**JETT DUVAL**

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141 Cross Creek Pl Apt 4C, Athens, GA 30605

**EDUCATION**

**University of Georgia**, Athens, GA *June 2024 - present*

**Ph.D. Candidate**

Microbial Biotechnology

**Bryant University**, Smithfield, RI *August 2020 – May 2024*

**Bachelor of Science**

C**oncentration:** Biology Research Intensive

**Minor(s):** Creative and Applied Arts, Psychology, Management, Chemistry

**RESEARCH EXPERIENCE**

Complex Carbohydrate Research Center, **University of Georgia, Athens, GA**

**Graduate Assistantship**  *June 2024 - present*

* Conducting independent research under the advisement of Dr. Christine Szymanski: understanding the interplay between protein modification (O-glycosylation and phosphorylation) and cell wall peptidoglycan and teichoic acid biosynthesis

Center for Health and Behavioral Sciences, **Bryant University, Smithfield, RI**

**Independent Study in Chemistry** *September 2023 – May 2024*

* Conducted independent research under the advisement of Dr. Christopher Reid: mapping the metabolic pathways connected to cell wall biosynthesis by analyzing various mutant strains using MIC (minimum inhibitory concentration) assays and fluorescence microscopy.
* Peer-mentored a junior undergraduate student to perform common laboratory techniques and methods.

**NSF-SURF Research Assistant in Reid Lab**  *Summer 2023*

* Awarded an NSF Summer Undergraduate Research Fellowship (SURF) to conduct 10 weeks of full-time research under the advisement of Dr. Christopher Reid
* Developed a method for selective hydrolyzation of amides in mono-substituted glycine diamide.
* Presented findings at the 2023 NERM Conference at Northeastern University (June 2023).
* Presented findings at the 2023 Summer IDeA Networks of Biomedical Research Excellence (INBRE)-SURF Conference at the University of Rhode Island (July 2023).
* Submitted publication to JACS (see below).

**Research Assistant in Reid Lab**  *Fall 2022- May 2023*

* Worked 10 hours per week to assist in conducting research and general lab maintenance.
* Learned how to communicate effectively in a research and lab environment, how to use specific biotechnological techniques to gather data from planned experiments, how to read and interpret data and results correctly and clearly, as well as reading and analyzing research papers.

**NSF- SURF Research Assistant in Reid Lab**  *Summer, 2022*

* Awarded an NSF SURF to conduct 10 weeks of full-time research under the advisement of Dr. Christopher Reid.
* Investigated changes in autolysin expression after genetic and chemical inactivation using *B. subtilis* as a model organism and our chemical probe, masarimycin.
* Presented findings at the Summer INBRE-SURF Conference at the University of Rhode Island (July 2022).

**Independent Study in Chemistry** *August 2021 – December 2021*

* Conducted independent research under the advisement of Dr. Christopher Reid: investigating involvement of N-acetlyglucosaminidase LytG in bacterial cell elongation and division.
* Developed skills in conducting MIC assays, fluorescence microscopy, electron microscopy, and qPCR.

**INBRE-SURF Research Assistant in Reid Lab** *Summer, 2021*

* Awarded an INBRE SURF to conduct 10 weeks of full-time research under the advisement of Dr. Christopher Reid.
* Worked towards identifying potential inhibitors to Phr1, a β-(1,3)-glucan transglycosylase from *Candida parapsilosis* which had previously been identified as an important virulence factor for adhesion to host tissues.
* Developed specialized skills in HPLC, mass spectrometry, and thin layer chromatography.
* Presented findings at the 2021 Summer INBRE-SURF Conference at the University of Rhode Island (July 2021).

**CONFERENCE ABSTRACTS AND PRESENTATIONS**

**DuVal JS**, Champney N, Reid CW (April 2024). Breaking Free: Selective Amide Hydrolysis in Diamides. ACS Annual Rhode Island Section Poster Session and Awards Night. Roger Williams University, Bristol, Rhode Island, USA. (poster).

**DuVal JS**, Champney N, Reid CW (April 2024). Breaking Free: Selective Amide Hydrolysis in Diamides. Research and Engagement Day. Bryant University, Smithfield, Rhode Island, USA. (poster).

**DuVal JS**, Champney N, Reid CW (March 2024). Breaking Free: Selective Amide Hydrolysis in Diamides. ACS Spring 2024. Ernest N. Morial Convention Center, New Orleans, Louisiana, USA. (poster)

**DuVal JS**, Champney N, Reid CW (October 2023). Breaking Free: Selective Amide Hydrolysis in Diamides. Celebration of Academic Excellence. Bryant University, Smithfield, Rhode Island, USA. (poster)

**DuVal JS**, Champney N, Reid CW (July 2023). Breaking Free: Selective Amide Hydrolysis in Diamides. Summer Undergraduate Research Symposium. University of Rhode Island, North Kingston, Rhode Island, USA. (poster)

Zeng J, Ring P, **DuVal JS,** Shaw S, Bliss J, Reid CW (July 2023). Development of a Fluorescent Based Assay for Characterization of *Candida parapsilosis.* Summer Undergraduate Research Symposium. University of Rhode Island, North Kingston, Rhode Island, USA. (poster co-author)

Zeng J, Ring P, **DuVal JS,** Shaw S, Bliss J, Reid CW (June 2023). Development of a Fluorescent Based Assay for Characterization of *Candida parapsilosis.* 7th Northeast Glycochemistry Meeting. Brandeis University, Waltham, Massachusetts, USA. (poster co-author)

**DuVal JS**, Hall E, Rauff TL, Degiorgis J, Reid CW (June 2023). Evaluating Genetic and Chemical Inactivation of Bacterial Autolysins. 7th Northeast Glycochemistry Meeting. Brandeis University, Waltham, Massachusetts, USA. (poster)

**DuVal JS**, Hall E, Rauff TL, Degiorgis J, Reid CW (June 2023). Evaluating Genetic and Chemical Inactivation of Bacterial Autolysins. NERM. Northeastern University, Boston, Massachusetts, USA. (poster).

**DuVal JS**, Degiorgis J, Reid CW (April 2023). Evaluating Genetic and Chemical Inactivation of Bacterial Autolysins. ACS Annual Rhode Island Section Poster Session and Awards Night. Providence College, Providence, Rhode Island, USA. (poster).

**DuVal JS**, Reid CW (April 2023). Jumping into the Void: A Harrowing Journey of Antimicrobial Discovery. Research and Engagement Day. Bryant University, Smithfield, Rhode Island, USA (oral presentation).

**DuVal JS**, Hernandez J, Degiorgis J, Reid CW (July 2022). Evaluating Genetic and Chemical Inactivation of Bacterial Autolysins. Summer Undergraduate Research Symposium. University of Rhode Island, North Kingston, Rhode Island, USA. (poster).

Paige R, **DuVal JS**, Shaw S, Bliss J, Reid CW (November 2021). Development of a Fluorescent Based Assay for Characterization of *Candida parapsilosis* β-(1,3)-Glucan Transglycosylase Phr1. ACS Carbohydrate & Pathogens: From Fundamentals to Applications, Chicago Convention Center, Chicago, Illinois, USA (poster co-author).

Paige R, **DuVal JS**, Reid CW (October 2021). Development of a Fluorescent Based Assay for Characterization of *Candida parapsilosis* β-(1,3)-Glucan Transglycosylase Phr1. Canadian Chemistry Conference & Exhibition, Calgary, Canada (poster co-author).

**DuVal JS**, Ring P, Reid CW (July 2021). Development of a Fluorescent Based Assay for Fungal Transglycosylases. Summer Undergraduate Research Symposium. University of Rhode Island, North Kingston, Rhode Island, USA. (poster).

**MEMBERSHIPS & AWARDS**

Osborne Graduate Fellowship *July 2024*

* Awarded to a UGA outstanding student who is underrepresented in their fields

The Bryant University Scholar Award *May 2024*

* Presented to the graduating senior who has authored a publication during their time at Bryant University

Rhode Island Section American Chemical Society *April 2024*

* Outstanding Chemistry Student for 2024 at Bryant University

Research and Engagement Day, Bryant University, Smithfield Rhode Island, USA *April 2024*

* Awarded for outstanding scholarly achievements by students in the form of a poster presentation award
* Nominated for the 2024 School of Health and Behavioral Sciences Director Award

Member of the American Chemical Society *Spring 2023 - present*

Research and Engagement Day, Bryant University, Smithfield Rhode Island, USA *April 2023*

* Awarded the 2023 School of Health and Behavioral Sciences Director Award
* Nominated for outstanding scholarly achievement by a student in the form of an oral presentation

Member of the Sigma Xi Scientific Reseach Honor Society *January 2023 – present*

Alpha Alpha Alpha (Tri-Alpha) *May 2023 – May 2024*

* National Honor Society for First-Generation college students

Order of Omega *September 2023 – May 2024*

* Premier leadership honor society for members of Fraternity & Sorority organizations

**PUBLICATIONS**

1. Hernandez J, Duval J, Rauff T, Hall E, Gallati M, Haubrich B, et al. Chemical Biology Reveals Involvement of N-acetylglucosaminidase LytG In Cell Elongation and Division. ChemRxiv. 2023; doi:10.26434/chemrxiv-2023-5bp52-v2

This content is a preprint and has not been peer-reviewed.

**LEADERSHIP EXPERIENCE**

Resident Assistant (RA) *August 2022- May 2024*

*Residential Life* (Bryant University, Smithfield, RI)

* Managed and mentored 60 students within a suite-style living space. Available 24/7 to help resolve conflicts
* Organized social and informational events to help foster relationships between dormitory residents
* Managed building administrative duties: room transfers, incident reports, and maintenance reports
* Interviewed and trained incoming RAs on job duties

MyPATH Mentor *September 2023 – May 2024*

*Undergraduate Advising* (Bryant University, Smithfield, RI)

* Responded in a timely manner to email inquiries from exploratory students to answer questions about my major/minors, decision making progress, and selection advice.
* Provided support for Advising events for incoming and exploratory students.
* Had a strong understanding of the curriculum and requirements of my major/minors to accurately communicate with exploratory students.
* Occasionally communicated and collaborated with faculty in my major/minor departments to make appropriate referrals.

Treasurer *August 2022- May 2023*

*Girls Club Lacrosse* (Bryant University, Smithfield, RI)

* Worked closely with the President and Vice-President to organize club events
* Made sure officers are updated with club transactions through short presentations

Wellness Chair *January 2021- December 2021*

*Alpha Sigma Alpha Sorority* (Bryant University, Smtihfield, RI)

* Faciliated programs that promoted both mental and physical health and wellness
* Organized the annual, week long collaboration of greek life, where the fraternity and sorority communities come together around events of celebration

**PROFESSIONAL SERVICE**

R&I Student Worker *September 2020- May 2024*

*Douglas & Judith Krupp Library*

* Provided excellent public service to students, staff, and visitors
* Completed various tasks as per the lead librarian requests
* Assisted library users with bibliographical information and reference queries, both on-site and on-line

**TECHNOLOGY SKILLS/ SOFT SKILLS**

* Well-versed in social media, Microsoft Suite, excel
* Organized, problem-solver, resilient, responsible, innovative, adaptive, goal-orientated, collaborative, leader

**REFERENCES**

**Christopher W. Reid**, Professor of Chemistry

Bryant University

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**Kirsten Hokeness**, Director of the School of Health and Behavioral Sciences

Bryant University

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**Christine Szymanski**, Professor / Associate Department

Head

Department of Microbiology

Complex Carbohydrate Research Center

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