



CELEBRATION OF STUDENT SCHOLARSHIP

Concordia's Annual



undergraduate research | scholarship | creative activity

SYMPOSIUM



2024 Event Program



**CONCORDIA
COLLEGE**

MOORHEAD, MINNESOTA

CONCISE SCHEDULE OF EVENTS

ALL DAY	Senior Art Exhibition Cyrus M. Running Gallery, ISC Commons
8:00 A.M.	Refreshments & Presenter check-in Centrum
9:00 A.M.	Welcome from the Provost and Director of URSCA, Poster Session 1 Centrum
10:30 A.M.	Concurrent Session 1 ISC, Jones, Olin, Birkeland
11:25 A.M.	Concurrent Session 2 ISC, Jones, Olin, Birkeland
12:15 P.M.	Department Sessions, Lunch break Various Locations
1:45 P.M.	Concurrent Session 3 ISC, Jones, Olin, Birkeland
2:40 P.M.	Concurrent Session 4 ISC, Jones, Olin, Birkeland
3:30 P.M.	Mentor of the Year Award, Prize Drawings Centrum
3:45 P.M.	Poster Session 2 Centrum
5:00 P.M.	Closing Centrum

SESSION FORMATS

POSTER SESSIONS

These are fluid sessions that include large printed posters on easels as well as a variety of creative works such as 2D and 3D art displayed on pedestals or digital monitors. Students are assigned a window of time to stand by their work in the Knutson Campus Center Centrum or Atrium along with other posters and/or art exhibits. They communicate their research or creative scholarship with attendees as they move throughout the space.

ART EXHIBITIONS

The Senior Art Exhibition is featured in the Cyrus M. Running Gallery, and one senior's art installation hangs from the ceiling in the ISC Commons.

CONCURRENT SESSIONS

These sessions feature several presentations scheduled at the same time in different locations. Presenters in concurrent sessions are assigned a specific room on campus and a time slot within the session during which they present their work to a seated audience. Presenters and audience members are encouraged to stay for the duration of the whole session. Current sessions include up to four variations, selected by students when they submitted their abstract.

Panel

40-minute session featuring a 10- to 20-minute presentation followed by facilitated discussion for the remainder of the session

Classic

15-minute oral presentation (e.g. papers, PPT, artist's talks, performance talks, extemporaneous speeches) followed by 5 minutes of Q&A for a total of 20 minutes

Nano

8-minute presentations followed by group Q&A. Three to four nano presentations will be scheduled in a single concurrent session

Pecha Kucha

400-second PPT presentation containing 20 PPT slides, each auto-timed for 20 seconds, with spoken word choreographed with each visual aid to tell a compelling story

DEPARTMENT SESSIONS

Academic departments and programs have the option of offering a special session during the lunch break. Examples of department session activities include honor society inductions and conversations with alumni.

COSS QUEST

DESCRIPTION

COSS QUEST is a gamified way to enjoy and interact with the various events at the URSCA Symposium COSS. There are a few ways to play COSS QUEST and earn chances to win prizes.



Follow [concordia_ursca](#) on Instagram and answer posted trivia questions.

Use [#coss2024](#) [#cordmn](#) when commenting about your COSS experience on socials



17 APRIL '24

PASSPORT



Pick up your COSS Passport from the Knutson Campus Center Centrum.

Collect stamps on your Passport as you attend COSS sessions and visit the tables in the atrium.

Show your stamped Passport to COSS volunteers in the Centrum for prize drawing entries.

SHOWCASE

DESCRIPTION

The Concordia Scholars - Showcase of Undergraduate Research is a digital collection of exemplary works presented by Concordia students at COSS. Faculty, staff, and guests are invited to nominate COSS presentations of any format for the Showcase. Nominations are due by 30 April 2024. To nominate, email the scholar's name and presentation title to archives@cord.edu.

Visit the Showcase:

<https://digitalhorizonsonline.org/digital/collection/cord-work>

The screenshot displays the Digital Horizons website interface. At the top, the logo 'DIGITAL HORIZONS' is visible with the tagline 'Life on the Northern Plains'. Below the logo is a navigation menu with links for Home, About, Browse, Contributors, Contact, Facebook, and Log in. A search bar is located on the right side of the header. The main content area is titled 'Concordia's Scholars - Showcase of Undergraduate Research (Concordia College)'. Underneath, there is a section 'About this collection' which describes the repository and lists nomination criteria. A 'Browse' button is present below the criteria. On the left side, a large image of a building is shown with the text 'A TALE OF TWO CITIES' and 'CONCORDIA LANGUAGE VILLAGE WALDSEE IN THE CRUCIBLE OF HISTORY AND MEMORY'. Below the image, there is a 'Transcript' button and an 'Object Description' button. A vertical list of page thumbnails is visible on the right side of the main content area.

NOMINATION CRITERIA

- Project demonstrates a high degree of rigor, depth, and quality
- Research or creative activity is original work that makes a relevant contribution to its area of study
- Presentation of research (written, oral, performed) is clear, professional, and engaging
- Research was conducted and presented in an ethical manner
- Project serves as an excellent model of undergraduate scholarship for the Concordia community

DETAILED SCHEDULE

<https://ursca.org/coss>

9:00 - 10:15 A.M. POSTER SESSION 1 Knutson Campus Center Centrum

P01. “Comparing Biodiversity of Small Mammal Species in Remnant and Restored Prairie Habitats”

Student Presenter(s): Katie Waugh, Lydia Durrett

Mentored by: Dr. Joseph Whittaker

P02. “Ethnographic review of Concordia’s EACH club”

Student Presenter(s): Olivia Daniels

Mentored by: Dr. Karla Knutson

P03. “Phytoplankton Abundance in Long Lake, Detroit Township, MN”

Student Presenter(s): Jordan Hunnicutt, Jadrian Moe, Tessa

Danielson, Isaac Blashack

Mentored by: Dr. Mike Bush

P04. “Review of Water Quality in Turtle River Lake”

Student Presenter(s): Rachel Andersen

Mentored by: Dr. Mike Bush

P05. “A Real-life Oasis: The importance of springs in desert ecosystems”

Student Presenter(s): Rachel Andersen, Hannah Olson, Grace Borka,

Erin Vruwink

Mentored by: Dr. Mike Bush

P06. “Stomata Density in Green Ash and Bur Oak Trees between Moorhead, MN and Long Lake, Detroit Lakes, MN”

Student Presenter(s): Desi Hoppe, Jillian Walz, Rachel Krause,

Maddie McGraw

Mentored by: Dr. Mike Bush

P07. “Magnetic Properties of Pipestone (Catlinite) Samples”

Student Presenter(s): Rowan Nelson, Elijah Heyer

Mentored by: Dr. Thelma Berquó

P08. “Unraveling the Function of Protein 3L1W: A Comprehensive In Silico and In Vitro Investigation”

Student Presenter(s): Gabriel Sparks, William Knoop, Alexander Rapelje

Mentored by: Dr. Julie Mach

DETAILED SCHEDULE

<https://ursca.org/coss>

9:00 - 10:15 A.M. POSTER SESSION 1 Knutson Campus Center Centrum

P09. “Synthesis of RAPTA Derivatives”

Student Presenter(s): Gannon Kuehn, Braden Jackson

Mentored by: Dr. Donald Krogstad

P10. “Photothermal Imaging of Transient and Steady State Convection Dynamics in Primary Alkanes”

Student Presenter(s): Johan Dominguez Lopez

Mentored by: Dr. Darin Ulness Dr. Mark Gealy

P11. “Top Managerial Challenges Small and Large Retail Stores Face”

Student Presenter(s): Isabella Ortendahl, Brady Tatro, Sam Johnson, Hannah Luithle, Emma Bowman, Garrett Sandberg

Mentored by: Dr. Shontarius Aikens

P12. “Modern Concerns of Administrative Roles”

Student Presenter(s): Kane Hoff, Abbey Hardwick, Conner Walsh, Matthew Gangl, Ryan Pogue

Mentored by: Dr. Shontarius Aikens

P13. “Exercise Culture in College Gyms”

Student Presenter(s): Devon Adams

Mentored by: Dr. Karla Knutson

P14. “Aerial Dance: The Teachers of FM Aerial and Movement Arts”

Student Presenter(s): Briea Freeman

Mentored by: Dr. Karla Knutson

P15. “Hummingbird Behaviors Concerning Sugar Concentrations in Feeders”

Student Presenter(s): Madelyn Barlage, Stella Peterson, Alexa Routledge

Mentored by: Dr. Jenn Sweatman, Dr. Joseph Whittaker, Dr. Mike Bush

P16. “Diferencias entre el sistema escolar y los sistemas de apoyo psicológico en Segovia y Estados Unidos (Differences between the school system and psychological support systems in Segovia and the United States)”

Student Presenter(s): Jacob Thompson

Mentored by: Ady Johnson

DETAILED SCHEDULE

<https://ursca.org/coss>

9:00 - 10:15 A.M. POSTER SESSION 1 Knutson Campus Center Centrum

P17. “The Influence of ‘Balance ton porc’ and other Feminism Movements in France”

Student Presenter(s): Margrethe Hawthorne

Mentored by: Dr. Gay Rawson

P18. “#NiUnaMenos: A Movement Against Femicide in Latin American Countries”

Student Presenter(s): Kailey Thomas

Mentored by: Karin Hillstrom

P19. “Writing for The Concordian”

Student Presenter(s): Amy Carpenter

Mentored by: Dr. Karla Knutson

P20. “Ethnography in The Real World”

Student Presenter(s): Joey Molstre, Annalise Skrade

Mentored by: Dr. Karla Knutson

P21. “A Suggestion for Concordia College on Adopting a Policy to Support Lifelong Learning”

Student Presenter(s): Bree Sheridan, Raquel Egge, Sydney Olson, Hadlie Dahlseid

Mentored by: Dr. Philip Lemaster

P22. “Intergenerational Relationships: Bridging the Gap”

Student Presenter(s): Jaxon Dewald, Kelly Pudwill, Sophie Mickelson, Dayana Ramsay

Mentored by: Dr. Philip Lemaster

P23. “Preparing The African American Spiritual”

Student Presenter(s): Matthew Mortensen

Mentored by: Dr. Jennifer Nash

P24. “Musicians and ‘Heretics’: Connections between the Troubadours and the Cathars of Medieval France”

Student Presenter(s): Zachary Catalan

Mentored by: Dr. Michael Johnson

DETAILED SCHEDULE

<https://ursca.org/coss>

9:00 - 10:15 A.M. POSTER SESSION 1 Knutson Campus Center Centrum

- P25. “Becoming What We Eat: How the Holy Mass Prepares the Laity for Missionary Discipleship”**
Student Presenter(s): Claire Dummer, Erika Collins
Mentored by: Dr. Mark Krejci
- P26. “Investigation into Evidence Base Around New Emergency Department Chest Pain Protocol”**
Student Presenter(s): Leo Hanson
Mentored by: Dr. Tally Tinjum
- P27. “Plasma Donation Center Potential to Act as a Community Resource”**
Student Presenter(s): Gendra-Marleen Aasmaa
Mentored by: Dr. Tally Tinjum
- P28. “Determinants of Oncology Health in Spanish-speaking countries”**
Student Presenter(s): McKenna Becher, Gabriela Castro
Mentored by: Karin Hillstrom
- P29. “Curanderismo Contemporaneo: An Examination of Contemporary Curanderismo in the US”**
Student Presenter(s): Josh Kramer, Gavin Bakke
Mentored by: Karin Hillstrom
- P30. “Studying the Healthcare Industry”**
Student Presenter(s): David Dorsey, Jacoby Nold, Robert Leslie, Jacob Parmer, Abby Eidsness
Mentored by: Dr. Shontarius Aikens
- P31. “Life and Work at the Fargo Police Department”**
Student Presenter(s): Caden Nestler
Mentored by: Dr. Karla Knutson
- P32. “The Impact of Poverty on Youth Crime Rates”**
Student Presenter(s): Levi Gross, Tanner Olson, Terry Kreps
Mentored by: Dr. Michelle Lelwica

DETAILED SCHEDULE

<https://ursca.org/coss>

9:00 - 10:15 A.M. POSTER SESSION 1 Knutson Campus Center Centrum

P33. “Analyzing the Relationship between Childhood Trauma and the Likelihood of Committing Sexual Crimes in Adulthood”

Student Presenter(s): Clara Rooney, Cole Cook, Frederick Robin

Mentored by: Dr. Michelle Lelwica

P34. “Objection, Your Honor! An Analysis of Contemporary Courtroom Dramas and Their Portrayals of Race, Gender, and Common Courtroom Stereotypes”

Student Presenter(s): Mykaela Zola

Mentored by: Dr. Indira Neill Hoch

P35. “Exploring the Role of Emotional Stimuli in Visual Working Memory Binding”

Student Presenter(s): Megan Olson

Mentored by: Dr. Dwight Peterson

Knutson Campus Center Atrium

P36. “The Efficacy of Gifted and Talented Education”

Student Presenter(s): Katrina Ustanko

Mentored by: Dr. Karla Knutson

P37. “The Evil Eye: An Analysis of Mal de Ojo in Latin America”

Student Presenter(s): Alissa Edjacin, Olivia Brault

Mentored by: Karin Hillstrom

P38. “Empathy is Hard: a Replication Study”

Student Presenter(s): Hanna Walica

Mentored by: Dr. Mona Ibrahim

P39. “Thanks :) : Perceived Professionalism of Emoji and Emoticon Usage in Emails”

Student Presenter(s): Jordon Perkins

Mentored by: Dr. Aileen Buslig

P40. “Pollinators Preference on Sugar Solution and Color”

Student Presenter(s): Mohamed Mustafa

Mentored by: Dr. Mike Bush

DETAILED SCHEDULE

<https://ursca.org/coss>

9:00 - 10:15 A.M. POSTER SESSION 1 Knutson Campus Center Atrium

P41. “Exploring Different Recipes For New Chitosan And Alginate Bioplastics”

Student Presenter(s): Favziya Rasulova

Mentored by: Dr. Graeme Wyllie

P42. “Assessing Microplastic Concentrations in the Gastrointestinal Tracts and Fecal Matter of Tree and Ground Squirrels (Sciuridae) found in Urban and Rural Habitats.”

Student Presenter(s): Yuden Dorji, Fatima Mohammed, Mubina Rasul, Favziya Rasulova

Mentored by: Dr. Joseph Whittaker

COSS PASSPORT TABLES Knutson Campus Center Atrium

Visit these tables for information about the services and opportunities they offer to students. Collect a stamp on your COSS Passport at each table.

Center for Holistic Health

Center for Student Success

Archives

Integrative Learning and PEAK

Career Center

DETAILED SCHEDULE

<https://ursca.org/coss>

10:30 - 11:10 A.M. CONCURRENT SESSION 1

Birkeland Alumni Lounge (near Memorial Auditorium) Theme: Voices & Representation

C01. “Building a Better Concordia: A Fresh Exercise Facility for a Fresh Start” (Panel Presentation)

Student Presenter(s): Mason Dahl, Daniel Skrade, Ethan Leopold, Kyla Abrahamson, Brynn Nelson, Lauren Sekely
Mentored by: Dominic Meyers

Integrated Science Center (ISC) 201 Theme: Food Health & Social Responsibility

C02. “Viral Pathogenic Mechanisms Leading to Stroke after Herpes Zoster Ophthalmicus in Children” (Classic Presentation)

Student Presenter(s): Connor Sturges
Mentored by: Dr. Charles Grose, University of Iowa

C03. “Utilization of the Crystal Kappa Mutations in HIV Fab Crystallization” (Classic Presentation)

Student Presenter(s): Dustin Traffie
Mentored by: Dr. Ian Wilson, The Scripps Research Institute

Integrated Science Center (ISC) 260 Theme: Knots & Threads

C04. “Building Healthy Communities with Food Sovereignty and Traditional Ecological Knowledge” (Nano Presentation)

Student Presenter(s): Lydia Durrett, Amber Eken
Mentored by: Dr. Jenn Sweatman

C05. “Building a Website with Multimedia” (Nano Presentation)

Student Presenter(s): Margaret Rappa, Alyssa Czernek
Mentored by: Erin Hemme-Froslic

C06. “A Mixed Method Study: What Lies Behind the Job Application” (Nano Presentation)

Student Presenter(s): Rachel Hauschildt
Mentored by: Dr. Indira Neill Hoch

DETAILED SCHEDULE

<https://ursca.org/coss>

10:30 - 11:10 A.M. CONCURRENT SESSION 1

Integrated Science Center (ISC) 301

Theme: Potential & Frustration

C07. “Exploring the Effects of Vivaldi Music Enrichment on Anxiety and Memory in Adult Leopard Zebrafish” (Classic Presentation)

Student Presenter(s): Annika Griffith, Jessica Howard, Ian Scheele

Mentored by: Dr. Krys Strand, Harshana DeSilva Feelixge

C08. “Culturing Neurons from Zebrafish Brain and Spinal Cord: A Student-Centered Tissue Culturing Approach” (Classic Presentation)

Student Presenter(s): Yvette Umtoniwase, Sharleen Mtesa

Mentored by: Harshana De Silva Feelixge, Dr. Krys Strand

Morrie Jones A-B (in Knutson Campus Center)

Theme: Community & Environment

C09. “Court Culture: Unveiling the Social Dynamics and Behaviors in the Intermural Basketball League at Concordia College” (Classic Presentation)

Student Presenter(s): Benjamin Becker

Mentored by: Dr. Karla Knutson

C10. “Verticality Old and New: Issues of Class Mobility in West Side Story and Parasite” (Classic Presentation)

Student Presenter(s): Reagan Mueller, Kaylee Robinson

Mentored by: Dr. Gregory Carlson

Morrie Jones C-D (in Knutson Campus Center)

Theme: Power & Reaction

C11. “The Unacknowledged Role of Women in Revitalizing Post-conflict Societies: An analysis of women’s roles in societies of conflict, war, and violent resistance movements” (Classic Presentation)

Student Presenter(s): Dana Al Khaldi

Mentored by: Dr. Kenneth Foster

C12. “Armies, Battles, Cards, and Dice: Building community through collaborative play” (Classic Presentation)

Student Presenter(s): Parsley Sternhagen, Sarah Mueller

Mentored by: Dr. Karla Knutson

DETAILED SCHEDULE

<https://ursca.org/coss>

10:30 - 11:10 A.M. CONCURRENT SESSION 1

Olin 124

Theme: Controversy & Empathy

C13. “Understanding CRT Predicts Antiracist Attitudes and Commitment to Social Justice” (Classic Presentation)

Student Presenter(s): Jaden Link

Mentored by: Dr. Mona Ibrahim

C14. “Building Empathy Through Literature: An analysis of ‘Kite Runner’” (Classic Presentation)

Student Presenter(s): Hakima Amiri

Mentored by: Dr. Amy Watkin

11:25 - 12:05 P.M. CONCURRENT SESSION 2

Birkeland Alumni Lounge (near Memorial Auditorium)

Theme: Voices & Representation

C15. “Student Publications Importance On A College Campus” (Panel Presentation)

Student Presenter(s): Kay Erickson, Paige Naughton, Desarae Kohrs

Mentored by: Erin Hemme Froslic

Integrated Science Center (ISC) 201

Theme: Food Health & Social Responsibility

C16. “The Digital Space as a Tool for the Democratization of Suppressed Knowledge” (Classic Presentation)

Student Presenter(s): Tasha Branden

Mentored by: Dr. Rebecca Stewart-Gray

C17. “Effectiveness and Engagement in Virtual Education and Work” (Classic Presentation)

Student Presenter(s): Graycin Wanzek

Mentored by: Bree Langemo, J.D.

DETAILED SCHEDULE

<https://ursca.org/coss>

11:25 - 12:05 P.M. CONCURRENT SESSION 2

Integrated Science Center (ISC) 260

Theme: Knots & Threads

C18. "A Virtual Tool for Virtual Knots" (Classic Presentation)

Student Presenter(s): Emily Liddell, Matej Kozanek

Mentored by: Dr. Sarah Seger

C19. "Characterization of IL-6 Cytokines in the Rat Supraoptic Nucleus" (Classic Presentation)

Student Presenter(s): Connor Sturges, Alisha Debleye, Ian Scheele, Tembo Chilala, Julia Wolf

Mentored by: Dr. Jason Askvig

Integrated Science Center (ISC) 301

Theme: Potential & Frustration

C20. "'Neuro-solidarity': Exploring the Union of Experiential Learning and Social Justice towards Creating Spaces of Intergenerational Healing and Resiliency" (Classic Presentation)

Student Presenter(s): Timea Vrabcová

Mentored by: Dr. Joe Underhill, Augsburg University

C21. "Low Pitch or Low Self-Esteem? Verbal and Vocalic Manifestations of Self-worth" (Classic Presentation)

Student Presenter(s): Zoey Zachek

Mentored by: Dr. Aileen Buslig

Morrie Jones A-B (in Knutson Campus Center)

Theme: Community & Environment

C22. "The Community Behind the Music- An Ethnography on the Microcultures of Hvidsten" (Classic Presentation)

Student Presenter(s): Macyn Speer

Mentored by: Dr. Karla Knutson

C23. "Mysterious Manet: An Examination of Musical Paradoxes in Edouard Manet's (1832-1883) The Spanish Singer (1860)" (Classic Presentation)

Student Presenter(s): Lydia Reppow

Mentored by: Dr. Annett Richter

DETAILED SCHEDULE

<https://ursca.org/coss>

11:25 - 12:05 P.M. CONCURRENT SESSION 2

Morrie Jones C-D (in Knutson Campus Center) Theme: Power & Reaction

C24. "It isn't JUST HAIR" (Classic Presentation)

Student Presenter(s): Hameedah Oladele

Mentored by: Dominic Meyers

C25. "How She Shoots: Women Empowerment Through Basketball"
(Classic Presentation)

Student Presenter(s): Hakima Amiri

Mentored by: Dr. Karla Knutson

Olin 124

Theme: Controversy & Empathy

C26. "Jean Genet : Énigme et écrivain" (Classic Presentation)

Student Presenter(s): Rachel Andersen

Mentored by: Dr. Gay Rawson

C27. "LGBTQ+ Targeted Literary Censorship" (Classic Presentation)

Student Presenter(s): Jessica Shaw

Mentored by: Dr. Amy Watkin

12:15 - 1:30 P.M. DEPARTMENT SESSIONS

Art

A Lifelong Journey and Senior Art Exhibition Opening

Olin 207

Biology

A Legacy of Mentorship: Celebration of Dr. Ellen Aho

Birkeland Alumni Lounge

Communication Studies and Theatre Arts

CSTA Honors and Awards

Francis Frazier Comstock Lab Theatre

DETAILED SCHEDULE

<https://ursca.org/coss>

12:15 - 1:30 P.M. DEPARTMENT SESSIONS

History

Phi Alpha Theta Induction Ceremony
Old Main 301

Physics

Sigma Pi Sigma Honor Society Induction
ISC 249

Psychology

Psi Chi Honors Induction and Psychology Job Panel
ISC 106

Sociology

Lessons from the Field
Old Main 331

World Languages and Cultures

A Taste of the Language Villages
Grose 236

1:45 - 2:25 P.M. CONCURRENT SESSION 3

Birkeland Alumni Lounge (near Memorial Auditorium) Theme: Voices & Representation

C28. "Chinese Culture in Everyday Life" (Panel Presentation)
Student Presenter(s): Yun Chieh Chang, Al Sterling, Cassandra Sternitzky, Ginger Garcia-Ortiz, Yuki Tei, Belle Wei
Mentored by: Yun Chieh Chang, Dr. Gay Rawson

DETAILED SCHEDULE

<https://ursca.org/coss>

1:45 - 2:25 P.M. CONCURRENT SESSION 3

Integrated Science Center (ISC) 201

Theme: Food Health & Social Responsibility

C29. “Accessibility in Norway’s Universal Healthcare System” (Classic Presentation)

Student Presenter(s): Kailey Thomas

Mentored by: Mark Melby

C30. “The Legacies of Norwegianization: Refugee Settlement & Integration Policy in Contemporary Norway” (Classic Presentation)

Student Presenter(s): Anna Kronbeck

Mentored by: Dr. Erik Cleven, St. Anselm College

Integrated Science Center (ISC) 260

Theme: Knots & Threads

C31. “Interviewing Standards and Stories” (Panel Presentation)

Student Presenter(s): Mary Skorich, Parsley Sternhagen, Benjamin Hunke

Mentored by: Erin Hemme Frosile

Integrated Science Center (ISC) 301

Theme: Potential & Frustration

C32. “Frustrated Plumes in Fresh and Salt Water” (Classic Presentation)

Student Presenter(s): John Biebighauser

Mentored by: Dr. Darin Ulness, Dr. Krys Strand, Dr. Mark Gealy

C33. “Photothermal Imaging of Convection and Conduction in Artificial Vitreous Humor” (Classic Presentation)

Student Presenter(s): Jack Pelzel, Reese Anderson

Mentored by: Dr. Krys Strand, Dr. Darin Ulness

DETAILED SCHEDULE

<https://ursca.org/coss>

1:45 - 2:25 P.M. CONCURRENT SESSION 3

Morrie Jones A-B (in Knutson Campus Center)

Theme: Community & Environment

C34. "Pathways to Greatness: Unveiling Leadership Insights from the Red River Valley" (Classic Presentation)

Student Presenter(s): Kevin Ness

Mentored by: Dean Chris Mason, Dr. Angel Carrete Rodriguez, Bree Langemo, J.D.

C35. "Fifty-Two Years of Title IX: The Study of Young Women's Culture in Competitive Volleyball" (Classic Presentation)

Student Presenter(s): Laura Brown

Mentored by: Dr. Karla Knutson

Morrie Jones C-D (in Knutson Campus Center)

Theme: Power & Reaction

C36. "'Poly-huh?' An Intro to Polymers, Epoxies, and New Advances in the Field" (Classic Presentation)

Student Presenter(s): Hannah Olson

Mentored by: Shikhin Nadkarni and Dr. Dean C Webster, NDSU

C37. "Mutated WDR45 Effects on Neurodevelopmental Delays in Beta-Propeller Protein Associated Neurodegeneration (BPAN)" (Classic Presentation)

Student Presenter(s): Jessica Howard

Mentored by: Dr. Louis-Jan Pilaz, Sanford Research, Sioux Falls, SD

Olin 124

Theme: Controversy & Empathy

C38. "Red River Waste Management and Cleanup" (Classic Presentation)

Student Presenter(s): Emma Louise Berger, Alex McPhee

Mentored by: Dr. Jenn Sweatman

C39. "The Future of Fungi: The Social Implications of Rapidly Spreading Fungi" (Classic Presentation)

Student Presenter(s): Josh Kramer

Mentored by: Dr. Darren Valenta, Dominic Meyers

DETAILED SCHEDULE

<https://ursca.org/coss>

2:40 - 3:20 P.M. CONCURRENT SESSION 4

Birkeland Alumni Lounge (near Memorial Auditorium) Theme: Voices & Representation

C40. “MUS 380: Singing, Incarceration and Restorative Justice” (Panel Presentation)

Student Presenter(s): Erik Ault, Elena Plum, Aaron Kess
Mentored by: Joseph Kemper

Integrated Science Center (ISC) 201 Theme: Food Health & Social Responsibility

C41. “Food Systems in Indigenous Societies under Settler Colonialism” (Classic Presentation)

Student Presenter(s): Dana Al Khaldi
Mentored by: Dr. Jan Pranger

C42. “Grounds to Grow- How a Coffee Cup Can Feed a Family and Save the Environment” (Classic Presentation)

Student Presenter(s): Veronica Wolfe
Mentored by: Karin Hillstrom

Integrated Science Center (ISC) 260 Theme: Knots & Threads

C43. “The Weimar Republic: a queer utopia, or a cautionary tale?” (Panel Presentation)

Student Presenter(s): Emily Liddell
Mentored by: Dr. Darren Valenta, Dominic Meyers

DETAILED SCHEDULE

<https://ursca.org/coss>

2:40 - 3:20 P.M. CONCURRENT SESSION 4

Integrated Science Center (ISC) 301 Theme: Potential & Frustration

C44. “Improving Healthcare for Patients with Adverse Childhood Experiences (ACEs)” (Classic Presentation)

Student Presenter(s): Kailey Thomas, Edwin Rasidovic
Mentored by: Dr. Michelle Lelwica

C45. “Spaceflight Associated Neuro-Ocular Syndrome (SANS)” (Classic Presentation)

Student Presenter(s): Zenab Ariye, Sahra Mohamed, Sharleen Mtesa
Mentored by: Dr. Krys Strand

Morrie Jones A-B (in Knutson Campus Center) Theme: Community & Environment

C46. “Impact of Urban Zoning on Deposition of Heavy Metal Pollution in Soil: Analysis on As, Cd, Cr, Hg, and Pb Using ICP-OES” (Classic Presentation)

Student Presenter(s): Landry Maragos, Connor Sturges, Maddie Guler
Mentored by: Dr. Jenn Sweatman, Dr. Mark Jensen

C47. “Environmental Justice in Moorhead, Minnesota: An Examination of Public Green Spaces in Six Neighborhoods of Varying Income Levels” (Classic Presentation)

Student Presenter(s): Anna Kronbeck, Daniel Pambu
Mentored by: Dr. Ken Foster

DETAILED SCHEDULE

<https://ursca.org/coss>

2:40 - 3:20 P.M. CONCURRENT SESSION 4

Morrie Jones C-D (in Knutson Campus Center) Theme: Power & Reaction

C48. “Recalled to Life, Searching for the Missing Thread” (Classic Presentation)

Student Presenter(s): Abigail Thurmer
Mentored by: Dr. Amy Watkin

C49. “Dead Fathers and Withered Violets: The Symbols of Psychosis in Hamlet and the Unreliability of Narration” (Classic Presentation)

Student Presenter(s): Laura Jensen
Mentored by: Dr. Karla Knutson

Olin 124

Theme: Controversy & Empathy

C50. “Researching and Testing ChatGPT and its Competitors, Separating the Hype from the Facts” (Classic Presentation)

Student Presenter(s): Nathan Kraft, Ye Yint Win
Mentored by: Dr. Ahmed Kamel

C51. “Building Better Mobile Keyboard Suggestions with Large Language Models and International Internship Opportunities (DAAD RISE)” (Classic Presentation)

Student Presenter(s): Riley Fiske
Mentored by: Florian Bemann, Prof. Sven Mayer, Daniel Buschek,
University of Bayreuth

3:30 - 3:45 P.M. AWARDS AND PRIZES

Presenters were invited to nominate their mentor for the 2024 COSS Mentor of the Year Award. The recipient of this award will be announced during this time. Following the award, a number of prize winners will be drawn from attendees and presenters who have played COSS Quest.

DETAILED SCHEDULE

<https://ursca.org/coss>

3:45 - 5:00 P.M. POSTER SESSION 2 Knutson Campus Center Centrum

P43. “Exploring the Origins and Impact of Microplastics on Squirrel Gut Microbiome: Insights into Firmicutes and Bacteroidetes Dynamics”

Student Presenter(s): Yuden Dorji, Danielle Haigh

Mentored by: Dr. Jenn Sweatman

P44. “Quantitative and Qualitative Analysis of Dental Anomalies and Pathology in White-tailed Deer (Odocoileus virginianus)”

Student Presenter(s): Tessa Danielson

Mentored by: Dr. Joseph Whittaker

P45. “Investigating Phyllotaxis with *Arabidopsis thaliana*”

Student Presenter(s): Eden Smith, Jorgen Deitz

Mentored by: Dr. Mallorie Taylor-Teeples

P46. “Examining the Relationship of Polypore Size and Tree Circumference”

Student Presenter(s): Seema Tian, Charlotte Dove, Braden Jackson, Mame Diarra Bousso

Mentored by: Dr. Mike Bush

P47. “Exploring the Psychoactive Brew Ayahuasca: Its Effects and Expansion to Western Medicine”

Student Presenter(s): Clara Rooney, Cole Cook

Mentored by: Karin Hillstrom

P48. “Can Color Redundancy Among Task-irrelevant Stimuli Benefit Visual Working Memory Performance?”

Student Presenter(s): Hailey Puppe, Kelly Pudwill

Mentored by: Dr. Dwight Peterson

P49. “Green Analytical Chemistry Principles Applied to the Extraction of Endocrine Disruptors from Water”

Student Presenter(s): Gabriel Sparks, Alexander Rapelje

Mentored by: Dr. Mark Jensen

P50. “History of Artificial Reefs”

Student Presenter(s): Delaney Claggett

Mentored by: Dr. Elijah Bender

DETAILED SCHEDULE

<https://ursca.org/coss>

3:45 - 5:00 P.M. POSTER SESSION 2 Knutson Campus Center Centrum

P51. “Tunneling Time in a Simple Ionization Model”

Student Presenter(s): Zach Jackson, Matthew Mondry
Mentored by: Dr. Luiz Manzoni

P52. “Parental Influences of Gendered Behavior”

Student Presenter(s): Jacob Thompson
Mentored by: Dr. Elizabeth Ewing Lee

P53. “‘Top 10’ Concerns in the Healthcare Industry; What Managers Need to be Aware of.”

Student Presenter(s): Anna Carlson, Mariame Ghayout, Elizabeth Malz, Lindsay Miller, Patience Kollie
Mentored by: Dr. Shontarius Aikens

P54. “¿Cómo vamos a pagar por eso?: The Spanish Universal Healthcare System vs The United States Healthcare System”

Student Presenter(s): Luke Wilts, Reanna Borgen
Mentored by: Karin Hillstrom

P55. “Exploring the Impact of Sporting Events on Climate Change”

Student Presenter(s): Rachel Andersen, Hallie Thompson, Madelyn Barlage
Mentored by: Dr. Jenn Sweatman

P56. “Carbon Tax in Minnesota? Is it applicable and how would it be used?”

Student Presenter(s): Ayden Friese
Mentored by: Dr. Jenn Sweatman

P57. “Youth Mental Health Access to Prevent Contact with the Justice System”

Student Presenter(s): Alyssa Czernek, Delaney Smith, Jadrian Moe, Alex Brings, Anna Guttormson
Mentored by: Dr. Michelle Lelwica

DETAILED SCHEDULE

<https://ursca.org/coss>

3:45 - 5:00 P.M. POSTER SESSION 2 Knutson Campus Center Centrum

P58. “Combatting Loneliness and Depression in Older Adults by Creating Intergenerational Connections Through a School Sanctioned Organization.”

Student Presenter(s): Madeline Guler, Ethan Tong, Jordyn Kahler, Liam Haslam

Mentored by: Dr. Philip Lemaster

P59. “Women’s Role in the Continuation of Curanderismo as Folk Medicine and Resistance in Mexico”

Student Presenter(s): Anna Kronbeck, Sara Kampsen

Mentored by: Karin Hillstrom

P60. “Forced Sterilization of Indigenous Peruvian Women”

Student Presenter(s): Rachel Bringle

Mentored by: Karin Hillstrom

P61. “Femicide in Mexico”

Student Presenter(s): Crystal Analco Morales

Mentored by: Karin Hillstrom

P62. “Virtual Gatherings: An Ethnographic Study of Culture and Socialization in Online Voice Chat Communities”

Student Presenter(s): Zachary Culver

Mentored by: Dr. Karla Knutson

P63. “Seeing the Message? TV Advertising in State-Wide Primary Elections”

Student Presenter(s): Hannah Paysse

Mentored by: Dr. Nicholas Howard

P64. “Organizational Behavior Issues for Managers/Leaders in the Arts and Culture Industry”

Student Presenter(s): Chase Linde, Christian Elmer, Erick Torres, Michael Matthews

Mentored by: Dr. Shontarius Aikens

P65. “Excavating Dinosaurs in the Hell Creek Formation”

Student Presenter(s): Olivia Daniels, Peter Weinzierl, Cael Schlauderaff

Mentored by: Dr. Ron Nellermeoe

DETAILED SCHEDULE

<https://ursca.org/coss>

3:45 - 5:00 P.M. POSTER SESSION 2 Knutson Campus Center Centrum

- P66. “Displaying Human Remains: A Consideration of Irish Bog Bodies”**
Student Presenter(s): Zara Iwen
Mentored by: Dr. Susan Lee
- P67. “Organizational Behavior in the Retail Industry”**
Student Presenter(s): Kay Pederson, Charlie Rasmussen, Justin Lamp, Kipton Jenson Jena Bjelland Ben Blancas
Mentored by: Dr. Shontarius Aikens
- P68. “Beyond the Boardroom: An Ethnographic Study of the Moorhead Public School Board”**
Student Presenter(s): Ridgley Hulstein
Mentored by: Dr. Karla Knutson
- P69. “Beyond the Books”**
Student Presenter(s): Tristin Qualey
Mentored by: Dr. Karla Knutson
- P70. “El Crecimiento del Ecoturismo en Segovia, España”**
Student Presenter(s): Hannah Olson
Mentored by: Karin Hillstrom
- P71. “Coffee and Connection: Exploring Social Dynamics in Twenty Below Coffee Co.”**
Student Presenter(s): Peyton Moench
Mentored by: Dr. Karla Knutson
- P72.-P74. “Beyond LEO: Human Factors of Long-Duration Space Travel”**
Student Presenter(s): Venesa Angau, Cayley Borrud, Alexa Corbett, Charlene Geraci, Annika Griffith, Signe Harris, Jessica Howard, Kathryn Lind, Peace Nanyonga, Sharon Mac-George Nwabia, Sahra Mohamed, Sharleen Mtesa
Mentored by: Dr. Krys Strand

DETAILED SCHEDULE

<https://ursca.org/coss>

3:45 - 5:00 P.M. POSTER SESSION 2 Knutson Campus Center Centrum

P75. “Investigating the Effects of Acetazolamide on Spaceflight-Associated Neuro-ocular Syndrome (SANS) in a Simulated Microgravity Environment”

Student Presenter(s): Yvette Umutoniwase, Yuden Dorji, Mubina Rasul, Favziya Rasulova, Fatima Mohammed

Mentored by: Dr. Krys Strand

P76. “Hactivism and Beyond: An Examination of Hacking in the Digital Era”

Student Presenter(s): Vanessa Islas, Mariana Martins Carvalho, Zamzam Mohamed

Mentored by: Dr. Ahmed Kamel

P77. “Establishing ‘Established Adulthood’: Empirical Support for a Distinct Period of Adult Life”

Student Presenter(s): Meg Shercliffe

Mentored by: Dr. Philip Lemaster

Knutson Campus Center Atrium

P78. “Understanding Consumer Perceptions and Behaviors in the Mental Health Merchandise Market: A Quantitative Analysis”

Student Presenter(s): Kaleigh Reller

Mentored by: Dr. Odile Streed

P79. “Pouring Apologia: How Bud Light Responded to Public Scrutiny”

Student Presenter(s): Alexandra Klein

Mentored by: Dr. Kirsten Theye

P80. “Regularly”

Student Presenter(s): Makayla Anderson

Mentored by: Dr. Karla Knutson

P81. “3DS8, Why Should we Investigate?”

Student Presenter(s): Mackenzie Johnson, Al Sterling, Isaac Blashack, Lily Haasser

Mentored by: Dr. Julie Mach

DETAILED SCHEDULE

<https://ursca.org/coss>

3:45 - 5:00 P.M. POSTER SESSION 2 Knutson Campus Center Atrium

P82. “The Effect of Anthropogenic Food Sources on Nest Placement and Foraging Location of Gray and Red Squirrels in an Urban Environment”

Student Presenter(s): Maia Lieske

Mentored by: Dr. Joseph Whittaker

P83. “Comparative Analysis of Microlitter Abundance in the Proventriculus, Gizzard, and Intestines of North American Waterfowl”

Student Presenter(s): Seema Mustafa, Therese Byankuba, Luke Young

Mentored by: Dr. Jenn Sweatman

P84. “Wild Rice Monitoring Near Tamarac National Wildlife Refuge”

Student Presenter(s): Sophie Schaumann

Mentored by: Kent Sundseth

COSS PASSPORT TABLES Knutson Campus Center Atrium

Visit these tables for information about the services and opportunities they offer to students. Collect a stamp on your COSS Passport at each table.

Center for Holistic Health

Center for Student Success

Archives

Integrative Learning and PEAK

Career Center

MENTOR OF THE YEAR AWARD

DESCRIPTION

Mentors can be key to student success. COSS presenters were invited to nominate their mentor(s) for the Mentor of the Year Award. An outstanding mentor demonstrates excellence in a variety of ways, including being a resource for students, guiding them, and providing support throughout the project; facilitating students' academic and professional growth, encouraging independence, and creating a positive learning environment; and supporting students as whole individuals, engaging with them in meaningful and encouraging ways throughout their project.

MENTOR OF THE YEAR AWARD RECIPIENTS

2013	Dr. Laura Aldrich-Wolfe	2019	Dr. Susan Lee
2014	Dr. Aileen Buslig	2020	Dr. Jenn Sweatman
2015	Dr. Krys Strand	2021	Dr. Julie Mach
2016	Dr. Darcie Sell	2022	Dr. Indira Neill Hoch
2017	Dr. Ellen Aho	2023	Dr. Joseph Whittaker
2018	Dr. Jason Askvig	2024	Will be announced at 3:30 p.m.

Thank you mentors!

GRATITUDE

STAFF, VOLUNTEERS, AND DONORS

The COSS URSCA Symposium would not be possible without the many staff and volunteers who help make the day run smoothly. The COSS Steering Committee thanks all of the session chairs, student moderators, competition jury members, COSS Quest assistants, hospitality providers, catering, and the room set-up crews. We would also like to thank all of the donors who have made URSCA possible at Concordia. Research and creative scholarship are transformative experiences for many students and we deeply appreciate the generous philanthropy of donors.

*Thank
you!*

COSS STEERING COMMITTEE

Dr. Krys Strand, Director of URSCA, Associate Professor of Biology,
Neuroscience Program Director

Dr. Susan Lee, Associate Professor of Art History, Heritage and Museum
Studies Program Director

Allison Koster, Chemical Safety Officer, ISC Building Manager, COSS
Competition Coordinator

Justin McDowell, Librarian

Yvette Umutoniwase, Biology and Neuroscience Majors, URSCA Intern

Sharleen Mtesa, Neuroscience and Psychology Majors, URSCA Intern

Timea Vrabcová, Neuroscience Major, URSCA Intern