Articles in Scientific Journals:


[52] Voit, E.O.: Canonical modeling: a link between environmental models and


[150] Voit, E.O., Z. Qi, and S. Kikuchi: Mesoscopic models of biomedical systems as intermediates between disease simulators and tools for discovering design principles: Dopamine-related diseases as case study. *Pharmacopsychiatry* 45 (S1), S22-S30, 2012,


[154] Yin, W., and E.O. Voit: Function and design of the Nox1 system in vascular smooth muscle cells (submitted).

[155] Chen, P.-W., L.L. Fonseca, Y.A. Hannun, and E.O. Voit: Coordination of rapid
sphingolipid responses to heat stress in yeast (submitted).


Books:


Chapters in Books:


September 30-October 1, 1996.


Polisetty, P.K., E.O. Voit, E.P. Gatzke: Yield Optimization of Saccharomyces


Other Publications:


Voit, E.O.: Modelltheoretische Untersuchungen zur Anordnung der


**Book Reviews:**


**Abstracts:**


[17] Rust, P.F. and E.O. Voit: S-system computation of central and noncentral F


Sims, K.J., F. Alvarez, Y. Okamoto, E. O. Voit, and Y.A. Hannun: Comparison of [3H] Palmitate labeled metabolites in the de novo sphingolipid synthetic pathway in wild type vs. ISC1 mutant of Saccharomyces cerevisiae. 54th Southeast Regional Meeting of the American Chemical Society, November 13-16, 2002, Charleston, SC.


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.


Lall, R., A. Rutes, H. Santos, J. S. Almeida, and E. O. Voit: A New Approach to


Voit, E.O.: Systems modeling. First International Conference of AB³C, the Brazilian Association for Bioinformatics and Computational Biology. Caxambu, Brazil, October 4-7, 2005.


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


Advanced Studies Houston TX, October 30-31, 2007.


Terrace Hotel, Atlanta, October 18-21, 2008.

[210] Voit, E.O.: Parameter estimation revisited (again!): Low SSE and speed are not enough. 11th International Conference on Molecular Systems Biology (ICMSB 2009), Max Planck Institute and Chinese Academy of Sciences, Shanghai, June 20-25, 2009.


Voit, E.O. Computational systems biology: From simple models to system simulation and the discovery of design principles. German Conference on Bioinformatics, Weihenstephan, September 7-9, 2011.


Fonseca, L.L., H. Santos, and E.O. Voit: Biochemical systems analysis of heat stress and adaptation of the trehalose cycle in *Saccharomyces cerevisiae* using *in vivo* $^{13}$C-NMR time series data. 8th International Conference on Bioinformatics. From Genomics to Synthetic Biology. Atlanta, GA, November 10-12, 2011.

Dolatshahi, S., and E. O. Voit: Computational systems analysis of the glycolytic pathway in *Lactococcus lactis*. Georgia Tech Research and Innovation


[258] Voit, E.O.: Pathway analysis. 2012 Winter School in Mathematical and Computational Biology, St. Lucia, Queensland, Australia, 2-6 July 2012.

Invited Conference Speaker:


[44] Voit, E.O.: Pathway Analysis and Identification with S-systems. Second International E. coli Alliance (IECA) Meeting, Magdeburg, Germany, March 10-

[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.


[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.


[94] Voit, E.O.: Current and future roles of statistics in dynamical biological pathway analysis. Minisymposium on Integration of Numerical and Statistical tools in
Computational Biology, SIAM Conference on the Life Sciences Meeting, Montreal, Canada, August 4 - 7, 2008.


[106] Voit, E.O.: Welcome. Microbes to Metazoans: Regulation, Dynamics, and
Evolution of Social Behavior, Georgia Institute of Technology, Atlanta, December 2-4, 2009.


Conference on Molecular Systems Biology, Lleida, Spain, May 9-13, 2011.


[120] Voit, E.O. Computational systems biology: From simple models to system simulation and the discovery of design principles. German Conference on Bioinformatics, Weihenstephan, September 7-9, 2011.


[127] Voit, E.O.: Pathway analysis. 2012 Winter School in Mathematical and Computational Biology, St. Lucia, Queensland, Australia, 2-6 July 2012.
Workshops Taught:


[22] Voit, E.O.: Introduction to systems biology. 2012 Winter School in Mathematical and Computational Biology, St. Lucia, Queensland, Australia, 2-6 July 2012.

[23] Voit, E.O.: Pathway analysis. 2012 Winter School in Mathematical and Computational Biology, St. Lucia, Queensland, Australia, 2-6 July 2012.

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 (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 
Mediques 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

2006  School of Mathematics
       Georgia Institute of Technology
Proteomics Center
       Medical University of South Carolina
Bioinformatics and Computational Biology Program
       Georgia Institute of Technology
Center for Nutrient Gene Interactions
       University of Alabama, Birmingham, AL
Department of Biostatistics, Bioinformatics, and Epidemiology
       Medical University of South Carolina
Bioinformatics Group
       North Georgia Technical College
2007  Computational and Life Science Initiative
      Emory University
      Integrative BioSystems Institute
      Georgia Institute of Technology
      Department of Biostatistics
      Texas A & M University
      Presentation to King Abdullah University of Science and Technology
      Delegation, Georgia Institute of Technology
      Lehrstuhl für Physik
      Ludwig Maximilians Universität München
      Instituto de Tecnologia Química e Biológica
      Oeiras, Portugal
      Department of Chemistry
      Appalachian State University
      Instituto de Engenharia de Sistemas e Computadores Investigação e
      Desenvolvimento, Lisbon, Portugal

2008  Center of the Study of Biological Systems
      Georgia Institute of Technology
      Department of Bioinformatics and Computational Biology
      M.D. Anderson Cancer Center, Houston, TX
      Department of Chemistry and Biochemistry,
      Georgia Institute of Technology
      Trinity Presbyterian Church Men’s Breakfast
      Systems Biology Group, Life Science University,
      Ås, Norway
      Lehrstuhl für Genomorientierte Bioinformatik, Helmholtz Zentrum
      München, Germany
      Bioinformatics Colloquium, Lehrstuhl für Physik
      Ludwig Maximilians Universität, München, Germany
      Institute for Systems Biology,
      Shanghai University, Shanghai, PRC
      VHA Georgia Hospital Association
      Department of Chemical and Biomolecular Engineering,
      Georgia Institute of Technology

2009  Computational Science and Engineering Division
      Georgia Institute of Technology
      Center for Computational Biology, University of Georgia

2010  School of Industrial and Systems Engineering
      Georgia Institute of Technology
      Szent Györgyi Lecture, Mayo Clinic, Rochester, MN
      Systems Biology Group, University of Coimbra, Portugal
      Department of Mathematics, Christian College of Madras, Chennai, India
Division of Biostatistics, Moffitt Cancer Center, Tampa, FL

2011  Center for Computational Biology, University of Georgia
       Directorate of Biological Sciences, National Science Foundation, Washington, DC
       Distinguished Lecture, Department of Mathematics, Georgia State University

2012  Samuel Nobel Foundation, Aardmore, OK
       Center for Cystic Fibrosis, Emory University
       Division of Bioinformatics, Medical University of South Carolina