

16th BBCC – Bioinformatics and Computational Biology Conference

1-3 December 2021 – *Virtual Edition*

FIRST CALL

The BBCC Scientific and Organizing Committees are glad to open the Call for Contributions for the 2021 edition. BBCC was born in 2006 in the shadow of Partenio Mountain and Vesuvius volcano, and has annually broadened its scope until becoming an international conference, recognized as ISCB affiliated since 2017. BBCC is also supported by BITS since 2006.

The central theme of this edition is inspired by the celebration of two anniversaries: 20 years since the publication of the first Human Genome in 2001 and 50 years since the foundation of the worldwide archive for macromolecular structure data, the Protein Data Bank (PDB) in 1971. PDB has embraced a culture of open access from the beginning, leading to its widespread use by the research community and is still relied on by hundreds of data resources. The Human Genome Sequence drafts has been a milestone accompanied by the fast-accelerating technological revolution in the sequencing technology and novel computational tools and models. The mind-blowing discovery that protein-coding genes represented a small fraction of the whole sequence made clear that it was just the beginning, and we are now in thrilling times where sequencing-based approaches and structure modelling can be integrated with unprecedented computational power at hand, thus allowing to tackle fundamental questions in gene regulation and to dissect disease mechanisms.

As in 2020, due to uncertainties in the pandemic evolution and to ensure safety for the participants, BBCC will be held as virtual Conference and registration will be free.

We encourage the submission of oral communications and posters/flash presentations on the main topics:

- computational methods and next generation sequencing novel applications
- epigenomic and higher-order chromatin structures
- omics, multi-omics, and integration
- regulatory networks, system biology and system medicine
- structural bioinformatics and computational biochemistry

with a focus on applications to human health and diseases: rare or complex genetic diseases, cancer and immuno-oncology, COVID-19.

The call is always open to topics of general interest for the Conference audience:

- data science and big data modelling
- combinatorial optimization in molecular biology
- transferability and industrial applications
- novel and challenging methodologies
- data mining
- metagenomics

Post-conference publications are in preparation, as for the previous editions of BBCC conferences (we published *BMC Bioinformatics* Supplements, Research Topics of *Frontiers in Genetics*, Special Issues on *Molecules*).

Key Dates

July 1st, 2021: Call for Contributions

July 15th, 2021: Opening of submissions

September 15th, 2021: Oral communications deadline

September 30th, 2021: Short communications/poster deadline

November 20th, 2021: Registration deadline

Visit the BBCC web site for more information on program, invited speakers, sessions, submission procedures.

The 16th edition of BBCC is an ISCB affiliated conference, under the patronage of BITS.

<http://www.bbcc-meetings.it>