

2020



UNIVERSITY
OF OREGON
COMMENCEMENT

DEPARTMENT OF
CHEMISTRY AND
BIOCHEMISTRY

DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY

Commencement Ceremony

SATURDAY, JUNE 20, 2020

Welcome

David Tyler

Department Head

Address to the Class of 2020

Marina Guenza

Professor

Concluding Remarks

David Tyler

Department Head

Presentation of Degree Candidates

Graduate Slide Roll

2020 UNDERGRADUATE AWARDS IN CHEMISTRY

American Institute of Chemists Foundation Award

Outstanding Senior

Makenna L. Pennel and Dan A. Tudorica

LeRoy H. Klemm Award for Excellence in Undergraduate Chemical Research

Dylan J. Bardgett, Rachel E. Lutz, Emma J. Mullen, and Makenna L. Pennel

Richard M. Noyes Physical Chemistry Achievement Award

Jake D. Olsen

Warner Peticolas Award for Excellence in Undergraduate Chemical Research in Physical Chemistry

Madelyn N. Scott

American Chemical Society Analytical Chemistry Award

Makenna L. Pennel

American Chemical Society Inorganic Division Award

Dylan J. Bardgett

American Chemical Society Organic Chemistry Award

Zachary R. Garrison

American Chemical Society Physical Chemistry Award

Zachary M. Miller

Biochemistry Achievement Award

Dan A. Tudorica

Chemical Biology Achievement Award

Rachel E. Lutz and Emma J. Mullen

Inorganic Chemistry Achievement Award

Dylan J. Bardgett

Materials Chemistry Achievement Award

Makenna L. Pennel

Organic Chemistry Achievement Award

Peiguan Brian Sun

DEGREE CANDIDATES

Biochemistry Baccalaureate Candidates

Hussein M. Al-Zubierj ^{1,4,5}

Zachary D. Basham ⁵

Jared Z. Brandon

Benjamin R. Camel

Patrick J. Connor ⁵

Janiel Elizarraga-Oregel

Zachary R. Garrison ⁵

Alexis K. Green

Saskia M. Ilcisin

Olivia M. Lang

Rachel E. Lutz ^{2,4,5}

Tristan C. McKibben

Sabrina M. Miller

Emma J. Mullen ^{1,4,5}

Robin A. Nagy

Peregrine D. Painter ^{3,5}

Haleigh E. Patten-Trujillo

Matthew S. Stevens

Ryan T. Swan

Christian K. Tamashiro ^{1,4}

Dan A. Tudorica ^{1,4,5}

Alexandria E. Wong ^{1,4,5}

Chemistry Baccalaureate Candidates

Maria F. Anderson

Dylan J. Bardgett ^{1,4,5}

Lya Carini

Jie Chen

James T. Gray

Evan R. Hanks

Kristen N. Hodge ³

Eli A. Jaffe ^{4,5}

Taryn M. Kam ^{3,5}

Jiaming Li

Jordan A. Mildon

Zachary M. Miller ⁵

Timothy J. Murphy

Nathan T. Nguyen

Jake D. Olsen ^{2,5}

Makenna L. Pennel ^{1,4,5}

Madelyn N. Scott ^{3,4,5}

Sara A. Staudhammer

Peiguan Brian Sun ^{4,5}

Tristan D. Zeryck

¹ Summa cum laude ² Magna cum laude ³ Cum laude ⁴ Phi Beta Kappa

⁵ Department honors

Master of Science Candidates

Myriam Jackelyn Castañeda
Alison S. Chang
Anh T. Do
Alec N. Gallman

Alison Guan
Aaron M. Miller
James H. Riddell

Advanced Materials Analysis and Characterization Program

Sean F. Harris | Samtec , Colorado Springs, CO
Aleia K. Kim | Covalent Metrology, Sunnyvale, CA
Alexandra L. Kuo | Archaeometry Laboratory, University of Missouri,
Columbia, MO
Andrew Lam | Thermo Fisher Scientific, Hillsboro, OR
Jenna Valdez | nLight , Portland, OR

Knight Campus Internship Program

Molecular Sensors

Lydia H. Griggs | Thermo Fisher Scientific, Eugene, OR
Kayla R. Jones | Cascade Chemistry, Eugene, OR
Bradley J. Lopes | Stowers Institute for Medical Research, Kansas City, MO
Emma C. Olson | OHSU Knight Cancer Early Detection Advanced Research
Center, Portland, OR
Rex Putnam | Serán Biosciences, Bend, OR
Andromeda M. Wheeler | Thermo Fisher Scientific, Eugene, OR

Photovoltaic and Semiconductor Device Processing

Shannon S. Fender | Los Alamos National Laboratory, Los Alamos, NM
Grant S. Hall | MKS Instruments (ESI), Portland, OR
Julie R. Hempleman | Thermo Fisher Scientific, Hillsboro, OR
Tiffany M. Nakama-Fukuhara | Thermo Fisher Scientific, Hillsboro, OR
Taylor C. Petersen | FormFactor, Beaverton, OR

Master of Science Candidates

Knight Campus Internship Program

Polymer Science

Dakotah K. Ballard | Lonza, Bend, OR

Morgan E. Bergstrom | Gates Corporation, Littleton, CO

Aileen Esther Calletano | WR Grace, Albany, OR

Matthew Carman | FormFactor, Beaverton, OR

Auston L. Clemens | Lawrence Livermore National Laboratory, Livermore, CA

Carey J. Cling | Serán Biosciences, Bend, OR

Lauren E. Dornan | Emerald Kalama, Kalama, WA

Pilar Gonzalez | CHEM INC, Fontana, CA

Michelle A. Gross | Lonza, Bend, OR

Kei Inoue | Lonza, Bend, OR

Coleman F. Johnson | Lonza, Bend, OR

Gregory J. Marquino | WR Grace, Albany, OR

Jangaba A. Massaquoi | Intel Corporation, Portland, OR

Lauren C. Naatz | Los Alamos National Laboratory, Los Alamos, NM

Samuel L. Roland | Nike, Portland, OR

Natasha C. Story | Los Alamos National Laboratory, Los Alamos, NM

Dayton M. Towata | WR Grace, Albany, OR

Camille H. Wong | Los Alamos National Laboratory, Los Alamos, NM

Doctoral Candidates

Connor J. Balzer

The Effects of WISH/DIP/SPIN90 and WASP Family Proteins Regulation of Arp2/3 Complex on Actin Network Architecture and Dynamics

Advisor: Professor Bradley Nolen

Andrew P. Carpenter

Molecular Structure and Bonding at Nanoemulsion Surfaces

Advisor: Professor Geraldine Richmond

Matthew M. Cerda

Development of Chemical Tools for Studying Reactive Sulfur Species

Advisor: Professor Michael Pluth

Sean P. Cleary

Fourier Transform Analysis for the Characterization of Mass Heterogeneity of Intact Protein Complexes Using Native Mass Spectrometry

Advisor: Professor James Prell

Curtis E. Colwell

Synthesis of Strained Carbon Nanotube Fragments and a New Tool for Molecular Strain Analysis

Advisor: Professor Ramesh Jasti

Dmitri Leo M. Cordova

Self-Assembly Behavior of Modulated Elemental Reactants

Advisor: Professor David Johnson

Micah Donor

Fundamental and Quantitative Analysis of Gas-Phase Protein Structure and Structural Transitions Using Ion Mobility-Mass Spectrometry

Advisor: Professor James Prell

Justin J. Dressler

Utilizing the Indeno[1,2-b]fluorene Scaffold to Access Stable and Tunable Diradicals

Advisor: Professor Michael Haley

Doctoral Candidates

Kira E. Egelhofer Ruegger

Interfacial Layer-Modified Solar Cell Contacts: Quantifying the Impact of Spiro-OMeTAD and Its Additives on Charge Transfer, Selectivity, Recombination, and Open-Circuit Voltage

Advisor: Professor Mark Loneragan

Danielle M. Hamann

Investigating the Influence of Nanoarchitecture and Atoms/ Unit Area on Constituent Structure and Transport Properties of Nanolaminate Heterostructures

Advisor: Professor David Johnson

Joseph L. Harman

Evolutionary and Mechanistic Studies of the Multifunctional Innate Immune Protein S100A9

Advisor: Professor Michael Harms

Ryan W. Holly

Defining the Molecular Mechanisms that Govern Par-3 Mediated Polarization of the Par-complex

Advisor: Professor Kenneth Prehoda

Alexis J. Kiessling

Time-Dependent Approaches and Their Utility: Dynamical Formulations of Two-Dimensional Electronic Spectroscopy Signals and Electronic Structure Theory

Advisor: Professor Jeffrey Cina

Erik J. Leonhardt

Cycloparaphenylenes as Building Blocks for Self-Assembled Nanotube-like Structures

Advisor: Professor Ramesh Jasti

Carolyn M. Levinn

Expanding the Sulfur Chemical Toolbox: Synthesis and Study of Small Molecule COS Donors and H₂S Probes

Advisor: Professor Michael Pluth

Doctoral Candidates

Terri C. Lovell

Nanohoops: A New Molecular Architecture for Fluorescent Probe Development

Advisor: Professor Ramesh Jasti

Ngoc Minh Phan

Synthesis of Disulfide, Thioether, and Hydrocarbon Cyclophanes Using Self-Assembly, Covalent Capture, and Photochemical Sulfur Extrusion

Advisor: Professor Darren Johnson

William K. Storck

*Characterization of LSD Complex Function, Histone Exchange, and Regulation of a Tryptophan Catabolism Gene Pair in *Neurospora crassa**

Advisor: Professor Eric Selker

Jesse W. Wilson

Native Ion Mobility-Mass Spectrometry Techniques for Characterizing the Structure and Lipid Binding of Bacterial Pore-Forming Toxins

Advisor: Professor James Prell

Kelly S. Wilson

Development of a Broadband Single-Shot Transient Absorption Spectrometer

Advisor: Professor Cathy Wong

UNIVERSITY OF OREGON

Michael H. Schill, President

Patrick C. Phillips, Provost and Senior Vice President

Bruce Blonigen, Tykeson Dean of Arts and Sciences,
College of Arts and Sciences

ALUMNI ASSOCIATION

To learn more about the UO Alumni Association,
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