

STUDENT RESEARCH SYMPOSIUM DAY-AT-A-GLANCE

SESSION I: 9:00–9:45 A.M.

OPENING EVENT: CELEBRATION AND KEYNOTE ADDRESS

Center for Faith and Life Main Hall

- **Introit:** Badinerie (BWV 1067), by J. S. Bach, arr. Kerry Turner. Performed by the QTC Horn Quartet (Dr. Rebecca Boehm Shaffer, faculty coach): Luke Berkley '20, Kyli Kurtenbach '20, Emily Stifter '20, Leah Wittenberg '20.
- **Invocation:** Anne Edison-Albright, campus pastor
- **Welcome:** Rachel Brummel, assistant professor of environmental studies; member, Honors Advisory Committee
- **Research Reflections:** Nicole Weber '18 and Erik Floden '18
- **Recognition of Symposium Participants:** Laurie Zaring, associate professor of linguistics and French; member, Honors Advisory Committee
- **Postlude:** Wapango, by Paquito D'Rivera, arr. David Harris and W. Marshall Sealy. Performed by the QTC Horn Quartet.
- **Benediction:** Anne Edison-Albright

SESSION II: 10:00 A.M.–11:00 A.M.

<i>Olin 112</i>	<i>Olin 101</i>	<i>Valders 367</i>	<i>Preus Library, Hovde</i>	<i>Valders 262</i>		<i>Valders 206, 362, and CFL Recital Hall</i>
Selves and Others: Unity and Diversity	Apps for Luther: Software for the Liberal Arts	Comparative International Politics	European Institutions and Movements	Wrinkles in Time and Language		Paideia 112 Research (see separate brochure)

SENIOR RECOGNITION CONVOCATION: 11:15–11:45 A.M.

Center for Faith and Life Main Hall

SENIOR CLASS PHOTO: 11:45 A.M.–12:00 P.M.

Bentdahl Commons

LUNCH BREAK: 12:00–1:00 P.M.

Community Dessert Gathering

Complimentary ice cream novelties, Bentdahl Commons, central campus

SESSION III: 1:00–2:00 P.M.

<i>Olin 112</i>	<i>Olin 101</i>	<i>Valders 367</i>	<i>Preus Library, Hovde</i>	<i>Valders 262</i>	<i>Center for the Arts Gallery</i>	<i>Valders 206, 362, and CFL Recital Hall</i>
Gender in Health, Performance, and Theology	Interrogating the Past	Creative Processes and Products I	Small Things, Big Questions	Public Policies, Movements, and Perceptions	Finding the Hjemland	Paideia 112 Research (see separate brochure)

SESSION IV: 2:15–3:45 P.M.

Poster Session in Sampson Hoffland Laboratories Carlson Atrium/Valders Hall of Science Concourse (with refreshments)

SESSION V: 3:45–4:45 P.M.

<i>Olin 112</i>	<i>Olin 101</i>	<i>Valders 367</i>	<i>Preus Library, Hovde</i>	<i>Valders 262</i>		<i>Valders 206, 362, and CFL Recital Hall</i>
The Black Death	Apps for Life: Software for Your Day-to Day	Creative Processes and Products II	Identities and World Views	Searching the Heavens: Gods and Stars		Paideia 112 Research (see separate brochure)

EVENING EVENTS: 7:30 P.M.

Opera Performance: *Così fan tutte*, W. A. Mozart (Center for Faith and Life)
Theatre Performance: *Marie Antoinette*, David Adjmi (Center for the Arts Jewel Theatre)

SENIOR RECOGNITION CONVOCATION

11:15–11:45 A.M.

PRELUDE

Second Suite in F major, by Gustav Holst, arr. by David Sabourir

The Noble Brass Quintet (John Cord, faculty coach)

Michael Winkler and Madison Ihde, trumpet

Elyse Grothaus, horn

Elliot Douma, trombone

Gavin Shaeferle, tuba

INVOCATION

Anne Edison-Albright, campus pastor

RECOGNITION OF HONOR SOCIETY MEMBERSHIP

ADDRESS

Ramona Nelson, professor of accounting and management

“Will this be on the exam?”

ANTHEM

The Music of Living, by Dan Forrest

Aurora and Norsemen

Jennaya Robison and Mark Potwin, conductors

BENEDICTION

Anne Edison-Albright

POSTLUDE

Fugue in G minor (The Little Fugue), by J. S. Bach, arr. by Ronald Romm

The Noble Brass Quintet

A class of 2018 photo will be taken on Bentdahl Commons immediately following convocation.

SYMPOSIUM SCHEDULE

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SESSION II: 10:00–11:00 AM

Olin 112

Selves and Others: Unity and Diversity

Moderator: Stephanie Travers

Natalie Shimp '19

Luther College as a Discourse Community:
First-Year Student Encounters with Linguistic
Discrimination

Nicole Weber '18

The Social Experience of Anxiety

Samantha Rabang '18

Misinterpreting Facial Emotions of African
Americans: Are Caucasians Prejudiced or
Just Emotionally Inept?

Olin 101

Apps for Luther: Software for the Liberal Arts

Moderator: Kent Lee

Ashenafi Beyene '18

Charles Mugwagwa '18, Tenzin Tsephel '18
SASC Tutoring App

Joshua Jackson '18

Ashleigh Bunkofske '18, Eric Coughlin '18
Luther Course Proposal System

Linh Nguyen '18

Ian Christopherson '18, Taylor Gades '18
NordicShift

Valders 367

Comparative International Politics

Moderator: Pedro dos Santos

Faye Lee '20

Ghana and Malaysia: A Comparative
Assessment of Economic Development after
Independence

Nazario Jap Dos Santos '19

Regime Change: A Path for Independence of
the Non-Self-Governing Territory

Ismail Hamid '19

Democratic Breakdown in the Maldives

Preus Library, Hovde

European Institutions and Movements

Moderator: Michael Engelhardt

Sean McKenzie '20

Labour Movements in France and Sweden:
The Longevity of Unions

Jamie Herman '18

The Knowledge Economy and the Future of
European Universities

Nathan Campbell '18

Military Equipment Manufacturing in
Norway

Valders 262

Wrinkles in Time and Language

Moderator: Wanda Deifelt

Bryce Hefty '18

Former First

Kaitlyn Buls '19

What Happened to Day Five?: Problems with
the Past in Kazuo Ishiguro's *The Remains of
the Day*

Sam Scheidt '18

Ecumenism and the Catholic Church

SESSION III: 1:00–2:00 PM

Olin 112

Gender in Health, Performance, and Theology

Moderator: Wanda Deifelt

Elizabeth Bonin '18

Access Denied: The Rapid Decline of Rural Reproductive Health Clinics

Laila Sahir '18

Gender and the Performance of Power in *Marie Antoinette*

Wylie Cook '18

#SayHerName: Understanding the History of Womanist Theology and Its Relevance in Understanding Police Violence against Black Women and Girls

Olin 101

Interrogating the Past

Moderator: Laurie Bouska

Katie Patyk '18

Archival Research and the English Major: Stories from the Papers of Theodore Sturgeon

Jeffrey Lackmann '18

Bilocation: Thomas Pynchon's Anti-Historical Novel *Against the Day*

Sarah Lodge '19

Love in the Time of Cholera

Valders 367

Creative Processes and Products I

Moderator: Lea Lovelace

Emma Withers '18

Ryan Koning '19

Use Your Voice!: Exploring Youth Activism and Social Justice Through an Artistic Lens

Aaron Shouse '18

The Creative Process of *This, That, and the Other Thing*: A Podcast

Preus Library, Hovde

Small Things, Big Questions

Moderator: Molly Wilker

Grant Benthin '18

Sulfonamide Alcohol Ligands as Metal-Free Catalysts for Ring-Opening Polymerization Reactions

Nathan Campbell '18

Effects of Ligand Substitution on CdSe Nanocrystal Optical Properties

Joshua Jackson '18

Charm Meson Production from Bottomonium Decays

Valders 262

Public Policies, Movements, and Perceptions

Moderator: Victoria Christman

Owen Schleif '18

Tracing the Roots of Nationalism: The Case of Spain

Halina Pyzdrowski '18

Forrest Stewart '18

On the Path to Community Flood Resilience: Exploring Flood Experiences in the Upper Iowa Watershed

Shelja Thakur '18

Ganga River Pollution: A Policy Analysis

Center for the Arts Gallery

Finding the Hjemland

Moderator: Kate Elliott

Annika Vande Krol '19

Finding the Hjemland: Herbjørn Gausta and the Immigrant American Experience

SESSION IV: 2:15–3:45 PM

SHL/Valders

Poster Session

Moderator: Kirk Larsen

Ananda Easley '18

Alcohol Consumption and Generative Development in Middle Adulthood

Emily Fuller '19

Using UV-vis Spectrophotometry and Fluorescence Spectroscopy to Analyze the Binding Relationship of Curcuminoids and HAS

Anna Li Holey '18

Elizabeth Glennon '19, Shannon Meehan '18
Recent Adult Monarch Butterfly (*Danaus plexippus*) Abundance Trends in Tallgrass Prairies of Northeast Iowa

Jacqueline Krawczyk '18

Kaitlin Bohn '18, Adeline Smith '18
Exploring Effective Stress Reduction Techniques to Be Included in a College Campus Stress-Reduction Room

Shannon Meehan '18

Elizabeth Glennon '19, Anna Li Holey '18
Monarch Butterfly (*Danaus plexippus*) Oviposition and larval Feeding Preferences on Five Species of Milkweed (*Asclepias* sp.) in Northeast Iowa

Sydney Rehnelt '18

Mary Buchheit '18, Megan Meyer '18, Allison Swiggum '18
The Effects of Mindfulness-Based Exercise Interventions like Yoga and Tai Chi on Stress Levels in College Students

Senia Sikkink '18

Persistence and Looking at Humans during an Unsolvable Task in Pet, Foster, and Shelter Dogs

Morgan Streyle '19

Nikhil Thacker '18

Habitat Use by Native Bumblebees in Northeastern Iowa

Victoria Vivtcharenko '19

Dopamine Quantification in *Caenorhabditis elegans* with High-Performance Liquid Chromatography

Nicole Weber '18

The Impact of Anxiety on Working Memory

Additional poster displays presented by students from the following classes:

Biology 112: Insects, Humans, and the Environment

Biology 239: Molecular and Cellular Biology

Biology 250: Restoration and Conservation

Biology 354: Evolutionary Biology

Computer Science 150: Intro to Computer Science

Physics 114: Physics of Sound

Psychology 353: Social Psychology

SESSION V: 3:45–4:45 P.M.

Olin 112

The Black Death

Moderator: Angela Kueny

Matthew Rossler '19

The Resurgence of the Black Death in 1720
France

Jamie Herman '18

Origins of Empiricism in Black Plague
Treatises

Karl Nycklemoe '18

The Three Dead: Perception of Death during
Times of Plague

Olin 101

Apps for Life: Software for Your Day-to-Day

Moderator: Kent Lee

Kieran Okerstrom '18,

Olivia Hawkins '18, Erik Nelson '18
Time-Management App

Kyle Miller '18,

Devin Hanggi '18, Aaron Herman '18
Pathwerks

Ryne Hanson '18,

Hillary Gardner '18, Jacob Schwartz '18,
Joschua Setiawan '18
SpeechApp

Valders 367

Creative Processes and Products II

Moderator: Amy Weldon

Linnea Peterson '18

The Oldest Child

Jeffrey Lackmann '18

“He says that he will never die”: Cormac
McCarthy’s *Blood Meridian* and the Stylistic
Rendering of the Eternal Judge

Preus Library, Hovde

Identities and Worldviews

Moderator: Holly White

Ana Lopez '19

Earth-Beings, Misfortune, and Causation in
Northern Chile

Marcella Meza '18

Anzaldúa’s Autohistoria-teoría: Subversion
and Revolution in Philosophical Expression

Eli Bowe '18

The Four-Dimensional Person

Valders 262

Searching the Heavens: Gods and Stars

Moderator: Tony Mutsune

Erik Floden '18

Determining Secular Brightness Trends of
Long-Period Variable Stars in Open Star
Cluster M23

Kevin Honz '18

Investigating Period Variations of Long
Period Variable Stars

Lily Kime '19

Gods Who Survive: Pagan Sources of John
Milton and Neil Gaiman

EVENING EVENTS: 7:30 P.M.

Opera Performance CFL Main Hall

Così fan tutte

Music by Wolfgang Amadeus Mozart

Libretto by Lorenzo da Ponte

“Who could be more faithful than our fiancées?” Nobody, according to soldiers Ferrando and Guglielmo, who are engaged to sisters Dorabella and Fiordiligi....until the skeptical Don Alfonso is willing to wager them against the claim. Don Alfonso has an elaborate scheme up his sleeve: stage a fake military procession that whisks the boys away to war (or so the sisters think), incite an emotional goodbye, get their chambermaid Despina involved in the wager, and disguise the boys as Albanians ready to woo the disheartened sisters. At its most serious, Mozart’s masterpiece *Così fan tutte* flirts with infidelity and betrayal and the inherent consequences, illuminated by some of his most divine music for voice and orchestra. At its lightest, it is a farcical comedy of errors, complete with mistaken identities, magnet therapy, and notaries in ridiculous wigs. In the end, it is a vehicle for Don Alfonso, the seasoned philosopher, to remind the young lovers, and indeed all of us, that true love will require forgiveness.

Professor of music Daniel Baldwin conducts the cast and the Luther College Chamber Orchestra in the performance; stage direction is by associate professor of music Andrew Whitfield; musical direction and preparation is by assistant professor of music Nicholas Shaneyfelt; and assistant stage direction is by instructor of music Carla Thelen Hanson. The production features original sets, designed and built by Brett Conrad, and original costumes, designed and built by Marann Faget. Lighting design is by theatre and dance technical director Tom Berger, and Luther student Cleo Garza is the stage manager.

The cast of *Così fan tutte* includes Luther students Kurt Anderson, Nathan Baldwin, Garret Baumler, Isaiah Cammon, Xavier Conzet, Colin Cosgrove, Mayalyn Cott, Emily Dirks, Mitchell Gage, Eddy Galstad, Jarrod Gross, Grace Huber, Abby Korenchan, Kiley Korey, Gabrielle Laske, Noah Lauer, Kelvin Li, Sean McKenzie, Mason Montuoro, Natalie Nelson, Riley Peters, Jenna Reimann, Natalie Rumer, Marie Sauze, Jacob Schmidt, Brenna Sherman, Sarah Smallfield, Jacob Southerland, Aidan Spencer, Katie Stuelke, and Josh Vidervol.

Theatre Performance Center for the Arts Jewel Theatre

Marie Antoinette

by David Adjmi

Director: Laila Sahir '18

Faculty advisor: Bobby Vrtis, assistant professor of theatre

Stage manager: Meghan Gaffney '18

Composer: John Kuntz '19

Assistant costume designer: Emma Brashear '18

Cast: Emma Brashear '18, Morgan Fanning '20, Christen Foster '18, Parker Fretheim '19, Mikaela Hanrahan '21, Andrew Kane '19, Jonathan Kuehner '20, Adrienne Lee '19, Nathan Sunde '21, Emma Withers '18, Ezra Wood (community member)

Adjmi’s contemporary take on the life of the young queen of France highlights the ideals and pressures of society in 1776 that shaped Marie Antoinette’s historical image as a frivolous woman. The lighthearted and witty tone of the play takes a dark turn as revolution threatens Marie Antoinette’s sheltered life. With social commentary that challenges modern viewers, Marie Antoinette forces the audience to question what is necessary for a fulfilling life.