

ROCHESTER ACADEMY OF SCIENCE

45th Annual Fall Scientific Paper Session

Poster Presentations

Saturday, November 10, 2018

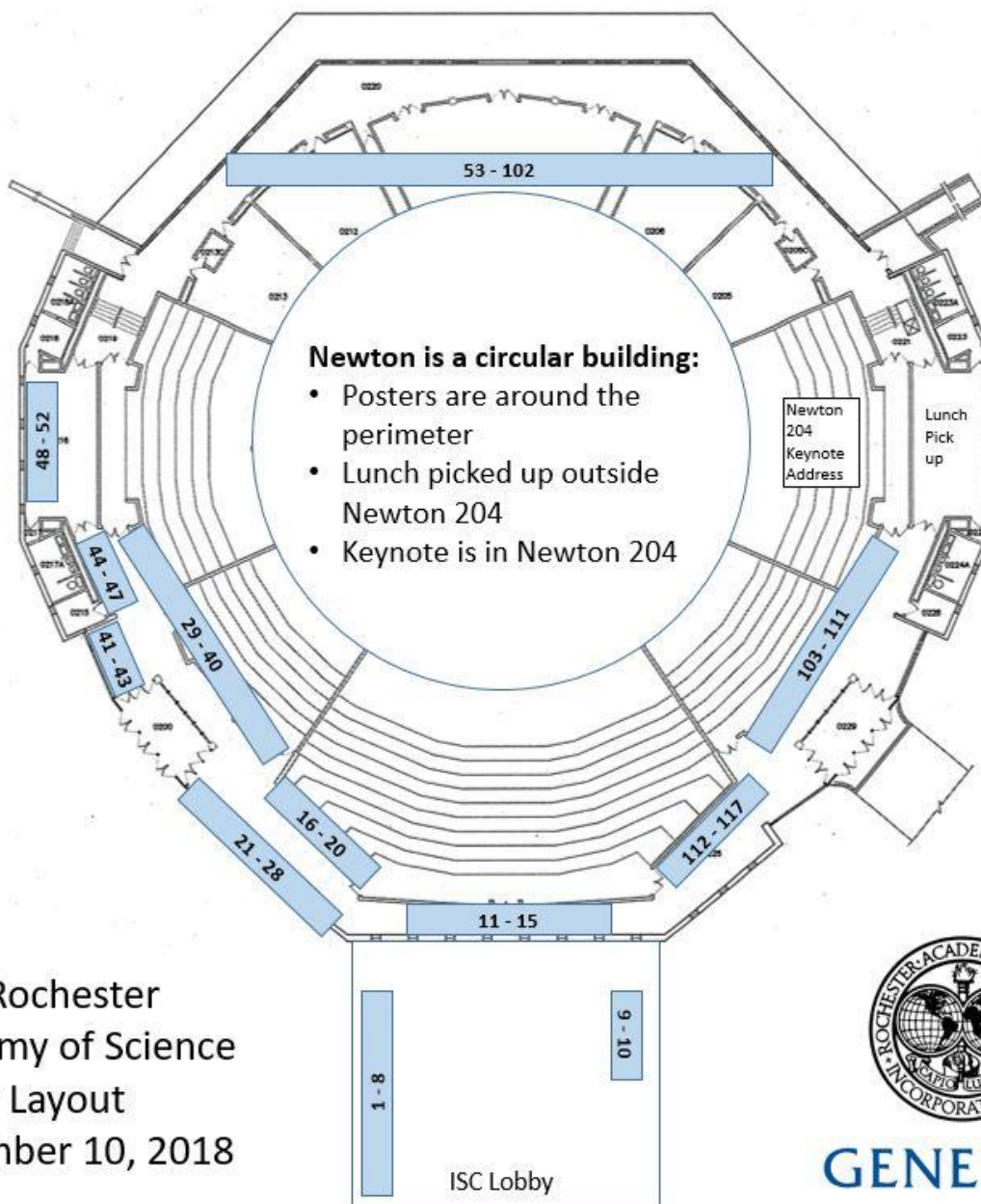
GENESE0

Hosted by SUNY Geneseo

Rochester Academy of Science
45th Annual Fall Scientific Paper Session Schedule

Oral Presentations

TIMES	TOPICS AND ROOMS (presentations during nearly all times, list of presenters on room doors)
9:30 - 9:45 am	
9:45 - 10:00 am	Session I, Bailey 102 Biology
10:00 - 10:15 am	Session II, Bailey 103 Biology, Molecular Biology, Biological Physics, Virology
10:15 - 10:30 am	Session III, Bailey 202 Bioinformatics, Biochemistry, Zoology
10:30 - 10:45 am BREAK	
10:45 - 11:00 am	Session IV, Bailey 203 Chemistry
11:00 - 11:15 am	Session V, Bailey 104 Environmental Science, Geology, Geosystems, Mathematical Modeling
11:15 - 11:30 am	Session VI, Bailey 105 Anthropology, Genetics, Physiology
	Session VII, Bailey 204 Computational Chemistry, Mathematics, Geography, Astrophysics, Atmospheric Science
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11:30 am – 12:30 pm	Poster Session, Newton Hall (a circular building, posters around perimeter)
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12:30 – 1:00 pm	Lunch pick-up, Entry to Newton 204A
<hr/>	
1:00 pm	Keynote address, Newton 204 <ul style="list-style-type: none"> • Introduction by SUNY Geneseo President and Geological Scientist Denise Battles • Dick Young, <i>A Newly Recognized Late Glacial Advance in Western N.Y.</i>



2018 Rochester
Academy of Science
Poster Layout
November 10, 2018



GENESE0

Poster Presentations

All presentations are in Newton Hall, perimeter of the circular building. Posters are grouped by subject.

Adolescent Education-Physics BS, Physics BA

1. Common Student Misconceptions in Physics Classes: Mechanics

Kyle Bautista, Carolina C. Ilie, *SUNY Oswego*

Animal Behavior

2. MOTHER-CALF POSITIONING IN SEAQUARIUM-BASED BELUGA WHALES

Natassia Tuhovak and Michael Noonan, *Canisius College*

3. BEHAVIORAL DIFFERENCES EXHIBITED IN ZOO-HOUSED SOCIAL AND SOLITARY FELIDS.

Abigail Robinson and Susan Margulis. *Canisius College*

Atmospheric Science

4. FOLIAGE CANOPY INFLUENCES ON DIURNAL TEMPERATURES.

Adrianna N. Kremer, *SUNY Brockport*; Kristine M. Chen, *University of Oklahoma*; and Neil F. Laird, *Hobart & William Smith Colleges*

Biochemistry

5. AN INVESTIGATION OF COMMENSAL-IMMUNE INTERACTIONS ALTERED BY ORAL PATHOGENS.

John Lepore, Sarah Metcalfe, Megan Jones, Michelle Panasiewicz, Michelle Visser and Jason Kay, *SUNY Geneseo*

6. NANOSCALE CELLULOSE MICROFIBRILS FROM POTATO, SUGAR BEET AND CELERY PULP AS RHEOLOGICAL MODIFIERS AND BIOCOMPOSITE MATERIALS.

Madeline Hoey, Alixander Perzon, Claire Holland, Peter Ulvskov, Bodil Jørgensen, *University of Rochester*

7. SYNTHESIS OF IRIIDIUM(III) COMPLEXES FOR G-QUADRUPLEX-SELECTIVE PROBES

Cory Forsyth, Carly Reed, and Joshua Blose, *SUNY Brockport*

8. THE INFLUENCE OF THE CELLULAR ENVIRONMENT ON Z-DNA FORMATION.

Amanda Hange, Joshua M. Blose, *SUNY Brockport*

9. CARBENE LABELING MASS SPECTROMETRY-CONTINUED OPTIMIZATION OF A TOOL FOR BIOPHYSICS.

Ellirose Edwards, Sahara Javner, *Houghton College*

Bioinformatics

10. Shotguns to Sharpshooters: Creating a Database of More Optimized amiRNAs

Samuel Chen, Dr. Xiao-Ning Zhang, *St. Bonaventure University*

Biological Detection

11. ALGINATE MICROPARTICLES AS BIOSIMULANTS.

Rachel Czerwinski, SUNY College of Environmental Science and Forestry; Meghan Ramsey, Frances Nargi Trina Vian, Benjamin Ervin, *MIT*

Biology

- 12. ADDITION OF MCH INHIBITS VDR WHEN MCHR1 LOCALIZES TO TRANSIENT PRIMARY CILIUM DURING ADIPOCYTE DIFFERENTIATION.**
Bianca Camillaci, Dr. Laurie Cook, *SUNY Brockport*
- 13. MICRORNA TARGET PREDICTION USING MACHINE LEARNING**
Neslihan Ari, Dr. Rongkun Shen, *SUNY Brockport*
- 14. ALTERNATIVE SPLICING DURING ADIPOCYTE DIFFERENTIATION**
Peter Giangrasso, Dr. Laurie Cook, and Dr. Rongkun Shen, *SUNY Brockport*
- 15. BACTERIAL EXPRESSION OF CHIMERIC ESCHERICHIA COLI AND TRYPANOSOMA BRUCEI DNA METHYLTRANSFERASES.**
Cassandra C. Taber and Kevin T. Militello, *SUNY Geneseo*
- 16. IDENTIFICATION OF RNA MODIFICATION ENZYMES IN TRYPANOSOMA BRUCEI.**
Will C. Schultz, Xiane Smith, Jordan Coffey, and Kevin T. Militello, *SUNY Geneseo*
- 17 MCH-MEDIATED EXPRESSION OF CIRCADIAN RHYTHM GENES**
Meghan Walters, Laurie B. Cook, *SUNY Brockport*
- 18. DETERMINING EFFECTS OF MELANIN-CONCENTRATING HORMONE ON INSULIN-SIGNALING PATHWAY COMPONENTS.**
Dayanara Torres, Laurie B. Cook, *SUNY Brockport*
- 19. DETERMINING THE INTERACTIONS BETWEEN DOUBLE STRAND BREAK PROCESSING AND NON-HOMOLOGOUS END JOINING DURING DIRECT REPEAT-MEDIATED DELETION EVENTS IN THE MITOCHONDRIA OF BUDDING YEAST.**
Imran Tahir, Andrew Connolly, Rey A. Sia, *SUNY Brockport*
- 20. EFFECTIVENESS OF PEPPERMINT OIL ON HUMAN AND PLANT PATHOGENIC BACTERIA.**
Dan Kaplan, Maryann Herman, *St. John Fisher College*
- 21. EFFECTS OF COCONUT OIL AND COCONUT OIL-PULLING ON STREPTOCOCCUS MUTANS**
Samantha Tardugno, , Maryann Herman, *St. John Fisher College*
- 22. TARGETING THE MEP PATHWAY TO DEVELOP NOVEL ANTIBIOTICS**
Miranda Williamson, Kevin Callahan, Anand Sridhar, Maryann Herman, *St. John Fisher College*
- 23. INVESTIGATION OF BACTERIAL BIOCONTROL OF FIREBLIGHT (ERWINIA AMYLOVORA)**
Maggie Lesch, Maryann Herman, *St. John Fisher College*; Daniel Stein, *Ontario Pear*
- 24. EXPLORATION OF KALANCHOE DAIGREMONTIANA PHYTOCHEMICALS FOR ANTIMICROBIAL PROPERTIES**
Brianna Walworth, Xayathed Somoulay, Grace Stoklosa, Sridhar Anand, Jonelle Mattiaccio, Maryann Herman, *St. John Fisher College*
- 25. EVALUATION OF CO-OCCURRENT ACTIONABLE GENES AND CORRESPONDING DRUG POTENTIAL USING LARGE-SCALE CANCER GENOMIC DATA**
Briana Kubik; Zi-Ming Zhao, Ph.D; Jeff Chuang, Ph.D, *SUNY Geneseo*
- 26. EXAMINATION OF NEUROD4 IN RETINOGENESIS**
Alexis Saunders, Dr. Travis Bailey, *SUNY Geneseo*

- 27. ENVIRONMENTAL STRESS RESPONSE AND COMPARISON OF BIOFILM FORMATION OF BACTERIAL ISOLATES.**
Maryah Glover, Milky Abajorga, Dr. Seema Thomas, *Rochesters Institute of Technology*
- 28. EXPRESSION OF NOTCH PATHWAY GENES IN GEF MUTANTS.**
Amanda Young, Sara Feinland, Dr. Travis Bailey, *SUNY Geneseo*
- 29. IDENTIFICATION AND CHARACTERIZATION OF POLYMERIC SUMO-2/3 CHAIN MODIFICATION AT THE SPINDLE MIDBODY DURING CYTOKINESIS.**
Te-An Chen, Xiang-Dong "David" Zhang, *Buffalo State*
- 30. CRITICAL BONE FRACTURE REPAIRS: A COMPARISON OF POROUS PROPERTIES OF CHITOSAN BIOACTIVE CEMENT AND PIG BONES.**
Medina Sabrina, Uddin Sabiha, Gabriel Justin, Barnabas Gikonyo, *SUNY Geneseo NY*
- 31. IMMUNE RESPONSE AND SEXUAL ORNAMENTATION TRADE-OFFS IN TELEOPSIS DALMANNI.**
Amy Farnham, Nicholas Sidou, Josephine Reinhardt, *SUNY Geneseo*
- 32. IMPACTS OF MEIOTIC DRIVE ON THE EXPRESSION AND ABUNDANCE OF TRANSPOSABLE ELEMENTS.**
Melanie Kirk, Chloe Ladias, *SUNY Geneseo*
- 33. IN VITRO ASSESSMENT OF A CRISPR/CAS9-MEDIATED, NON-TRANSIENT GENE THERAPY CANDIDATE FOR VARIOUS CANCERS.**
Alexander Ille, Hannah Lamont, Kimberly Bernosky-Smith, *D'Youville College*
- 34. INVESTIGATION INTO THE ROLE OF ACINETOBACTER BAYLYI TSSM, A T6SS COMPONENT, IN BACTERIAL CELL-CELL INTERACTIONS.**
John Miller, Kristin Picardo, Ph.D. *St. John Fisher College*
- 35. EFFECTS OF THIORIDAZINE HYDROCHLORIDE ON CRYPTOCOCCUS NEOFORMANS VIRULENCE FACTORS**
Valerie Garcia-Batiz, Tiffany Arrington, Virginia Glazier, *Niagara University*
- 36. ISOLATION OF BACTERIOPHAGE IN STAPHYLOCOCCUS SPECIES**
Janelle A. Fancher, Maria C. Kajdasz, Shania P.J.M. van Nuland and Mark A. Gallo Ph.D., *Niagara University*
- 37. DECT-BASED QUANTIFICATION OF BMAT AND AN ANALYSIS OF VARIABILITY WITHIN THE LUMBAR VERTEBRAE**
Angela J. Kubik, Katelyn A. Greene, Kyle McNamara, Kristen M. Beavers, J. Keenan Brown, Leon Lenchik, Daniel P. Beavers, Denise K. Houston, Ashley A. Weaver, *SUNY Geneseo*
- 38. ALLELIC HETEROZYGOSITY IN THE CANDIDA ALBICANS BIOFILM TRANSCRIPTION FACTOR, ROB1.**
Julia Rak, Megan McGraw, Virginia Glazier, *Niagara University*
- 39. OPTIMIZATION OF GROWTH CONDITIONS AND LIPID ACCUMULATION FOR BIODIESEL PRODUCTION USING CHLAMYDOMONAS REINHARDTII**
Nate Halsteter, Emily McDermott, and Noveera Ahmed, Ph.D., *St. John Fisher College*
- 40. OPTIMIZATION OF MICROSATELLITE DNA COMPARISON BETWEEN INDIVIDUAL BELUGAS AS A PROCEDURE FOR GENETIC IDENTIFICATION.**
Leanne Walker and Michael Noonan, *Canisius College*
- 41. POLYMERIC SUMO 2/3 CHAIN MODIFICATION OF PML REGULATES THE SIZE, NUMBER, AND STABILITY OF PML NUCLEAR BODIES.**
Robert White, Xiang-Dong "David" Zhang, *SUNY Buffalo State*

- 42. PRE-DISPERSAL SEED PREDATION IN THE ROEMER ARBORETUM**
Tulpen Hansen-Schwoebel, Racheal Devine, *SUNY Geneseo*
- 43. PREVALENCE OF TOXOPLASMA GONDII IN THE SYRACUSE URBAN DEER POPULATION.**
Gabriella Oliva, Jason Luscier, Emily D Ledgerwood, *Le Moyne College*
- 44. SEASONAL VARIATION IN RED FOX ACTIVITY**
Alanna Richman, Chloe Cottone, *SUNY Geneseo*
- 45. SPONTANEOUS CROSS-FOSTERING IN NEONATAL MATERNAL DYADS IN CAPTIVE BELUGA WHALES**
Madison Blackwell, Michael Noonan, *Canisius College*
- 46. STRUCTURAL VARIATION OF MYELIN BASIC PROTEIN IN THE WHITE-FOOTED MOUSE AND ITS IMPLICATION IN NEUROPROTECTION.**
Hannah Lamont, Alexander Ille, Stacy Amico-Ruvio, *D'Youville College*
- 47. EFFECTS OF SURFACE MODIFICATION ON DICTYOSTELIUM ADHESION AND MECHANOSENSATION**
Allison Hearn & Sara Fuller, *SUNY Oswego*
- 48. THE CONTRIBUTION OF POLLINATION TREATMENT TO POPULATION SPREAD OF AN INVASIVE THISTLE.**
Simran Singh, Suann Yang, Erin Shinski, *SUNY Geneseo*; Brittan Teller, *Penn State University*
- 49. THE OBESOGENIC EFFECTS OF BISPHENOLS IN DROSOPHILA MELANOGASTER LARVAE**
Allen Murphy, Thomas Pasquale, Advisor: Edward Freeman, *University of Rochester*
- 50. THE ROLE OF THE NON-HOMOLOGOUS END JOINING GENE, KU80, IN MITOCHONDRIAL GENOME STABILITY IN BUDDING YEAST.**
Brooke Scott, Rey Sia, *SUNY Brockport*
- 51. TOWARDS THE ELUCIDATION OF NOVEL VIRAL FACTORS THAT HIJACK HOST UBIQUITINATION PATHWAYS**
Madison Muehl, Josh Lapham, and Dr. Geoffrey Lipka, *Alfred University*
- 52. 2018 FIELD SURVEY: FOLLOW-UP SPOTTED TURTLE (CLEMMYS GUTTATA) CENSUS AT IRA MARSH**
Dr. Peter A. Rosenbaum, Kasey Barber, Kaitlyn Talmage and Matthew Gorman, *SUNY Oswego*

Biology - Animal Behavior

- 53. THE DEVELOPMENT OF INDEPENDENT SWIMMING IN SEAQUARIUM-BASED JUVENILE BELUGA WHALES.**
Emily Began and Michael Noonan, *Canisius College*

Biology - Cell and Molecular

- 54. GENETIC SUPPRESSOR SCREEN IN DICTYOSTELIUM CELLS LACKING KRSB.**
Swin Ratnayake, Yulia Artemenko, *SUNY Oswego*

Biology - Micro

- 55. ISOLATION AND IDENTIFICATION OF CULTURABLE BACTERIAL ENDOPHYTES FROM POISON IVY.**
Trevor S. Penix, Peter C. Wengert and Michael A. Savka, *Rochester Institute of Technology*
- 56. PREVALENCE OF WOLBACHIA SP. IN THE OAK TWIG PRUNER (ANELAPHUS PARALLELUS) FROM TWO DIFFERENT HOST PLANTS**
Sarah Bresette, William Brown, and Luciana Cursino, *Keuka College*
- 57. RATE OF PLASMID LOSS WHEN SELECTIVE PRESSURE IS REMOVED: USE IT OR LOSE IT**
Jack Klem, Jessica Nguyen, and Mark Gallo, Ph.D., *Niagara University*

Biology - Plant

58. ANATOMY AND MICRO-MORPHOLOGY OF THE STYLAR UMBRELLA OF SARRACENIA PURPUREA (NORTHERN PITCHER PLANT).

Chad Halson, Jinyan Guo, *SUNY Oswego*

Biology - Plant Physiology

59. EXPRESSING A. THALIANA SR45 AND SR45 RRM IN E. COLI.

Anna, Hu, Nick, Jodush, Dr. Xiao-Ning, Zhang, *Saint Bonaventure University*

60. IDENTIFICATION OF ASAP COMPLEX MUTANT LINES IN ARABIDOPSIS THALIANA.

Joseph, Hong, Xiao-Ning, Zhang, *Saint Bonaventure University*

Biology

61. EFFECT OF ARGININE METHYLATION ON THE ENZYMATIC ACTIVITY AND FUNCTIONS OF TbLpn, A LIPIN HOMOLOGUE FROM TRYPANOSOMA BRUCEI.

James Illingworth, Alyssa Raichel, Elizabeth Green, Rebecca Rossier, Michel Pelletier, *SUNY Brockport*

62. EFFECT OF DIETARY MAGNESIUM ON THE MICROBIOME OF THE SPLEEN IN A MOUSE MODEL OF ULCERATIVE COLITIS.

Josiah Seaburg, Taylor Schultz, Michel Pelletier, *SUNY Brockport*

Biology/Ecology

63. QUANTIFYING POST-DISTURBANCE DAMAGE OF SCAEVOLA PLUMIERI AND SCAEVOLA TACCADA.

Miranda W. Ella, Susan S Witherup, Peter Melcher, *Ithaca College*

64. THE IMPACT OF MORROW'S HONEYSUCKLE ON THE NUTRITION AND BODY CONDITION OF BIRDS.

Gretchen Horst, Susan Smith Pagano, *Rochester Institute of Technology*

Biology/Environmental Microbiology

65. DISTRIBUTION OF SULFUR-CYCLING BACTERIA IN FAYETTEVILLE GREEN LAKE.

Joy M. O'Brien, *Niagara University*

Biology/Physiology

66. EFFECT OF DIETARY MAGNESIUM MANIPULATION ON THE GASTROINTESTINAL MICROBIOME OF A MOUSE MODEL OF ULCERATIVE COLITIS

Christopher Carlson, Bernardo Ortega, *SUNY Brockport*

67. INHIBITION OF SODIUM TRANSPORT BY DECREASED APICAL PH IN THE MOUSE EPITHELIAL KIDNEY CELL LINE MPKCCDC14

Taylor Thompson, Bernardo Ortega, *SUNY Brockport*

68. IMPACT OF INVASIVE JAPANESE BARBERRY ON THE BREEDING PHYSIOLOGY OF OVENBIRDS.

Molly Border, Katherine Hensel, Susan Smith Pagano, *Rochester Institute of Technology*; Chad Seewagen, *Great Hollow Nature Preserve and Ecological Research Center*

Biotechnology

69. PHENOTYPIC EFFECTS OF β -CATENIN BUILDUP IN ZEBRAFISH

Mohammed Alshammary, Laura Branch, Zexuan Jia, Sagan Stanczak, *Rochester Institute of Technology*

Biotechnology and Molecular Bioscience

70. APPLICATIONS OF CRISPR-CAS9 TECHNOLOGY ON WNT5A IN DANIO RERIO EMBRYOS

Andreia Cadar, Guy Azriel, Rachel Fasiczka, Jeremy Kane, *Rochester Institute of Technology*

71. 3D MODELING OF A BRITTLE STAR VITELLARIA LARVA.

Guy Azriel, Jack Nelson, Madison Lenhart, *Rochester Institute of Technology*

Chemistry

72. AN INVESTIGATION INTO NANOSCALE OLIGOMERIZATION OF AMYLOID BETA PEPTIDE AT THE INTERFACE OF GOLD AND ICE.

Justin Slovak, Brianna Paulino, Shreyya Malik, Sakura Hamazaki, Kazushige Yokoyama, *SUNY Geneseo*

73. CRITICAL BONE FRACTURE REPAIRS: A COMPARISON OF THE MECHANICAL PROPERTIES OF CALCIUM PHOSPHATE BIOACTIVE CEMENT AND PIG BONE PART II.

Mark Soto, Yen Linh Le, Barnabas Gikonyo, *SUNY Geneseo*

74. DYNAMIC CHELATION BEHAVIOR IN NEUTRAL HYPERCOORDINATE DIORGANOSILICON COMPLEXES OF 1-HYDROXY-2-PYRIDINETHIONE.

Erin R. Tiede, Bradley M. Kraft, St. John Fisher College; William W. Brennessel, *University of Rochester*

75. EVALUATING THE PROMISE OF CALCIUM PHOSPHATE CEMENTS TO TRANSFER PROTEINS TO FRACTURED BONE SITE PART 1: DIFFUSION STUDIES

Simran Singh, Pema Sherpa, Barnabas Gikonyo, *SUNY Geneseo*

76. INTERFERENCE OF IONIC LIQUIDS ON THE BRADFORD ASSAY: A SPECTROSCOPIC STUDY.

Tyler A. Johnston, Mark P. Heitz, *SUNY Brockport*

77. METHOD DEVELOPMENT AND APPLICATION OF POLYMER ANALYSIS.

Jessica Zagari, Markus M. Hoffmann, *SUNY Brockport*

78. PROBING THE DIFFUSION RATE AND INTERNAL PEPTIDE DYNAMICS: TEMPERATURE AND PH-DEPENDENCE STUDIES OF A FLUORESCIN-TAGGED AMYLOID BETA PEPTIDE AND THIOFLAVIN T IN A SOL-GEL MATRIX

David Akanonu, Gus Formato, Manami Endo, Kieran Brown, Kazushige Yokoyama, *SUNY Geneseo*

79. THE SYNTHESIS OF TROCHELIOPHOROLIDE A: REDESIGNING AND CONSTRUCTING NEW FRAGMENTS.

Zexuan Jia, Diksha Biswa, Christina Goudreau, *Rochester Institute of Technology*

80. VARIABILITY IN DOM COMPOSITION AND CARBON METABOLISM IN CREATED WETLANDS.

Benjamin Hamilton, Carmody McCalley, Christy Tyler, Nathan Eddingsaas, *Rochester Institute of Technology*

Ecological Modeling

81. CHARACTERIZATION OF THE SARRACENIA PURPUREA INQUILINE MICROBIAL COMMUNITY.

Kelsey Barrus, Jacquelyn Lewis, Jason Bintz, Jamie Potter, *Houghton College*

Ecology

82. THREE YEARS OF INVASIVE CATTAIL REMOVAL IN A PEATLAND OF CONSERVATION SIGNIFICANCE IN OSWEGO COUNTY, NY.

Justin Searles, Sarita Charap, Joseph McCarthy, Bianca Fernandez, Koty Kurtz, Nathan Mckean, Faith Page, and C. Eric Hellquist, *SUNY Oswego*

83. ECOLOGICAL IMPACTS OF FOOD WASTE DIGESTATE DISPOSAL

Shradha Shrestha, Christy Tyler, *Rochester Institute of Technology*

84. ORIGINS OF AN INVASIVE: GEOSPATIAL ANALYSIS OF PLANT DISTRIBUTION AND WIND PATTERNS TO IDENTIFY POSSIBLE ORIGINS OF SCAEVOLA TACCADA IN PUERTO RICO

Taylor Yowan, *Ithaca College*

Electrical and Computer Engineering

85. PROGRESS TOWARDS BUILDING AN EXTERNAL-CAVITY DIODE LASER (ECDL)

Gregory Abbass, Sachintha Herath, Priyanka Rupasinghe, *SUNY Oswego*

Environmental Science

86. ASSESSING SALT MARSH VULNERABILITY, RESILIENCE, AND BLUE CARBON POTENTIAL THROUGH THE USE OF HIGH RESOLUTION HYPERSPECTRAL IMAGERY

Sarah Goldsmith, Rehman Eon, Christy Tyler, Charles Bachmann, Christopher Lapszynski, David Osgood, *Rochester Institute of Technology*

87. LAKE-WIDE COMPARISON OF CHINOOK SALMON CONDITION AFTER PEN-REARING IN LAKE ONTARIO

Josh Noonan, *SUNY Brockport*, additional authors: *New York State Department of Environmental Conservation, Ontario Ministry of Natural Resources and Forestry*

88. THE CONTROVERSIAL HISTORY OF THE KINZUA DAM.

Elijah Hall, Kaitlin Stack Whitney, *Rochester Institute of Technology*

89. THE IMPACT OF HERBIVORES ON METHANE PRODUCTION AND OXIDATION IN WETLANDS.

Briana Burt, *Rochester Institute of Technology*

90. THE RESPONSE OF DIFFERENT DAPHNIA PULICARIA GENOTYPES TO ALGAL BLOOMS CAUSED BY FERTILIZERS

Lillian Denecke, Michael Chislock, *SUNY Brockport*

91. USING MICRO ALGAE TO REMEDIATE AGRICULTURAL EFFLUENTS FROM WESTERN NY AND EXPLORING HARVESTED BIOMASS FOR BIOFUEL POTENTIAL.

Daniel Anini Baah, Dr. Jeffery Lodge, *Rochester Institute of Technology*

92. BLACK SOLDIER FLY LARVAE COMPOST VIABILITY STUDY

Dawn Carter (PhD), Sarah Brownell (PhD), Shwe Sin Win (PhD), Brian Thorn, Lennon Cavanaugh-Gordon, Nicole Cavanaugh, Vince Darmohray, *Rochester Institute of Technology*

Environmental Science and Ecology

93. COMPARISON OF PREY FISH FATTY ACID SIGNATURES AMONG THE FINGER LAKES

Matthew Beers, Tom Bianchi, Matt Futia, Jacques Rinchard,

94. LAND-USE IMPACTS WATER QUALITY AND AQUATIC INVERTEBRATE COMMUNITIES IN THE GENESEE RIVER.

Daniel Beers, Courtney McDaniel, and Michael Chislock, *SUNY Brockport*

95. THE IMPACT OF THE INVASIVE HEMLOCK WOOLLY ADELGID ON SOIL STABILITY IN THE HEMLOCK LAKE WATERSHED.

Jenna Malagisi, Kathryn Amatangelo, *SUNY Brockport*

Forensics

96. POST-CREMATION WEIGHT AS AN INDICATOR FOR SEX AND STATURE.

Alexandra Novak, *SUNY Geneseo*

Genetics/genomics/virology/microbiology.

97. CHARACTERIZATION OF NOVEL GIANT BACILLUS THURINGIENSIS SIPHOVIRUSES RELATED TO B. ANTHRACIS PHAGE TSAMSA.

Benjamin Hall, Breanna Laber, Ei Thinzar Phyto, Mohamed Mohamed, Julie Thomas, *Rochester Institute of Technology*

Geological Sciences

98. BIOSTRATIGRAPHY, SEA LEVEL CHANGE, AND DISCONFORMITIES IN THE UPPER DEVONIAN CHATTANOOGA SHALE OF WESTERN TENNESSEE BASED ON CONODONTS AND MAGNETIC SUSCEPTIBILITY (PRESENTED AT GSA 2017 IN SEATTLE, WA)

Josephine Chiarello, Emily Hauf, D. Jeffrey Over, *SUNY Geneseo*; Jin-Si R. Over, *University of Victoria, BC*; Thomas J. Algeo, *University of Cincinnati*

Inorganic chemistry

99. SYNTHESIS AND CHARACTERIZATION OF NOVEL ORGANOSILICON COMPLEXES BEARING THE 8-HYDROXYQUINOLINE N-OXIDE LIGAND.

Kathleen I. Lowry, Bradley M. Kraft, *St. John Fisher College*; William W. Brennessel, *University of Rochester*

Life Science

100. CAN THE OAK TWIG PRUNER BEETLE (ANELAPHUS PARALLELUS) BE SEXED?

Jesse Freeling Brundage, William Brown, Luciana Cursino, *Keuka College*

101. TRANSCRIPTOMICS OF THE OPHIOPLOCUS ESMARKI BRITTLE STAR.

Alexandria Shumway, Hyla Sweet, *Rochester Institute of Technology*

102. 3D PROSTATE TUMOR FORMATION IN VITRO.

Alaa Abdelmageed Ahmed, Janice B. Fung, Brenda C. Lara, Amany E. Elsharkawy, Irene M. Evans, *Rochester Institute of Technology*

Natural Sciences

103. FACTORS THAT INFLUENCE ROADKILL DETECTION PROBABILITIES

Liana Raguso, *The Lawrenceville School*, William Brown, *Keuka College*, Marion Zuefle, *Cornell University*

Paleontology

104. BUFFALOPTERUS WITHIN THE LATE SILURIAN BERTIE GROUP OF NEW YORK AND ONTARIO, CANADA.

Samuel J. Ciarca, Jr., Stephen Mayer, Wayne Davey, Tod S. Clements

Physics

105. DESIGNING AN ARDUINO WATER QUALITY SENSOR.

Elizabeth Moore, William White, Ileana Dumitru Ph.D., Peter Spacher Ph.D., John Halfman, Ph.D, Lisa Cleckner, Ph.D., *Hobart and William Smith Colleges*

106. USING DRONES TO MONITOR HARMFUL ALGAL BLOOMS.

William White, Josh Andrews, Ileana Dumitru Ph.D., Peter Spacher Ph.D., John Halfman, Ph.D, Lisa Cleckner, Ph.D., *Hobart and William Smith Colleges*

106. THE SENSITIVITY OF CEPHEID BLUE LOOPS IN THE H-R DIAGRAM TO MIXING LENGTH PARAMETERS

Nicholas Proietti, Samantha Carey, Shashi Kanbur, *SUNY Oswego*; Earl Bellinger, *Aarhus University, Denmark*

108. TREATING CANCER WITH PHYSICS: NANOPARTICLE BREAKTHROUGH

Jared J. Bouldin, Carolina C. Ilie, *SUNY Oswego*

Physiology

109. ELECTRICAL STIMULATION IMPROVES SCRATCH WOUND RECOVERY IN CULTURED SMOOTH MUSCLE CELLS.

Kirsten Blakeslee, Keegan Frenya, Ransom H. Poythress, *Houghton College*

Physiology (Biology)

110. ANOCTAMIN 1 & ANOCTAMIN 2 AT THE MOLECULAR LEVEL

Alexandra Flint, Bailey Majtyka, Christina Abraham, Cori Mainville, Iesha DeLesline, Adam Rich, *SUNY Brockport*

111. Protein expression of anoctamin 1 and anoctamin 2 in various tissues of the zebrafish

Claire Makowsk, Brian Smith, Clarissa Steier, Brook Scott, *SUNY Brockport*

112. Testing Anoctamin Function in Gastrointestinal Transit and Vision in Zebrafish.

John Purificato, Cody Drought, Jordan Johnson, Alexa Drier, Kelly Anderson, Adam Rich, *SUNY Brockport*

Zoology

113. QUATERNARY LIZARDS FROM CATHEDRAL CAVE, WHITE PINE COUNTY, NEVADA.

Nicole Spangenburg, *SUNY Oswego*