

THESIS DEFENSE SCHEDULE

SPRING 2026

Celebrate the culmination of hard work, research, and academic excellence during Honors College Thesis Defense Days.

ABOUT THESIS DEFENSE DAYS

Thesis defenses are open to the public, offering a unique opportunity to engage students in their original research, critical analysis, and scholarly discussion. Thanks for joining!

Emma Tavares	Thursday, 4/23/26 - 8:00 - 9:30 AM
Kennedy Stevens	Thursday, 4/23/26 - 2:00 - 3:30 PM
Jonathan Leung	Friday, 4/24/26 - 10:00 - 11:30 AM
Laila Andualem	Friday, 4/24/26 - 11:00 AM - 12:30 PM
Jacob Parker	Friday, 4/24/26 - 12:30 - 2:00 PM
Danya Husein	Friday, 4/24/26 - 2:00 - 3:30 PM
Grant Brake	Friday, 4/24/26 - 2:00 - 3:30 PM
Linh Tran	Friday, 4/24/26 - 3:30 - 5:00 PM
Adewunmi Adeyemo	Friday, 4/24/26 - 3:30 - 5:00 PM
Alzahraa Saeed	Thursday, 4/30/26 - 2:00 - 3:00 PM
Lynn Farhat	Thursday, 4/30/26 - 3:00 - 4:00 PM
Dharani Dhar Avula	Thursday, 4/30/26 - 4:00 - 5:00 PM
Kaustubha Pokharel	Friday, 5/1/26 - 12:30 - 2:00 PM
Jubina Tela	Friday, 5/1/26 - 2:00 - 3:30 PM

SCHEDULE AT-A-GLANCE

THESIS DEFENSE SCHEDULE SPRING 2026

Emma Tavares

Maternal Mental Health: Exploring the Experience of Mothers Raising Children with Autism Spectrum Disorder

Thursday, 4/23/26
8:00 AM - 9:30 AM

Faculty Mentor: Dr. Calvin Sims

Sage Hall, Room 356

[Zoom Link](#)

Mothers are uniquely affected by the exceptional caregiving responsibilities related to raising children with disabilities. Specifically, mothers of children with autism spectrum disorder (ASD) have a higher risk of burnout and other mental health problems than mothers of typically developing children. This risk may be related to how mothers are often seen as primary caregivers in their child's life. The purpose of this study is to understand how mothers experience raising a child with autism spectrum disorder and how that influences maternal mental health. Utilizing semi-structured, open-ended interviews, this study explores themes relating to caregiving stressors, social support, and maternal mental health.

Kennedy Stevens

Influence of GLP-1 agonist treatment on early cardiovascular disease development in C57BL/6 mice

Thursday, 4/23/26
2:00 PM - 3:30 PM

Faculty Mentor: Dr. Amie Lund

Auditorium-English Building,
Room 202

[Zoom Link](#)

GLP-1 has been associated with a decreased risk of heart attack and strokes in patients with diabetes. However, there is very little characterization of the effects of air pollution PM on GLP-1 signaling in the cardiovascular system. We investigated whether exposure to diesel particulate matter (DEP) with or without GLP-1 agonist treatment alters the expression of early markers of inflammation and vascular disease: monocyte chemoattractant protein (MCP)-1, Interleukin-6 (IL-6) and the reactive oxygen species 8-OHdG. Additionally, we investigated the expression of GLP-1 Receptor within each treatment group. This was achieved using polymerase chain reaction (PCR) and histological analysis using immunofluorescence microscopy.

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Jonathan Leung	Shifted Levy's dragon curve and Revolving Sequences
Friday, 4/24/26 10:00 AM - 11:30 AM	Faculty Mentor: Kiko Kawamura
Sage Hall, Room 356 Zoom Link	Self-similar fractals are structures that replicate their overall form at every scale, revealing intricate patterns found throughout nature, art, and mathematics. In this paper, we explore a particularly striking example: L'evy's Dragon Curve—a self-similar curve notable for its ability to tile the complex plane. Approaching the curve through the lens of functional equations, we show that every point on the curve admits a natural representation as a complex power series. This representation is characterized by a special revolving sequence, offering new insight into the curve's algebraic structure and deepening our understanding of its mathematical properties.
Laila Andualem	Exploring Grief, Mourning, and Perceptions of Death in Second-Generation Ethiopian Americans
Friday, 4/24/26 11:00 AM - 12:30 PM	Faculty Mentor: Dr. Calvin Sims
Sage Hall, Room 355 Zoom Link	In Ethiopian culture, funerals are large community gatherings that can last up to a week. These gatherings include expressive mourning practices such as wailing, crying loudly, screaming, and chest beating. For second-generation Ethiopian Americans navigating both Ethiopian and American cultural identities, witnessing these reactions may shape their understanding of mortality through exposure to intense, public expressions of grief. This study examines how exposure to these culturally normative practices influences the grieving process among second-generation Ethiopian Americans and whether it contributes to death anxiety, defined as the fear of one's own death.

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Jacob Parker

SANABI

Friday, 4/24/26
12:30 PM - 2:00 PM

Faculty Mentor: Frances Perkins

Sage Hall, Room 355

[Zoom Link](#)

My Honors College Capstone is a series of screenplays for the Korean indie game SANABI: a story of a retired military general seeking revenge for his daughter in a cyberpunk Korea, with themes of loss, revenge, family, and how all of these are affected by the onset of Artificial Intelligence. During defense day, I will provide a brief explanation of the story's events, a textual and cultural analysis of SANABI and Korean media, the academics and methodology of adaptation, and the final result: a series of screenplays, formatted and adapted for TV, of SANABI.

Danya Husein

Night and Day: Examining the relationship between racism, microaggressions, and sleep

Friday, 4/24/26
2:00 PM - 3:30 PM

Faculty Mentor: Dr. Calvin Sims

Sage Hall, Room 355

[Zoom Link](#)

Racism is a critical indicator of overall well-being and plays an essential role in an individual's mental health. Sleep hygiene and mental health have been proven to have a bidirectional link, with one affecting the other. The link between racism and poorer sleep outcomes has been investigated and proven to have discrimination as a mediator of racial sleep disparities. There has been minimal to no research conducted on microaggressions and family distress within the range of discrimination to establish the effect on an individual's sleep. This study will decrease the knowledge gap on the effect of racism on an individual's sleep health due to emotional and familial distress.

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Grant Brake

Slaying Inner Dragons: Perceptions of Tabletop Roleplaying Games' Mental Health Effects in LGBTQ Individuals

Friday, 4/24/26
2:00 PM - 3:30 PM

Faculty Mentor: Dr. Kiet Huynh

Sage Hall, Room 354

[Zoom Link](#)

Tabletop role-playing games often face players with challenging scenarios that engage them strategically, socially, and mentally, allowing for those who might otherwise struggle with such interactions to build a repertoire of skills to use when faced with such interactions in their real lives. The purpose of this study is to explore the perceived mental health effects of tabletop role-playing games on LGBTQ+ individuals. Through semi-structured interviews and reflexive thematic analysis, a pronounced positive mental health effect was identified through perspective taking, identity exploration, and skill development. Clinical and research recommendations are incorporating identity acceptance and incorporation into pre-existing therapy frameworks.

Linh Tran

Open Doors Closed Hearts, Understanding psychological and social barriers to therapy

Friday, 4/24/26
3:30 PM - 5:00 PM

Faculty Mentor: Dr. Calvin Sims

Sage Hall, Room 355

[Zoom Link](#)

My thesis, Open Doors, Closed Hearts, examines why college students avoid therapy even when mental health resources are increasingly available. It focuses on internal psychological and social barriers to help-seeking, such as stigma, distrust of therapists, discomfort with vulnerability, reliance on alternative coping mechanisms, and perceptions of institutional support. Using a mixed-methods approach, we're planning to analyze Likert-scale survey responses alongside open-ended questionnaire responses and semi-structured interviews from University of North Texas students. The goal is to better understand the personal reasoning behind therapy avoidance and identify ways to make mental health support feel more emotionally and socially accessible.

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Adewunmi Adeyemo

Examining the Effects of Emotional Family Support on Middle Schoolers' Outcomes Across Racial Groups

Friday, 4/24/26
3:30 PM - 5:00 PM

Faculty Mentor: Dr. Sharon Jenkins

Sage Hall, Room 354

[Zoom Link](#)

My thesis examines the relationship between emotional support and academic outcomes among middle school students, while also examining potential differences across racial and gender groups. Using survey data, the study explores whether higher levels of emotional support from parents are associated with better academic performance. The research also investigates whether these relationships vary among different demographic groups. The findings aim to contribute to a better understanding of how emotional support may influence student success and highlight the importance of supportive environments during early adolescence.

Alzahraa Saeed

Tracking Primary Cilia Dynamics and Oligodendrocyte Maturation Across Postnatal Development

Thursday, 4/30/26
2:00 PM - 3:00 PM

Faculty Mentor: Dr. Jannon Fuchs

Matthews Hall, Room 312

[Zoom Link](#)

Oligodendrocytes are specialized glial cells in the central nervous system that produce myelin, which is necessary for efficient neuronal signaling and white matter integrity. Primary cilia are microtubule-based organelles that act as signaling centers and play a role in pathways such as mTOR signaling. This study analyzes oligodendrocyte ciliation during early postnatal development (P7–P21) in the mouse cortex and corpus callosum using confocal image stacks of Arl13b, CC1, and pS6. It evaluates changes in cilia presence and maturation markers across development. It is predicted that cilia decrease as cells mature, alongside developmental changes in mTOR activity.

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Lynn Farhat

Myelination Triad: The Interplay Between Cilia and mTOR in Oligodendrocyte Development

Thursday, 4/30/26
3:00 PM - 4:00 PM

Faculty Mentor: Dr. Jannon Fuchs

Matthews Hall, Room 312

[Zoom Link](#)

Cells in the central nervous system aid in the production of myelin, which increases the rate in which signals are sent throughout the body. Deficits in myelin leads to diseases such as multiple sclerosis (MS) and tuberous sclerosis complex (TSC). Therefore, the purpose of this study is to examine the interplay between how different pathways influence the development and maturation of cells in the central nervous system by imaging male and female mice in various stages of life.

Dharani Dhar Avula

mTOR Signaling, Primary Cilia, and Lineage Progression in Oligodendrocyte Development Across the Mouse Lifespan

Thursday, 4/30/26
4:00 PM - 5:00 PM

Faculty Mentor: Dr. Jannon Fuchs

Matthews Hall, Room 312

[Zoom Link](#)

Oligodendrocyte lineage progression is tightly regulated by intracellular signaling pathways that integrate metabolic state, environmental cues, and developmental timing. Among these pathways, mechanistic target of rapamycin (mTOR) signaling plays a central role in oligodendrocyte precursor cell (OPC) proliferation, differentiation, and myelination. This project investigates how mTOR signaling levels correlate with stages of oligodendrocyte lineage progression and the presence or absence of primary cilia. Additionally, it examines whether these relationships change with mouse age. Using immunohistochemistry, lineage-specific markers, and quantitative imaging across developmental and adult timepoints, this study aims to clarify how metabolic signaling and structural signaling platforms interact to regulate oligodendrocyte maturation. Understanding these interactions may provide insight into age-dependent differences in myelination and remyelination capacity.

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Kaustubha Pokharel

**Structural Uncertainty in Financial Markets: An Explanatory Analysis
of Volatility Regimes and Institutional Frictions**

Friday, 5/1/26
12:30 PM - 2:00 PM

Faculty Mentor: Dr. Meredith Rhodes

Sage Hall, Room 356

[Zoom Link](#)

My study investigates how market liquidity influences volatility under different market conditions. Using a regime-dependent vector autoregression framework, the analysis examines how liquidity shocks propagate through financial markets during periods of normal activity and periods of market stress. Liquidity is measured through log illiquidity, while volatility is proxied by the absolute irregular component of returns. The results reveal persistent volatility dynamics and clear feedback between liquidity and volatility. Importantly, the transmission of liquidity shocks differs significantly across stress regimes, with stronger responses during high stress periods. Additional tests incorporating funding spreads and major market events show that the core liquidity volatility relationship remains robust across specifications.

Jubina Tela

**Schadenfreude and its relations to self esteem: Does our perception
of ourselves impact how we view others?**

Friday, 5/1/26
2:00 PM - 3:30 PM

Faculty Mentor: Dr. Calvin Sims

Sage Hall, Room 355

[Zoom Link](#)

Regarding schadenfreude, the enjoyment of others' misfortune, the literature has shown consistent disagreement over the mediators and predictors. We plan to evaluate reported self-esteem, depression, happiness, and empathy with the use of various self-report assessments, clipped YouTube videos, and open-ended interview questions. The aim of the study is to discover or further support past findings that make up the experience of schadenfreude. We use the open-ended interview to dive into schadenfreude from the perspective of the schadenfroh, or the feeler of the emotion. We believe that schadenfreude is a complex emotion that calls for a megacognitive view to fully understand.