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- [109] Voit, E.O. and J. Almeida: Decoupling Dynamical Systems for Pathway Identification from Metabolic Profiles, using Biochemical Systems Theory. 1st International Conference on Systems Biology of *E.coli* (IECA2003). Keio University, Tsuruoka, Japan, June 23-25, 2003.
- [110] Voit, E.O. and J. Almeida: Data Preprocessing Facilitates Metabolic Pathway Identification from Time Profiles. ISMB 2003 Conference, Brisbane, Australia, June 28 – July 4, 2003.
- [111] Schwacke, J. and E.O. Voit: BSTLab: A Matlab Toolbox for Biochemical Systems Theory. ISMB 2003 Conference, Brisbane, Australia, June 28 – July 4, 2003.
- [112] K.J. Sims, F. Alvarez-Vasquez, Y.A. Hannun, and E.O. Voit: Targeted labeling experiments refine mathematical models of the *de novo* sphingolipid pathway in yeast. Annual Meeting of the National Library of Medicine Trainees. Bethesda, MD, July 9-11, 2003.
- [113] Schwacke, J. and E.O. Voit: BSTLab: A Matlab Toolbox for Biochemical Systems Theory. ERATO Kitano Symbiotic Systems Project Symposium, Tokyo, September 19, 2003.
- [114] Lall, R., A. Rutes, H. Santos, J. S. Almeida, and E. O. Voit: A New Approach to

Parameter Estimation using S-systems: Modeling the Glycolytic Pathway of *Lactococcus lactis*. 4th Georgia Tech-UGA Conference on Bioinformatics. Atlanta, GA, November 13-16, 2003.

- [115] Almeida, J.S., and Eberhard O. Voit: Topological and Numerical Extraction of Dynamic S-system Models from Experimental Time Series. 4th Georgia Tech-UGA Conference on Bioinformatics. Atlanta, GA, November 13-16, 2003.
- [116] Schwacke, J. and E.O. Voit: Model Development using Biochemical Systems Theory and BSTLab. 4th Georgia Tech-UGA Conference on Bioinformatics. Atlanta, GA, November 13-16, 2003.
- [117] Almeida, J.S. and E.O. Voit: Neural-Network Based Parameter Estimation in S-system Models of Biological Networks. The Fourteenth International Conference on Genome Informatics (GIW 2003), Yokohama, Japan, December 14-17, 2003.
- [118] Voit, E.O. and E.P. Gatzke: Modeling of metabolic systems using global optimization methods. Adchem: International Symposium on Advanced Control of Chemical Processes, Hong Kong, January 11-14, 2004.
- [119] Voit, E.O.: S-system Based Pathway Identification from Metabolic Profiles. South Carolina Bioinformatics Conference, Wild Dunes, March 14-16, 2004.
- [120] Voit, E.O.: Of Math and Microbes. American Society for Microbiology-- Integrating Metabolism and Genomics. Montreal, Canada, 30 April – 3 May, 2004.
- [121] Schwacke, J.H., and E.O. Voit: Consequences of Observed Concentrations of MAPK Signaling Components. National Library of Medicine Training Directors Meeting, Indianapolis, IN, June 9-10 2004.
- [122] Voit, E.O.: The Dawn of a New Era of Metabolic Systems Analysis. DESTOBIO '04, Trento, Italy, 21 June – 25 June, 2004.
- [123] Voit, E.O.: Metabolic modeling with time series data. Dagstuhl Seminar on Integrative Bioinformatics - Aspects of the Virtual Cell, Schloss Dagstuhl, Germany, 4 July – 9 July, 2004.
- [124] Sims, K.J., Fernando Alvarez - Vasquez, Eberhard O. Voit, and Yusuf A. Hannun: Modeling and simulation of sphingolipid metabolism in *S. cerevisiae*. Conference on Mathematical Models in Signaling Systems, Vanderbilt University, Nashville, TN. 16 – 18 June 2004.
- [125] Borges, C.C.H., E.O. Voit, and J.S. Almeida: Signal extraction for numerical decoupling of S-systems. International Conference on Molecular Systems

Biology (ICMSB'04), Tahoe, CA, August 21-25, 2004.

- [126] Ervadi-Radhakrishnan, A. and E.O. Voit: Controllability of S-systems. International Conference on Molecular Systems Biology (ICMSB'04), Tahoe, CA, August 21-25, 2004.
- [127] Lall, R., S. Marino, J.S. Almeida, E.O. Voit, A.R. Neves, and H. Santos: Modeling the glycolytic pathway in *Lactococcus lactis* from experimental time series data using S-systems and a generalized least squares method. International Conference on Molecular Systems Biology (ICMSB'04), Tahoe, CA, August 21-25, 2004.
- [128] Marino, S., and E.O. Voit: An automated procedure for information extraction with S-systems. International Conference on Molecular Systems Biology (ICMSB'04), Tahoe, CA, August 21-25, 2004.
- [129] Mocek, W. and E.O. Voit: S-system with delay. International Conference on Molecular Systems Biology (ICMSB'04), Tahoe, CA, August 21-25, 2004.
- [130] Schwacke, J.H., and E.O. Voit: Consequences of observed MAPK signaling component concentrations. International Conference on Molecular Systems Biology (ICMSB'04), Tahoe, CA, August 21-25, 2004.
- [131] Sims, K.J., F. Alvarez, Y.A. Hannun, and E.O. Voit: Simulation of sphingolipid metabolism in *S. cerevisiae*. International Conference on Molecular Systems Biology (ICMSB'04), Tahoe, CA, August 21-25, 2004.
- [132] Voit, E.O.: Time series data open new avenues of metabolic systems analysis. International Conference on Molecular Systems Biology (ICMSB'04), Tahoe, Ca, August 21-25, 2004.
- [133] Voit, E.O.: Metabolic modeling with time series data. Bioinformatics in Taiwan, National Yang Ming University, Taipei, Taiwan, September 9-11, 2004.
- [134] Sims, K.J., F. Alvarez, Y.A. Hannun, and E.O. Voit: Simulation of sphingolipid metabolism in *S. cerevisiae*. 39th Annual Southeastern Regional Lipid Conference, Cashiers, NC, November 3-5, 2004.
- [135] Gatzke, E., P.K. Polisetty, and E.O. Voit: Model Identification and Yield Optimization for Metabolic Pathway Systems Using Global Optimization Methods and GMA Model. SIAM-SEAS Conference, Charleston, SC, March-25-26, 2005.
- [136] Schwacke, J.H. and E.O. Voit: Insights in the design and operation of the MAP Kinase cascade. SIAM-SEAS Conference, Charleston, SC, March-25-26, 2005.

- [137] Polisetty, P.K., E.O. Voit, E.P. Gatzke: Model Identification and Yield Optimization for Metabolic Pathway Systems Using Global Optimization Methods and GMA Model. SIAM Conference on Optimization, Stockholm, Sweden, May 15-19, 2005.
- [138] Voit, E.O.: Metabolic modeling with time series data. Workshop: Unraveling the Function and Kinetics of Biochemical Networks, Indiana University, May 9-11, 2005.
- [139] Voit, E.O.: Modeling sphingolipid metabolism in *S. cerevisiae*. First Scientific Meeting of the Metabolomics Society. Tsuruoka, Japan, June 20-23, 2005.
- [140] Voit, E.O.: Metabolic Networks I: The Challenge of Complexity. Summer School on „NanoScience and Systems Biology,“ LMU Gene Center, Grosshadern-Martinsried Life Sciences Campus, July 25-28, 2005.
- [141] Voit, E.O.: Metabolic Networks II: Case Studies. Summer School on „NanoScience and Systems Biology,“ LMU Gene Center, Grosshadern-Martinsried Life Sciences Campus, July 25-28, 2005.
- [142] Polisetty, P.K., E.O. Voit, E.P. Gatzke: Yield Optimization of *Saccharomyces cerevisiae* using a GMA Model and a MILP-based piecewise linear relaxation method. Proceedings of: Foundations of Systems Biology in Engineering, Santa Barbara, CA, August 7-10, 2005.
- [143] Voit, E.O.: Systems modeling. First International Conference of AB³C, the Brazilian Association for Bioinformatics and Computational Biology. Caxambu, Brazil, October 4-7, 2005.
- [144] Sims, K.J, F. Alvarez-Vasquez, Y. A. Hannun, L. M.Obeid, and E. O. Voit: Role of sphingolipids in lifespan of *Saccharomyces cerevisiae*: integration of bench and biochemical systems modeling, Sixth International Conference on Systems Biology, Boston, MA, October 19-24, 2005.
- [145] Sims, K.J, F. Alvarez-Vasquez, Y. A. Hannun, L. M.Obeid, and E. O. Voit: Role of sphingolipids in lifespan of *Saccharomyces cerevisiae*: integration of bench and biochemical systems modeling, 40th Annual Southeastern Regional Lipid Conference: November 2–4, 2005, Cashiers, NC.
- [146] Voit, E.O.: Modeling sphingolipid metabolism. Renal Week 2005, Philadelphia, PA, November 8-13, 2005.
- [147] Polisetty, P.K., E.O. Voit, E.P. Gatzke: Deterministic Global Optimization Techniques for Solution of NLP and MINLP Problems Using Piecewise Linear Relaxations with Applications in Metabolic Engineering. AIChE Annual

Meeting, Computing and Systems Technology Division, Cincinnati, Ohio, USA, October 30-November 4, 2005.

- [148] Voit, E.O.: Systems modeling. First International Conference of AB³C, the Brazilian Association for Bioinformatics and Computational Biology. Caxambu, Brazil, October 4-7, 2005.
- [149] Voit, E.O.: Small Systems Biology, 2006 Meeting of the Association of Biomolecular Resource Facilities, Integrating Science, Tools, and Technologies with Systems Biology, Long Beach, CA, February 11-14, 2006.
- [150] Sims, K.J., Hannun, Y.A., Obeid, L. M., Lu, X., E. O. Voit: Biochemical Systems Modeling of Sphingolipids and the Chronological Lifespan of Yeast, National Library of Medicine Meeting, Bethesda, MD, 2006.

Other Publications:

- [1] Voit, E.O.: Räumliche Verteilung und Häufigkeit des Zusammentreffens von Spinnmilben and Raubmilben (*Tetranychus urticae* und *Phytoseiulus riegeli*, *Acarina*). Diplomarbeit, 91 pp., Universität zu Köln, 1976.
- [2] Voit, E.O.: Modelltheoretische Untersuchungen zur Anordnung der Knospennarben auf der Oberfläche von Hefezellen. Inaugural-Dissertation, 160 pp., Universität zu Köln, 1981.
- [3] Voit, E.O.: Yucch, 100 years of American Mathematics (Editorial). in: The News and Courier / The Evening Post, Charleston, SC, Saturday, April 30, 1988.
- [4] Voit, E.O., and J.T. Crowder: Research Growth at MUSC: Modeling of financial needs for new hiring. Internal Report, August 2, 1991.
- [5] Voit, E.O.: S-systems: 19 Cartoons depicting the state of the art in 92. Presented at the international Second S-System Symposium, Tampa, FL, 1992.
- [6] Voit, E.O.: It all began with Prometheus. Medical Alumni Today, MUSC Press, pp. 18-19, Summer 1996.
- [7] Voit, E.O., and B.C. Tilley: Profile: Master's and doctoral programs in biostatistics, epidemiology, and biomedical informatics at the Medical University of South Carolina. *Quality Assurance Journal* **5(3)**, 179-181, 2001.

Invited Speaker:

- [1] The Power-Function Approach to Mathematical Modeling of Biological Systems Yields a General Growth Law, Symposium on Advances in Mathematical Modeling and State Estimation, Annual Meeting of the American Chemical Society, New York, NY, August 1981.
- [2] Matrix Analysis of Biochemical Systems, Course on Biochemical Systems Analysis, Ann Arbor, MI, 1982, 3 lectures.
- [3] Linear Analysis of Biochemical Systems, Analysis of Growth, Course on Biochemical Systems Analysis, Ann Arbor, MI, 1985, 6 lectures.
- [4] Accuracy of Alternative Nonlinear Power-Law Models for Biochemical Systems: Advantages of S-Systems, 11th World Congress of the International Association for Mathematics and Computers in Simulation (IMACS), Oslo, Norway, 1985.
- [5] S-Systems. Annual Meeting of the American Statistical Society, South Carolina Chapter, Charleston, SC, 1987.
- [6] Equivalence between S-systems and Lotka Volterra Systems. Mathematical Ecology Conference, Charleston, SC, 1987.
- [7] Recasting of Differential Equations as S-systems. Sixth International Conference on Mathematical Modelling, Washington University, St. Louis, MO, 1987.
- [8] S-system Modeling of Dynamical Networks. Workshop on Dynamics of Networks, Eisenach, GDR, 1988.
- [9] New Nonlinear Methodologies for Modeling Molecular and Cellular Systems, First IFAC Symposium on Modelling and Control in Biomedical Systems, Venice, Italy, 1988.
- [10] Recasting Nonlinear Models as S-systems, First S-System Symposium, Charleston, SC, 1989.
- [11] Comparison of Accuracy of Alternative Models for Biochemical Pathways, Advanced NATO Research Workshop on Control of Metabolic Processes, II Chiocco, Italy, 1989.
- [12] Generic Modelling of Population Dynamics with S-systems, 2nd International Conference on Mathematical Population Dynamics, Rutgers, New Brunswick, 1989.
- [13] Voit, E.O.: S-system modeling of complex systems with randomly fluctuating input. Fourth International Conference on Statistical Methods for the Environmental Sciences, Espoo, Finland, 1992.

- [14] Voit, E.O.: How many variables? Some comments on the dimensionality of nonlinear systems. World Congress of Nonlinear Analysts, Tampa, FL, 1992.
- [15] Voit, E.O.: Optimization of integrated biochemical systems. Second S-System Symposium, Tampa, FL, 1992.
- [16] Voit, E.O.: S-systems: 19 Cartoons depicting the state of the art in 92. Second S-System Symposium, Tampa, FL, 1992.
- [17] Berg, P.H. and E.O. Voit: A brief update on S-system analysis and parameter estimation with SCoP. Second S-System Symposium, Tampa, FL, 1992.
- [18] Yu, S. and E.O. Voit: A new tool for distribution approximation and classification. Second S-System Symposium, Tampa, FL, 1992.
- [19] Voit, E.O.: Biochemical Systems Analysis I and II. 4-th Biochemical Genetics Training Course, Hilton Head, SC, 1993.
- [20] Voit, E.O., R.A. Holser, and W.L. Balthis: Conditional Monte-Carlo Modeling with S-Systems. International Congress on Modelling and Simulation, Perth, Australia, 1993.
- [21] Voit, E.O. and P.J. Sands: S-system analysis of biomass partitioning in Scots pine, *Pinus sylvestris*. International Symposium on Integrative Biochemistry, Barcelona, Spain, 1994.
- [22] Voit, E.O.: A gentle introduction to S-systems. International Symposium on Integrative Biochemistry, Barcelona, Spain, 1994.
- [23] Voit, E.O. and R.G. Knapp: Environmental Health Risk Assessment at the Medical University of South Carolina and the University of Charleston. International Conference on Environmetrics, Burlington, Canada, 1994.
- [24] Voit, E.O. and W.L. Balthis: Assessment of size-dependent mercury distributions in king mackerel. International Conference on Environmetrics, Burlington, Canada, 1994.
- [25] Environmental Health Risk Assessment. Course on Environmental Immunology, MUSC, 1995.
- [26] Voit, E.O., W.L. Balthis, and Z. Zhang. Analysis of mercury exposure from eating fish, using hierarchical Monte Carlo simulations. 6-th International Conference on Environmetrics, Kuala Lumpur, Malaysia, 1995.
- [27] Voit, E.O.: S-systems in statistics, epidemiology, and risk assessment: Not just a

mathematical curiosity. International PowBioSys Symposium on Power-Law Modeling of Biological Systems, Oeiras, Portugal, October 4-7, 1998.

- [28] Voit, E.O.: New results on the S-distribution. International PowBioSys Symposium on Power-Law Modeling of Biological Systems, Oeiras, Portugal, October 4-7, 1998.
- [29] Savageau, M.A., E.O. Voit, and A. Sorribas: Three-day short course on power-law modeling for doctoral students. Gulbenkian Institute, Oeiras, Portugal, October 1-3, 1998.
- [30] Voit, E.O.: Pharmaco-economic modeling for HIV/AIDS infection. ABT-378/r Global Outcomes Workshop, Amsterdam, Netherlands, January 20-22, 2000.
- [31] Voit, E.O.: Functional integration of genomic and metabolic data. VIth International Symposium on Biochemical Systems Theory. Puerto de la Cruz (Tenerife). September 25-29, 2000.
- [32] Voit, E.O.: Introduction and overview. Conference on Biochemical Systems Theory and Modeling in the Post Genomic Era: Principles of Design to Designed Benefits. Ann Arbor, MI, December 1-2, 2000.
- [33] Voit, E.O.: Optimal design for heat stress response in yeast. Conference on Biochemical Systems Theory and Modeling in the Post Genomic Era: Principles of Design to Designed Benefits. Ann Arbor, MI, December 1-2, 2000.
- [34] Voit, E.O.: Models-of-data and models-of processes in the post-genomic era. International Conference on Compartmental Models and Disease Transmission (in honor of John A. Jacquez), Ann Arbor, MI, October 19-21, 2001.
- [35] Voit, E.O.: Functional integration of genomic and metabolic data. Cambridge Healthtech Institute's Premier Conference "Metabolic Profiling: Pathways in Discovery," Chapel Hill, NC, December 3-4, 2001.
- [36] Voit, E.O.: Computational analysis of biochemical systems. South Carolina *In Silico* Biology Symposium, Charleston SC, December 10, 2001.
- [37] Voit, E.O.: Understanding complex metabolic processes through modeling: Challenges, Methods, and Partial Solutions. Mathematical Modeling in Biology Workshop, Duke University, May 1-3, 2002.
- [38] Voit, E.O.: Bottom-Up and Top-Down Analysis of Operating Principles in Metabolic Networks. VIIth International Symposium for Biochemical Systems Theory: From Phenotype to Genotype and Back. Averøy, Møre og Romsdal, Norway, June 17-20, 2002.

- [39] Voit, E.O.: Introduction to Biochemical Systems Analysis. Advanced FEBS Workshop in Biochemistry, Carcavelos, Portugal, September 2002.
- [40] Voit, E.O.: Metabolic and Genome Analysis. Advanced FEBS Workshop in Biochemistry, Carcavelos, Portugal September 2002.
- [41] Voit, E.O.: Modeling and Identification of Metabolic Pathways with Biochemical Systems Theory. *E. coli* Model Cell Consortium Meeting, Northwestern University, July 26-28, 2002.
- [42] Voit, E.O.: A Turning Point in Modeling History. First International *E. coli* Alliance (IECA) Meeting, North Mymms, U.K., November 10-12, 2002.
- [43] Voit, E.O.: Analysis of Proteomic Time Profiles. Applied Biosciences / MUSC Joint Proteomics Meeting, Charleston, February 26, 2003.
- [44] Voit, E.O.: Pathway Analysis and Identification with S-systems. Second International *E. coli* Alliance (IECA) Meeting, Magdeburg, Germany, March 10-12, 2003.
- [45] Voit, E.O.: Biomedical Informatics, Computational Biology, Systems Biology —If we don't know what it is, how can we teach it? Southern Regional Conference on Statistics, Jekyll Island, GA, June 8-11, 2003.
- [46] Voit, E.O.: Pathway Analysis and Identification with S-systems. First International Conference on Systems Biology of *E.coli*, Keio University, Tsuruoka Japan, June 23-25, 2003.
- [47] Voit, E.O.: Trends in Complex Systems. Third Virtual Conference in Genomics and Bioinformatics (VCGB), North Dakota State University, Fargo, ND., September 16-18, 2003.
- [48] Voit, E.O.: Modeling Approach toward understanding protein dynamics. NHLBI Proteomics Conference, Bethesda, MD, October 2-3, 2003.
- [49] Almeida, J.S. and E.O. Voit: Neural-Network Based Parameter Estimation in S-system Models of Biological Networks. The Fourteenth International Conference on Genome Informatics (GIW 2003), Yokohama, Japan, December 14-17, 2003.
- [50] Voit, E.O.: Biochemical Systems Theory: Workshop on The Integration of Chemical and Biological Engineering. Tufts University, Medford, MA, March 12-13, 2004.
- [51] Voit, E.O.: Applications of Biochemical Systems Theory: Workshop on The Integration of Chemical and Biological Engineering. Tufts University, Medford,

MA, March 12-13, 2004.

- [52] Voit, E.O.: S-system Based Pathway Identification from Metabolic Profiles. South Carolina Bioinformatics Conference, Wild Dunes, March 14-16, 2004.
- [53] Voit, E.O.: Of Math and Microbes. American Society for Microbiology--Integrating Metabolism and Genomics. Montreal, 30 April – 3 May, 2004.
- [54] Voit, E.O.: Time series data open new avenues of metabolic systems analysis. International Conference on Molecular Systems Biology (ICMSB'04), Tahoe, Ca, August 21-25, 2004.
- [55] Voit, E.O.: Metabolic modeling with time series data (keynote address). Bioinformatics in Taiwan, National Yang Ming University, Taipei, Taiwan, September 9-11, 2004.
- [56] Voit, E.O.: Time series data open new avenues of metabolic systems analysis. Cambridge Health Institute Conference on Analytical Methods for Metabolic Profiling. Lake Buenavista, December 15, 2004.
- [57] Voit, E.O.: Metabolic modeling with time series data. Biocomplexity 7 Workshop, May 9-11, 2005 Indiana Memorial Union, Bloomington, IN
- [58] Voit, E.O.: Modeling sphingolipid metabolism in *S. cerevisiae*. First Scientific Meeting of the Metabolomics Society. Tsuruoka, Japan, June 20-23, 2005.
- [59] Voit, E.O.: Metabolic Networks I: The Challenge of Complexity. Summer School on „NanoScience and Systems Biology,“ LMU Gene Center, Grosshadern-Martinsried Life Sciences Campus, July 25-28, 2005.
- [60] Voit, E.O.: Metabolic Networks II: Case Studies. Summer School on „NanoScience and Systems Biology,“ LMU Gene Center, Grosshadern-Martinsried Life Sciences Campus, July 25-28, 2005.
- [61] Voit, E.O.: Systems modeling. First International Conference of AB³C, the Brazilian Association for Bioinformatics and Computational Biology. Caxambu, Brazil, October 4-7, 2005.
- [62] Voit, E.O.: Modeling sphingolipid metabolism. Renal Week 2005, Philadelphia, PA, November 8-13, 2005.
- [63] Voit, E.O.: Modeling sphingolipid metabolism. 2006 Gordon Conference on Glycolipid and Sphingolipid Biology, Ventura, CA, January 8-13, 2006.
- [64] Voit, E.O.: Teaching Interdisciplinary Courses in Integrative Biology, 2006 Systems Biology Symposium, National Taiwan University, Taipei, Taiwan, 18

January 2006.

- [65] Voit, E.O.: Key Note Address: Topics in Systems Biology, 2006 Systems Biology Symposium, National Taiwan University, Taipei, Taiwan, 18 January 2006.
- [66] Voit, E.O.: Small Systems Biology, 2006 Meeting of the Association of Biomolecular Resource Facilities, Integrating Science, Tools, and Technologies with Systems Biology, Long Beach, CA, February 11-14, 2006.
- [67] Voit, E.O.: Small Systems Biology, Marine Eco-Genomics Workshop, Charleston, SC, Charleston, SC, February 27-28, 2006.
- [68] Voit, E.O.: Biological Systems Large and Small, 20th Anniversary Symposium of the Institute for Systems Research, University of Maryland, College Park, Maryland, April 13-14, 2006.
- [69] Voit, E.O.: Small Systems Biology, Annual Meeting of the American Society for Microbiology, Orlando, FL, May 21-25, 2006.

Workshops taught:

- [1] South Carolina Junior Academy of Science Workshop, Charleston, SC, October 10, 1987.
- [2] 4th Biochemical Genetics Training Course, Hilton Head Island, SC, July 5-8, 1993.
- [3] Tutorial of the Iizuka '96 *4th International Conference on Soft Computing*, Iizuka, Fukuoka, Japan, September 30-October 1, 1996.
- [4] National Workshop for Doctoral Students, Gulbenkian Institute, Oeiras, Portugal, October 1-3, 1998.
- [5] National Workshop for Doctoral Students, Gulbenkian Institute, Oeiras, Portugal, May 22-26, 2000.
- [6] Eighth International Conference on Intelligent Systems for Molecular Biology, San Diego, CA, August 18-23, 2000.
- [7] International Conference on Intelligent Systems in Molecular Biology, Edmonton, Canada, August 3, 2002.
- [8] Advanced FEBS Workshop in Biochemistry, Carcavelos, Portugal, September 7-13, 2002.

- [9] Workshop on The Integration of Chemical and Biological Engineering. Tufts University, Medford, MA, March 12-13, 2004.
- [10] Workshop associated with Conference Bioinformatics in Taiwan, National Yang Ming University, Taipei, Taiwan, September 9-10, 2004.
- [11] Summer School on „NanoScience and Systems Biology,“ LMU Gene Center, Grosshadern-Martinsried Life Sciences Campus, July 25-28, 2005.
- [12] Workshop on Systems Biology in Metabolic Engineering, Instituto de Tecnologia Química e Biológica, Oeiras, Portugal, November 23, 2005.
- [13] Tutorial on Pathway Analysis with PLAS, 2006 Meeting of the Association of Biomolecular Resource Facilities, Integrating Science, Tools, and Technologies with Systems Biology, Long Beach, CA, February 11-14, 2006.

Seminars:

- 1983 Cybernetics Program, Universität Köln
Department of Microbiology and Immunology, University of Michigan
Division of Theoretical Medicine, Universität Köln (Series of three seminars)
- 1984 Zoologisches Institut, Universität Köln
Landwirtschaftliches Institut, Universität Bonn
Department of Biometry, Medical University of South Carolina
- 1985 Department of Chemical Engineering, University of Michigan
- 1986 Department of Microbiology and Immunology, University of Michigan
Department of Mathematics, Pomona College
Department of Biometry, Medical University of South Carolina (Series of two seminars)
- 1987 Department of Statistics and Biometry, Emory University, Atlanta, Georgia
Department of Statistics, University of Georgia, Athens, Georgia
South Carolina Youth Academy of Sciences (Workshop)
Department of Biometry, Medical University of South Carolina
- 1988 U.S. Department of Agriculture, Forest Service, Charleston, South Carolina
Sigma Xi Society, Charleston Chapter
National Seminar on Dynamical Systems, Akademie der Wissenschaften der DDR, Berlin, GDR
Fachhochschule für Medizinische Informatik, Heilbronn, Germany
Zoologisches Institut der Universität Köln, Köln, Germany

- Department of Biometry, Medical University of South Carolina
- 1989 Division of Biometrics, Food and Drug Administration,
Washington, D.C.
Center for Drug Evaluation and Research, Food and Drug
Administration, Washington, D.C.
- 1990 Department of Biometry, Medical University of South Carolina
Department of Biostatistics, University of South Carolina
- 1991 Department of Biostatistics, Epidemiology, and Systems Science,
Medical University of South Carolina
Board of Trustees, Medical University of South Carolina
Fachbereich Mathematik/Informatik, Universität Osnabrück, Germany
Office of Public Relations, Medical University of South Carolina
- 1992 Department of Biostatistics, Epidemiology, and Systems Science,
Medical University of South Carolina
Honeywell, Sensor and System Development Center
South Carolina High School Teacher Association
- 1993 Division of Modeling, Cooperative Research Center for Temperate Hardwood
Forestry, Hobart, Tasmania
- 1994 CSIRO Forestry and Cooperative Research Center for Temperate Hardwood
Forestry, Hobart, Tasmania
CSIRO Forestry, Headquarters, Canberra, Australia
Board of Trustees, Medical University of South Carolina
Department of Biometry and Epidemiology,
Medical University of South Carolina
- 1996 Mu Sigma Rho Student Career Development Seminar,
Medical University of South Carolina
Department of Environmental Health Sciences, School of Public Health,
University of South Carolina
Catalan Biological Society, Universitat de Lleida, Departament de Ciències
Mèdiques Bàsiques
- 1999 Department of Biometry and Epidemiology,
Medical University of South Carolina
Department of Pharmacology,
Medical University of South Carolina
- 2000 Department of Biochemistry and Molecular Biology,
Medical University of South Carolina

Department of Biometry and Epidemiology,
Medical University of South Carolina

2001 Department of Biochemistry and Molecular Biology,
Medical University of South Carolina
Marine Biomedicine Program,
Medical University of South Carolina
Metabolic Pathway Group
Monsanto/Renessen, St. Louis
Graduate School Exposure Program
Medical University of South Carolina
Departments of Pharmaceutical Sciences and Pharmacy Practice,
Medical University of South Carolina

2002 Department of Molecular Cell Biology
Georgia Institute of Technology
Department of Chemistry and Biochemistry
University of Lisbon, Portugal
BioTechnology Institute
University of Minnesota
Proteomics Group
Medical University of South Carolina

2003 Department of Bioinformatics
University of Michigan
Department of Biomedical Engineering
Georgia Institute of Technology
Marine Biomedicine Program
Medical University of South Carolina
Computer and Computational Sciences & Bioscience
Los Alamos National Laboratories

2004 Proteomics Group
Medical University of South Carolina
Department of Mathematics
Clemson University
Department of Biostatistics, Bioinformatics and Epidemiology
Medical University of South Carolina
Department of Biology, National Dong Hwa University,
Hua Lien, Taiwan
Bioinformatics and Computational Biology Seminar
Georgia Institute of Technology
Bioinformatics Group
North Georgia Technical College
Computational Biology Center
University of Georgia

Agricultural University
Ås, Norway

2005 Resource Centers for Minority Aging Research
SC Cooperative for Healthy Aging in Minority Populations
Charleston, SC
Seminar for Problem-Based Learning Group
Georgia Institute of Technology
Department of Bioengineering
University of Illinois at Urbana-Champaign
School of Applied Physiology
Georgia Institute of Technology
Center for Nonlinear Science
Georgia Institute of Technology
Bioinformatics Program
Gulbenkian Institute, Oeiras, Portugal
Ludwig-Maximilian University
Munich, Germany

6/2006