

Ivan V Ivanov  
Clinical Associate Professor  
Department of Veterinary Physiology and Pharmacology  
College of Veterinary Medicine and Biomedical Sciences  
Texas A& M University

## EDUCATION

- MS in Mathematics, Sofia University, Bulgaria, 1987
- Ph.D. in Mathematics, University of South Florida, USA, 1999
- Postdoctoral, Mathematics, Syracuse University, USA, 1999-2000
- Postdoctoral, Mathematics, Texas A&M University, USA, 2000-2003
- Postdoctoral, Bioinformatics, Texas A&M University, 2003-2005

## RESEARCH INTERESTS

- Genomic Signal Processing and Mathematical Modeling of Gene Regulatory Networks
- Responses of Biological Systems to Exposure to Nanomaterials: Predictive Models
- Compression and Control of Gene Regulatory Networks

## POSITIONS AND HONORS

- Member of the Intercollegiate Faculty of the Professional Program of Biotechnology, 2012 - current
- Application Researcher, Institute of Applied Mathematics and Computational Science, Texas A&M University, 2010 - current
- Member of the Intercollegiate Faculty of Toxicology, Texas A&M University, 2009 -current
- Clinical Associate Professor, Department of Veterinary Physiology and Pharmacology, Texas A&M University, 2013 - current
- Clinical Assistant Professor, Department of Veterinary Physiology and Pharmacology, Texas A&M University, 2005 - 2013
- NCI Postdoctoral Trainee, Statistics Department and Department of Electrical Engineering, Texas A&M University, 2003 - 2005
- Visiting Assistant Professor, Department of Mathematics, Texas A&M University, 2000-2003
- Teaching Research Associate, Department of Mathematics, Syracuse University, 1999-2000

## RESEARCH SUPPORT

### Current

- Title: *NIEHS Center for Translational Environmental Health Research*, NIH 1P30ES023512-01 (Walker)  
Funding Agency: NIH/NIEHS  
Project Period: 04/01/14 – 08/31/18, \$1,000, 000/year, **Quantitative Biology Core Director.**
- Title: *Gut Microbiota and Colonic Gene Expression: A Lignan Trial in Humans*, U01CA162077 (Lampe/Hullar/Chapkin)  
Funding Agency: NIH/NCI, National Institutes of Health  
Project Period: 09/01/11- 8/31/16, \$171,775/year, **Collaborator.**

#Underlined co-authors indicate past or present students or postdoctoral fellows advised by Dr. Ivanov

- Title: *Chemoprotective Effects of Natural Products on Colonic Adult Stem Cells*, R01 CA 168312 (Chapkin)  
Funding Agency: NIH/NCI, National Institutes of Health  
Project Period: 09/1/11 - 8/31/16, \$310,623/year, **Collaborator**.

### **Past**

- Title: *Predicting Nanomaterial Toxicity. Developing of predictive mathematical and computational models for induced nanomaterial toxicity*  
Funding Agency: Norman Hackerman ARP  
Project Period 7/1/10 - 5/30/13, \$90,000/year, **PI**.
- Title: *Development, optimization, and validation of Next Generation Genome Sequencing (NGS) methods for high throughput Babesia bovis and Babesia bigemina whole genome sequencing*, seed grant program  
Funding Agency: Texas AgriLife Research/TVMDL  
Project period: 9/1/11 – 8/31/2013, \$55,000/year, Co-PI.
- Title: *Whole Genome Functional Analyses in Horses to Dissect Important Diseases*, 2010-65205-20446  
Funding Agency: USDA  
Project Period: 1/15/10 - 1/14/13, \$120, 000/year, **Co-Director**.
- Title: *Simultaneous Gene Expression Analysis of Coding and Non-coding RNAs in Colon Cancer Prevention*, R01 CA129444  
Funding Agency: NIH/NCI, National Institutes of Health  
Project Period: 10/1/07 - 6/31/12, \$225, 000/year, **Collaborator**.
- Title: *Next Generation Sequencing Analysis of the Lyme Disease Agent in the Tick Vector*  
Funding Agency: Texas AgriLife Research Genomics Seed Grant Program  
Project Period: 09/01/2011 – 08/31/2012, \$35,000, **Co-PI**.
- Title: *Analyzing and Annotating TIGM C57BL/6N ES clones*  
Funding Agency: Texas AgriLife  
Project Period: 03/1/2012 – 09/1/2012, \$12,100, **Co-PI**
- Title: *International Research Travel Assistance Grant*  
Funding agency: Texas A&M University  
Project Period: 01/01/2008 – 08/31/2008, \$1,300, **PI**.

### **PUBLICATIONS<sup>#</sup>**

#### **Refereed in Peer-reviewed Journals**

- C. Sayes, P. Smith, and **I. Ivanov**, A framework for grouping nanoparticles based on their measurable characteristics, *International Journal of Nanomedicine*, 8:1-12, 2013.
- N. Ghaffari, M. Yousefi, C. Jhonson, **I. Ivanov**, and E.R. Dougherty, Modeling of Next Generation Sequencing Sample Processing Pipeline for the Purposes of Classification, *BMC Bioinformatics*, **14**:307, 2013.
- P. Kachroo, **I. Ivanov**, A. Seabury, M. Liu, B. Chowdhary, and N. Cohen, Age-Related Changes Following in vitro Stimulation with Rhodococcus equi of Peripheral Blood Leukocytes from Neonatal Foals, *PLoS One*, 2013.
- E. Archibong, L. Wang, **I. Ivanov**, A. Lita, K. Redda, and N. Mateeva, Investigation of the Binding of Dioxin Selective Pentapeptides to a Polyaniline Matrix, *Synthetic Metals*, 162(13-14):1255-1263, 2012.
- J.S. Suchodolski, M.E. Markel, J.F. Garcia-Mazcorro, S. Unterer, R.M. Heilmann, S.E. Dowd, P. Kachroo, **I. Ivanov**, Y. Minamoto, E.M. Dillman, J.M. Steiner, A.K. Cook, L.

<sup>#</sup>Underlined co-authors indicate past or present students or postdoctoral fellows advised by Dr. Ivanov

Toresson, The Fecal Microbiome in Dogs with Acute Diarrhea and Idiopathic Inflammatory Bowel Disease. *PLoS ONE* 7(12): e51907. doi:10.1371/journal.pone.0051907, 2012.

- S. Schwartz, I. Friedberg, **I. Ivanov**, L.A. Davidson, J.S. Goldsby, D.B. Dahl, D. Herman, M. Wang, S.M. Donovan, and R. Chapkin, A Metagenomic Study of Diet-Dependent Interaction Between Gut Microflora and Host in Infants Reveals Differences in Developmental and Immune Responses, *Genome Biology*, 13(4):R32, 2012, PMID: 22546241 .
- J. Qin, X. Liu, B. Laffin, X. Chen, Grace Choy, C.R. Jeter, T. Calhoun-Davis, H. Li, G.S. Palapattu, S. Pang, K. Lin, J. Huang, **I. Ivanov**, W. Li, M.V. Suraneni, and D.G. Tang, The PSA- $\alpha$  Prostate Cancer Cell Population Harbors Self-Renewing Long-Term Tumor-Propagating Cells that Resist Castration, *Cell Stem Cell*, 10(5):556-569, 2012, PMID: 22560078.
- C. Zhao, J. Hua, M.L. Bittner, **I. Ivanov**, and E.R. Dougherty, Identifying mechanistic similarities in drug responses, *Bioinformatics*, 28(14):1902-10, 2012, PMID:22592382.
- C. Zhao, **I. Ivanov**, M.L. Bittner, and E.R. Dougherty, Pathway Regulatory Analysis in the Context of Bayesian Networks Using the Coefficient of Determination, *Journal of Biological Systems*, 19(4):651-682, 2011.
- M. Shah, S. Schwartz, C. Zhao, L. Davidson, B. Zhou, J.R. Lupton, **I. Ivanov**, and R.S. Chapkin, Integrated microRNA and mRNA expression profiling in a rat colon carcinogenesis model: Effect of a chemoprotective diet, *Physiological Genomics*, 43:640-654, 2011, PMID: 21406606.
- A.A. Romoser, P.L. Chen, J.M. Berg, C. Seabury, **I. Ivanov**, M.F. Criscitiello, and C.M. Sayes, Quantum dots trigger modulation of the NF $\kappa$ B pathway in human skin cells, *Molecular Immunology*, 48(12-13):1349-59, 2011, PMID: 21481475 .
- M. Shah, S. Schwartz, C. Zhao, L.A. Davidson, B. Zhou, J.R. Lupton, **I. Ivanov**, and R. Chapkin, Integrated microRNA and mRNA expression profiling in a rat colon carcinogenesis model: Effect of a chemo-protective diet, *Physiol Genomics*, 43(10): 640-654, 2011, PMID: 21406606.
- P. Kachroo, **I. Ivanov**, L.A. Davidson, B.P. Chowdhary, J.R. Lupton, and R.S. Chapkin: Classification of diet-modulated gene signatures at the colon cancer initiation and progression stages, *Digestive Diseases and Sciences*, 56:2595-2604, 2011, PMCID: PMC3139012 .
- Q. Jia, **I. Ivanov**, Z. Z. Zlatev, R.C. Alaniz, B.R. Weeks, E.S. Callaway, J.S. Goldsby, L.A. Davidson, Y-Yi Fan, L. Zhou, J. R. Lupton, D.N. McMurray, and R.S. Chapkin, Fish oil and curcumin combination modulates colonic cytokinetics and gene expression in DSS-treated mice, *British Journal of Nutrition*, 106:519-529, 2011, PMID: 21401974.
- C.M. Sayes and **I. Ivanov**, Comparative Study of Predictive Computational Models for Nanoparticle-Induced Cytotoxicity, *Risk Analysis*, 30(11):1723-1734, 2010, PMID: 20561263.
- X. Qian, N. Ghaffari, **I. Ivanov**, and E.R. Dougherty, State Reduction for Network Intervention in Probabilistic Boolean Networks, *Bioinformatics*, 26(24):3098-3104, 2010.
- **I. Ivanov**, P. Simeonov, N. Ghaffari, X. Qian, and E.R. Dougherty, Selection Policy-Induced Reduction Mappings for Boolean Networks, *IEEE Transactions on Signal Processing*, 58(9): 4871-4882, 2010.
- R.S. Chapkin, C. Zhao, **I. Ivanov**, L. Davidson, J. Goldsby, J.R. Lupton, R.A. Mathai, M. Siegel, D. Rai, M. Russell, S.M. Donovan, and E.R. Dougherty, Noninvasive stool-based detection of infant gastrointestinal development using gene expression profiles from exfoliated epithelial cells, *American Journal of Physiology, Gastrointestinal and Liver Physiology*, 298(5):G582-G589, 2010, PMCID: 20203060.

- L. Davidson, N. Wang, M. Shah, J.R. Lupton, **I. Ivanov**, and R. S. Chapkin, n-3 Polyunsaturated fatty acids modulate carcinogen-directed non-coding microRNA signatures in rat colon, *Carcinogenesis*, 30(12):2077-2084, 2009, PMID: 2792315 .
- L. Davidson, N. Wang, **I. Ivanov**, J. Goldsby, J.R. Lupton, and R.S. Chapkin, Identification of Actively Translated mRNA Transcripts in a Rat Model of Early Stage Colon Carcinogenesis, *Cancer Prevention Research*, 2(11):984-994, 2009, PMID: PMC2783859.
- X. Qian, **I. Ivanov**, and E.R. Dougherty, Intervention in Gene Regulatory Networks via Greedy Control Policies Based on Long-Run Behavior, *BMC Systems Biology*, pp. 3-61, 2009.
- C. Zhao, **I. Ivanov**, E.R. Dougherty, T.J. Hartman, E. Lanza, G. Bobe, N.H. Colburn, J.R. Lupton, L.A. Davidson, and R.S. Chapkin, Noninvasive Detection of Candidate Molecular Biomarkers in Subjects with a History of Insulin Resistance and Colorectal Adenomas, *Cancer Prevention Research*, 2(6):590-597, 2009, PMID: PMC2745241.
- **Ivanov**, Boolean model of genomic regulatory networks: reduction mappings, inference, and external control, *Current Genomics*, 10(6):375-87, 2009
- H. Hosako, G.S. Martin, M. Barrier, A.Y. Chen, **I. Ivanov**, and P.E. Mirkes, Gene and miRNA Expression in p53-Deficient Day 8.5 Mouse Embryos, *Birth Defects Res A Clin Mol Teratol.*, 85(6):546-555, 2009.
- F. Wu, **I. Ivanov**, R. Xu, and S. Safe, Role of Sp Transcription Factors in Hormone-Dependent Modulation of Genes in MCF-7 Breast Cancer Cells: Microarray and RNA interference studies, *Journal of Molecular Endocrinology*, 42(1):19-33. 2009.
- G. Vahedi, **I. Ivanov**, and E.R. Dougherty, Inference of Boolean Networks under Constraint on Bidirectional Gene Relationships, *IET Systems Biology Journal*, 3(3):191-202, 2009.
- **I. Ivanov**, R. Pal, and E.R. Dougherty, Dynamics Preserving Size Reduction Mappings for Probabilistic Boolean Networks, *IEEE Transactions on Signal Processing*, 55(5):2310-2322, 2007.
- **I. Ivanov**, and E.R. Dougherty, Modeling Genetic Regulatory Networks: Continuous or Discrete?, *Journal of Biological Systems*, 14(2):219-229, 2006.
- R. Pal, **I. Ivanov**, A. Data, and E.R. Dougherty, Generating Boolean Networks With a Prescribed Attractor Structure, *Bioinformatics*, 21(21):4021-4025, 2005.
- X. Zhou, X. Wang, R. Pal, **I. Ivanov**, and E.R. Dougherty, A Bayesian Connectivity-based Approach to Constructing Probabilistic Gene Regulatory Networks, *Bioinformatics*, 20(17):2918-2927, 2004.
- **I. Ivanov** and E.R. Dougherty, Reduction Mappings Between Probabilistic Boolean Networks, *Journal of Applied Signal Processing*, 4(1):125-131, 2004.
- **I. Ivanov**, B. Shekhtman, Linear Discrete Operators on the Disk Algebra, *Proc. Amer. Math. Soc.*, 129(7):1987-1993, 2001.
- **I. Ivanov**, R. Kovacheva, and J. Gilewicz, Rational Functions of Best Uniform Approximation and Holomorphic Continuation of Functions, *Approx. Theory Appl. (N.S.)*, 12(1):1-9, 1996.
- J. Gilewicz, **I. Ivanov**, and R. Kovacheva, On the Convergence of Rational Functions of Best Uniform Approximation with Unbounded Number of the Poles, *Math. Balkanica (N.S.)*, 9(2-3):117-129, 1995.
- J. Gilewicz, **I. Ivanov**, and R. Kovacheva, On the Convergence of Rational Functions of Best Uniform Approximation with Unbounded Number of the Poles, *C. R. Acad. Bulgare Sci.*, 45(11):23-25, 1993.
- **I. Ivanov**, Best Rational Approximations and Meromorphic Continuation of a Function, (in Russian), *Serdica*, 16(1):35-41, 1990.

#Underlined co-authors indicate past or present students or postdoctoral fellows advised by Dr. Ivanov

## **Refereed in Peer-reviewed Conference Proceedings**

- M. Yousefi and **I. Ivanov**, Optimal Control of Gene Regulatory Networks with Uncertain Intervention Effects, *IEEE GlobalSIP 2013*, December 2013.
- J. Knight, **I. Ivanov**, and E.R. Dougherty, Multivariate Poisson Model for RNA-Seq Classification, *IEEE GENSIPS13*, November 2013.
- C.M. Sayes and **I. Ivanov**, Grouping of Colloidal Metal Nanoparticles Based on Their Measurable Characteristics: A Proposed Framework", *Proceedings of IEEE Workshop on Nanoinformatics for Biomedicine*, in conjunction with IEEE BIBM '12, Philadelphia, PA, October 2012
- C. Zheng, S. Schwartz, R.S. Chapkin, R.J. Carroll, and **I. Ivanov**, Feature selection for high-dimensional integrated data, *2012 SIAM International Conference on Data Mining (SDM 2012)*, April 2012.
- C. Zhao, **I. Ivanov**, M.L. Bittner, and E.R. Dougherty, Pathway Analysis in the Context of Bayesian Networks – Mathematical Modeling of Master and Canalizing Genes, *IEEE GENSIPS11*, December 2011.
- C. Zhao, **I. Ivanov**, M. Shah, L.A. Davidson, R.S. Chapkin, and E.R. Dougherty, Conditioning-based Model for the Regulatory Activities of microRNAs in Specific Dietary Contexts, *IEEE GENSIPS10*, November 2010.
- N. Ghaffari, **I. Ivanov**, and E.R. Dougherty, A CoD-based Reduction Algorithm for Boolean and Probabilistic Boolean Networks, *IEEE GENSIPS09*, May 2009.
- J. Dougherty, and **I. Ivanov**, Reduction Cost for Boolean Networks with Perturbation, *IEEE GENSIPS08*, June 2008.
- N. Ghaffari, **I. Ivanov**, and E.R. Dougherty, Reduction Mappings and Control Policies for Intervention in Boolean Networks, *IEEE GENSIPS08*, June 2008.
- **I. Ivanov**, G. Vahedi, and E.R. Dougherty, Constrained Reduction Mapping for a Class of Network Models of Genomic Regulation, *IEEE/NLM LSSA 07*, November 2007.
- G. Vahedi, **I. Ivanov**, and E. R. Dougherty, Bidirectional Relationships and Attractor Structure of Boolean Networks, *IEEE GENSIPS07*, May 2007.
- **I. Ivanov**, R. Pal, and E.R. Dougherty, Applying Reduction mappings in Designing Genomic Regulatory Networks, *IEEE/NLM LSSA 06*, July 2006.
- **I. Ivanov**, B. Shekhtman, Linear Discrete Operators and Recovery of Functions, *Approximation theory IX*, Vol. I., Innov. Appl. Math., Vanderbilt Univ. Press, Nashville, TN, 157-164, 1998.

## **Book Chapters**

- **I. Ivanov**, *Complexity of the BN and the PBN Models of GRNs and Mappings for Complexity Reduction*, invited chapter in the book *Computational Methodologies in Gene Regulatory Networks*, Sanjoy Das, Doina Caragea, W. H. Hsu, Stephen M. Welch, Edts., IGI Global, 2009.

## **Abstracts**

- J. Knight, F. Liang, **I. Ivanov**, and E.R. Dougherty, Bayesian Model Averaging Framework for Big Data and Systems Biology, 9<sup>th</sup> International Conference on Large-Scale Scientific Computations, *LSSC'13*, Bulgaria, June 2013.
- E. Kim, L. A. Davidson, M. Shah, J. Knight, R. Zoh, J. Goldsby, E. Callaway, **I. Ivanov**, and R.S. Chapkin, Tumor suppressive effects of DHA plus pectin diet on microRNA expression in colonic stem cell, *Stem Cell Meeting*, TIPS, TAMU, May 2013.

#Underlined co-authors indicate past or present students or postdoctoral fellows advised by Dr. Ivanov

- M. Wang, M. Li, R.S. Chapkin, **I. Ivanov**, S.M. Donovan, Fecal microbiome and metabolites differ between breast and formula-fed human infants, *Experimental Biology*, Boston, MA, April 2013.
- K. Triff, K. Konganti, S. Gaddis, B. Zhou, **I. Ivanov**, and R.S. Chapkin, Genome wide analysis of the rat colon reveals site-specific differences in histone modifications and proto-oncogene expression, *Keystone – Nutrition, Epigenetics and Human Disease (B5) Meeting*, Santa Fe, NM, February 2013.
- C. Zheng, S. Schwartz, **I. Ivanov**, R.J. Carroll, and R.S. Chapkin, Integrated Data Analysis of Host-Microbiome Data, *KAUST first International Research Poster Competition for Undergraduates*, January 2012.
- I. Friedberg, S. Schwartz, **I. Ivanov**, L.A. Davidson, J.S. Goldsby, D.B. Dahl, D. Herman, M. Wang, S.M. Donovan and R.S. Chapkin. A metagenomic study of diet-dependent interaction between gut microflora and host in infants reveals differences in developmental and immune responses, *International Society for Computational Biology (ISMB2012)*, July 2012.
- S.M. Donovan, L.A. Davidson, C. Zhao, **I. Ivanov**, J.S. Goldsby, J.R. Lupton, R. Mathai, M. Monaco, D. Rai, W.M. Russell, E.R. Dougherty, and R.S. Chapkin, *Noninvasive Assessment of the Intestinal Transcriptome of Breast-and Formula-fed Infants*, 15<sup>th</sup> *ISRHML Conference Breastfeeding and the Nutrition Transition*, Lima, Peru, 2010.
- **I. Ivanov**, P. Simeonov, N. Ghaffari, X. Qian, and E.R. Dougherty, *Compression and Control of Boolean Models of Genomic Regulatory Networks*, *AB C-Meeting: 5<sup>th</sup> International Conference of the Brazilian Association for Bioinformatics and Computational Biology*, Angra dos Reis, Brazil, 2009.
- P. A. Smith, **I. Ivanov**, and C. M. Sayes, *Building Mathematical Models for Nanoparticle-Induced Reactive Oxygen Species Production: A study comparing silver, zinc, copper, nickel, and iron nanoparticles*, *SOT Annual Meeting*, Washington DC, March 2011.
- A. Jergens, **I. Ivanov**, V. Wilke, D.S. Nettleton, and J. Suchodolski, *EMT1E and S100 genes provide robust discriminative molecular signatures of intestinal inflammation in canine inflammatory bowel disease*, *Digestive Disease Week*, Chicago, IL, May 2011.
- M. Shah, S. L. Schwartz, C. Zhao, L.A. Davidson, B. Zhou, J.R. Lupton, **I. Ivanov**, and R.S. Chapkin, *Integrated microRNA and mRNA expression profiling in a rat colon carcinogenesis model: Effect of a chemoprotective diet*, *AACR Annual Meeting*, Orlando, FL, April 2011.
- S.L. Schwartz, I. Friedberg, **I. Ivanov**, L.A. Davidson, J.S. Goldsby, D.B. Dahl, E.R. Dougherty, D. Herman, M. Wang, S.M. Donovan, and R.S. Chapkin, *Breast Milk and Infant Formula: Prediction, Correlation, and Classification within the Joint Host Gut Transcriptome and Microbiota*, *Microbiota and mucosal immunology: the interface in health and disease*, San Francisco, April 2011.

## INVITED TALKS

- *Mathematical Modeling of Genomic Regulation* (3 lectures), Department of Mathematics and Informatics, Sofia University, Sofia, Bulgaria, 2007.
- *Issues in Modeling of Genomic Regulation*, International Conference 60 Years Institute of Mathematics and Informatics, Bulgarian Academy of Sciences, Sofia, 2007.
- *Research Issues in Genomic Signal Processing*, Department of Mathematics, University of Houston, 2008.

#Underlined co-authors indicate past or present students or postdoctoral fellows advised by Dr. Ivanov

- *Mathematical Models of Genomic Regulation: Complexity and Reduction*, ABCS Bioinformatics Workshop, Texas A&M University, 2008.
- *Reduction Mappings and Control Policies for Intervention in Boolean Networks*, 15th American Conference in Applied Mathematics, 2009.
- *Reduction Mappings and Control Policy for Intervention in Boolean Networks*, ABCS Bioinformatics Workshop, Texas A&M University, 2009.
- *Compression and Control of Boolean Models of Genomic Regulation*, University of Houston, 2010.
- *Pathway Regulatory Analysis and Modeling of Drug Intervention Effects in the Context of Bayesian Networks*, Florida A&M University, 2011.

## **COURSES TAUGHT**

- *Advanced Computational Biology and Bioinformatics*, Sofia University "Kliment Ohridski", Sofia, Bulgaria, 2008, 2009, 2010, and 2011.
- *Special Topics in Analysis of Genomic Signals*, Texas A&M University, 2008 and 2009.
- *Analysis of Genomic Signals*, Texas A&M University, 2011, 2012, 2013.
- *Advanced Engineering Mathematics, Engineering Calculus, Differential Equations*, Texas A&M University, 2000, 2001, 2002, and 2003.
- *Calculus, Elementary Statistics*, Syracuse University, 1999 and 2000.
- *Differential Equations, Calculus, Geometry, Elementary Calculus, Engineering Calculus, College Algebra, Finite Mathematics*, University of South Florida, 1994, 1995, 1996, 1997, 1998, and 1999.

## **SERVICE**

- A member of the *CVM IT Services Advisory Committee*
- A member of the organizing committee of the *ABCS Bioinformatics Workshop*, Texas A&M University, 2009.
- A member of the organizing committee of the annual Mid-south .Computational Biology and Bioinformatics Society meeting (MSBIOS'11).
- Chair of the TX chapter (TEXBios) of MSBIOS.
- A member of the program committees of the *IEEE Genomic Signal Processing meetings* GENSIPS'09, GENSIPS'10, GENSIPS 11, GENSIPS12 and GENSIPS'13.
- A member of the program committees of the Conference on *BioMedical Engineering and Informatics* BMEI'09 and BMEI'10.
- Organized and ran the *Summer Research Experience for Undergraduates* at the Department of Veterinary Physiology and Pharmacology, Texas A&M University, 2009 and 2010.
- A reviewer for several national and international journals and meetings.

## **POST-DOCTORAL RESEARCHERS ADVISED**

- Roger Zoh, Training Program in Bioinformatics, Texas A&M University (2012 – present)
- Scott Schwartz, Training Program in Bioinformatics, Texas A&M University (2010 – 2011)

## GRADUATE STUDENT COMMITTEE RESPONSIBILITIES

- Student: David Morris  
Degree Sought: PhD  
Department: VTPB, Texas A&M University  
Responsibility: committee Member
- Student: Esmaeil Atashpazgargari  
Degree Sought: PhD  
Department: Electrical and Computer Engineering, Texas A&M University  
Responsibility: Committee Member.
- Student: Jizhou Yang  
Degree Sought: MBT  
Department: BIOT, Texas A&M University  
Responsibility: committee Member
- Student: Charlotte Rambo  
Degree Sought: PhD  
Department: Toxicology, Texas A&M University  
Responsibility: committee Member.
- Student: Yassen Bantchev  
Degree Sought: MS  
Department: Mathematics and Informatics, Sofia University  
Responsibility: Co-Chair.
- Student: Mohammad Shahrokh Esfahani  
Degree Sought: PhD  
Department: Electrical and Computer Engineering, Texas A&M University  
Responsibility: Committee Member.
- Student: Navadon Khunlertgit  
Degree Sought: PhD  
Department: Electrical and Computer Engineering, Texas A&M University  
Responsibility: Committee Member
- Student: Fang-Han Hsu  
Graduated: 2013, PhD in Electrical and Computer Engineering, Texas A&M University  
Responsibility: Committee Member.
- Student: Jason Knight  
Degree Sought: PhD  
Department: Electrical and Computer Engineering, Texas A&M University  
Responsibility: Committee Member.
- Student: Mohammadmahdi Yousefi  
Graduated: 2013, PhD in Electrical and Computer Engineering, Texas A&M University  
Responsibility: Committee Member.
- Student: Ting Chen  
Graduated: 2013, PhD in Electrical and Computer Engineering, Texas A&M University  
Responsibility: Committee Member.
- Student: Chen Zhao  
Graduated: 2012, PhD in Electrical and Computer Engineering, Texas A&M University  
Responsibility: Co-Chair.
- Student: Noushin Ghaffari  
Graduated: 2012, PhD in Electrical and Computer Engineering, Texas A&M University



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- Student: Ritwik Kumar Layek  
Graduated: 2012, PhD in Electrical and Computer Engineering, Texas A&M University  
Responsibility: Committee member.
- Student: Priyanka Kachroo  
Graduated: 2012, PhD, BIMS, Texas A&M University  
Responsibility: Committee member.
- Student: Youting Sun  
Graduated: 2012, PhD in Electrical and Computer Engineering, Texas A&M University  
Responsibility: Committee member.
- Student: Jennifer Goldsby  
Graduated: 2012, MS in Statistics, Texas A&M University  
Responsibility: Committee Member.
- Student: Ling Wang  
Graduated: 2012, MS in Chemistry, Florida A&M University  
Responsibility: Committee Member.
- Student: Charles Zheng  
Graduated: 2012, BS in Statistics, Texas A&M University.  
Responsibility: Undergraduate Mentor.
- Student: Natacha Maria Salazar  
Graduated: 2010, MS  
Department: VTMS, Texas A&M University  
Responsibility: Committee member.
- Student: Zlatomir Zlatev  
Graduated: 2009, MS in Biomedical Informatics  
Department: Mathematics and Informatics, Sofia University  
Responsibility: Co-Chair.
- Student: Adrash Joshi  
Graduated: 2010, PhD in Statistics, Texas A&M University  
Responsibility: Committee member.
- Student: Seokho Lee  
Graduated: 2008, PhD in Statistics, Texas A&M University  
Responsibility, Committee member
- Student: Sudha Yellapantula  
Graduated: 2007, MS in Electrical and Computer Engineering, Texas A&M University  
Responsibility: Committee member