CURRICULUM VITAE: George V. Popescu

Associate Research Professor
Institute for Genomics, Biocomputing and Biotechnology, Mississippi State University,
Pace Seed Lab 118, 650 Stone Blvd. P.O. Box 6040, Mississippi State, MS 39762,
Phone: 662-325-7369, e-mail: gvp18@msstate.edu
ORCID: https://orcid.org/0000-0002-7580-6792
Google Scholar: https://scholar.google.com/citations?user=7XZANIQAAAAJ&hl=en

Education

2004 – 2006 Postdoctoral Training in **Genomics, Bioinformatics and Systems biology**, Center for Excellence in Genomic Sciences, Yale University.
1996 - 2001 **Ph.D. in Computer Engineering**, Rutgers – The State University of New Jersey
1988-1993 **B.S. /M.S. in Information Engineering**, University "Politehnica" Bucharest, Romania; thesis research conducted at INP Grenoble, France.

Professional Appointments

2023-present **Associate Research Professor**, Institute for Genomics, Biocomputing and Biotechnology and Biochemistry, Nutrition and Health Promotion Department, Mississippi State University
2016-2023 **Assistant Research Professor**, IGBB, Mississippi State University
2015-2016 **Senior lecturer,** Computer Science Department, Central Washington University
2012-2015 **Senior scientist**, visiting, Boyce Thompson Institute
2011-2015 **Senior scientist**, National Institute for Lasers, Plasma and Radiation Physics, Bucharest (NILPRP), Romania
2009 - 2011 **Associate research professor**, University "Politehnica" Bucharest:
2007 - 2008 **Postdoctoral** visiting positions at Boyce Thompson Institute/Cornell, DIMACS
2004 - 2006 **Postdoctoral Research Associate**, Yale University
2001 - 2004 **Research Staff Member**, IBM TJ Watson Research Center
2000 **Summer Intern**, IBM TJ Watson Research Center
1996 - 2000 **Research Assistant**, Center for Advanced Information Processing, Rutgers University
1996 **Research Assistant**, Dept. of Electrical and Computer Engineering, University of Colorado, Colorado Springs
1993 - 1995 **Junior Faculty**, Researcher, University "Politehnica" Bucharest
1993 TEMPUS **Research student**, LTIRF Grenoble France

Member of professional societies

ISCB - International Society for Computational Biology
ASBMB - American Society for Biochemistry and Molecular Biology
ACM - Association for Computing Machinery, senior member
EPS - European Physical Society

Publications and Patents

67 journal articles and book chapters, over 80 publications in journals and conference proceedings. 8 US/EU patents. ORCID: 0000-0002-7580-6792. Hirsch index 29.

Awards

3 **PRECISI Research Excellence Awards**, UEFISCDI, 2013, 2014, 2015
2 **IBM Invention Achievement Awards**, 2003, 2004
TEMPUS (European Commission Education Program) Fellowship, 1993
National Physics Olympiad 1984, 1985, 1986, **"Traian Lalescu"** National Physics Contest, 1990

Reviewer activity

Bioinformatics, Nature-Systems Biology, Frontiers in Plant Science, BMC Bioinformatics, BMC Cancer, Journal of Computational Biology, IEEE Transactions Journals, ACM journals.

Teaching

BCH 8990 – Systems Biology BCH-EPP Department, MSU, Fall 2018)
CS 427 - Algorithm Analysis (CS Department, CWU, Winter 2016)
CS 540 - Algorithms for Biological Data Analysis (CS Department, CWU, Fall 2015)
Designed a curriculum of 18 courses, organized one biophysics and two data science laboratories, and an HPC cluster for a graduate program in Bio-imaging, Bioinformatics, and Complex Systems (Fall 2009-Spring 2012).
Bioinformatics and computational genomics (UPB, Spring 2011, Spring 2012)
Systems biology and molecular modeling (UPB Fall 2011, Fall 2012)
Optimization algorithms (UPB Spring 2011, Spring 2012)
Matrix computations (UPB Fall 2010)
Structure and dynamics of complex networks (UPB 2010)
Mathematical modeling and statistics for engineering (UPB 2009)
Image processing and analysis (UPB 1993-1996)

University Service

Invited Research Professor, ICUB, University of Bucharest, May-July 2024.
Graduate Faculty member, Computational Biology Graduate Program, Level 1 appointment.
Graduate Faculty member, Department of Biochemistry, Molecular Biology, Plant Pathology and Entomology, CALS, Level 1 appointment.
Graduate Faculty member, Department of Computer Science and Engineering, Bagley College of Engineering, Level 1 appointment.
Graduate student advisor, Department of Mathematics and Statistics, College of Arts and Sciences
MSU University Curriculum Committee August 2022-present.
DAFVM Faculty Senate, University Senate Service, July 1, 2018 - June 30, 2021

Funding

Collaborative Proposal: Molecular patterns and spatiotemporal dynamics of redox sensing and signaling networks NSF RoL, 2021-2025, PI.
Metagenomics Guided Methods for Biocontrol of Root Microbial Communities with Anti-fungal Activities in Soybean. MAFES - Mississippi Soybean Promotion Board. 2024-2025, PI.
Characterize root microbial communities with growth-promoting and anti-fungal activities in soybean. MAFES - Mississippi Soybean Promotion Board. 2020-2024, PI.
Discovery of bacterial strains with anti-fungal properties in MS Delta root microbiomes. MAFES, 2023-2025, PI.
New methods for DNA copy number variation analysis. August 2020 – July 2021. REU MAFES.
New methods for Genome-Wide Association Studies and functional data mining in plants. August 2020 – June 2021). REU MAFES.
Structure and evolution of the plant kinome. October 2020 - August 2021. REU ORED.
Collaborative Proposal: Function and Regulation of Thimet Oligopeptidase-Mediated Proteolytic Pathways in Plant Stress, NSF MCB, 2017-2021, 195K, co-PI.
Analysis of thiol switches in plant-specific thimet oligopeptidases (TOPs), Sponsored by ORED, $2,000.00. (September 1, 2017 - September 1, 2018).
Identification and Analysis of Plant Gene Regulatory Networks for Crop Improvement. MAFES, 2018-2019, PI.
Analysis of transcriptional responses of sweet potato under abiotic stress, MAFES, 2017-2018, co-PI.
Activity modeling and simulation of bacterial efflux pump inhibitors based on advanced laser methods, PN-II-PT-PCCA-2011-3.1-1350, 2012-2015, 500K USD, PI.

Spectral analysis of periodic epi-organization of genomes, BRANCUSI-RO-FR-2013, 2013-2014, PIs: George Popescu, Francois Kepes (CNRS).
Inverse Networks Problems in Systems Biology: new methods for signaling networks structure and dynamics analysis, XSEDE allocation grant, 2013-2014, PI: George Popescu (BTI).
Boyce Thompson Institute bioinformatics grant, 2012-2014, 100K, PI.
Advanced master program in Bio-imaging, Bioinformatics, and Complex Systems, POSDRU-61756 2010-2013, 4M USD, Co-organizer.
IBM Adventurous Research program: OZONE: Self-managing Overlay for Large Scale Distributed Applications (IBM Research) 2002-2004.
Middleware for supporting interactive applications on the grid (IBM), 2003-2004.

Institute service, committees and special responsibilities

Reviewer for Granting Agencies: NSF DBI, NSF SSB, NIH SuRE R16, NSF Computational biology, Algorithms in the Field 2017, NSF *GRFP* panelist. HORIZON 2020 reviewer. UEFISCDI 2014, 2015, 2017, DOE – SmartGRID 2009.
Topic Editor for Frontiers in Plant Science: Mass Spectrometry and New Computer-Based Tools in Plant Science Research
Frontiers in Plant Science Associate Editor
Nature Scientific Reports Editorial Board
BMC Bioinformatics Editorial Board
Lead invited editor for Complexity Journal on *Dynamical Analysis of Biological Systems*, (co-editors: Eberhard O. Voit, GATECH, Constantin Udriste, UPB).
Workshop Organizer, Poster presentations, *The 15th Annual MCBIOS Conference*, Starkville, MS. (September 1, 2017 - March 31, 2018).
Co-organization of COST activities: "Antibiotic transport and efflux: new strategies to combat bacterial resistance" (BM0701) 2012.
Designed and co-developed "Bio-Photonics Laboratory" infrastructure at the UPB, 2010-2012.
IBM academic initiative program 2012-2015
IBM summer intern mentorship program 2002-2003
IBM Broadband Computing Strategy team 2001-2002

Research associate, graduate student training

Name	*Training period*	*Position*
Philip Berg	01/18-2024	Graduate research assistant, Postdoctoral student, BCH-EPP, IGBB, MSU
Mohit Verma	10/21-08/23	Postdoctoral student, IGBB, MSU
Xin Ye	07/22-07/23	Postdoctoral student, BCH-EPP, MSU
Philku Lee	05/19-12/21	Graduate research assistant, Math and Statistics Dept., Postdoctoral student, CAVS, MSU
Ghanbarijahromi, Mohammadamin	01/2025-Present	Graduate research assistant, Computational Biology
Afra Bhuiyan	01/2024-Present	Graduate research assistant, BNHP, MSU
Rezwana Setu	12/2020-Present	Graduate research assistant, BNHP, MSU
Josh Mitchell	12/2022-Present	Graduate research assistant, Computational Biology
Asanka Duwage	01/20-Present	Graduate research assistant, Math and Statistics Dept., MSU
Tobias Oketch	01/19-Present	Graduate research assistant, Math and Statistics Dept., MSU
Thualfeqar Al-Mohanna	01/18-12/19	Graduate research assistant, BCH-EPP, MSU
Drew Ferrell	08/20-05/2022	Graduate research assistant, Computational Biology
Himangi Srivastava	06/18-2021	Graduate research assistant, ECE, MSU

Norbert Bokros	07/16-12/2018	Graduate research assistant, BCH-EPP, MSU
Gizem Dimlioglu	07/16-08/20	Graduate research assistant, BCH-EPP, MSU
Alexandru Stoicu	2014-2015	M.S. student, NILPRP and University of Bucharest
Camelia Moldovan	2012-2013	M.S. student, University Politehnica of Bucharest

Languages: English, Romanian, French

Selected publications

Journal Papers

Philip Berg, Asanka Duwage, Mohit Verma, **George Popescu**. 2024. Mavis: An Ensemble of Methods for Mean-Variance Trend Modeling and Bayesian Decision in Comparative Proteomics. Mol Cell Proteomics submission.

Sah, S. K., **Popescu, G. V**., Reddy, K. R., Klink, V. P., & Li, J. (2024). The Glycine Max Abscisic Acid-Activated Protein Kinase-Like Kinase 1 (GmAALK1) Modulates Drought Stress Response. *Journal of Plant Growth Regulation*, 1-22.

Uyen Wesser, Josh Mitchell, Najmeh Nejat, Pradeep B K, Philip Berg, Teresa Wilkerson, Sorina C. Popescu, **George V. Popescu**, Identification of root endophytes with protective activity against Xylaria necrophora, the causal agent of Taproot Decline in soybeans, Phytobiomes Journal submission.

Philip Berg, **George Popescu**. 2023. Baldur: Bayesian Hierarchical Modeling for Label-Free Proteomics with Gamma Regressing Mean-Variance Trends. Mol Cell Proteomics. 2023 Dec;22(12):100658. doi: 10.1016/j.mcpro.2023.100658. Epub 2023 Oct 7.

Anthony A. Iannetta, Philip Berg, Najmeh Nejat, Amanda L. Smythers, Rezwana R. Setu, Uyen Wesser, Ashleigh L. Purvis, Zoe A. Brown, Andrew J. Wommack, Sorina C. Popescu, Leslie M. Hicks, **George V. Popescu**. 2023. High throughput peptidomics elucidates immunoregulatory functions of plant thimet oligopeptidase-directed proteostasis. bioRxiv 2022.05.11.491536; doi: https://doi.org/10.1101/2022.05.11.491536

Olorunwa, O. J., Adhikari, B., Brazel, S., Shi, A., Popescu, S. C., **Popescu, G. V.**, & Barickman, T. C. (2022). Growth and photosynthetic responses of cowpea genotypes under waterlogging at the reproductive stage. *Plants*, *11*(17), 2315.

Olorunwa OJ, Adhikari B, Brazel S, Popescu SC, **Popescu GV**, Shi A, Barickman TC. Waterlogging during the reproductive growth stage causes physiological and biochemical modifications in the leaves of cowpea (Vigna unguiculata L.) genotypes with contrasting tolerance. Plant Physiol Biochem. 2022 Nov 1;190:133-144. doi: 10.1016/j.plaphy.2022.08.018. Epub 2022 Sep 7. PMID: 36115267.

Himangi Srivastava, Drew Ferrell, and **George V. Popescu**. (2022). NetSeekR: A networks analysis pipeline for RNASeq time series data. BMC bioinformatics 23 (1), 1-14.

O. Olorunwa, B. Adhikari, S. Brazel, S.C. Popescu, **G.V. Popescu**, T.C. Barickman. (2022). Short waterlogging events differently affect morphology and photosynthesis of two cucumber (Cucumis sativus L.) cultivars, Front. Plant Sci., 22 July 2022, https://doi.org/10.3389/fpls.2022.896244

Elizabeth K. Brauer, Nagib Ahsan, **George V. Popescu**, Jay J. Thelen, Sorina C. Popescu. (2022). Back from the dead: the atypical kinase activity of a pseudokinase regulator of cation fluxes during inducible immunity, Front. Plant Sci., doi: 10.3389/fpls.2022.931324

Popescu, S.C., Tomaso-Peterson, M., Wilkerson, T., Bronzato-Badial, A., Wesser, U., **Popescu, G.V.** (2022). Metagenomic Analyses of the Soybean Root Mycobiome and Microbiome Reveal Signatures of the Healthy and Diseased Plants Affected by Taproot Decline. Microorganisms, 10, 856. https://doi.org/10.3390/microorganisms10050856

Philku Lee, **George Popescu**, Seongjai Kim, (2022). Stable rotational symmetric schemes for nonlinear reaction-diffusion equations. Computers & Mathematics with Applications. Volume 109, 1 March 2022, Pages 191-203.

Thualfeqar Al-Mohanna, Najmeh Nejat, Anthony A. Iannetta, Leslie M. Hicks, **George V. Popescu**, and Sorina C. Popescu, Arabidopsis thimet oligopeptidases are redox-sensitive enzymes active in the local and systemic plant immune response. Journal of Biological Chemistry (296), 22 April 2021, DOI: https://doi.org/10.1016/j.jbc.2021.100695

Philku Lee, **George Popescu**, Seongjai Kim, (2019). *Nonoscillatory Alternating Direction Procedures for Reaction-Diffusion Equations.* Complexity 2020. https://www.hindawi.com/journals/complexity/2020/5163704/

Al-Mohanna, T., Ahsan, N., Bokros, N. T., Dimlioglu, G. C., Reddy, R. K., Shankle, M. C., **Popescu, G. V**., Popescu, S. C. (2019). Proteomics and Proteogenomics Analysis of Sweetpotato (Ipomoea batatas) Leaf and Root. J Proteome Res.18(7):2719-2734. doi: 10.1021/acs.jproteome.8b00943. Epub 2019 Jun 17.

Bokros, N., Popescu, S. C, **Popescu, G. V.** (2019). Multispecies MAPKKK analysis reveals conserved MAP3K expansions and defines the MAP3K gene family in Gossypium hirsutum. BMC Bioinformatics. 2019 Mar 14;20(Suppl 2):99. doi: 10.1186/s12859-019-2624-9.

Berg, P., McConnell, E., Hicks, L., Popescu, S. C, **Popescu, G. V.** (2019). Evaluation of linear models and missing value imputation for the analysis of peptide-centric proteomics. BMC Bioinformatics. 2019 Mar 14;20(Suppl 2):102. doi: 10.1186/s12859-019-2619-6. (best paper).

Brauer, E. K., **Popescu, G. V**., Singh, D., Calvino, M., Gupta, B., Chakravarthy, S., Collmer, A., Popescu, S. C. (2018). Integrative network-centric approach reveals signaling pathways associated with plant resistance and susceptibility to Pseudomonas syringae. PLOS Biology, 16(12), e2005956.

Berg, P. C., McConnell, E., Westlake, T., Wilson, K., **Popescu, G. V**., Hicks, LM, Popescu, S. C. (2018). Proteome-wide analysis of cysteine reactivity during effector-triggered immunity. Plant Physiology, pp.01194.2018.

Campe R, Langenbach C, Leissing F, **Popescu GV**, Popescu SC, Goellner K, Beckers G, Conrath U. (2015). "ABC transporter PEN3/PDR8/ABCG36 interacts with calmodulin and is required for Arabidopsis nonhost resistance". New Phytol. 2016 Jan;209(1):294-306. doi: 10.1111/nph.13582. Epub 2015 Aug 28.

Westlake TJ, Ricci WA, **Popescu GV** and Popescu SC (2015). "Dimerization and thiol sensitivity of the salicylic acid binding thimet oligopeptidases TOP1 and TOP2 define their functions in redox-sensitive cellular pathways". Front. Plant Sci. 6:327. doi: 10.3389/fpls.2015.00327

Singh DK, Calviño M, Brauer EK, Fernandez-Pozo N, Strickler S, Yalamanchili R, Suzuki H, Aoki K, Shibata D, Stratmann JW, **Popescu GV**, Mueller L, and Popescu SC (2014) "The tomato kinome and the TOKN ORFeome: resources for the study of kinases and signal transduction in tomato and Solanaceae ." Molecular Plant Microbe Interaction; 27:7-17.

Magali M, Westlake T, Zampogna G, **Popescu GV**, Tian M, Noutsos C, and Popescu SC. "The Arabidopsis Oligopeptidases Top1 and Top2 Are Salicylic Acid Targets That Modulate SA-Mediated Signaling and the Immune Response." The Plant Journal 76, no. 4: 603-614.

Lee HY, Bowen CH, **Popescu GV**, H.-G. Kang, N. Kato, S. Ma, S. Dinesh-Kumar, M. Snyder and S. C. Popescu, "RTNLB1 and RTNLB2 Reticulon-Like Proteins Regulate Intracellular Trafficking and Activity of the FLS2 Immune Receptor, Plant Cell Online 2011, 10.1105/tpc.111.089656.

Popescu SC, **Popescu GV**, Bachan S, Zhang Z, Gerstein M, Snyder M, and S. P. Dinesh-Kumar, "MAPK target networks in *Arabidopsis thaliana* revealed using functional protein microarrays", Genes Dev. 2009 Jan 1;23(1):80-92. Epub 2008 Dec 18.

Popescu SC, **Popescu GV**, Bachan S, Zhang Z, Seay M, Gerstein M, Snyder M, and S. P. Dinesh-Kumar, "Differential binding of calmodulin-related proteins to their targets revealed through high-density *Arabidopsis* protein microarrays", PNAS. 2007 Mar 13;104(11):4730-5.

Urban AE, J. Korbel, R. Selzer, T. Richmond, J. Cubells, A. Hacker, **Popescu GV**, R. Green, B. Emanuel, M. Gerstein, S. M. Weissman and M. Snyder, "High resolution mapping of DNA copy alterations in human chromosome 22 using high density tiling oligonucleotide arrays," PNAS, March 2006, 103 (12), pp. 4534-4539.

Feingold, E.A. et al.. "The ENCODE (ENCyclopedia of DNA Elements) Project." Science 306:636-640.

Selected Book Chapters

Al-Mohanna, T., **Popescu G. V.,** Popescu S. C., Methods to analyze the redox reactivity of plant proteins. Chapter in "Reactive Oxygen Species in Plants: Methods and Protocols", Methods in Molecular Biology, pp.161-179, Springers Protocols, Humana Press. 2022.

Al-Mohanna, T. C., Bokros, N. T., Ahsan, N. Popescu, S. C., **Popescu, G. V**. (2019). Methods for optimization of protein extraction and proteogenomic mapping in sweetpotato. Book chapter in Plant Proteomics Methods and Protocols (Springer Nature Methods in Molecular Biology), accepted.

Popescu GV, C. Noutsos, Popescu SC (2016) "Big Data in Plant Science: data mining techniques for plant genomics and proteomics", Methods in Molecular Biology: "Data Mining Techniques for the Life Sciences, 2-nd edition" (Springer). Eds: Carugo, O., Eisenhaber, F.

Brauer EK, Popescu SC, **Popescu GV**, (2014) "Experimental and analytical approaches to characterize plant kinases using protein microarrays." Methods in Molecular Biology: "Plant MAP Kinases", pp. 217-235.

Popescu GV, Popescu SC, "Complexity and modularity of MAPK signaling networks", *Handbook of Research in Computational and Systems Biology: Interdisciplinary Applications*, IGI Global 2010.

Popescu GV, Popescu SC, *Selected Topics in Computational Biology*, University "Polithenica" Bucharest Press, 2013.

Other publications

Andrei IR, **Popescu GV**, Pascu ML. "Optical spectrum behaviour of a coupled laser system under chaotic synchronization conditions," Journal of the European Optical Society-Rapid Publications Volume: 8, 2013, 6 pp. DOI: 10.2971/jeos.2013.13054

Pascu ML, **Popescu GV**, Ticos CM, Andrei IR. "Unresonant interaction of laser beams with microdroplets," Journal of the European Optical Society-Rapid Publications Volume: 7, 2012, 18 pp. DOI: 10.2971/jeos.2012.12001

M. Bouzit, G. Burdea, **Popescu GV**, and R. Boian, "The Rutgers Master II-New Design Force-Feedback Glove", IEEE/ASME Transactions on Mechatronics, Vol. 7(2), pp. 256-263, June 2002.

Girone M., Burdea, G., M. Bouzit, **Popescu GV**, and J. Deutsch, "A Stewart Platform-based System for Ankle Telerehabilitation," invited article, Special Issue on Personal Robotics, Autonomous Robots, Vol. 10, pp. 203-212, Kluwer, March 2001.

Burdea, G., **Popescu GV**, V. Hentz, and K. Colbert, "Virtual Reality-based Orthopedic Tele-rehabilitation," IEEE Transactions on Rehabilitation Engineering, Vol. 8, No. 3, pp. 429-432, September 2000.

A. Kolcz, J. Alspector, M. Augusteijn, R. Carlson and **Popescu GV**, "A line-oriented approach to word spotting in handwritten documents,"Pattern Analysis and Applications, vol. 3, no. 2, pp. 153-168, 2000.

Popescu GV, G. Burdea, M. Bouzit, M. Girone, and V. Hentz, "A Virtual-Reality-Based Telerehabilitation System with Force Feedback," IEEE Transactions on Information Technology in Biomedicine, vol. 4, No. 1, pp. 45-51, March 2000.

G. Burdea, G. Patounakis, **Popescu GV**, R. E. Weiss, "Virtual Reality-based Training for the Diagnosis of Prostate Cancer", IEEE Transactions on Biomedical Engineering, Vol. 46, No. 10, pp 1253-1260, October 1999.

Popescu GV, G. Burdea, and H. Trefftz, "Multimodal interaction modeling," in Handbook of Virtual Environments; Design, Implemenation and Applications, K. Stanney ed., 1-st edition Lawrence Erlbaum Associates, Inc. February 2002, 2-nd edition CRC Press 2014.

Popescu GV, "Distributed indexing networks for efficient large-scale group communication," in Handbook of Research on P2P and Grid Systems for Service-Oriented Computing: Models, Methodologies and Applications, N. Antonopoulos, G. Exarchakos , M. Li and A. Liotta eds, IGI Global 2009.

Buzuloiu, Vasile, Ma Malciu, **V G Popescu**, and C Vertan "Optimal recovery of signal parameters from a few samples: one- and two-dimensional applications," Optical Engineering 35(6), (1 June 1996). https://doi.org/10.1117/1.601123

Talks and conferences:

ASBMB 25, April 2025, "Peptidase-controlled ultradian gene oscillations translate into functional patterns in systemic immunity".

ASPB-SS 25, March 2025, Peptidase-controlled ultradian gene oscillations are required for priming and execution of systemic acquired resistance.

MCBIOS 2018 (MCBIOS-XV), March 2018, "Network-centric analysis of pathways for resistance and susceptibility in host pathogen interactions".

UEFISCDI Symposium, July 2014, "Activity modeling and simulation of bacterial efflux pump inhibitors based on advanced laser methods - new results".

iSSB, GENOPOLE September 2013, "Spectral analysis of periodic epi-organization of genomes".

National Institute of Physics (NILPRP), July 2012, "Activity modeling and simulation of bacterial efflux pump inhibitors based on advanced laser methods".

Dana Farber Research Institute, Center for Cancer Computational Biology, August 2011, "Computational and biophysical methods for the comprehensive characterization of molecular interactions in cellular networks".

Boyce Thompson Institute for Plant Research, July 2011, "Computational and biophysical methods for the comprehensive characterization of molecular interactions in cellular networks".

Institute for Neuro and Bioinformatics, Luebeck University, Germany, November 2009, "Understanding genome variation: CNV, SNP and pathway analysis".

RECOMB Regulatory Genomics, Systems Biology and DREAM3 Workshop, October 2008, "Large scale identification of MAPK networks in *Arabidopsis Thaliana".*

DM-HI08 INFORMS Annual Meeting, October 2008, "Computational models for comparative genomics hybridization analysis".

Center for Molecular Medicine and Genetics, Wayne State University, September 2008, "Understanding cellular control: insights from genome variation, epigenetic regulation and signaling pathway analysis".

Cold Springs Harbor Laboratory, September 2008, "Understanding genome variation: DNA copy number variation detection, SNP analysis and pathway inference".

NIH – NIDDK, August 2008, "Understanding genome variation: DNA copy number variation detection, SNP analysis and pathway inference"

EMBL Hamburg April 2008, "Efficient algorithms for hard optimization problems: applications to combinatorial biology".

H. Lee Moffitt Cancer Center and Research Institute, October 2007. "Computational models for comparative genomics and protein networks inference".

INFORMS Annual Meeting, October 2006, "Transposition Search for Optimal Graph Embedding".

Dana-Farber Cancer Institute, Harvard University, February 2006, "Computational models for micro-array data analysis".

8th Annual Computational Genomics Conference, Yale University, November 2005, "In-silico DNA micro-array hybridization: Computational models for estimating DNA micro-array hybridization efficiency".

Conference proceedings

Andrei IR, **Popescu GV**, Ticos CM, Pascu ML. "Optical Spectrum Analysis of Chaotic Synchronization in a Bidirectional Coupled Semiconductor Laser System," Chaos and Complex Systems, Ch 60, pp. 425-429. Springer, 2013, DOI: 10.1007/978-3-642-33914-1_60

Popescu GV, "Transposition Search for Optimal Graph Embedding", INFORMS Annual Meeting, Pittsburgh, 2006.

G. Popescu, Z. Liu. "Network overlays for efficient control of large scale dynamic groups" Proceedings of DS-RT 2006. Torremolinos, SPAIN, pp: 135-142, 2006.

T. Chang, J. Fan, M. Ahamad, **G. Popescu**, Z. Liu. "Preference-aware overlay topologies for group communication," Proceedings of GLOBECOM '05: IEEE Global Telecommunications Conference, St Louis, MO, Vols 1-6 Pages: 641-645, 2005

Simon J. E. Taylor, **George V. Popescu**, J. Mark Pullen, Stephen John Turner. "Distributed Simulation and the Grid: Position Statements." Proceedings of DS-RT 2004, Budapest, HUNGARY, pp. 144-149, 2004.

G. Popescu, Z. Liu. "Stateless application-level multicast for dynamic group communication", Proceedings of DS-RT 2004. Budapest, HUNGARY, pp. 20-28, 2004.

G. Popescu, C. Codella. "An Architecture for QoS data replication in Networked Virtual Environments" Proceedings of IEEE VR2002, March 2002, Orlando Fl, pp. 41-48. 2002.

T. Chang, G**. Popescu**, C. Codella. "Scalable and Efficient Update Dissemination for Interactive Distributed Applications", Proceedings of ICDCS 2002, Vienna, Austria, pp 143-150, 2002.

G. Popescu, Z. Liu. "On Scheduling 3D model transmission in Networked Virtual Environment" Proceedings of IEEE DSRT 2002, pp. 127-134, 2002.

Popescu GV, G. Burdea and R. Boian, "Shared Virtual Environments for Telerehabilitation," Proceedings of Medicine Meets Virtual Reality 2002, IOS Press, Newport Beach CA, pp. 362-368, January 23-26 2002.

M. Bouzit, **Popescu GV**, G. Burdea, and R. Boian, "The Rutgers Master II-ND Force Feedback Glove", Proceedings of IEEE VR 2002 Haptics Symposium, pp. 145-152, Orlando FL, March 2002.

M. Girone, G. Burdea, M. Bouzit, **Popescu GV** and J. Deutsch, "Orthopedic Rehabilitation using the "Rutgers Ankle" Interface," Proceedings of Virtual Reality Meets Medicine 2000, IOS Press, pp. 89-95, January 2000.

Popescu GV, G. Burdea, M. Bouzit, "Virtual Reality Simulation Modeling for a Haptic Glove," Computer Animation'99 Conference, Geneva, Switzerland, pp. 195-200, May 26-28, 1999.

Popescu GV, G. Burdea, M. Bouzit, M. Girone, and V. Hentz, "PC-Based Telerehabilitation System With Force Feedback," Proceedings of Medicine Meets Virtual Reality (7) Conference, "The Convergence of Physical Informational Technologies: Options for a New Era in Healthcare", IOS Press, Amsterdam, Vol. 62, pp. 262-267, 1999.

Popescu GV.and G. Burdea,"Dextrous Haptic Interface for Jack," ASME WAM, Seventh Annual Symposium on Haptic Interfaces for Virtual Environment, Anaheim CA, November 19-20, DSC Vol. 64, pp. 189-194, 1998.

Burdea, G.,G. Patounakis, **Popescu GV** and R. Weiss, "Virtual Reality Training for the Diagnosis of Prostate Cancer," IEEE International Symposium on Virtual Reality and Applications (VRAIS'98), Atlanta, GA, March, pp. 190-197.Reprinted in IEEE Proceedings of Information Technology Applications in Biomedicine (ITAB'98), Washington DC, pp. 6-13invited talk, May 16-17, 1998.

Andre, M., **Popescu GV**, A. Shaikh, A. Medl, I. Marsic, C. Kulikowski, and J. L. Flanagan,"Integration of Speech and Gesture for Multimodal Human-Computer Interaction," Second International Conference on Cooperative Multimodal Communication, 28-30 January 1998, Tilburg, The Netherlands.

Medl, A., I. Marsic, **Popescu GV**, A. Shaikh, M. Andre, C. Kulikowski and J. Flanagan,"Multimodal Interface for Collaborative Mission Planning," Workshop on Real-time Intelligent User Interfaces for Decision Support, and Information Visualization, 6-9 January 1998, San Francisco, CA.

Burdea, G., S. Deshpande, **Popescu GV**, N. Langrana, D. Gomez, D. DiPaolo, and M. Kanter, "Computerized Hand Diagnostic/Rehabilitation System Using a Force Feedback Glove," Proceedings of Medicine Meets Virtual Reality 5 Conference, pp. 141-150, 1997.

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