BIO SIGMAA

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Although the history of mathematics and computation in biology began a long time ago, the history of this volume begins with the formation of BIO SIGMAA. In January of 2006, Carl Cowan and Michael Pearson spoke with me about the SIGMAAs of the MAA at the Joint Mathematics Meetings in San Antonio. Carl was President of the MAA at the time and saw mathematical biology as an important new area in mathematics and one that might benefit from the SIGMAA program of the MAA. I had helped run several successful MAA PREP workshops related to mathematical and computational biology and I suppose that put me on Carl's list. I am also tall, which makes me easy to track down in a crowded room.

Over the next few days, we spent time talking with other people we thought might be interested in being a part of the SIGMAA. There was a great deal of support from people both more and less experienced than I. Somehow I found myself organizing the effort, but I was really just collating the ideas of others. I finished the first draft of the charter in April 2006 and after feedback, it was completed by July. In August 2006, BIO SIGMAA became the tenth SIGMAA.

Since biology can hardly be called a single field of study, mathematical and computational biology can be no less diverse. It was important from the beginning to be as inclusive as possible, welcoming all areas of biology and all approaches to understanding them. At the time the SIGMAA formed, there were several organizations promoting research in mathematical and computational biology, but the connection to educational practices and undergraduate research needed a broader platform and a bigger voice. BIO SIGMAA was created to strengthen the ties between research and education and to provide a venue for sharing ideas.

From 2006 to now, many people have put in a great deal of effort into BIO SIGMAA and it has grown in both numbers and maturity. This volume gives readers a taste of current educational practices in mathematical and computational biology. It represents approaches taken or proposed in different areas of biology, different approaches to the study of biology, and the relationship of these practices with different aspects of education.

There are many other ideas that did not fit into this volume and I feel sure new ideas will be motivated by those that did. I encourage everyone to share those ideas at an upcoming BIO SIGMAA event.