

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 in Biology Vanderbilt University, Nashville, TN	December 2010
Bachelor of Science in Biology University of Toledo, Toledo, OH	May 2005
Bachelor of Arts in Chemistry University of Toledo, Toledo, OH	May 2005

EMPLOYMENT

State University of New York at Albany Assistant Professor, Department of Biological Sciences Associate Member, The RNA Institute	September 2016 - Present
University of Pennsylvania Postdoctoral Fellow, Department of Cell and Developmental Biology	September 2010 - August 2016
Vanderbilt University Graduate Research Scientist, Department of Biological Sciences	September 2005 - August 2010

PUBLICATIONS

1. **Sammons MA**, Nguyen TT, McDade SS, and Fischer M. (2020) Tumor suppressor p53: From engaging DNA to target gene regulation. *Nucleic Acids Research*. *In Press*
2. Belrose JL, Prasad A, **Sammons MA**, Gibbs KM, and Szaro B. (2020) Comparative Gene Expression Profiling between Optic Nerve and Spinal Cord Injury in *Xenopus laevis* Reveals a Core Set of Genes Inherent in Successful Regeneration of Vertebrate Central Nervous System Axons. *BMC Genomics*. 2020 Aug 5;21(1):540. DOI: 10.1186/s12864-020-06954-8
3. 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. *Viruses*. 2020 May 5; 12(5):E510. DOI:10.3390/v12050510

4. 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
5. 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
6. 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
7. 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
8. 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.
9. 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
10. Lin JM, Taroc EZM, Frias JA, Prasad A, Catizone AN*, **Sammons MA**, and Forni PE. (2018) The transcription factor Tfp2e/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
11. 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 Melnick 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
12. 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
13. Zhu, J, Dou, Z, **Sammons, MA**, Levine, AJ., and Berger SL. (2016) Lysine methylation represses p53 activity in teratocarcinoma cells. *Proceedings of the National Academy of Sciences*. 113(35):9822-7.
14. **Sammons, MA.**, Zhu, J, and Berger, SL. (2016). A chromatin-focused siRNA screen for regulators of p53-dependent transcription. *G3 (Bethesda)* 6(8), 2671-8.
15. Monteith, JA., Mellert, HS., **Sammons, MA**, Kuswanto, LA., Sykes, SM., Berger, SL., and McMahon, SB. (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.
16. 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

17. **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.
18. Zhu J, **Sammons MA**, 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 SL (2015) Gain-of-function p53 mutants co-opt chromatin pathways to drive cancer growth. *Nature*, 525 (7568):206-11
19. 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
20. 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.
21. **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.
22. **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.
23. 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.
24. **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.

GRANT FUNDING

Active Awards

National Institutes of Health, NIGMS, R35 <i>Defining cis-regulatory networks controlling a core stress response</i> Principal Investigator: Morgan Sammons Total award: \$1,765,488	2020-2025
National Institutes of Health, NIGMS, R15 <i>Molecular mechanisms regulating the establishment of cis-regulatory elements by the transcription factor p63</i> Principal Investigator: Morgan Sammons Total award: \$450,000	2018-2022
National Institutes of Health, NICHD, R15 <i>Role of Inductive Signals Released by Nasal Mesenchyme and Brain in Controlling Terminal Nerve Development and GNRH-1 Neuronal Migration</i> Co-Investigator with PI: Paolo Forni Total award: \$450,000	2018-2021

National Institutes of Health, NIDCD, R01 2018-2023
Molecular mechanisms controlling differentiation and circuit formation of the vomeronasal sensory neurons
Co-Investigator with PI: Paolo Forni
Total award: \$1,539,977

Completed Awards

New York State Spinal Cord Injury Research Board 2017
Institutional Support for Spinal Cord Injury
Co-investigator with PI: Ben Szaro, PhD

American Cancer Society
Postdoctoral Fellowship 2012-2014
Investigator: Morgan Sammons, PhD

CONFERENCE PRESENTATIONS

18th International p53 Workshop 2020
Weizmann Institute of Science, Rehovot, Israel
Regulation of p53 target gene transcription by distal gene regulatory elements
Meeting canceled due to SARS-CoV-2 pandemic

Northeast Regional Meeting (NESDB 2020) 2020
Society for Developmental Biology, Marine Biological Laboratory, Woods Hole, MA, USA
Gene regulatory elements at the intersection of development and tumor suppression
Meeting canceled due to SARS-CoV-2 pandemic

Systems Biology: Global Regulation of Gene Expression 2020
Cold Spring Harbor Laboratory Meetings, Cold Spring Harbor, NY, USA
Genomewide mechanisms driving bespoke transcriptional responses to cellular stress

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
Hosted by a consortium of RNA Centers
MD Anderson, Harvard Medical School, National Cancer Institute, University at Albany, UMass Medical School, University of Michigan, University of Rochester, Yale University, Sherbrooke University
Regulatory paradigms controlling a core stress response
- 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)

PROFESSIONAL SERVICE

Journal Referee

Early Career Reviewer Board for Journal of Biological Chemistry
BMC Molecular and Cell Biology
Briefings in Functional Genomics
Cancer Cell
Cell Cycle
Cell Reports
eLife
Molecular Oncology
Nature Communications
Wiley WIREs Systems Biology and Medicine

Proposal Referee

Cancer Etiology Study Section, NIH Center for Scientific Review 2020

DEPARTMENTAL AND UNIVERSITY SERVICE

Department Service

Personnel and Appointments Committee	2020-2021
Bioinformatics Faculty Search Committee	2019-2020
Graduate Programs Assessment Committee	2019
Personnel and Appointments Committee	2018-2019
MCDN PhD Program Curriculum Committee	2018-2019
Director of Biology Department Seminar Series	2017-present
Graduate Admissions Committee	2017-18
Stem Cells and Regeneration Faculty Search Committee	2017-18
Graduate Admissions Committee	2016-17
Katherine Vario Scholarship Committee	2016
Shore Scholarship Committee	2017-2018
World of Biology - Living-Learning Community Faculty Advisor	2017-2020

University Service

Workshop for Interaction and Scientific Collaboration (WISC) Organizer	2017
Bioinformatics/Center for Functional Genomics User Workshop	2017

TEACHING

<i>Genetics of Human Disease, ABIO 329</i>	Fall 2020
Department of Biological Sciences, State University of New York at Albany	136 students
<i>Advanced Molecular Biology, ABIO 524</i>	Spring 2020
Department of Biological Sciences, State University of New York at Albany	22 students
<i>Genetics of Human Disease, ABIO 329</i>	Fall 2019
Department of Biological Sciences, State University of New York at Albany	136 students

<i>Living Learning Community, UFSP 110</i> Department of Biological Sciences, State University of New York at Albany	Fall 2019 28 students
<i>Seminar in MCDN, ABIO 681</i> Department of Biological Sciences, State University of New York at Albany	Spring 2019 14 students
<i>Advanced Molecular Biology, ABIO 524</i> Department of Biological Sciences, State University of New York at Albany	Spring 2019 13 students
<i>Genetics of Human Disease, ABIO 329</i> Department of Biological Sciences, State University of New York at Albany	Fall 2018 96 students
<i>Living Learning Community, UFSP 110</i> Department of Biological Sciences, State University of New York at Albany	Fall 2018 26 students
<i>Genetics of Human Disease, ABIO 329</i> Department of Biological Sciences, State University of New York at Albany	Fall 2017 74 students
<i>Living Learning Community, UFSP 110</i> Department of Biological Sciences, State University of New York at Albany	Fall 2017 25 students

MENTORING

Doctoral Students at the University at Albany

Allison Catizone, PhD	2017 - 2020
Serene Durham	2018 - Present
Dana Woodstock	2019 - Present

Postdoctoral Trainees

Gizem Karsli Uzunbas, PhD	2016 - 2019
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Professional Employees

Faraz Ahmed, Bioinformatics Specialist	2017-2019
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Doctoral Dissertation Committee Service

Alicia McCarthy MCDN PhD Program, University at Albany	2016 - 2020
Jamie Belrose MCDN PhD Program, University at Albany	2017 - Present
Nicholas Moskwa MCDN PhD Program, University at Albany	2018 - Present
Amber Altrieth MCDN PhD Program, University at Albany	2019 - Present
Anwasha Sarkar MCDN PhD Program, University at Albany	2019 - Present
Ali Ropri BMS PhD Program, University at Albany	2020 - Present

Pheonah Badu MCDN PhD Program, University at Albany	2020 - Present
Raghu Katreddi, MCDN PhD Program, University at Albany	2020 - Present
Jesus Frias, MCDN PhD Program, University at Albany	2020 - Present

Masters Thesis Committee Service

Connor Duffy M.S. Biology Program, State University of New York at Albany	2017 - 2019
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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 <i>2019 Glenn L. Bumpus Award for Excellence in Undergraduate Research</i>	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