Julianne H. Grose, Ph.D.

Brigham Young University
Microbiology and Molecular Biology
3040 LSB
Provo, UT 84602

Email: julianne_grose@byu.edu
Webpage: http://groselab.byu.edu
Office Phone: (801) 422-4940
Fax: (801) 422-0519

I am an Associate Professor in the Department of Microbiology and Molecular Biology at Brigham Young University. My university position consists of 45% effort for teaching, 45% effort for mentoring/research and 10% effort for citizenship. I teach approximately 12 credit hours of undergraduate courses per year and currently mentor three graduate students and 15 undergraduates in my research lab. My teaching is dedicated to bringing novel research experiences into the classroom through an international program, Phage Hunters (HHMI SEA-PHAGES program). Research in my laboratory is dedicated to two main projects: 1) the study of metabolism and its relation to disease, and 2) the study of microbiomes and their contribution to the health of organisms, including bacteriophages that infect the *Enterobacteriaceae* family of bacteria. The latter is a continuation of the Phage Hunters course/program. My long-term goal is to mentor students in the classroom and lab through high quality research experiences as well as to contribute novel scientific findings to our fields of study.

EDUCATION AND TRAINING

Education

2003 Ph.D. Biology, University of Utah
1996 B.S. Chemistry, Math minor, University of Utah

Research Positions

9/2016 – Present	**Associate Professor**, Brigham Young University, Department of Microbiology and Molecular Biology.
9/2008 – 2016	**Assistant Professor**, Brigham Young University, Department of Microbiology and Molecular Biology.
2006 – 2008	**Research Associate**, BioEnergenix (Pharmaceutical company), Department of Biochemistry, University of Utah. PAS kinase inhibitors in the treatment of diabetes and hyperlipidemia.
2004 – 2008	**Postdoctoral Scholar**, Lab of Dr. Jared Rutter, Department of Biochemistry, University of Utah. Molecular characterization of PAS kinase.
1996-2003	**Ph.D. Student** ,Lab of Dr. John Roth, Department of Biology, University of Utah. Regulation of NAD(P) metabolism in *Salmonella typhimurium*.
1994-1995	**Undergraduate Research Assistant**, Lab of Dr. Marion Woods MD.
1992-1993	**ACCESS Program** for Women in Mathematics and Science

PROFESSIONAL HONORS AND FELLOWSHIPS

C. Joseph Rowberry Teaching and Learning Faculty Fellowship, Brigham Young University (2018)
Maesar Excellence in Teaching Award, Brigham Young University (2017)
First place award -NSF Community College Innovation Challenge, team advisor (2017)
Alcuin Fellowship, Brigham Young University (2017)
Technology Transfer Award, Brigham Young University (2016)
Faculty Women's Association Scholarship Award, Brigham Young University **(**2016)
Travel Award, Annual SEA-PHAGES Conference (2012, 2015)
Travel Award, SEA-PHAGES Advanced Genomics Workshop (2015)
Travel Award, IR-4 Biopesticide Workshop (2014, 2015, 2016, 2017, 2018)
Teaching Award, Highest Student Ratings in a 100-level Course (2013)
Travel Award, ASM Early-career Faculty Travel Award (2009)
Postdoctoral Fellowship, Multidisciplinary Cancer Research Training Grant (2004-2006)

Postdoctoral Fellowship, Ruth L. Kirschstein National Research Service Award (2006, gratefully declined)

PROFESSIONAL ACTIVITIES

President of the Intermountain Branch of the American Society for Microbiology (ASM) (2017-2018)

Member of the Science Education Alliance (SEA), American Heart Association (AHA), American Society for Microbiology (ASM), American Society for Cell Biology (ASCB), Genetics Society of America (GSA)

iGEM Jamboree Judge (America's -2013, International - 2014)

Editorial Board Member, Nutrients (MDPI) (2019-current)

Ad-hoc Reviewer for Pilot Research Projects Southwest Environmental Health Sciences Center (2012), the National Science Foundation Graduate Research Fellowship Program (NSF GRFP), and the Human Frontier Science Program Career Development Award (HFSF CDA), and for many scientific journals including but not limited to: Acta Biochimica et Biophysica Sinica, Archives of Virology, Environmental Microbiology and Environmental Microbiology Reports, FEBS Letters, FEMS IJMS, Microbiology Letters, Journal of Bioprocessing & Biotechniques, Molecules, Molecular Biology of the Cell, Nutrients, PLOS ONE and Trends in Microbiology, Viruses, Journal of Virology.

TOTAL RESEARCH SUPPORT
EXTRAMURAL RESEARCH SUPPORT
Current

Beckman Scholars Program
Role: Co-principle Investigator and Beckman Scholar Mentor
The Arnold and Mabel Beckman Foundation
Amount: $109,200 End date: 9/2020

Manipulating the Microbiome of Small Hive Beetles and Varroa Mites
Role: Principle Investigator
Private Investor
Amount: $79,000 End date: 5/31/2021

DNA packaging and delivery by dsDNA viruses
Role: Subcontract Principle Investigator
National Institutes of Health 5R01 GM114817
Amount (Subcontract): $15,000 End date: 7/31/2020

Phage Hunters: Discovery and Bioinformatics
Role: Principal Investigator
LDS Philanthropies Private donor
Amount: $25,000 End date: 12/29/2021

Completed

Regulation and function of PAS kinase: PASsing glucose to control respiration, lipogenesis and cell cycle
Role: Principle Investigator
National Institutes of Health 2R15 GM100376-02
Amount: $786,167 End date: 1/31/2020

Characterizing a kinase regulator of ataxin-2 as a therapeutic target for ALS
Role: Co-Principle Investigator with Aaron Gitler
Robert Packard Center for ALS Research
Amount: $100,000 End date: 3/31/2019

Phage Hunters: Discovery and Bioinformatics
Role: Principal Investigator
LDS Philanthropies Private donor
Amount: $8,000 End date: 7/1/2017

Manipulation of Phage-derived Bacteriocin Production as a Novel Antimicrobial Treatment for Bacterial Phytopathogens
Role: Subcontract Principal Investigator
USDA National Institute of Food and Agriculture Award 2016-67014-24850
Amount (subcontract): $20,000 End date: 01/31/2019

INTRAMURAL RESEARCH GRANTS

Current

PAS Kinase as a Potential Moderator of Heart Disease
Role: Co-Principle Investigator
2020 Gerontology Research Grant Award
Amount: $8,260 End date: 11/30/2020

Completed

Impact of mutant Atypical Chemokine Receptors on Chemokines and Inflammation
Role: Co-Principle Investigator
Inflammation Research Award – BYU
Amount: $6,254 End date: 1/31/2018
BYU Mentoring Environment Grant

Balancing the cellular budget: Dissecting PAS kinase-dependent glucose partitioning
Role: Principal Investigator
BYU Mentoring Environment Grant
Amount: $20,000 End date: 1/31/2017

Identifying Genetic Factors Involved in the Development of Diabetes
Role: Principal Investigator
BYU Mentoring Environment Grant
Amount: $20,000 End date: 1/31/2016

Enhancing Learning Through Novel, Publishable Viral Research
Role: Principal Investigator
BYU Mentoring Environment Grant
Amount: $8,400 End date: 11/31/2016

Elucidating a Precise Role for the Small Heat Shock Proteins CryAB and HspB2 in Cardiac Robustness
Role: Principal Investigator
BYU Mentoring Environment Grant
Amount: $20,000 End date: 3/31/2015

A Phage-Based Treatment for Fire Blight and American Foulbrood
Role: co-Principal Investigator
BYU Technology Transfer Bridging Fund
Amount: $15,000 End date: 12/13/2014
BYU Teaching Enhancement Grant

Teaching Enhancement Through a Mentored Research-based Course
Role: Principal Investigator
Award: $8,500
BYU Teaching Enhancement Grant

Molecular Characterization of Pathways Involved PAS Kinase Regulation and Function.
Role: Principal Investigator
BYU Mentoring Environment Grant
Amount: $20,000 End date: 1/31/2014

Characterization of PAS Kinase Regulation and Novel PAS Kinase Substrates.
Role: Principal Investigator
BYU Mentoring Environment Grant
Amount: $20,000 End date: 1/31/2013

BYU Mentoring Environment Grant Regulation and Function of Yeast PAS kinase.
Role: Principal Investigator
BYU Mentoring Environment Grant
Amount: $20,000 End date: 1/31/2012

The Function of Yeast PAS kinase.
Role: Principal Investigator
BYU Mentoring Environment Grant
Amount: $20,000 End date: 1/31/2011

PUBLICATIONS (45 peer-reviewed publications)

1. Thurgood TL, Sharma R, Call JJ, et al. Genome Sequences of 12 Phages That Infect Klebsiella pneumoniae. Microbiol Resour Announc 2020;9. https://doi.org/10.1128/MRA.00024-20. https://www.ncbi.nlm.nih.gov/pubmed/32299868.
2. Pape JA, Grose JH. The effects of diet and sex in amyotrophic lateral sclerosis. Rev Neurol (Paris) 2020;176:301-15. https://doi.org/10.1016/j.neurol.2019.09.008. https://www.ncbi.nlm.nih.gov/pubmed/32147204.
3. Murcia JDG, Weinert A, Freitas CMT, et al. Atypical chemokine receptor ACKR2-V41A has decreased CCL2 binding, scavenging, and activation, supporting sustained inflammation and increased Alzheimer's disease risk. Sci Rep 2020;10:8019. https://doi.org/10.1038/s41598-020-64755-1. https://www.ncbi.nlm.nih.gov/pubmed/32415244.
4. Thompson DW, Casjens SR, Sharma R, Grose JH. Genomic comparison of 60 completely sequenced bacteriophages that infect Erwinia and/or Pantoea bacteria. Virology 2019;535:59-73. https://doi.org/10.1016/j.virol.2019.06.005. https://www.ncbi.nlm.nih.gov/pubmed/31276862.
5. Sharma R, Pielstick BA, Bell KA, et al. A Novel, Highly Related Jumbo Family of Bacteriophages That Were Isolated Against Erwinia. Front Microbiol 2019;10:1533. https://doi.org/10.3389/fmicb.2019.01533. https://www.ncbi.nlm.nih.gov/pubmed/31428059.
6. Handoko YA, Wardani AK, Sutrisno A, et al. Genome Sequences of Two Bacillus Phages Isolated from Indonesia. Microbiol Resour Announc 2019;8. https://doi.org/10.1128/MRA.01058-19. https://www.ncbi.nlm.nih.gov/pubmed/31831605.
7. DeMille D, Pape JA, Bikman BT, Ghassemian M, Grose JH. The Regulation of Cbf1 by PAS Kinase Is a Pivotal Control Point for Lipogenesis vs. Respiration in Saccharomyces cerevisiae. G3 (Bethesda) 2019;9:33-46. https://doi.org/10.1534/g3.118.200663. https://www.ncbi.nlm.nih.gov/pubmed/30381292.
8. Yost DG, Chang C, LeBlanc L, et al. Complete Genome Sequences of Paenibacillus larvae Phages Halcyone, Heath, Scottie, and Unity from Las Vegas, Nevada. Microbiol Resour Announc 2018;7. https://doi.org/10.1128/MRA.00977-18. https://www.ncbi.nlm.nih.gov/pubmed/30533661.
9. Willis SD, Stieg DC, Ong KL, et al. Snf1 cooperates with the CWI MAPK pathway to mediate the degradation of Med13 following oxidative stress. Microb Cell 2018;5:357-70. https://doi.org/10.15698/mic2018.08.641. https://www.ncbi.nlm.nih.gov/pubmed/30175106.
10. Walker JK, Merrill BD, Berg JA, et al. Complete Genome Sequences of Paenibacillus larvae Phages BN12, Dragolir, Kiel007, Leyra, Likha, Pagassa, PBL1c, and Tadhana. Genome Announc 2018;6. https://doi.org/10.1128/genomeA.01602-17. https://www.ncbi.nlm.nih.gov/pubmed/29903825.
11. Stieg DC, Willis SD, Ganesan V, et al. A complex molecular switch directs stress-induced cyclin C nuclear release through SCF(Grr1)-mediated degradation of Med13. Mol Biol Cell 2018;29:363-75. https://doi.org/10.1091/mbc.E17-08-0493. https://www.ncbi.nlm.nih.gov/pubmed/29212878.
12. Stamereilers C, Fajardo CP, Walker JK, et al. Genomic Analysis of 48 Paenibacillus larvae Bacteriophages. Viruses 2018;10. https://doi.org/10.3390/v10070377. https://www.ncbi.nlm.nih.gov/pubmed/30029517.
13. Sharma R, Berg JA, Beatty NJ, et al. Genome Sequences of Nine Erwinia amylovora Bacteriophages. Microbiol Resour Announc 2018;7. https://doi.org/10.3389/fmicb.2019.01533. https://www.ncbi.nlm.nih.gov/pubmed/31428059.
14. Pape JA, Newey CR, Burrell HR, et al. Per-Arnt-Sim Kinase (PASK) Deficiency Increases Cellular Respiration on a Standard Diet and Decreases Liver Triglyceride Accumulation on a Western High-Fat High-Sugar Diet. Nutrients 2018;10. https://doi.org/10.3390/nu10121990. https://www.ncbi.nlm.nih.gov/pubmed/30558306.
15. Merrill BD, Fajardo CP, Hilton JA, et al. Complete Genome Sequences of 18 Paenibacillus larvae Phages from the Western United States. Microbiol Resour Announc 2018;7. https://doi.org/10.1128/MRA.00966-18. https://www.ncbi.nlm.nih.gov/pubmed/30533693.
16. Berg JA, Merrill BD, Breakwell DP, Hope S, Grose JH. A PCR-Based Method for Distinguishing between Two Common Beehive Bacteria, Paenibacillus larvae and Brevibacillus laterosporus. Appl Environ Microbiol 2018;84. https://doi.org/10.1128/AEM.01886-18.

https://www.ncbi.nlm.nih.gov/pubmed/30217838.
17. Arens DK, Brady TS, Carter JL, et al. Characterization of two related Erwinia myoviruses that are distant relatives of the PhiKZ-like Jumbo phages. PLoS One 2018;13:e0200202. https://doi.org/10.1371/journal.pone.0200202. https://www.ncbi.nlm.nih.gov/pubmed/29979759
18. Hanauer DI, Graham MJ, Sea P, et al. An inclusive Research Education Community (iREC): Impact of the SEA-PHAGES program on research outcomes and student learning. Proc Natl Acad Sci U S A 2017;114:13531-6. https://doi.org/10.1073/pnas.1718188115.
https://www.ncbi.nlm.nih.gov/pubmed/29208718.
19. Esplin IND, Berg JA, Sharma R, et al. Genome Sequences of 19 Novel Erwinia amylovora Bacteriophages. Genome Announc 2017;5. https://doi.org/10.1128/genomeA.00931-17.
https://www.ncbi.nlm.nih.gov/pubmed/29146842.
20. Dedrick RM, Jacobs-Sera D, Bustamante CA, et al. Prophage-mediated defence against viral attack and viral counter-defence. Nat Microbiol 2017;2:16251. https://doi.org/10.1038/nmicrobiol.2016.251.
https://www.ncbi.nlm.nih.gov/pubmed/28067906.
21. Merrill BD, Ward AT, Grose JH, Hope S. Software-based analysis of bacteriophage genomes, physical ends, and packaging strategies. BMC Genomics 2016;17:679. https://doi.org/10.1186/s12864-016-3018-2.
https://www.ncbi.nlm.nih.gov/pubmed/27561606.
22. Casjens SR, Grose JH. Contributions of P2- and P22-like prophages to understanding the enormous diversity and abundance of tailed bacteriophages. Virology 2016;496:255-76.
https://doi.org/10.1016/j.virol.2016.05.022. https://www.ncbi.nlm.nih.gov/pubmed/27372181.
23. Berg JA, Merrill BD, Crockett JT, et al. Characterization of Five Novel Brevibacillus Bacteriophages and Genomic Comparison of Brevibacillus Phages. PLoS One 2016;11:e0156838.
https://doi.org/10.1371/journal.pone.0156838. https://www.ncbi.nlm.nih.gov/pubmed/27304881.
24. Sheflo MA, Gardner AV, Merrill BD, et al. Correction for Sheflo et al., Complete Genome Sequences of Five Brevibacillus laterosporus Bacteriophages. Genome Announc 2015;3.
https://doi.org/10.1128/genomeA.01113-15. https://www.ncbi.nlm.nih.gov/pubmed/26430035
25. Pope WH, Bowman CA, Russell DA, et al. Whole genome comparison of a large collection of mycobacteriophages reveals a continuum of phage genetic diversity. Elife 2015;4:e06416.
https://doi.org/10.7554/eLife.06416. https://www.ncbi.nlm.nih.gov/pubmed/25919952.
26. Merrill BD, Berg JA, Graves KA, et al. Genome Sequences of Five Additional Brevibacillus laterosporus Bacteriophages. Genome Announc 2015;3. https://doi.org/10.1128/genomeA.01146-15.
https://www.ncbi.nlm.nih.gov/pubmed/26494658.
27. Grose JH, Langston K, Wang X, et al. Characterization of the Cardiac Overexpression of HSPB2 Reveals Mitochondrial and Myogenic Roles Supported by a Cardiac HspB2 Interactome. PLoS One 2015;10:e0133994.
https://doi.org/10.1371/journal.pone.0133994. https://www.ncbi.nlm.nih.gov/pubmed/26465331.
28. DeMille D, Badal BD, Evans JB, Mathis AD, Anderson JF, Grose JH. PAS kinase is activated by direct SNF1-dependent phosphorylation and mediates inhibition of TORC1 through the phosphorylation and activation of Pbp1. Mol Biol Cell 2015;26:569-82. https://doi.org/10.1091/mbc.E14-06-1088.
https://www.ncbi.nlm.nih.gov/pubmed/25428989.
29. Merrill BD, Grose JH, Breakwell DP, Burnett SH. Characterization of Paenibacillus larvae bacteriophages and their genomic relationships to firmicute bacteriophages. BMC Genomics 2014;15:745.
https://doi.org/10.1186/1471-2164-15-745. https://www.ncbi.nlm.nih.gov/pubmed/25174730.
30. Grose JH, Jensen JD, Merrill BD, Fisher JN, Burnett SH, Breakwell DP. Genome Sequences of Three Novel Bacillus cereus Bacteriophages. Genome Announc 2014;2.
https://doi.org/10.1128/genomeA.01118-13. https://www.ncbi.nlm.nih.gov/pubmed/24459255.
31. Grose JH, Jensen GL, Burnett SH, Breakwell DP. Genomic comparison of 93 Bacillus phages reveals 12 clusters, 14 singletons and remarkable diversity. BMC Genomics 2014;15:855. Correction: BMC Genomics 2014;15:1184. https://doi.org/10.1186/1471-2164-15-855.https://www.ncbi.nlm.nih.gov/pubmed/25280881.
32. Grose JH, Casjens SR. Understanding the enormous diversity of bacteriophages: the tailed phages that infect the bacterial family Enterobacteriaceae. Virology 2014;468-470:421-43.
https://doi.org/10.1016/j.virol.2014.08.024. https://www.ncbi.nlm.nih.gov/pubmed/25240328.
33. Grose JH, Belnap DM, Jensen JD, et al. The genomes, proteomes, and structures of three novel phages that infect the Bacillus cereus group and carry putative virulence factors. J Virol 2014;88:11846-60.
https://doi.org/10.1128/JVI.01364-14. https://www.ncbi.nlm.nih.gov/pubmed/25100842.
34. DeMille D, Bikman BT, Mathis AD, et al. A comprehensive protein-protein interactome for yeast PAS kinase 1 reveals direct inhibition of respiration through the phosphorylation of Cbf1. Mol Biol Cell 2014;25:2199-215. https://doi.org/10.1091/mbc.E13-10-0631.
https://www.ncbi.nlm.nih.gov/pubmed/24850888.
35. Banerjee Mustafi S, Grose JH, Zhang H, et al. Aggregate-prone R120GCRYAB triggers multifaceted modifications of the thioredoxin system. Antioxid Redox Signal 2014;20:2891-906.
https://doi.org/10.1089/ars.2013.5340. https://www.ncbi.nlm.nih.gov/pubmed/24180415.
36. Smith KC, Castro-Nallar E, Fisher JN, Breakwell DP, Grose JH, Burnett SH. Phage cluster relationships identified through single gene analysis. BMC Genomics 2013;14:410. https://doi.org/10.1186/1471-2164-14-410. https://www.ncbi.nlm.nih.gov/pubmed/23777341.

37. DeMille D, Grose JH. PAS kinase: a nutrient sensing regulator of glucose homeostasis. IUBMB Life 2013;65:921-9. https://doi.org/10.1002/iub.1219. https://www.ncbi.nlm.nih.gov/pubmed/24265199.
38. Breakwell DP, Barrus EZ, Benedict AB, et al. Genome sequences of five b1 subcluster mycobacteriophages. Genome Announc 2013;1. https://doi.org/10.1128/genomeA.00968-13. https://www.ncbi.nlm.nih.gov/pubmed/24285667.
39. Grose JH, Rutter J. The role of PAS kinase in PASsing the glucose signal. Sensors (Basel) 2010;10:5668-82. https://doi.org/10.3390/s100605668. https://www.ncbi.nlm.nih.gov/pubmed/22219681.
40. Grose JH, Sundwall E, Rutter J. Regulation and function of yeast PAS kinase: a role in the maintenance of cellular integrity. Cell Cycle 2009;8:1824-32. https://doi.org/10.4161/cc.8.12.8799. https://www.ncbi.nlm.nih.gov/pubmed/19440050.
41. Grose JH, Smith TL, Sabic H, Rutter J. Yeast PAS kinase coordinates glucose partitioning in response to metabolic and cell integrity signaling. EMBO J 2007;26:4824-30. https://doi.org/10.1038/sj.emboj.7601914. https://www.ncbi.nlm.nih.gov/pubmed/17989693.
42. Grose JH, Joss L, Velick SF, Roth JR. Evidence that feedback inhibition of NAD kinase controls responses to oxidative stress. Proc Natl Acad Sci U S A 2006;103:7601-6. https://doi.org/10.1073/pnas.0602494103. https://www.ncbi.nlm.nih.gov/pubmed/16682646.
43. Grose JH, Bergthorsson U, Xu Y, Sterneckert J, Khodaverdian B, Roth JR. Assimilation of nicotinamide mononucleotide requires periplasmic AphA phosphatase in Salmonella enterica. J Bacteriol 2005;187:4521-30. https://doi.org/10.1128/JB.187.13.4521-4530.2005. https://www.ncbi.nlm.nih.gov/pubmed/15968063.
44. Grose JH, Bergthorsson U, Roth JR. Regulation of NAD synthesis by the trifunctional NadR protein of Salmonella enterica. J Bacteriol 2005;187:2774-82. https://doi.org/10.1128/JB.187.8.2774-2782.2005. https://www.ncbi.nlm.nih.gov/pubmed/15805524.
45. Jacobsen RB, DelaCruz RG, Grose JH, McIntosh JM, Yoshikami D, Olivera BM. Critical residues influence the affinity and selectivity of alpha-conotoxin MI for nicotinic acetylcholine receptors. Biochemistry 1999;38:13310-5. https://doi.org/10.1021/bi9907476. https://www.ncbi.nlm.nih.gov/pubmed/10529206.

BOOK CHAPTERS (2 Peer-reviewed)

1. Grose JH. (2010), Ch. 15, The Lure of Bacterial Genetics: a Tribute to John Roth. Eds. Maloy, S., Hughes, K.T., and Casadesus, J, ASM Press, Washington, DC, 9-22.
2. Grose JH and Casjens, SR. (2019) Bacteriophage Diversity. Encyclopedia of Virology; 4th addition. Academic Press. Cambridge Massachusets. ISBN-13: 978-0123739353

RATIFIED INTERNATION COMMITTEE ON THE TAXONOMY OF VIRUSES (ICTV) PROPOSALS (4 peer-reviewed)

1. Svircev, AM, Yagubi, AI, Kropinski, AM, Adriaenssens EM, Grose, JH. To create one (1) new genus, Agricans257virus, including five (5) new species in the family Myoviridae. https://talk.ictvonline.org/ICTV/proposals/2016.066a- dB.A.v1.Agrican357virus.pdf
2. Wittmann J, Grose JH, Yagubi, AI, Svircev, AM and Kropinski, AM. To create a new genus, EA92virus, including 2 (two) new species within the family Prodoviridae. https://talk.ictvonline.org/ICTV/proposals/2016.078a-dB.A.v1.Ea92virus.pdf
3. Grose, JH, Kropinski, AM, Adriaenssens, EM, Kuhn, J, Hope, S. To create one (1) new genus, Abouovirus, including two (2) new species in the family Myoviridae. DO - 10.13140/RG.2.2.13252.22405
4. Klumpp Barylski J, Kropinski A, Grose JH, Adriaenssens EM (2015). ICTV taxonomic proposal 2015.036a-dD.A.v2.Cp51virus. Create genus Cp51virus including 3 new species within the family Myoviridae. http://www.ictvonline.org/proposals-15/2015.036a-dD.A.v2.Cp51virus.pdf

GENBANK GENOME PUBLICATIONS

The following are 120 GenBank publications of complete phage genomes. All genomes include full genomes (not genome fragments) with complete annotation of all genes and tRNAs.. Genomes were peer reviewed by GenBank prior to acceptance and publication.

Year	Phage name (bacterial host)	Accession #	Authors
2020	KaAlpha (*Klebsiella* phage)	MN013084	Anderson,K.J., Thurgood,T.L., Sharma,R., Arens,D.K., Kruger,J.L., Thompson,D.W., Casjens,S. and Grose,J.H.
2020	KaOmega (*Klebsiella* phage)	MN013077	Anderson,K.J., Thurgood,T., Sharma,R., Arens,D.K., Thompson,D.W., Kruger,J.L. and Grose,J.H.
2020	Derbicus (*Erwinia* phage)	NC_048173	Webb,C.J., Sharma,R., Berg,J.A., Payne,A.M., Fajardo,C.P. Breakwell,D.P., Hope,S. and Grose,J.H
2019	Emp27 (*Klebsiella* phage)	MN013074	Potts,E., Thurgood,T.L., Sharma,R., Handoko,Y., Kruger,J.L., Thompson,D.W., Arens,D.K. and Grose,J.H.
2019	Domnhall (*Klebsiella* phage)	MN013075	Sirrine,M.R., Thurgood,T.L., Sharma,R., Wilkey,A., Kruger,J.L., Arens,D.K., Thompson,D.W., Casjens,S. and Grose,J.H.
2019	IMGroot (*Klebsiella* phage)	MN013076	Meek,T., Sharma,R., Thurgood,T.L., Atkinson,A.D., Fairholm,J., Brown,O., Loertscher,E., Arens,D.K., Kruger,J.L., Johnson,L., Thompson,D.W., Walker,J., Casjens,S. and Grose,J.H.
2019	KingDDD (*Klebsiella* phage)	MN013078	Dawson,D.D., Sharma,R., Thurgood,T.L., Loertscher,E., Ong,K., Kruger,J.L., Arens,D.K., Thompson,D.W., Johnson,L., Walker,J., Casjens,S. and Grose,J.H.
2019	Call (*Klebsiella* phage)	MN013079	Call,J.J., Thurgood,T.L., Sharma,R., Loertscher,E., Anderson,K., Carroll,M., Flindt,K., Urrea,L., Arens,D.K., Kruger,J.L., Thompson,D.W., Walker,J., Johnson,L. and Grose,J.H.
2019	SegesCirculi (*Klebsiella* phage)	MN013080	Foster,K.K., Sharma,R., Thurgood,T.L., Loertscher,E., Barker,A., Chronis,J., Fairholm,J., Finnegan,Z., Flake,P., Hielscher,T., Melhado,E., Potts,E., Sarabia,R., Wiley,M.S., Johnson,L., Arens,D.K., Kruger,J.L., Thompson,D.W., Walker,J., Casjens,S. and Grose,J.H
2019	Potts1 (*Klebsiella* phage)	MN013081	Potts,E., Thurgood,T.L., Sharma,R., Urrea,L., Arens,D.K., Kruger,J.L., Thompson,D.W. and Grose,J.H.
2019	Sibilus (*Klebsiella* phage)	MN013082	Finnegan,Z.K., Thurgood,T.L., Sharma,R., Brundage,B., Wilkey,A.,Arens,D.K., Kruger,J.L., Thompson,D.W., Casjens,S. and Grose,J.H.
2019	Alina (*Klebsiella* phage)	MN013083	Sirrine,M.R., Thurgood,T.L., Sharma,R., Arens,D.K., Kruger,J.L., Thompson,D.W. and Grose,J.H.
2019	NahiliMali (*Klebsiella* phage)	MN013085	Foster,K.K., Sharma,R., Thurgood,T.L., Kruger,J.L., Loertscher,E.,Arens,D.K., Thompson,D.W., Johnson,L., Walker,J., Casjens,S. and Grose,J.H.
2019	Chronis (*Sinorhizobium phage)*	MN013086	Crockett,J.T., Hodson,T.S., Hyde,J.R., Schouten,J.T., Smith,T.A., Merrill,B.D., Crook,M.B., Griffitts,J.S., Burnett,S.H., Grose,J.H. and Breakwell,D.P.
2019	Penguinator (*Klebsiella* phage)	MN013087	Dawson,D.D., Sharma,R., Thurgood,T.L., Arens,D.K., T. Thompson,D.W.,Kruger,J.L., Loertscher,E., Johnson,L.,Walker,J., Casjens,S. and Grose,J.H.
2018	ArcticFreeze (*Paenibacillus* phage)	MH431932	Wright,C.K., Walker,J.K., Withers,J.M., Monk,J.R., Ward,A.T., Fajardo,C.P., Breakwell,D.P., Grose,J.H., Hope,S. and Tsourkas,P.K.
2018	Unity (*Paenibacillus* phage)	MH460824	Chang,C.E., Leblanc,L., Cassin,E., Salisbury,A., Peterman,C., Rai,P., Wong,S., Uriarte-Valle,G., Muscelli,S., Tan,R., Grose,J.H.,
2018	Gryphonian (*Paenibacillus* phage)	MH431934	Usher,B.K., George,J., Ward,A.T., Fajardo,C.P., Breakwell,D.P., Grose,J.H., Hope,S. and Tsourkas,P.K.
2018	Halcyone (*Paenibacillus* phage)	MH460827	Diane,Y.G., Leblanc,L., Cassin,E., Salisbury,A., Peterman,C., Rai,P., Torres,E.L., Wallace,C.R., Reyes,S., Ines,J.L., Grose,J.H.,

2019	SplendidRed (*Bacillus* phage)	MN013088	Handoko,Y.A., Wardani,A.K., Sutrisno,A.A., Widjanarko,S.B., Sharma,R. and Grose,J.H.
2019	MarvelLand (*Bacillus* phage)	MN013089	Handoko,Y.A., Wardani,A.K., Widjanarko,S.B., Sharma,R., Flor,S. and Grose,J.H.
2019	TropicalSun (*Klebsiella* phage)	MN013090	Handoko,Y.A., Wardani,A.K., Sutrisno,A., Widjanarko,S.B., Sharma,R. and Grose,J.H.
2019	Petruchio (*Mycobacterium phage)*	KY213952	King,R.D., Delesalle,V.A., Grose,J., Hope,S., Breakwell,D., Garlena,R.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W.and Hatfull,G.F.
2019	Rebecca (*Erwinia* phage)	MK514281	Eardley,R., Sharma,R., Beatty,N., Choi,M.C., Duncan,S.,Fajardo,C.P., Ferguson,H.P., Kruger,J.L., Webb,C.J. and Grose,J.H.
2019	TF17 (*Psuedomonas phage*)	MK514283	Carr,E.L., Loertscher,E., Flor,S., Gaertner,R.K., Melhado,E.S., Bruandage,B., Kruger,J.L., Thurgood,T.L., Breakwell,D.P. and Grose,J.H.
2018	Gryphonian (*Paenibacillus* phage)	MH431934	Usher,B.K., George,J., Ward,A.T., Fajardo,C.P., Breakwell,D.P., Grose,J.H., Hope,S. and Tsourkas,P.K.
2018	Arcticfreeze (*Paenibacillus* phage)	MH431932	Wright,C.K., Walker,J.K., Withers,J.M., Monk,J.R., Ward,A.T., Fajardo,C.P., Breakwell,D.P., Grose,J.H., Hope,S. and Tsourkas,P.K.
2018	DevRi (*Paenibacillus* phage)	MH431933	Ririe,D.B., Buhler,B., Salisbury,A., Pascacio,C., Stamereilers,C., Ward,A.T., Fajardo,C.P., Breakwell,D.P., Grose,J.H., Hope,S. and Tsourkas,P.K.
2018	Scottie (*Paenibacillus* phage)	MH460825	Diane,Y.G., Leblanc,L., Cassin,E., Salisbury,A., Peterman,C., Rai,P., Barroga,N.D., Macalinao,D.S., Juste,J., Cisneros,R., Grose,J.H., Strong,C., Amy,P.S. and Philippos,T.K.
2018	Heath (*Paenibacillus* phage)	MH460826	Diane,Y.G., Leblanc,L., Cassin,E., Salisbury,A., Peterman,C., Rai,P., Barroga,N.D., Macalinao,D.S., Juste,J., Cisneros,R., Grose,J.H., Strong,C., Amy,P.S. and Philippos,T.K.
2018	Toothless (*Paenibacillus* phage)	MH454084	Heaton,K.E., Velez,K., Merrill,B.D., Ward,A.T., Breakwell,D.P., Grose,J.H., Hope,S. and Tsourkas,P.K.
2018	Saudage (*Paenibacillus* phage)	MH454083	Duncan,S.G., Pascacio,C., Ward,A.T., Fajardo,C.P., Breakwell,D.P., Grose ,J.H., Hope,S. and Tsourkas,P.K.
2018	Genki (*Paenibacillus* phage)	MH454082	Stevenson,M.B., Imahara,C., Ward,A.T., Fajardo,C.P., Breakwell,D.P., Grose,J.H., Hope,S. and Tsourkas,P.K.
2018	Jacopo (*Paenibacillus* phage)	MH454079	Ward,C.S., Monk,J.R., Kim,M., Walker,J.K., Fajardo,C.P., Breakwell,D.P., Grose,J.H., Hope,S. and Tsourkas,P.K.
2018	Bloom (*Paenibacillus* phage)	MH454077	Bloomfield,T.J., Dhalai,A., Ward,A.T., Fajardo,C.P., Breakwell,D.P., Grose,J.H., Hope,S. and Tsourkas,P.K.
2018	Lucielle (*Paenibacillus* phage)	MH431937	Rogers,S.L., Monk,J.R., Ward,A.T., Fajardo,C.P., Breakwell,D.P., Grose,J.H., Hope,S. and Tsourkas,P.K.
2018	Kawika (*Paenibacillus* phage)	MH431936	Furiman,D.A., Rai,P., Ward,A.T., Fajardo,C.P., Breakwell,D.P., Grose,J.H., Hope,S. and Tsourkas,P.K.
2018	Kiel007 *Paenibacillus* phage)	MG727696	Graves,K., Dhalai,A., Stamereilers,C., Merrill,B.D., Ward,A.T.,Berg,J.A., Hilton,J.A., Fajardo,C.P., Walker,J.K., Breakwell,D.P., Grose,J.H., Hope,S. and Tsourkas,P.K.
2018	Pagassa (*Paenibacillus* phage)	MG727699	Merrill,B.D., Graves,K., Salisbury,A., Ward,A.T., Berg,J.A., Hilton,J.A., Fajardo,C.P., Walker,J.K., Breakwell,D.P., Grose,J.H., Hope,S. and Tsourkas,P.K.
2018	Tadhana (*Paenibacillus* phage)	MG727700	Payne,A.M., Merrill,B.D., Graves,K., Velez,K., Ward,A.T., Berg,J.A., Hilton,J.A., Fajardo,C.P., Walker,J.K., Breakwell,D.P., Grose,J.H., Hope,S. and Tsourkas,P.K.
2018	Likha (*Paenibacillus* phage)	MG727702	Hill,H.L., Walker,J.K., Mun,H., Merrill,B.D., Ward,A.T., Berg,J.A., Hilton,J.A., Fajardo,C.P., Breakwell,D.P.,

			Grose,J.H., Hope,S. andTsourkas,P.K.
2018	BN12 (*Paenibacillus* phage)	MG727695	Payne,A.M., Imahara,C., Merrill,B.D., Ward,A.T., Berg,J.A., Hilton,J.A., Fajardo,C.P., Walker,J.K., Breakwell,D.P., Grose,J.H.,Hope,S. and Tsourkas,P.K
2018	Dragolir (*Paenibacillus* phage)	MG727697	Merrill,B.D., Monk,J., Ward,A.T., Berg,J.A., Hilton,J.A., Fajardo,C.P., Walker,J.K., Breakwell,D.P., Grose,J.H., Hope,S. and Tsourkas,P.K.
2018	PBL1c (*Paenibacillus* phage)	MG727698	Dingman,D., Mangohig,J., Merrill,B.D., Ward,A.T., Berg,J.A., Hilton,J.A., Fajardo,C.P., Walker,J.K., Bakhiet,N., Field,C., Stahly,D.P., Breakwell,D.P., Grose,J.H., Hope,S. and Tsourkas,P.K.
2018	Leyra (*Paenibacillus* phage)	MG727701	Lastname,F.X., Knabe,B.K., Walker,J.K., George,J., Merrill,B.D., Ward,A.T., Berg,J.A., Hilton,J.A., Fajardo,C.P., Breakwell,D.P., Grose,J.H., Hope,S. and Tsourkas,P.K.
2018	SunLIRen (*Erwinia* phage)	MH426725	Sharma,R., Ke,K., Breakwell,D.P., Hope,S. and Grose,J.H.
2018	Pavtok (*Erwinia* phage)	MH426726	Sharma R, Hughes J, Breakwell DP, Hope S, Grose JH
2018	Alexandra (*Erwinia* phage)	MH248138	Cowger AE, Thompson DW, Sharma R, Herring JA, Hoj TR, Killpack S, Lawrence E, Nwosu I, Roark BJ, Tueller JA, Choi MC, Ferguson HP, Kruger L, Hope S, Breakwell DP, Grose JH.
2018	Asesino (*Erwinia* phage)	NC_031107	Berg Ja, Hyde JR, Breakwell DP, Hope S, Grose JH.
2018	Wellington (*Erwinia* phage)	MH426724	Sharma,R., James,B., Berg,J.A., Breakwell,D.P., Hope,S. and Grose,J.H.
2017	Bosolaphorus (*Erwinia* phage)	MG655267	Sharma,R., Galbraith,T., Beatty,N., Choi,M.C., Duncan,S., Fajardo,C.P., Ferguson,H.P., Kruger,J.L., Webb,C.J. and Grose,J.H.
2017	DesertFox (*Erwinia* phage)	MG655268	Sharma,R., Yeates,E.L., Beatty,N.J., Choi,M.C., Duncan,S., Fajardo,C.P., Ferguson,H.P., Kruger,J.L., Webb,C.J. and Grose,J.H.
2017	MadMel (*Erwinia* phage)	MG655269	Sharma,R., Wood,M.E., Beatty,N., Choi,M.C., Duncan,S., Fajardo,C.P., Ferguson,H.P., Kruger,J.L., Webb,C.J. and Grose,J.H.
2017	Apocalypse (*Mycobacterio*phage)	NC_024148	Loney,R.E., Wentworth,H.A., Hanna,I.R., Delesalle,V.A., Grose,J.,Hope,S., Breakwell,D., Garlena,R.A., Russell,D.A., Pope,W.H. Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.
2017	Smairt (*Mycobacterium* phage)	MF668283	Tso,M.S., Paredes,A., Zierold,M.E., Delesalle,V.A., Grose,J., Hope,S., Breakwell,D., Delesalle,V.A., Garlena,R.A., Russell,D.A.,Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.
2017	Joad (*Erwinia* phage)	MF459647	Bickmore, M., Vaden, K., Brady, T.S., Tateoka, O., Carter, JL, Pape, JA, Robinson, DM, Russel, K.A., Staley, L.A., Stettler, J.M., Townsend, M.H., Wienclaw, T., Williamson, T.L., Kruger, J.L Berg ,J.A., Sharma, R., Payne, A.M., Fajardo, C, Hope, S.., Breakwell,D.P. and Grose, JH.
2017	RisingSun (*Erwinia* phage)	MF459646	Putnam, M, Sharma, R., Kruger, J.L., Berg, J.A., Payne, A.M., Fajardo, C, Hope, S.., Breakwell,D.P. and Grose, JH.
2017	Yoloswag (*Erwinia* phage)	KY448244	Pollock,S.V., Berg,J.A., Esplin,I.N.D., Hurst,E., Kruger,J.L., Sharma,R., Grose,J.H., Breakwell,D.P. and Hope,S
2017	Mortimer (*Erwinia* phage)	MG655270	Sharma,R., Ferguson,H.P., Berg,J.A., Jensen,G.L., Keele,B.R., Ward,M.E.H., Breakwell,D.P., Hope,S. and Grose,J.H.
2016	Special G (*Erwinia* phage)	KU886222	Sharma,R., Grossarth,S.E., Foy,B., Harbaugh,K., Ingersoll,K. Berg,J.A., Jarvis,T.M., Esplin,I.N.D., Merrill,B.D., Schoenhals,J., Breakwell,D.P., Hope,S. Grose,J.H.
2016	Ray (*Erwinia* phage)	KU886224	Sharma,R., Esplin,I.N.D., Berg,J.A., Jensen,G.L., Keele,B.R., Ward,M.E.H., Breakwell,D.P., Hope,S, Grose ,J.H.

2016	Simmy50 (*Erwinia* phage)	KU886223	Sharma,R., Simister,A.R., Berg,J.A., Jensen,G.L., Keele,B.R. Ward,M.E.H., Breakwell,D.P., Hope,S. Grose,J.H.
2016	Huxley (*Erwinia* phage)	NC_031127	Berg,J.A., Grossarth,S.E., Jarvis,T.M., Merrill,B.D., Breakwell,D.P.,Hope,S. Grose,J.H.
2016	Caitlin (*Erwinia* phage)	NC_031120	Berg,J.A., Beatty,N.J., Hyde,J.R., Tatlow,P., Breakwell,D.P., Hope,S. Grose,J.H.
2016	Phobos (*Erwinia* phage)	NC_031043	Berg,J.A., Kruger,J.L., Esplin,I.N.D., Merrill,B.D., Sharma,R., Breakwell,D.P., Hope,S.Grose,J.H.
2016	Kwan (*Erwinia* phage)	NC_031010	Berg,J.A., Hurst,E., Tatlow,P., Breakwell,D.P., Hope,S. Grose,J.H.
2016	EarlPhillipIV (*Erwinia* phage)	NC_031007	Berg,J.A., Buchanan,A.L., Choi,M.C., Sharma,R., Tatlow,P.J, Allen,R.C., Bloomfield,T.J., Buhler,B., Bybee,R.N., Duncan,S. Fuhriman,D.A., Harris,N., Hilton,J.A., Hurst,E., James,B.D.,Knabe,B.K., Pollock,S.V., Ririe,D.B., Rogers,S.L.,Stephenson,M.B., Thompson,S.E., Usher,B.K., Ward,A.T., Webb,C.J., Wells,M..,Wright,C.K., Breakwell,D.P., Hope,S. Grose,J.H.
2016	ChrisDB (*Erwinia* phage)	NC_031126	Berg,J.A., Jaen,D., Shurtleff,C.A., Esplin,I.N.D., Merrill,B.D., Breakwell,D.P., Hope,S. Grose,J.H.
2016	Asesino (*Erwinia* phage)	NC_031107	Berg,J.A., Hyde,J.R., Breakwell,D.P., Hope,S. Grose,J.H.
2016	Stratton (*Erwinia* phage)	KX397373	Berg,J.A., Stratton,M.L., Esplin,I.D., Jensen,G.L., Merrill,B.D.,Breakwell,D.P., Hope,S. Grose,J.H.
2016	Parshik (*Erwinia* phage)	KX397371	Berg,J.A., Ashcroft,C.R., Bairett,S.R., Esplin,I.N.D., Gibby,P.D., Grossarth,S.E., Harbaugh,K., Ingersoll,K., Jean,D., Jensen,G.L., Kruger,J.L., Merrill,B.D., Ransom,E.K., Schoenhals,J. Taylor,A.S.,Breakwell,D.P., Hope,S. Grose,J.H.
2016	Machina (*Erwinia* phage)	KX397370	Berg,J.A., Smith,H.G., Hyde,J.R., Merrill,B.D., Sharma,R., Breakwell,D.P., Hope,S. Grose,J.H.
2016	Gutmeister (*Erwinia* phage)	KX098391	Esplin,I.N.D., Berg,J.A., Thurgood,T.A., Jensen,G.L., Sharma,R.Hope,S., Breakwell,D.P. Grose,J.H.
2016	Rexella (*Erwinia* phage)	KX098390	Peck,M.D., Kruger,J.L., Bairett,S.R., Ingersoll,K.Q., Grossarth,S.E.,Ransom,E.K., Berg,J.A., Harbaugh,K.Q., Jensen,G.L., Wienclaw,T.M., Ashcroft,C.R., Taylor,A.S., Schoenhals,J.E.Esplin,I.N.D., Merrill,B.D., Breakwell,D.P., Burnett,S.H Grose,J.H.
2016	Deimos-Minion (*Erwinia* phage)	KU886225	Sharma,R., Jensen,G.L., Kruger,J.L., Esplin,I.N.D., Jarvis,T.M. Merrill,B.D., Schoenhals,J., Breakwell,D.P., Hope,S. Grose,J.H.
2016	Frozen (*Erwinia* phage)	KX098389	Berg,J.A., Peck,M.D., Grossarth,S.E., Jarvis,T.M., Merrill,B.D.,Breakwell,D.P., Burnett,S.H., Grose,J.H.
2015	Powder (*Brevibacillus* phage)	KT151958	Wienclaw,T.M., Kruger,J.L., Bairett,S.R, Ingersoll,K., Grossarth,S.E., Ransom,E.K., Berg,J.A., Harbaugh,K., Jensen,G.L., Ashcroft,C.R.,Taylor,A.S., Graves,K.A., Schoenhals,J.E., Esplin,I.D., Merrill,B.D.,Breakwell,D.P., Grose,J.H.,Burnett,S.H., Bradley,K.W., Clarke,D.Q.,Lewis,M.F., Barker,L.P.,Bailey,C.P., Asai,D.J., Garber,M.B.,Bowman,C.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D.,Hendrix,R.W. and Hatfull,G.F.
2015	Sundance (*Brevibacillus* phage)	KT151959	Wienclaw,T.M., Kruger,J.L., Bairett,S.R., Ingersoll,K., Grossarth,S.E., Ransom,E.K., Berg,J.A., Harbaugh,K., Jensen,G.L., Ashcroft,C.R.,Taylor,A.S., Graves,K.A., Schoenhals,J.E., Esplin,I.D., Merrill,B.D.,Breakwell,D.P., Grose,J.H.,Burnett,S.H., Bradley,K.W., Clarke,D.Q., Lewis,M.F., Barker,L.P.,Bailey,C.P., Asai,D.J., Garber,M.B., Bowman,C.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D.,Hendrix,R.W. and Hatfull,G.F.
2015	SecTim467 (*Brevibacillus* phage)	KT151957	Wienclaw,T.M., Kruger,J.L., Bairett,S.R, Ingersoll,K., Grossarth,S.E., Ransom,E.K., Berg,J.A.,Harbaugh,K., Jensen,G.L., Ashcroft,C.R., Taylor,A.S., Graves,K.A., Schoenhals,J.E., Esplin,I.D., Merrill,B.D., Breakwell,D.P., Grose,J.H.,Burnett,S.H., Bradley,K.W.,Clarke,D.Q., Lewis,M.F., Barker,L.P., Bailey,C.P., Asai,D.J., Garber,M.B., Bowman,C.A., Russell,D.A., Pope,W.H., JacobsSera,D. ,Hendrix,R.W. and Hatfull,G.F.

2015	Osiris (*Brevibacillus* phage)	KT151956	Wienclaw,T.M., Kruger,J.L., Bairett,S.R., Ingersoll,K.,Grossarth,S.E., Ransom,E.K., Berg,J.A., Harbaugh,K., Jensen,G.L., Ashcroft,C.R.,Taylor,A.S., Graves,K.A., Schoenhals,J.E., Esplin,I.D., Merrill,B.D.,Breakwell,D.P., Grose,J.H.,Burnett,S.H., Bradley,K.W., Clarke,D.Q.,Lewis,M.F.Barker,L.P.,Bailey,C.P., Asai,D.J., Garber,M.B.,Bowman,C.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.
2015	Jenst (*Brevibacillus* phage)	KT151955	Wienclaw,T.M., Kruger,J.L., Bairett,S.R., Ingersoll,K.,Grossarth,S.E., Ransom,E.K., Berg,J.A., Harbaugh,K., Jensen,G.L., Ashcroft,C.R., Taylor,A.S., Graves,K.A., Schoenhals,J.E., Esplin,I.D., Merrill,B.D.,Breakwell,D.P., Grose,J.H.,Burnett,S.H., Bradley,K.W., Clarke,D.Q.,Lewis,M.F.Barker,L.P.,Bailey,C.P., Asai,D.J., Garber,M.B.,Bowman,C.A., Russell,D.A., Pope,W.H., Jacobs-Sera,D.,Hendrix,R.W. and Hatfull,G.F.
2015	phiM7 (*Sinorhizobium* phage)	KR052480	Schouten,J.T.,Crockett,J.T., Hodson,T.S., Hyde,J.R., Smith,T.A.,Merrill,B.D., Crook,M.B., Griffitts,J.S., Burnett,S.H., Grose,J.H. and Breakwell,D.P.
2015	phiM19 (*Sinorhizobium* phage)	KR052481	Crockett,J.T., Hodson,T.S., Hyde,J.R., Schouten,J.T., Smith,T.A.,Merrill,B.D., Crook,M.B., Griffitts,J.S., Burnett,S.H., Grose,J.H. and Breakwell,D.P.
2015	phiN3 (*Sinorhizobium* phage)	KR052482	Hodson,T.S., Hyde,J.R., Schouten,J.T., Crockett,J.T., Smith,T.A.,Merrill,B.D., Crook,M.B., Griffitts,J.S., Burnett,S.H., Grose,J.H. and Breakwell,D.P.
2014	Phantastic (Mycobacteriophage)	KJ510415	Meadows,H.N., Fisher,J.N.B., Gardner,A.V., Merrill,B.D., Hartmann,K.A., Bailey,M.E.,Beckstead,A.P., Deus,L.M., Earl,A.S.,Easter,R.A., Gibby,P.D., Graves,K.A., Ayer,P.A.,Heiner,M.E.,Herring,J.A., Jaen,A.D., Liu,J.E., Manci,A.M., Nielsen,D.A.,Paz,H.C.,Sabin,N.R., Solomon,M.B., Sutter,R.A., Wake,B.N., Willyerd,H.J., Zimmerman,L.J.,Breakwell,D.P., Burnett,S.H., Grose,J.H., Bradley,K.W., Clarke,D.Q., Lewis,M.F.,Barker,L.P., Bailey,C., Asai,D.J., Garber,M.L., Bowman,C.A., Russell,D.A.,Pope,W.H.,Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.
2013	Alex (Mycobacteriophage)	JX649100	Benedict, A.B., Fisher,J.N.B., Gardner,A.V., Lunt,B.L., Payne,D.E., Burnett,S.H., Breakwell,D.P. and Grose,J.H.
2013	Gyarad (Mycobacteriophage)	JX649099	Ladle,K.C., Fisher,J.N.B., Gardner,A.V., Lunt,B.L., Breakwell,D.P., Grose,J.H. and Burnett,S.H.
2013	Nacho (Mycobacteriophage)	JX649098	Kartchner,B.J., Fisher,J.N.B., Gardner,A.V., Lunt,B.L., Grose,J.H., Burnett,S.H. and Breakwell,D.P.
2013	Piglet (Mycobacteriophage)	JX649097	Barrus,E.Z., Adawi,E.C., Kennedy,A.K., Poe,D.E., Williams,K.R., Fisher,J.N.B., Gardner,A.V., Merrill,B.D., Grose,J.H., Burnett,S.H. and Breakwell,D.P.
2013	Serpentine (Mycobacteriophage)	JX649096	Brighton,A.K., Fisher,J.N.B., Gardner,A.V., Lunt,B.L., Breakwell,D.P., Burnett,S.H. and Grose,J.H.
2013	Basilisk (B. cereus phage)	KC595511.1	Jensen,J.D., Fisher,J.N.B., Gardner,A.V., Irons,D.L., Lloyd,J., Pettersson,S.M., Smith,C., Sullivan,S., Brighton,A.K., Sheflo,M.A., Burnett,S.H., Breakwell,D.P. and Grose,J.H
2013	JL (B. cereus phage)	KC595512.1	Lloyd,J., Fisher,J.N.B., Gardner,A.V., Hallam,S.J., Jensen,J.D., Pettersson,S.M., Smith,C., Sullivan,S., Brighton,A.K., Sheflo,M.A., Burnett,S.H., Breakwell,D.P. and Grose,J.H.
2013	Shanette (B. cereus phage)	KC595513	Pettersson,S.M., Fisher,J.N.B., Gardner,A.V., Hallam,S.J., Jensen,J.D., Lloyd,J., Smith,C., Sullivan,S., Brighton,A.K., Sheflo,M.A., Burnett,S.H., Breakwell,D.P. and Grose,J.H.
2013	Jimmer1 (*Brevibacilus phage)*	KC595515	Merrill,B.D., Sheflo,M.A.,Gardner,A.V. Merrill,C.A., Williams,K.R., Lunt,B.L., Ayer,P.A., Grose,J.H., Breakwell,D.P. and Burnett,S.H

2013	Jimmer2 (*Brevibacilus* phage)	KC595514	Sheflo,M.A., Gardner,A.V. Kennedy,A.K.,Beckstead,A.P., Russell,R.C., Merrill,B.D., Merrill,C.M., Zimmerman,L.J., Lunt,B.L., Grose,J.H., Breakwell,D.P. and Burnett,S.H.
2013	Abuou (*Brevibacilus* phage)	KC595517	Sheflo,M.A., Gardner,A.V., Kennedy,A.K., Beckstead,A.P., Russell,R.C., Merrill,B.D., Merrill,C.M., Zimmerman,L.J.,Lunt,B.L., Grose,J.H., Breakwell,D.P. and Burnett,S.H.
2013	Emery (*Brevibacilus* phage)	KC595516.1	Sheflo,M.A., Gardner,A.V., Kennedy,A.K., Beckstead,A.P., Russell,R.C., Merrill,B.D., Merrill,C.M., Zimmerman,L.J.,Lunt,B.L., Grose,J.H., Breakwell,D.P. and Burnett,S.H.
2013	Davies (*Brevibacilus* phage)	KC595518	Sheflo,M.A.,Merrill,B.D,Gardner,A.V., Grose,J.H., Breakwell,D.P. and Burnett,S.H.
2013	Anubis (Mycobacteriophage)	KF279418	Jackson, KR, Lunt, BL, Fisher, JN, Garner, AV, Bailey, ME, Deus, LM, Earl, AS, Gibby,PD, Hartmann, KA, Liu, JE, Manci, AM, Nielsen, DA, Solomon, MB, Breakwell, DP, Burnett, SH, and Grose, JH.
2013	Adawi (Mycobacteriophage)	KF279411	Adawi,E.C., Merrill,C.A., Sargent,C.J., Fisher,J.N., Gardner,A.V., Lunt,B.L., Merrill,B.D.,Breakwell,D.P., Burnett,S.H. and Grose,J.H.
2013	Bane1 (Mycobacteriophage)	KF279412	Marlow,S., Merrill,C.A., Sargent,C.J., Fisher,J.N., Gardner,A.V., Lunt,B.L., Merrill,B.D.,Burnett,S.H., Grose,J.H. and Breakwell,D.P.
2013	Bane2 (Mycobacteriophage)	KF279413	Gardner,A.V., Merrill,C.A., Sargent,C.J., Fisher,J.N., Lunt,B.L., Merrill,B.D., Burnett,S.H., Grose,J.H. and Breakwell,D.P.
2013	Fredward (Mycobacteriophage)	KF279414	Ladle,K.C., Fisher,J.N.B., Gardner,A.V., Lunt,B.L., Breakwell,D.P., Grose,J.H. and Burnett,S.H.
2013	Quink (Mycobacteriophage)	KF279417	Vance,K.S., Kiser,C.D., Earl,A.S., Hansen,A.W., Merrill,C.A.,Sargent,C.J., Fisher,J.N.,Gardner,A.V., Lunt,B.L., Merrill,B.D.,Breakwell,D.P., Burnett,S.H. and Grose,J.H.
2013	PhrostyMug (Mycobacteriophage)	KF279415	Hansen,A.W., Irons,D.L., Sargent,C.J., Fisher,J.N., Gardner,A.V.,Lunt,B.L. Merrill,B.D.,Payne,I.D.A.V.I.D., Breakwell,D.P.,Grose,J.H. and Burnett,S.H.
2013	SargentShorty9 (Mycobacteriophage)	KF279416	Sargent,C.J., Merrill,C.A., Fisher,J.N., Gardner,A.V., Lunt,B.L., Merrill,B.D., Payne,I.D., Breakwell,D.P., Grose,J.H. and Burnett,S.H.
2012	Aeneas (Mycobacteriophage)	JQ809703	Morrell,J.D., Brighton,A.K., Fisher,J.N.B., Sheflo,M.A., Adawi,E.C., Christiansen,M.R., Ferguson,N.C., Gardner,A.V., Irons,D.L., Jensen,J.D., Kennedy,A.K., Lloyd,J.S., Marlow,S.C.,Mason,S.J., McCord,T.M., Merrill,B.D., Nelson,E.P., Norton,C.S., Pettersson,S.M., Poe,D.E., Russell,R.C., Smith,T.C., Sullivan,S.,Williams,K.R., Breakwell,D.P., Grose,J.H., Burnett,S.H., Wang,X.,Crowell,R., Bostrom,M.A., Burke,M., Wright,G.M.,Gregory,S.G.,Colman,S.D., Bradley,K.W., Khaja,R., Lewis,M.F.,Barker,L.P., Asai,D.J., Bowman,C.A., Russell,D.A., Pope,W.H.,Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.
2012	Fezzik (Mycobacteriophage)	JN600672	Woodward,T.J., Daetwyler,M.E., Fisher,J.N.B., Lunt,B.L., Sheflo,M.A., Payne,D.E. II, Breakwell,D.P., Burnett,S.H. and Grose,J.H.

2012	KLucky39 (Mycobacteriophage)	JF704099	Haskell,K.J., Giri,I., Issac,T.F., Liechty,Z.S., Daetwyler,M.E.,Bull,L.A., Payne,D.E. II, Lunt,B.L., Argueta,L.B., Bajgain,P.,Benedict,A.B., Earley,B.J., Engle,J.M., Fisher,J.N., Greenhalgh,E., Hansen,A.W., Ladle,K.C., Petersen,S.K., Sabin,D.S., Sargent,C.J.,Severson,M.C., Smith,K.C., Taylor,M.A., Woodward,T.J.,Wright,B.A., Burnett,S.H., Breakwell,D.P., Zhang,X., Meincke,L.J., Goodwin,L.A., Detter,J.C., Han,S., Green,L.D., Bradley,K.W.,Khaja,R., Lewis,M.F., Barker,L.P., Jordan,T.C., Russell,D.A.,Leuba,K.D., Fritz,M.J., Bowman,C.A., Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.
2012	Nepal (Mycobacteriophage)	JQ698665	Bajgain,P., Fisher,J.N.B., Lunt,B.L., Sheflo,M.A., Brighton,A.K., Adawi,E.C., Christiansen,M.R., Ferguson,N.C., Gardner,A.V.,Irons,D.L., Jensen,J., Kennedy,A., Lloyd,J.S., Marlow,S., Mason,S.J., McCord,T.M., Merrill,B.D., Nelson,E.P., Norton,C.S.,Pettersson,S.M., Poe,D.E., Russell,R.C., Smith,T.C., Sullivan,S.,Williams,K.R., Burnett,S.H., Breakwell,D.P. and Grose,J.H.
2012	Shauna1 (Mycobacteriophage)	JN020141	Sheide,M.G., Fisher,J.N., Lunt,B.L., Smith,K.C., Taylor,M.A.,Baker,B., Barrus,E.Z., Brighton,A.K., Chapman,K.M., Drake,E.A.,Jackson,K.R., Kartchner,B.J., Kiser,C.D., Kiser,J.T., Kitchen,J.C.,McDaniel,S.W., Ormsby,W.R., Parker,M., Steck,R.P., Vance,K.S.,Breakwell,D.P., Burnett,S.H., Grose,J.H., Wang,X., Crowell,R.,Burke,M., Wright,G.M., Gregory,S.G., Colman,S.D., Bradley,K.W.,Khaja,R., Lewis,M.F., Barker,L.P., Jordan,T.C., Russell,D.A.,Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.
2012	TA17A (Mycobacteriophage)	JN400277	Lunt,B.L., Payne,D.E., Fisher,J.N.B., Smith,K.C.B., Taylor,M.R.,Baker,B., Barrus,E.Z., Brighton,A.K., Chapman,K.M., Drake,E.A.,Jackson,K.R., Kartchner,B.J., Kiser,C.D., Kiser,J.T., Kitchen,J.C.B.,Mcdaniel,S.W., Ormsby,W.R., Parker,M., Sheide,M.G., Steck,R.P.,Vance,K.S., Breakwell,D.P., Burnett,S.H. and Grose,J.H.
2011	AnnaL29 (Mycobacteriophage)	JN572060	Lunt,B.L., Sheflo,M.A., Fisher,J.N.B., Breakwell,D.P., Burnett,S.H. and Grose,J.H.
2011	JEBEKS (Mycobacteriophage)	JN572061	Earley,B.J., Engle,J.M., Smith,K.C., Lunt,B.L., Fisher,J.N.B., Payne,D.E. II, Breakwell,D.P., Burnett,S.H. and Grose,J.H.
2011	Wee (Mycobacteriophage)	NC014901	Fried-Petersen,H., Adair,T.L., Anders,K.R., Aley,S.B., Bratsch,S.A.,Clase,K.L., Coleman,J.M., Debro,L.H., Dellis,S., Fang,Y., Findeis,S.,Gibbon,B.C., Golebiewska,U.P., Grillo,W.H., Grose,J.H., Hester,A., Hollowell,G.P., Kearney,S., Kelly,J., Klyczek,K., Kuleck,G., Londono,J.A., Mogen,K., Monti,D.L., Murdock,C., Ovalle,R., Pfeif,S., Pizzorno,M.C., Poxleitner,M., Reyes,D., Rickus,J.L., Rosas- Acosta,G., Schneider,P., Stowe-Evans,E., Stukey,J., Taylor,M.A., Tollis,M., Wong,C.K., Wu,H., Zimmerman,A.M., Cresawn,S.G.,Lee,E., Shaffer,C.D., Barker,L.P., Bradley,K.W., Khaja,R.,Lewis,M.F., Jordan,T.C., Russell,D.A., Pope,W.H., Jacobs-Sera,D.,Hendrix,R.W. and Hatfull,G.F.

2012	Shauna1 (Mycobacteriophage)	JN020141	Sheide,M.G., Fisher,J.N., Lunt,B.L., Smith,K.C., Taylor,M.A.,Baker,B., Barrus,E.Z., Brighton,A.K., Chapman,K.M., Drake,E.A.,Jackson,K.R., Kartchner,B.J., Kiser,C.D., Kiser,J.T., Kitchen,J.C.,McDaniel,S.W., Ormsby,W.R., Parker,M., Steck,R.P., Vance,K.S.,Breakwell,D.P., Burnett,S.H., Grose,J.H., Wang,X., Crowell,R.,Burke,M., Wright,G.M., Gregory,S.G., Colman,S.D., Bradley,K.W.,Khaja,R., Lewis,M.F., Barker,L.P., Jordan,T.C., Russell,D.A.,Pope,W.H., Jacobs-Sera,D., Hendrix,R.W. and Hatfull,G.F.
2012	TA17A (Mycobacteriophage)	JN400277	Lunt,B.L., Payne,D.E., Fisher,J.N.B., Smith,K.C.B., Taylor,M.R.,Baker,B., Barrus,E.Z., Brighton,A.K., Chapman,K.M., Drake,E.A., Jackson,K.R., Kartchner,B.J., Kiser,C.D., Kiser,J.T., Kitchen,J.C.B.,Mcdaniel,S.W., Ormsby,W.R., Parker,M., Sheide,M., Steck,R.P.,Vance,K.S., Breakwell,D.P., Burnett,S.H. and Grose,J.H.
2011	AnnaL29 (Mycobacteriophage)	JN572060	Lunt,B.L., Sheflo,M.A., Fisher,J.N.B., Breakwell,D.P., Burnett,S.H. and Grose,J.H.
2011	JEBEKS (Mycobacteriophage)	JN572061	Earley,B.J., Engle,J.M., Smith,K.C., Lunt,B.L. Fisher,J.N.B., Payne,D.E. II, Breakwell,D.P., Burnett,S.H. and Grose,J.H.
2011	Wee (Mycobacteriophage)	NC014901	Fried-Petersen,H., Adair,T.L., Anders,K.R., Aley,S.B., Bratsch,S.A.,Clase,K.L., Coleman,J.M., Debro,L.H., Dellis,S., Fang,Y., Findeis,S.,Gibbon,B.C., Golebiewska,U.P., Grillo,W.H., Grose,J.H., Hester,A., Hollowell,G.P., Kearney,S., Kelly,J., Klyczek,K., Kuleck,G., Londono,J.A., Mogen,K., Monti,D.L., Murdock,C., Ovalle,R., Pfeif,S., Pizzorno,M.C., Poxleitner,M., Reyes,D., Rickus,J.L., Rosas- Acosta,G., Schneider,P., Stowe-Evans,E., Stukey,J., Taylor,M.A., Tollis,M., Wong,C.K., Wu,H., Zimmerman,A.M., Cresawn,S.G.,Lee,E., Shaffer,C.D., Barker,L.P., Bradley,K.W., Khaja,R., Lewis,M.F., Jordan,T.C., Russell,D.A., Pope,W.H., Jacobs-Sera,D.,Hendrix,R.W. and Hatfull,G.F.

RESEARCH PRESENTATIONS (2008- present; 194 total)

National/International (86 total, 2008-present)

Grose, JH. (2019) PAS kinase as a putative therapeutic target for the treatement of ALS. Invited seminar speaker, Johns Hopkins University Packard Center for ALS research.

Gitler, AD **and Grose, JH**. (2019) New Genome-wide Approaches to define C9ORF72 function and role in ALS. Annual Robert Packard Center for ALS Research Symposium. Baltimore, Maryland.

Newey, C. and **Grose, JH**. (2019) PAS kinase as a Potential Therapeutic Target for Treating Metabolic Disease. World Conference for Undergraduate Research. Germany

Carr, E., Breakwell, DP and **Grose, JH.** Isolating Mycobacteriophages from Raw Sewage for Greater Clinical Significance. (2019) 12th Annual SEA-Phages Symposium, Ashburn, Virginia.

Grose JH. (2019) Microbial Biotechnology in the Face of Industrial Revolution 4.0. International Conference on Green Agroindustry and Bioeconomy. Malang, Indonesia

Grose JH. (2019) Phighting Fireblight with Phage. Balijestro Research Institute for Citrus and Subtropical Fruites. East Java, Indonesia

Grose JH. (2019) Current Virology. Three in one Program Keynote. Brawijaya University, Malang, Indonesia

Grose JH. (2019) Manipulating the Microbiome in Veterinary Care. Brawijaya University Veterinary School, Malang, Indonesia.

Grose JH. (2019) Phighting Fireblight with Phage. Satya Wacana Chrisian University. Jojakarta, Indonesia

Thompson , D, **Grose JH**. (2019) The toolkit utlized by bacteriophages to infect and lyse bacteria. Second International Symposium on Fire Blight in Roseaceous Plants. Travese City, MN

Grose , JH. (2019) Fire Quencher: a Microbiome Replacement Therapy for Apple Trees. Second International Symposium on Fire Blight in Roseaceous Plants. Travese City, MN

Grose, JH. (2018) Uncovering a protein kinase signaling pathway for PASsing glucose. IMYA 13th International Meeting on Yeast Aging and Apoptosis, Leuven, Belgium.

Duncan S, Hurst E, Berg J, Ward A, Hilton J, Breakwell D, **Grose JH**, Hope S. (2018) Paenibacillus Larvae Phages Contain Regions of Conserved Synteny Despite Large Genomic Differences. Poster presentation. 11th Annual SEA-Phages Symposium, Ashburn, Virginia.

Pielstick BC, Arens D, Pape J and Grose JH. (2018) The Effects of PAS kinase and Cbf1 on Cellular Respiration. The Beckman Foundation Annual Symposium. San Francisco, California.

Grose, JH. (2018) Phighting Phire Blight with Phage. 9th annual International Pest Management (IPM) Symposium. Baltimore, Maryland.

Potts, E, Thurgood, T, Thompson, D, Breakwell, DP and **Grose JH**. (2018) Searching for Jumbo Bacteriophages that Infect Mycobacterium. 10th Annual SEA-Phages Symposium, Ashburn, VA

Grose, JH. (2018) Exploring a protein kinases of ATAXIN-2 as a potential therapeutic target. John's Hopkins University Packard Center Investigator's Meeting

Gitler, AD and **Grose, JH**. (2018) Identifying kinase regulators of Ataxin-2. 18th Annual Robert Packard Center for ALS Research Symposium. Baltimore, Maryland.

Grose, JH. (2018) The role of PAS kinase inPASsing Glucose. 2018 Analytical Genetics Meeting, San Diego, CA

Arens, D, and **Grose JH**. (2018) Ecological niche plays major role in determining host specificity of two novel jumbo *Erwinia* myoviruses. 2018 Analytical Genetics Meeting, San Diego, CA.

Thompson, D. and **Grose JH.** (2018) Fighting FireBlight with Phages. 2018 Analytical Genetics Meeting, San Diego, CA.

Pape, J. and **Grose JH.** (2018) PAS kinase and Cbf1/USF1 alter cellular respiration through ATP synthase. 2018 Analytical Genetics Meeting, San Diego, CA.

Colby, B. and **Grose JH.** (2018) Novel regulators of Cellular Respiration Revealed through a suppressor screen. 2018 Analytical Genetics Meeting, San Diego, CA.

Ong, K and **Grose JH.** (2018) Understanding AMPK-oxysterol binding protein signaling in controlling cell death and mitochondrial function using Saccharomyces cerevisiae model. Analytical Genetics Meeting, San Diego, CA.

Grose, JH. (2018) The role of PAS kinase in PASsing Respiration. Rowan University Departmental Seminar Series, Glassboro, New Jersey.

Grose, JH. (2017) Phighting FireBlight with Phage. Western Region IR-4 Biopesticides Meeting. Denver, Colorado.

Colby, BA, Ballard, TP, Fajardo, CP, Kruger, J, Duncan, S, Webb, CJ, Sharma, R, Breakwell, DP, Hope, S, and **Grose JH**. (2017) The Bee's and the Tree's: Phage Hunting at BYU 2016-2017. 9th Annual SEA-Phages Symposium, Ashburn, VA

Duncan, S., Farjardo, C, and **Grose JH**. (2017) Weekly Exercises Aimed at Improved Understanding of Key Concepts for the Phage Hunters Classroom. 9th Annual SEA-Phages Symposium, Ashburn, VA

Azadani, DN, Pray, R, Ramirez, J, **Grose, JH** and Hatherill, JR. (2017) Slowing Antibiotic Resistance with EnteroSword. NSF Community College Innovation Challenge Boot Camp, Arington, VA.

Grose, JH. (2017) PAS kinase: PASsing Glucose and Cell Death. 12th International meeting on Yeast Apoptosis. Bari, Italy.

Grose, JH. (2017) Phighting Fire Blight with Phage. Western region IR-4 meeting. Denver, Colorado.

Ong, KL, Rees, A, Franson,J, White, Joe, Hilton, A Choksi, N, Pattison, J, Nickle, T, Laub,S, Harris, M, Dallon, B, Bikman, B, Bridgewater,L,**Grose JH**. (2017) PAS kinase deficient mice display increased rates of cellular respiration. Keystone Mitochondria Communication, Taos, New Mexico.

Pattison, J, DeMille, D, Bikman, B, and **Grose JH**. **(**2017). The Role of PAS kinase in Cellular Respiration. Keystone Mitochondria Communication, Taos, New Mexico.

Grose, JH. (2016) PAS kinase:: A key to PASsing respiration. LDS Lifescience Research Symposium. Lehi, Utah,

Franson,J, White, Joe, Ong, KL, Choksi, N, Hilton, A, Rees, A, Resolme, J., Zhao, J, Sevey, R., Olsen, KB, **Grose JH,** Bridgewater,L.(2016) Effect of Diet, Genes, and Microbiota on Glucose Tolerance in a Mouse Model with a Genetically Increased Metabolic Rate. LDS Lifescience Research Symposium. Lehi, Utah,

Pattison, J, DeMille, D, Bikman, B, and **Grose JH**. **(**2016) The Role of PAS kinase in Cellular Respiration. LDS Lifescience Research Symposium. Lehi, Utah.

Zhao, J., Grossarth, S., Bridgewater, L, **Grose JH.** (2016) Phage hunting through the human gut. (2016) Phage Phield Day, Provo, Utah.

Esplin, I, Grose, JH. Fighting Fire with Phages. (2016) Phage Phield Day, Provo, Utah. Allen, R, Bybee, RN, Furhiman, DA, Ririe, DB, Thomson, SE, Usher, BK. Breakwell, DP,

Grose, JH, Hope, S. Genome Analysis of Lycanus and DevRi. (2016) Phage Phield Day, Provo, Utah.

Sharma, R, Putnam, R, Grose, JH. Genomic characterization and comparison of five different families of bacteriophages infecting Erwinia amylovora. (2016) Phage Phield Day, Provo, Utah.

Kruger, J, Tatlow, PJ, Grose, JH. Isolation and Characterization of Deimos-Minion, the Largest Erwinia amylovora Bacteriophage. (2016) Phage Pheild Day, Provo, Utah.

Harris, N, Hurst, E, James, B, Pollock, S, Smith, H, Webb, CJ, Breakwell, DP, Grose, JH, Hope, S. (2016) Phage Honeybear and Related Phage Toothless. Phage Phield Day, Provo, Utah

Bloomfield, T., Buhler, B, Duncan, S., Knabe, B, Stephensen, M, Wells, M, Wright, C, Breakwell, DP, Hope, S, **Grose, JH**. (2016) Genomic Analysis and Characterization of PBL1C: The First Discovered *Paenibacillus Larvae* Phage. Phage Phield Day, Provo, Utah.

Duncan S, Hurst E, Berg J, Ward A, Hilton J, Breakwell D, **Grose JH**, Hope S. (2016) Paenibacillus Larvae Phages Contain Regions of Conserved Synteny Despite Large Genomic Differences. Poster presentation. 8th Annual SEA-Phages Symposium, Ashburn, Virginia.

Harris N, Hurst E, James B, Pollock SV, Smith H, Webb CJ, Berg J, Fajardo C, Hilton J, Ward A, Breakwell D, **Grose JH**, Hope S. (2016) Genomic Characterization of Honeybear and Related Phage Toothless. ASM Intermountain Branch Meeting, University of Utah, Salt Lake City, UT.

Hancock, J, Cook, M, **Grose, JH**, Bridgewater, L, Weber, KS. (2016) Role of PAS kinase and metabolism on immune cells. Autumn Immunology Conference 44th Annual Meeting. Chicago, Illinois.

Grose, JH, Buckley, A., and Casjens, S. (2016) Understanding the enormous diversity of tailed bacteriophages: Investigating the Relationships of Bacteriophages within a Class Reveals Obvious Borders Between Bacterial Orders. Analytical Genetics Meeting, Rotorua, New Zealand

DeMille D., Pattison, J and **Grose, JH**. (2016) The Role of PAS kinase in Cellular Respiration. Analytical Genetics Meeting, Rotorua, New Zealand

DeMille D., Bikman B, and **Grose JH (**2015) The role of PAS kinase in controlling cellular respiration. Cell Symposia: Multifacited Mitochondria, Chicago, Illinois

Hancock, J., Cook, M., **Grose, J**H., Bridgewater, L. (2015) Role of PAS kinase and metabolism on immune cells. Autumn Immunology Conference Chicago, Illinois.

Mathews, M and **Grose JH (2015)** FireQuencher: A phage-based therapy for fire blight. IR-r Biopesticide Workshop, Atlanta, Georgia.

Grose JH. (2015) Fire Quencher: A Phage-based Treatment for Fire Blight. Podium presentation. IR-4/USDA Biopesticides Workshop. Atlanta, GA.

Grose, JH and Casjens, S. Investigating the Relationships of Bacteriophages with a Class Reveals Obvious Boarders Between Bacterial Orders. (2015) 7th Annual HHMI SEA-PHAGES Symposium, Janelia Farms, Virginia.

Wienclaw TM, Taylor AS, Bairett SR, Ashcroft CR, Merrill BD, Schoenhals JE, Esplin ID, Breakwell DP, **Grose JH**, and Burnett SH (2014) Phage Jenst provides a unique genome with gene products new to *Paenibacillus larvae* phages. 6th Annual HHMI SEA-Phages Symposium, Ashburn, VA.

Grose JH. (2014) PASsing glucose: Balancing the Cellular Budget. Oral Presentation. Center for Microbia Sciences, SDSU, CA

Jensen, JL, Berg, JA, Esplin, ID, Foy, BM, Grossarth, SE, Harbaugh, K, Ingersoll, K, Kruger, JL, Peck, MD, Ransom, EK, Smith, HG, Stratton, JL, Breakwell, DP, Burnett, SH, and **Grose JH**. (2013) Isolation and Characterization of Eleven Phages that Infect *Erwinia amylovora.* Oral presentation. 6th Annual HHMI SEA-PHAGES Symposium, Janelia Farms, Virginia. Honorable mention

Merrill BD, Sheflo MA, Ayer PA, Beckstead AP, Fajardo CP, Ferguson NC, Fisher JNB, Gardner AV, Graves KA, Hartmann KA, Kennedy AK, Liu JE, Lunt BL, Merrill CA, Russell RC, Wake BN, WilliamsKR, Zimmerman LJ, **Grose JH**, Breakwell DP, Burnett SH. (2013) Discovery and Characterization of Novel Paenibacillus larvae Bacteriophages. 5th Annual SEA-Phages Symposium, Ashburn, VA.

Ferguson, NC, Irons, DL, Marlow, SC, McCord, TM, Herring JA, Deus LM, Manci AM, Meadows HN, Heiner ME, Willyerd HJ, Gardner AV, Fisher JNB, SmithK, **Grose JH**, Breakwell DP, Burnett SH (2013) Phage cluster and subcluster identification using Tape Measure Protein primers in a PCR reaction. 5th Annual SEA-Phages Symposium, Ashburn, VA.

Jensen, JD, (2013), J.N.B. Fisher, **J.H. Grose**, S.H. Burnett, and D.P. Breakwell. Isolation and Characterization of Three Novel Bacteriophages of Bacillus cereus. American Society for Microbiology General Meeting, Denver, CO.

Badal, B, DeMille, D, Mackay, J**, Grose JH.** Interplay between the yeast nutrient sensing kinases Snf1, TORC1 and PAS kinase. (2013) Poster presentation. Analytical Genetic Meeting. Hayes, W, Langston, KT, Neubert, J, Benjamin, IJ, and Grose, JH. Characterizing the Role of HSPB2 and CRYAB in Cardiac Metabolism and Muscle Structure. Poster presentation.Analytical Genetics Meeting Alta, UT.

DeMille, D, and Grose JH. (2013) A Comprehensive Interactome for Yeast PAS Kinase Reveals Direct Regulation of Respiration Through the Phosphorylation of Cbf1. Podium presentation. Analytical Genetics Meeting, Alta, UT.

Mackay, J, DeMille, D, and Grose JH. (2013) Uncovering Regulation and Function of the Yeast NAD Kinase Utr1. Poster presentation. Analytical Genetics Meeting, Alta, Utah

Brown, A, Christopher, A, Harrison, C, Kiser, K, Lasko, D, Li, X, Merrill, B, Peck, K, Perry, LJ, Sabin, N, Schellhous, M, Smith, K, Koooyman, D,Price, P, and **Grose JH.** (2013) Phage Pharming. Podium and poster presentations. iGEM Worldchampionship Jamboree, MIT.

Brown, A, Christopher, A, Harrison, C, Kiser, K, Lasko, D, Li, X, Merrill, B, Peck, K, Perry, LJ, Sabin, N, Schellhous, M, Smith, K, Koooyman, D, and **Grose JH. (**2013) Phage Pharming. Podium and poster presentations. iGEM Regional Jamboree, Toronto, Canada. ***Gold Medal Awarded and Invitation to the iGEM Word Champsionship Jamboree***

Anderson, J, Buckley, A, Cabeza Pezoa, Y, Emery, H, Fullwood, R, Hecht, K, Jackson, K, Jones, E, Mackay, J, Meek, J, Nordgren, K, Rees, J, Ritchie, D, Shumway, J, Yates, J, Kooyman, D, and **Grose, JH**. (2012) E. colin: A Two-circuit System for Colin Cancer Detection. Podium and poster presentations. iGEM Regional Jamboree, Standford, CA.

DeMille, D, Mackay, J, Sowa, S, Hall, T, Lawrence, E, and **Grose, JH**. (2012) The Role of Yeast PAS kinase in Passing Glucose. Poster presentation. Yeast Molecular Biology and Genetics Meeting, Princeton University, NJ.

Chetty, V, D, Abedayo, Mathis, A, DeMille, D, Morley, S, Anthonymuthu, T, Yuan, Y, Goncalves, J**, Grose, JH**, Prince, Guy-Bart, S, and Warnick, S. (2012) In-Silico Robust Reconstruction of the Per-Arnt-Sim Kinase Pathway Using Dynamical Structure Functions. Poster presentation. Foundations of Systems Biology and Engineering FOSBE), Keio University, Japan.

Mathis, A, Morley, S, Southwick, T, DeMille, D, Abedayo, J, Warnick, S, **Grose JH**, and Prince, J. (2012) Definitive Network Reconstruction of the Yeast PAS Kinase Network via Mass Spectrometry Proteomics and Phosphoproteomics. Poster presentation. US HUPO: The Future of Proteomics, NM.

Gardner,AV, Adawi, EC, Christiansen, MR, Ferguson, NC, Irons, DL, Jensen, J, Kennedy, A, Lloyd, JS, Marlow, S, Mason, S, McCord, TM, Merrill, BD, Nelson, EP, Norton, CS, Pettersson, SM, Poe, DE, , RC, Smith, TC, Sullivan, S, Williams, KR, Morrell, JD, Brighton, AK, Fisher, JNB, Sheflo, MA, Breakwell, DP, Burnett, SH, **Grose, JH.** (2012) Proposal for A1 Subcluster Division and Evidence of Evolutionary Events in B1 and B4 Subcluster Phage. Poster presentation. Howard Hughes Medical Institute 4th Annual Phage Symposium, Ashburn, VA.

Rice, J, Neubert, J, Langson, K, Nelson, F, Wood, J, and **Grose, JH**. (2012) Characterizing the Role of HspB2 in Cardiac Mitochondrial Function. Poster presentation. National Conference for Undergraduate Research (NCUR), Weber State University, UT.

Price, K, Chapman, K, Cutler, C, Hoops, W, Lee, S, Louis, K , Nguyen J, and **Grose, JH**. (2012) Molecular Mechanisms of R120G CryAB-induced Cardiomyopathy. Poster presentation. National Conference for Undergraduate Research (NCUR), Weber State University, UT.

Mackay, J, DeMille, D, Gessel A, Lawrence, E, Hall, T, and **Grose, JH.** (2012) A Yeast Two-hybrid Screen Reveals Novel Roles for Yeast PAS kinase. Poster presentation. National Conference for Undergraduate Research (NCUR), Weber State University, UT.

Findlay, R, Teng, J, Bevard, K, Thornock, S, and **Grose, JH** (2012) The Regulation of PAS Kinase, a Key Sensory Kinase Required for Glucose Homeostasis. Poster presentation. National Conference for Undergraduate Research (NCUR), Weber State University, UT.

Brighton, AK, Joshua N. B. Fisher, JNB, Lunt, BL, Taylor, MA, Smith, KC, Baker, B, Barrus, EZ, Chapman, KM, Drake, EA, Jackson, KR, Kartchner, BJ, Kiser, CD, Kiser, JT, Kitchen, JCB, McDaniel, SW, Ormsby, WR, Parker, M, Sheide, MG, Steck, RP, Vance, KS, Breakwell, DP, Burnett, SH, and **Grose, JH.** (2011) Additional Evidence for Frameshifts in A2 and Gene Mosaicism in F Mycobacteriophage. Poster presentation. Howard Hughes Medical Institute Third Annual Phage Symposium, Ashburn, VA.

Grose, JH, Breakwell, DP, and Burnett, SH. (2011) Out of the SEA: Getting Students to Crawl on Land. Poster presentation. Howard Hughes Medical Institute Third Annual Phage Symposium, Ashburn, VA.

Grose, JH. (2011) The Role of PAS Kinase in PASsing Cellular Glucose. Podium presentation Analytical Genetic Meeting, Carmona, Spain.

DeMille, D, Mackay, J, Gessel, A, Lawrence, E, Hall, T, and **Grose J.H**. (2011) The Role of Yeast PAS kinase in Metabolic Regulation. Poster presentation. Analytical Genetic Meeting, Carmona, Spain.

Biggs, M, Roberts, JA, Sabin, D, Sabin, M, Merrill, M, Allley, A, Chamberlain, C, Adebayo, J, Kooyman, DL, and **Grose, JH**. (2011) E. colonoscopy. Podium and poster presentation. iGEM Worldchampsionship Jamboree, MIT, Boston, MA.

Biggs, M. Roberts, JA, Sabin, D, Sabin, M, Merrill, Alley, A, Chamberlain, C, Adebayo, J, Kooyman, DL, and **Grose, JH**. (2011) E. colonoscopy. Podium and poster presentation. IGEM Regional Jamboree, Indianapolis, MN. ***Gold Medal Awarded and Invitation to the iGEM Word Champsionship Jamboree***

Swenson, C, Breakwell DP and **Grose, JH.** (2010) Mendelian Segregation of Alleles in *Saccaharomyces cerevisiae*. Poster presentation. ASMCUE, UC San Diego.

Grose, JH. (2009) PASsing Glucose- the Role of PAS Kinase in Regulating Cellular Glucose Metabolism. Podium presentation. Analytical Genetic Meeting, Asilomar, CA.

Breakwell, DP, and **Grose, JH.** (2009) The NAD Cycle: Exercises for Teaching Biosynthetic Pathways. Podium presentation. ASMCUE, Colorado State University, CO.

Grose, JH, and Breakwell, DP. (2009) A Modified Ames Test to Teach Mutations and Mutagens. Podium presentation. ASMCUE, Fort Collins, Colorado State University, CO.

DeMille, D., Bikman, B., and **Grose, JH**. (2015) The role of PAS kinase in controlling cellular respiration. Multifaceted Mitochondria Meeting, Chicago Illinois.

Grose JH (2015) PAS kinase: PASsing glucose**.** Invited Departmental Seminar. Washington University, Illinois.

Grose JH (2015) Investigating the Relationships of Bacteriophages with a Class Reveals Obvious Boarders Between Bacterial Orders, 8th Annual SEA-Phages Symposium. HHMI Janelia Farms, Virginia

Regional/Local (2008- present, 108 total)

Arens, D. and **Grose JH.** (2019) Characterizing novel pathways at the pivotal point for controlling the balance between respiration and lipid biosynthesis in yeast. Intermountain Branch American Society for Microbiology (ASM) Meeting. Brigham Young University, Provo

Newey, C., Pape, J. and **Grose, JH.** (2019) PAS kinase as a Potential Therapeutic Target for Metabolic Diseases. Intermountain Branch American Society for Microbiology (ASM) Meeting. Brigham Young University, Provo

Arens, D. and **Grose, JH.** (2018) Characterizing novel pathways at the pivotal point for controlling the balance between respiration and triglyceride biosynthesis in yeast. TriBranch ASM meeting, Durango, Colorado.

Pape, J. and **Grose JH.** (2018) PAS kinase and Cbf1/USF1alter cellular respiration through ATP synthase. TriBranch ASM meeting, Durango, Colorado.

Roark, B. Choksi, N., and **Grose JH.** (2018) Using Yeast to Uncover a Critical Pathway Involved in Neurodegenerative Disease. TriBranch ASM meeting, Durango, Colorado.

Pielstick, P., Arens, D., Pape, J. and **Grose JH**. (2018) Novel Regulators of Cellular Respiration Revealed Through a Suppressor Screen. TriBranch ASM meeting, Durango, Colorado.

Thurgood, T., **Grose JH**. (2018) Regulation of cellular apoptotic pathway through phosphorylation of apoptosis-related protein BI-1 by metabolic protein Per-Arnt-Sim Kinase (PASK)

Fajardo C Meredith S, Roll C, Griffitts JS, Hope S, **Grose JH**, and Breakwell DP. (2018) Proof of Concept: Determining Phage Adsorption Using Flow Cytometry. TriBranch ASM meeting, Durango, Colorado.

Whitlock, T, Greene, N, Creaser, I, Knowles, A, Dalton Karlinsey, D, Nelson, N, Barton, K, Bateman, J, Quist, N, Hendrickson, J, Ellis, K, Chamberlain, N, Jenkins, J, Fajardo, C, Fuhriman, DA, Griffitts JS, Hope S, **Grose JH**, and Breakwell DP. (2018) The genomes of CW76, a unique phage, and XTREME, a T4-like phage infecting Sinorhizobium meliloti. TriBranch ASM meeting, Durango, Colorado.

Jenkins, J, Whitlock, T, Greene, N, Creaser, I, Knowles, A, Dalton Karlinsey, D, Nelson, N, Barton, K, Bateman, J, Quist, N, Hendrickson, J, Ellis, K, Chamberlain, N, Fajardo, C, Fuhriman, DA, Griffitts JS, Hope S, **Grose JH**, and Breakwell DP Breakwell. (2018) Host Range and Receptor Binding of 13 Newly-Isolated Phages Infecting Sinorhizobium meliloti. TriBranch ASM meeting, Durango, Colorado.

Birch, EK, Brantley, SB, Eberhard, BD, Fairholm, JD, Flindt, K, Foster, KW, Himes, SR, Ruesch, S, Uricoechea Urrea, LV, Thurgood, T, Breakwell, DP, Hope, S and **Grose JH**. (2018) Novel Application of Common Genetic Screening Technique Used to Characterize Phage Proteins and Assign Putative Functions. TriBranch ASM meeting, Durango, Colorado.

Doney, J, Hadden, R, Holmstead, J, Eardley, R, Hansen, E, **Grose JH**. (2018) Developing a phage therapy for Anthrax. TriBranch ASM meeting, Durango, Colorado.

Anderson, K, Barker, A, Carroll, M, Hogan, T, Nieman, T, Parsons, M, Simister, A, Steffensen, A, Todd, J, Breakwell, DP, Hope, S and **Grose JH**. (2018) Screening for antibiotic-resistance genes in a sewage phage population. TriBranch ASM meeting, Durango, Colorado.

Melhado, E, Chow, J, Wiley, M, Sarabia, R, Standing, S, Breakwell, DP, Hope, S and **Grose JH**. Isolation and Characterization of Sewage Phages. TriBranch ASM meeting, Durango, Colorado.

Hyer, MG, Call, JJ, Dawson, DD, Chronis, JD, Ayala, MA, Finnegan, Z, Fox, A, Hielscher, T. Yeates, EL, Breakwell, DP, Hope, S and **Grose JH**. (2018) Identification of promiscuous sewage phage. TriBranch ASM meeting, Durango, Colorado.

Potts, E, Sirrine, M. Meeks, T, Rodriguez, W, Wilkey, A, Tovar,K, Porter,M, Lambert, A, Yeates, E, Breakwell, DP, Hope, S and **Grose JH**. (2018) A phage-based strategy for safe and effective treatment of antibiotic-resistant bacteria. TriBranch ASM meeting, Durango, Colorado.

Yeates, E, Nieman, T, Sharma, R, and **Grose JH**. (2018) A comparison of three families of bacteriophages that infect Erwinia amylovora. TriBranch ASM meeting, Durango, Colorado.

Grose, JH. (2017) PASsing respiration: the role of PAS kinase in inhibiting respiration and the consequences in diabetes. Utah Valley University, Utah

Grose, JH. (2017) Phighting Phireblight with Phage. Intermountain Branch ASM meeting, Weber State University.

Cardinal, J, Gille,J, Fe, K, Salazar, EG, Sharma, R, Breakwell, D, Hope, S, and **Grose, JH**. (2017) Discovery of Likely Transcriptional Regulons and Hypothesized Protein Function in Phage RAY of the Deimos-Minion Family through Motif Analysis. Intermountain Branch ASM meeting, Weber State University.

Freestone, C, Hughes, J, Loertscher,E, Sharma, R, Duncan, S, Breakwell, D, Hope, S, and

Grose, JH. (2017) Genome Comparison of Five Erwinia amylovora Bacteriophages. Intermountain Branch ASM meeting, Weber State University.

McColley, A, Leavitt, P, Fajardo, C, Kruger,J, Webb, CJ, and **Grose, JH**. (2017) A Host Range Analysis of the Yoloswag Bacteriophage Family. Intermountain Branch ASM meeting, Weber State University.

Judge, L, Harley, K, Sharma, R, Duncan,S, Breakwell, D, and Hope, S, and **Grose, JH**. (2017) Comparative Genomics of Four *Erwinia* Bacteriophages and N4, a Pathogenic Driving Force in *E. coli.* Intermountain Branch ASM meeting, Weber State University.

Colby, B, Stubbs,O, Bell, K, Radar, K, Sharma, R, Duncan, S, Breakwell, D, Hope, S, and **Grose, JH**. (2017) Analysis of Interesting Proteins in Deimos-Minion Bacteriophage Family. Intermountain Branch ASM meeting, Weber State University.

Cheuk Wing Denise Ng, Jonny Malmrose, Kai Li Ong, and **Grose, JH**. (2017) Understanding the Functions of Oxysterol Binding Protein using Yeast Model. Intermountain Branch ASM meeting, Weber State University.

Walton, D, Judd, J, Jensen, H, Fajardo, C, Kruger, J, Webb, CJ, and **Grose, JH**. (2017) The Host Range of Bacteriophage Phamilies "Cobes" and "Kyle". Intermountain Branch ASM meeting, Weber State University.

Kruger, J, Esplin, I, Hurst,E, , Knabe,B, Pollock,S, Severe,J, Webb, CJ and **Grose, JH**. (2017) Quenching Fireblight: A Search for Stable Phage Therapy. Intermountain Branch ASM meeting, Weber State University.

Ward, C, Walker, J, Johnson, L, Fajardo,C, Kruger, J, Webb, CJ and **Grose, JH**. (2017) Frozen Phage Family Not as Specific as We Once Thought: A Host Range Study. Intermountain Branch ASM meeting, Weber State University.

Luke, L Bodhaine, C, Sharma, R, Duncan, S, Breakwell, D, Hope, S, and **Grose, JH**. (2017) Interesting Proteins within Phages Found within the "Frozen" Phage Family. Intermountain Branch ASM meeting, Weber State University.

Hansen, E, Eardley, R, Melville, M, Kruger, J, Webb, CJ, Fajardo, C, and **Grose, JH**. (2017) Host Range of the Rising Sun Phage Family. Intermountain Branch ASM meeting, Weber State University.

Ballard, T, Withers, J, Duncan, S, Breakwell, D, Hope, S, and **Grose, JH**. (2017) Dots, Dots, Lines: A Dot Plot Comparison of the *Erwinia* Phage Frozen. Intermountain Branch ASM meeting, Weber State University.

Nieman, T, Yeates, E, Hovenden, T, Sharma, R, Duncan, S, and **Grose, JH**. (2017) Phinding Phamily for Phage Deimos-Minion: A Phylogenetics Study. Intermountain Branch ASM meeting, Weber State University.

Choi, M, Ferguson, H, and **Grose, JH**. (2017) The Natural Bacterial Flora of a Healthy Apple Tree. Intermountain Branch ASM meeting, Weber State University.

Ong, KL, Christensen, M, Ng, CW, Malmrose, J, Badal, B, and **Grose, JH**. (2017) Understanding AMPK-Oxysterol Binding Protein Signaling in Controlling Cell Death and Mitochondrial Function using *Saccharomyces cerevisiae* Model. Intermountain Branch ASM meeting, Weber State University.

Roundy, S, Scott,M, Jiminez, J, Workman, A, and **Grose, JH**. (2017) PAS Kinase and its Effects in Cellular Respiration. Intermountain Branch ASM meeting, Weber State University.

Sharma, R, and **Grose, JH**. (2017) Deimos-Minion: A Phage So Big it is Hard To See. Intermountain Branch ASM meeting, Weber State University.

Arens, D, Pattison,J, DeMille, D, and **Grose, JH**. (2017) Using Yeast to Understand the Regulation of Cellular Respiration by PAS Kinase Dependent Pathways. Intermountain Branch ASM meeting, Weber State University.

Pattison, J, DeMille, D, Bikman, B, and **Grose JH**. **(**2016) The Role of PAS kinase in Cellular Respiration. Utah Conference for Undergraduate Research. University of Utah**.**

Kruger, J, Tatlow, PJ, **Grose, JH**. Isolation and Characterization of Deimos-Minion, the Largest *Erwinia amylovora* Bacteriophage. (2016) Utah Conference for Undergraduate Research, Salt Lake City, Utah.

White, Joe, Franson,J, Rees, A, Hilton, A., Ong, KL, Choksi, N, Resolme, J., Zhao, J, **Grose JH**, Bridgewater,L.(2016) Effect of Diet, Genes, and Microbiota on Glucose Tolerance in a Mouse Model with a Genetically Increased Metabolic Rate. LDS Lifescience Research Symposium. Lehi, Utah.

DeMille, D, Bikman, B, and **Grose JH**. **(**2015). The Role of Yeast PAS Kinase in Controlling Cellular Respiration through Cbf1. Tri-branch ASM meeting, Fort Collins, Colorado State University, CO.

Pattison, J, DeMille, D., Bikman, B, and **Grose, JH**. The transcription factor centromere binding factor 1 (Cbf1) as a central point of control to upregulate mitochondrial activity and decrease lipid biogenesis in the yeast Saccharomyces cerevisiae. (2015) Tri-branch ASM meeting, Fort Collins, Colorado State University, CO.

Sharma, R, and **Grose JH**. **(**2015). Understanding the Relationship between Bacteriophages of the Enterobacteriaceae and Pseudomonaceae Family. Tri-branch ASM meeting,

Fort Collins, Colorado State University, CO.

Barnett, D., and **Grose JH** (2015) The Role of Yeast PAS Kinase in NAD Homeostasis. Tri-branch ASM meeting, Fort Collins, Colorado State University, CO.

Berg, J., and **Grose JH**. **(**2015). Characterization and Analysis of Six Novel Erwinia Phages Reveals Relationship to Enterobacteriaceae Family Members. Tri-branch ASM meeting, Fort Collins, Colorado State University, CO.

Esplin, I, and **Grose JH**. **(**2015). Oral presentation. Tri-branch ASM meeting, Fort Collins, Colorado State University, CO.

Simister, A, Thurgood, T, Heaton, K, Berg, J, Merrill, B, Burnett, SD, Breakwell, DP, and **Grose JH. (**2015) The Mosaic Nature and Evolution of Three *Brevibacillus* Phages and Their Impact on *Brevibacillus laterosporus* and Other Bacteria. Tri-branch ASM meeting. Poster presentation, Fort Collins, Colorado State University, CO.

McBride, M, Evans, MR, Brundage, BM, Berg, J, Merrill, B, Burnett, SD, Breakwell, DP, and **Grose JH. ((**2015) Comparing Protein Structures of a Transcriptional Regulator Repeated in *Brevibacillus* Phages. Poster presentation. Tri-branch ASM meeting, Fort Collins, Colorado State University, CO. ***Third place best poster presentation***

Hilton, JA, Schouten, JT, Berg, J, Merrill, B, Burnett, SD, Breakwell, DP, and **Grose JG. (**2015) Discovery of Two Novel Phage Clusters in *Brevibacillus laterosporus* Using Comparative Genomics. Poster presentation. Tri-branch ASM meeting, Fort Collins, Colorado State University, CO.

Ferguson, H, Krugar, J, Burnett, SD, Breakwell, DP, and **Grose JG. (**2015) Poster presentation. Tri-branch ASM meeting, Fort Collins, Colorado State University, CO.

Rees, A, White, J, Ong, KL, Hilton, A, Choksi, Nidhi, Franson, J, Bridgewater, LB, and **Grose, JH. (**2015). The role of PAS kinase and the Gut Microbiome on Metabolism and Obesity Onset in Mice. Poster presentation. Tri-branch ASM meeting, Fort Collins, Colorado State University, CO.

Grose JH, (2014) PAS kinase: Balancing the Cellular Budget. Oral presentation. BYU Cancer Research Center Summer Symposium, Provo, UT.

Crockett, JT, Esplin, KP, Hyde, JR, Berg, J, Merrill, B, Burnett, SD, Breakwell, DP, and **Grose JH. (**2015) *Brevibacillus* Bacteriophages Xane and Jenst Reveal a DNA Motif Indicating a Gene Regulatory Sequence. Poster presentation. Tri-branch ASM meeting., Fort Collins, Colorado State University, CO.

DeMille, DM and **Grose JH**. (2014) PAS Kinase: A Key Regulator of Respiration and Lipid Biosynthesis. Podium presentation. MMBIO graduate retreat, BYU, Provo, UT. ***Best oral presentation***

Anderson, J. and **Grose JH**. (2014) Interplay Between the Yeast Nutrient Sensing Kinases TORC1, Snf1, and PAS kinase. Podium presentation. MMBIO graduate retreat, BYU, Provo, UT.

Hayes, W. and **Grose JH**. (2014) A CryAB Interactome Reveals Client Specificity and Dysfunction of Mutants Associated with Human Disease. Podium presentation. MMBIO graduate retreat, BYU, Provo, UT.

Barnett, D and **Grose JH**. (2014) Regulation of UTR1 by PAS kinase and the Effects on Cell Growth and Proliferation. Podium presentation BYU Cancer Research Center Retreat, BYU, Provo, UT.

Hayes, W. and **Grose JH**. (2014) Characterization of Disease-associated HSPB2 and CRYAB Variants Reveals Chaperone Dysfunction. Podium presentation. BYU Cancer Research Center Retreat, BYU, Provo, UT.

Anderson, J. and **Grose JH**. (2014) Interplay Between the Yeast Nutrient Sensing Kinases TORC1, AMPK, and PAS kinase. Podium presentation. BYU Cancer Research Center Retreat, BYU, Provo, UT.

Jarvis, T, Esplin, I, and **Grose JH**. (2014) Isolation and Characterization of 11 *Erwina amyovora* Phages. Oral presentation. ASM Intermountain Branch Meeting, BYU, Provo, UT. ***Best oral presentation***

Anderson, J, and **Grose JH**. (2014) Interplay Between the Yeast Sensory Kinases TOR, Snf1 and PAS Kinase. Podium presentation. ASM Intermountain Branch Meeting, BYU, Provo, UT.

Barnett, DM, Pattison, JA, DeMille, D, Mackay, JT, Mathis, AD, Hall, TD, Sowa, SW, Prince, JT, and **Grose JH**. (2014) Large-scale Screening Uncovers PAS Kinase Interactome. Poster presentation. ASM Intermountain Branch Meeting, BYU, Provo, UT. ***Runner up best poster presentation***

Hayes, WH, Langston, K, and **Grose, JH**. (2014) Characterization of Disease-associated HspB2 and CryAB Variants Reveals Chaperone Dysfunction. Poster presentation. ASM Intermountain Branch Meeting, BYU, Provo, UT.

Harris, KE, Crist, AC, and **Grose JH**. (2014) Identifying Unique Roles of PAS Kinase. Poster presentation. ASM Intermountain Branch Meeting, BYU, Provo, UT.

Taylor, AS, Bairett, SR, Wienclaw, TM, Ashcroft, CR, Esplin, ID, Schoenhals, JE, Merrill,

BD, Breakwell, DP, **Grose, JH,** and Burnett SH. (2014) Isolation and Characterization of *Paenibacillus larvae* Bacteriophage Jenst. Poster presentation. ASM Intermountain Branch Meeting, BYU, Provo, UT.

Ransom, E, Berg, J, Grossarth, S, Smith, H, Anieves, D, Esplin, ID, Merrill, BD, Schoenhals, JE, Breakwell, DP, Burnett, SH, and **Grose JH**. (2014) Comparative Genome Analysis of Seven Novel *Erwinia* Phages Reveals Orthologous Proteins and Allows for Formation of a Cluster with Three Known Enterobacteriaceae Phages. Poster presentation. ASM Intermountain Branch Meeting, BYU, Provo, UT.

Stratton, M, Harbaugh, K, Foy, B, Anieves, D, Paz, H, Shurtleff, C, Kruger J, Peck, M, Jensen, G, Esplin, ID, Merrill, BD, Schoenhals, JE, Breakwell, DP, Burnett, SH, and **Grose JH.** (2014) Discovery and Genomic Analysis of an N4-like *Erwinia amylovora* Phage. Poster presentation. ASM Intermountain Branch Meeting, BYU, Provo, UT.

Ingersoll, K, Jensen, G, Kruger, J, Foy, B, Grossarth, S, Harbaugh, K, Paz, H, Esplin, ID, Schoenhals, JE, Merrill, BD, Burnett, SH, Breakwell, DP, and **Grose JH**. (2014) Isolation and Characterization of Deimos-Minion, the Largest *Erwinia amylovora* Bacteriophage. Poster presentation. ASM Intermountain Branch Meeting, BYU, Provo, UT.

Schoenhals, JE, Merrill, BD, Graves, KA, **Grose, JH**, Burnett, SH, and Breakwell DP. (2014) DNA Packaging Strategies for Bacteriophages Identified Using Phylogenetic Analysis of Large Terminase Proteins. Poster presentation. ASM Intermountain Branch Meeting, BYU, Provo, UT.

Grose JH, (2013) The Role of Sensory Protein Kinases in Cancer. Oral Presentation. BYU Cancer Research Center Summer Symposium, Provo, UT

Badal, B, and **Grose JH**. (2013) Snf1 Directly Phosphorylates and Activates Yeast PAS Kinase. Podium presentations. ASM Intermountain Branch Meeting, Idaho State University, ID.

Anderson, J, Roark, B, Buckley, A, Cabeza, Pezoa Y, Emery, H, Fullwood, R, Hecht, K, Jackson, K, Jones, E, Mackay, J, Meek, J, Nordgren, K, Rees, J, Ritchie, D, Shumway, J, Yates, J, Kooyman, D, and **Grose JH**. (2013) E. colin: A Two-circuit System for Colin Cancer Detection. Podium presentation, ASM Intermountain Branch Meeting, Idaho State University, ID.

Merrill BD, Sheflo MA, Ayer PA, Beckstead AP, Fajardo CP, Ferguson NC, Fisher JNB, Gardner AV, Graves KA, Hartmann KA, Kennedy AK, Liu JE, Lunt BL, Merrill CA, Russell RC, Wake BN, WilliamsKR, Zimmerman LJ, **Grose JH,** Breakwell DP, Burnett SH. (2013) Discovery and Characterization of Novel Paenibacillus larvae Bacteriophages. ASM Intermountain Branch Meeting, Idaho State University, Pocatello, ID.

Bevard, K, Thornock, S, Collins, G, Ramsey, M, and **Grose JH**. (2013) Characterizing Yeast PAS Kinase Through Random Mutagenesis. Poster Presentation. Utah Undergraduate Conference for Research, Utah State University, UT.

Grose, JH. Molecular Biology and Genetics. (2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018) Oral presentation. Expanding Your Horizons, Utah Valley University, UT.

DeMille, D, and **Grose, JH**. (2012) New Roles for PAS kinase Revealed Through Protein-protein Interaction Studies. Podium presentation. Intermountain Branch ASM meeting, Idaho State University, ID. ***Best Biomedical Oral Presentation***

DeMille, D, Mackay, J, Sowa, S, Hall, T, Gessel, A, Lawrence, E, and **Grose, JH**. (2012) The Role of Yeast PAS kinase in Glucose Partitioning. Poster presentation. Intermountain Branch ASM Meeting, Idaho State University, ID.

Findley, R, Thornock, S, Bevard, K, and **Grose, JH**. (2012) The Regulation of PAS kinase, a Key Sensory Kinase Required for Glucose Homeostasis. Poster presentation. Intermountain Branch ASM Meeting, Idaho State University, ID.

Price, K, Chapman, K, Cutler, C, Hoops,W, Lee, S, Nguyen, J, and **Grose, JH**. (2012) Molecular Mechanisms of R120G CryAB-induced Cardiomyopathy. Poster presentation. Intermountain Branch ASM Meeting, Idaho State University, ID.

Anderson, J, Meek, J, Dean, R, Roark, B, and **Grose, JH**. (2012) A Novel Method for Malaria Detection. Podium presentation. Intermountain Branch ASM Meeting, Idaho State University, ID.

Roberts, J, Emery, H, Jones, E, Nordgren, K, Reese, J, Shumway, J, Yates, J, and **Grose, JH**. (2012) A Dual AND Gate for Sensing ROS and Heat. Poster presentation. Intermountain Branch ASM Meeting, Idaho State University, ID.

Buckley, A, Cabeza Pezoa, Y, Fullwood, R, Hecht, K, Jackson, K, and **Grose, JH**. (2012) E. colera: A Cholera Detection and Elimination system. Podium presentation. Intermountain Branch ASM Meeting, Idaho State University, ID.

Ferguson, NC, Irons, DL, Marlow, SC, McCord, TM, Brighton, AK, Fisher, JNB, Sheflo, MA, Breakwell, DP, **Grose, JH,** Burnett, SH (2012) Division of the Mycobacteriophage A1 Subcluster Based on Phylogenetic Comparison. Poster presentation. ASM Intermountain Branch Meeting, Idaho State University, ID. Mason, SJ, Gardner, AV, Nelson, EP, Christiansen, MR, Brighton, AK. Fisher, JNB, Sheflo, MA, Breakwell, DP, Grose, JH, Burnett, SH (2012) Mislabeling of the Second Tape Measure Protein. Poster presentation. ASM Intermountain Branch Meeting, Idaho State University, ID.

Jensen, JD, Merrill, BD, Russell, RC, Smith, TC, Brighton, AK, Fisher, JNB, Sheflo, MA, Breakwell, DP, Burnett, SH, **Grose, JH**. (2012) Phylogenetic Origin of Glutaredoxin Gene Shared by Mycobacteriophage A1 Sub-cluster, Distantly Related Bacteria, and other bacteriophages. Poster

presentation. ASM Intermountain Branch Meeting, Idaho State University, ID.

Lloyd, JS, Norton, CS, Sullivan, S, Pettersson, SM, Brighton, AK, Fisher, JNB, Sheflo, MA, Breakwell, DP, Erickson, D, Burnett, SH, and **Grose, JH**. (2012) Lack of Correlation between Phage Clusters and Ecoregions in the United States. Poster presentation. ASM Intermountain Branch Meeting, Idaho State University, ID.

Williams, KR, Adawi, EC, Kennedy, AK, Poe, DE, Brighton, AK, Fisher, JNB, Sheflo, MA, Breakwell, DP, Burnett, SH, **Grose, JH**. (2012) Divergent Evolution of a RuvC Holliday Junction Resolvase in the B1 Subcluster. Poster presentation. ASM Intermountain Branch Meeting, Idaho State University, ID.

Gardner, AV, Brighton, AK, Fisher, JNB, Sheflo, MA, Breakwell, DP, **Grose, JH**, and Burnett, SH. (2012) Environmental Effect on Phage Genomes: Analysis of the B4 Subcluster. Poster presentation. ASM Intermountain Branch Meeting, Idaho State University, ID.

Grose, JH. (2012) E. colonoscopy: Synthetic Biology as a Platform for Learning. Podium presentation. Current Topics in Chemistry, Brigham Young University, UT.

DeMille, D, and **Grose J.H.** (2012) The Role of Yeast PAS kinase in PASsing Glucose. Podium presentation. MMBIO Graduate Student Retreat, BYU, UT.

Grose, JH. Evidence for Disparate Yet Overlapping Function for the Small Heat Shock Proteins CryAB and HspB2. (2011) Podium presentation. Protein Aggregation Disease (PAD) Interest Group, University of Utah, UT.

DeMille, D, and **Grose JH**. (2011) The Role of Yeast PAS kinase in Metabolic Regulation. Podium presentation. MMBIO Graduate Student Retreat, BYU, UT.

Jarvis, K, Cutter, C, Van De Graaff, S, Chapman, K, Weist, KB, Benjamin, I, and **Grose, JH**. (2011) Discovering Pathways Involved in Alpha/B-crystalline Dependent Cardiomyopathy. Poster presentation. Utah Conference for Undergraduate Research (UCUR), Weber State University, UT.

Biggs, M, Roberts, JA, Sabin, D, Sabin, M, Merrill, M , Allley, A, Chamberlain, C, Adebayo, J, Williams, L, Kooyman, DL and **Grose, JH**. (2011) Evolving a Thermoswitch Sensitive to Narrow Temperature Shifts. Podium presentation. IBE Western Regional Student Conference, Utah State University, UT. Best Biomedical Presention

Biggs, M, Roberts, JA, Sabin, D, Sabin, M, Merrill, M, Allley, A, Chamberlain, C, Adebayo, J, Kooyman, DL, and **Grose, JH**. (2011) A Dual Input Reporter System in E. coli as a Potential Colon Cancer Diagnostic. Poster presentation. ASM Intermountain Branch Meeting, Weber State University, uT.

DeMille, D, and **Grose JH**. (2011) The Role of Yeast PAS kinase in Metabolic Regulation. (2011) Poster presentation. ASM Intermountain Branch Meeting, Weber State University, UT.

Jarvis, K , Weist, K, Van De Graaff, S, Cutter, C, Chapman, K, Neubert, J, Benjamin, I and **Grose, JH**, Discovering Pathways Involved in alpha/β-crystalline Dependent Cardiomyopathy. (2011) Poster presentation. ASM Intermountain Branch Meeting, Weber State University, UT.

Mackay, J, Sowa, S, Loeb, S, Haines, C, and **Grose JH**. (2011) Finding Interacting Partners for PAS kinase. Poster presentation. ASM Intermountain Branch Meeting, Weber State University, UT.

Brighton, AK, Kaitlyn, SV, Parker, M, Jackson, KL, Steck, RP, Ormsby, WR, Taylor, MA, Fisher, J, and Lunt, B, Burnett, S.H., **Grose, JH**. and Breakwell, DP. (2011) Gene Mosaicism Demonstrated in Mycobacteriophage Shauna1. Poster presentation. ASM Intermountain Branch Meeting, Weber State University, UT.

Barrus, EZ, Sheide, MG, Taylor, MA, Fisher, J, and Lunt, B, Burnett, SH, **Grose, JH**. and Breakwell, DP. (2011) Shauna1 Mycobacteriaphage Holin Gene Confirms Common Ancestry of All F cluster Phage. Poster presentation. ASM Intermountain Branch Meeting, Weber State University, UT.

Kartchner, BJ, Kiser, JT, Kiser, CD, McDaniel, SW, Taylor, MA, Fisher, J, Lunt, B, Burnett, SH, **Grose, JH,** and Breakwell, DP. (2011) Clustering of Mycobacteriophage in the Utah Landscape. ASM Intermountain Branch Meeting, Weber State University, UT.

Smith, KC, Burnett, SH, **Grose, JH**, and Breakwell, DP. (2011) Degenerate PCR Primers to Identify Mycobacteriophage Clusters and Sub-Clusters. Poster presentation. ASM Intermountain Branch Meeting, Weber State University, UT.

Chapman, KM, Baker, B, Drake, EA, Kitchen, JCB, Taylor, MA, Fisher, J, and Lunt, B, Burnett, SH, **Grose, JH**, and Breakwell, DP. (2011) TA17A: A Unique Member of the Mycobacteriophage Sub-Cluster A2. Poster presentation. ASM Intermountain Branch Meeting, Weber State University, UT.

Kitchen, JCB, Brighton, AK, Chapman, KM, Baker, B, Taylor, MA, Fisher, J, and Lunt, B, Burnett, SH, **Grose, JH**, and Breakwell, DP. (2011) Morphological Traits of Mycobacteriophage Clusters and Sub-Clusters. Poster presentation. ASM Intermountain Branch Meeting, Weber State University, UT.

Grose, JH. (2011) Identifying Novel Binding Partners for CryAB. Podium presentation. Protein Aggregation Disease (PAD) Interest Group, University of Utah, UT

Sowa, S, Harris, KT, and **Grose JH**. (2010) A Yeast Two-hybrid Screen for Novel PAS Kinase Substrates. Poster presentation. ASM Intermountain Branch Meeting, Brigham Young University, UT.

Johnson, C, and **Grose, JH**. (2010) Redox Currency, NAD/NADP Biosynthesis and Function. Poster presentation. ASM Intermountain Branch Meeting, Brigham Young University, UT.

Jarvis, K, Neubert, JC, and **Grose JH**. (2010) Yeast as a Model for Studying R120G- CryAB Cardiomyopathy. Poster presentation. ASM Intermountain Branch Meeting, Brigham Young University, UT.

Grose, JH. (2010) Saccaharomyces cerevisiae as a Model for Studying Protein Aggregation Cardiomyopathy. Podium presentation. Protein Aggregation Disease (PAD) Interest Group, University of Utah, UT.

Grose, JH. (2009) Functional Clustering: Can it Identify New Roles for an Old Molecule (NAD)? Oral presentation. Bacterial Supergroup, Brigham Young University, UT.

Grose, JH. (2008) NAD(P) Metabolism; the Center of Cellular Control. Oral presentation. Bacterial Supergroup, Brigham Young University, UT.

TEACHING

Courses taught

Honors 220: Unexpected Connections: DNA as a Language (3 credits)
MMBIO151: Intro to Microbiology (4 credits); 3 hours lecture and 3 hours lab per week
MMBIO194A: Phage Hunters Discovery (2 credits); 6 hours lab per week
MMBIO194B: Phage Hunters Genomics (2 credits); 6 hours lab per week
MMBIO221: General Microbiology (3 credits) ; 3 hour lecture per week
MMBIO395: Readings in Molecular Biology (1 credit); 1 hour lecture per week
MMBIO470: Synthetic Biology (1 credit) ; 6 hours lab per week
MMBIO691: Graduate seminar (1 credit): 1 hour seminar per week
MMBIO551R: Bacteriophages (1 credit); 1 hour lecture per week
MMBIO551R: Lifesciences and the Restored Gospel of Jesus Christ
(2 credits), 2 lectures per week, team taught (organized and oversaw)
MMBIO661: Molecular Biology of the Cell (3 credits); 3 hours lecture per week, team taught (JHG taught 12 lectures)
MMBIO665: Genomics, team taught (JHG taught 7 lectures and lead a special research project)
MMBIO494R: Mentored Research (1-3 credits); taught each semester

FELLOWSHIPS AWARDED TO STUDENTS IN THE GROSE LAB

Graduate Fellowships (10)

BYU Gerontology Fellowship(1)

Daniel Arens **(**2020) The role of Cbf1/USF1 in cancer metabolism

BYU Graduate Studies Fellowship (2)

Ruchira Sharma (2015) Characterization of Bacteriophages that Infect *Erwinia amylovora*
Whitney Hayes. (2014) Characterization of disease-associated HSPB2 and CRYAB variants reveals chaperone dysfunction.

BYU Cancer Research Center Fellowships (14)

Colleen Newey (2020) Characterizing Stress Granule Regulation in Mammalian Cells due to PAS kinase and Ataxin 2 inhibition
Daniel Arens **(**2019) The role of Cbf1/USF1 in cancer metabolism
Kai Li Ong **(**2019) The role of Osh6/Snf1 in apoptosis
Kai Li Ong **(**2018) The role of Osh6/Snf1 in apoptosis
Jenny Pape (2017) Characterizing the role of Cbf1 in respiration
Brooke Roark (2017) Characterizing the Interaction between PAS kinase and its substrates
Kai Li Ong **(**2017) The role of Osh6/Snf1 in apoptosis
Kai Li Ong **(**2016) The role of Osh6/Snf1 in apoptosis
Nidhi Choksi (2016) Characterizing the role for PAS kinase and Ataxin-2 in Stress Granule Formation
Kai Li Ong **(**2015) The role of Osh6/Snf1 in apoptosis
Desiree DeMille (2015) The effects of PAS kinase on Cell Cycle
Joe Anderson. (2014) Interplay between the yeast nutrient sensing kinases TORC1, AMPK, and PAS kinase
Whitney Hayes. (2014) Characterization of disease-associated HSPB2 and CRYAB variants reveals chaperone dysfunction
Bryan Badal. (2013) Activation of PAS kinase by the metformin target AMPK/Snf1.

Undergraduate Fellowships

BYU Cancer Research Center Fellowship (5)

Abigail Taylor (2020), Daniel Barnett (2014, 2015) Jenny Pattison (2015, 2016)

BYU ORCA/CURA Grants (17)

Carr, Emilee (2020)
Sirrine, Michael (2020)
Barnett, Laura (2019)
Ng, Denise. (2017)
Nicholes, Sam. (2017)
Jenny Pattison(2016)

Andrew Rees (2016)
Brighton, Alicia. (2016)
Brown, Amber (2015)
Jarvis, Todd. (2015)
Hall, Tacie (2015)
Mackay, Jordan. (2012)
Hoopes, Whitney. (2012)
Mackay, Jordan. (2011)
Loeb, Serena. (2011)
Neubert, Jonathan. (2011) R
Sowa, Steve. (2011)
Jarvis, Kent. (2010)

CITIZENSHIP

University-wide

BYU Microscopy Committee (2019-present)
BYU Committee for Experiential Learning Summitt (2019)
Faith and Learning Faculty Advisement Committee (2016-present)
Cougars vs Cancer student Association– faculty advisor (2016-present)
BYU Be the Match on Campus - faculty advisor (2016-present)

Department/College-wide

Deans Advisory Committee (Chair, 2015-present)
Graduate Committee (2013-present)
Undergraduate Committee (2008 -2012)
Ad-hoc Committees:
BYU How to write a grant training, speaker
BYU Cancer Research Center grant reviewer
Mentoring Environment Grant (MEG) reviewer
ORCA reviewer (undergraduate research fellowships)

Other activities

My citizenship efforts outside of my department are focused on encouraging women in science supporting science fair teams and expanding contacts within my field of study.

2019-2020 **Team Advisor.** Timpview 9th grade Ecybermission Team: Care4Air: State Second Place Winners

2019-2020 **Team Advisor.** Mountain Heights 8th grade Ecybermission Team: Fueling Change: Sate First Place Winners and National Finalists

2019-2020 **Team Advisor.** Mountain Heights 10th-grade Google Science Fair State Finalists.

2018-2019 **Team Advisor.** Mountain Heights 9th grade Ecybermission Team: Phantastic Phage Phinders. First place National Winner.

2020 **Guest Speaker for Summit Academy High School.** Lead two one hour discussions on science and helped students isolate a phage.

2020 **Break out Discussion Leader** in She's a Scientist. Brigham Young University

2019 **Round Table Discussion** Leader at BYU Experiential Learning Summitt

2019 **Guest Lecturer** (5 lectures) in the 3 in 1 Biotechnology program, Brawijaya University, Indonesia

2017-2018 **Organizer** of the TriBranch ASM meeting, Durango, Colorado. Initiated and organized a conference that will include seven states and three branches of the ASM

2016 **Organizer** of the Phage Phield Day, Provo, Utah. Organized the entire conference including choice of venue, invited guests, schedule, abstracts accepted for oral and poster presentation, and guest speaker (Stanley Malloy). Approximately 40 students in attendance from Brigham Young University and Gettysburg University.

2010-2017 **Instructor**, Expanding Your Horizons, Utah Valley University. Designed and presented two, 1-hour Molecular Biology clinics each year for young women ages 11-18 for this international program designed to encourage women in science.

2013-2015 **Instructor**, ACCESS program for women in science, University of Utah. Designed and implemented a yearly, four-day, 8 hour/day lecture and lab molecular biology clinic for 42 incoming female freshman.

2010-2014	**Co-organizer and Instructor**, Women in Science Club advisor. Designed and implemented yearly microbiology activities for outreach to local elementary schools in conjunction with students from the women in science club.
2013	**Co-organizer** of the international Analytical Genetics Meeting, Alta, Utah. Organized the entire conference including choice of venue, invited guests, schedule, abstracts accepted for oral and poster presentation, etc. Approximately 94 scientists in attendance from throughout the world.
2010 - 2015	**Founder** and **Organizer** of the BYU Metabolism Interest Group. Organized monthly meetings to present and discuss research with faculty from multiple departments.
2010 - 2018	**Founder** and **Organizer** of the annual Microbiology and Molecular Biology Career Symposium. Organization includes choice of venue, invitation to 20 companies, advertising, etc. Between 100-200 students attend each year

GRADUATE STUDENT TRAINEES (15)

Desiree DeMille	Ph.D. student	2010-2015 (graduated)
Jenny Pape	Ph.D. student	2017-2019 (graduated)
Ruchira Sharma	Ph.D. student	2014-2019 (graduated)
Kai Li Ong	Ph.D. student	2014-2019 (graduated)
Daniel Arens	Ph.D. student	2017-present
Daniel Thompson	Ph.D. student	2017-present
Jonathan Neubert	M.S. student	2011-2012 (graduated)
Kelsey Langston	M.S. student	2011-2013(graduated)
Bryan Badal	M.S. student	2012-2014 (graduated)
Whitney Hayes	M.S. student	2013-2016 (graduated)
Nidhi Choksi	M.S. student	2014-2016 (graduated)
Brooke Roark	M.S. student	2017-2019 (graduated)
Elise Melhado	M.S. student	2017-2019 (graduated)
Trever Thurgood	M.S. student	2017-2019 (graduaed)
Colleen Newey	M.S. student	2019-present

MENTORED UNDERGRADUATE RESEARCH ASSISTANTS (160)

Undergraduates trained in the Grose Lab. An asterisks indicates students who have presented their research at a conference or in a publication.

Mathew Biggs*	Christopher Bird*
Jonathan Bowan	David Boyer*
Alicia Brighton*	Amber Brown*
Grace Brummer*	Alisa Buchanan
Audrey Buckley*	Joe Castillo
Kylie Chapman*	Minsey Choi*
Arick Christopher*	Michael Christiansen
Steven Hallam	Kimball Harley*
Marina Ramsay	Joshua Rice*
Julie Roberts*	Trevor Taylor
Mackay Coffee	John Collins
Joseph Anderson*	Tysen Nickle*
Julius Adebeyo*	Trever Southwick*
Addison Alley*	Blake Dallon*
Andrew Mathis*	Benjamin Donnovan[u]
Chetty Vasu*	Steve Sowa*
Christina Swenson*	Ilse Daniella Jaen Anieves*
Tommy Andros	Igor Baldow*
Nolan Beatty	Emily Bennion
Rachel Findley*	Spencer Thornock*
Jason Tseng*	Katie Harris*
Jordan Berg*	Casey Cuttler*
Govinda Dhakai	Alysha Doan
Steven Duncan	Ian Esplin*
Brady Evans	Lauren Facer*
Rebecca Eardley*	Joshua Findley*
Rachel Findley*	Joshua Fischer*
Michael Fry*	Adam Gardner*

Joshua Gillman
Andrew Gessel*
Jordan Jensen*
Foster Openshaw
Alexis Poulson*
Colby Haines*
Samuel Pollock*
Kimball Harley*
Micah Putnum*
Mark Herzog*
Emily Hansen*
Emily Hurst*
Kent Jarvis*
Dione King
Serena Loeb*
Paul Rogers
Devin Sabin*
Michael Scott
Matthew Sheppard
Christina Swenson*
Ashley Tam*
Fredrick Nelsen*
Samuel Nicholes*
Jonny Malmrose*
Daniel Barnett*
Evangeline Taylor
Audrey Workman*
Steven Roundy*
Samantha Laub*
Jeffrey Zhao*
Kayla Bevard*
Mitch Harrison*
Kelsey Langston*
Charles (CJ) Webb*
Joseph (Joe) White*
Tacie Hall*
Katelyn Perry*
Haley Burrell*
John Hancock*
Christopher Skaggs
Michael Wells*
Jared Kruger*
Laura Barnett*
Ryan Perry*
Sinjon Roush*
Trever Thurgood*
Sam Rutter
Samuel Flor*
Rochelle Gaertner*
Sierra Freed
Silvia Soule
Seth Evans

Savannah Grossarth*
Garrett Jensen*
Kendall Kiser*
Kelton Peck*
Lindsey (LJ) Perry*
Nicole Phipps*
Katherine Price*
David Herbert*
Kristy Rader*
Whitney Hoopes*
Jill Hughes*
Moon He
Todd Jarvis*
Paul Leavitt*
Mackay Merrill*
Steven Roundy
Mark Sabin*
Jeremy Severe
Kyle Smith*
Steve Sowa*
Philip (PJ) Tatlow*
Jonathan Neubert*
Nick Nielsen*
Jerilyn Franson*
Brady Evans*
Eliza Lawrence*
Jenny Pattison*
Colleen Newey*
Jordan Mackay*
Joseph White*
Andrew Rees*
Jared Resolme*
Steve Van de Graff*
Kevin Weist*
Jonathan Wood
Cheuk Wing Denise Ng*
Jens Jimenez*
Alistair Hilton*
Alex Crist*
Cooper Vandemerwe*
Michael Christensen*
Bradley Knabe*
Brittany (Colby) Pielstick*
Michael Sirrine *
Michael Scott *
Abigail Taylor*
Hannah Ferguson*
Aurora Rodriguez*
Evan Harris
Colby Soule
Truman Davidson
Emilee Carr*