**Conference:**

VISUALIZING BIOLOGICAL DATA (VIZBI 2021)

<https://vizbi.org/2021/Program/>

Hi Samuel Carleial,    
Thank you for registering for "Visualizing Biological Data (VIZBI 2021)".   
Please submit any questions to: [inna.boesselmann@embl.de](mailto:inna.boesselmann@embl.de)  
Date Time: Mar 25, 2021 09:15 AM Amsterdam, Berlin, Rome, Stockholm, Vienna   
Join from a PC, Mac, iPad, iPhone or Android device:

[Click Here to Join](https://embl-de.zoom.us/w/95502016640?tk=sOB3NLGUak1lygLeBKfGH_QzVLeJahwaK9r-4-g-zwU.DQIAAAAWPF0ggBZxazl5M1ZXS1M4dVlBTVpiUEEwWVdRAAAAAAAAAAAAAAAAAAAAAAAAAAAA&pwd=Qkt4YlAyb051eXZqUys5Tnpwb2ZiUT09&uuid=WN_G5K1szr5RJKYTNW-bJIqdw)  
Note: This link should not be shared with others; it is unique to you.  
Passcode: emblVIZBI  
[Add to Calendar](https://embl-de.zoom.us/webinar/tJEod-uorz0sHtTVl4kYmvSLksLQyamAHsT8/ics?user_id=qk9y3VWKS8uYAMZbPA0YWQ&type=icalendar)    [Add to Google Calendar](https://embl-de.zoom.us/webinar/tJEod-uorz0sHtTVl4kYmvSLksLQyamAHsT8/calendar/google/add?user_id=qk9y3VWKS8uYAMZbPA0YWQ&type=google)   [Add to Yahoo Calendar](https://embl-de.zoom.us/webinar/tJEod-uorz0sHtTVl4kYmvSLksLQyamAHsT8/ics?user_id=qk9y3VWKS8uYAMZbPA0YWQ&type=yahoo)

**Notes:**

**Institution & People**

University of Stuttgart

Institute for Visualisation and Interactive Systems (VIS): [link](https://www.vis.uni-stuttgart.de/en/)

Prof. Dr. Daniel Weiskopf

hhmi (Medical illustration and Educational illustration Support) USA

<https://www.biointeractive.org/>

Fabian de Kok-Mercado

Universite Paris-Sud

Petra Isenberg (Team Aviz)

<https://petra.isenberg.cc/wiki/pmwiki.php>

The Jackson Laboratory (non-profit biomedical institution based in Maine USA)

A very big that apparently do lots of things in data visualization

https://www.jax.org/

David S. Goodsell (Artist; produces illustrations for molecular science)

<https://ccsb.scripps.edu/goodsell/>

University of Queensland, Australia

Professor Rob Parton

Uses powerful animation research to study cell molecular mechanisms

<https://imb.uq.edu.au/research-groups/parton> (see NANOSCAPE prject)

University College Cork, Ireland

Dr Rosane Minghim (brasileira)

Computer scientist that uses illustrations tools to help study large datasets

<https://www.ucc.ie/en/compsci/peopledraft/minghimdrrosane/>

Research Institute of Molecular Pathology (Vienna, Austria)

**Read suggestion:**

Bertin’s semiology on data visualization ([link](https://en.wikipedia.org/wiki/Jacques_Bertin))

**Papers:**

MacEachren et al 2012 - Visual semiotics & uncertainty visualization: An empirical study

Pang et al 1997 – approaches to uncertaintiy visualization

Brodlie et al 2012 – A review of uncertainty in data visualization

Bonneau et al 2014 – overview of the state of the ar t of uncertainty visualization

Padilla & Hullman 2020 – uncertainty visualization

Jena et al 2020 – uncertainty visualization: an interactive visual survey

**See method**

Tree maps are used to visualize hierarchies (types: bubbles, rectangles, contours)

Voroni maps, cluster things together

Sankey diagram, a type of flow chart

Radial-Based Visualizations; RadViz graphs, circular forms of plotting

**See software**

Web-based tool for making Venn diagrams: <http://www.interactivenn.net/index2.html>

Web-based tool to make biological animations: <https://bioviz-studio.com/>

Web-based tool for visualizing proteins: <https://www.aquaria.ws/>

Web-based tool for genomic data visualization: <https://genomespy.app/>

volcano3D package R for plotting volcano plots and radial-based plots

**For ideas**

<http://www.dear-data.com/theproject>

<https://observablehq.com/>

**Missed, but see later on**

HCI vs VIS research (HCI catastrophes see)

CHI conference oldest and more traditional