

COMBIGS - WEBINAR SERIES

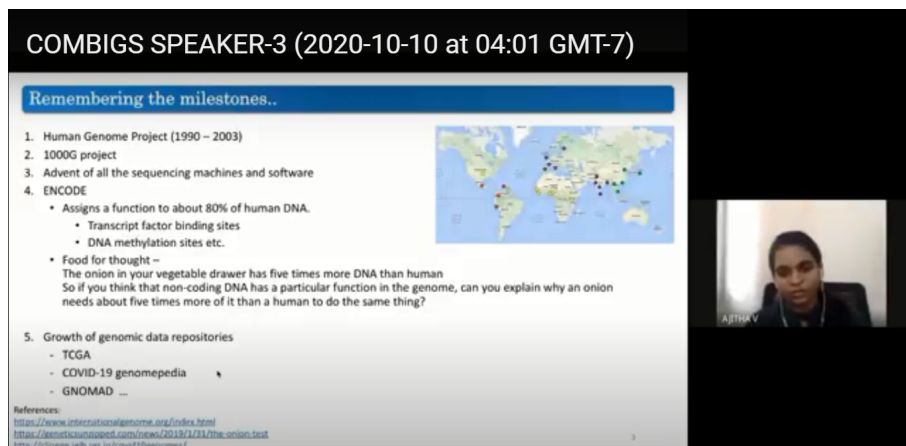
A series of webinars have been planned and organized on behalf of COMBIGS (Bioinformatics Students association) by staff coordinators -Dr.A.Sathya and Dr.L.Ramya of School of Chemical and Biotechnology. In this regard, an alumni talk was organized on 10.10.2020. Ms. C.Ajithavalli (2008-2012 alumnus of SASTRA, Dept. of Bioinformatics), currently employed as (*NGS Researcher/ Software Engineer III, Thermo Fisher Scientific Bengaluru*) delivered intriguing talk on '**Next Generation Sequencing – Advancements and Opportunities in the Clinical World .**' Dr.K.S.Rajan, Dean, SCBT motivated the students by encouraging them. The students were enthusiastically participating with a quest for NGS applications. This was the third of the webinar series organized for the benefit of students.

COMBIGS SPEAKER-3 (2020-10-10 at 04:01 GMT-7)

Remembering the milestones..

1. Human Genome Project (1990 – 2003)
2. 1000G project
3. Advent of all the sequencing machines and software
4. ENCODE
 - Assigns a function to about 80% of human DNA.
 - Transcript factor binding sites
 - DNA methylation sites etc.
 - Food for thought –
The onion in your vegetable drawer has five times more DNA than human
So if you think that non-coding DNA has a particular function in the genome, can you explain why an onion needs about five times more of it than a human to do the same thing?
5. Growth of genomic data repositories
 - TCGA
 - COVID-19 genomedia
 - GNOMAD ...

References:
<https://www.internationalgenome.org/index.html>
<https://geneticsunlabeled.com/news/2019/1/31/the-onion-test>
<https://icrnam.scripps.edu/covid19genomes/>



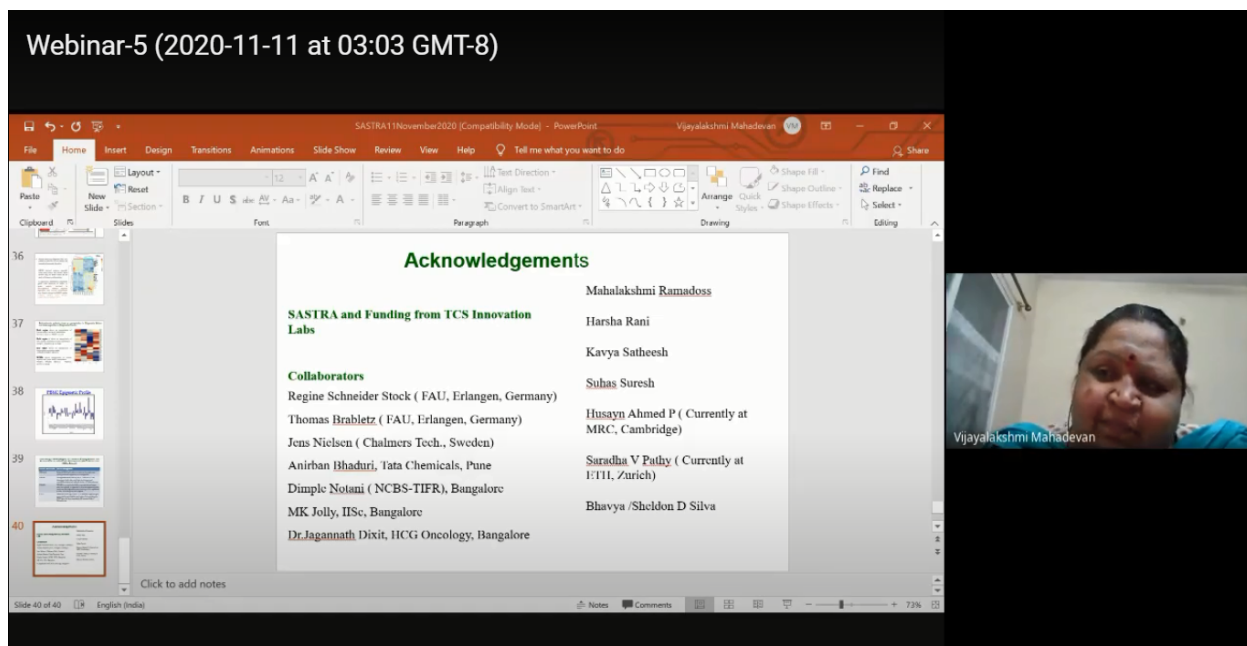
A Fourth invited lecture on '*MR imaging and its biomedical applications*' was organized by COMBIGS on 04.11.20. The mind sparking talk was delivered by Mr.R.Anantharaman, CEO,-FIRST TBI, SASTRA on the topic- 'Introduction to FIRST-TBI, SASTRA and opportunities for incubation of ideas for Startups'. The students were exposed to the practical ideas of startups and were greatly motivated.



A Fifth invited lecture on '***MINING THE EPIGENOME FOR DISEASE SIGNATURES*** 'was organized by COMBIGS on 11.11.20. The thought provoking power talk was delivered by Dr.Vijayalakshmi Mahadevan, (*Faculty Scientist, Epigenetics and Image informatics*), IBAB, Bengaluru. Many of the graduate and post graduate students actively participated with fruitful interactions with the speaker and the interest of the students was invincible.

Altogether the webinar series provided a vibrant intellectual platform for the students across all years of department of Bioinformatics for the acidification of ideas & scientific intricalties .

Webinar-5 (2020-11-11 at 03:03 GMT-8)



The screenshot shows a PowerPoint presentation titled "Acknowledgements" displayed within a Microsoft PowerPoint window. The window title bar indicates the file is "SASTRA11November2020 (Compatibility Mode) - PowerPoint" and the presenter is "Vijayalakshmi Mahadevan". The presentation is on slide 40 of 40. The slide content is as follows:

- Acknowledgements**
- SASTRA and Funding from TCS Innovation Labs**
- Collaborators**
- Regine Schneider Stock (FAU, Erlangen, Germany)
- Thomas Brabletz (FAU, Erlangen, Germany)
- Jens Nielsen (Chalmers Tech., Sweden)
- Anirban Bhaduri, Tata Chemicals, Pune
- Dimple Notani (NCBS-TIFR), Bangalore
- MK Jolly, IISc, Bangalore
- Dr.Jagannath Dixit, ICG Oncology, Bangalore
- Mahalakshmi Ramadoss
- Harsha Rani
- Kavya Satheesh
- Suhas Suresh
- Husayn Ahmed P (Currently at MRC, Cambridge)
- Saradha V Pathy (Currently at ETH, Zurich)
- Bhavya /Sheldon D Silva

On the right side of the screen, there is a video feed of Dr. Vijayalakshmi Mahadevan, who is speaking. The name "Vijayalakshmi Mahadevan" is written below the video feed.