Morgan A. Sammons, PhD

Department of Biological Sciences State University of New York at Albany Life Sciences 2078 1400 Washington Ave Albany, NY 12222

EDUCATION

Doctor of Philosophy, Biology Vanderbilt University, Nashville, TN

December 2010

Bachelor of Science, Biology University of Toledo, Toledo, OH

May 2005

Bachelor of Arts, Chemistry University of Toledo, Toledo, OH

May 2005

PROFESSIONAL EXPERIENCE

State University of New York at Albany

September 2016 - Present

Assistant Professor, Department of Biological Sciences

University of Pennsylvania

Research Scientist, Epigenetics Institute

September 2015 - August 2016 September 2010 - August 2015

Postdoctoral Fellow, Department of Cell and Developmental Biology

September 2005 - August 2010

Vanderbilt University
Graduate Research Scientist, Department of Biological Sciences

PUBLICATIONS

- 1. Catizone AN*, Karsli Uzunbas G*, Celadova P, Kuang S*, Bose D, and **Sammons MA**. (2019) Locally acting transcription factors are required for p53-dependent cis-regulatory element activity. bioRxiv. DOI: 10.1101/761387
- 2. Naik AS, Lin JM, Taroc EZM, Katreddi RR, Frias JA, **Sammons M**, and Forni P. (2019) Smad4 signaling establishes the somatosensory map of basal vomeronasal sensory neurons. bioRxiv. DOI: 10.1101/738393
- 3. Karsli Uzunbas G*, Ahmed F*, and **Sammons MA**. (2019) Control of p53-dependent transcription and enhancer activity by the p53 family member p63. Journal of Biological Chemistry. DOI: 10.1074/jbc.RA119.007965
- 4. Lin-Shiao E, Lan Y, Welzenbach J, Alexander KA, Zhang Z, Knapp M, Mangold E, **Sammons M**, Ludwig KU and Berger SL (2019) p63 establishes epithelial enhancers de novo at critical craniofacial development genes. Science Advances. 2019 May 1; 5(5):eaaw0946. doi: 10.1126/sciadv.aaw0946.
- 5. Catizone AN*, Good CR, Alexander KA, Berger SL, and **Sammons MA** (2019). Comparison of genotoxic versus non-genotoxic stabilization of p53 provides insight into parallel stress-responsive transcriptional networks. Cell Cycle. Apr;18(8):809-823. doi:10.1080/15384101.2019.1593643
- 6. Lin JM, Taroc EZM, Frias JA, Prasad A, Catizone AN*, **Sammons MA**, and Forni PE. (2018) The transcription factor Tfap2e/AP-2 plays a pivotal role in maintaining the identity of basal vomeronasal sensory neurons. Developmental Biology. 2018 June 19. DOI: 0.1016/j.ydbio.2018.06.007

- 7. Fraietta J, Nobles C, Sammons MA, Lundh S, Carty S, Reich T, Cogdill A, Wang Y, Gohil M, Kulikovskaya I, Nazimuddin F, Gupta M, Gee M, Liu X, Young R, Ambrose D, Jordan M, Marcucci K, Levine B, Garcia KC, Zhao Y, Kalos M, Porter D, Lacey S, Berger S, Bushman F, June C, Morrissette J, DeNizio J, Reddy S, Hwang Y, Everett J, Alexander K, Lin-Shiao E, Kohli R, Chen F, and Melenhorst J. (2018) Disruption of TET2 Promotes the Therapeutic Efficacy of CD19-targeted T-cells. Nature. 2018 May 30. doi: 10.1038/s41586-018-0178-z
- 8. Pauken, KE, Sammons, MA, Odorizzi, PM, Manne, SK, Godec, J, Khan, O, Drake, AM, Chen, Z, Sen, D, Kurachi, M, Barnitz, RA, Bartman, C, Bengsch, B, Huang, AC, Schenkel, HM, Vahedi, G, Haining, WN, Berger, SL, and Wherry, EJ, (2016). Epigenetic stability of exhausted T cells limits the durability of reinvigoration by PD-1 blockade. Science. 354(6316): 1160-1165
- 9. Zhu, J, Dou, Z, **Sammons, MA.**, Levine, A.J., and Berger S.L. (2016) Lysine methylation represses p53 activity in teratocarcinoma cells. Proceedings of the National Academy of Sciences. 113(35):9822-7.
- 10. **Sammons, M.A.**, Zhu, J, and Berger, S.L. (2016). A chromatin-focused siRNA screen for regulators of p53-dependent transcription. G3 (Bethesda) 6(8), 2671-8.
- 11. Monteith, J.A., Mellert, H.S., **Sammons, M.A.**, Kuswanto, L.A., Sykes, S.M., Berger, S.L., and McMahon, S.B. (2016) A rare tumor-derived mutation in p53 provides pro-survival gain of function via induction of anti-apoptotic molecule TNFAIP8. Molecular Oncology. (8):1207-20.
- Capell, B.C., Drake, A.M., Zhu, J., Shah, P.P., Dou, Z., Dorsey, J., Simola, D.F., Donahue, G., Sammons, M.A, Singh Rai, R., Natale, C., Ridky, T.W., Adam, P.D., and Berger, S.L. (2016). MLL1 is essential for the senescence-associated secretory phenotype. Genes and Development, 30: 321-336
- 13. Sammons, M.A., Zhu, J., Drake, A.M., and Berger, S.L. (2015). TP53 engagement with the genome occurs in distinct local chromatin environments via pioneer factor activity. Genome Research 25, 179-188.
- Zhu, J, Sammons, M.A, Donahue, G, Dou, Z, Vedadi, M, Geglik, M, Barsyte-Lovejoy, D, Al-Awar, R, Katona, B, Shilatifard, A, Huang, J, Hua, X, Arrowsmith, C, and Berger, S.L. (2015) Gain-of-function p53 mutants co-opt chromatin pathways to drive cancer growth. Nature, 525 (7568):206-11
- 15. Dikovskaya, D, Cole J.J., Mason S.M., Nixon, C, Karim, S.A., McGarry, L, Clarke, W, Hewitt, R.N., Sammons, M.A, Zhu, J, Wu, H, Berger, S.L., Blyth, K, and Adams, P.D. (2015) Mitotic stress is an integral part of the oncogene-induced senescence program that promotes multinucleation and cell cycle arrest. Cell Reports. 12(9):1483-96
- 16. Mushrush, D.J., Koteiche, H.A., Sammons, M.A., Link, A.J., McHaourab, H.S., and Lacy, D.B. (2011). Studies of the mechanistic details of the pH-dependent association of botulinum neurotoxin with membranes. J Biol Chem 286, 27011-27018.
- 17. Sammons, M.A., Samir, P., and Link, A.J. (2011). Saccharomyces cerevisiae Gis2 interacts with the translation machinery and is orthogonal to myotonic dystrophy type 2 protein ZNF9. Biochem Biophys Res Commun 406, 13-19.
- 18. Sammons, M.A., Antons, A.K., Bendjennat, M., Udd, B., Krahe, R., and Link, A.J. (2010). ZNF9 activation of IRES-mediated translation of the human ODC mRNA is decreased in myotonic dystrophy type 2. PLoS One 5, e9301.
- 19. Elzie, C.A., Colby, J., **Sammons, MA.**, and Janetopoulos, C. (2009). Dynamic localization of G proteins in Dictyostelium discoideum. J Cell Sci 122, 2597-2603.
- Sammons, M., Wan, S.S., Vogel, N.L., Mientjes, E.J., Grosveld, G., and Ashburner, B.P. (2006). Negative regulation of the RelA/p65 transactivation function by the product of the DEK proto-oncogene. J Biol Chem 281, 26802-26812.

^{*} indicates trainees from the University at Albany, State University of New York

GRANT FUNDING

Active Awards

National Institutes of Health NIGMS, GM128049

\$450,000

Molecular mechanisms regulating the establishment of cis-regulatory elements

by the transcription factor p63

Investigator: Morgan Sammons, PhD

2018-2021

National Institutes of Health, NICHD HD09641101

\$450,000

Role of Inductive Signals Released by Nasal Mesenchyme and Brain in Controlling Terminal Nerve Development and GNRH-1 Neuronal Migration

Co-Investigator with PI: Paolo Forni, PhD

2018-2021

National Institutes of Health, NIDCD DC01714901

\$1.539.977

MOLECULAR MECHANISMS CONTROLLING DIFFERENTIATION AND CIRCUIT FORMATION OF VOMERONASAL SENSORY NEURONS

Co-Investigator with PI: Paolo Forni, PhD

2018-2023

Completed Awards

New York State Spinal Cord Injury Research Board

\$142,500

Institutional Support for Spinal Cord Injury Co-investigator with PI: Ben Szaro, PhD

2017 (Completed)

CONFERENCE PRESENTATIONS

International p53/p63/p73 Workshop

2019

Hosted by the Ruer Bokovi Institute in Dubrovnik, Croatia

Determinants of cell type-specificity and cis-regulatory activity within the p53 family of transcription factors Abstract selected for full talk

Evolution and Core Processes in Gene Expression

2019

American Society for Biochemistry and Molecular Biology Symposium, Lansing, MI, USA

Determinants of cell type-specificity and cis-regulatory activity within the p53 family of transcription factors Abstract selected for full talk

Transcriptional Regulation by Chromatin and RNA Polymerase II

2018

American Society for Biochemistry and Molecular Biology Symposium, Snowbird, UT, USA

Varying roles for p53 family members in the establishment and maintenance of chromatin structure

Epigenetics and Chromatin

2018

Cold Spring Harbor Laboratory Meetings, Cold Spring Harbor, NY, USA

Varying roles for p53 family members in the establishment and maintenance of chromatin structure

Systems Biology: Global Regulation of Gene Expression Cold Spring Harbor Laboratory Meetings, Cold Spring Harbor, NY, USA Genomewide mechanisms driving bespoke transcriptional responses to cellular stress	2018	
3rd Annual p53 Isoforms Conference University of Bergen, Bergen, Norway Cell lineage- and enhancer-dependent regulation of p53-dependent transcription	2017	
Core Processes in Gene Expression ASBMB Special Symposium, Stowers Institute, Kansas City, MO, USA Cell lineage- and enhancer-dependent regulation of a canonical stress response	2017	
Cancer Epigenetics Keystone Symposia, Seattle, WA, USA p53 activity is regulated by lineage-specific enhancers	2017	
INVITED TALKS Workshop for Interaction and Scientific Communication Life Sciences Initiative, State University of New York at Albany Enhancing Transcriptional Decision Making	2017	
Cancer Research Center School of Public Health, State University of New York at Albany Chromatin dynamics in the p53 tumor suppressor network (and T-cell immunotherapy)	2016	
TEACHING		
Genetics of Human Disease, ABIO 329 Department of Biological Sciences, State University of New York at Albany	Fall 2019 136 students	
Living Learning Community, UFSP 110 Department of Biological Sciences, State University of New York at Albany	Fall 2019 28 students	
Seminar in MCDN, ABIO 681 Department of Biological Sciences, State University of New York at Albany	Spring 2019 14 students	
Advanced Molecular Biology, ABIO 524 Department of Biological Sciences, State University of New York at Albany	Spring 2019 13 students	
Genetics of Human Disease, ABIO 329 Department of Biological Sciences, State University of New York at Albany	Fall 2018 96 students	
Living Learning Community, UFSP 110 Department of Biological Sciences, State University of New York at Albany	Fall 2018 26 students	
Genetics of Human Disease, ABIO 329		

MENTORING	
Graduate Students	_
Allison Catizone MCDN PhD Program State University of New York at Albany	2017 - Present
-MCDN PhD Program, State University of New York at Albany -Role: Primary advisor	
Serene Durham	2018 - Present
MCDN PhD Program, State University of New York at Albany	
Role: Primary advisor	
Dana Woodstock	2019 - Present
MCDN PhD Program, State University of New York at Albany Role: Primary advisor	
Postdoctoral Trainees	
Gizem Karsli Uzunbas	2016 - 2019
Postdoctoral Trainee, State University of New York at Albany	
Role: Primary advisor	
Current Position: Staff Scientist, Broad Institute, Cambridge, MA, USA	
Professional Employees	
Faraz Ahmed, Bioinformatics Specialist	2017-2019
Current Position: Bioinformatics Scientist, Cornell University, Ithaca, NY, USA	
Undergraduates	
Kate Sazon, UAlbany Biology	2018 - Present
Chelsi Riley, UAlbany Biology	2018 - 2019
Sylvia Kuang, UAlbany Honors College	2017 - 2019
Matthew Cacciola, UAlbany Biology	2016 - 2018
Sarah Soliman, UAlbany Biology Taylor Mellow UAlbany Biology	2016 - 2018 2016 - 2018
Kegan Shreffler, UAlbany Biology	2016 - 2018
Sajana Chandrawansa UAlbany Biology	2016 - 2017
Aleyna Nur Sarap, UAlbany Biology	2016 - 2017
Merlyn Ramirez, UAlbany Biology	2016 - 2017
DEPARTMENTAL AND UNIVERSITY SERVICE	0010
Graduate Programs Assessment Committee, Department of Biological Sciences Personnel and Appointments Committee, Department of Biological Sciences	2019 2019
MCDN PhD Curriculum Committee, Department of Biological Sciences	2018-2019
Shore Scholarship Committee	2018
Graduate Admissions Committee, Department of Biological Sciences	2017-18
Stem Cells and Regeneration Faculty Search Committee	2017-18
Workshop for Interaction and Scientific Collaboration (WISC) Organizer	2017
Shore Scholarship Committee	2017
World of Biology - Living-Learning Community Faculty Advisor Bioinformatics/Center for Functional Genomics User Lecture	2017-2018 2017
Graduate Admissions Committee, Department of Biological Sciences	2016-17
Katherine Vario Scholarship Committee	2016

Fall 2017 25 students

 $Living\ Learning\ Community,\ UFSP\ 110$ Department of Biological Sciences, State University of New York at Albany

PROFESSIONAL SERVICE

Reviewer, $Cancer\ Cell$ Reviewer, $Cell\ Reports$

Reviewer, Briefings in Functional Genomics
Reviewer, Wiley WIRES Systems Biology and Medicine
Reviewer, Molecular Oncology

Reviewer, Nature Communications

Reviewer, Cell Cycle