

==== VCBM 2017 Call for Papers ====

<http://www.vcbm.org/>  
Eurographics Workshop on Visual Computing for  
Biology and Medicine 2017  
in Bremen, Germany

\*) Workshop Dates: September 7-8, 2017

\*) Submission Deadline: June 19, 2017

== Aims and Scope ==

EG VCBM (<http://www.vcbm.org/>), 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 7th VCBM since its foundation in 2008) will be held during September 7-8, 2017, in Bremen, Germany.

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 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.

\*) Medical simulation and visual computing solutions that support new approaches in computational medicine, including also the uses of stereoscopy and haptics

\*) Visualization approaches for data from new or challenging imaging modalities including real-time imaging (e.g., ultrasound)

\*) Visual computing solutions in the context of the virtual physiological human

\*) Survey papers on visual computing in biology and medicine

Methods might include, but are not limited to:

\*) Visualization and analysis of all kinds of biomedical data (signals and images)

\*) Visualization, mining and analysis of biomedical data collections, including cohort data

\*) Information visualization of medical data sets, e.g., electronic health records

\*) Computer models of biomechanical, physiological, and biochemical functions in living systems

- \*) Fusion, analysis and visualization of heterogeneous and/or multi-source data
- \*) Multi-scale methods and data structures for large data
- \*) Interaction and design of visual computing workflows in medicine and biology
- \*) Data tracking and registration
- \*) Data reconstruction and geometry extraction
- \*) Real time rendering and interaction with anatomy models

#### **== Information for Authors ==**

In addition to full-length papers, there will be again a short papers track, encouraging scientific contributions from an even more diverse group of researchers and practitioners. All VCBM 2017 papers (full and short) will be peer-reviewed and will appear in the Eurographics Digital Library.

\*) Full Papers: Full papers are up to 10 pages in length (including references) and describe original research contributions in the areas outlined above. The authors of the best three papers will be invited to submit an extended article version of their paper as journal publication to Computer Graphics Forum.

\*) 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).

VCBM 2017 will also feature a poster 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 here:  
[https://srmv2.eg.org/COMFY/Conference/VCBM\\_2017](https://srmv2.eg.org/COMFY/Conference/VCBM_2017)

Login with your existing SRM account, or create a new one using the relevant links. Papers can be up to 10 pages (for full papers) or 5 pages (for short papers) and should be prepared using the Eurographics style. More details can be found on the SRM web page. Please note that the reviewing process will be double-blind, so take care to anonymize your submission.

More information on the preparation of your submissions will also be available on the VCBM 2017 website: <http://www.vcbm.org/>

#### **== Important Dates ==**

- \*) Paper submission deadline (full and short papers): June 19, 2017
- \*) Author notification: July 22, 2017
- \*) Camera-ready deadline: August 14, 2017
- \*) Workshop: September 7-8, 2017

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

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Sincerely,

the Full Paper Co-Chairs of EG VCBM 2017,

Stefan Bruckner (University of Bergen, Norway),  
Anja Hennemuth (Fraunhofer MEVIS, Bremen, Germany), and  
Bernhard Kainz (Imperial College London, Great Britain),

together with the Short Paper Co-Chairs of EG VCBM 2017,

Dorit Merhof (RWTH Aachen, Germany),  
Christian Rieder (Fraunhofer MEVIS, Germany),  
Ingrid Hotz (Linköping University Norrköping, Schweden).