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 — December 2010
Vanderbilt University, Nashville, TN

Bachelor of Science, Biology — May 2005
University of Toledo, Toledo, OH

Bachelor of Arts, Chemistry — May 2005
University of Toledo, Toledo, OH

EDUCATIONAL EMPLOYMENT

State University of New York at Albany — September 2016 - Present
Assistant Professor, Department of Biological Sciences Associate Member, The RNA Institute

University of Pennsylvania
Research Scientist, Epigenetics Institute — September 2015 - August 2016
Postdoctoral Fellow, Department of Cell and Developmental Biology — September 2010 - August 2015

Vanderbilt University — September 2005 - August 2010
Graduate Research Scientist, Department of Biological Sciences

PUBLICATIONS

1. Bonenfant G, Meng R, Shotwell C, Badu P, Payne A, Ciota A, **Sammons MA**, Berglund JA, and Pager CT. (2020) Asian Zika virus isolate significantly changes the transcriptional profile and alternative RNA splicing events in a neuroblastoma cell line. In Press at Viruses.
2. Naik AS, Lin JM, Taroc EZM, Katreddi RR, Frias JA, **Sammons MA**, and Forni P. (2020) Smad4 signaling establishes the somatosensory map of basal vomeronasal sensory neurons. Development. 2020 147: dev184036 doi: 10.1242/dev.184036
3. Link AJ, Niu X, Weaver CM, Jennings JL, Duncan DT, McAfee KJ, **Sammons M**, Gerbasi VR, Farley AR, Fleischer TC, Browne CM, Samir P, Galassie A, and Boone B. (2020) Targeted identification of protein interactions in eukaryotic mRNA translation. Proteomics. 2020 Apr; 20(7)e1900177. doi: 10.1022/pmic.201900177
4. Catizone AN*, Karsli Uzunbas G*, Celadova P, Kuang S*, Bose D, and **Sammons MA**. (2020) Locally acting transcription factors are required for p53-dependent cis-regulatory element activity. Nucleic Acids Research. 2020 Mar 5 doi: 10.1093/nar/gkaa147
5. 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

6. 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.
7. 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
8. 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
9. 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
10. 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
11. 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.
12. **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.
13. 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.
14. 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
15. **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.
16. 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
17. 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
18. 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.
19. **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.
20. **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.
21. 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.

22. **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
2018-2022

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 2018
Cold Spring Harbor Laboratory Meetings, Cold Spring Harbor, NY, USA
Genomewide mechanisms driving bespoke transcriptional responses to cellular stress

3rd Annual p53 Isoforms Conference 2017
University of Bergen, Bergen, Norway
Cell lineage- and enhancer-dependent regulation of p53-dependent transcription

Core Processes in Gene Expression 2017
ASBMB Special Symposium, Stowers Institute, Kansas City, MO, USA
Cell lineage- and enhancer-dependent regulation of a canonical stress response

Cancer Epigenetics 2017
Keystone Symposia, Seattle, WA, USA
p53 activity is regulated by lineage-specific enhancers

INVITED TALKS

RNA Collaborative Seminar Series 2020
University of Michigan
Regulatory strategies controlling the stress-dependent transcriptome *Department of Nanobioscience* 2020
SUNY Polytechnic University
Exploring cis-regulation by p53 family transcription factors
Department of Biochemistry 2019
Albert Einstein College of Medicine
Exploring cis-regulation by p53 family transcription factors
Workshop for Interaction and Scientific Communication 2017
Life Sciences Initiative, State University of New York at Albany
Enhancing Transcriptional Decision Making
Cancer Research Center 2016
School of Public Health, State University of New York at Albany
Chromatin dynamics in the p53 tumor suppressor network (and T-cell immunotherapy)

TEACHING

Advanced Molecular Biology, ABIO 524 Spring 2020
Department of Biological Sciences, State University of New York at Albany 22 students

Genetics of Human Disease, ABIO 329 Fall 2019

Department of Biological Sciences, State University of New York at Albany — 136 students

Living Learning Community, UFSP 110 — Fall 2019
Department of Biological Sciences, State University of New York at Albany — 28 students

Seminar in MCDN, ABIO 681 — Spring 2019
Department of Biological Sciences, State University of New York at Albany — 14 students

Advanced Molecular Biology, ABIO 524 — Spring 2019
Department of Biological Sciences, State University of New York at Albany — 13 students

Genetics of Human Disease, ABIO 329 — Fall 2018
Department of Biological Sciences, State University of New York at Albany — 96 students

Living Learning Community, UFSP 110 — Fall 2018
Department of Biological Sciences, State University of New York at Albany — 26 students

Genetics of Human Disease, ABIO 329 — Fall 2017
Department of Biological Sciences, State University of New York at Albany — 74 students

Living Learning Community, UFSP 110 — Fall 2017
Department of Biological Sciences, State University of New York at Albany — 25 students

MENTORING

Graduate Students

Allison Catizone, PhD — 2017 - 2020
MCDN PhD Program, State University of New York at Albany
Current Position: Scientist, GenScript, Piscataway, NJ, USA

Serene Durham — 2018 - Present
MCDN PhD Program, State University of New York at Albany

Dana Woodstock — 2019 - Present
MCDN PhD Program, State University of New York at Albany

Postdoctoral Trainees

Gizem Karsli Uzunbas, PhD — 2016 - 2019
Postdoctoral Trainee, State University of New York at Albany
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

Committee Service

Alicia McCarthy — 2016 - 2020
MCDN PhD Program, State University of New York at Albany

Connor Duffy — 2017 - 2019
M.S. Biology Program, State University of New York at Albany

Jamie Belrose — 2017 - Present
MCDN PhD Program, State University of New York at Albany

Nicholas Moskwa — 2018 - Present

MCDN PhD Program, State University of New York at Albany
Amber Altrieth 2019 - Present
MCDN PhD Program, State University of New York at Albany
Anwesha Sarkar 2019 - Present
MCDN PhD Program, State University of New York at Albany
Ali Ropri 2020 - Present
Biomedical Sciences PhD Program, State University of New York at Albany

PhD Rotation Students

Sawyer Hicks	2019-2020
Angelina Giorgio	2018-2019
Jesus Frias	2018-2019
Deneice Brown	2017-2018
Frank Jenkins	2016-2017
Philip Bender	2016-2017
Shane Breznak	2016-2017

Undergraduates

Lauren Merchant, UAlbany Biology, Honors College	2019 - Present
Kate Sazon, UAlbany Biology, Honors College	2018 - Present
Chelsi Riley, UAlbany Biology	2018 - 2019
Sylvia Kuang, UAlbany Biology, Honors College	2017 - 2019
Matthew Cacciola, UAlbany Biology	2016 - 2018
Sarah Soliman, UAlbany Biology	2016 - 2018
Taylor Mellow UAlbany Biology	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

Bioinformatics Faculty Search Committee	2019-2020
Graduate Programs Assessment Committee, Department of Biological Sciences	2019
Personnel and Appointments Committee, Department of Biological Sciences	2019
MCDN PhD Curriculum Committee, Department of Biological Sciences	2018-2019
Shore Scholarship Committee	2018
Chair of Biology Department Seminar Series, Department of Biological Sciences	2017-present
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	2017-2018
Bioinformatics/Center for Functional Genomics User Lecture	2017
Graduate Admissions Committee, Department of Biological Sciences	2016-17
Katherine Vario Scholarship Committee	2016

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*
Reviewer, *BMC Molecular and Cell Biology*
Reviewer, *eLife*