CURRICULUM VITAE August 18, 2022

## Morgan A. Sammons, PhD

Department of Biological Sciences University at Albany, State University of New York Life Sciences 2078 1400 Washington Ave Albany, NY 12222 masammons@albany.edu

#### **EDUCATION**

Doctor of Philosophy in Biology
Vanderbilt University, Nashville, TN

Bachelor of Science in Biology May 2005

University of Toledo, Toledo, OH

Bachelor of Arts in Chemistry

May 2005

University of Toledo, Toledo, OH

#### **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 September 2010 - August 2016

Postdoctoral Fellow, Department of Cell and Developmental Biology

Vanderbilt University September 2005 - August 2010

Graduate Research Scientist, Department of Biological Sciences

#### **PUBLICATIONS**

- 1. Reverdatto S, Prasad A, Belrose JL, Zhang X, **Sammons MA**, Gibbs KM, and Szaro BG (2021) Developmental and Injury-induced Changes in DNA Methylation in Regenerative versus Non-regenerative Regions of the Vertebrate Central Nervous System. BMC Genomics. 2022 Jan 04; 23(2) DOI: 10.1186/s12864-021-08247-0
- 2. Sarkar K, Kotb NM, Lemus A, McCarthy A, Martin ET, Camacho J, Iqbal A, Valm AM, **Sammons MA**, and Rangan P (2021) A feedback loop between heterochromatin and the nucleopore complex controls germ-cell to oocyte transition during Drosophila oogenesis. bioRxiv. DOI: 10.1101/2021.10.31.466575
- 3. Woodstock DL\*, **Sammons MA**, and Fischer M (2021) p63 and p53: collaborative partners or dueling rivals?. Frontiers in Cell and Developmental Biology. DOI: 10.3389/fcell.2021.701986

- 4. **Sammons MA**, Nguyen TT, McDade SS, and Fischer M. (2020) Tumor suppressor p53: From engaging DNA to target gene regulation. Nucleic Acids Research. DOI: 10.1093/nar/gkaa666
- 5. 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
- 6. 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
- 7. 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
- 8. 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
- 9. 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
- 10. 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
- 11. 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.
- 12. 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
- 13. 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
- 14. 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
- 15. 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

- 16. 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.
- 17. **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.
- 18. 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.
- 19. 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
- 20. **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.
- 21. 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
- 22. 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
- 23. 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.
- 24. **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.
- 25. **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.
- 26. 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.
- 27. **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

Defining cis-regulatory networks controlling a core stress response

Principal Investigator: Morgan Sammons

Total award: \$1,765,488

2020-2025

<sup>\*</sup> denotes undergraduate, graduate, or postdoctoral trainees from the University at Albany

National Institutes of Health, NICHD, R15

2018-2021

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

Total award: \$450,000

## 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**

#### National Institutes of Health, NIGMS, R15

2018-2022

Molecular mechanisms regulating the establishment of cis-regulatory elements by the transcription factor p63

Principal Investigator: Morgan Sammons

Total award: \$450,000

# 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**

Evolution and Core Processes in Gene Expression

2022

American Society for Biochemistry and Molecular Biology Symposium, Stowers Institute, Kansas City, MO, USA

Abstract selected for full talk

Abstract selected for full talk 18th International p53 Workshop

2020

Weizmann Institute of Science, Rehovat, Israel

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

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

International p53/p63/p73 Workshop

2019

Hosted by the Ruer Bokovi Institute in Dubrovnik, Croatia

# Abstract selected for full talk

Evolution and Core Processes in Gene Expression  American Society for Biochemistry and Molecular Biology Symposium, East Lansing, MI,  Abstract selected for full talk	2019 USA
Transcriptional Regulation by Chromatin and RNA Polymerase II American Society for Biochemistry and Molecular Biology Symposium, Snowbird, UT, USA	2018
Epigenetics and Chromatin Cold Spring Harbor Laboratory Meetings, Cold Spring Harbor, NY, USA	2018
Systems Biology: Global Regulation of Gene Expression Cold Spring Harbor Laboratory Meetings, Cold Spring Harbor, NY, USA	2018
3rd Annual p53 Isoforms Conference University of Bergen, Bergen, Norway	2017
Core Processes in Gene Expression ASBMB Special Symposium, Stowers Institute, Kansas City, MO, USA	2017
Cancer Epigenetics Keystone Symposia, Seattle, WA, USA	2017
INDUTED TALKS	
INVITED TALKS  Department of Biological, Geological, and Environmental Sciences  Cleveland State University	2022
Department of Bioinformatics and Genomics University of North Carolina - Charlotte	2021
Department of Chemistry and Biochemistry San Diego State University	2021
RNA Collaborative Seminar Series Hosted by the RNA Center Consortium	2020
Department of Nanobioscience SUNY Polytechnic University	2020
Department of Biochemistry Albert Einstein College of Medicine	2019
Workshop for Interaction and Scientific Communication Life Sciences Initiative, State University of New York at Albany	2017
Cancer Research Center	2016

# PROFESSIONAL SERVICE

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BMC Molecular and Cell Biology Briefings in Functional Genomics

Cancer Cell

Cell Cycle

Cell Reports

eLife

Journal of Biological Chemistry (Member of Early Career Reviewer Board)

Molecular Oncology

Nature Communications

Nucleic Acids Research

Science

Wiley WIRES Systems Biology and Medicine

# **Proposal Referee**

Seed Grant Review Panel, SUNY Downstate Health Sciences University	2022
Israel Science Foundation (ISF), Grant Review	2022
Radiation Oncology-Biology Integration Network U54, NIH Center for Scientific Review	2022
Molecular Genetics A Study Section, NIH Center for Scientific Review	2021
Israel Science Foundation (ISF), Grant Review	2021
Cancer Etiology Study Section, NIH Center for Scientific Review	2020
National Science Centre, Poland, Grant Review	2020
National Science Foundation (NSF), Grant Review	2020

# **DEPARTMENTAL AND UNIVERSITY SERVICE**

# **Department Service**

Biology Tenure-Track Faculty Search Committee, Chair	2022-2023
Undergraduate Curriculum Committee, Chair	2022-2023
Trainee Session Judge, RNA Institute Symposium	2022
Graduate Admissions Committee	2021-2022
Graduate Recruitment Committee	2021-2022
Personnel and Appointments Committee	2020-2021
Bioinformatics Faculty Search Committee	2019-2020
Graduate Programs Assessment Committee	2019-present
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 World of Biology - Living-Learning Community Faculty Advisor	2017-2018 2017-2020
College and University Service Chair, College of Arts and Sciences Faculty Council Vice Chair, College of Arts and Sciences Faculty Council NSF Project SAGES Internal Grant Reviewer College of Arts and Sciences FRAP-B Program Reviewer College of Arts and Sciences Faculty Council Workshop for Interaction and Scientific Collaboration (WISC) Organizer Bioinformatics/Center for Functional Genomics User Workshop	2022-2023 2021-2022 2021-2022 2021 2020-Current 2017 2017
TEACHING	
Genetics of Human Disease, ABIO 329 Department of Biological Sciences, State University of New York at Albany	Fall 2022 137 students
Advanced Molecular Biology, ABIO 524 Department of Biological Sciences, State University of New York at Albany	Spring 2022 21 students
Genetics of Human Disease, ABIO 329 Department of Biological Sciences, State University of New York at Albany	Fall 2021 116 students
Advanced Molecular Biology, ABIO 524 Department of Biological Sciences, State University of New York at Albany	Spring 2021 35 students
Genetics of Human Disease, ABIO 329 Department of Biological Sciences, State University of New York at Albany	Fall 2020 142 students
Advanced Molecular Biology, ABIO 524 Department of Biological Sciences, State University of New York at Albany	Spring 2020 22 students
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 Department of Biological Sciences, State University of New York at Albany	Fall 2017 74 students
Living Learning Community, UFSP 110 Department of Biological Sciences, State University of New York at Albany	Fall 2017 25 students
Epigenetics of Human Disease Department of Cell and Developmental Biology, University of Pennsylvania	Spring 2015 14 students
Epigenetics of Human Disease Department of Cell and Developmental Biology, University of Pennsylvania	Spring 2014 11 students
MENTORING	
Doctoral Students Allison Catizone, PhD Serene Durham, PhD Dana Woodstock Abby McCann Jhosped Dufflart	2017 - 2020 2018 - 2022 2019 - Present 2021 - Present 2021 - Present
Postdoctoral Trainees Gizem Karsli Uzunbas, PhD Gabriele Baniulyte, PhD	2017 - 2019 2021 - Present
Professional Employees Faraz Ahmed, Bioinformatics Specialist Aparna Prasad, Research Scientist	2017-2019 2020-2021
Doctoral Dissertation Committee Service Alicia McCarthy, PhD Jamie Belrose, PhD Nicholas Moskwa, PhD Amber Altrieth Anwesha Sarkar, PhD Ali Ropri, PhD BMS PhD Program, University at Albany Pheonah Badu Raghu Katreddi Jesus Frias Nick Mathias	2016 - 2020 2017 - 2020 2018 - 2022 2019 - Present 2019 - 2022 2020 - 2022 2020 - Present 2020 - Present 2020 - Present 2020 - Present 2020 - Present
Masters Thesis Committee Service Connor Duffy, MS	2017 - 2019

Hannah Shippas, MS Kavya Chegireddy, MS	2021 - 2022 2021 - 2022
BMS MS Program, University at Albany Pearl De Veer	2021-2022
PhD Rotation Students Kathryn Piper Esperanza Rosas Nicole Traver Afrooz Golestanian Michelle Urman Sawyer Hicks Angelina Giorgio Jesus Frias Deneice Brown Frank Jenkins Philip Bender	2022 2022 2021 2021 2020-2021 2019-2020 2018-2019 2018-2019 2017-2018 2016-2017
Shane Breznak	2016-2017
Undergraduates Michael Bratslavsky, UAlbany Biology, Honors College Owen Zon, UAlbany Biology, Honors College Thesis Committee Member Mya Moriconi, UAlbany Biology, Honors College Daniel Koskas, UAlbany Biology, Honors College Lauren Merchant, UAlbany Biology, Honors College Kate Sazon, UAlbany Biology, Honors College Chelsi Riley, UAlbany Biology Sylvia Kuang, UAlbany Biology, Honors College 2019 Glenn L. Bumpus Award for Excellence in Undergraduate Research Matthew Cacciola, UAlbany Biology Sarah Soliman, UAlbany Biology Taylor Mellow UAlbany Biology Kegan Shreffler, UAlbany Biology Sajana Chandrawansa UAlbany Biology Aleyna Nur Sarap, UAlbany Biology Merlyn Ramirez, UAlbany Biology	2022 - Present 2022 - Present 2021 - Present 2020 - Present 2019 - 2021 2018 - Present 2018 - 2019 2017 - 2019  2016 - 2018 2016 - 2018 2016 - 2018 2016 - 2018 2016 - 2017 2016 - 2017 2016 - 2017
HONORS  Torch Faculty/Student Engagement Award Outstanding Nominee American Cancer Society Postdoctoral Fellow Vanderbilt Graduate Fellow	2021 2012 2005