3MT® THREE MINUTE THESIS
FOUNDED BY THE UNIVERSITY OF QUEENSLAND

IDAHO

STATEWIDE COMPETITION

TUESDAY FEB. 17, 2026 2 PM PST

LIVE FROM LAKE CDA ROOM, STUDENT UNION NORTH IDAHO COLLEGE, COEUR D'ALENE

Idaho State University
BOISE STATE UNIVERSITY
University of Idaho

MEET THE EMCEE

Andrew "Andy" Fields
Center Executive Officer,
Coeur d'Alene and Northern Idaho

Andrew R. Fields, Ed.D., CEO of University of Idaho Coeur d'Alene, has over 25 years of higher education leadership experience in academics, administrative services and student services. He is a student-focused, collaborative and systems-thinking leader with talent in managing complex organizations through collegiality and respect. Fields is focused on strategic planning and innovative program development to support the mission of the university statewide while meeting the needs of a rapidly growing and changing community in North Idaho.

A true lifelong learner, Fields holds graduate degrees in educational administration and leadership, business administration, adventure-based management and outdoor leadership as well as undergraduate degrees in environmental recreation, liberal studies, welding and industrial technology. Fields has also completed over 15 professional certifications.

Fields has created, enhanced and managed innovative programs for several colleges and universities, including Stanford University, Shasta College, Central Washington University, California State University East Bay, University of California Davis and University of the Pacific, Stockton. Having held several positions including dean, director and faculty, he is an advocate for great instruction, prioritizing students and creating an exceptional student experience. Fields directly attributes his career advancement to education and is passionate about bringing higher education opportunities to all communities.

A special thank you to our host location in Coeur d'Alene, Idaho on the campus of North Idaho College in the Lake Coeur d' Alene Room at the Student Union, and the amazing team comprised of U of I and NIC staff to make this event possible.

MESSAGES FROM THE UNIVERSITIES

Jeremiah Shinn
Boise State University
(Video)

Robert W. Wagner
Idaho State University
(Video)

C. Scott Green
University of Idaho
(Video)

MEET THE GRAD DEANS

Scott Lowe
Boise State University

Karen Appleby
Idaho State University

Jerry McMurtry
University of Idaho

MEET THE JUDGES

Linda Coppess

Linda Coppess is the president and CEO of the Coeur d'Alene Regional Chamber. The Coeur d'Alene Regional Chamber is a membership organization that works with over 800 businesses and organizations. A Coeur d'Alene High School and University of Washington graduate, Coppess spent 24 years working at Microsoft, a multinational technology corporation, in sales, marketing and executive engagement before returning to her hometown of Couer d'Alene.

Dan Gookin

Dan Gookin, mayor of the City of Coeur d'Alene, moved his family to Kootenai County in 1993. He's been involved with the Festival of Trees in the 1990s, and in 1997 took the role of Artistic Director for the Lake City Playhouse. In 2002, Dan moved into the City of Coeur d'Alene and became involved in politics, working as an activist for transparency and accountability in local government. Dan was first elected to the Coeur d'Alene city council in 2011. He served three-and-a-half terms before being elected mayor in 2025.

Professionally, Dan is best known as the founder of the *For Dummies* book series, having written the original book, *DOS For Dummies*, in 1991. All told, Dan has written over 180 books on technology, with over 12 million copies in print translated into 32 languages. He does online training with LinkedIn Learning and engages in other creative endeavors.

First and foremost, Dan considers himself a father, having raised four boys in Idaho. He enjoys woodworking, playing the piano, riding his bike, cooking, playing racquetball, and making lists of things that he enjoys doing. He holds a BA in Communications/Visual Arts from UCSD

Dr. Bob McFarland

Bob McFarland, M.D., chair of the Kootenai Health board of directors, is a retired family physician and experienced healthcare leader. As a former instructor for the Kootenai Clinic Family Medicine Residency and a long-time advocate for regional health, he was elected to the Idaho Hospital Board as the North Region Hospital Trustee representative in 2024. McFarland was named the Idaho Family Physician of the Year in 2016. He has focused on medical management, long-range planning, and serving on the admissions committee for the University of Washington School of Medicine

Dr. Nick Swayne

Dr. Nick Swayne is an accomplished higher education president, strategic innovator, and decorated military veteran. Since 2022, he has led North Idaho College as its 11th president, during this time NIC reversed a 12-year enrollment decline, rebuilt campus leadership, and is on the path toward restoring its accreditation standing. His initiatives in workforce training, dual-credit pathways, and affordable bachelor's partnerships have positioned NIC as a regional leader in student success. Swayne holds a bachelor's degree in political science from the University of Idaho, a master's degree in public administration from Northeastern University, and a Ph.D. in strategic leadership from James Madison University.

Britt Thurman

Britt Thurman, Executive Director of the Museum of North Idaho, was raised in Coeur d'Alene and is a proud Vikings graduate. She has worked in the museum field for over a decade. Britt received her BA in History from the University of Idaho and MA in Museum Studies from the University of Kansas. She has worked at museums of varying sizes in multiple parts of the country, primarily in community engagement, accessibility, education, and exhibit design.

The Winners Advance to Regionals &
TODAY THEY WIN

THE RULES

The presenters are judged on the following:

Communication Style:
Was the thesis topic and its significance communicated in language appropriate to a non-specialist audience?

Comprehension:
Did the presentation help the audience to understand the research?

Engagement:
Did the oration make the audience want to know more?
The 3MT competition was originally developed by the University of Queensland, Australia in 2008, and is now held in over 600 universities across the world.

Today, four graduate students from each of the Idaho graduate schools will compete to describe their research in 180 seconds or less. The top three and the People's Choice winner have the opportunity to present their work at the Western Regional 3MT event (online) in March.
Thank you for celebrating graduate student research in the state of Idaho!

People's Choice

Remember your favorite presenter!
The audience online may vote using the Zoom Poll.

The audience in-person will have a paper ballot!

THE ORDER

Presenter	Title
1. Colin Martin, BSU	Ribbons of Life: Remote Sensing of Riverscapes in the Arid West
2. Katelyn Cathcart, ISU	Implicit Bias Toward Disability Disclosure in the Early Graduate Application Process
3. Zoe Froh , UI	Weaving Culture and Education: Culturally Relevant Practices in Indigenous Early Childhood Classrooms
4. Mia Toronto, BSU	From Label to Lips: Ensuring Vitamins Deliver on Their Promise
5. Arifa Islam Champa, ISU	The Detection Illusion: Revealing Hidden Failures in AI Phishing Detection
6. Zachary Foley, UI	Does Increased Fertilization and Spacing Make Trees Better Defended Against Beetles?
7. Holly Olvera, BSU	Common Infant Product Materials Negatively Impact Breathing
8. Will Kimball, ISU	From Pollution to Purification: Sulfur Repurposed
9. Leela Appili, UI	Barley to Beer: Is Beta-glucan a Foe and Beta-glucanase a Friend?
10. Aman KC, BSU	Tracking Glacier Change for Safer Communities
11. Aubree Denker, ISU	Empowering Collegiate Athletes Through a Comprehensive Sexual Health Education Toolkit
12. Fangyuan Li, UI	Athlete's perception on parental coaching behavior: What helps? What hurts?

MEET THE 12 PARTICIPANTS

In the arid Western United States, nothing is more essential to life than freshwater. Water is critical to farming, ranching, and wildlife, impacting everyone that calls this region home. In just a few hundred years we have dramatically changed our water cycle, yet the shifting baseline syndrome makes many of these changes invisible. We use satellite images to link seasonal changes in the vegetation within river corridors to the types of insects that live in those rivers. Developing this link between large scale data (satellites), and small scale data (insects) increases our understanding of what is happening on the landscape at large spatial scales. This increase in knowledge allows us to make better decisions about how and where we can improve the health of our rivers.

Collin Martin
Boise State University
Biology

Ribbons of Life: Remote Sensing of Riverscapes in the Arid West

Disability bias in graduate admissions is a critical yet underexamined barrier to equal access and inclusion in psychology. This study investigates implicit bias toward applicants with disabilities in psychology doctoral admissions. Standardized emails were sent to APA-accredited faculty nationwide, varying by disability disclosure (blindness, stutter, ADHD, or none). Results will identify potential inequities and inform inclusive training practices. Furthermore, findings may guide efforts to reduce bias in the admissions process.

Katelyn Cathcart
Idaho State University
Clinical Psychology

Implicit Bias Toward Disability Disclosure in the Early Graduate Application Process

MEET THE PARTICIPANTS

Zoe Froh
University of Idaho
Family and Consumer Sciences

Weaving Culture & Education: Culturally Relevant Practices in Indigenous Early Childhood Classrooms

This mixed-methods study examines the relationship between culturally relevant practices (CRP) and social-emotional development in Indigenous children attending Head Start programs, using the 2019 American Indian and Alaska Native Head Start Family and Child Experiences Survey (AIAN FACES) archival data. A multilevel modeling approach will be used to investigate whether teachers' CRP is associated with children's social-emotional development, controlling for child age. Complementary qualitative interviews with four lead teachers from Northern Idaho Indigenous Head Start programs will provide deeper insight into the current CRP practices and challenges. Grounded in Ladson-Billings' culturally relevant pedagogy framework, this research addresses a critical gap in empirical literature on Indigenous early childhood education. Findings will inform evidence-based practices that honor Indigenous culture while supporting children's development in early learning environments.

Mia Toronto
Boise State University
Biomolecular Sciences

From Label to Lips: Ensuring Vitamins Deliver on Their Promise

Following a healthy lifestyle has become increasingly popular in recent years, shifting the food industry's focus toward manufacturing nutrient-dense foods fortified with bioactive ingredients such as vitamins. However, vitamins are often unstable in complex food matrices, necessitating the addition of higher amounts to compensate for degradation over a product's shelf life. This practice can negatively impact consumers' health and increase product costs. In addition, manufacturers must comply with FDA regulations requiring that the vitamin content listed on the nutrition label be met or exceeded throughout the product's shelf life. My research focuses on the extraction and quantitation of vitamins from a protein powder matrix, as well as determining vitamin degradation rates within this system. This work supports consumers in achieving their health and nutrition goals while enabling manufacturers to add appropriate vitamin levels to their products. My research will ensure that from product label to consumer's lips, vitamins are delivering on their promise.

MEET THE PARTICIPANTS

Phishing attacks often use deceptive URLs to trick users into sharing sensitive information. We conduct a systematic feature selection study across five datasets to identify 32 key URL-based features for AI-driven phishing detection. Using large-scale evaluations, we compare machine learning, deep learning, and large language models on two disjoint datasets. Results show strong baseline performance but sharp drops with unseen data, emphasizing the need for robust, adaptable detection methods.

Arifa Islam Champa
Idaho State University
Engineering & Applied Science

The Detection Illusion: Revealing Hidden Failures in AI Phishing Detection

Bark beetle attacks are a major threat to the U.S. timber industry, and the primary defense mechanism trees possess against these insects is the production of resin ducts. Increasing resin duct formation could strengthen tree defenses. We used neural network–based resin duct and tree ring detection to examine how pine plantation management practices influence resin duct production in the southeastern United States. Our analysis included 298 loblolly (Pinus taeda) and slash pine (Pinus elliottii) cores from four experimental plantations in Georgia and Florida, representing planting densities of 300, 600, 900, and 1,500 trees per acre under two fertilization levels.
While lower density and higher fertilization significantly increased tree diameter, they did not significantly affect the percentage of ring area composed of resin ducts. These findings suggest that the management practices we tested in southeastern U.S. pine plantations do not substantially alter tree defense capabilities through resin duct production.

Zachary Foley
University of Idaho
Geography

Does Increased Fertilization and Spacing Make Trees Better Defended Against Beetles?

MEET THE PARTICIPANTS

Each year, approximately 3,500 infants in the United States die from sleep-related incidents, many involving compromised breathing. While safe sleep guidelines exist, infants may still be exposed to breathing risks from common commercial products. This research examined how materials frequently used in infant products affect breathing by measuring respiratory responses in healthy adults. Participants breathed into different fabrics while changes in oxygen and carbon dioxide were recorded. Several materials produced measurable changes in breathing-related measures compared to unrestricted breathing, suggesting that material properties may influence breathing safety. Infants, with more vulnerable respiratory systems and reduced ability to respond to obstruction, may face greater risk under similar conditions.

Holly Olvera
Boise State University
Biomedical Engineering

Common Infant Product Materials Negatively Impact Breathing

Every year, millions of tons of sulfur are produced as waste from fossil fuel refining. Instead of being used, this sulfur is piled into massive stockpiles. My research explores a way to transform this waste into new materials through a process called inverse vulcanization. While most sulfur-based materials are insoluble, I have developed polymers with water solubility, granting them an application in removing heavy metals from aqueous waste. This research provides a robust, cost-effective route to transforming waste into functional materials.

Will Kimball
Idaho State University
Chemistry

From Pollution to Purification: Sulfur Repurposed

MEET THE PARTICIPANTS

Leela Appili
University of Idaho
Plant Sciences

Barley to Beer: Is Beta-glucan a Foe and Beta-glucanase a Friend?

Beta-glucan is a water-soluble polysaccharide present in the cell walls of grains in barley and oats. Barley grain with high beta-glucan is undesirable for beer brewing as it causes cloggage filtration during beer production and unwanted turbidity in refrigerated beer products. Activated during malting, beta-glucanase, a vital enzyme in the barley grain, plays a crucial role in breaking down beta-glucan, contributing to an effective brewing process. The main objective of this research is to investigate the variations in malt beta-glucanase enzyme activity in four barley cultivars grown in five different locations. Remarkably, malt beta-glucanase activity significantly varied amongst the locations tested. The barley from Aberdeen, Idaho, showed the highest enzyme activity, while the same barley variety grown in Powell, Wyoming, exhibited the lowest. These findings would facilitate brewing industries in the development of strategies for selection of barley grains for improvement of beer quality.

Aman KC
Boise State University
Geophysics

Tracking Glacier Change for Safer Communities

In High Mountain Asia, glaciers serve as "water towers" for nearly two billion people, yet they pose a threat through Glacial Lake Outburst Floods (GLOFs). "Surge-type" glaciers can rapidly advance, damming rivers and creating unstable lakes that burst without warning. This research utilizes a decade of multi-sensor satellite imagery to create high-resolution time-lapses of glacier and lake evolution. By integrating this big data with machine learning, the study identifies key patterns, such as glacier velocity and terrain changes to forecast surge and flood risks at a regional scale. This work provides a framework to strengthen early warning systems, transforming mountain hazards into manageable risks for vulnerable downstream communities.

MEET THE PARTICIPANTS

Aubree Denker
Idaho State University
Public Health

Empowering Collegiate Athletes Through a Comprehensive Sexual Health Education Toolkit

This project addresses a documented gap in sexual health and consent education among collegiate athletes by developing a comprehensive, evidence-based toolkit. The initiative aligns with state, federal, and NCAA compliance requirements for prevention education on consent and sexual violence. Through collaboration with Title IX and ISU Athletics, the project aims to build actionable skills, promote self-advocacy, and empower female student-athletes. If effective, the toolkit will be adaptable and scalable for future campus-wide implementation.

Fangyuan Li
University of Idaho
Education-Sports Ethics

Athlete's perception on parental coaching behavior: What helps? What hurts?

Existing sports literature emphasizes that parental support can foster motivation and resilience, but over-involvement can contribute to stress and burnout. This study addresses the gap in research beyond youth-focused samples and no research on collegiate athletes' reflections. The purpose of this study is to describe how athletes perceive their parents' coaching behaviors in different contexts. A 26-item Parental Coaching Behavior Scale piloted across competition, training, and everyday life contexts (5- point Likert; Cronbach's α = .761). Preliminary findings show fathers' coaching was more often perceived as beneficial than mothers' (34.1% vs. 6.8%) but also carried a greater risk of harm in practice (36.4% vs. 18.2%). Athletes depicted mothers' involvement as generally more neutral and less intensive. Results suggest a dual edge to paternal coaching: greater potential to help alongside higher perceived pressure. All of which suggests the need for calibrated parental roles, clear coach–parent alignment, and athlete-centered support.

VOTE FOR THE BEST PRESENTATION

WHO WILL WIN?

People’s Choice $500


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