



American Chemical Society Wichita Section

April 2021 Newsletter

Section Meeting & Virtual Symposium April 23-24

The purpose of this conference was to bring together students, faculty and individual scientists continued research despite where they are; and to open opportunities for dialogue and collaboration among participants. This event was held online by having both oral and poster presentations, an invited speaker presentation, and an award section. This virtual symposium was supported by the ACS Wichita section, funded by ACS METT (Members Engaging Through Technology) program.

April 23 11:00 am-5:00 pm

Student Presentations

Poster Presentations:

1. Towards Peptide-polymer Nanoparticles of Different Charges for Studying Biological Interactions
Shelby Innes, Alireza J. Nasrazadani, Emily L. Torrey¹, Hernan A. Hernandez, Matthew P. Thompson, Nathan C. Gianneschi, and Andrea J. Luthi
2. Determination of Cannabinoid Content in CBD Oils, Hemp Oils, and Edibles
Courtney Sellens and Mingjing Sun
3. Comparison of Unapplied vs. Applied Liquid Cosmetic Foundation Using Attenuated Total Reflectance- Fourier Transform Infrared Spectroscopy
Rebecca Garland, Mingjing Sun, Melissa Bailey, and Jeremy Morris
4. Computational Study of Structural And Energetic Effects of Mutations in STING

Lyly Le, Haley Pfeifer, and Masa Watanabe

5. Determination of Concentrations of Lead and Zinc in Soil at Tri-State Mining District by Using ICP and XRF
Brayden Miller and Qiyang Zhang
6. Kinetic controlled-Growth Synthesis of Cadmium Selenide Nanocrystal Quantum Dots
Jaren R. Hambleton, Addison Mininger, Morgan Dilley, and Arvin J. Cruz

Oral Presentations:

1. Achieving Ultra-Fast Separation for Neurotransmitters by Using Capillary Electrophoresis
Michael Yackovich and Qiyang Zhang
2. Mining Sub-structural Motif by Graph Network Method
Ellie Bultena and Masa Watanabe
3. Revealing Palladin's Role In Metastasis by Directly Observing Its Influence on Actin Polymerization
Derek Baldwin, Sharifah Albraiki, and Moriah Beck
4. Characterization of PET tracer Flutemetamol (GE-067) binding to A β 1-40 fibrils
Gayani Wijegunawardena, Pu Duan, Mei Hong, and Haifan Wu
5. Reactions of Lysergic Acid Amide and Cinnamaldehyde: Synthesis, Analysis, and Applications
Michael Stump and Qiyang Zhang
6. Computational study of structural influences on the trans-cis photoisomerization of 2,2-diazoazulene
David Harrell and Jason Applegate

April 24 11:00 am-2:30 pm

Opening Remark

Dr. Brent Thomas, Dean of Liberal Arts and Science College, Emporia State University

Recognition of Top Three Presentations

Poster: Presentations 1, 6, 2 from the list

Oral: Presentations 1, 4, 6 from the list

Invited Speaker Presentation

Title: Covid-19 Biology, Vaccines and You

Dr. Sherry Fleming, PhD

Johnson Cancer Research Center
Kansas State University

Speaker Bio

Dr. Sherry Fleming received her bachelor's and master's degrees in microbiology at Kansas State University and her doctorate in immunology from the University of Colorado Health Science. After postdoctoral experience at Walter Reed Army Institute of Research and Uniformed Services University, she returned Kansas State University in 2004 as a tenure-track professor in biology and was promoted to professor in 2017. In Jan 2020, Dr. Fleming became Director of the Johnson Cancer Research Center. She has an active research program in the innate immune response to hypoxia that brought in more than \$4.8 million to the university from the National Institutes of Health and Department of Defense. As principal investigator on more than \$3.2 million, Fleming also produced and patented a small therapeutic that decreases melanoma growth. In addition, she is the K-State campus coordinator for the Kansas IDeA Network of Biomedical Research Excellence, or K-INBRE, and has been the director of LACS.

Abstract

The Covid-19 pandemic has changed our lives, but what is really going on within your body after infected by the Sars-CoV2 virus, and how vaccination changes the response that? The virus particles infect cells causing an immune response by a variety of distinct white blood cells. The vaccines contain, or cause your body to make, a small viral peptide of the virus. The presence of this small peptide, leads to a similar protective immune response. We will discuss the body's response to Sars-CoV2, the vaccines and how your sex may play a role in the biological response.

Senior ACS Members Recognition

Student and Service Awards

Senior ACS Members, with 50 and 60 years membership, were recognized. Outstanding students awards in freshman, junior, and

senior level chemistry majors were presented with nominations from Wichita Section Colleges. Volunteer student awards were also presented.

Chair's Message

High School Science Teacher Outreach

The Wichita Section is making an effort to improve our connection with high school science teachers. If you know a science teacher who might be interested, please invite them to our next meeting. The section will cover the cost of the meal. For additional information about this outreach effort contact Qiyang Zhang at qzhang@emporia.edu.

2021 Section Executive Committee

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Wichita Section Web Site

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