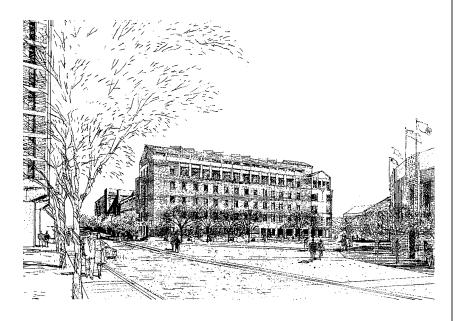
# Molecular, Cellular, and Developmental Biology Spring Commencement 2020

May 16, 2020 10:00 AM <u>https://www.colorado.edu/mcdb/</u> University of Colorado, Boulder

Dr. Lee Niswander – MCDB Chair Spring 2020 Opening Remarks and Commencement Address

Student Graduate Address Jack Ethan Johnson

Doctor of Philosophy MCDB conferred by: Dr. Ken Krauter – MCDB Associate Chair Conferral of Bachelor Degrees by: Dr. Jennifer Knight



## **Doctor of Philosophy - MCDB**

Giancarlo Noe Bruni Advisor: Dr. Joel Kralj - MCDB Illuminating Bacterial Electrophysiology Howard Hughes Medical Institute Gilliam Awardee

Dalton Buysse Advisor: Dr. Greg Odorizzi – MCDB Regulation of ESCRT- III Membrane Scission at Endosomes by Doa4, a Ubiquitin Hydrolase

Tova Lynn Ceccato

Advisors: Dr. Leslie Leinwand – MCDB – Dr. Kristi Anseth – Chemistry, Chemical and Biological Engineering

Physical and Biochemical Cues Initiate Pathological Signaling in Cardiac Fibroblasts

Lauren Christine Crisman Advisor: Dr. Jingshi Shen - MCDB Identification and Characterization of Trafficking Regulators Via Genome Wide CRISPER Screening

Kenneth Michael Felsenstein Advisor: Dr. Dan Theodescu – Cedars Sinai Functional Genomic Dissection of Immunobiological Phenotypes in Cancer

**Eli Gendron** 

Advisor: Dr. Stephen Schmidt -EBIO

Climate Change Driven Disturbances to Annual Patterns in Alpine Hydrology Depress Diversity of Planktonic Communities by Increasing the Influence of Selection from Local Environmental Factors on Community Assembly

Steven Guard Advisor: Dr. William Old - MCDB Unbiased Omics: Revealing DYRK1A Function in DNA Damage Repair and the Mechanism of Action of Cannabidiol

Genevieve Kerr Wilson

Advisor: Dr. Leslie Leinwand -MCDB

Expression of a Slow Muscle Myosin (β-MyHC) Drives Both Physiological & Pathological Changes in Skeletal Muscle

Bridget Lee Menasche Advisor: Dr. Jingshi Shen - MCDB Genetic Screens Identify Regulators of Cytoxic Lymphocyte Mediated Cell Death and Membrane Trafficking

Andrew Bank MorgenthalerAdvisor: Dr. Shelley Copley – MCDB Gene Duplication Divergence, and What Lies in Between Deanna Langager Muehleman Advisor: Dr. Leslie Leinwand -MCDB

Biological Sex Differences in a Rodent Model of Pathological Cardiac Hypertrophy and Regression

Alex Renee PaineAdvisor: Dr. Jenny Knight - MCDBStudents' Use of Science Process Skills in Introductory LevelBiology Labs

**Douglas Kevin Peters** Advisor: Dr. Robert Garcea - MCDB Spatiotemporal Organization of Murine Polyomavirus Replication Centers

### **Master of Arts Degree - MCDB**

Marisela Gonzalez-Cruz

Advisor: Dr. Lee Niswander – MCDB

A Long Non-Coding RNA as a Regulator of Neural Progenitor Cell Fate

# **Chancellor's Recognition Awards - 4.0 GPA**

Yannick Clency Lee-yow\*\* \*

summa cum laude with distinction

The Use of Caenorhabditis elegans as a Radiotherapy Model for Studying Short-term and Long-term Radiation-induced Side Effects Advisor: Dr. Ding Xue

John Troup Moir V<sup>\*</sup> with distinction Bachelor of Arts in Biochemistry and an additional major in Molecular Cellular Developmental Biology and a minor in Leadership

Jessica Janet Rea<sup>\*</sup> with distinction Bachelor of Arts - Neuroscience with an additional major in Molecular Cellular Developmental Biology and a minor in Business

Logan Tyler Schwanz\*\* \*

summa cum laude with distinction

Computational Modeling of Hindered Zirconium Beta-Diketonate Polymerization Catalysts Advisor: Dr. Michael Marshak, Chemistry

# **MCDB Undergraduate Honors**

Sandra Anaa Appiah<sup>\*\*</sup> magna cum laude Investigating the Composition of the Gut Microbiome in Murine Polytrauma and Hemorrhagic Shock Advisor: Dr. Christopher Lowry - Integrative Physiology

Xander Gordonray Brandeen\*\* \*

summa cum laude with distinction

Effects of Separation Time on Pair Bond Behaviors and Partner-Elicited Neuronal Activation Advisor: Dr. Zoe Donaldson, MCDB, Psychology and Neuroscience

Logan Thrasher Collins\*\*

*summa cum laude* Beckman Scholar

Design of a de novo Aggregating Antimicrobial Peptide and a Bacterial Conjugation-based Delivery System Advisor: Dr. Anushree Chatterjee – Chemical and Biological Engineering

Tadg Forward\*\* \*

summa cum laude with distinction

Preliminary Protocols for the Quantification of Shewanella oneidensis Iron Reduction Performance Advisor: Dr. Luis Zea, Aerospace Engineering Sciences

Grace Nicole Hibshman<sup>\*\*</sup> summa cum laude Atomic Force Microscopy Reveals Higher-Order Telomeric Architecture Mediated by Shelterin Advisor: Dr. Thomas Cech, Biochemistry

Chloe Huntzinger<sup>\*\* \*</sup> magna cum laude The Influence of Light Levels on Carbon Isotope Fractionation by Synechococcus sp. PCC 7002 Advisor: Dr. Boswell Wing, Geology

Benjamin Huxley\*\* \*

summa cum laude with distinction

Exogenous Rescue of Endogenous TPD-43 Knockout in Cultured Muscle Cells Advisor: Dr. Brad Olwin, MCDB

Jack Ethan Johnson<sup>\*\*</sup> summa cum laude Identification and Characterization of cpr-4 Suppressor Mutant Advisor: Dr. Ding Xue, MCDB

Alfred Austin Kemp\*\*

magna cum laude

Optimizing Retroviral Barcode Infection of Skeletal Muscle Stem Cells Advisor: Dr. Brad Olwin, MCDB Rathan Kumar<sup>\*\*</sup> magna cum laude How is GLUT4-mediated Glucose Uptake Impaired in Insulin Resistance? Advisor: Dr. Jingshi Shen, MCDB

Robert David Meushaw<sup>\*\*</sup> summa cum laude Engineering of a Cleavable C-terminal Domain of RNA Polymerase II Advisor: Dr. Dylan Taatjes, Biochemistry

Alice Rey Landfair Mueller\*\* \* summa cum laude with distinction A Dive into the Endogenous Retrovirus-Derived BANCR Expression under Interferon-y Advisor: Dr. Edward Chuong, MCDB

Valerie Marie Olsen<sup>\*\*</sup>magna cum laude The Role of Coronin1c in Endoplasmic Reticulum Associated Endosomal Fission Advisor: Dr. Gia Voeltz, MCDB

Jessica Pafford<sup>\*\*</sup> magna cum laude RCAN1 Mediates Anxiety-related Behaviors in part through Regulation of CREB1 Signaling Advisor: Dr. Charles Hoeffer, Integrative Physiology

Stephanie Nicole Salazar<sup>\*\*</sup> summa cum laude Evaluation of the Effects of Altitude on Rat Anxiety - and Depressive-like Behavioral Responses

Advisor: Dr. Christopher Lowry, Integrative Physiology

Isaac Emanuel Sellinger<sup>\*\*</sup> magna cum laude Covalent Organic Frameworks as Customizable Vehicles for Controlled Drug Release Advisor: Dr. Wei Zhang, Chemistry

Isabella Galang Shelby<sup>\*\* \*</sup> Creating a Mouse Model of Human p63-related Ectodermal Dysplasia Using CRISPR-Cas9 Gene Editing Advisor: Dr. Rui Yi, MCDB

Austin Robert Hammermeister Suger<sup>\*\*</sup> summa cum laude Investigation of Student Reasoning as a Significant Predictor of Academic Success in Introductory Genetics Advisor: Dr. Jenny Knight, MCDB Seana Patricia Thompson<sup>\*\*</sup> *The Microbiology of Table Salts* Advisor: Dr. Noah Fierer, EBIO

#### **Bachelor of Arts - MCDB**

**Deena Gehad Abuagina** Fatima Rashid Al-Ali Marv Ava Jov Andel Sandra Anaa Appiah\*\* **Eloise Ana Aragon** Morgan Miranda Baciu Samuel Noah Baird\* Aidan Andrew Barker Matthew Stephen Barry Jonathan Michael Beirne Jessica Benjamin Kahealani Bentosino **Bruce Richard Berg Matthew Porter Bertelson** Alexander William Black Stephan T. Blaskovics **Tyler James Blue Xander Gordonray Brandeen** 

**Corev Wilson Brown** Kaitlin E. Buck **Erin Leigh Burgmaier** Trevor S. Call Sara Marie Campione **Christine Catherine Canepa\*** Joshua Leonano Celis Mukda Chabairum **Janelle Salazar Chapman** Erin Char\* Gavin Chiem\* **Oliver Marco Chow** Henry Luong Chu **Kimberly Ann Clark** Stephen Kyle Clark Logan Thrasher Collins\*\* \*

Crystal Marie Colmenero Sophie Elida Conley Emily Kay Czarnik\* Shelbi Elizabeth Davenport Niccolo Guzzo Degliantoni Benjamin Neil Dinges Lajessie Fonsur Dinh Rhys Patrick Dresser magna cum laude with distinction

magna cum laude

with distinction

summa cum laude with distinction

with distinction

with distinction with distinction

summa cum laude Beckman Scholar

with distinction

Samuel Joseph Farmer Antonio Dimitri Feula Jackson Thomas Fontaine Tadg Forward\*\* \*

Lauren Elizabeth Gerace\* **Dylan Richard Gessner Isabel Rae Gonzales** Lauren Elizabeth Grav **Christopher Greidanus\* Brianna Raechelle Griffin Margaret Groissant** Jordan Michael Hahn Sophia Matisse Harding Kevin Hau Shav Helm\* Grace Nicole Hibshman\*\* **Emily Michelle Hite** Scott Ho **Cameron David Horning Gretchen Hover\*** Chloe Huntzinger\*\* Benjamin Huxlev\*\* \*

Margaret Percy Ivy\* **Emily Louise Jacobs** Lauren Elizabeth Jacobsen Nicole Kay Jacobsen Kathrina Marie Jaehne Asmita Jha Xingvi Jiang Jack Ethan Johnson\*\* **Oula Kareem\*** Alfred Austin Kemp\*\* Danielle Alyssa Klem\* Stella Nichol Koliavas Daren O'Brien Kraft Sarah Elise Kreston **Michelle Kubicki Rathan Kumar\*\*** Nathan Ryan Landry\* Avery Allen Langley Yannick Clency Lee-yow\*\* \*

Cassandra Leibson Meredith Ann Lewis Jennifer Nicole Liebig Cassandra Leibson Benjamin James Madden Karim Mahmoud summa cum laude with distinction with distinction

with distinction

with distinction summa cum laude

with distinction magna cum laude summa cum laude with distinction with distinction

summa cum laude with distinction magna cum laude with distinction

*magna cum laude* with distinction

summa cum laude with distinction Allyson Malloy **Cameron Joseph Markuson** Chelsea Anne Martin Marisa Camille Martin Wegryn Ian Daniel McAdams **Charly Mendoza Justus Josephine Mestas Robert David Meushaw\*\*** Joel Robert Meyers John Troup Moir V\* **Nigel Francis Moore** Alice Rey Landfair Mueller\*\* \* Amrita Nag\* Sara Le Nguyen Simile Nguyen Maria Valentina Nino Quiroga Lauren Olsen Valerie Marie Olsen\*\* Levant Avetekin Ozdemir Jessica Pafford\*\* **Dongioo Park Margaret Patterson Haley Ann Peterson** Joshua Xiao Kang Peterson\* Jade Katherine Ponder Manasa Ponnapalli\* **Anna Jing Price** Olivia Grace Raygoza Jessica Janet Rea\* **Brian Thomas Reed Ellen Kendall Renard** Josephine Xiaoyun Rudoff Micah DeLoss Salazar Stephanie Nicole Salazar\*\* **Kathryn Salmeron** Lyndsie Ann Salvagio **Jamie Nicole Schultz** Logan Tyler Schwanz\*\* \* Eric Austin Schwender\* **Brody Seebass** Isaac Emanuel Sellinger\*\* Maryssa Elaine Sena Ksenia Serdvukova\* Amira Sheikh Isabella Galang Shelby\*\* \* Andrew Shlossman **Thomas Scott Grady Sizemore** 

summa cum laude with distinction with distinction magna cum laude magna cum laude

summa cum laude

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summa cum laude with distinction

magna cum laude

with distinction

summa cum laude with distinction Shannon Mae Skeoch Brandon Smith Youn Seong Son Andrew Daniel Soto **Olivia Grace Squalls** Julia Suffoletta Austin Robert Hammermeister Suger\*\* summa cum laude Justin Kyle Tapper\* with distinction **Gabriel Adam Tauber Gabriella Elizabeth Thalblum** Johna May Bezdek Thaut Seana Patricia Thompson\*\* \* magna cum laude

**Shelby Nicole Toline** Megan J. Urban Jose Alfredo Valadez Zachariah Daniel Velasco Giovanni Alexis Venzor Melendez Nishika Virmani Makavlah Waddle **Faye Walker** Andrew Joseph Walowitz **Chioma Brandie West** Lukas Emerson Wiborg William Robert Williston **Binpeng Wu** Joshua M. Zertuche

with distinction

\*\*Graduation with Honors is determined by the Honors Program of the college and is based on several criteria, including the quality of original scholarly work. Honors are not conferred on a graduate simply by virtue of high grades. The Departmental Honors Program is organized around a student research project undertaken in MCDB or a related department. It is not necessary to take Honors Department courses to qualify. Candidates for Departmental Honors must satisfy GPA requirements, complete a research project, prepare an Honors thesis describing the research project in a scholarly fashion and pass an oral examination.

\*Graduation with Distinction is noted by the asterisk and is achieved through 30 credit hours completed at the University of Colorado, Boulder. Students must have a GPA average of 3.75 or higher for all course work completed at the University of Colorado and have a cumulative GPA average of 3.75 or higher for all collegiate course work completed at all institutions attended.