Preface to the Proceedings

The fourth IEEE Computational Intelligence in Bioinformatics and Computational Biology symposium marks a dramatic change from the previous three meetings as it is being held as part of the first IEEE Symposium Series on Computational Intelligence. This year we also welcome the inclusion of two special-sessions, one with a focus on biomedical engineering and the other focusing specifically on fuzzy systems for bioinformatics. The opportunities for cross-fertilization of ideas will surely be tremendous as this event includes 12 individual symposia.

There continues to be a steady increase in the number of researchers applying computational intelligence approaches to problems in bioinformatics and computational biology as evidenced by an increase in submissions. This is even more impressive in light of the accelerated time-table for this year's event - CIBCB'06 was held in September 2006, just six month prior to CIBCB'07. For this years meeting, authors from 31 countries submitted over 130 papers for consideration, and all papers were rigorously peer-reviewed. The technical program is divided into six regular oral sessions, two special topic oral sessions, and two poster sessions allowing for the presentation of a wide variety of computational intelligence approaches to an even wider variety of problems. Special acknowledgment goes to Dr. Pierre Baldi for providing the opening keynote, to the volunteer work of the technical chairs and the reviewers, and to the IEEE Computational Intelligence Society for their overall sponsorship and their additional generosity in providing student travel grants.

These proceedings document the synergy and hard work of the many researchers dedicated to the application and extension of computational intelligence methods to the exciting fields of bioinformatics and computational biology. May this meeting help to inspire us all to continue our efforts in this demanding interdisciplinary field. In closing we note that this meeting and these proceedings would not have been possible without the dedication and hard work of the CIBCB'07 organizing committee – they are a terrific group of talented individuals who we have had the honor and pleasure to work with over the past year. Please enjoy the technical program, learn from these proceedings, and have fun at the conference.

David W. Corne Jagath C. Rajapakse L. Gwenn Volkert IEEE CIBCB'07 General Chairs Honolulu, Hawaii April 1, 2007

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