension of riidl has setup India's first and only Do-It-Yourself Biolab, and a Bio-Incubator with the support of Department of Biotechnology-BIRAC, Government of India and Somaiya Vidyavihar, an 8,550 square feet incubation centre for Biotechnology startups; a space where students, academicians and researchers can come, execute their ideas and innovate. Bioriidl labs includes Molecular Biology Lab, Cell Culture Lab, Fermentation Lab, Analytical Lab and Common Instrument Lab for members and startups to access.

Bioriidl Advisory Board:

1. Shri. Samir Somaiya, President, Somaiya Group

2. Dr. Manish Diwan, Head - Strategic Partnership & Entrepreneurship Development, BIRAC

- 3. Shri. Maulik Jasubhai, Chairman & MD, Jasubhai foundation
- 4. Dr. Ranjan Mogre, Director, Avatos Lifesciences

5. Dr. R. V. Hosur, Director: UM-DAE Centre for Excellence in Basic Sciences University of Mumbai

- 6. Lt. Gen. Jagbir Singh, Hon'ble Secretary, Somaiya Vidyavihar
- 7. Prof. Rajashekharan Pillai, Provost, Somaiya Vidyavihar
- 8. Shri. Faraz Kagalwala, Chief Finance Officer, Somaiya Trust
- 9. Dr. Sangeeta Srivastav, Executive Director, Godavari Biorefineries Pvt. Ltd.

Introduction - Darwin 2019

2) Speaker

Sessions



Darw n

D arwin 2019 was a 3 days International Conference organised by Somaiya Vidyavihar's Bioriidl where many bio-experts and bio-enthusiasts interacted with each other and shared their solutions to different existing problems. The conference was held from 28th to 30th November at Somaiya Vidyavihar Campus. The conference hosted a Biohackathon, various workshops, field visits, speaker sessions and panel discussions by famous experts in the field of Biotechnology. Attendees included academicians, industry experts and students from educational institutes as well as from corporate institutions from USA, Europe, Nepal, Bangladesh and all across India.

1

Darwinian

Gathering

Impact of Darwin 2019

7000+ Online Community

Attendees

200 Biohackers

50+ Projects

10+ Speakers

Scholarships

The 3-day international conference witnessed the presence of 500+ attendees, forming an online community of 7000+, hundred schools and colleges, participants from educational institutes as well as from corporate from the USA, Europe, Nepal, Bangladesh and all across India,

and more than 50 innovation centers.

The conference also encompassed:

- 101+ attendees who attended the conference physically
- 200+ participants of Biohackathon, a competition in which the participants had to build a system with biological application and provide solutions to different problems
- 50+ projects were given a platform to exhibit their ideas
- 5+ scholarships provided to the Biohackers
- INR 1 lakh cash prize to the winner of Biohackathon

Pre-Events



1) Agar Art

Agar Art was one of Darwin 2019's preevents. The theme for Agar Art was using microbes to create colourful patterns on Agar plates. It was in association with American Society for Microbiology (ASM). Bioriidl had conducted Agar Art in collaboration with Somaiya Initiatives For Research and Consultancy (SIRAC).

2 BioBricks

BioBricks was a workshop in collaboration with iGEM Bioriidl Somaiya conducted by Ms. Apekshakumari Patel. It was an interactive and engaging workshop focusing on BioBricks - DNA sequence which conform to a restriction-enzyme assembly standard. These building blocks were used to design and assemble larger synthetic biological circuits from individual part which would then be incorporated into living cells to construct new biological systems.



Bio Bytes

The theme for BioBytes was Incorporating technology in healthcare, conducted by Mr. Javed Khatri. It was in collaboration with Facebook Developer Circles Mumbai which provided an opportunity to all the bio enthusiasts to meet and collaborate with hardcore coders. It was a gleaming step to link biology with coding.







Roadshow, conducted in collaboration with Facebook Developer Circles Mumbai, Global Bio-India & BIRAC. It was an interactive panel discussion panelists talked wherein about researches that are being conducted at their companies. The discussion also led to new opportunities that are undertaken as an initiative to conduct biotech projects by Mechanical Engineering dept of Somaiya College in association with IIT Bombay.

Inaugural Ceremony





The inauguration ceremony began with the campus prayer and lighting the lamp as per Somaiya Vidyavihar traditions followed by the official inauguration of Darwin by Mr. Joe Davis. After this, Mr. Joe Davis delivered his Keynote speech which was surely an insightful session. Maintaining the cultural authenticity, a beautiful classical Bharatnatyam dance was soon performed.

An introductory meet and greet termed Darwinian Gathering was organised for the attendees to get to know each other and let the day settle in, hoping for the best in the coming two days.

Speaker Sessions

Mr. Joe Davis Artist Scientist at Harvard Medical School **Dr. David Kong** Director, Community Biotechnology Initiative, MIT Media Lab 3 Mr. Erik Zepka Researcher, Scientist, Artist and Philosopher



Prof. Jacinta D'Souza Professor and Chairperson, The School of Biological Sciences



Dr. Thomas Landrain Co-Founder, Just One Giant Lab (JOGL)





The keynote speech on the 1st day was delivered by Prof. Joe Davis who is a research affiliate in the Department of Biology at MIT, and Artist Scientist in the George Church Laboratory at Harvard Medical School in which he shared insights about his work. The session was filled with energy and enthusiasm and the attendees were inspired as they had insightful takeaways from the session.

The second day's talk series consisted of dyanmic and informative sessions by Mr.

Erik Zepka, researcher, scientist, artist and philosopher who creates platforms to rethink how we engage with Science and Technology and Mr. Thomas Landrain, Co-founder and President at Just One Giant Lab. The 3rd day's talk sessions were highly inspiring and filled with energy deliivered by Dr. David Kong, Synthetic Biologist, community organizer; Dr. Anshu Bhardwaj, CRI fellow, Paris and Prof. Jacinta D'souza, Professor and Chairperson, The School of Biological Sciences.

Panel Discussions





Mrs. Babita Krishnan



Mrs. Hetal Mundra

There were two panel discussions in conducted during the conference. The 2nd day's discussion was based on the topic "Combating Climate Change" and comprised of some exceptional speakers including Mr. Joe Davis, Mr. Rushva Parihar, Ms. Sumaira Abdulali and Ms. Sugandha Shetye, moderated by Mrs. Babita Krishnan.

The 3rd day's panel discussion was based on the topic "Promoting Open Research" and the panel consisted of Prof. Jacinta D'souza, Mr. Erik Zepka, Dr. Subhojit Sen, Mr. Jatin Khaimani, moderated by Mrs. Hetal Mundra. The discussion was highly energetic and inspiring.

Workshops



Several interesting and interactive hands-on workshops were a part of the 2nd and 3rd day of the conference. The main aim of the workshops was to enhance science literacy among non-science majors. The different workshops that were conducted were creating Bio-materials, DNA Extraction, Bio Brick, Agar Art, CRISPR, Foldscope and Growing algae. In the hands-on Biomaterials workshop, creating Bio-Polymers, Bio-Plastics and Bio-Leather from readily available materials was learnt. The DNA extraction workshop, the attendees learnt to extract DNA from easily available materials. The hands-on Bioinformatics workshop consisted of developing a new sequence and use it to interpret and analyze the biological data.

Van Gogh's starry night, butterflies, mountains, Walt Disney's cartoon characters, flowers and roses were some of the artwork that the attendees were able to create through this workshop. microbes are the paint and agar forms the canvas.

Bioinformatics workshop discussed many online tools that can be used to develop a new sequence and use it to interpret and analyze the biological data. Prediction of various parameters, properties or other characteristics are possible through these tools.



Mr Erik Zepka demonstrated the technique where one can modify the genes and distinguished results were shown of the edited gene and the sample gene. The workshop the attendees learnt to alter the repetitive DNA sequences and modify the gene function whereas in the How to conduct a Hackathon by Mr Jatin Khaimani discussed the various aspects of conducting a hackathon. This workshop inculcated the knowledge of the ways about hosting a hackathon and how a person can judge the performance on the basis of complexity, feasibility and how we can incorporate the solutions in real life. The Foldscope workshop aimed to raise awareness of the foldscope, a simple and affordable microscope. Attendees learnt to assemble it and its various other specifications.

Biobricks workshop focused on using a software for not only banks time for further experiments but also designed their desired BioBrick Circuitry, depending upon the purpose of users' research area. The best part is that by using this platform a biobackground student could integrate and learn all the online tools easily, as multidisciplinary research projects are expanding worldwide.

Field Visits



1 Merck Life Sciences

Merck Life sciences is one of the leading pharmaceutical R&D company that has provided various patents and research papers throughout.. It works on Lifesciences, Biotechnology, Chemistry and healthcare products and has a large base of customers.

- Various machines were observed in the laboratories that were used for treatment of water and chemical analysis. Dr. Pintu Bhattacharya guided all those present on how the different equipment helps them to identify the impurities of water and the quantity and quality of the impurities in them.
- Dr. Sanjay Poman provided guidance in the chemical analysis lab. He showed the techniques and methods to analyse the sample and determine the quality of it along with the use of HPLC and TLC machines.





Imaginarium is India's largest Rapid Prototyping and Rapid Manufacturing Center. They provide prototypes to an assortment of industries from jewelry, engineering, automotive, architecture, consumer goods, etc. The center is a home to various 3D Printing Machines including 20 Industrial 3D Printers.

- The attendees learnt about the newer techniques of Metal 3D Printing, Body Organ, 3D Print and Ornamental 3D Printing in the domain 3D Printing Technology.
- A glance through the center, along with the presentation of the operational segment of the center. They were told how the center is offering customers solutions through state-of-the-art technology.



3 Haffkine Institute

The Haffkine Institute for Training, Research and Testing multi-disciplinary Institute engaged in training, research and testing of various aspects of infectious diseases. The institute is named after Waldemar Mordecai Haffkine who discovered plague vaccine.

- The attendees were given an insight of the details and procedures of Cloning techniques, and majorly about the cloning of Dolly the Sheep.
- Details regarding the investigative studies in the domains of Virology, Zoonosis, Biochemistry, Toxicology, Bacteriology, Clinical Pathology and Chemotherapy were also disclosed and explained.
- Development of Anti-rabies serum and anti-snake-venom serum, production of Oral Polio Vaccine were also explained.



Godavari Biorefineries Ltd. is a daughter company



of the Somaiya Group. There are 2 specialized labs in Godavari Biorefineries Ltd. - Cancer Biology Labs and Genesis Labs.

- Dr. Maithili Athavale was the coordinator for this field trip. Participants were shown that Godavari Biorefineries Ltd. is currently working on the discovery of molecules of treatment of breast cancer and prostate cancer cells. Their approach has been different than all other Pharmaceutical Companies.
- Genesis Lab was shown focusing on agriculture research. They are working on renewable resources from agriculture which is fundamentally different than working on fossil fuels.

Biohackathon



Production of Biotherapeutic pesticides



Utilization of fruit waste







Pulverizing plastics

purifier

Biohackathon was a competition in which the biohackers to build a system with biological application and provide solutions to different problems. The competition showcased various bio-based innovations in the areas of Water Management, Waste Management, Bio Products, Energy, Genetics, Environment and Bio-Medical.

On the 2nd day of the conference 40+ teams presented their projects to a panel of experts. From these projects, 5 best teams were selected for the finale which took place on the 3rd day of the conference. The projects of the 5 teams selected for the final round of Biohackathon were Utilization of fruit waste, pulverizing plastics, Agar based water purifier, production of biotherapeutic pesticides and vegetable oils to produce rubbers. The winner of the competition was Mr. Kartik Savla who received a cash prize of Rs. 1,00,000. His project was based on replacing aromatic oils by vegetable oils in rubber products thereby reducing the illeffects it was contributing to the environment.

Winner – Biohackathon

(1)

It takes courage to experiment with innovative ideas. What motivated you to participate in Darwin?

Innovation means creating something new, and that sense of creation is what keeps you motivated. My willingness to create is what brought me to Darwin.

2

How did you conceptualize the idea of replacing aromatic oils by vegetable oils in rubber products?

The idea of replacing aromatic oils with vegetable oil is based on my target to create a biodegradable rubber to prevent the harm caused by the waste generated by the rubber products, and it's just the second step towards my target.

3 It w

It's been a year since you were declared the winner for India's biggest revolutionary movement. How does it feel now and would you like to give any advice to this year's participants?



Mr. Kartik Salva - Winner,

It always feels good when you are rewarded for your work, the only suggestion I would like to give is that any rewards for your work should be taken as appreciation and encouragement to continue the work, never let your hunger for learning and creation end.



Your idea had a great future scope. So, are you still exploring it?

Yes, it has a great scope for development and I am exploring the ways to achieve it. The idea has a great future scope, the work I have done contributes for a part, there is more work that needs to be done to achieve the ultimate goal of creating biodegradable rubber. Also, it will be a revolution in the field of rubber as well as open a new stream for development. Yes, I am still exploring the possible ways to achieve it.

Biohackathon 2019



Could you please share your field of study and what are you working on currently?

I am a Chemical Engineer, and currently looking forward to bringing up my various ideas to life by learning the necessary subjects to support them.

Introduction - Darwin 2020



Darwin 2020 was held from 2nd to 5th of December with registrations from over 29+ countries. To make the beginning even more exceptional than it already was, the conference witnessed Prof. George Church, Professor of Genetics at Harvard Medical School inaugurating the newly built Bioriidl - India's First DIY Biolab and shared his insights elaborating snippets of his work that he has accomplished lowering the cost of an extremely expensive and intricate process with regards to the DNA.

Over the course of four days, the attendees interacted with many subject experts who have established themselves in the field as entrepreneurs and researchers and learnt much about the finesse involved in micro-branches of biotechnology that are interconnected with one another. From synthetic biology to deeply encompassing sessions about vaccines and virus, the sessions covered it all leaving the attendees awed and wanting to learn more.

Each day consisted of Virtual Tours, Workshops, Talk Sessions, Featured Sessions by Biolabs, Panel Discussions and Networking Sessions where the attendees came together to discuss various topics, newer perspectives about problems that have persisted in the Biotechnology field. Around sixteen hands-on workshops were conducted that allowed everyone present to be a part of the real world from over their screens along with a paper presentation competition - Research Symposium that enabled participants to bring forth their ideas in a truly insightful and impacting manner. The research papers of the winners were selected to get published in The African Journal of Biological Sciences.

And in order to facilitate even better ideas, networking sessions where attendees could choose a topic of their choice and lead conversations. The sessions were conducted over the course of next three days that the conference was held. An airmeeting - networking sessios was also organised for the rest of the attendees.

The virtual tours took the attendees to many biolabs across the globe and offered them a glimpse into the various experiments, equipment and conclusions drawn that are one step forward to achieving the dream of bringing a revolution together. As a matter of fact, the international attendance brought forth many ideas, opinions and people together- which made Darwin 2020 an even more successful conference that one could have hoped it would be.

Impact of Darwin 2020

750+ Attendees

Countries



Research Symposium Teams

16 Virtual Workshops

Virtual Tours

12 Collaborations

The 4-day virtual conference witnessed the presence of 750+ attendees from 29+ countries including India, Brazil, Mexico, USA.

The conference also encompassed:

- 43 teams participating at Research Symposium, a platform for the researchers to exhibit their research papers

- 16 Virtual Workshops like Biomaterials, Primer Designing, Yeastograms, Bioinformatics and more

- 4 Virtual Tours to various institutes & labs like SVA Bio Art Lab, MboaLab, & more to make the attendees understand the global innovation culture

- 12 Collaborators to promote the Community Biolab culture in several countries across the globe

Participating countries



Bangladesh
 Iran

Pakistan

• Spain

• Greece

• UK

- Mexico
- USA
- Brazil
- Nepal

- France
- Sweden
- Bolivia
- Singapore
- Cameroon

• Tunisia

• Nigeria

• Malawi

Indonesia

• Denmark

• Turkey

- Israel
 - South Africa
- South Korea
- Egypt
- Australia
- Austria
- Thailand

Pre-Events



1 Panel discussion on Genetic Modifications - Safe or Unsafe?

With Mr. Salman Promon Khan, Ms. Maria Chavez, Mr. Robert Garcia and Mr. Otim Geoffrey as our panelists - the topic of Genetically Modified organisms was thoroughly discussed. The sub-topics of, bioethics, legal framework and importance of biolabs were brought forth

and the glaring absence of knowledge about the subject was acknowledged along with ways to correct this framework, and importance of biolabs.





and Facts about Food for Immunity Boosts by Dt. Bhavna Sharma

Talking about the myths and facts about immune and immunity system, Dt. Bhavna Sharma instilled a need for better lifestyle in all viewers. Things about gluton based diet, home remedies as boosts and vitamin supplements were cleared and a precise understanding was presented about how they work and how should we make them work.



Ask Me Anything session on 7 years until we stop existing by Mr. Sagar Singh

The session witnessed Mr. Sagar Singh, an environmentalist talking about how climate change governs life right now and the only way to battle the degradation is switch to sustainable methods because complete ban of plastic and shut down of industries is not possible. He talked about the importance of effective waste disposal, use of

non-conventional resources and recycling, along with a message to focus on the consumption pattern that is extremely capitalist in nature. The session, overall, was a huge success as the attendees were enlightened with a very different perspective and the alarming problem that should be the world's biggest priority right now - climate change.







today to live a better tomorrow by Mr. Subhajit Mukherjee

Mr. Subhajit talked about the intentions and psych of the population who do not acknowledge the many problems that arise with inefficient use of freshwater. He talked about important factors like time and education that are needed urgently in order to bring about a substantial change in society when it comes to fast depleting sources. The pre-event came to

an end at a hopeful note with a promise to do better today and tomorrow - not just for us but for those who do not enjoy the same resources as us and the ones who truly deserve it.



5 Ask Me Anything on Biodiversity Conservation and Community Building

The event held a profound impact as personal topics like education and qualities required in order to be an impactful leader were discussed by Mr. Nirit Dutta with regards to nature and life in general. Important issues like impractical education practiced in India and the conflict regarding meat consumption was addressed with positive

milestones from the speaker's own life. The event talked about community building, biological management, a career in it and the scope of becoming successful in it along with qualities required to be a changemaker in the field.

6 Pre-Research Symposium

Darwin offered a small glimpse into the world that their movement has built with science and research. Partnering with BioTalk Magazine for the Pre-Research Symposium, where attendees submitted their research articles and got a chance to be featured in the BioTalk Magazine and a special mention on Darwin's website.

The BIoTalk Magazine is a team of Biotech engineers united by the goal to build a Biotechnology community. They aim to be a bridge between students, scholars, professors and the industry. They are looking for dots in the bioscience community to connect and lay the initiative to set the right path for future scientists and engineers!

Winners



1 Anandita Ghan

4 Ishita Tarnekar

2 Anusha Wei

5 Kristiane Polido

Mustafa Hakim Vohra

8 Sandarbh Kumar

3 Gayathri Chandran

6 Michelle Pereira

🧿 Savani Nagarkar

🔟 Shweta Chakrabarti

Bioriidl Inauguration



The virtual inauguration of Bioriidl, India's First DIY Biolab was conducted as a part of the first day of Darwin 2020. Bioriidl was inaugurated through a video tour of the lab in the Somaiya Vidyavihar Campus by Prof. George Church, Professor of Genetics at Harvard Medical School. Prof. Church is also a founding member of the Wyss Institute & the director of PersonalGenomes.org, world's only open-access information on human genomic, environmental and trait data and it was an absolute honor to host him at the conference. He added during the inauguration, "It's a wonderful space created. I think many amazing researchers will come from here. That's a wonderful

resource, wonderful facility."

Bioriidl is an extended augmentation of riidl which encourages research and innovation in the field of biological sciences. The Bioriidl lab based in the Somaiya Vidyavihar Campus consists of a 2 floored space comprising of a bio-incubator at the lower floor and a biotechnology lab on the upper one. The bio-incubator is an incubation cell for Biotechnology startups; a space where biologists can come, execute their ideas and bring their innovations to life whereas the labs include Molecular Biology Lab (inclusive of a Biological Safety Cabinet Class II A2 with Thimble Ducting and Electrophoresis unit (Vertical and Horizontal), Cell Culture Lab (inclusive of Liquid Nitrogen Container for storing 3000 samples), Fermentation Lab (Peristaltic Pump and Autoclave - 100 Litres included), Analytical Lab and Common Instrument Lab for members and startups to access.

Speaker Sessions

1 Keynote speech by Prof. George Church, Professor of Genetics at Harvard Medical School



Prof. George is the professor of Genetics at Harvard Medical School, a founding member of the Wyss Institute & the director of PersonalGenomes.org, world's only open-access information on human genomic, environmental and trait data. He developed the first methods for the first genome sequence & dramatic cost reductions since then (down from \$3 billion to \$600), contributing to nearly all "next generation sequencing" methods & companies. His team invented CRISPR for human stem cell genome editing & other synthetic biology technologies and applications.

- He started with a brief background into the Genetics field and Synthetic Biology.
- He enlightened the attendees about the long journey that DNA and genomics have been through and the milestones that have been achieved. He spoke about the evolution of this field and how it was expensive but later became cheap and more efficient and also explained about DNA Writing.
- He virtually inaugurated Bioriidl India's first DIY Biolab. The lab helps students, faculties, scientists and biotech entrepreneurs in their research work, developing ideas and products by providing economical lab facilities, biotech community and a number of services to accelerate their success.

2 Dr. Manish Diwan, the Head of Strategic Partnerships & Entrepreneurship Development at BIRAC on the topic BIRAC energizing Biotech ecosystem



Dr. Manish Diwan, the Head of Strategic Partnerships & Entrepreneurship Development at BIRAC. Dr. Diwan aims to nurture and empower the Biotech Innovation Ecosystem in India. An ardent supporter of startups across the value chain, he provides resources that facilitate ideation commercialization, translational research and address unmet needs in healthcare, medical devices, diagnostics, industrial biotech, agriculture,

waste management, clean energy, and related areas through the development of globally competitive, innovative products and technologies.

- He shared insights about the qualitative and quantitative significance and importance of biotech startups and companies across the globe with informative statistics that showed more than 600 Biotech companies, more than 3500 Biotech startups, and more than 200 biotech products that are available and functional.
- He also spoke about BIRAC which supports startup solutions in market, for eg: Accuster and Predible. They are the largest vaccine manufacturer in India and are 12th in the Indian and 3rd in the Asian market.
- They have 125+ startup solutions for Covid 19. BIRAC has been given the task to facilitate high quality medical products.

3 Dr. Thomas Landrain, co-founder and CEO of JOGL, on the topic Biocommunity based Research and Innovation



Dr. Thomas Landrain is one of the pioneers behind the DIYbio (Do-ityourself Biology) & Open Science movements and communities. He founded in 2009 La Paillasse in Paris, the first French open lab that became one of the largest ones in the world. He is the founder of the digital platform Just One Giant Lab (JOGL.io). JOGL is the first research & innovation laboratory operating as a distributed, open, and massive mobilization platform for collaborative task solving.

- He made a point about missed potential, how the lack of resources affects millions of students; how solving an accessibility issue brings out the new era of researchers, entrepreneurs, civil servants and more.
- He mentioned the various projects with great potential that do not get the resources, recognition and help that they need.
- Bringing out a solution Just One Giant Lab (JOGL) is the first research and innovation laboratory operating as a distributed, open and massive mobilisation platform for collaborative task solving.
- OpenCovid19 is a JOGL program which develops open source at low cost tools and methodologies that are safe and easy to use in response to the Covid-19 pandemic.

4 Mr. Joe Davis, artist scientist in the George Church Laboratory at Harvard Medical School on the topic DNA Manifolds for Information Keeping



Mr. Joe Davis, a research affiliate in the Department of Biology at MIT, and in the George Church Laboratory at Harvard Medical School. Joe Davis spent most of his early life in the American Deep South. While earning his Creative Arts degree (1973) from Mt Angel College in Oregon, he pioneered sculptural methods in laser carving at Bell Laboratories in Murray Hill, NJ, and the University of Cincinnati Medical Center Laser Laboratory.

He shared his insights and throwed light on various points including:

- Human, Religion and Cosmic Relation are related to each other.
- Neurology and Mental Health research is still evolving.
- Subhan Allah is encoded in 76 codes using binary conversions.
- Silent code can be used to encode any DNA codes.
- DNA fountain enables a robust efficient storage architecture.
- DNA storage is expensive for the long term.

5 Ms. Anu Acharya, the Founder & CEO of Mapmygenome on the topic Genomics in the Pandemic Age



As the Founder & CEO of Mapmygenome, Ms. Anu introduced the concept of personal genomics in India with the launch of Genomepatri in 2013. She co-founded & pioneered her first venture Ocimum Biosolutions through innovative bioinformatics & LIMS solutions, global acquisitions, awards, & fund raises. She serves on governing boards of NIBMG & IIIT Hyderabad;

Advisory Board at Action for India & KIIT; board of mentors for Ivy Cap Ventures; member of CII National Committee on Biotechnology; Committee Member of HIMSS Asia Pacific India Chapter.

- Mapmygenome was created to bridge the inequality in the genomics world.
- She spoke about the journey of Genomepatri and the research since then, Genomepatri became the most popular product.
- Genomepatri predicts genetic risk for 100+ diseases, traits, inherited conditions, drug responses and carrier status.
- Created COVID 19 testing lab at Hyderabad airport to identify any mutations.

Dr. Kate Adamala, co-founder of the synthetic cell therapeutics startup Synlife on the topic Biology in Synthetic Life



Dr. Kate is a biochemist engineering synthetic cells. Her research aims at understanding the chemical principles of biology, using artificial cells to create new tools for bioengineering, drug development, and basic research. The interests of the lab span questions from the origin and earliest evolution of life, using synthetic biology to colonize space, to the future of biotechnology and medicine. Kate is a co-founder of the synthetic cell therapeutics startup Synlife, and coordinator of the Build-a-Cell synthetic cell community.

• Genes for delivering a cell functions of which are not known.

- Synthetic engineers want to simplify the existing cells to make them more understandable and easier to build and to enable them to behave suiting the kind of pattern that the consumer wants.
- This manufactured cell would contain elements of cells/organisms and other synthetic elements.
- Advantages of this cell would include construction of genomes and proportion and constitution of elements that will make it diverse and versatile in nature.
- Applications of synthetic biology and biocomputing along with the visions to engineer processing machines that work on biological parts to provide operational freedom as electronics do.
- Explanation of SCRAMM synthetic cell requirements for activating medicinal metabolites.
- Teleportation of biology.

Or. Jason Kelly , co-founder & CEO of Ginkgo Bioworks on on the topic Scaling Synthetic Biology

Ginkgo's platform needs more than technology to deliver cell applications





Dr. Jason Kelly is the co-founder & CEO of Ginkgo Bioworks. Ginkgo is a synthetic biology company that programs cells for customers in the chemical, pharmaceutical, food & energy industries. The company recently raised over \$430M in venture capital to expand their automated genetic engineering foundries. They have a \$100M joint venture with Bayer to develop microbes for self-fertilizing crops, a \$160M partnership with Roche to develop antibiotics & with Motif for making animal-free protein ingredients. They have been listed for the past three years on CNBC's Disruptor 50 List of fast-growing companies. Prior to Ginkgo, Jason received B.S. degrees in Chemical Engineering & Biology and a PhD in Biological

Engineering all from MIT.

- Brought out a different perspective of DNA and Computer code We can program cells(DNA) like we program computers(code) but cells are not computers.
- DNA synthesis is the core technology for compiling genetic code. Ginkgo's platform needs more than technology to deliver cell applications.
- Ginkgo's large fixed cost investment reduces the variable cost of compiling and debugging code for their customers, they provides support on process optimization to Moderna for COVID-19 response.
- When you debug a computer program that happens on a computer but when we think about DNA we can do simulation on a low level, chances are rare in biology to debug a cell program.

Dr. Jaden A. Hastings, CEO of Analogs LLC on the 8 topic Hacking in Space



Dr. Hastings works across multiple fields as a researcher as well as an entrepreneur, from synthetic biology to machine learning and bioastronautics. In 2017, Hastings founded the x0.lab initiative a not-forprofit organization that supports mission-based scientific field studies and supporting STEAM education in remote communities. Hastings has cofounded two community labs, London Biohackspace.

- Dr. Jaden A. Hastings brought along a surprise for the session in the form of none other than Dr. Jessica Synder.
- The SENSORIA Program is actively working to close existing gaps in our ability to support the next generation of crewed missions that will be tasked with performing under extraordinary conditions over the course of months to years.
- The main aim of the SENSORIA Program is to place women squarely at the center of our vision for the future of space exploration through a series of female-led analog missions.
- The Lunares Research Base is a specialized facility for simulating manned space missions on the Moon and Mars which conduct research in the field of human factors psychology during manned space flights and tests of modern technologies, not only from the space sector.

Dr. Amy Dickman, Kaplan Senior Research Fellow at the University of Oxford on the topic Warriors, Women, and Wildlife: Big Cat Conservation in Tanzania and beyond



Dr. Amy is the Founder and Director of Oxford University's Ruaha Carnivore Project. She has worked in Africa for over 20 years, specializing in humancarnivore conflict and community-based conservation. She has published over 80 papers and book chapters on large carnivore conservation, is a National Geographic Explorer and has won international awards for her conservation work.

- Dr. Dickman has always been fascinated by lions.
- Big cats have always been central to human cultures , highlighting various issues faced for protecting big cats.
- For years, Ruaha has been a global hotspot for large Carnivores but now they are under immense threat.
- Unbelievably, Lions are in less number than Rhinos; around 22500 left.
- Significant percentage of lions range outside the protected areas which makes it difficult to conserve them.
- The key threats to lions are conflict, habitat and prey loss.

Research Feature by Prof. Dr. Gustavo Zubieta, Director, High Altitude Pulmonary and Pathology Institute IPP



Dr. Gustavo is the director and the high altitude medicine specialist Head of the High Altitude Pulmonary and Pathology Institute in La Paz, Bolivia, he is edicated to the favorable effects of life at high altitude and its benefits with less incidence and mortality during this COVID-19 Pandemic. Apart from publishing on Extended longevity at high altitude at BLDE Journal in Vijayapur, India, he has also given multiple talks about the benefits of life at high altitude in multiple conferences throughout India.

- Prof. Dr. Gustavo Zubieta talked about Chronic Hypoxia and evolution at high altitude and beyond in Space.
- There are two types of adaptation Genetic adaptation and Physiological adaptation together both bring out change.
- Pneumolysis is a new terminology which is destruction of the alveolicapillary tissue.
- In the cities with the altitude of 3100m 4100m like La Paz and El Alto we are defeating Hypoxia.
- Right now we are on Earth and intend to go to Mars; from an environment full of oxygen to where there is no oxygen.

Panel Discussions



<u>Role of Community Biolabs in</u> <u>Promoting Open Science</u>

<u>Panelists</u>

<u>Moderator</u>

Mr. David Sun Kong, Director, Community Biotechnology Initiative, MIT Media Lab



Mr. Salman Promon Khan, CEO, Mechamind



Ms. Carolyn Angleton, Co-Founder, ARC-BAC



Mr. Otim Geoffrey, Founder & CEO, SynBio



Mr. Beno Juarez Fab Lab Lima

Africa

The panelists shared their valuable insights on the following points:

- Community biotechnology education programme held a lot when COVID-19 happened.
- Science literacy allows citizens to understand the problems and have a conversation with the government.
- Community biolab is an open space and researchers are good to communicate and interact with the community, and get to know what biotechnology helps in agriculture, medicine.
- Our main aim is to empower new DNA in traditional industry.
- Pushbacks biolab get from traditional industry:
 - 1. Funding issues, accessibility and the lack of education.
 - 2. Policy makers are a real challenge on getting on board with the issues.
 - 3. Take on Focusing local as well as connecting internationally.
- It's really important to start an initiative from our homes as they say 'Charity starts from Home' then it'll be easier to share our knowledge internationally.

Sustainability and Feasibility of Biomaterials

<u>Panelists</u>

1 Ms. Lara Campos

Artist, Designer, Researcher & Maker, Biomateriality



Dr. Florian Graichen, Scion's General Manager, Forests to Biobased Products





Mr. Salman Promon Khan, CEO, Mechamind



Material Researcher & Tutor, Materiom



Dr. Sangeeta Srivastava, Executive Director, Godavari **Biorefineries Ltd**

The discussion throwed light on various points including:

- The development of sustainable biomaterial is a challenging opportunity for new learners.
- The most important thing is to understand the problem; for any process to have an economic value we need to have knowledge of the scale of the process, it has to be sustainable.
- By doing this we can design our process and actually learn from it.
- We really need to think about starting conversations with our communities about the problems, situation they are facing and then create solutions for the same and share our projects with them.
- We have to work with the communities who will be using the design otherwise all the design will be of no use.
- If we want to replace the mineral and plastic industry there are laborers involved, Billions of capital involved.
- There is a transition happening from Fossil based economy to bio economy. And now that we are moving away from exploiting fossil fuels we can still have some hope for Biomaterials.

Fireside Chat



Evolution of Viruses Leading to Pandemics

<u>Speaker</u>

<u>Moderator</u>



Dr. Gigi Gronvall Senior Scholar, Johns Hopkins Center for Health Security

Mr. Robert Garcia PhD Scholar at Monash -Warwick Alliance



They discussed the importance of vaccines and Antibodies to test the Aftermath of coronavirus. They talked about various kinds of testing depending on the past (Antibody) and current infections (PCR) and types of vaccines that are needed and their manufacture and distribution.

They concluded with how if nothing is done to prevent the outbreak, the scale of destruction will be much higher than history has witnessed. Vaccination has to be introduced prevent re-infection with the right ethical and scientific standards in tow.

Virtual Workshops



1) Yeastograms by Guenter Seyfried

Yeastograms conducted by Guenter Seyfried was a method to cultivate baker's yeast and to shape the cultivation according to aesthetic and artistic decisions. The attendees received live exposure to the microbial world using home-based products like pressure cookers and potatoes.

2 Designing Sustainability by Louis Rose

Louis Rose guided to design products, develop a conscience about the methods used in the manufacturing process, and maintain a healthy relationship with nature that supports the entire chain of events. Attendees learnt to develop bio-

"Industrial Design (ID) is the professional practice of designing products, devices, objects, and services used by millions of people around the world every day."
INDUSTRIAL DESIGNERS SOCIETY OF AMERICA



Industrial Design

based materials from natural sources and design products by exploring and conceptualizing various processes and systems

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Bioinformatics & Homology Protein Modeling by BSRI Lab

screen

BSRI Lab enlightened about homology modelling works and what exactly the structure of a PDB file is. Use softwares such as NCBI, UNIPROT, Phyre2, Swiss Model, PyMol and get all protein databases with just a simple click.





Bioprinting by Alessandro Queiroz

4

Alessandro Queiroz explained the basic concepts of bioprinting, the process of slicing a structure, studying which are the main parameters influencing the process, bioprinters, software used in the process. The attendees worked on short and medium term applications like drug testing and tissue engineering.

5 Understanding Molecular Cloning by Dr. Jyotirmoi Aich

Dr. Jyotirmoi Aich helped understand Molecular Cloning, shedding light on restriction digestion, DNA ligation preparation of competent cells followed by transformation to identify the recombinant and non recombinant colonies.





6 Cultivate Your Own Bacteria by Edgar Bottle

Growing bacteria by Edgar Bottle taught the attendees to grow bacteria at home. The hands-on workshop also facilitated to inculcate an understanding of the diversity of bacteria in the environment among the attendees.

Microchonography - Motion under the microscope by Roland van Dierendonck

Microchonography (Motion under Microscope) by Ronald Van Dierendonck was an informative session where everyone captured the movements of microorganisms under the microscope through chronophotography.





8 Science Communication by Claudia Alarcon Lopez

Science communication by Claudia Alarcon Lopez where attendees learnt to make their own scienceoriented social media profile for better reach as a bio enthusiast. Received personal review on the

creation of an efficient bio-based social handle and learned to communicate and share your work with researchers, Ph.D., scientists, and engage science enthusiasts in your work.

9 Virtual PCR Simulator by Biotec Oportunidades

Virtual PCR Simulator by Biotechop in which attendees were informed about construction of virtual PCR simulator, scoping its applications, experimenting with PCR technique and Utilizing functions of kits, reagents, and protocols with real-life examples.







10 How to make a DIY Incubator by BioHacking Space

Team Biohacking space Peshawar came up with the idea of constructing a cheap price DIY incubator. The DIY incubator they design is cheap and also one with little knowledge of engineering can design this on its own by using a refrigerator insulated chamber,

thermostat, a light source, DC motor, and a heating element. In Biohacking Space DIY Incubator, attendees were taught how to design its infrastructure, testing it and control the dryness of culture media.

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11 BioBricks by Apeksha Patel

Biobricks an attempt to create was an understandable base of synthetic biology and its general techniques. Building blocks that can be combined in different ways were assembled to form larger synthetic biological circuits that together have

a unique function which could be incorporated into living cells such as E. coli cells to construct new biological systems. Attendees designed an in-silico plasmids, assemble biological circuits and incorporation of living cells into biological systems.

12 Healthcare Decoded - The Analytics **Conundrum by Harish Rijhwani**

Mr. Harish Rijhwani taught the attendees about the healthcare system, which has grown exponentially in terms of efficiency with due credits to data analytics. The data-reliant system can help derive accurate insights on the systemic waste of resources, track individual practitioner performance, and the health of the population along with the identification of people at risk of chronic diseases.

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Development of Bioplastics by Zumra 13 **Yagamur Cetinler**

Yagamur Cetinler explained Zumra making biodegradable bowls from bio-based materials for feeding street animals. The attendees created edible bioplastic bowls and processed home based bioplastics using various production methods.



Biomaterials using Organic Waste by Naifactory Lab

Naifactory Lab gave insights to the attendees about creating biomaterials using organic materials. It taught how to create biomaterials using AGAR. They learnt about upcycling organic waste to make a vertical interior garden with biopots.

In Silico Approach for Visualizing Coronavirus by PSRC Labs

PSRC Labs helped the attendees build an understanding of the coronavirus by visualizing it's structure first hand by using RasMol, over screens without any risk. The attendees experimented with protein structure using biomolecule visualization techniques and worked with tools like VMD apart from browsing through various biological databanks and databases.





16 Primer Designing by Tejas Chirmade

Mr. Tejas Chirmade introduced the attendees to Primer designing concepts and PCR applications in the real world. Topics like Gene isolation were covered and sequence visualization were of executed by use of MEGA-X.

Featured Talk Sessions by Biolabs



1 Biodesign Lab

Biodesign Lab's mission is to explore how living organisms forms and behave or inanimate matter phenomena, can be useful for Architectural Design.

- Discussion about using wasps for metamorphosis.
- The lab's idea is to produce the materials and not merely mimic them.
- Producing biomaterial from the comfort of your home is a fairly easy job but producing it in large quantities may turn out to be a chore and this is what they are working on - to ease this process into one that of comfort.
- The future plans consist of trying to keep on changing ideas and keep designing more.





SynBio Africa's mission is to be the leading innovators for sustainable and low cost solutions with breakthrough technologies to great challenges in health, agriculture and environment in Africa. Their areas of interest are as follows: biosensor and biomarker development, environment bioremediation and vaccine development among others.





- Mr. Otim Geoffrey established Synbio Africa a Community Biolab in Uganda to increase the benefits of Synthetic biology in Africa.
- Connect innovation to entrepreneurship for maintaining sustainability.
- Challenges faced by Synbio Africa Funding for projects.
- Lack of regulatory system for biotechnology and biosafety.
- Inadequate resources in terms of laboratory space and equipment.



3 Hive Lab

Hive BioLab is the first community/DIYBio lab in Ghana, Africa dedicated to the rapid prototyping of ideas in biology, research, enterprising biostartups by helping and providing resources to students and graduates to translate science to

businesses. There are numerous programs and discussions activities like beekeeping community project and much much more.

- Using biology to solve community problems.
- A brief tour of the lab.
- Spoke about open source, laser cutting and 3D printing.



Matera Lab strongly believes that waste is a design flaw, and that in order to change it, the lab helps everyone to see the potential that there is in "waste". Always having in mind, the circularity of everything,



they create consumers who know where their products come from. And last, but not least, what they can do about it. Their goal is to find and offer different materials and product solutions that are sustainable, compostable, and locally sourced. A community lab, based in México, it seeks to address "waste" perception. All this integrating science and design into alternative products. Helping upcycle the current organic waste stream, such as food scraps, peels among others, into simple processes of production (which can be made from our own kitchen) and turning them into usable products.



8 Media Lab Nepal

Media Lab Nepal is a group of students from diverse fields like biotechnology to engineering to management, introducing bio hack for the first time in Nepal which is established to bring together innovators to innovate for all. It believes that the effective solution can be obtained when innovators from different disciplines work for it. In collaborations with international scientists, labs

and private companies, it aims to benefit the innovation process in developing countries like Nepal. Inventors and Innovators can be found in any corner. Education and their qualification cannot act as their judging factor so it also aims to bring them together and give them an opportunity to innovate without any boundary.



The purpose of BSRI is to provide bioinformatics and experimental biology education and hands-on practices to the students.Bioinformatics, Structural biology, Pharmacology, Molecular Biology, Synthetic Biology are now the emerging fields for research. We are trying to train up our students for preparing themselves to cope up with these cutting edge research facilities.





We are focusing to establish a platform where STEAM based trainings will be integrated to teach specific communities, which may enable us to go from idea to product in a comparatively lower cost. We aim to



MECHAMIND is dedicated to the development of an open community and collaboration. Their include engineering, biology, design, works charity, economic empowerment and more. Their dream is to establish a Citizen Science

Network as a base of an open science society in Bangladesh. They are focusing to establish a platform where STEAM based trainings will be integrated to teach specific communities, which may enable us to go from idea to product in a comparatively lower cost. They aim to enable underprivileged kids to solve real-life problems and develop skillsets for future techbased industries.



Nova planta

The company works with the development of scientific research with the use of plant biotechnology using the various techniques of plant tissue culture for large-scale production of plants.

6 PSRC Lab

PRSC is a leading pharmaceutical and biotechnological centre between medical universities in Tehran which encourages enhancement of creativity, motivation, professionalism and ethical attitude in students. It launches startup related to pharmaceutical, bio-technological and health



HPLC workshop

sciences. It helps evolve innovative ideas and help creators commercialize them. It provides high quality research services like microbial and molecular analysis with full fledgedadvanced technologies.



Community Of Biotechnology

The "Community of Biotechnology" is a national organization where all the students of biotechnology of public and private universities in Bangladesh are united in a platform where they share different resources with one another and do research despite being in different

institutions. It offers workshops, seminars and research opportunities throughout the country. It is being collaborated with many well-known national and international organization in the world.

Virtual Tours



1 BioLinker

BioLinker is a startup that works with the production of synthetic biology, supplies cell-free recombinant protein synthesis kits, as well as solutions and services for the production and purification of recombinant proteins in different systems or as they like to say it, synthetic biology at your fingertips.



The Bio Art Lab, founded in 2011 as part of SVA's BFA Fine Arts facility was conceived as a place where scientific tools and techniques become art in practice. This lab is the result of many people's expertise, research and sustained efforts. Witness the historic skeletal collections, a herbarium, and an aquarium along with the library of the Bio Art Lab.





3 Fablab Barcelona

Fab Lab Barcelona was the first fab lab funded in the Europe Union and is a benchmark in the powerful network of about 1800 fab labs in over 100 countries. Fab Lab Barcelona is a research and

and innovation centre situated inside the institute of Advanced Architecture of Catalonia, focusing mainly on Research, Education, and Services, pushing the boundaries of what Fab Labs can be and do in neighbourhoods, cities and regions. It is also the headquarters of the Global Coordination of the Fab Academy program and leads the Fab City Project. Get a glimpse of their research projects and extraordinary work in Bio - Art, Design and much more in a Virtual tour of their lab.





MboaLab is a laboratory for social innovation, community education, collaboration, and mediation at the service of the community. The aim of Mboalab is to catalyze sustainable local development and improve people's living conditions through



open science. Attendees glimpsed into a variety of incubators, enzymes, bio-equipment, live experiments on protein-synthesizing, and much more.

Research Symposium

Research symposium is a global research paper presentation competition which gives a platform to the researchers to exhibit their research papers and get their work published in a reputed journal. The attendees were introduced to other researchers and innovations in the Life Sciences domain happening around the globe.

The symposium consisted of two rounds - the first demanded a submission of an abstract of 250 words explaining brief about the research with keywords. The second round asked the participants to present the entirety of the paper using Powerpoint presentations. The top 10 selected papers are ready to be published in The African Journal of Biological Sciences which is an International peer-reviewed, Open Access journal that publishes original research articles as well as review articles in all areas of Biological Sciences. It operates a fully open access publishing model which allows open global access to its published content. The research based in the papers ranged from cataloguing of biological assets to RNA vaccines mediated by CRISPR and probiotics and prebiotics in colon cancer.

1) Ms. Shilpy Sharma

4 Dr. Subhan Ali Md

7 Mr. Mahommad Tarek

10 Ms. Carmen Padilla

<u>Judges</u>



🜀 Mr. Deepika Sharma

8 Dr. Rohit Bhatia







6 Mr. Ritwika Roy



Research Symposium Winners





2) Niyati Bhanushali



Anshika Gandre 3



Divya Vilas Gujar 4



5) Krina Chirag Gandhi



6) Shabib Khan

























12 Namrata Raval





14 Claudia Alarcón López









17 Alpana Aacchelal Sahani 18 Vrushali Deepak Shedge

19 Manasi Vinayak Phadke



20 Siddique Iramzeba Nazir Ahmed



21) Anika Afroz Shaikh



22 Muskan Shaikh



























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The Ambassador Program

The individuals who were seleted had a passion for starting a change in the biotechnology domain and support the biocommunity in India, leading and guiding individuals to a future where we all achieve the objective of this evolutionary movement.

These individuals acted as an official Ambassador and representatives of Darwin. They promoted the Darwin conference through their individual social media handles, and connected us with a regional community of researchers and entrepreneurs. They helped Darwin turn into a global community. Their roles included maintaining relevant databases along with submission of monthly reports to the Darwin team, encouraging people to participate and be a part of Darwin.

In return, they received opportunities to learn skills like leadership, marketing, communication, social media marketing along with a specified period of training to help them achieve the best possible results. They were also provided with certificates and Letter of Appreciations as a reward along with exposure in our international biocommunity.

2019

2020



















3 Urmi Gori

Yamil Antonio
 Calustro Ibañez

Social Media Contest Winners





Ronak Gadhvi

3 Anushree Keni







It was indeed an amazing and insightful conference. I am extremely glad and thankful to be a part of this conference for yet another time. It was interesting to connect with so many bioenthusiasts with like minded thinking. I would say Darwin 2020 has been the only good thing that happened during this pandemic. I am eagerly waiting for the next conference that is going to be held in 2021. And really want that conference to be physical and want to meet a lot of great scientists in person.

- Saundarya Prithweeraj

It was an amazing confence held in different sessions with lots of experimental things. There were interesting things done during the work shop some seminar spoke about importance of experiments . Science Is all about experiments and since we' all are aware and love to do it we were interestingly attended the seminars.

- Neha Pravin Valantra

Amazing conference! Darwin 2020 was a worth the while experience. The workshops were very helpful & relevant. It personally helped me to think out-of-the box, helped in taking my inquisitiveness towards different types of ideas & more opportunities which i never thought of. Awesome management & smooth running meeting. Totally worth it!

- Nishika Yadav

Darwin Team

riidl Team

Mr. Gaurang Shetty

Mr. Amit Yadav

Mr. Prerak Gala

Mr. Ritik Chahar

Ms. Bhavna Pandya

Mr. Raj Dhiravani

Mr. Sangram Chavan

Mr. Hrushikesh Agrawal

Mrs. Hetal Mundra

Mr. Sachin Khot

Organizing Team

Ms. Zeel Jain

Mr. Miit Patwa

Mr. Smit Shah

Mr. Hersh Vitekar Mr. Fevin Doshi Ms. Ruchira Nikam Mr. Siddhant Shah

Mr. Yug Solanki

Ms. Nikita Chaudhary

Ms. Virjaa Gada	Mr. Saurabh Tiwari	Ms. Anjali Tiwari
Mr. Saumya Sanghvi	Mr. Aman Bhargav	Ms. Harshada Mali
Ms. Rutuja Mogal	Mr. Vaibhav Gadhia	Ms. Payal Bhanushali
Ms. Dikshita Chalke	Mr. Swadit Chandan	Mr. Jinay Jain
Ms. Janhavi Yadav	Mr. Vedant Kolekar	Ms. Khushi Gupta
Ms. Sithu Priya Das	Ms. Ritika Punjabi	Mr. Harshal Soman
Ms. Dnyanda Joshi	Ms. Anusha Nair	Mr. Anurag Madan
Mr. Mihir Bhanushali	Ms. Grishma Mehta	Ms. Anushka More

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Collaborators



Synbio Africa



Mechamind

Media Lab Nepal



Community of Biotechnology



PSRC Labs

Hive Biolab







Bio Science Research Initiative



Nova Planta



Biodesign



African Journal of Biological Sciences



The Biotalk Magazine

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