



SPRING 2025 SEMINAR SERIES

April 25	Ryan Lukkarinen , Research, <i>"Synthesis of Novel Sulfur-Containing Schiff Base Ligands and Their Metal Complexes"</i> (3:00 p.m.)
May 2	Oladapo Jacob , Research, <i>"Development of a Novel Approach to Phenaliporphyrin"</i> (3:00 p.m.)

Seminars are held Fridays at 3:00 pm in JH 225 unless otherwise indicated.

DATES AND DEADLINES:

April 29	Last day to withdraw from a second-half semester course. A withdrawal grade of WX is assigned. No adjustment of charges or financial aid. Last day to add or remove pass/no pass (pass/fail) option from a second-half semester course.
May 2	Transfer Day. Last day for students who have a final exam conflict to complete the conflict verification form.
May 3	Last Day of spring classes. Evaluation (final exams) period begins.
May 9	Spring semester ends. Evaluation (final exams) period ends
May 9-10	Commencement Ceremonies take place
May 15	Begin final audit of May 2025 bachelor's degree candidates – Deficiency statements will be sent to the student and the department/school again, whether deficiencies are old or new.
May 19	Summer Session begins. (Summer Session has many variable length courses; consult the Registrar's website for dates regarding withdrawal from a course). Last day to register on My.IllinoisState.edu for Summer 2025. Future summer registration must be done in 107 Moulton Hall or by emailing Registrar@ilstu.edu .
May 23	Deadline for August 2025 graduate degree candidates to submit a degree audit.
May 26	Memorial Day. University closed.
May 30	Transfer Day

UPCOMING

May 2, 2025 Senior Banquet and Awards Ceremony 5:30-8:00 p.m. Circus Room/Bone Center

May 9, 2025 Graduation Reception 6:00 – 8:00 p.m. Turner Hall, Room 212

May 10-11, 2025 Graduation Ceremonies

STUDENT, FACULTY and STAFF ACTIVITIES

Presentations:

^(UG) **Kobulnicky, Trent** and **Driskell, Jeremy D. (mentor)**. “*Conjugation and Analysis of Random and Site-Specific Biotinylated Antibodies on Streptavidin-Coated Surfaces*”. National Meeting of the American Chemical Society, Spring 2025, San Diego, CA. March 24, **2025**. (Poster)

Driskell, Jeremy D., ^(G) **Ebbah, Eunice**, ^(G) **Amissah, Anthony** and **Kim, Jun-Hyun**. “*SERS-based Vertical Flow Assay Exploiting Plasmonic Paper and Antibody-Directed Assembly of Plasmonic Core-Satellites for Point of Care Diagnostics*.” National Meeting of the American Chemical Society, Spring 2025, San Diego, CA, March 26, **2025**. (Talk)

^(G) **Beitello, Emily**, ^(G) **Osei, Kwame**, ^(UG) **Kobulnicky, Trent**, **Friesen, Jon A.** and **Driskell, Jeremy D.** “*Conjugation and Analysis of Random and Site-Specific Biotinylated Antibodies on Streptavidin-Coated Surfaces*.” National Meeting of the American Chemical Society, Spring 2025, San Diego, CA, March 23, **2025**. (Poster)

^(UG) **Kobulnicky, Trent**, ^(G) **Beitello, Emily** and **Driskell, Jeremy D.** “*Site-Specific Monoclonal Antibody Modification via Microbial Transglutaminase to Improve Absorption onto Gold Nanoparticles*.” National Meeting of the American Chemical Society, Spring 2025, San Diego, CA, March 23, **2025**. (Poster)

^(G) **Breusche, Faith E.**, ^(UG) **Somerlot, Anna H.**, ^(UG) **Walder, Jason R.**, **Friesen, Jon A.** and **Driskell, Jeremy D.** “*Exploring Mutagenesis as a Method to Modify HRP for Enhanced Activity and Absorption to Gold Nanoparticles*.” National Meeting of the American Chemical Society, Spring 2025, San Diego, CA, March 23, **2025**. (Poster)

^(UG) **Marinucci, Nicole**, Forkin, Maiya and **Lash, Timothy D. (mentor)**. “*Synthesis of Porphyrins With Two Exocyclic Rings Using the ‘3+1’ Version of the MacDonald Condensation*.” National Meeting of the American Chemical Society, Spring 2025, San Diego, CA, March, **2025**. (Poster)

(G) Awa, Francis and Lash, Timothy D. (mentor). "Synthesis of Quinone Fused Carbaporphyrins." National Meeting of the American Chemical Society, Spring 2025, San Diego, CA, March 26, 2025. (Poster)

(G) Jacob, Oladapo and Lash, Timothy D. (mentor). "Development of a Novel Route to Phenaliporphyrin." National Meeting of the American Chemical Society, Spring 2025, San Diego, CA, March 26, 2025. (Poster)

(UG) Bains, Gursewak and Lash, Timothy D. (mentor). "Reduced Aromatic Character in Nitronaphthoporphyrins". Poster Presentation at the 2025 Illinois State University Graduate Research Symposium, Normal, Illinois, April 11, 2025.

(UG) Borchardt, Ryan and Peters, Steven (mentor). "Synthesis and Reduction of Z-Naphthyl Isocyanate." Poster Presentation at the 2025 Illinois State University Graduate Research Symposium, Normal, Illinois, April 11, 2025.

(UG) Brozenec, Rachel and Mitchell, T. Andrew (mentor). "Synthesizing Materials for Research on (5+2) Cycloadditions". Poster Presentation at the 2025 Illinois State University Graduate Research Symposium, Normal, Illinois, April 11, 2025.

(UG) Eifert, Rex and Mitchell, T. Andrew (mentor). "Synthesis of Structural Diversity from Maltol-Driven Rearrangement Reactions." Poster Presentation at the 2025 Illinois State University Graduate Research Symposium, Normal, Illinois, April 11, 2025.

(G) Gautam, Binod, (UG) Foster, Cayden and Baral, Susil (mentor). "Single Chain Manipulation of Synthetic Polymers". Poster Presentation at the 2025 Illinois State University Graduate Research Symposium, Normal, Illinois, April 11, 2025.

(UG) Gonzalez, Grace, (UG) Kirchoff, Michaela, (UG) Milligan, Garrett, (G) Okereke, Blessing and Kim, Jun-Hyun (mentor). "Regulating Surface Enhanced Raman Scattering Signals by Thermo-Responsive Gold-Polymer Nanocomposites." Poster Presentation at the 2025 Illinois State University Graduate Research Symposium, Normal, Illinois, April 11, 2025.

(UG) Kobulnicky, Trent, (G) Beitello, Emily and Driskell, Jeremy D. (mentor). "Conjugation and Analysis of Random, Site-Specific Biotinylated Antibodies on Streptavidin-Coated Surfaces." Poster Presentation at the 2025 Illinois State University Graduate Research Symposium, Normal, Illinois, April 11, 2025.

(UG) Marinucci, Nicole, Forkin, Maiya and Lash, Timothy D. (mentor). "Synthesis of Porphyrins with Two Exocyclic Rings Using the $\text{~}3+1\text{~}$ Version of the MacDonald Condensation." Poster Presentation at the 2025 Illinois State University Graduate Research Symposium, Normal, Illinois, April 11, 2025.

(UG) Sloan, Mia and Szczepura, Lisa F. (mentor). "Coordination of Benzyl Containing Phosphine Ligands to Ruthenium (II)." Poster Presentation at the 2025 Illinois State University Graduate Research Symposium, Normal, Illinois, April 11, 2025.

(UG) Melgoza, Briana, Szczepura, Lisa F. (mentor) and Coil, Taylor. "Synthesis and Characterization of $[\text{Re6Se8}(\text{P}^{\text{Bn}}\text{3})_4\text{I}_2]$ and $[\text{Re6Se8}(\text{P}^{\text{Bn}}\text{3})_5\text{I}]$ I." Poster Presentation at the 2025 Illinois State University Graduate Research Symposium, Normal, Illinois, April 11, 2025.

(UG) Milligan, Garrett, (G) Okereke, Blessing, (UG) Kirchoff, Michaela, (UG) Gonzalez, Grace and Kim, Jun-Hyun (mentor). "Optimization of Synthetic Conditions to Maximize the Fluorescent Property of Gold Nanoclusters." Poster Presentation at the 2025 Illinois State University Graduate Research Symposium, Normal, Illinois, April 11, 2025.

(G) Nsabaah, Joseph and Mitchell, T. Andrew (mentor). "Applications of [5+2] Cycloadditions Towards Cleavable Tethers." Poster Presentation at the 2025 Illinois State University Graduate Research Symposium, Normal, Illinois, April 11, 2025.

(G) Okereke, Blessing, (UG) Milligan, Garrett, (UG) Kirchoff, Michaela, (UG) Gonzalez, Grace and Kim, Jun-Hyun (mentor). "Fabrication of Carbon Black for the Development of Highly Reactive Supported Catalysts." Poster Presentation at the 2025 Illinois State University Graduate Research Symposium, Normal, Illinois, April 11, 2025.

(G) Piontek, Russell and Mulligan, Christopher C. (mentor). "Detection and Long-Term Assessment of COVID-19 Pharmaceuticals in Soil and Their Degradation Pathways." Poster Presentation at the 2025 Illinois State University Graduate Research Symposium, Normal, Illinois, April 11, 2025.

(UG) Sheehan, Casey and Chilukuri, Bhaskar (mentor). "Surface Interactions Between Halogenated Aromatic Compounds." Poster Presentation at the 2025 Illinois State University Graduate Research Symposium, Normal, Illinois, April 11, 2025.

(G) Alende, Joy and Mitchell, T. Andrew (mentor). "A Surprising Rearrangement of Pyrone-Amides." Poster Presentation at the 2025 Illinois State University Graduate Research Symposium, Normal, Illinois, April 11, 2025.

(UG) Walis, Sara and Friesen, Jon (mentor). "Temperature Dependence of *Listeria Monocytogenes* and *Sulfolobus Islandicus* Glycerol Kinase and Characterization of *Listeria Monocytogenes* Glycerol Kinase." Poster Presentation at the 2025 Illinois State University Graduate Research Symposium, Normal, Illinois, April 11, 2025.

(UG) Anderson, Madelynn, (UG) Klann, Makenna S., (G) Wiggins, Emily J. and Mulligan, Christopher C. (mentor). "Developing a Substrate Spray Mass Spectrometry-Based Method for Processing Fingernail Scraping Evidence for Exogenous Chemical Screening." Poster Presentation at the 2025 Illinois State University Graduate Research Symposium, Normal, Illinois, April 11, 2025.

(G) Beitello, Emily, (G) Osei, Kwame, (UG) Kobulnicky, Trent, Friesen, Jon (co-mentor) and Driskell, Jeremy D. (mentor). "Site-Specific Monoclonal Antibody Modification via Microbial Transglutaminase to Improve Adsorption onto Gold Nanoparticles." Poster Presentation at the 2025 Illinois State University Graduate Research Symposium, Normal, Illinois, April 11, 2025.

(G) Boafa, Emmanuel, (UG) Kobulnicky, Trent and Barnes, George L. (mentor). "Graph-Based Analysis of CID Simulation Data of Protonated Peptides: A Case Study of Protonated Threonine and Phospho-Threonine." Poster Presentation at the 2025 Illinois State University Graduate Research Symposium, Normal, Illinois, April 11, 2025.

(^G) Breausche, Faith E., (^{UG}) Somerlot, Annelise, (^{UG}) Walder, Jason, Friesen, Jon A. and Driskell, Jeremy D. (mentor). "Exploring Mutagenesis as a Method to Modify HRP for Enhanced Activity and Adsorption to Gold Nanoparticles." Poster Presentation at the **2025** Illinois State University Graduate Research Symposium, Normal, Illinois, April 11, **2025**.

(^{UG}) Ervin, Quentin and Mitchell, T. Andrew (mentor). "Preparing for the Base-Mediated Rearrangement Reaction." Poster Presentation at the **2025** Illinois State University Graduate Research Symposium, Normal, Illinois, April 11, **2025**.

(^{UG}) Kimsey, Alexandria, (^G) Affram, Kweku Amaning and Hitchcock, Shawn R. (mentor). "Towards the Synthesis of an Antimalaria Agent via the Asymmetric Glycolate Aldol Addition Reaction and a Convergent Transamidation Strategy." Poster Presentation at the **2025** Illinois State University Graduate Research Symposium, Normal, Illinois, April 11, **2025**.

(^G) Oluborode, Joseph and Mitchell, T. Andrew (mentor). "N-O Tether-Enabled Net Intermolecular [5+2] Cycloaddition: A Preliminary Study." Poster Presentation at the **2025** Illinois State University Graduate Research Symposium, Normal, Illinois, April 11, **2025**.

(^G) Wiggins, Emily, Jones, Blaise, (^G) Nwaiwu, Kingsley, Wieland, Jamie R. and Mulligan, Christopher C. (mentor). "Rapid, Direct Screening of Opioids from Unwashed Poppy Seeds with 3D-Printed Cone Spray Ionization-Mass Spectrometry (3D-PCSI-MS)". Poster Presentation at the **2025** Illinois State University Graduate Research Symposium, Normal, Illinois, April 11, **2025**.

(^{UG}) Gonzalez, Grace, (^{UG}) Kirchoff, Michaela, (^{UG}) Milligan, Garrett, (^G) Okereke, Blessing and Kim, Jun-Hyun (mentor). "Regulating Surface-Enhanced Raman Scattering Signals by Thermo-Responsive Gold-Polymer Nanocomposites." Poster Presentation at the **2025** Illinois State University Graduate Research Symposium, Normal, Illinois, April 11, **2025**.

Publications:

Platt, David C.; Ferrence, Linda M.; (^G) Breausche, Faith; (^G) Terry, Katelyn; Ferrence, Gregory M. and Jones, Marjorie A. (corresponding author); "Lanthanide Exposure In Vitro Differentially Diminishes MTT Cell Viability in Axenic Neuronal or Glial Cell Model Systems." *Inorganics* **2025**, 13, 127. <https://doi.org/10.3390/inorganics13040127>; invited manuscript.

Awards:

Illinois State University's Office of Student Research was pleased to announce that **Trent Kobulnicky** was named a 2025 **Goldwater Scholar**.

