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 interfaces 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 11th VCBM since its foundation in 2008) will be held from September 22 to September 24, 2021, in Paris, France. We currently hope to have a hybrid event at which people can meet in person in Paris. In any case, there will be an option to attend this year’s VCBM virtually for those who may not be able to travel.

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 (regular 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)
- Visualization approaches for data from new or challenging imaging modalities (e.g., real-time ultrasound, CyTOF, Spectroscopy, layer MRI)
- Visual computing solutions in the context of the virtual physiological human
- Medical simulation and visual computing solutions that support new approaches in computational medicine.
- Visual analytics in Behavioral Biology (e.g., collective behavior) or epidemiology (e.g., population studies)

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 2021 papers (full, short and surveys) will be peer-reviewed and will appear in the Eurographics Digital Library. Authors can choose between single- or double-blind review by anonymizing their papers accordingly.
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.

- **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. The authors of the best papers (usually the best three papers) are invited to submit an extended version of their work to Computer Graphics Forum (CGF), provided that their work fits into the scope of CGF. In addition, all accepted papers are invited to submit an extended version to the Computers and Graphics Journal (C&G) Special Section on Visual Computing for Biology and Medicine (VCBM) in January 2022.

- **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 (including references).

- **Surveys:** We do not impose strict maximum lengths for submitted papers to the surveys 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 2021 will also feature a poster and an image contest program.

**Submission Instructions**

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

Please use the following LaTeX style for your submissions: `egPubStyle-VCBM2021.zip`

**Important Dates**

- **EXTENDED** Paper submission deadline (full, short and survey papers): July 9, 2021
- Author notification: August 10, 2021
- Camera-ready deadline: August 27, 2021
- Workshop: September 22 – September 24, 2021

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

**Contacts**

Full paper chairs: chairs-vcbm2021@eg.org
Short paper chairs: shortpapers-vcbm2021@eg.org

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