MARK A. SCHNEEGURT

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PhD, Biology Brown University	1989
MS, Biology Rensselaer Polytechnic Institute	1985
BS, Biology Rensselaer Polytechnic Institute	1984
Professor Curriculum and Instruction, Wichita State University	2014-present
Coleman Foundation Faculty Fellow in Entrepreneurship Barton School of Business, Wichita State University	2014-present
Affiliated Faculty Biomedical Engineering, Wichita State University	2013-present
Professor Biological Sciences, Wichita State University	2012-present
Associate Professor Biological Sciences, Wichita State University	2006-2012
Visiting Professor Biological Sciences, University of Notre Dame	2005-2008

Assistant Professor 2000-2006 Biological Sciences, Wichita State University Visiting Professor 2000-2004 Center for Environmental Science and Technology, University of Notre Dame Research Assistant Professor 1997-2000 Biological Sciences, University of Notre Dame Postdoctoral Research Associate 1996-1997 Biological Sciences, University of Notre Dame 1996-2000 Faculty Center for Environmental Science and Technology, University of Notre Dame Research Assistant Professor 1995-1996 Biological Sciences, Purdue University Postdoctoral Research Associate 1992-1995 Biological Sciences, Purdue University 1992-1996 Associate NASA Specialized Center of Research and Training, Purdue University Postdoctoral Research Scientist 1989-1991 Eli Lilly and Company

Instructor

General Biology I, BIO 210G, Wichita State University

Instructor

Instructor

Astrobiology, BIO 660, Wichita State University

Instructor

Interstellar Seminar, LASI 150G, Wichita State University

Instructor

Computer Methods in Biology, BIO 572, Wichita State University

Instructor

Readings in Microbial Ecology, BIO 798J, Wichita State University

Instructor (Classroom and Online)

Teacher Workshop in Microbial Ecology, BIO 750K, Wichita State University

Instructor (Online)

The Human Organism, BIO 106G, Wichita State University

Instructor

Introduction to Microbiology, BIO 220, Wichita State University

Instructor

Biology Colloquium, BIO 497 and 797, Wichita State University

Instructor

Microbes and Man, BIOS 115, University of Notre Dame

Instructor

Principles of Microbiology, BIOS 401, University of Notre Dame

Instructor

Microbiology Laboratory, BIOS 401L, University of Notre Dame

Co-Instructor

Applied and Environmental Microbiology, BIOS 528, University of Notre Dame

Co-Instructor

Topics in Microbial Ecology, BIOS 590, University of Notre Dame

Co-Instructor

Mars: A 21st Century Frontier, ENG 101, University of Notre Dame

Teaching Assistant at Brown University in General Biology Laboratory, Biochemistry, Molecular Biology Laboratory, Biology for Non-Majors

Teaching Assistant at Rensselaer Polytechnic Institute in Molecular Biology Laboratory

American Society for Microbiology Sigma Xi: The Scientific Research Honor Society Kansas Academy of Science

Faculty of Excellence, WSU, 2014-present

Sigma Xi Chapter Activity Award, 2013

Finalist, Academy of Effective Teaching Award, WSU, 2012

Excellence in Research Award, WSU, 2012

150 Greatest Scientists in the History of Kansas, Ad Astra, 2011

Leadership in the Advancement of Teaching Award, WSU, 2010

Faculty Scholar Award, KINBRE, 2007

Outstanding nominee, Academy of Effective Teaching Award, WSU, 2007

Paper nominated for Provasoli Award, 2001

Sigma Xi Grant-in-Aid of Research, 1987

National Researcher Service Award (NIH), 1987-88

New York State Regents Scholarship, 1980

National Merit Scholarship, 1980

Cyanosite selected for 16 website awards

Collaborative Research: RII Track-2 FEC: Promoting N₂O- and CO₂-Relieved Nitrogen Fertilizers for Climate Change-Threatened Midwest Farming and Ranching, NSF EPSCoR

Responses of Microbial Isolates from Spacecraft Assembly Facilities to the Chemical and Physical Conditions of Mars and the Ocean Worlds, NASA ROSES Planetary Protection Research

Long Working-Distance Objective Lens for WSU Core Fluorescence Microscope, KINBRE Core Facility Support

Further Studies on Life at Low Water Activities, NASA, PPR, JPL/CalTech

Extended Studies on Life at Low Water Activities, NASA, PPR, JPL/CalTech

Life at Low Water Activity with Salts Relevant to Mars and Icy Satellites, NASA

ROSES, PPR, JPL

Survival and Reproduction of Microorganisms under Extreme Martian Chemical Conditions, NASA ROSES, PPR, JPL

Bioenergy Through Ecological Uses of Algae, Kansas NSF EPSCoR

Extending the Research Training Tower to Pre-College Students by Screening Prairie Plants for Anti-Cancer Activities, Flossie West Memorial Foundation

Pass Me the Salt: Extending the Research Training Tower to Pre-College Students, NSF Education GK-12

Life at High Magnesium Sulfate Concentrations, Kansas NASA EPSCoR

Development of the Ninnescah Field Station and Experimental Tract, NSF Field Stations and Marine Laboratories

Collaborative Research: Salt Plains Microbial Observatory, NSF MCB Microbial Observatories

Measuring the Abundance of Methanogens and Sulfate-reducers with Real-time PCR of Wastewaters Treated with BioKat, NRP Inc.

Molecular Approaches to Study Organismal Response to Global Environmental Change, NSF EPSCoR MI

Molecular Biology and Microbiology Trunk Program, Kansas NSF EPSCoR Education Initiative

Safe, Low-Cost, Salty Microbiology for the Classroom, KanEd

Remediation of Swine Wastes Using Bio-Stimulants. Kansas Department of Health and the Environment

Avian Ecology and West Nile Virus Spread. Kansas Biomedical Research Infrastructure Network, NIH

Acquisition of Fluorescence and Phospho Imaging Instruments, NSF EPSCoR MRI

Evaluation of Chemical and Biological Assays as Indicators of Toxic Metal Bioavailability in Soils, EPA EPSCoR

Investigation of the Spatial Distributions and Transformations of Cr, Pb, and U Co-contaminant Species at the Bacteria-Geosurface Interface. Argonne National Laboratory, Natural Accelerated Bioremediation (NABIR) Program, DOE

Disturbance and the Biodiversity of the Microbial Guild Fixing Nitrogen in Tallgrass Prairie. NSF EPSCoR

Quantifying Bacteria-Metal-Mineral Adsorption: Wet Chemistry and Advanced Photon Source Approaches. NSF EAR

Cyanosite: A General Webserver for Cyanobacterial Research. PI. Foundation for Microbiology

Investigation of the Spatial Distributions and Transformations of Cr, Pb, and U Co-contaminant Species at the Bacteria-Geosurface Interface. Natural Accelerated Bioremediation (NABIR) Program, DOE, Argonne National Laboratory

- 104. Zbeeb, H. Z., Md Joad, H. H. Zayed, A. Mahdi, T. M. Luhring, F. Chen, B. C. Clark, and M. A. Schneegurt. Bacterial growth tolerances to an iterative matrix of ions relevant to Mars and the ocean worlds. *in preparation*.
- 103. Carte, M., T. Eberl, S. Gandikota, F. Chen, B. C. Clark, and M. A. Schneegurt. Abundance and characteristics of salinotolerant bacteria isolated from a spacecraft assembly facility and surrounding soils. *in preparation*.
- 102. Carte, M., F. Chen, B. C. Clark, and M. A. Schneegurt. Succession of the fungal community of a spacecraft assembly cleanroom when enriched in brines relevant to Mars. *submitted*.
- 101. Schneegurt, M. A., T. E. Beaven, and C. F. Kulpa, Jr. Microbial degradation of

- 95. Alsuri, M. R., B. D. Bower, D. H. Burns, G. Fraire, B. Seelam, R. Shaban, S. Shaban, and M. A. Schneegurt (2023) The broad antibacterial activity of a small synthetic receptor for cellular phosphatidylglycerol lipids. Folia Microbiologica :465-476.
- 94. Howell, S. P., B. R. Kilmer, T. Porazka, and M. A. Schneegurt (2022) Abundance, isolation, and characterization of halotolerant microbes from common oligosaline soils. Pedobiologia :150827.
- 93. Tran, M. D., J. W. Dille, W. L. Camden, D. Brunt, C. M. Rogers, and M. A. Schneegurt (2022) Keratinolytic bacteria from the feathers of wild Dark-eyed Juncos (*Junco hyemalis*). Avian Biology Research :73-83.
- 92. Cesur, R. M., I. M. Ansari, F. Chen, B. C. Clark, and M. A. Schneegurt (2022) Bacterial growth in brines formed by the deliquescence of salts relevant to cold arid worlds. Astrobiology :104-115.
- 91. Zbeeb, H. Z., Md Joad, H. H. Zayed, T. M. Luhring, M. A. Schneegurt, A. Mahdi, F. Chen, and B. C. Clark (2021) Bacterial growth tolerances to heavy brines formed by an iterative matrix of ions and their salts. *LPSC* :2331.
- 90. Cesur, R. M., I. M. Ansari, C. R. Stewart, M. A. Schneegurt, F. Chen, and B. C. Clark (2021) Bacterial survival and growth in fluid inclusions and deliquescent brines of salt evaporites relevant to cold arid worlds. *LPSC* :1243.
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- 88. Spellmeyer, A. J., C. M. Rogers, and M. A. Schneegurt (2020) Radiotracking refines the role of food supplementation on overwinter survival of the Dark-

- 87. Shrestha, N., K. K. Dandinpet, and M. A. Schneegurt (2020) Effects of nitrogen and phosphorus limitation on the accumulation of biodiesel lipids in *Chlorella kessleri* str. UTEX 263 grown in darkness on sugars and plant biomass hydrolysates. Journal of Applied Phycolog;# 0HR!P(HBIP"
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- 79. Schneegurt, M. A. (2017) Copyediting and proofreading scientific publications after acceptance. Transactions of the Kansas Academy of Science :200-202.
- 78. Al Soudi, A. F., O. Farhat, F. Chen, B. C. Clark, and M. A. Schneegurt (2017) Bacterial growth tolerance to concentrations of chlorate and perchlorate salts relevant to Mars. International Journal of Astrobiology :229-235.
- 77. Fredsgaard, C., D. B. Moore, F. Chen, B. C. Clark, and M. A. Schneegurt (2017b) Prevalence of sucretolerant bacteria in common soils and their isolation and characterization. Antonie van Leeuwenhoek :995-1005.
- 76. Parker, N., M. A. Schneegurt, A.-H. T. Tu, B. M. Forster, and P. Lister (2017) *OpenStax Microbiology*. OpenStax College, Rice University, 1308 pp.
- 75. Fredsgaard, C., D. B. Moore, A. F. Al Soudi, J. D. Crisler, F. Chen, B. C. Clark, and M. A. Schneegurt (2017a) Relationships between sucretolerance and salinotolerance in bacteria from hypersaline environments and their implications for the exploration of Mars and the icy worlds. International Journal of Astrobiology :156-162.
- 74. Schneegurt, M. A. (2016) Peer review in scientific publication. Transactions of the Kansas Academy of Science :360-362.
- 73. Harris, D. and M. A. Schneegurt (2016) The other open-access debate. American Scientist :334-336; :3.
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- 68. Schneegurt, M. A. (2013) What is publishable data and how will I recognize it?

- 61. Caton, I. R. and M. A. Schneegurt (2012) Culture-independent analysis of the soil bacterial assemblage at the Great Salt Plains of Oklahoma. Journal of Basic Microbiology :16-26.
- 60. Crisler, J. D., T. M. Newville, F. Chen, B. C. Clark, and M. A. Schneegurt (2012) Bacterial growth at the high concentrations of magnesium sulfate found in Martian soils. Astrobiology :98-106.
- 59. Welch, W. G., C. H. Cope, C. R. Wernert, D. A. Distler, and M. A. Schneegurt (2011) A thirty-year longitudinal survey of unionid mussels from the urban reach of the Little Arkansas River. Transactions of the Kansas Academy of Science : 249-257.
- 58. Welch, W., S. Ross, A. C. Steinle, and M. A. Schneegurt (2010) Effects of

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- 50. Litzner, B. R., T. M. Caton, and M. A. Schneegurt (2006) Carbon substrate utilization, antibiotic sensitivity, and numerical taxonomy of bacterial isolates from the Great Salt Plains of Oklahoma. Archives of Microbiology

- analysis of bacteria: Elemental and redox analysis of single cells. Science :686-687.
- 42. Schneegurt, M. A., A. N. Wedel, and E. W. Pokorski (2004) Safe, low-cost, salty microbiology for the classroom. The Science Teacher :40-43.
- 41. Ams, D. A., J. B. Fein, J. Schaefer, A. N. Wedel, and M. A. Schneegurt (2004) Effect of bacterial metabolism on Cd adsorption to bacterial surfaces. In: Water-Rock Interaction, Vol. 11, Wanty and Seal (eds), Taylor and Francis Group, London, pp. 1087-1090.
- 40. Schneegurt M. A. and S. Mader (2004) The Viruses. In: *Biology*, 8th Ed., S. Mader (ed), McGraw-Hill.
- 39. Schneegurt M. A. and S. Mader (2004) The Prokaryotes. In: *Biology*, 8th Ed., S. Mader (ed), McGraw-Hill.
- 38. Schneegurt M. A. and S. Mader (2004) The Protists. In: *Biology*, 8th Ed., S. Mader (ed), McGraw-Hill.
- 37. Schneegurt M. A. and S. Mader (2004) The Fungi. In: *Biology*, 8th Ed., S. Mader (ed), McGraw-Hill.

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strain ATCC 51142, in mixotrophic and chemoheterotrophic cultures. Journal of Phycology :632-642.

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- 3. Weinstein, J. D., M. A. Schneegurt, and S. I. Beale (1987) Biosynthetic precursors of δ-aminolevulinic acid in plants and algae. In: Biggins, J., ed., Progress in Photosynthesis Research, Proceedings of the VII International Congress on Photosynthesis, Vol. IV, Martinus Nijhoff, Boston, pp. 431-434.
- 2. Schneegurt, M. A. and S. I. Beale (1986) Biosynthesis of protoheme and heme *a* from glutamate in maize epicotyls. Plant Physiology :965-971.
- 1. Schneegurt, M. A. and C. N. McDaniel (1986) Amino acid transport in suspension

217. Garcia, G. J., E. C. Sklute, M. A. Schneegurt, J. F. Holden, and M. D. Dyar. Spectral characterization of halophiles isolated from hypersaline environments relevant to Mars and ocean worlds. 54th Lunar Planetary Science Conference, (virtually) Houston, March 2023.

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208. Tran, M. D., D. Brunt, W. L. Camden, J. W. Dille, C. M. Rogers, and M. A. Schneegurt.

202. Carte, M. E., F. Chen, B. C. Clark, and M. A. Schneegurt. Enrichment of the microbial community of a spacecraft assembly facility in extreme brines relevant to Mars. JPZ'-#

- Program, 120th Annual Meeting of the American Society for Microbiology, (virtually) Los Angeles, June 2020.
- 195. Zbeeb, H. Z., MD Joad, H. H. Zayed, A. Mahdi, A. F. Al Soudi, T. M. Luhring, F. Chen, B. C. Clark, and M. A. Schneegurt. Extreme bacterial growth tolerances to brines relevant to Mars. Abstracts and Program, 120th Annual Meeting of the American Society for Microbiology, (virtually) Los Angeles, June 2020.
- 194. Carte, M. and M. Schneegurt. Ecological succession of the microbial community of a spacecraft assembly facility in enriched brines relevant to Mars. Abstracts and Program, 16th Annual Graduate Research and Scholarly Projects Symposium, Wichita, May 2020.
- 193. Zbeeb, H., T. Nolan, and M. Schneegurt. Assessment of bacterial cell survival and vitrification in salt concentrations relevant to Mars. / &<5'+15<#+, -#] ':3'+7 (#Annual KINBRE Research Symposium, Wichita, January 2020.
- 192. Ansari, I., R. Cesur, F. Chen, B. Clark, M. Schneegurt. First demonstration of bacterial growth in deliquescent brines relevant to Mars. / &<5'+15<#+, -#]':3'+7(# Annual KINBRE Research Symposium, Wichita, January 2020.
- 191. Cesur, R. M., I. M. Ansari, F. Chen, B. C. Clark, and M. A. Schneegurt. Demonstration of bacterial growth in brines formed by the deliquescence of salts relevant to Mars. Abstracts and Program, 119th Annual Meeting of the American Society for Microbiology, San Francisco, June 2019.
- 190. Tran, M. D., W. L. Camden, and M. A. Schneegurt. Characterization of keratinolytic bacteria from the feathers of wild Dark-eyed juncos (*Junco hyemalis*). Abstracts and Program, 119th Annual Meeting of the American Society for Microbiology, San Francisco, June 2019.
- 189. Tran-Nguyen, M. D., W. L. Camden, and M. A. Schneegurt. Bacterial keratinase enzyme for the treatment of nail and skin disease. Abstracts and Program, Undergraduate Research and Creative Activity Forum, Wichita, April 2019.

- BC. Abstracts and Program, 118th Annual Meeting of the American Society for Microbiology, Atlanta, June 2018.
- 180. Zayed, H., MD Joad, A. F. Al Soudi, A. Mahdi, H. Zbeeb, F. Chen, B. C. Clark, and M. A. Schneegurt. Bacterial growth tolerances to an iterative matrix of ions relevant to Mars and the ocean worlds. Abstracts and Program, 118th Annual Meeting of the American Society for Microbiology, Atlanta, June 2018.
- 179. Alsuri, M. R., B. D. Bower, G. Fraire, R. Shaban, D. H. Burns, and M. A. Schneegurt. Novel mechanism of lipid-binding receptors with antibacterial activity against ESKAPE and MDR human pathogens. Abstracts and Program, 118th Annual Meeting of the American Society for Microbiology, Atlanta, June 2018.
- 178. Nickel, T. D., W. G. Welch, C. H. Cope, and M. A. Schneegurt. Shifting unionid mussel assemblages of the Walnut River Basin. JPI52# / , ,4+9# . %%58,3# :=#52%# \ + ,<+<# / 1+-%7;# :=#018%,1%(#E:N%X+(# / N'89#HIJB"##E'+,<+158:,<# :=#52%# \ + ,<+<# / 1+-%7;#:=#018%,1%# 0HJ!"#
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 HIJR"#
- 174. Wilks, J., F. Chen, B. C. Clark, and M. A. Schneegurt. Bacterial growth at eutectic temperatures and in saturated salt solutions relevant to Mars. Abstracts and Program, 117th Annual Meeting of the American Society for Microbiology, New Orleans, June 2017.
- 173. Bower, B. D., M. Alsuri, J. Wilks, M. Harsch, D. Burns, D. English, K. Mitchell-Koch, and M. A. Schneegurt. Antibacterial activity of a picket-porphyrin liptin targeted against phosphatidylglycerol. Abstracts and Program, 117h Annual Meeting of the American Society for Microbiology, New Orleans, June 2017.
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 HIJV"#
- JPR"# ^'%-<3++'-(# 6"(#) "# L"# . :: '%(# + , -# . "# / "# 012 , %%34'5"# # A%9+58: , <28N<# &%5>%% , # <41'%5:9%'+ , 1%# + , -# <+98 , :5:9%'+ , 1%# 8 , # &+15%'8+9# 8<: 9+5%<# =' : 7 # : 983 : <+98 , %# + , -# 2; N%'<+98 , %#<: 89<"## / &<5'+15<#+ , -#] ':3'+7 (#JJV52#d% , %'+9# . %%58 , 3#:=#52%# / 7 %'81+ , # 0:18%5; #=: '# . 81': &8:9:3; (#L:<5: , (# . +; #HIJV"#
- JPS"#)+,-8,N%5(#\"#+,-#."# / "# O12,%%34'5"##)+'XQ3':>,#+93+%#=%-#3'+8,#+,-#
 983,:1%9949:<81#2;-':<;9+5%<#=:'#&8:-8%<%9#N':-4158:,"##/&<5'+15<#+,-#]':3'+7(#

 JJV52#d%,%'+9#.%%58,3#:=#52%#/7%'81+,#O:18%5;#=:'#.81':&8:9:3;(#L:<5:,(#.+;#

 HIJV"#
- JPP"# ^'%-<3++'-(#6"(#) "#L"# . :: '%(#+, -# . "# / "#012,%%34'5"##6 : 7 N+'8<: ,#:=#<41'%5:9%'+, 1%#
 +, -#<+98, :5:9%'+, 1%# 8, # &+15%'8+9# 8<:9+5%<#=': 7 # :983:<+98, %# +, -# 2; N%'<+98, %# <: 89<"##

 JVS52# / , ,4+9# . %%58, 3# :=#52%# \ +, <+<# / 1+-% 7; # :=#018%, 1%(#?7N:'8+(# / N'89#HIJV"##

 E'+, <+158: ,<# :=#52%# \ +, <+<# / 1+(,<) -0 . 2(+) 0 . 2(<) -0 . 2(# /) -0 . 2(1) 0 . 2(+) 0 . 0 . 2(+) 0 . 2

- JPZ"# 62%, (#^"(# . "#E"#* +#) 41(#] "#D+8<2+7 N+;+, (# / "#] ': &<5(#L"#69+'X(#+, -# . "#012, %%34'5"## / #1 : 7 N+'+58@%#+, +9; <8<# : =# 7 81' : &8+9#-8@%' <85; #8, #<N+1%1'+=5#+<<% 7 &9; #=+189858%<#+, -# %N<: 7 85%# 9+X%<"## / &<5'+15<#+, -#] ': 3'+7 (# \$: 'X<2: N# : ,# 52%# F+&85+&8985; # :=# W1; # \$: '9-<(#] +<+-%, +(#^%&'4+'; #HIJV"#
- JPH"# ?&%'9(#E"#6"#+, -#. "#/"#012, %%34'5"##.:9%149+'#+, -#N2%, %581#12+'+15%'8Y+58:, #:=#52%#
 &+15%'8+9#+<<% 7 &9+3%#:=#F:5#*+X%(#\$ / (#+, #%, @8':, 7%, 5#>852#2832#1:, 1%, 5'+58:, <#
 :=# 7+3, %<84 7 # <49=+5%(#+, -# 85<# '%9%@+, 1%#5:#..+'<"## Annual KINBRE Research
 Symposium, Kansas City, January 2014.#
- JPJ"# . ::'%(#) "#L"(#6"#^'%-<3++'-(#E"#*"#\4'Y(#+,-#."#/"#012,%%34'5"##041'%5:9%'+,1%#8,#
 :983:2+98,%#<:89<#+,-#2+9:5:9%'+,5#&+15%'8+"##/&<5'+15<#+,-#]':3'+7(#JJZ52#d%,%'+9#
 . %%58,3#:=#52%#/7%'81+,#0:18%5;#=:'#.81':&8:9:3;(#)%,@%'(#.+;#HIJZ"#
- JPI"# 6'8<9%'(#C"#) "(#E"#E"#. +8(#b"#/27+-(#^"#62%,(#L"#6"#69+'X(#+,-#."#/"#012,%%34'5"## L+15%'8+9#3':>52#8,#-%98e4%<1%,5#9852847#+,-#N%'129:'+5%#<+95<#N:5%,58+99;#'%9%@+,5# 5:#.+'<"##/&<5'+15<#+,-#]':3'+7(#JJZ

JVS"# 0129855%, 2+'-5(#c"#\"(#L"#A"#F:41X(#E"#L+8'-(#+,-#."#/"#012, %%34'5"##W<:9+58:, #+,-#

12+'+15%'8Y+58:, #:=# 2+9:5:9%'+,5# &+15%'8+# =':7#:983:2+98,%# <:89<"## \$ 0_#

_,-%'3'+-4+5%#A%<%+'12#+,-#6'%+58@%#/158@85;#^:'47(#\$81285+(#/N'89#HIJZ"#

JVP"# 012,%%34'5(#."#/"#0837+#a8#*%154'%0##A%1:3,8Y8,3#N4&98<2+&9%#-+5+"#JVP52#/,,4+9#

- JZB"# \ 89 7 % '(# L"# A"(# E"# 6"# ? &% '9(# C"#) "# 6 '8<9% '(# L"# 64, -% '9+(# L"# ?"# . +-4(#+, -# . "# / "# O12, %%34 '5"## 64958@+58: ,#+, -# 7 :9%149+ '#+, +9; <8<# :=#52%# 781': &8+9#1: 7 74, 85; #8, # %N<: 785%#9+X%<# :=#52%#] +18=81# c : '52>%<5"## / &<5'+15<#+, -#] ': 3'+7 (#JJH52# d%, %'+9# . %%58, 3#: =#52%# / 7% '81+, #0:18%5; #=: '# . 81': &8:9:3; (#O+, #^'+, 18<1: (#C4, %#HIJH"#
- JZR"# \$ +39%; (#]"#\"#+, -#. "#/"#012,%%34'5"##.:9%149+'#+,+9; <8<#:=#781':&8+9#1:774,85; #
 <5'4154'%#8,#:N%,#N:,-<#=:'#+93+9#&8:-8%<%9#N':-4158:,"##/&<5'+15<#+,-#]':3'+7(#

 JJH52#d%,%'+9#.%%58,3#:=#52%#/7%'81+,#0:18%5; #=:'#.81':&8:9:3; (#0+,#^'+,18<1:(#
 C4,%#HIJH"#
- JZS"# Dandinpet, K. K. and M. A. Schneegurt. The potential of *Chlorella kessleri* in production of biodiesel in dark. NSF EPSCoR Kansas Solar Energy Center PI Meeting, Wichita, June 2012.
- 135. Wagley, P. K. and M. A. Schneegurt. Molecular analysis of microbial community structure in open ponds for algal biodiesel production. NSF EPSCoR Kansas Solar Energy Center PI Meeting, Wichita, June 2012.
- JZV"# ?&%'9(# E"(# L"# A"# \ 89 7 %'(# L"# 64, -%'9+(#+, -# . "# / "# 012, %%34'5"# # W<:9+58:, #+, -#
 12+'+15%'8Y+58:, #:=#%N<:5:9%'+, 5#+%':&81#2%5%':5':N281#781':&%<#=':7#52%#<+54'+58, 3#
 7+3, %<84 7 #<49=+5%#%, @8':, 7 %, 5#:=#F:5#*+X%(#\$ / "##\$ 0_#_, -%'3'+-4+5%#A%<%+'12#
 +, -#6'%+58@%# / 158@85; #^:'4 7 (#\$ 81285+(# / N'89#HIJH"#
- JZZ"# L8<5+(#L"(#\"#0"#\$:95%'<-:'=(#c"#L"#02'%<52+(#+,-#."#/"#012,%%34'5"##W<:9+58:,#+,-#
 12+'+15%'8Y+58:,#:=#+,+%':&%<#=':7#F:5#*+X%(#\$/"##\$0_#_,-%'3'+-4+5%#A%<%+'12#
 +,-#6'%+58@%#/158@85;#^:'47(#\$81285+(#/N'89#HIJH"#
- JZH"# \$ +39%;(#] "#\ "#+, -#. "#/ "#012,%%34'5"# . 81': &8+9#1: 7 7 4,85;#+,+9;<8<#:=#: N%, #N:, -<#
 =: '#+93+9#&8: -8%<%9#N': -4158:, "##B52#/,,4+9#0; 7 N: <84 7 #: =# d '+-4+5%#A%<%+'12#+, -#
 012:9+'9;#]': [%15<(#\$ 81285+(#/N'89#HIJH"#
- JZJ"# 012,%%34'5(# . "# / "##083 7 +# a 8#*%154'%0##E2%#%5281<# : =#+1+-% 7 81#+452 : '<28N"##JVV52#

 / , ,4+9# . %%58, 3# : =#52%# \ + ,<+<# / 1+-% 7 ;# : =#018% , 1%(# \$ 81285+(# . +'12#HIJH"#

- JZI"# \$ +39%; (#]"#\"#+, -#. "#/"#012,%%34'5"##.:9%149+'#+,+9; <8<#:=#781':&8+9#1:774,85; #

 <5'4154'%#8,#:N%, #N:, -<#=:'#+93+9#&8:-8%<%9#N':-4158:,"##JVV52#/,,4+9#..%58,3#:=#

 52%#\+,<+<#/1+-%7;#:=#018%,1%(#\$81285+(#.+'12#HIJH"##

 ORB"#
- JH!"# \ 89 7 %'(#L"#A"(# \$ 81285+# c : '52%+<5# . +3 , %5#F832#O12 : :9#E%+ 7 (#E"#*"# \ 4'Y(#C"# \$ "#
) 899%(#+ , -# . "# / "#O12 , %%34'5"## / ,58 7 81' : &8+9#+158@85; #8 ,#%M5'+15<#=' : 7 # , +58@%#
 N'+8'8%#N9+ ,5<"##JVV52# / , ,4+9# . %%58 , 3# : =#52%# \ + ,<+<# / 1+-% 7 ;# : =#O18% ,1%(#
 \$ 81285+(# . +'12#HIJH"## 0\$J"#
- JHB"# O12,%%34'5(# . "# / "(#E"#?"#L%+@%,(#+,-#6"#^\"#\49N+(#C'\"##62+'+15%'8Y+58:,#:=#+#<:89#

 #8<:9+5%#+158@%#8,#52%#-%3'+-+58:,#:=#N;'%,%"##JVV52# / ,,4+9# . %%58,3#

 :=#52%#\+,<+<# / 1+-%7;#:=#O18%,1%(#\$81285+(# . +'12#HIJH"##

 ORZ"#
- JHR"# . +8(#E"#E"(# / "# ` "# c :<: @+(#+, -# . "# / "#012,%%34'5"##L+15%'8+9#3': >52#8, #N%'129: '+5%#

 <+95<#+5#1:,1%,5'+58:,<#=:4, -#8, #<: 89<#:,# . +'<"##JVV52# / ,,4+9# . %%58,3#:=#52%#

 \+,<+<# / 1+-% 7; #:=#018%,1%(# \$ 81285+(# . +'12#HIJH"## 0SV"#

- JHV"#) 899%(# C"# \$ "(# O"# 6"# \ %9Y%, &%'3(# O"# ?"# C+1X(# 6"# . "# A:3%'<(# . "# / "# O12, %%34'5"##

 . 81': &8+9#1: 7 7 4, 858%<#:, #52%#=%+52%'<#:=#>89-#[4,1:<#8,#\+,<+<"##\+,<+<#c+54'+9#

 A%<: 4'1%<#6:,=%'%, 1%(# \$ 81285+(#C+,4+';#HIJH"#
- JHZ"# L8<5+(#L"(#\"#0"#\$:95%'<-:'=(#c"#L"#02'%<52+(#+,-#."#/"#012,%%34'5"##W<:9+58:,#+,-#
 12+'+15%'8Y+58:,#:=#+,+%':&%<#=':7#F:5#*+X%(#\$/" Annual KINBRE Research
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- JHJ"# ?&%'9(#E"(#\"#A:>%(#L"#A"#\897%'(#L"#64,-%'9+(#+,-#."#/"#012,%%34'5"##W<:9+58:,# +,-#12+'+15%'8Y+58:,#:=#%N<:5:9%'+,5#+%':&81#2%5%':5':N281#781':&%<#=':7#52%# <+54'+58,3#7+3,%<847#<49=+5%#%,@8':,7%,5#:=#F:5#*+X%(#\$/"##/,,4+9#\WcLA?# A%<%+'12#0;7N:<847(#\+,<+<#685;(#C+,4+';#HIJH"#
- 120. Sigma Xi Lecture: The ethics of academic authorship. Wichita State University, Wichita, December 2011.
- JJ!"# ?&%'9(#E"(#

- JJP"#) 899%(#C"# \$ "(#O"#?"#C+1X(#O"#6"#\%9Y%, &%'3(#6"#."#A:3%'<(#+, -#."#/"#012,%%34'5"##
 \$ 89-#&8'-#=%+52%'<#+<#%M5'%7%#781':&8+9#2+&85+5<"##JVZ'-#/,,4+9#.%58,3#:=#52%#
 \+,<+<#/1+-%7;#:=#018%,1%(#L+9->8,#685;(#\0(#/N'89#HIJJ"##
 0JPP"#
- JJV"#]: '+YX+(# E"(# L"# A"# \ 89 7 %'(# \$ 81285+# F832# O12::9# c:'52>%<5# E%+ 7 (# \$ 81285+# c:'52%+<5# . +3, %5#F832#O12::9#E%+ 7 (#+, -# . "# / "#012, %%34'5"##W,9+, -#:983:2+98, %# <:89<#+<###2+&85+5#=: '#14954'+&9%#2+9:5:9%'+,5#&+15%'8+"##JVZ'-# / ,,4+9# . %%58,3#:=#52%# \ +,<+<# / 1+-% 7;#:=#018%,1%(#L+9->8,#685;(#\ 0(# / N'89#HIJJ"## 0JRIQJRJ"#
- JJZ"# ?&%'9(#E"(#L"#A"#\897%'(#\"#A:>%(#+,-#."#/"#012,%%34'5"##62+'+15%'8Y+58:,#:=#52%#781':&8+9#+<<%7&9+3%#=':7#52%#<+54'+58,3#7+3,%<847#<49=+5%#%,@8':,7%,5#:=#F:5#*+X%(#\$/"##/,,4+9#.%%58,3#:=#52%#.8<<:4'8#D+99%;#L'+,12#:=#52%#/7%'81+,#0:18%5;#=:'#.81':&8:9:3;(#*8,1:9,(#c.?(#/N'89#HIJJ"#
- JJH"# \ 89 7 %'(# L"# A"(# E"#]: '+YX+(# \$ 81285+# F832# O12::9# c:'52>%<5# E%+ 7 (# \$ 81285+# c:'52%+<5# . +3,%5#F832#O12::9#E%+ 7 (#+, -# . "# / "#012,%%34'5"#W,9+, -#:983:2+98,%# <:89<# +<# +# 2+&85+5# =: '# 14954'+&9%# 2+9:5:9%'+,5# &+15%'8+"## / ,,4+9# . %%58,3# :=# 52%# . 8<<:4'8#D+99%;#L'+,12#:=#52%# / 7 %'81+,#0:18%5;#=:'# . 81':&8:9:3;(#*8,1:9,(#c?(# / N'89#HIJJ"#
- JJJ"# \$ +39%;(#]"#+,-#."# / "# O12,%%34'5"##.:9%149+'#+,+9;<8<#:=#:N%,#N:,-<#=:'#+93+9#
 &8:-8%<%9#N':-4158:,"##/,,4+9#..%%58,3#:=#52%#..8<<:4'8#D+99%;#L'+,12#:=#52%#
 / 7%'81+,#O:18%5:#=:'#..81':&8:9:3;(#*8,1:9,(#c?(#/N'89#HIJJ"#
- JJI"# O12,%%34'5(# . "# / "(#L"#A"# \ 89 7 %'(#+, -#C"# \$ "#) 899%"##?M5%, -8, 3#52%#'%<%+'12#5'+8, 8, 3# 5:>%'#5:#N'%1:99%3%#<54-%,5<"## c O^# d \QJH#]\W# . %%58, 3(# \$ +<28, 35:, (#) 6(# / N'89# HIJJ"#
- JI!"# ?&%'9(#E"(#\"#A:>%(#C"#))"#6'8<9%'(#L"#\897%'(#+,-#."#/"#012,%%34'5"##W<:9+58:,#+,-#
 12+'+15%'8Y+58:,#:=#781':&%<#=':7#F:5#*+X%(#\$/(#+,#%,@8':,7%,5#>852#2832#
 7+3,%<847#<49=+5%#1:,1%,5'+58:,<"##/,,4+9#__,-%'3'+-4+5%#A%<%+'12#+,-#6'%+58@%#
 / 158@858%<#^:'47(#\$81285+(#\0(#/N'89#HIJJ"#

- 94. Lakougna, H.(# . .#6%;+,, R.#/<7+5494, M.#/ "#Schneegurt. Bacterial surface contact and adhesion on polymeric biomaterials. P52# / , ,4+9# . :4,5+8,# \$ %<5#L8: 7 %-81+9# ? ,38,%%'8,3#6:,=%'%,1%, Park City, UT, September 2009.!
- !Z"# ?@+, <(#O"# / "(#C"# / "#L::52(#F"#. "#O5:, %(#+, -#."# / "#O12, %%34'5"##) 8@%'<85;#+, -#
 12+'+15%'8Y+58:, #:=#2+9:5:9%'+, 5#=4, 38#+5#52%#d'%+5#O+95#]9+8, <#:=#` X9+2:7+"##JI!52#
 d%, %'+9#. %%58, 3#:=#52%# / 7%'81+, #O:18%5;#=:'#.81':&8:9:3;(#]289+-%9N28+(#.+;#
 HII!"#
- !H"# L%+,(#."#*"(#6"#/"#62+7&%'<(#6"#A"#\$%',%'5(#+,-#."#/"#012,%%34'5"##/<<%<<7%,5#
 :=#+#N'87+';#'%<%+'12#N':3'+7#=:'#52%#2832#<12::9#19+<<'::7"##JI!52#d%,%'+9#
 . %%58,3#:=#52%#/7%'81+,#0:18%5;#=:'#.81':&8:9:3;(#]289+-%9N28+(#.+;#HII!"#
- ! J"# O12,%%34'5(#. "#/"##/#<87 N9%#1:9:,;#1:9:'#7 %52:-#=:'#%<587+58,3#781':&8+9#-8@%'<85;#

 8,#<:89<#=':7#52%# d'%+5#O+95#]9+8,<#:=#`X9+2:7+"##JI!52#d%,%'+9#. %%58,3#:=#52%#

 / 7%'81+,#0:18%5;#=:'#.81':&8:9:3;(#]289+-%9N28+(#.+;#HII!"#
- ! I"# L%+, (# . "#*"(#6"# / "#62+7 &%'<(#6"#A"# \$ %', %'5(#+, -# . "# / "#012, %%34'5"## / <<%<< 7 %, 5# :=# +# N'87+'; # '%<%+'12# N':3'+7#=:'#52%#2832#<12::9#19+<<'::7"##JI!52#d%,%'+9# . %%58, 3#:=#52%# / 7 %'81+, #0:18%5; #=:'# . 81':&8:9:3; (#]289+-%9N28+(# . +; #HII!"#
- B!"# 6'8<9%'(#C"#)"(#E"#."#c%>@899%(#+,-#."#/"#012,%%34'5"##L+15%'8+9#3':>52#+5#
 1:,1%,5'+58:,<#:=#7+3,%<847#<49=+5%#=:4,-#8,#.+'58+,#<:89<"##JVJ<5#/,,4+9#.%%58,3#
 :=#52%#\+,<+<#/1+-%7;#:=#018%,1%(#E:N%X+(#.+'12#HII!"##
- BB"# \$ \%912(# \$ "(# 6"# \$ \%' , \%'5(#+, -# . "# / "# O12 , \%34'5"## E28'5; #; \%+'<#9+5\%'0# ^ '\%<2# > +5\%'#

 7 4<<\%9#<4'\@\%; #:=#52\%# * 8559\\# / 'X+, <+<\#A8@\%'"\##JVJ<5\# / , ,4+9\# . \%\58, 3\#:=\#52\\# \ + ,<+<\#

 / 1+-\% 7 ; #:=\#O18\% , 1\%(\#E:\N\X+(\# . +'12\#HII!"\##

 0JPR"\#
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- BP"# 6+5:,(#W"#A"#+,-#. "# / "# 012,%%34'5"## 64954'%QW,-%N%,-%,5#+,+9;<8<#:=# 781':&8+9#
 -8@%'<85;#+5#52%# d'%+5#0+95#]9+8,<#:=# ` X9+2:7+" JIB52# d%,%'+9#. %%58,3#:=#52%#
 / 7%'81+,#0:18%5;#=:'#.81':&8:9:3;(#L:<5:,(#./(#C4,%#HIIB"#
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- 58. Santos-Pinzon, I. R. and M. A. Schneegurt. Abundance of NifH genes in urban, agricultural, and pristine prairie streams exposed to different levels of nitrogen loading. 3rd Annual Ecological Genomics Symposium, Overland Park, KS, November 2005.
- 57. Evans, S. A., R. H. Hansen, M. A. Buchheim, J. A. Buchheim, and M. A. Schneegurt. Isolation and characterization of halotolerant fungi from the Great Salt Plains of Oklahoma. 105th General Meeting of the American Society for Microbiology, Atlanta, GA, June 2005.
- 56. Schneegurt, M., J. Bath, G. Boddy, R. McMinn, M. Chambers, and T. Witherspoon. Low-cost salty microbiology interactives and classroom activities. 105th General Meeting of the American Society for Microbiology, Atlanta, GA, June 2005.

- 48. Ams, D. A., J. Schaefer, A. N. Wedel, M. A. Schneegurt, and J. B. Fein. Effect of bacterial metabolism on Cd adsorption to bacterial surfaces. Water-Rock Interactions 11, Saratoga Springs, NY, July 2004.
- 47. Litzner, B. R., J. A. Buchheim, M. A. Buchheim, M. A. Schneegurt. Numerical taxonomy and phylogenetics of bacterial isolates from the Salt Plains Microbial Observatory. 104th General Meeting of the American Society of Microbiology. New Orleans, LA, May 2004.
- 46. Caton, T. M., C. W. Knapp, C. H. Linacre, R. K. Yang, M. S. Smith, D. W. Graham, I. M. Head, M. A. Schneegurt, and W. K. Dodds. Effect of chronic nitrogen loading on the microbial guilds driving nitrogen cycling in small streams. 104th General Meeting of the American Society of Microbiology. New Orleans, LA, May 2004.
- 45. Bhattarai, L., T. M. Caton, C. Wilson, R. V. Miller, and M. A. Schneegurt. Environmental tolerance of bacterial isolates from the Salt Plains Microbial Observatory. 104th General Meeting of the American Society of Microbiology. New Orleans, LA, May 2004.
- 44. Ferreira, K. L., D. R. Ownby, G. M. Pierzynski, M. J. Lydy, and M. A. Schneegurt. Evaluation of chemical and biological assays as indicators of toxic metal bioavailability. 104th General Meeting of the American Society of Microbiology. New Orleans, LA, May 2004.
- 43. Rogers, J and M. A. Schneegurt. The effect of *Echinacea* on bacteria. 67th Annual Meeting of the Kansas Junior Academy of Science, May 2004.
- 42. Litzner, B. and M. A. Schneegurt. Carbon substrate utilization in moderately halophilic bacteria isolated from the Great Salt Plains of Oklahoma. WSU Undergraduate Research and Creative Activity Forum, April 2004.
- 41. Hatcher, P. and M. A. Schneegurt. Denaturing gradient gel electrophoresis of the soil microbial community of the Great Salt Plains. WSU Undergraduate Research and Creative Activity Forum, April 2004.

- 40. Litzner, B. and M. A. Schneegurt. Carbon substrate utilization in moderately halophilic bacteria isolated from the Great Salt Plains of Oklahoma. KBRIN Student Symposium, January 2004.
- Hatcher, P. and M. A. Schneegurt. Denaturing gradient gel electrophoresis of the soil microbial community of the Great Salt Plains. KBRIN Student Symposium, January 2004.
- 38. Henley W., A. Kirkwood, R. Miller, M. Schneegurt, and M. Buchheim. Algae, Bacteria and Archaea of the Salt Plains Microbial Observatory. Microbial Observatories PI Meeting, NSF Headquarters, Arlington, VA, September, 2003
- Henley W., M. Schneegurt, M. Buchheim, R. Miller, and A. Kirkwood. Salt Plains Microbial Observatory: Isolation and characterization of halotolerant pro- and eukaryotes. ASLO General Meeting, NASA Ames, CA, July 2003
- 26. Caton, T. M., L. R. Witte, J. A. Buchheim, M. A. Buchheim, and M. A. Schneegurt-Phenetic and phylogenetic characterization of the prokaryotic assemblage at the Great Salt Plains of Oklahoma 103rd General Meeting of the American Society of Microbiology, Washington, DC, May 2003.
- 35. Wilson C. M., M. A. Schneegurt, M. A. Buchheim, and R. V. Miller. DNA-Damage Repair Capacity of *Halomonas* spp. at the Salt Plains Microbial Observatory. 103rd General Meeting of the American Society of Microbiology, Washington, DC, May 2003.
- 34. Kirkwood, A. E., M. A. Buchheim, J. A. Buchheim, M. A. Schneegurt, and W. J. Henley. Characterization of photosynthetic algae from the Salt Plains Microbial Observatory, Oklahoma. 103rd General Meeting of the American Society of Microbiology, Washington, DC, May 2003.
- 33. Litzner, B. and M. Schneegurt. Carbon substrate utilization in moderately halophilic bacteria isolated from the Great Salt Plains of Oklahoma. WSU Undergraduate Research and Creativity Forum, Wichita, KS, April 2003.

- 32. Hanna, J. and M. Schneegurt. Selective ecology of the Great Salt Plains. WSU Undergraduate Research and Creativity Forum, Wichita, KS, April 2003.
- 31. Caton, T., M. Buchheim, and M. Schneegurt. Abundance of culturable bacteria species from the Great Salt Plains of Oklahoma. Annual Meeting of the Missouri Valley Branch of the American Society for Microbiology, Edmond, OK, April 2003.
- 30. Rashid, P., M. Buchheim, and M. Schneegurt. Molecular analysis of the microbial guild fixing nitrogen in ricefields. Annual Meeting of the Missouri Valley Branch of the American Society for Microbiology, Edmond, OK, April 2003.
- Hanna, J. and M. Schneegurt. Functional diversity of the Great Salt Plains microbial assemblage. Annual Kansas Biomedical Research Infrastructure Network Symposium, Kansas City, MO, January 2003.
- Schneegurt, M., W. Henley, M. Buchheim, and R. Miller. The Great Salt Plains Microbial Observatory. Microbial Observatories PI Meeting, NSF Arlington, September 2002.
- 27. Schneegurt, M. A., T. M. Caton, H. D. Nguyen, A. T. Potter, and W. J. Henley. Initial Characterization of the Microbial Community of the Great Salt Plains of Oklahoma. 102nd General Meeting of the American Society of Microbiology, Salt Lake City, May 2002.
- 26. DiRusso, E. G., T. M. Caton, K. E. Brown, M. A. Schneegurt, and R. V. Miller. DNA Repair Capacity of Bacteria Isolated from the Great Salt Plains of Oklahoma. 102nd General Meeting of the American Society of Microbiology, Salt Lake City, May 2002.
- Kemner, K. M., B. Lai, M. Schneegurt, J. Zachara, and K. H. Nealson. High-Energy X-ray Microprobe Investigations of Metal-Mineral-Microbe Interactions. Synchrotron Environmental Science II, Argonne National Laboratory, May 2002.

- 24. Henley, W., K. Major, M. Schneegurt, M. Buchheim, R. Miller, and A. Potter. Salt Plains Microbial Observatory and LExEn Research: Characterization of Halotolerant Microbes. Second Astrobiology Science Conference, NASA Ames Research Center, April 2002.
- 23. Schneegurt, M. A., K. M. Kemner, B. Lai, J. Maser, Z. Cai, S. Kelly, D. G. Legnini, P. P. Ilinski, W. Rodrigues, K. H. Nealson, and C. F. Kulpa, Jr. Examination of metal-microbe interactions using X-ray microimaging. 101st General Meeting of the American Society of Microbiology, Orlando, May 2001.

22.

- str. ATCC 51142. General Meeting of the American Society for Microbiology, Miami Beach, FL, May 1997.
- 16. Sherman, L. A., M. Colon-Lopez, P. Meunier, and M. A. Schneegurt. Regulation of the circadian metabolic rhythms in the unicellular diazotrophic cyanobacterium *Cyanothece* sp. First European Phycological Congress, Cologne, DE, August 1996.
- 15. Schneegurt, M. A. and L. A. Sherman. Diurnal carbohydrate cycling in *Cyanothece* sp. ATCC 51142. Workshop on Cyanobacter 0.2 (l) () Tj ET Q q 0.24 0 0 0.24 0 601.92cm .24 0 0 0.

9.

- 1. Schneegurt, M. A. and C. N. McDaniel. Amino acid uptake in washed tobacco cells. Regional Meeting of the American Chemical Society, Troy, NY, May 1985.
- 43. "Interstellar Seminar", Galaxy Forum, Cosmosphere, Hutchinson, KS, August 2022.
- 42. "Bacterial Survival and Growth in Dense Brines, Deliquescent Liquids, Cryomuds, and Crystal Fluid Inclusions", WSU Club Nova, September 2022.
- 41. "Life on Pluto? Life on Mars? Better Pass the Salt!", Department of Integrative Biology, Oklahoma State University, Stillwater, OK, April 2019.
- 40. "Life on Pluto? Life on Mars? Better Pass the Salt!", Department of Geology, Wichita State University, Wichita, KS, April 2018.
- 39. "Hypersaline Microbiology", NASA Mars 2020 Meeting of Experts, National Academy of Sciences, Washington, DC, August 2017.
- 38. "*OpenStax Microbiology* Author's Corner", ASMCUE Annual Meeting, Denver, July 2017.
- 37. "Bacterial Growth at Eutectic Temperatures and in Saturated Salt Solutions Relevant to Mars", iPoster talk at American Society for Microbiology General Meeting, New Orleans, June 2017.
- 36. "OpenStax Microbiology Author's Corner", ASM General Meeting, New Orleans, June 2017.
- "Life on Pluto, Life on Mars, Better Pass the Salt", Johnson Space Center, Houston, May 2017.
- 34. "CryptoJewish Poetry from the Mexican Inquisition Trials of the Carvajal Family", Cafe Chevré, Temple Emanuel, Wichita, May 2017.
- 33. "CryptoJewish Poetry from the Mexican Inquisition Trials of the Carvajal Family", WSU Language and Linguistics Colloquium, Wichita, April 2017.

- 32. "Life on Pluto, Life on Mars, Don't Drink the Water", Oasis Atheist Club, Wichita, March 2017.
- 31. "Life on Pluto, Life on Mars, Don't Drink the Water", Science Cafe, Donut Whole, Wichita, February 2017.
- 30. "*OpenStax Microbiology* Author's Corner", ASMCUE Annual Meeting, Bethesda, October 2016.
- 29. "Life on Pluto?", Department of Biology, University of Central Oklahoma, Edmond, April 2016.
- 28. "Life on Pluto?", invited science cafe speaker at 116th Sigma Xi National Meeting, Kansas City, October 2015.
- HR"# $j / 93 + 9 \pm 12 = 8 < 9 \pm 12 = 3 ; j(\# \ 0 \# c \ 0 \# ? \] \ 0 6 : A \# A \% < + '12 \# 0 ; 7 \ N : < 84 \ 7 (\# C4 , \% \# HIJZ"#$
- 26. "Extremely Salty Microbes on Mars and in the Classroom", invited ASM Lecturer at National Association of Biology Teacher's Annual Meeting, Dallas, TX, November 2012.
- HP"# j/93+9#L8: -8%<%9#E%12,:9:3;j(#\O#cO^#?]06:A#A%<%+'12#0;7N:<847(#C4,%#HIJZ"#
- 24. "Extreme Living: Finding Salty Martians", Ad Astra Teacher Workshop, Kansas Cosmosphere, Hutchinson, August 2011.
- 23. "Ecology and Physiology of Algal Biodiesel Production", KS NSF EPSCoR Research Symposium, June 2011.
- 22. "Microbial Life at the High Concentrations of Magnesium Sulfate Found in Martian Soils", Ecology and Environmental Biology, Kansas State University, April 2011.
- "Ecology and Physiology of Algal Biodiesel Production", KS NSF EPSCoR Seminar Series, September, 2010.
- "Isolation and Characterization of Microbes from Basque Lake, BC, and Hot Lake, WA, Environments with High Magnesium Sulfate Concentrations", Jet

Propulsion Laboratory, NASA, Pasadena, CA, June 2010.

19.

- 9. "Circadian Rhythms in the Unicellular Cyanobacterium Cyanothece sp. ATCC 51142", Biology Department, Friends University, March 2002.
- 8. "Circadian Rhythms in the Unicellular Cyanobacterium Cyanothece sp. ATCC 51142", Botany Department, Oklahoma State University, February 2002.
- 7. "Circadian Rhythms in the Unicellular Diazotrophic Cyanobacterium *Cyanothece* sp. ATCC 51142", University of Tulsa, October 2001.
- 6. "Monitoring Microbial Systems with Molecular Tools: Studies with Activated Sludge, Soil, and Organism Selection", Environmental Protection Agency, Cincinnati, OH, October 1997.
- "Application of Traditional and Molecular Techniques in Microbial Ecology", Environmental Science and Engineering Symposium, Indiana University-Purdue University at Indianapolis, September 1997.
- "Circadian Rhythms in the Cyanobacterium *Cyanothece* sp. ATCC 51142",
 Department of Biological Sciences, Rensselaer Polytechnic Institute, Troy, NY,
 October 1995.
- 3. "Applications of Mathematics to CELSS Research", College of Science, Ball State University, Muncie, IN, September 1995.
- "An Aerobic, Unicellular, Diazotrophic Cyanobacterium for CELSS Applications",
 Symposium on Nitrogen Dynamics in Closed Systems, Lawrence Berkeley
 Laboratories, Berkeley, CA, September 1995.
- "CELSS-3D: A Broad Computer Model Simulating an Advanced Life Support System", Kennedy Space Center, FL, August 1995
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Cyanosite, a webserver for cyanobacterial research (1994-present) http://www-

Provided Technical Reviews (more than 80 at WSU) of manuscripts from *Bioremediation*Journal, Microbial Ecology, Pesticide Biochemistry and Physiology, Environmental

Science & Technology, World Journal of Microbiology and Biotechnology, American

Midland Naturalist, Biotechniques, Industrial Engineering and Chemistry Research,

NSF Grant Review Panel for Microbial Observatories and Microbial Interactions and Processes Program, 2002-2004

Co-convener of WSU Undergraduate Research and Creativity Forum, 2004

Kansas Biosciences Initiative Strategic Planning, 2005 Co-Chair of Biofuels, Biomaterials, and Environmental Hot Team

NSF Grant Review Panel for Dimensions of Biodiversity Program, 2010

NASA PPR Grant Review Panel, 2017

Brines Across the Solar System: Modern Brines, LPI, October 2021 Organizer, moderator, and presenter

Provided ad hoc technical reviews (>25) for grant proposals to NSF, USDA CSREES, NASA, Kentucky Science and Engineering Foundation, EISG, New Jersey Sea Grant College Program, IECR, NC Biotechnology Consortium, VT NSF EPSCoR, KU Leaven

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University Planning and Budget Committee, 2007-2009

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"Pass Me the Salt" GK-12 program with Wichita Public Schools placed WSU