

Mikhail G. Dozmorov, Ph.D.

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EDUCATION

INSTITUTION/LOCATION	YEARS	DEGREES/DATE	FIELDS OF STUDY
Moscow Institute of Electronic Technology (Technical University), Moscow, Russia	1990-1995	BS, July 1995	Physics and Chemistry
Moscow Institute of Electronic Technology (Technical University), Moscow, Russia	1995-1997	MS, July 1997	Computer sciences and microelectronics
Göteborg University, Göteborg, Sweden	1999-2005	PhD, Mar 2005	Medical Biophysics
<i>Thesis:</i> Activity-dependent changes of synaptic transmission in a long-term perspective, and processes involved <i>Advisor:</i> Holger Wigström			

FACULTY APPOINTMENTS

YEARS	RANK	INSTITUTION	DEPARTMENT
2014-Present	Assistant professor	Virginia Commonwealth University	Biostatistics
2012-2014	Research assistant member	Oklahoma Medical Research Foundation	Arthritis and Clinical Immunology

TEACHING RESPONSIBILITIES

ID	NAME	DATES	ROLE
BIOS691	Reproducible research tools	Summer 2016-18	Instructor
This 1-credit hour course introduces the fundamental concepts in computational reproducible research. Through lectures and hands-on exercises students learn best practices of statistical data analysis and programming. Course website: https://mdozmorov.github.io/BIOS691.2018/			
BIOS567/BIOS668	Statistical Methods for High-throughput Genomic Data I, II	Fall/Spring 2016-18	Instructor
This two-parts 3-credit hour course explains basic concepts of statistical genomics, from microarray- and sequencing technologies through statistical methods for high-dimensional data analysis. Topics include R/Bioconductor programming, QC, normalization, differential expression analysis, dimensionality reduction, clustering, genomic alignment, variant calling, microRNA-seq, bulk and single-cell RNA-seq, ChIP-seq, methylation, microbial genomics, chromatin conformation capture data analysis. Course website: https://mdozmorov.github.io/BIOS668.2018/			
PSYCH691	Molecular Biology Genetics and Epigenetics in Psychiatry	Spring 2017	Guest lecturer
RNA-seq technology, data analysis and interpretation			
HGEN502	Advanced Human Genetics	Fall/Spring 2017-19	Guest lecturer
RNA-seq technology, data analysis and interpretation			
Seminar series	Bioinformatics 101	Fall 2015-18	Instructor
This series of 10 lectures include introductory topics on bioinformatics. Topics taught include statistics of enrichment analysis, RNA- and ChIP-seq, methylation technology and analysis, reproducible research.			
Workshop	Microarray data analysis using R/Bioconductor	Winter 2013	Instructor
This 4-day workshop provided an in-depth hands-on learning of practical aspects of microarray data analysis and interpretation using R/Bioconductor. Place: Trivandrum, India. Course material: https://github.com/mdozmorov/ci-workshop			
Other	Advanced Topics in Pharmaceutical Sciences	Fall semester 2010	Guest lecturer
Molecular and Cellular Biology lectures			

OTHER EXPERIENCE

YEARS	POSITION	INSTITUTION	DEPARTMENT
2014	Industry consultant	SensiQ Technologies Inc.	
2010-2012	Senior research associate	Oklahoma Medical Research Foundation	Arthritis and Clinical Immunology
2005-2010	Postdoctoral fellow	Oklahoma University Health Science Center	Urology Department (Cancer research)
1997-1999	Instructor	Zelenograd Community College, Russia	Bioinformatics and computer sciences

AWARDS AND HONORS:

2019-2023	Blick scholar, supported by the George and Lavinia Blick Research Fund, VCU
2014	Young investigator award, National IDeA Symposium of Biomedical Research Excellence
2014	Outstanding research assistant member, William G. Thurman award, OMRF
2013	Best paper, 1 st place (as first and corresponding author), MCBIOS 2013 conference
2012	Best oral presentation, 1 st place award, MCBIOS 2012 conference
2012	Federation of American Societies For Experimental Biology (FASEB) MARC Travel Award
2011	Best oral presentation, 1 st place travel award, OMRF
2009	Ingenuity Systems Certified Analyst

PROFESSIONAL SERVICE

MEMBERSHIP IN PROFESSIONAL/SCIENTIFIC SOCIETIES

2019-present	ASA, The American Statistical Association
2010-present	ISCB, The International Society for Computational Biology
2010-2017	ASHG, American Society of Human Genetics
2007-2017	AACR, American Association for Cancer Research
2006-present	AAAS, American Association for the Advancement of Sciences
2005-2018	MCBIOS, The Oklahoma Bioinformatics Society
2005-2014	OCN, Oklahoma Center for Neuroscience
2002-2005	SFN, Society For Neuroscience
1999-2005	SLS, Svenska Läkaresällskapet

EDITORIAL BOARD

2015	Editor, <i>Bioinformatics and Biology Insights</i> supplement
2011-2017	Editor, MCBIOS bioinformatics conference proceedings, published in <i>BMC Bioinformatics</i>

JOURNAL REVIEWER

Complete list of reviewing and editorial work: <https://publons.com/a/1496860/>

2018-present	Frontiers in Immunology ad hoc reviewer
2018-present	F1000 post-publication ad hoc reviewer
2017-present	Nature Methods ad hoc reviewer
2016-present	Nucleic Acid Research ad hoc reviewer
2016-present	Bioinformatics ad hoc reviewer
2016-present	BMC Bioinformatics ad hoc reviewer
2015-present	Briefings in Bioinformatics ad hoc reviewer
2014	Computational and Structural Biotechnology Journal ad hoc reviewer
2013-present	Statistical Advisor, <i>PLoS ONE</i> , http://www.plosone.org/static/statistical_advisors

CONFERENCES SERVICE

2016-2017	International Society for Computational Biology (ISCB) conference: Abstract/Poster judge
2014-2017	MidSouth Computational Biology and Bioinformatics Society (MCBIOS) conference: Board member, secretary, session chair, poster judge
2010-present	Organizer and host of keynote/seminar speakers

MAJOR COMMITTEE ASSIGNMENTS/SERVICE

2018-2019	Genomics Task Force, strategy planning to establish genomics/bioinformatics cores at VCU
2018	Review Panel Member for the Massey Cancer Center pilot proposal study section
2018	Review Panel Member for the NIH BST-80 AREA (R15) Bioengineering study section
2016	NIEHS Special Emphasis Panel/Scientific Review Group "NIEHS Bioinformatics support"

CURRENT TRAINEES

2019-present	Katarzyna Tyc, Ph.D. (postdoctoral fellow)
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GRADUATE STUDENTS COMMITTEE MEMBERSHIP

2019-present	Han Zhang, Ph.D. candidate (Computer Sciences, VCU)
2019-present	Patrick Coit, Ph.D. candidate (Autoimmunity and epigenetics, University of Pittsburgh)
2019-present	Huseyin Gedik, Ph.D. candidate (VCU Integrated Life Sciences Program)
2019-present	Mohammad Ahangari, Ph.D. candidate (VCU Integrated Life Sciences Program)
2019-present	Alexander Azzo, MD/Ph.D. candidate (CCTR/CMM program, VCU)
2018-present	Borwyn Ann Wang, Ph.D. candidate (CTSA, VCU)
2018-present	Saranya Chidambaranathan-Reghupaty, Ph.D. candidate (Clinical and Translational Research)
2017-present	Mohammad Al-Zubi, Ph.D. candidate (VCU Integrated Life Sciences Program)
2017-present	Tia Turner, MD/Ph.D. candidate (Pathology Department, VCU)
2018-2019	John Drake, MS in Bioinformatics (VCU Integrated Life Sciences Program)
2018-2019	Mohamad Kronfol, Ph.D. (Dept. of Pharmacotherapy and Outcomes Science, VCU)
2017-2018	James Thomas DeLigio, Ph.D. (Dept. of Biochemistry & Molecular Biology, VCU)
2015-2018	Chelsea Sawyers, Ph.D. (Virginia Institute for Psychiatric and Behavioral Genetics)
2015-2017	Robin F. Chan, Ph.D. candidate (Center for Biomarker Research and Precision Medicine, VCU)

PAST GRADUATE STUDENTS

2017-2019	Kellen G. Cresswell, Ph.D. (Department of Biostatistics, genomics concentration)
2016-2019	John C. Stansfield, Ph.D. (Pfizer, Cambridge, MA)
2016	Edmund R. Glass, Ph.D. (Scientist at PharPoint Research Inc., Durham, NC)

EXAM CHAIR SERVICE

2018	Brian A. Ruiz, MS (Pathology and Biophysics Department, VCU)
2017	Danielle K. Seibert, MS (Department of Human and Molecular Genetics, VCU)
2016	Ahmed H. Alquthami, Ph.D. (Department of Health Care Policy and Research, VCU)

ORAL PRESENTATIONS

2019	"SpectralTAD: defining hierarchy of Topologically Associated Domains using graph theoretical clustering", JSM (Joint Statistical Meeting), Denver, CO
2019	"Genomics technologies", Pathology Science Club, Department of Pathology, VCU
2019	"A method for comparing molecular coherence of gene networks," Genetics and Human Agency Annual Meeting, Wintergreen Resort, VA
2018	"Bioinformatics approaches in epigenetic studies," ACR (American College of Rheumatology) conference, Chicago, IL
2017	"A method for comparing 3D structures of normal and cancer genomes," Commonwealth of Virginia Cancer Research Conference, Charlottesville, VA

- 2017 "Network Biology and disease coherence," Genetics and Human Agency Annual Meeting, University of Virginia, Charlottesville, VA
- 2017 "3D genomics and epigenomics to better understand complex diseases," University of Virginia, Charlottesville, Center for Public Health Genomics, VA
- 2017 "Effective use of genome annotation data to better understand complex diseases," Georgetown University, ICBI, Washington, DC.
- 2016 "Pathway and Functional Enrichment Analysis Methods," Center for Clinical and Translational Research, VCU, Richmond, VA
- 2016 "Reproducible research in data science," Computer Science Department, VCU, Richmond, VA
- 2016 "Reproducible Research in cancer," Massey Cancer Center, Richmond, VA
- 2016 "GenomeRunner web server: epigenomic similarity and differences define the functional impact of SNP sets," MCBIOS, Memphis, TN. *Featured speaker
- 2015 "Pathway and Functional Enrichment Analysis Methods," Center for Clinical and Translational Research, VCU, Richmond, VA
- 2015 "Epigenomic classification of complex diseases," MCBIOS, Little Rock, AZ. *Featured speaker
- 2014 "Unlocking the epigenomics of aging," Department of Pathology, VCU, Richmond, VA
- 2014 "Connecting genomics, epigenomics, and phenotype," VIPBG, Richmond, VA
- 2014 "Connecting Genomics and Epigenomics: the rare variants case," MCBIOS, Stillwater, OK
- 2014 Software demo "Systematic classification of common disease-associated SNPs by their epigenomic relationship," AGBT, Marco Island, FL
- 2013 "Systematic classification of disease-associated genomic elements by their epigenomic associations," MCBIOS, Columbia, MA
- 2012 "GenomeRunner: Automating genome exploration and our data within it," MCBIOS, Oxford, MS
- 2012 "Galaxy tools for next-generation sequencing analysis applied to the analysis of ChIP-seq data." Research Computing & Bioinformatics Seminar. OMRF. Oklahoma City, OK.
- 2011 "GenomeRunner: A Global Positioning System within Genome". BioConferenceLive online two-day conference. <http://www.bioconferencelive.org>
- 2011 "GenomeRunner: A Global Positioning System within Genome". Research Computing & Bioinformatics Seminar. OMRF. Oklahoma City, OK.
- 2011 "MECP2 role in SLE: variants than make the difference". Oklahoma Medical Research Foundation, Oklahoma City, OK.
- 2011 "GenomeRunner: Automating genomic exploration". Oklahoma Medical Research Foundation retreat, Norman, OK
- 2008 "Systems biology approach to understanding the extracellular matrix modulation of phenotype". MCBIOS 2008, Oklahoma City, OK.
- 2005 "Integrating Bioinformatics Tools with Deep Biological Knowledge". OKBIOS 2005 meeting, Oklahoma City, OK.

SOFTWARE

TADcompare	An R package for differential analysis and characterization of Topologically Associated Domains	https://github.com/dozmorovlab/TADCompare
SpectralTAD	An R package for calling Topologically Associated Domains (TADs) using spectral clustering bioRxiv: 10.1101/549170	https://github.com/dozmorovlab/SpectralTAD https://bioconductor.org/packages/devel/bioc/html/SpectralTAD.html
multiHiCcompare	An R package for the joint normalization of multiple Hi-C datasets and comparative analysis of complex Hi-C experiments. PMID: 31111111	https://github.com/dozmorovlab/multiHiCcompare https://bioconductor.org/packages/devel/bioc/html/multiHiCcompare.html

HiCcompare	30668639 An R package for joint normalization and differential analysis of chromatin interactions obtained from Hi-C sequencing. bioRxiv: 10.1101/147850v2 , PMID: 30064362	https://github.com/dozmorovlab/HiCcompare https://bioconductor.org/packages/devel/bioc/html/HiCcompare.html
HMP2data	An R package for data access from the integrative Human Microbiome data portal	https://github.com/dozmorovlab/HMP2Data https://bioconductor.org/packages/devel/data/experiment/html/HMP2Data.html
Ircde	An R package for cell type-specific deconvolution and differential gene expression analysis. PMID: 27766949	https://github.com/mdozmorov/Ircde.dev
GenomeRunner	A web server and a standalone tool for enrichment analysis of genomic regions in epigenomic annotations. PMID: 27153607 and PMID: 22155868.	http://integrativegenomics.org/ https://sourceforge.net/p/genomerunner

PUBLICATIONS

<https://www.ncbi.nlm.nih.gov/myncbi/mikhail.dozmorov.1/bibliography/public/>

IN PREPARATION/SUBMITTED

- Jinyang Cai, Patricia Greninger, Richard I.J. Kurupi, [Mikhail Dozmorov](#), John Glod, Sosipatros Boikos, Novartis, Anthony C. Faber and Cyril H. Benes. **High-risk neuroblastoma rely on MEK signaling that is targetable through NF1-SHP2.** (submitted/under review)
- Kellen G. Cresswell, [Mikhail G. Dozmorov](#)*. **TADCompare: an R package for differential analysis and characterization of Topologically Associated Domains.** (submitted/under review)
- Kellen G. Cresswell, John C. Stansfield, [Mikhail G. Dozmorov](#)*. **SpectralTAD: an R package for defining a hierarchy of Topologically Associated Domains using spectral clustering.** (submitted/under review)
- Nicholas M. Clark, Leandro M. Martínez, Amy L. Olex, Comfort Effi, [Mikhail G. Dozmorov](#), Paula D. Bos. **Regulatory T cells support breast cancer progression by opposing IFN- γ -dependent functional reprogramming of macrophages.** *Science Translational Medicine*. (submitted)
- Sheeba Jacob, Tia H. Turner, Ann Yu, Colin Coon, Mohammad A. Alzubi, Ynes Bouck, [Mikhail G. Dozmorov](#), Sosipatros A. Boikos, Jennifer Koblinksi, J. Chuck Harrell, Cyril H. Benes, Carlotta Costa, and Anthony C. Faber. **Genomic screening reveals UBA1 as a potent and druggable target in diverse models of triple negative breast cancer** (submitted/under review)
- Carl Craver, Mark Reimers, [Mikhail Dozmorov](#), Silviu Bacanu, and Kenneth Kendler. **Gloomy Prospects and Roller Coasters: Finding Coherence in GWAS?** (submitted/under review)

PREPRINTS

- Kellen G. Cresswell, John C. Stansfield, [Mikhail G. Dozmorov](#). **SpectralTAD: an R package for defining a hierarchy of Topologically Associated Domains using spectral clustering.** *bioRxiv*, doi: <https://doi.org/10.1101/549170>
- Gowon O. McMichael, John Drake, Eric Sean Vornholt, Kellen Cresswell, Vernell Williamson, Chris Chatzinakos, Mohammed Mamdani, Siddharth Hariharan, Kenneth S. Kendler, Michael F. Miles,

Gursharan Kalsi, Brien P. Riley, Mikhail Dozmorov, Silviu-Alin Bacanu, Vladimir I. Vladimirov. **Assessing the role of long-noncoding RNA in nucleus accumbens in subjects with alcohol dependence.** *bioRxiv*, doi: <https://doi.org/10.1101/583203>

CORRESPONDING AUTHOR PUBLICATIONS

1. Stansfield JC, Tran D, Nguyen T, Dozmorov MG*. **R Tutorial: Detection of Differentially Interacting Chromatin Regions From Multiple Hi-C Datasets.** *Curr Protoc Bioinformatics*. 2019 May 24. PMID: 31125519.
2. Stansfield JC, Cresswell KG, Dozmorov MG*. **multiHiCcompare: joint normalization and comparative analysis of complex Hi-C experiments.** *Bioinformatics*. 2019 Jan 22. PMID: 30668639.
3. Dozmorov MG*. **GitHub Statistics as a Measure of the Impact of Open-Source Bioinformatics Software.** *Front Bioeng Biotechnol*. 2018 Dec 12. PMID: 30619845
4. Dozmorov MG*. **Reforming disease classification system-are we there yet?** *Ann Transl Med*. 2018 Nov 6. PMID: 30613605
5. Stansfield JC, Cresswell KG, Vladimirov VI, Dozmorov MG*. **HiCcompare: an R-package for joint normalization and comparison of HI-C datasets.** *BMC Bioinformatics*. 2018 Jul 31. PMID: 30064362.
6. Dozmorov MG*. **Disease classification: from phenotypic similarity to integrative genomics and beyond.** *Brief Bioinform*. 2018 Jun 22. PMID: 29939197
7. Dozmorov MG*. **Epigenomic annotation-based interpretation of genomic data: from enrichment analysis to machine learning.** *Bioinformatics*. 2017 Oct 15. PMID: 29028263
8. Glass ER, Dozmorov MG*. **Improving sensitivity of linear regression-based cell type-specific differential expression deconvolution with per-gene vs. global significance threshold.** *BMC Bioinformatics* 2016 Oct 6. PMID: 27766949.
9. Dozmorov MG*, Cara LR, Giles CB, Wren JD. **GenomeRunner web server: Regulatory similarity and differences define the functional impact of SNP sets.** *Bioinformatics* 2016 Apr 1. PMID: 27153607.
10. Dozmorov MG*, Dominguez N, Bean K, Macwana S, Roberts V, Glass E, James JA, Guthridge JM. **B cell and monocyte contribution to systemic lupus erythematosus identified by cell-type-specific differential expression analysis in RNA-seq data.** *Bioinformatics and Biology Insights*. 2015 Oct 8. PMID: 26512198.
11. Dozmorov MG*, Adrianto I, Giles CB, Glass E, Glenn SB, Montgomery C, Sivils KL, Olson LE, Iwayama T, Freeman WM, Lessard CJ, Wren JD*. **Detrimental effects of duplicate reads and low complexity regions on RNA- and ChIP-seq data.** *BMC Bioinformatics*. 2015 Sep 25. PMID: 26423047.
12. Dozmorov MG*. **Polycomb Repressive Complex 2 epigenomic signature defines age-associated hypermethylation and gene expression changes.** *Epigenetics*. 2015 Apr 16. PMID: 25880792.
13. Dozmorov MG*, Cara LR, Giles CB, Wren JD. **GenomeRunner: automating genome exploration.** *Bioinformatics*. 2012 Feb 1. PMID: 22155868.

14. Dozmorov MG*, Wren JD, Alarcón-Riquelme ME. **Epigenomic elements enriched in the promoters of autoimmunity susceptibility genes.** *Epigenetics*. 2013 Nov 8. PMID: 24213554. *Corresponding author.
15. Dozmorov MG*, Giles CB, Koelsch KA, Wren JD. **Systematic classification of non-coding RNAs by epigenomic similarity.** *BMC Bioinformatics*. 2013, Oct 9. PMID: 24267974. *Corresponding author, Best paper of the MCBIOS X conference

COLLABORATIVE PUBLICATIONS

16. Sayyad MR, Puchalapalli M, Vergara NG, Wangenstein SM, Moore M, Mu L, Edwards C, Anderson A, Kall S, Sullivan M, Dozmorov M, Singh J, Idowu MO, Koblinski JE. **Syndecan-1 facilitates breast cancer metastasis to the brain.** *Breast Cancer Res Treat*. 2019 Jul 20. PMID: 31327090.
17. Buchta Rosean C, Bostic RR, Ferey JCM, Feng TY, Azar FN, Tung KS, Dozmorov MG, Smirnova E, Bos PD, Rutkowski MR. **Pre-existing commensal dysbiosis is a host-intrinsic regulator of tissue inflammation and tumor cell dissemination in hormone receptor-positive breast cancer.** *Cancer Res*. 2019 May 7, PMID: 31064848.
18. Yu X, Azzo A, Bilinovich SM, Li X, Dozmorov M, Kurita R, Nakamura Y, Williams DC Jr, Ginder GD. **Disruption of the MBD2-NuRD complex but not MBD3-NuRD induces high level HbF expression in human erythroid cells.** *Haematologica*. 2019 Apr 19, PMID: 31004025
19. Alzubi MA, Turner TH, Olex AL, Sohal SS, Tobin NP, Recio SG, Bergh J, Hatschek T, Parker JS, Sartorius CA, Perou CM, Dozmorov MG, Harrell JC. **Separation of breast cancer and organ microenvironment transcriptomes in metastases.** *Breast Cancer Res*. 2019 Mar 6, PMID: 30841919
20. R Menon V, Ananthapadmanabhan V, Swanson S, Saini S, Sesay F, Yakovlev V, Florens L, DeCaprio JA, P Washburn M, Dozmorov M, Litovchick L. **DYRK1A regulates the recruitment of 53BP1 to the sites of DNA damage in part through interaction with RNF169.** *Cell Cycle*. 2019 Feb 17, PMID: 30773093
21. Reimers MA, Craver C, Dozmorov M, Bacanu SA, Kendler KS. **The Coherence Problem: Finding Meaning in GWAS Complexity.** *Behav Genet*. 2018 Nov 16, PMID: 30446889.
22. Towner RA, Smith N, Saunders D, Brown CA, Cai X, Ziegler J, Mallory S, Dozmorov MG, Coutinho De Souza P, Wiley G, Kim K, Kang S, Kong DS, Kim YT, Fung KM, Wren JD, Battiste J. **OKN-007 Increases temozolomide (TMZ) Sensitivity and Suppresses TMZ-Resistant Glioblastoma (GBM) Tumor Growth.** *Transl Oncol*. 2018 Nov 20, PMID: 30468988.
23. Iness AN, Felthousen J, Ananthapadmanabhan V, Sesay F, Saini S, Guiley KZ, Rubin SM, Dozmorov M, Litovchick L. **The cell cycle regulatory DREAM complex is disrupted by high expression of oncogenic B-Myb.** *Oncogene*. 2018 Sep 11, PMID: 30206359.
24. Mazzini GS, Khoraki J, Dozmorov M, Browning MG, Wijesinghe D, Wolfe L, Gurski RR, Campos GM. **Concomitant PPAR α and FXR Activation as a Putative Mechanism of NASH Improvement after Gastric Bypass Surgery: a GEO Datasets Analysis.** *J Gastrointest Surg*. 2018 Sep 11. PMID: 30206765.
25. Robertson CL, Mendoza RG, Jariwala N, Dozmorov M, Mukhopadhyay ND, Subler MA, Windle JJ, Lai Z, Fisher PB, Ghosh S, Sarkar D. **Astrocyte Elevated Gene-1 Regulates Macrophage Activation in Hepatocellular Carcinogenesis.** *Cancer Res*. 2018 Sep 4, PMID: 30181179.

26. Wu W, Wang X, Zhang W, Tian L, Booth JL, Duggan ES, More S, Liu L, Dozmorov M, Metcalf JP. **RIG-I Signaling via MAVS Is Dispensable for Survival in Lethal Influenza Infection In Vivo.** *Mediators Inflamm.* 2018 Nov 8, PMID: 30532653.
27. de la Fuente Revenga M, Ibi D, Saunders JM, Cuddy T, Ijaz MK, Toneatti R, Kurita M, Holloway T, Shen L, Seto J, Dozmorov MG, González-Maeso J. **HDAC2-dependent Antipsychotic-like Effects of Chronic Treatment with the HDAC Inhibitor SAHA in Mice.** *Neuroscience.* 2018 Jul 17. PMID: 30025863
28. Martínez-Bueno M, Oparina N, Dozmorov MG, Marion MC, Comeau ME, Gilkeson G, Kamen D, Weisman M, Salmon J, McCune JW, Harley JB, Kimberly R, James JA, Merrill J, Montgomery C, Langefeld CD, Alarcón-Riquelme ME. **Trans-Ethnic Mapping of BANK1 Identifies Two Independent SLE-Risk Linkage Groups Enriched for Co-Transcriptional Splicing Marks.** *Int J Mol Sci.* 2018 Aug 8. PubMed PMID: 30096841.
29. Booth JL, Duggan ES, Patel VI, Wu W, Burian DM, Hutchings DC, White VL, Coggeshall KM, Dozmorov MG, Metcalf JP. **Gene expression profiling of primary human type I alveolar epithelial cells exposed to Bacillus anthracis spores reveals induction of neutrophil and monocyte chemokines.** *Microb Pathog.* 2018 Apr 25. PMID: 29704667
30. Turner TH, Alzubi MA, Sohal SS, Olex AL, Dozmorov MG, Harrell JC. Characterizing the efficacy of cancer therapeutics in patient-derived xenograft models of metastatic breast cancer. *Breast Cancer Res Treat.* 2018 Mar 12. PMID: 29532339
31. Lochmann TL, Powell KM, Ham J, Floros KV, Heisey DAR, Kurupi RIJ, Calbert ML, Ghotra MS, Greninger P, Dozmorov M, Gowda M, Souers AJ, Reynolds CP, Benes CH, Faber AC. **Targeted inhibition of histone H3K27 demethylation is effective in high-risk neuroblastoma.** *Sci Transl Med.* 2018 May 16. PMID: 29769286
32. Dozmorov MG, Bilbo SD, Kollins SH, Zucker N, Do EK, Schechter JC, Zhang JJ, Murphy SK, Hoyo C, Fuemmeler BF. **Associations between maternal cytokine levels during gestation and measures of child cognitive abilities and executive functioning.** *Brain Behav Immun.* 2018 Mar 26. PMID: 29588230.
33. Floros KV, Lochmann TL, Hu B, Monterrubio C, Hughes MT, Wells JD, Bernadó Morales C, Ghotra MS, Costa C, Souers AJ, Boikos SA, Leverson JD, Tan M, Serra V, Koblinski JE, Arribas J, Prat A, Paré L, Miller TW, Dozmorov MG, Harada H, Windle BE, Scaltriti M, Faber AC. **Coamplification of miR-4728 protects HER2-amplified breast cancers from targeted therapy.** *Proc Natl Acad Sci U S A.* 2018 Feb 23. PMID: 29476008
34. Song KA, Niederst MJ, Lochmann TL, Hata AN, Kitai H, Ham J, Floros KV, Hicks MA, Hu H, Mulvey HE, Drier Y, Heisey DAR, Hughes MT, Patel NU, Lockerman EL, Garcia A, Gillepsie S, Archibald HL, Gomez-Caraballo M, Nulton TJ, Windle BE, Piotrowska Z, Sahingur SE, Taylor SM, Dozmorov M, Sequist LV, Bernstein B, Ebi H, Engelman JA, Faber AC. **Epithelial-to-Mesenchymal Transition Antagonizes Response to Targeted Therapies in Lung Cancer by Suppressing BIM.** *Clin Cancer Res.* 2018 Jan 1. PMID: 29051323
35. Wren JD, Dozmorov MG, Toby I, Nanduri B, Homayouni R, Manda P, Thakkar S. **Proceedings of the 2017 MidSouth Computational Biology and Bioinformatics Society (MCBIOS) Conference.** *BMC Bioinformatics.* 2017 Dec 28. PMID: 29297277

36. Masser DR, Hadad N, Porter HL, Mangold CA, Unnikrishnan A, Ford MM, Giles CB, Georgescu C, Dozmorov MG, Wren JD, Richardson A, Stanford DR, Freeman WM. **Sexually divergent DNA methylation patterns with hippocampal aging.** *Aging Cell*. 2017 Sep 25. PMID: 28948711.
37. Sai Vineela Bontha, Ricardo Gehrau, Sihee L. Suh, Catherine I. Dumur, Mikhail Dozmorov, Kellie J. Archer, Daniel G. Maluf, Lorenzo Gallon, Valeria R. Mas. **Effects of DNA Methylation on Progression to Interstitial Fibrosis and Tubular Atrophy in Renal Allograft Biopsies: A Multi-omics Approach.** *American Journal of Transplantation*, 2017 May 28. PMID: 28556588
38. Liu Y, Walavalkar NM, Dozmorov MG, Rich SS, Civelek M, Guertin MJ. **Identification of breast cancer associated variants that modulate transcription factor binding.** *PLoS Genet*. 2017 Sep 28. PMID: 28957321.
39. Srivastava J, Robertson CL, Ebeid K, Dozmorov M, Rajasekaran D, Mendoza R, Siddiq A, Akiel MA, Jariwala N, Shen XN, Windle JJ, Subler MA, Mukhopadhyay ND, Ghashuddin S, Ghosh S, Lai Z, Chen Y, Fisher PB, Salem AK, Sanyal AJ, Sarkar D. **A novel role of astrocyte elevated gene-1 (AEG-1) in regulating nonalcoholic steatohepatitis (NASH).** *Hepatology*. 2017 Jun 30. PMID: 28437865
40. Hylemon PB, Takabe K, Dozmorov M, Nagahashi M, Zhou H. **Bile acids as global regulators of hepatic nutrient metabolism.** *Liver Res*. 2017 Jun 1. PMID: 29123941
41. Dozmorov MG, Coit P, Maksimowicz-McKinnon K, Sawalha AH. **Age-associated DNA methylation changes in naive CD4+ T cells suggest an evolving autoimmune epigenotype in aging T cells.** *Epigenomics*. 2017. PMID: 28322571
42. Dumancas, GG, Adrianto I, Bello G, Dozmorov M. **Current Developments in Machine Learning Techniques in Biological Data Mining.** *Bioinformatics and Biology Insights*. 2017. PMID: 28469415
43. Nulton TJ, Olex AL, Dozmorov M, Morgan IM, Windle B. **Analysis of the cancer genome atlas sequencing data reveals novel properties of the human papillomavirus 16 genome in head and neck squamous cell carcinoma.** *Oncotarget*. 2017. PMID: 28187443
44. Ramanathan R, Olex AL, Dozmorov M, Bear HD, Fernandez LJ, Takabe K. **Angiopoietin pathway gene expression associated with poor breast cancer survival.** *Breast Cancer Res Treat*. 2017. PMID: 28062977
45. Patel VI, Booth JL, Duggan ES, Cate S, White VL, Hutchings D, Kovats S, Burian DM, Dozmorov M, Metcalf JP. **Transcriptional Classification and Functional Characterization of Human Airway Macrophage and Dendritic Cell Subsets.** *J Immunol*. 2017. PMID: 28031342
46. Kronfol MM, Dozmorov MG, Huang R, Slattum PW, McClay JL. **The role of epigenomics in personalized medicine.** *Expert Rev Precis Med Drug Dev*. 2017. PMID: 29276780
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