

REED COLLEGE

ONE
HUNDRED
AND
NINTH
COMMENCE-
MENT
MONDAY
MAY 15
2023

The Program

PROCESSIONAL*

INTRODUCTORY REMARKS

Audrey Bilger, President

WELCOME

Roger M. Perlmutter '73, Chair, Board of Trustees

ALUMNI WELCOME

Dave Baxter '87

REED COLLEGIUM MUSICUM

"The Road Home"

Stephen Paulus (1949–2014)

COMMENCEMENT ADDRESS INTRODUCTION

Audrey Bilger, President

ADDRESS

Kraig Kraft '00

CONFERRING OF THE DEGREE OF BACHELOR OF ARTS

Audrey Bilger, President

RECESSIONAL*

MARSHALS

Commencement Marshal

Janis Shampay, Howard Vollum Professor of Biology

Student Marshals

Kristen G. Anderson, Professor of Psychology

Noelwah Netusil, Stanley H. Cohn Professor of Economics

Matt Pearson '92, Professor of Linguistics

Faculty Marshals

Sameer ud Dowla Khan, Professor of Linguistics

Nigel J. Nicholson, Walter Mintz Professor of Greek, Latin,

and Ancient Mediterranean Studies & Humanities

**The audience is requested to rise for the processional and recessional.*

Please remain in place during the recessional until the faculty and class of 2023 have left the tent. Sign language interpretation is provided by Access Services Northwest. Our bagpiper is John Goff. Graduates and guests are invited to a reception after the ceremony in the Gray Campus Center Quad.

Kraig Kraft '00

Dr. Kraig Kraft is an agroecologist who has worked on rural and community development issues in Latin America, Africa, and Asia for over 15 years.

He is presently the Asia & Africa Director at World Coffee Research (WCR), a nonprofit organization that focuses on research to ensure the future of coffee and coffee-growing communities. At WCR, he has developed deep partnerships with national and international stakeholders to advance scientific innovations that improve coffee productivity, coffee quality, climate resilience, and farmer livelihoods while also building local capacity and prioritizing responsible public and private development efforts.

Prior to WCR, Kraig was involved with both research and project coordination for multiple humanitarian aid organizations, scientific institutions, and private sector companies on issues related to sustainable agricultural development. In addition to his scientific publications, Kraig has authored articles on food and agricultural topics and development issues in coffee regions for the general public. He is the co-author, with Dr. Gary Nabhan and the late chef Kurt Friese, of a book on climate change and local culinary traditions (*Chasing Chiles: Hot Spots on the Pepper Trail*, 2011), and he has appeared on national media to raise awareness about the vulnerability of the coffee sector to climate change.

Kraig earned a BA in biology from Reed College and an MS in international agricultural development and a PhD in agricultural ecology from the University of California, Davis. He was awarded a Watson Fellowship after graduating from Reed in 2001, named as a Fulbright Scholar in 2006, and served as a UC Mexus fellow in 2007. He speaks Spanish, French, and some Tagalog. After 14 years living overseas, Kraig has recently moved back to Portland, Oregon, with his wife, Heather Zornetzer '00, and their three children. Although he has not quite adjusted to the cold water temperatures for surfing the Oregon coast, he is happily rediscovering the thriving local food and coffee communities of the Pacific Northwest.

Music by Rose City Brass Quintet

Logan Thane Brown, trumpet

Lars Campbell, trombone

JáTtik Clark, tuba

Joseph Klause, trumpet

Daniel Partridge, horn

PRELUDE

Brass Quintet no. 2, Opus 6

Victor Ewald (1860–1935)

Suite from Maria de Buenos Aires

Astor Piazzolla (1921–1992)

Arranged for Brass Quintet by Steven Verhelst

PROCESSIONAL

Pomp and Circumstance no. 4, Opus 39

Sir Edward Elgar (1857–1934)

Arranged for the Rose City Brass Quintet by Lars Campbell

RECESSIONAL

Dances from “The Danserye”

Tylman Susato (1510/15–after 1570)

Arranged and edited by John Iverson

Collegium Musicum

SHOHEI KOBAYASHI

Assistant Professor of Music

Soprano

Leo Barnes '25

Jules Camden '25

Adrian Mercer-Garber '23

Lori Der Sahakian '23

Alto

Violet Burns '25

Ethan Gregor '23

Asta Rossi '25

Tess Rutstein '23

Azure Sensabaugh '23

Tenor

Kyle Petersen '23

Sky Peterson '23

Bass

Kellen Brosnahan '23

Ethan Yu '23

“The Road Home”

Stephen Paulus (1949–2014)

Tell me, where is the road
I can call my own,
That I left, that I lost
So long ago?
All these years I have wandered,
Oh when will I know
There's a way, there's a road
That will lead me home?

After wind, after rain,
When the dark is done,
As I wake from a dream
In the gold of day,
Through the air there's a calling
From far away,
There's a voice I can hear
That will lead me home.

Rise up, follow me,
Come away, is the call,
With the love in your heart
As the only song;
There is no such beauty
As where you belong;
Rise up, follow me,
I will lead you home.

Seniors are listed alphabetically under each of Reed's five academic divisions, followed by interdisciplinary majors that cross the divisions and master's graduates. The listing includes the academic department in which the student majored and any concentration within that major (noted by a colon). The title of the student's thesis is listed, except for students who completed one of Reed's combined degree programs in place of the thesis year at Reed.

The Arts

CALVIN BEEMAN-WEBER
Art: Studio Art
Self Portraits With a Severed Head

AARON JOSEPH BERLAU
Theatre
"Lean in, Engage, and Maybe Die":
A Critical Analysis of the Haunting
World of Horror Theatre

OLIVIA BROWN
Art: Studio Art
<The Escapism Manifesto>

HANNAH ELYSE COHEN
Art: Studio Art
All That is Left of Me is You

LORI DER SAHAKIAN
Music
Constructions and Representations of
the Middle East in Post-9/11 Pop and
Hip-Hop Music

JULIA KRISTEN DOELLING
Art: Art History
How the Cauldron Shaped the Lives
and Afterlives of its Users in Etruscan
Italy

ARIANA FLEET
Art: Art History
Perceptions of the City Under
the City, A Literary and Material
Phenomenology of the Urban
Underground

SIDNEY FONG
Art: Studio Art
Da Bin Lou: Understanding My
Chinese American Identity

ANNA HENDRICKSON
Theatre
Wild Boars Won't Let Me Sleep: A
Study of Immersive Theatre

RAJNI LOUISE
Art: Studio Art
Surfacing

ZOE MARCHAND
Music
The 21st Century Minnesota Music
Community: An Oral Present

ANNAJE CLAUDIA RIOUS
Art: Art History
A Closer Look at Backdrops:
Decentralizing the Body in
Constructions of Meaning in
Contemporary Portraiture Practices

CALEB S.
Music
Game Sound Practices as a Result
of Technological and Commercial
Advancement

IAN SILVERMAN
Theatre
Virtual Reality and Theatre:
Defining Lenses Through Which to
Understand Virtual Reality Theatre
and Audience Relationships

JACK SOLOMON
Art: Studio Art
Between Resurrections

ANNABELLE STERN
Dance
Staging the Square: Community
and Queerness Through the Lens of
American Square Dance

WILLIAM STEVENS
Theatre
Not Another Hideous Progeny:
Frankenstein, Adaptation, and the
Theatre

DÜNYA TAYLAN
Art: Art History
Turkish National Identity
Construction and its Manifestations
in Contemporary Turkish Fashion
Design

MABEL ESTHER THADEN
Art: Studio Art
Clowning Around

ROSS TIDWELL
Art: Studio Art
Monsters and Miracles: A Medieval
Comic Anthology

History & Social Sciences

ALEINA L. ALIWARGA
Economics
The Effects of Public Transportation
Infrastructure on Income Inequality

ELIJAH ARCHER
History
What Royals Fear: Magic and
Political Scandal in Early Modern
Europe

CLARA BARCLAY
History
Growing Holiday Magic: Nature,
Labor, and Meaning in Christmas
Trees in the Mid-Twentieth Century
Pacific Northwest

LUKA BAYON-FRAISE
Economics
Estate Inheritance and Gift Taxes:
An Unsatisfactory Solution to the
Problem of Inequality in the United
States

CLEO PRICE BERRYMAN
Economics
Is the Federal Reserve contributing
to racial wealth inequality? Monetary
policy and the racial wealth gap in
Minneapolis, MN.

MIA BOYER-EDWARDS
Sociology
Union Suppression and New
Organized Labor: The Case of Union
Revival at Amazon

GRACE WENDE BRIGGS
Anthropology
“I Feel Bloated:” A Historical
Ethnography of Body Image in the
United States

RYAN H.S. BRUDER
History
The Lineage of Nationalism in the
Philippines from 1896 to 1916

ISABELLE ANNICK CALDWELL
Economics
“Is Portland Over?” The Economic
Impact of Homicide Shootings in
Portland, OR in 2021

ELISE MARIE CARLSON
Anthropology: Science,
Environment, and Technology
Studies
Urban Foraging: Finding Value
Within the Waste and Weeds

LUCAS CARMICHAEL-TANAKA
History
A History of Japanese-American
Settlement and Resettlement in
Oregon

ROAN CHAFEE
Political Science
Revolution at the Ballot Box: Ranked
choice voting in the US as a model of
electoral change.

GENEVIEVE CHILDERS
Anthropology: Linguistic
Anthropology
Chasing an Escape: Cottagecore,
COVID-19, Capitalism, and
Climate Change

SAGE MARIE CURRY-WYNNE
Sociology
Bureaucratizing Intersectionality:
Understandings and Practices of
LGBTQ Inclusivity Within Domestic
Violence Organizations

EMILY MARIE DUNLAP
History
Female Education in the Early
Republic as Discussed by Abigail
Adams and Thomas Jefferson

ROBIN ECKENSBERGER
History
Stuffed and Silent: A Study of the
Troubling Legacies of Taxidermy at
the Field Museum, 1890-1920

GABRIEL FISH
Anthropology: Science,
Environment, and Technology
Studies
Thinking With Fire: Burning
Landscapes of Knowledge and Power

AURORA MOON FORTE
Sociology
Political Outsiders at a Small Liberal
Arts College

FLORA GLADWIN
Anthropology: Science,
Environment, and Technology
Studies
Ecotourism and Unpredictability:
*Multispecies Ethnography in the Waters
of Bonaire*

ANOUSHKA GOENKA
Economics
A Study of Performance-Based
Compensation in the Indian Premier
League (IPL)

LEO GOLUB
Political Science
The Politics of Paperwork: Evaluating
US Forest Service Implementation
of the National Environmental
Policy Act

KILALA HALL
Anthropology: Science,
Environment, and Technology
Studies
Woven Fibers: Thrifted Clothing as a
Material Nexus in Hawai'i

NOAH ROBERT HANSER-YOUNG
Political Science
Uncovering Truth: The Philosophical
and Political Implications of
Heidegger's Concept of Truth in
Being and Time

ROBIN HART
Sociology
Inclusive Course Content Shifts in
Higher Education: Driven by School
Classification, Socio-Demographic
Diversity, and Departmental Creation

SALIM INGRAM
Anthropology
The Intersubjective World of
Guantánamo Bay

OLIVIA JENKINSON
Sociology
Who's Doing What: Birth Control
Practices and Divisions of Labor in
Young Couples

MUSKAN JHA
Economics
Comparative Analysis of
Occupational Mobility of Low-Skilled
Workers in the U.S. and Germany

ALICE SOMERSET KIRKHAM
Anthropology
The Power of Perspective:
*How the Egyptian Nation Thwarted
Authoritarian Oppression*

KHALIL LALTOO
Anthropology: Science,
Environment, and Technology
Studies
Saving Seed: Socio-Ecological
Dimensions of Corn Farming in
Chiapas, Mexico

SOFIE ELSA LARSEN-TESEY

Anthropology

Salmon Pluralities: Nch'í Wána
Pum, Traditional Fishing, and
Indigenous Modernity

SAMANTHA KUHNE LAVAN

History

School Lunch feeding politics-
How the National School Lunch
Program Became a State and
Federal tool for Political Goals

ZOE LEE-DIVITO

History

Contestations of Nations and
States: Modern Tibet, 1912-1951

ANDY BIANCA-ROSE

LORENZO SALINAS

Political Science

Past Brown: The Supreme
Court's March Towards
Resegregation

ALONDRA LOZA NAVARRO

Sociology

Navigating DEI work in liberal
arts colleges: Identifying and
managing the costs of racialized
burdens amongst staff

FENNELL LUDWIG

Anthropology

Away with the Fairies

HARRY MANDER

Economics

Solar Customer Responsiveness
to Time-of-Use Net Energy
Metering: A Study of
Demographic and Environmental
Factors in California

LIAM MARSHALL

Economics

Paragraph IV and Category X;
Why Do Generic Pharmaceutical
Companies Agree to Settlements
That Delay Generic Entry for Free?

BAMBI MASSEY

Political Science

Taking Up Space: An Analysis of
the Intersection Between Fatness
and Femininity

KATIE MAXFIELD

Political Science

(How) Is Compensatory
Mitigation Working? An Analysis
of Environmental Impact
Statements for Clean Energy
Projects in Washington State

JOSEPH FRANCIS

MCDONNELL-MYERS

Political Science

Surviving Political Sex Scandals

GRANT CARLSON MIMMS

History

The Spatial Politics of the German
Soundscape, 1918-1945

DIANA MULLEN

Anthropology

Reinventing the Wheel: How Parents
of Medically Complex, Disabled
Children Experience, Navigate and
Create Care Systems

EVANGELINE FRANCES NAÑEZ

Sociology

“That’s your Auntie”: An analysis of
Southwest Pueblo Indian family-making
after attending Indian boarding school

ANIKA SAMANTHA NICOLAS

Economics

Looking at Determinants of Health
Status Using Machine Learning

MICHELLE O'SHEA

Anthropology

Artificially Artistic or Cyborgian
Artist? AI Art Exists in a Complicated
Entanglement of Economies, Smoke
Screens, and Robot Relations

SKYE A. OYAMA

Political Science

Antitrust, the Second Gilded Age, and
the Future of Technological Society

CLARA YOOJIN PARK

Anthropology

Participatory Defense: Highlighting
Cambodian American Perfected
Personhood

KATHRYN PETERSEN

Sociology

Everyone wants to be sustainable until
they have to pay for it: Barriers to
sustainable urban restructuring in
Santa Rosa, CA

SARAH PRINGLE

Anthropology

Animating Towards a Brighter Future
through the Implied Child Viewer: the
Significance of Queer and POC
Representation in Children’s Media

MAYA RONEN

Anthropology

Loving from the Outside-In: An
Exploration of Autistic Forms of Love

BENJAMIN ROSS

Sociology

Leave Room for Community in my
Coffee: Creating Social Capital in a
Community Centered Café

LIAM CHRISTOPHER

RYAN-O'FLAHERTY

Economics

Place of Business: Spatial
Competition in the Food Retail
Industry

CATHERINE AIDAN SAIDI

Sociology

“The Simple Beauty of it”: Accessibility
Within Bluegrass Jams—A Curious
Model of Cultural Self-Sufficiency

ADA BEATRIZ SANCHEZ

Political Science

How Ethnic Enclaves Interact with
the City

RILEY SCHLEMMER

Sociology

Managing Masculinity in the
Military: Experiences, Outlooks,
and Reflections after Serving

NINA KATHERINE SCHMIDT

Sociology

From Wilson to Wells: A Semiotic
Examination of the Renaming of a
Portland High School

EMMA SOFIA HOWARD SCHOU

Sociology

Who Speaks for the Trees?: Place
Attachment and Environment
Identity in the Pacific Northwest
Forest Industry

LILI JOYCE LIYUN SIEDARE

History

“For Lewd and Immoral Purposes”:
Chinese Women in the United
States and the Page Act of 1875

RISHITH SINHA

Economics

Quantifying the Association
between Open Spaces and
Neighborhood Gentrification in
Portland, Oregon

DYLAN THELEN

History

The Flower of Chivalry Withers:
Social Class Anxieties through
Military English Military
Development in the Hundred Years'
War (1337-1453)

EMMA THI HA THORON

Economics

Pandemic Effects on Gross Domestic
Product and the Unemployment Rate

ISAAC ROBERTO THURSTON

History

Reformed, not Abolished: The
Forced Labor of Native Americans in
California

YUKE (CHLOE) TIAN

Economics

Venture Capital Investing Since the
Covid-19 Shock

GABRIEL URAL

Political Science

Adding Fuel to the Fire: An Analysis
of State Land Use Policies and Local
Conditions and their Impact on
Wildfire Hazard Mitigation in the
WUI

MAXWELL JUSTIN DAVID

VANLANDSCHOOT

Economics

Has Fission Fizzled? Surveying Risk
Perceptions and Voting Behavior in
the Pacific Northwest

ELIZABETH WIGHT

History

“We will not leave the mountains till
Zion is redeemed”: Mormon Political
Thought in Early Utah Territory,
1850-1858

HENRY WILSON

Economics

What Ever Happened to Those Rail
Workers?

MILES WOO

Political Science

UnCarted Waters: Urbanity,
Political Power, and the Future of
the Food Carts in Portland, Oregon

TIM WU

History

Republic of Warlords: A Governor's
Ambition

BEQUEREL MICHAEL YONAKA

Anthropology

In the shadow of capitalism:
experiences of disabled USians in the
contingent workforce

DEZHAO ZHANG

Economics

Boards and Cooperatives

Literature & Languages

SIERRA ABBOTT

Chinese

More Than Words: An Examination of Different Functions of Language in Han Shaogong's 韩少功 A Dictionary of Maqiao 马桥词典

SOPHIE BACHER

Chinese

Swayed and Swaying All Under Heaven: A Consideration of the *Mao Commentary* to the *Poetry* 毛詩訓詁傳

RONAN BATTISTONI

Comparative Literature

Stories for the Slow Apocalypse: *Iyashikei* in the Anthropocene

HENRY G BELMAN

English

My Favorite Martian (Manhunter): Alien Immigrants in Comics

CAITLIN TESS BERROL

English: Creative Writing
Green Elephant: Stories

MADELEINE BRICKEY

French

Examining Sensations in Baudelaire and 19th Century French Poetry: A Sensory Escape from Reality

SADIE BRINK

Russian

Orthodoxy and Russian Symbolism: Life-Creation in the Works of Mother Maria Skobtsova

OLIVER BROWNLEE

English: Creative Writing
Last Name, First Name

HAZEL BYERS

English: Creative Writing
After the Light Is Gone

ISABEL SOPHIA

CHAMBERLAIN

Comparative Literature
rhizophora

TANNER CHAMBERLIN

English: Creative Writing
The Wake

GEORGE HECTOR CROOKS

Classics: Greek and Latin
Narratives of Roman History in
Salvian's *De Gubernatione Dei*

SEAN ERIC DAVIDSON

English

Got to be (un)real: Henry Darger's transmedial paracosm

ANAYANCI LIZETTE DE PAZ

Spanish

Resisting the Bureaucratic Mode of Perception and Creating Relational Spectatorship through *Celda 211* and *Ciutat Morta*

SYLVAN RAIN DOMST

German

The Battle for Political Autonomy: War and National Identity in the Writings of Heinrich von Kleist

BREWSTER DURBIN

English

The Irishman and
The Unspeakable

AMELIA FORMAN

Comparative Literature

Writing the Mystical Subject: the Works of Saint Teresa of Ávila

CELIA FABINY GARB

Greek, Latin, and Ancient Mediterranean Studies: History and Archaeology
Ancient DNA: An Unfit Arbiter of the Indo-European Debate

ROSE GATLIN

Greek, Latin, and Ancient Mediterranean Studies: History and Archaeology
From Pen to Palace: Examining Roman Britain Through Literary Sources and Archaeological Discoveries at Fishbourne and Vindolanda

TANIA GABRIELA JARAMILLO

Comparative Literature

Islanded Modernities: Eco-Poetics of the Shore in Joyce, Walcott and Césaire

BRIANNA CELINE KNAPP

English: Creative Writing
Green and Full of Everything

NAOMI HUNTER LEW

English: Creative Writing
Witnessing, Embodied

ALISA MACDONALD

Greek, Latin, and Ancient
Mediterranean Studies: Greek
and Latin
A Comparison of Homeric and
Virgilian Similes

ISABELLE FRANCES MERCADO

Comparative Literature
Sea and Storms: Decolonial
Aesthetics & Poetics of Catastrophe
in the Caribbean

LUNA GABRIELA MOORE

English: Creative Writing
Chrysalis

AMELIA MORIARTY

Comparative Literature
Cringe-core Ethics: Nabokov's
Invitation to a Beheading Versus the Apathetic
Imagination

JONAH MROZ

Comparative Literature
Gay Means Happy: Popular
Contemporary Queer Media,
Representation, and Fandom Culture

HANNAH OCHTERA

Comparative Literature
The Reconciliation of *The Marvelous
Land of Oz*

KATIA CARLOS QUEENER

English: Creative Writing
Devotion

ALEX QUIGLEY

English
Three Metaphysical Fables

MICHAEL HARRISON QUINN

Greek, Latin, and Ancient
Mediterranean Studies: Greek
and Latin
The Examination of *Virtus*, Slavery,
and Civil War in the Third Servile
War in Appian's *Civil Wars*

GABRIELA RAMIREZ

English
Disrupting the Bildungsroman:
Silence as a Symptom of Shame,
Reading, and Learning in *Northanger
Abbey*, *Incidents in the Life of a Slave
Girl*, and *Normal People*

KALEB BLOYD SAUM

English
The Empire Never Ended:
Authenticity, Paranoia, and Religion
in Selected Works of Philip K. Dick

FREYA SCHLAEFER

Classics: Greek and Latin
Gastric Heroics: Towards a Grammar
of Eating in Archaic Greek Poetry

STEPHANIE ANN SHU

Chinese
Writing Love and Liminality: Female
Homoeroticism in Early Republican
Chinese Fiction

MILES CLARK SILVEY

Comparative Literature
Fray and Contaminated: Posthuman
subjectivity in contemporary science
fiction

ZACKARY ALEC SIY

English: Creative Writing
Bildungsroman

COOPER WALDEN STURM

English: Creative Writing
Exuvia

DAVID PATRICK TRUEBLOOD

English: Creative Writing
Artifacts of Life: Epistolary Stories

ZOE MARIE UTLEY

English
Joy Harjo's Map to Healing in *Wings
of Night Sky*, *Wings of Morning Light:
A Ceremony*

BRUCE WANG

English: Creative Writing
Flowers Seen Through the Fog

AMIR WEKSLER

Classics: Greek and Latin
Love's Coming for your Head! A
Translation, Commentary, and
Analysis of Pseudo-Theocritus, Idyll 23

Mathematical & Natural Sciences

KODINNA ANACHEBE

Chemistry

“A Teachable Moment”: Examining Student Attitudes Towards Chemistry

HIMA ARAMONA

Physics

Geodesics in Color Space

SARAH AVENDANO

Biology

Sexual selection for male advertisement call dominant frequency ratios in *Xenopus petersii*

AADIT VIJESHKUMAR BAGDI

Computer Science

Functional Programming, Or How the “Fun” got taken out of Functional Programming: An examination of Haskell as a tool for interactive web applications

CHARLIE BALL

Biology

Auditory Preferences in Female *Xenopus laevis* for Male Advertisement Calls

ZACHARY ROTH BARBANELL

Computer Science-Mathematics

Optimizing Gadgets for Fully Homomorphic Encryption

SOLOMON BOLKER BIXBY

Chemistry

What is Going On?
1,2-Diastereoselectivity in Reductions with a Novel Binary Hydride

SCOTT WHALEN BLAIR

Mathematics

A Taste of Differential Field Theory

STOCKTEN LUCAS BLANCO

Biology

Surviving the scorch: an ecological perspective on human mortality during heat-waves

WOLFGANG BRIGHTENBURG

Mathematics: Statistics

On Estimating the Number of Clusters: Mind the Gap!

MARGARET BRITTON

Biology

Misogyny and Moralism: A History of Bias in HIV/AIDS Research

KELLEN BROSNAHAN

Mathematics

Representation Theory, Schur-Weyl Duality, and the Partition Algebra

JIAXI CAO

Mathematics-Physics

Classical Jackiw-Teitelboim Gravity: Towards Quantization

PERRY A CHAN

Computer Science

Session Typing and Checking Using State Minimization

SASHA CHANG

Biology

Exploring the mechanisms driving the formation of vasculature surrounding the developing zebrafish retina

TIMOTHY CHAO

Biology

How The Plane of Cell Division Changes Between Wildtype and *hdac* mutants

TAIYU CHEN

Mathematics

The Impact of Schools on Traffic Congestion: A Case Study in California K-12 Public Schools

PETER CHEREPANOV

Computer Science

An Expanded and Updated Review of Halftoning Techniques

LAUREN CLEVELAND

Physics

Implementing a Dichroic Atomic Vapor Lock for the Reed Magneto-Optical Trap Repump Laser

CADEN CORONTZOS

Computer Science

Optimizing Lempel-Ziv-Welch for DNA Compression

MALEN CUTURIC

Mathematics: Statistics

MAUPing Up: An Empirical Analysis of Error Rates in Dasymetric Mapping

DAPHNE DANIEL

Biology

Big Brain Energy: CRISPR-Cas9 Gene Disruption Reveals a Requirement for the RA Responsive Transcription Factor *tshz1a* in Dorsal-Ventral Axis Formation

EULALIE REDD DE SOUZA
Biochemistry and Molecular
Biology
Expression and Purification of *E. coli*
CusS Sensor Domain: Solubility and
Possibilities

MICHAEL CONNOR DEIPARINE
Computer Science
Playlist For A Traveling Salesman

ATHENA DI PROPERZIO
Biology
Yeah Sex is Cool, but Have You Tried
Obligate Parthenogenesis? The
Effect of Methyl Farnesoate on
Sex-Determining Genes in
Daphnia pulex

ZACK DOOLEY
Mathematics
A Survey of Categorification:
Towards Categorical Algebra and
Higher Categories

XINLONG DU
Physics
Classical Analog of Quantum
States in the Infinite Square Well

SAFIYA OLIVIA
INELL EASTHAUSEN
Biology
Exploration of Mutation By
Looking At the *Daphnia magna*
Ionome

ROSCOE DYLAN
ELINGS-HAYNIE
Computer Science-Mathematics
A Zero-Knowledge Proof for
Norinori

JACOB E. FINKELSTEIN
Mathematics
An Accessible Proof of the Prime
Number Theorem

ETHAN GREGOR
Chemistry
Investigation of Formic Acid
Dehydrogenation with Alternatives
to an Ir-Ru Catalyst

KATHERINE GURIN
Biology
The Impact of Urbanization on the
Trophic Niche of Coyotes

JIANGQI HAN
Physics
Toward a Semi-Classical
Percolation Model

AIDAN LOUISA HANLEY
Biology
Examining Human Impacts on
Stomatal Development Through
Drought and Agrochemicals

MADISON HELD
Biology
Two Can Play That Game: An
Investigation into the Co-Occurrence
of Minisatellites and Recombination
Hotspots

FINN HILL
Computer Science
An expansion of Miss Ratio Curves

AUDREY MINERVA HINCHLIFF
Biology
It Always Rains but it Never Spores:
Defining Sporulation Patterns in PET
Degrading Bacterial Consortium

RYAN A. HOLLAND
Physics
NMDA Receptors and the
Complexity of Single Neurons

HENRY HOLLEB
Biochemistry and Molecular
Biology
The Curious Case of the Disappearing
Polymorph: Pharmaceutical Co-
crystallization, Polymorphism, and
Vanilla Flavored Crystals

ROBERT JACOB HOOPES
Computer Science
The L-Systems Explorer: An
Introduction to Generative Art

WILLIAM MILLER HOWES
Computer Science
Nintendo Entertainment System
Emulation in Rust

NAREG KEDJEJIAN
Biochemistry and Molecular
Biology
An Enzymatic Biosensor for the
Detection of Changes in
Acetylcholine and Choline Levels in
Xenopus Laevis

JOSEPHINE KESSLER
Computer Science
Harmonies Bound in Markov Chains

BHAVJOT KHURANA
Mathematics: Statistics
Supervised Machine Learning to
Predict Student Proficiency in
Oregon Public Schools

ARIA DEANNA
KILLEBREW BRUEHL
Computer Science
A Parameterized Approach for
Hedcut Rendering

ILANA KIM
Computer Science-Mathematics
Simplicial Homology Computation
Using Discrete Morse Theory

SOPHIE LINH-LAN KLINGBORG
Biology
Genetics of R2R3 MYB Transcription
Factors in *Erythronium*

HANNAH ELIZABETH KUDER
Mathematics-Physics
The Beesis

NICHOLAS MANTHALA
LANDMAN
Biochemistry and Molecular
Biology
How long are they really? An
investigation into the telomere
length of *Xenopus laevis* with
nanopore sequencing

HELEN LASTER
Biochemistry and Molecular
Biology
Closing the Loop: TPA Recovery
from a Plastic Degrading Bacterial
Consortium

ORION LEE
Physics
Lost in Transition: Electron
Localization in Transition States of
Quantum Hall Systems

ANNA ROSE LUCE
Mathematics
The CW Decomposition of the
Grassmannian Manifold

REBECCA FERRYL LUFF
Computer Science
Human Understanding of Fairness
Definitions

NICHOLAS LUTZ
Chemistry
Soaking it all in: Employment of
Halogen Bonding to Form Dynamic
Crystal Molecular Sponges

OLIVER MANSBACH
Mathematics
Persisting Through The Convexity:
Convex Modules for the
Commutative Grid

OLIVIA MCGOUGH
Mathematics
Persistent Homology and
Applications to Graph Data

HART MONYATOVSKY
Biology
Flipping the Script: Divergent
Transcriptional Elements in the
hTERT Promoter

BRYANT MORRELL
Computer Science
Towards Analysis of Parallel
Caching with Variable Size Items

CARLI NEWMAN
Biochemistry and Molecular
Biology
Full-length 16S rRNA Sequencing
Reveals Perturbations to Gut
Microbiome Composition in
Response to *in vitro* Treatment
with Tamoxifen and 17 β -Estradiol

KEITH NG
Computer Science-
Mathematics
Building To The Third Story: An AI
To Play Santorini

HARRISON JOHN NICHOLLS
Computer Science
Formal Verification of Key
Exchange Protocol Security

JADEN NICHOLS
Biology
Behavioral Nuances of the Oregon
Zoo Chimpanzees *Pan Troglodytes*
In captivity

OLIVER NICHOLSON
Biochemistry and Molecular
Biology
Beginnings of a Structural Analysis
of Manganese Exporters MneP and
MneS

ALEXANDRA DERDERIAN
NOSAL
Chemistry
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Water Isotopes Throughout the
Holocene from the Skytrain Ice Core

HELEN (ELLE)
OBERWEIS-MANION
Biochemistry and
Molecular Biology
Split Discs and the Challenges of
Purifying a Protein from
Drosophila Cells

SEAN J. O'DONNELL
Mathematics
Primes in Extensions and Expressions
via Binary Quadratic Forms

BLAZE OKONOGI-NETH
Mathematics
An Introduction to Elliptic Curves,
Modular Forms, and the Modularity
Theorem

CHRISTOPHER DECLAN O'LEARY
Biology
Quantification of Plant Hemoglobin
Gene Expression in *Glycine Max*

EMILY JUNE OSBORNE
Computer Science
Scheduling Orals

BHAVANA PANCHUMARTHI
Physics
Dielectric Response of Bulk hBN

VICTORIA JEANETTE PARKER
Physics
Development, Modeling, and
Radiation Characterization of the
Reed Research Reactor Central
Thimble and Neutron Beam
Facilities through Monte Carlo
Simulations and the Neutron
Transport Equation

KYLE PETERSEN
Chemistry
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Behavior in Crystalline Adamantane-
Azopyridine Assemblies

SKY PETERSON
Biochemistry and
Molecular Biology
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ZnuABC Complex

JOHN MARK POOLE
Computer Science
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evolutionary and ecological dynamics

EMMA POTTER
Chemistry
Synthesis of a small molecule
inhibitor for ZnuA to investigate the
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**RYAN LEONHARD
QUISENBERRY**
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Multithreaded Prefix-Free Parsing
for Multi-Genome Index
Construction

KATHA RAJAN
Physics
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Reed Rubidium Magneto-
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IWAN RICHARDS
Computer Science
Fluid Modeling in Computer
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Squares-Material Point Model

JONAH ROHLFING
Chemistry
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Exploration of Diastereoselective
Reductions of Chiral Cyclic
Ketones by Snelling Salt

SUHAS SAKAMURI
Biology
Male-Male Claspings in African
Clawed Frogs, *Xenopus laevis*

RAYN SAMSON
Mathematics-Physics
Relativistic Ehrenfest Relations
for Klein-Gordon Fields

AMELIA SCHAEFFER
Chemistry-Physics
Striking Gold: An Atomic Force
Microscopy Study of Gold
Nanoparticle-Polymer Interfaces

SOL ROBIN SKINNER
Mathematics: Statistics
Making Sense of Making Sense
of Sensitivity

MONROE AME STEPHENSON
Mathematics
Kazhdan-Lusztig Polynomials of
Matroids

RYAN TANG
Physics
Experimental exploration of
water waves

ELIOT J. TARLOV
Computer Science
The Quantum Approximate
Optimization Algorithm and its
Application to Clustering.

ROHAN SINGH WALIA
Computer Science
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ALEX WHITE
Computer Science
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NICOLE XU
Biochemistry and Molecular
Biology
Characterization of a
Transmembrane Protein TerC

JOSHUA YAMAMOTO
Mathematics: Statistics
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Inflation Modeling

ZONGHAN YU
Chemistry
Spectroscopic Studies of the CuA
Assembly Mechanism

LARRY ZENG
Computer Science-Mathematics
Exploring Noninterference in
Programming Languages: A Study of
Simple Dependency Core Calculus
and Logical Relations

RUNSHI ZHOU
Physics
A Non-Field-Theoretical Evaluation to
the Point Charge Electrodynamics in
Compact Extra Dimension - Potential,
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YUAN ZHUANG
Biology
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Computational Algorithms in Aiding
Discovery of Novel Genetic
Regulation Interactions

DANIEL JIARUI ZOU
Computer Science-Mathematics
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QUINN GREEN ZULEGER
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Philosophy, Religion, Psychology & Linguistics

IMAN SARA AHSAN
Psychology
Investigating the Effect of Race and
Skin Color on Emotion Attributions

LUCY ALLISON
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CHLOE MOON BEITCHMAN
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LEX STAR COLEMAN
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BRIDGET GRACE CURLEY
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Empathic Design Frameworks
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HARPER ELIZABETH DZIEDZIC
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RILEY WILSON ELLIS
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Students from a Self-
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China: On the Discourse of Wind
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binary discussion of F0 performance
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Presentation Through Clothing as a
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in Nineteenth-Century Salem,
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Associations in Heterosexuals and
Sexual Minority Groups
- MARK MAGEE**
Philosophy-Psychology
An account of concept structure:
What concepts definitely are not
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- BEN PABLO GELMAN
MANNHEIM**
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Affective Contemplation on the
Passion of Christ in Julian of
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Mixed race identity: An acoustic
analysis of individuals with one
Japanese and one white parent

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Stanislav Grof’s Transpersonal
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for Catalyzing Abundantly Healthy
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Changing Perceptions: Investigating
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Environmental Studies: Biology
Big Trouble, Little Forest:
Differential Responses of
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Strawberry Leaf AgNPs and
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Salted Waters: The Implications
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International and Comparative
Policy Studies: Anthropology
Reimagining Family Life in Peru:
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of Adolescent Pregnancy on
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It's (Not) a Mut Point: The Effects
of Mutation on Competitive
Ability in *Daphnia* Makes a
Case for the Conservation of
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NICOLE DIAZ

Anthropology-Art
Tending, Making, Breaking: Dyke
Play as World Creation

LYDIA KNOX DOMBROWSKI

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Archiving the Nation, Region by
Region: The Archive of American
Folk Song, 1928–1942

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Honey I Ate the Kids: Fish Brains,
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“Money or River”: A Bistable
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Chemistry
Application of Quantum Dot
Microfluidic Paper-based Devices
(μ PADs) for the Detection of Heavy
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Rain. On. Me. Synthetic Fibers in
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Black, Yellow, Orange:
Implementing bumblebee species
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Policy Studies: Economics
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Studies: Anthropology
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DAVID HATHAWAY ROTHFELS

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Thuja plicata (western redcedar) in
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MAYA SAXE

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An investigation of *Drosophila*
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SIZHENG SONG

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Staging memory and Performing
Spectatorship in *Antigona Furiosa*

ANA ALEXANDRA TOPASNA

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Something Seems Fishy: An
Exploratory Study on *Daphnia magna*
Neuroanatomy and Neural Reactions
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NATALIE VAN NORMAN

Religion-Political Science
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Art-Biology
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local botanical history through
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JIAHE YUE

Neuroscience
Neurons Are Not the Only Things
That Matter: What Happens When
Brain Glial Cells Encounter Vision
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ARIELLA JESSICA ZULCH

Neuroscience
Effects of Long-Term Levonorgestrel
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Hippocampal Neurogenesis in Intact
Female Long-Evans Rats

A Note on the Beginnings of Reed College & Commencement

In the late 1800s, the Reverend Thomas Lamb Eliot suggested to two of his parishioners, Oregon pioneers Simeon and Amanda Reed, that they use their wealth for the betterment of society. He urged them to found “a Reed Institute of lectures and arts and music and museum.” In 1908, with contributions from Simeon and Amanda’s estate after their deaths, a board of trustees led by Eliot established the Reed Institute in Portland, Oregon.

Reed College began its first classes in 1911 with 50 students—26 men and 24 women—and 15 faculty members. As an innovative experiment to restore relevancy to the liberal arts in an age dominated by science and industry, Reed sought neither the size and specialization of the university nor the intercollegiate athletics and elaborate social life that had become standard at many private colleges.

Under the inspiration and guidance of Reed’s founding president, William Trufant Foster, the college set out to build a democratic community without regard for nationality, gender, religion, race, or class. No fundamental distinctions were made between students and faculty in what was called “the quest for truth.” Students were expected to do original work in a major subject area—the senior thesis. A principle of honor governed all aspects of campus life.

Reed held its first commencement ceremony in 1915, for which President Foster conferred degrees on the back steps of Eliot Hall. In the last few decades, the college has usually invited a notable graduate to give the commencement address; recent alumni commencement addresses have been given by Kathleen Saadat ’74, Igor Vamos ’90, Jennifer Ferenstein ’88, Robert Smith ’89, Larry Sanger ’91, Michelle Nijhuis ’96, Adonia Lugo ’05, and Lisa Nakamura ’87.

For over a hundred years Reed has remained steadfast in its belief in the intrinsic value of rigorous scholarship, the joy of serious intellectual pursuit, and the essential role of community in the development of knowledge.

A Note on Academic Regalia

Academic regalia worn at commencement reveal different types of academic achievement through the use of different styles and colors of gowns and hoods. The bachelor's gown has a long, pointed sleeve; the master's is a long closed sleeve with a slit at the elbow; and the doctor's is a very full, bell-shaped sleeve with the bands matching the color of the gown opening. The hoods are lined in the official color of the institution that conferred the degree, although the bachelor's hood is rarely used. The colored velvet binding in the hoods indicates the academic area in which the degree was earned—white for liberal arts, yellow for science, purple for law, red for theology, green for medicine, and blue for philosophy.

