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Sumit Kumar Jha · Ion Măndoiu · Sanguthevar Rajasekaran · Pavel Skums · Alex Zelikovsky (Eds.)

Computational Advances in Bio and Medical Sciences

10th International Conference, ICCABS 2020 Virtual Event, December 10–12, 2020 Revised Selected Papers



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 ISSN 0302-9743
 ISSN 1611-3349 (electronic)

 Lecture Notes in Bioinformatics
 ISBN 978-3-030-79289-3

 ISBN 978-3-030-79289-3
 ISBN 978-3-030-79290-9 (eBook)

 https://doi.org/10.1007/978-3-030-79290-9

LNCS Sublibrary: SL8 - Bioinformatics

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Preface

The 10th edition of the International Conference on Computational Advances in Bio and medical Sciences (ICCABS 2020) was held in a virtual format during December 10–12, 2020. ICCABS has the goal of bringing together researchers, scientists, and students from academia, laboratories, and industry to discuss recent advances on computational techniques and applications in the areas of biology, medicine, and drug discovery.

There were 11 extended abstracts submitted in response to the ICCABS 2020 call for papers. Following a rigorous review process in which each submission was reviewed by at least two Program Committee members, the Program Committee decided to accept six extended abstracts for oral presentation and publication in the post-proceedings volume. The technical program of ICCABS 2020 included 15 invited talks presented at the 10th Workshop on Computational Advances for Next Generation Sequencing (CANGS 2020) and 15 invited talks presented at the 3rd Workshop on Computational Advances for Single-Cell Omics Data Analysis (CASCODA 2020). Workshop speakers were invited to submit extended abstracts and, following the same review process used for the main conference, five additional extended abstracts were selected for publication in the post-proceedings volume. All extended abstracts included in the volume have been revised to address reviewers' comments.

The technical program of ICCABS 2020 also featured keynote talks by three distinguished speakers: Prof. Leslie M. Loew from the University of Connecticut Health Center, USA, gave a talk on "The Virtual Cell Project," Prof. May Dongmei Wang from the Georgia Institute of Technology and Emory University, USA, gave a talk on "Translating AI for Biomedicine and Healthcare: Challenges and Opportunities," and Prof. Amarda Shehu from George Mason University, USA, gave a talk on "Great Disruptions and Expectations: A Perspective in Protein Modeling Research." We would like to thank all keynote speakers and authors for presenting their work at the conference. We would also like to thank the Program Committee members and external reviewers for volunteering their time to review and discuss the submissions. Last but not least, we would like to extend special thanks to the Steering Committee members for their continued leadership, and to the finance, local arrangements, publicity, and publication chairs for their hard work in making ICCABS 2020 a successful event despite the ongoing COVID-19 pandemic.

May 2021

Sumit Kumar Jha Ion Măndoiu Sanguthevar Rajasekaran Pavel Skums Alex Zelikovsky

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