



## Full, Short & Survey Papers

### Aims and Scope

EG VCBM, the Eurographics Workshop on Visual Computing for Biology and Medicine, is an annual event addressing the state of the art in visual computing research with a strong focus on applications in biology and medicine. It provides an interdisciplinary forum for experts (researchers and practitioners) from visualization, visual analytics, computer graphics, image processing, computer vision, human computer interaction, as well as experts from biology and medicine, jointly working on next generation visual computing solutions for medicine, healthcare and the biotechnology sector.

This year's workshop (already the 12th VCBM since its foundation in 2008) will be held from September 22 to September 23, 2022, in Vienna, Austria. We currently hope to have an on-site event at which people can meet in person in Vienna.

EG VCBM solicits the submission of original, application-oriented research papers that advance the fusion of visual computing methods within medicine and biology. All papers (full papers as well as short papers) should focus on a well-defined biological/medical problem, and demonstrate a significant innovation or improvement in visual computing.

**Suggested topics** for full and short papers include, but are not limited to:

- Visual computing solutions for medical applications like radiology, surgery, pathology, cardiology, nephrology, neurology, etc., including medical education.
- Visual computing solutions for applications that support biomedical research in systems biology, \*omics research, molecular pathology, neuroanatomy, biomedical imaging, etc.
- The use of virtual reality and augmented reality in biomedical applications (e.g., for surgical procedures, molecular visualization, rehabilitation and therapy).
- Visualization approaches for data from new or challenging imaging modalities (e.g., real-time ultrasound, CyTOF, Spectroscopy, layer fMRI).
- Visual computing solutions in the context of the virtual physiological human.
- Visual computing solutions that support new approaches for modeling and simulation in computational medicine and biology.
- Visual analytics for big data (e.g. from behavioral biology or epidemiology) or for explainable artificial intelligence (AI) for biology and medicine.
- Visualization techniques and applications addressing biological data on all scales (e.g., sequence and structure data, multivariate/spatial omics data, phylogenetic data, biological networks and pathways, or biological ontologies).
- Solutions for the modeling and simulation of biological systems.
- Biological/medical workflows or processes for the interdisciplinary collaboration between biology/medicine and visualization.

In addition to that, we solicit:

- Survey papers on visual computing in biology and medicine.

### Information for Authors

In addition to full-length papers, there will again be a short papers track and a survey track, encouraging scientific contributions from an even more diverse group of researchers and practitioners. All VCBM 2022 papers (full, short, and surveys) will be peer-reviewed and will appear in the Eurographics Digital Library.

### Important Dates

|                                |           |
|--------------------------------|-----------|
| Workshop dates:                | 22. – 23. |
| FP & SP submission (extended): | 10.       |
| FP & SP notification:          | 12.       |
| FP & SP camera-ready:          | 26.       |
| Posters submission:            | 19.       |
| Posters notification:          | 2.        |
| Posters final version:         | 9.        |
| Image contest (extended):      | 14.       |

### Announcements

Registration is now open

Bio+Med+Vis Summer School 2022 is happening just before VCBM in nearby

[EG VCBM 2022 Image Contest](#)

[EG VCBM 2022 Call for Posters](#)

### Sponsors



### Previous Workshops

[EG VCBM 2021](#)

[EG VCBM 2020](#)

We encourage the use of digital videos to support all submissions, particularly if part of, or all of the work covers interactive techniques. Please use only the most common video codecs such as MP4 H.264 to maximize the chances that the reviewers can view it.

EG VCBM 2019  
EG VCBM 2018  
EG VCBM 2017  
EG VCBM 2016  
EG VCBM 2015  
EG VCBM 2014  
EG VCBM 2012  
EG VCBM 2010  
EG VCBM 2008

- **Full Papers:** We do not impose strict maximum lengths for submitted papers to the full papers track. However, it is unusual for papers to exceed 10 pages (in CGF LaTeX style including all images and references). Papers should only be as long as their content would justify. Reviewers might rate a submission lower if it is perceived as being unnecessarily long or might recommend it for a short paper, instead. Authors are encouraged to use supplementary material, such as videos or executable programs to provide extra content. All authors are invited to submit extended versions of their papers to a dedicated C&G Special Section, while the authors of the best papers (usually the best three papers) are additionally invited to submit an extended version of their work to Computer Graphics Forum (CGF), provided that their work fits into the scope of CGF. The best paper authors will have to choose one of the two possible extensions (double submission is prohibited).
- **Short Papers:** Short papers describe a more focused and concise research contribution and are likely to have a smaller – yet significant – scope of contribution. Potential examples include the presentation of initial results from novel ongoing research projects or the exploration of new application areas. Short papers draw from the same list of topics as full papers. Their length is limited to a total of 5 pages (in CGF LaTeX style including all images and references).
- **Surveys:** We do not impose strict maximum lengths for submitted papers to the survey track. However, it is unusual for surveys to exceed 20 pages (in CGF LaTeX style including all images and references). Authors are encouraged to use supplementary material, such as videos, to provide extra content.

VCBM 2022 will also feature a poster and an image contest program, the details of which will be announced in a separate call.

### Submission Instructions

Papers can be submitted using the Eurographics SRM conference management system.

### Important Dates

- EXTENDED Paper submission deadline (full, short and survey papers): **July 10, 2022**
- Author notification: August 12, 2022
- Camera-ready deadline: August 26, 2022
- Workshop: September 22 – September 23, 2022

All deadlines are at 23:59 CET (UTC+1).

Sincerely,

the Full Paper Co-Chairs of EG VCBM 2022,

**Renata G. Raidou** (TU Wien, Austria)

**Björn Sommer** (Royal College of Art, United Kingdom)

**Torsten Kuhlen** (RWTH Aachen, Germany)

**Michael Krone** (University of Tübingen, Germany)

together with the Short Paper Co-Chairs of EG VCBM 2022,

**Thomas Schultz** (University of Bonn, Germany)

**Hsiang-Yun Wu** (Pölsen University of Applied Sciences, Austria)