26th International Conference on DNA Computing and Molecular Programming

DNA 26, September 14–17, 2020, Oxford, UK (Virtual Conference)

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Editors

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Preface

This volume contains the papers presented at DNA 26: the 26th International Conference on DNA Computing and Molecular Programming. The conference was originally scheduled to be held at the University of Oxford, but due to the COVID-19 pandemic it was changed to an online format. The virtual conference was held during September 14-17, 2020, and was organized under the auspices of the International Society for Nanoscale Science, Computation, and Engineering (ISNSCE). The DNA conference series aims to draw together researchers from the fields of mathematics, computer science, physics, chemistry, biology, and nanotechnology to address the analysis, design, and synthesis of information-based molecular systems.

Papers and presentations were sought in all areas that relate to biomolecular computing, including, but not restricted to: algorithms and models for computation on biomolecular systems; computational processes in vitro and in vivo; molecular switches, gates, devices, and circuits; molecular folding and self-assembly of nanostructures; analysis and theoretical models of laboratory techniques; molecular motors and molecular robotics; information storage; studies of fault-tolerance and error correction; software tools for analysis, simulation, and design; synthetic biology and in vitro evolution; and applications in engineering, physics, chemistry, biology, and medicine.

Authors who wished to orally present their work were asked to select one of two submission tracks: Track A (full paper) or Track B (one-page abstract with supplementary document). Track B is primarily for authors submitting experimental results who plan to submit to a journal rather than publish in the conference proceedings. We received 52 submissions for oral presentations: 25 submissions to Track A and 27 submissions to Track B. Each submission was reviewed by at least three reviewers, with several reviewed by four reviewers. The Program Committee accepted 11 papers for Track A (44%) and 11 papers for Track B (41%). Additionally, the Program Committee reviewed and accepted 37 submissions to Track C (poster) and selected 6 for short oral presentations. This volume contains the papers accepted for Track A.

We express our sincere appreciation to our invited speakers, Tom de Greef, Marta Kwiatkowska, Jérôme Leroux, Ard Louis, Damien Woods, and Niles Pierce. We especially thank all of the authors who contributed papers to these proceedings, and who presented papers and posters during the conference. Last but not least, the editors thank the members of the Program Committee and the additional invited reviewers for their hard work in reviewing the papers and providing constructive comments to the authors.

September 2020 Cody Geary
Matt Patitz

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