

Ioannis (Yannis) P. Androulakis
Biomedical Engineering, *Rutgers University*
Chemical and Biochemical Engineering, *Rutgers University*
Surgery Department, *Rutgers-RWJ Medical School* (adjunct)
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Educational background

1993-1996 Postdoctoral Fellow, Chemical Engineering Department, *Princeton University*
Faculty Advisor: Prof. Christodoulos A. Floudas
Areas of Research: "*Protein Structure Prediction*" and "*Computational Issues in Global Optimization: Algorithmic Developments and Distributed Computing Implementations*"

1990-1993 Ph.D., Chemical Engineering Department, *Purdue University*
Faculty Advisor: Prof. Gintaras V. Reklaitis
Thesis Topic: "*Approaches to Asynchronous and Decentralized Decision Making*"

1988-1990 MS, Chemical Engineering Department, *Purdue University*
Faculty Advisor: Prof. Venkat Venkatasubramanian
Thesis Topic: "*Genetic Algorithmic Approaches to Process Design and Optimization*"

1983-1988 Diploma, Chemical Engineering Department, *NTUA, Greece*
Faculty Advisor: Prof. Dimitri P. Tassios
Thesis Topic: "*The VdW-711 Equation of State for Polar Compounds and Mixtures*"

Professional Experience

2016- Member, Institute for Quantitative Biomedicine
Rutgers, The State University of New Jersey

2014- Professor, Biomedical Engineering Department and
Chemical & Biochemical Engineering Department
Rutgers, The State University of New Jersey

2014- Member, Center for Biophysical Pathology,
Rutgers - New Jersey Medical School

2014-2019 Vice-chair, Biomedical Engineering Department
Rutgers, The State University of New Jersey

2012-2019 Undergraduate Program Director, Biomedical Engineering Department
Rutgers, The State University of New Jersey

2013- Member, Graduate Program in Electrical and Computer Engineering
Rutgers University

2013- Member, Graduate Programs in Molecular Biosciences
Rutgers University

2012- Member, Exposure Science Division
Environment and Occupational Health Sciences Institute
Rutgers University – RWJ Medical School

2010-2012 Vice-chair, Biomedical Engineering Department
Rutgers, The State University of New Jersey

2009- Associate Professor
Biomedical Engineering Department and
Chemical & Biochemical Engineering Department
Rutgers, The State University of New Jersey

2009- Adjunct Associate Professor
Department of Surgery
UMDNJ - RWJ Medical School

2008- Undergraduate Program Director
Biomedical Engineering Department
Rutgers, The State University of New Jersey

2008- Member of the Graduate Faculty, Graduate Program in Computational Biology & Molecular Biophysics (BioMaPS)
Rutgers, The State University of New Jersey

2008- Affiliated Faculty
Center for Engineering in Medicine, Boston, MA

2004-2009 Assistant Professor
Biomedical Engineering Department and
Chemical & Biochemical Engineering Department
Rutgers, The State University of New Jersey

2002-2004 Knowledge Capitalization Technical Program Leader
Corporate Strategic Research Laboratories
ExxonMobil Research and Engineering Company

2001-2004 Engineering Associate
Corporate Strategic Research Laboratories
ExxonMobil Research and Engineering Company

1998-2001 Senior Engineer
Corporate Strategic Research Laboratories
ExxonMobil Research and Engineering Company

1996-1998 Research Associate
Corporate Research Science Laboratories
Exxon Research and Engineering Company

Other Academic Appointments: (Rutgers University) Institute for Quantitative Biomedicine; Graduate Program in Pharmaceutical Sciences, Ernest Marion School of Pharmacy; Center for Biophysical Pathology; Graduate Program in Electrical and Computer Engineering; Graduate Programs in Molecular Biosciences; Exposure Science Division, Environment and Occupational Health Sciences Institute; and Center for Engineering in Medicine, Boston, MA

Professional Accomplishments

Honours

Full Member, Sigma Xi Scientific Honor Society, 2021
Fellow, American Institute of Chemical Engineers, 2019
Fellow, American Institute of Medical and Biological Engineering, 2015

Awards

Board of Trustees Award for Excellence in Research, Rutgers University, 2018
Member (ad hoc), EPA Scientific Advisory Board, Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), 2017
Environmental Protection Agency Scientific and Technological Achievement Award, 2015
Outstanding Engineering Faculty Award, School of Engineering, Rutgers the State University of New Jersey (2013)
Excellence in Teaching Award, Engineering Governing Council, School of Engineering, Rutgers University (2006)

Leadership positions

Vice-chair (2021), Chair-elect (2022), Chair (2023) *Quantitative systems Pharmacology Special Interest Group, International Society of Pharmacometrics*

Service to profession

Membership in Professional Societies: American Institute of Chemical Engineering; American Institute of Medical and Biological Engineering; Biomedical Engineering Society; Society of Endocrinology; American Physiological Society
Computing and Systems Technology Division (AIChE) Area 10C Chair (2012-2013)

Editorial Board Membership:

Field Chief Editor: *Frontiers in Systems Biology*
Academic Editor: *PLoS ONE*
Editor-in-chief: *Open Access Bioinformatics* (2007-2014)
Editorial Board Member: *International Journal of Burns and Trauma, Critical Reviews in Biomedical Engineering, The Open Bioinformatics Journal, American Journal of Translational Research, Open Systems Biology Journal, Saturday Review-Drug Trials, American Journal of Translational Research, CPT: Pharmacometrics & Systems Pharmacology, ISRN Bioinformatics, Communications in Mathematical Biology and Neuroscience, AIMS Bioengineering, J. Pharmacokinetics Pharmacodynamics.*

Guest Editor: *Current Opinion in Biotechnology*, special issue on “Systems Biology” (2019); *Gene Regulation and Systems Biology*, special Issue on “Quantitative Systems Biology” (2017); *Mathematical Biosciences*, special Issue on “Modelling inflammation” (2015); *Computers and Chemical Engineering*, special Issue on “Bio-Systems Engineering” (2015); *Critical Reviews in Biomedical Engineering*. Special Issue on “Inflammation in human health and disease” (2013)

Member of International Conference Programming Committees: *Foundations of Computer-Aided Process Design* (2019); *International Symposium on Mathematical and Computational Oncology* (2019); *Process Systems Engineering* (2018); 17th *European Conference on Computational Biology* (2018); 22nd *European Symposium on Computer Applications in Process Engineering*, (2012); 21st *European Symposium on Computer Applications in Process Engineering* (2011); 4th *International Conference on Foundations of Systems Biology in Engineering* (2011); 10th *IEEE International Conference on Data Mining* (2010); *International Conference on Bioinformatics and Bioengineering* (2010); 10th *IEEE International Conference on Bioinformatics & Bioengineering* (2010); 3rd *International Conference on Foundations of Systems Biology in Engineering* (2009); *DIMACS Workshop on Nanotechnology and Biology* (2009); *IEEE International Conference on Data Mining (ICDM-08)* (2008)

Chairing Technical Meetings

International Conference on Foundations of Systems Biology in Engineering, Conference Chair, Cambridge, MA, 2022

Scientific Reviewer: *Nature*, *Cell Biology and Toxicity*; *J. Pharmacokinetics and Pharmacodynamics*; *AICHE Journal*; *Annals of Biomedical Engineering*; *Annual Reviews of Biomedical Engineering*; *Biophysical Journal*; *BMC Bioinformatics*; *BMC Systems Biology*; *BMC Genomics*; *Computers and Chemical Engineering*; *Energy and Fuels*; *Industrial & Engineering Chemistry Research*; *Journal of Catalysis*; *Journal of Global Optimization*; *Naval Research Logistics*; *Optimization and Engineering*; *Algorithms for Molecular Biology*; *IET Systems biology*; *Computers in Biology*; *Transactions on Knowledge and Data Engineering*; *Personalized Medicine*; *Chemical Engineering research and Design*, *PLoS Medicine*, *Journal Process Control*, *J. Chemical Information and Modeling*, *Food and Chemical Toxicology*, *Psychoneuroendocrinology*, *Molecular BioSystems*, *Journal of Physiobiochemical Metabolism*, *ISRN Bioinformatics*, *J. Leukocyte Biology*

Review Panel Member: NSF, NIH/NIEHS, DOE, EPA; Defense Threat Reduction Agency; Italian Ministry of Health General Directorate for Health and Technologies Research; Fonds National de la Recherche Luxembourg; European Research Council; General Secretariat for Research and Technology of Greece

Academic Work

Peer reviewed Publications

225 referred journal publications

Impact as of March 2022: [Google Scholar] *h-index* 44; [Scopus] *h-index* 35;

Student Advising

Graduated PhD: 17; Current PhD: 2 (9/19 women); Graduated MS: 6; Undergraduate students supervised: 26

Other scientific works

19 referred conference proceedings; 27 books chapters; 1 US Patent - No. 6,726,850; 52 invited National and International presentations; 160 National and International conference presentations

Federal Reports

Euling, S., S. Makris, B. Sen, B. Benson, K. Gaido, V. Wilson, C. Keshava, N. Keshava, L. White, P. Foster, IP Androulakis, M. Ovacik, S. Hester, L.E. Gray, C. Thompson and W. Shiu, *An Approach to Using Toxicogenomic Data in EPA Human Health Risk Assessments: A Dibutyl Phthalate Case Study*, National Center for Environmental Assessment, Office of Research and Development, U.S. Environmental Protection Agency, Washington, DC 20460 (2010)