

Mathematical Biology Newsletter

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Edited by: Holly Gaff

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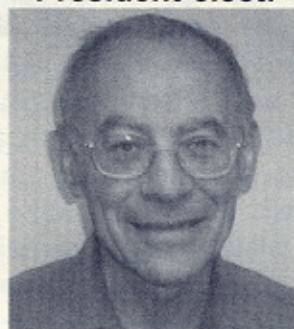
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Results of 2006 SMB Elections

Congratulations to the newly elected Board Members.

President-elect:



Avner Friedman

New Board Members:



Nicolas Britton



Patrick Nelson



Kristin Swanson



ervation Ecology Research Unit at the University of Pretoria in South Africa.

Pimm, S.L., *Food webs*, Chapman and Hall, London, 1982

Pimm, S.L., "The complexity and stability of ecosystems" *Nature* 307, 321 - 326 (26 January 1984)

S. L. Pimm; H. Lee Jones; Jared Diamond "On the Risk of Extinction" *The American Naturalist*, Vol. 132, No. 6. (Dec., 1988), pp. 757-785

Pimm, S.L., *The balance of nature?: Ecological issues in the conservation of species and communities*, University of Chicago Press, Chicago IL, 1991

Pimm, S.L., Russell G.J.; Gittleman J.L.; Brooks T.M. "The future of biodiversity" *Biological Conservation*, Volume 75, Number 3, 1996, pp. 310-310(1)

Pimm, S.L., *The world according to Pimm: A scientist audits the earth*, McGraw Hill, New York, 2001

The Dr A.H. Heineken Prize for Environmental Sciences was established in 1990. Previous prizewinners have included James Lovelock, Paul Ehrlich, Lonnie Thompson and Simon Levin.



Report from BIOMAT 2005

Priya Kooner

BIOMAT 2005, International Symposium on Mathematical and Computational Biology, was held on 3rd-8th December 2005 at the National Laboratory of Scientific Computing (LNCC), Petropolis, Brazil. The BIOMAT symposia are annual meetings organised by the BIOMAT consortium based in Brazil, with the meetings being held at various venues throughout Brazil each year. The attendees were therefore mainly from South America but also included many researchers from USA and Europe.

The meeting began with two days of tutorials, with topics including: "Spatially

Structured Discrete Models", "P-fuzzy Modelling", and "Control Optimization of Chaotic Population Systems". The remainder of the meeting consisted of a good mix of keynote, contributed and poster presentations from wide-ranging areas of mathematical biology. Keynote lectures included: "On the Origin of Metazoans" by Frederick Cummings, "Structure Prediction of Alpha-Helical Proteins" by Christodoulos Floudas, "Exploring Chemical Space with Computers: Informatics Challenges for AI and Machine Learning" by Pierre Baldi, "Theoretical Study of a Biofilm Life Cycle: Growth, Nutrient Depletion and Detachment" by Jorge Velasco-Hernández, "On Biclustering with Feature Selection for Microarray Data Sets" by Panos Pardalos, "Steiner Minimal Trees and Twist Angles in Folded Protein Structures" by James MacGregor Smith, "Modeling Plague Dynamics: Endemic States, Outbreaks and Epidemic Waves" by Eduardo Massad, "Modelling Aspects of Vascular Cancer Development" by Philip Maini, "Modeling the in vivo Dynamics of Viral Infections" by Ruy Ribeiro, "Optimization of Between Group Analysis of Gene Expression Disease Class Prediction" by Guy Pièrre, "Software Tool to Model Genetic Regulatory Networks: Applications to Segmental Patterning in *Drosophila*" by Rui Dilão, "Modelling Cooperative Phenomena in Interacting Cell Systems with Cellular Automata" by Andreas Deutsch, "Quality and Effectiveness of Protein Structure Folding" by Anna Tramontano and "Space: The Final Frontier of Control Theory in Application to Natural Resource Management" by Louis Gross.

The BIOMAT symposium was very well organized and the organising committee, led by Rubem Mondaini, was extremely welcoming. The beautiful surroundings of the mountains of Petropolis helped to add an air of tranquillity over the meeting. Further details of the symposium and proceedings from past symposia can be found on the BIOMAT website at <http://biomat.org>.