

S E A T T L E P A C I F I C U N I V E R S I T Y

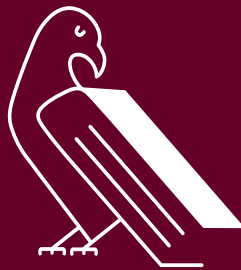
Senior Honors Celebration

UNIVERSITY SCHOLARS



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University Scholars

CHARACTER. CONVICTION. COMMUNITY.

Senior Honors Celebration Program

Welcome and Greeting

Christine Chaney, PhD
Director, Honors Program
Professor of English

Words of Congratulations

Laura Hartley
Provost; Executive in Charge

Erin Kimminau Servanthood Scholarship Award

*Awarded to the rising senior who best
exemplifies a life of servant-scholarship*

Faculty Words of Sending

Presentation of Honors Graduates

Wesley Lingren Award Presentation

Outstanding University Scholar for 2020

Commissioning and Sending

Emily Barker

From Marginal to Mainstream: The Queer History of Camp Aesthetics & Ethical Analysis of 'Camp' in High Fashion

First Faculty Mentor: Professor Erica Manzano, Theatre

Second Faculty Mentor: Professor Sarah Mosher, Theatre

Post-graduation plans: Emily will finish her last semester away at the Fashion Institute of Technology in New York this autumn and continue to live in New York City thereafter. She plans to return to work in live theatre spaces as soon as they reopen, and it is safe to do so. While there is some uncertainty and much flexibility to her future, she knows she will continue to explore clothing as a vessel of communication and storytelling, whether that occurs onstage or off.

Acknowledgments: I am so thankful to have had Sarah Mosher as a mentor, educator, and friend for my first two years at SPU. I do not believe that I would have the same confidence in my work if it wasn't for her guidance. When she left SPU, she left big shoes to fill, but Erica Manzano did it quickly and gracefully. Erica continues to challenge me, work with me, and inspire me to take risks. I thank them both for supporting me through this process, despite being in different states and time zones. I also want to thank my parents for everything they've ever done for me (which is far too much to include here). The last four years would not have been possible without the lessons I took with me from home. Specifically, I thank them for always pushing me to be more curious, to try new things, and to do what I think is right. The world feels more effervescent with these in mind.

Gabriel Blank

The Importance of Cinematic Literacy

Faculty Mentor: Dr. Todd Rendleman, Communication

Post-graduation plans: After graduation, Gabe plans to continue working as a video producer for a local Seattle gaming accessories company while continuing to pursue his long-term goals as a filmmaker.

Acknowledgments: Thank you to all my family, friends, and professors.

Emma Brenchley

The Role of Empathy in Design and the Responsibility of Designers to Create With Users in Mind

Faculty Mentor: Professor Karen Gutowsky-Zimmerman, Art/Visual Communication

Post-graduation plans: After graduation, Emma plans to move home and create as much art as she wants with the goal of finding a job in corporate design and branding down the road – and possibly living on her parents' sailboat.

Acknowledgments: Thank you to all my family, friends, and professors.

Amy E. Castle

Salicylic acid response to simulated herbivory in geographically distinct *T. heterophylla* and *H. discolor* populations Underlying Inquiry-Based Undergraduate Number Theory Texts

Faculty Mentor: Dr. Ryan Ferrer, Biology

Post-graduation plans: Following graduation, Amy plans to work in Seattle for a few years before looking at graduate programs for conservation ecology. She hopes to pursue a career in field ecology research or public lands management.

Acknowledgments: My deepest gratitude goes to all the wonderful professors I have had the opportunity to learn from these last four years. Thank you to Dr. Ferrer for his guidance throughout the design of this project and the work we were able to get started. Thank you to Dr. Tenlen for advising and supporting me, both in class and out. Thank you to Dr. Wall-Scheffler, whose commitment to scientific excellence and attention to detail inspire me to be the best scientist I can be. Thank you to Dr. Chaney for her constant help and encouragement from the Honors side of things. Finally, I wouldn't be who I am today without the love and support of my friends and family. Thank you for balancing me, encouraging me, and being with me throughout it all.

Carl S. Cederborg

Machine Learning in Stock Price Prediction Using Long Short-Term Memory Networks and Gradient Boosted Decision Trees

Faculty Mentor: Dr. Carlos Arias, Computer Science

Post-graduation plans: Carl will be finding regular software engineering work while pursuing the startup he has created with a few of his close friends here at school. They are creating a hedge fund with the express intent to utilize their funds to solve social issues and create institutions that shape the culture for the glory of God.

Acknowledgments: I would like to thank my family for their unending support through all of college. Thanks and gratitude also to Dr. Arias for being my Faculty Mentor and helping me deliver on this project. Finally, deepest gratitude to Sophie, without whom I would not have finished this race.

K'reisa J. Cox

Vocation or Victimization: An Analysis of Legal Models Addressing Prostitution

First Faculty Mentor: Dr. Charity Osborn, School of Business Government, and Economics

Second Faculty Mentor: Dr. Peg Achterman, Communication, Journalism, and Film

Post-graduation plans: K'reisa will be attending Notre Dame Law School to pursue a JD degree with an emphasis in criminal law studies. After spending the next three years in Indiana, she plans to get a clerkship position prior to returning to Seattle to begin practicing law. She plans on specifically focusing on special assault, domestic violence, and trafficking prosecution.

Acknowledgments: I would first like to give a tremendous amount of thanks to my family. I could not have had such an amazing experience at SPU without the unconditional love and support of my mom, dad, and sister. Thank you for always being my cheerleaders, most committed supporters, and favorite people! I would also like to thank my Faculty Mentors Dr. Osborn and Dr. Achterman for their confidence in me, which helped me push myself both in the honors project and through my law school applications. Thank you also to the SPU faculty and especially Dr. Chaney, for always encouraging me to bet on myself and providing me with so many opportunities to succeed. Lastly, I'd like to thank my amazing friends who are too numerous to list but are a wide support network that I will be forever grateful for.

Janessa Akemi Fong

The Effects of Korean Beauty Standards on Body Image, Self-Esteem, and Life Satisfaction

Faculty Mentor: Dr. Paul Y. Kim, Psychology

Post-graduation plans: Janessa plans on taking a gap year before going to graduate school in pursuit of a master's degree in counseling psychology.

Acknowledgments: I would like to acknowledge Dr. Kim for helping me throughout the IRB application process and guiding me in my project. He's helped me gain better perspective of my goals for my paper and has supported me in the direction of my paper. I would also like to thank Kristen Hoffman for helping me gather sources for my project! And lastly, I would like to thank my roommates for giving me so much love and support while I worked on this project, and during my time in the Honors Program!

Emma K. Friesen

Structural Delusion, Religious Anxiety, and A Melodramatic Priest: Exploring Macro and Micro Influences on the Martyrs of Córdoba

First Faculty Mentor: Dr. Alissa Walter, History

Second Faculty Mentor: Dr. Raphael Mondesir, Sociology

Post-graduation plans: A naive Emma used to think that she would have her future figured out by graduation, but, alas, that is not the case. After she graduates, she plans to move back to her home state of Colorado and spend time with her family as she searches for employment. Where and what that employment will be is uncertain, but now she is considering applying to positions within the fields of education and public policy. Otherwise, she will be spending time outdoors and invested in various creative hobbies. Eventually she plans to attend graduate school but is holding off on this for the time being. Her long-term pipedream is to teach in a university classroom, but she will hold that lightly for now as she takes a break from academia and pursue other opportunities and passions.

Acknowledgments: My deepest gratitude is owed to my professors that inspired and fostered in me a love for sociology and have helped me learn how to take my knowledge to create a more just world. I would specifically like to thank Dr. Kevin Neuhouser, Dr. Jennifer McKinney, and Dr. Raphael Mondesir for both consistently challenging me intellectually and as a human being. My primary Faculty Mentor, Dr. Alissa Walter, rekindled my love for history and offered robust constructive criticism of my project even amidst the pandemic and other life changes. Thank you, Dr. Walter, for encouraging me to take risks with this project and holding space for my stress and grief amidst it all; it has been an incomparable gift to be in your classroom and work with you on this project. I would also like to thank my parents for giving me freedom in my studies, even when you may not always fully understand their purpose, and for your encouragement to grow up to be myself. Thank you also to my two older sisters, Lauren and Andrea, for your unconditional support and for being incredible role models. Finally, I would like to thank some of my closest friends, specifically those in the honors program, including Alex Moore, Andrew Josselyn, and Taylor Petrucci. I could not have made it through these years without your friendship.

John P. Goodhew

A Practical Guide to the Impractical Life: Time and Purpose in the Ethics of 4th Century Monasticism

First Faculty Mentor: Dr. Owen Ewald, Classics

Second Faculty Mentor: Dr. Rick Steele, Theology

Post-graduation plans: John plans to return to his home state of Colorado to teach camp for the summer. In the fall, he plans to travel to New York City, where he will live and work at a homeless shelter in the South Bronx while discerning the monastic life. He dreams of long bicycle trips, playing in a reggae band, and meaning.

Acknowledgments: For Dr. Owen Ewald, especially, I will never tire of being grateful. You've poured great amounts into me and will have much to be responsible for whatever comes out. Big thanks to my friends who have kept me going along the way and made this whole process a joy and something I'm sad to leave -- you know who you are. And, of course, inexpressible thanks to all the professors who have particularly kindled love of learning in me -- Dr. Thorpe, for the many chestnuts, wholehearted mentorship, and showing me my major in such a depth of light; Dr. Moe, for the greatest fish soup of my life; and Dr. Steele, for sharing my love of monasticism and church history.

Most importantly, much love to my family:

Abby — for keeping it spicy and making sure I'm not alone in my craziness

Mary — for reminding me that mental and emotional stability are, in fact, possible

Mom — for epitomizing home and love

Joe — for showing me first most of the things I love most

Dad — for teaching me to have patience, Grasshopper, and to love of all things simple.

Lisa — for bringing me up here in the first place, and being a rock and joy throughout.

Victor A. Hanson

Assessing competition reaction rates in the nitration of 2-methylbiphenyl, biphenyl, and toluene to determine steric restriction in resonance-stabilized planarization of the carbocation intermediates

First Faculty Mentor: Dr. Kevin Bartlett, Chemistry

Second Faculty Mentor: Dr. Karisa Pierce, Chemistry

Post-graduation plans: Victor plans to work several years in biochemical research either in the Seattle area or California before applying to graduate programs in metalloprotein catalysis. He then plans to seek employment in research on optimizing catalysis in pharmaceutical and research applications.

Acknowledgments: I would first like to thank Dr. Kevin Bartlett and Dr. Karisa Pierce for their assistance, guidance, and insight both in overseeing my research and in teaching me the chemistry fundamentals that both engendered this project and gave me the skills to conduct it. I would also like to thank my faculty advisors, Dr. Benjamin McFarland and Dr. Christine Chaney for their guidance, patience, and careful foresight throughout my experience here at Seattle Pacific University. Additionally, I would like to thank Tristan Wine and Joshua Padilla for their research in the 2-methylbiphenyl project; this Honors Project would have been impossible without your assistance. I would also like to thank my friends and family for their support and love; your presence in my life is a blessing and I am so grateful. Finally, I would like to thank everyone else who has supported me in my experience here at Seattle Pacific University. Particularly all of my professors, Sue Martin and Kristi Holt for keeping our research team stocked with reagents and cataloging and disposing our research waste, the Gwinn dining hall staff for feeding me, and the 2020, 2021, and 2022 Honors Cohorts for being my peers, tutors, paper-editors, motivational speakers, entertainers, goofballs, and friends. Go Falcons!

Olivia C. Heale

The Whore and the Holy Woman: How Christianity and Islam Slandered Their Leading Ladies

Faculty Mentors: Dr. Alissa Walter, History

Dr. Rick Steele, Theology

Dr. Katherine Douglass, Theology

Dr. Sara Koenig, Theology

Dr. Diana Keuss, History

Post-graduation plans: Olivia will begin a “Livelihoods and Economic Inclusion” fellowship with Seattle-based non-profit World Concern in July. There she will work on grant proposals, program design, and monitoring and evaluation systems for poverty-alleviation programs in Africa, the Middle East, and Asia. She hopes to develop her start-up Souk and finish writing her musical, Mary, in her free time before heading to grad school in Europe in a couple of years to continue her studies.

Acknowledgments: I'd like to thank my family, friends, and teachers for guiding me through these last four years. Because of you I've grown so much, not just academically and professionally but also emotionally and spiritually. I love who I've become.

Ryan Hodge

The Health Care Costs of Overnutrition: A Disease-based and Instrumental Variables Approach

Faculty Mentor: Dr. Richard Dadzie, Economics

Post-graduation plans: Ryan will be attending University of California Riverside next fall in the economics doctorate program.

Acknowledgments: I acknowledge and will remember all my professors at SPU. I am especially thankful for Dr. Koenig, Mason, Hau, Dadzie, and Wai. Dr. Koenig and I had engaging discussions about theology outside of class, especially over some of the work done by Peter Rollins. Dr. Mason encouraged and advised me well to study economics at the undergraduate and graduate level early in my major. Dr. Hau talked with me at length about economics after class and at his office hours which inspired and guided me in my studies. Dr. Dadzie mentored me closely in my research and was instrumental in my preparation for graduate school. Finally, Dr. Wai pushed me, led me, and trained me in mathematics and the discipline required to succeed as a scholar, likely more than he realizes.

Menolly A. Hollabaugh

Institutional Indifference: Physical and Mental Health Challenges of Pregnant Inmates

First Faculty Mentor: Dr. David Diekema, Sociology

Second Faculty Mentor: Dr. Karen Snedker, Sociology

Post-graduation plans: Menolly will return home to Napa, California to work for a year, with plans to attend law school in the fall of 2022. Menolly looks forward to the academic and personal challenges law school will provide, whether it leads to a career in law or acts as a steppingstone into something yet to be discovered. On a personal level, her goal is to break down stigma surrounding mental illness, people who are homeless, and inmates, whether it be in academic settings or everyday conversation.

Acknowledgments: First and foremost, thank you to my parents who believe in me when I do not believe in myself – my dad who drove me to the junior college every day when I was 15 telling me I could do it, and my mom who reminds me to find the joy in the daily grind. Thank you, Anastasia, for being with me in texts if not in person. I could not have made it here without you. There has been a lot more to my college journey than just the last three years, so thank you Penni, Autumn and Mrs. Coon for helping me get here in your individual ways. Thank you Dr. Diekema and Dr. Snedker for teaching me so much, not just in class content, but how to be (even more) excited about learning and how to be educated on the things I care about. Thank you, Dr. Chaney, for being the well-spoken, kind, brilliant, and encouraging Honors Director you are. I never left a class or meeting with you feeling anything less than proud to be in Honors.

Hannah Hutchinson

Ecological and social impact of the northward distribution expansion of Africanized honeybees (*Apis mellifera scutellata*) throughout the Americas

First Faculty Mentor: Dr. Long, Biology

Second Faculty Mentor: Dr. Neuhausser, Sociology

Post-graduation plans: After graduation, Hannah will be focusing on work, developing an application to the Peace Corps, and eventually attending graduate school.

Andrew C. Josselyn

Consumer-based Aquatic Trash Collecting Drone: An Engineering Design Case Study

Faculty Mentor: Dr. James Walker, Engineering

Post-graduation plans: Andrew plans to move to Santa Cruz, California, where he will apply for jobs in biomedical engineering with an emphasis on designing more sustainable devices. He intends to spend his time with much-missed friends and family exploring nature, reading and going to the ocean. Andrew is most looking forward to getting married this summer and starting his new life with his significant other.

Acknowledgments: Thank the numerous people who have supported me throughout these past four years and helped work through my Honors project. I would like specifically thank Dr. Walker for the assistance and guidance you offered to my engineering senior design team and Honors project. I would also like to thank my engineering senior design team, FIRMIV. The dedication and expertise you brought to the team made this work possible. Finally, I owe a deep gratitude to my friends, family, and fiancé for the continuous support and care. Your commitment to me and my wellbeing, and eagerness to support me have propelled me further as a student and person.

Jennifer C. Kirchner

The Blue Castle: A Musical Adaptation

Faculty Mentor: Professor Candance Vance, Theatre

Post-graduation plans: Jennifer will continue to work as a theatre artist and technician wherever the work will take her. She plans to spend the summer working in California before coming back to Seattle and working as a playwright, set designer, and performer. Her aspirations will hopefully lead her to soon travel as much as possible while still creating theatre – perhaps in the UK or perhaps on cruise ships. As a lifelong student, Jennifer plans to pursue design and performance further at graduate school soon.

Acknowledgments: I am so unspeakably thankful for the incredible community that SPU has given me. Thank you so much to my theatre mentors: Candace Vance, who has seen me at my most vulnerable, Rick Lorig, who has been there for me since I scheduled an advising appointment the first week of freshman year, Jerry Collum, who could always make things work, Tucker Goodman, who has shown me profound grace, and all the adjuncts, teachers and directors who've completely changed my life. Being in the University Scholars program has made all the difference to my college experience, thank you so much to every incredible professor, I've loved (almost) every second of it! And to that end, thank you so much to my dear friends in University Scholars who have edited my essays, debated with me, stayed up with late night discussions, kept the inside jokes, gotten early morning coffee, and made me feel at home from the very beginning. You have made it all worth it. Thank you, Eliana Coe, who has not only made such wonderful music for this project but has kept me on track and given me the encouragement I never knew I needed. Thank you, Mom and Dad, for your support and for giving me an attitude to succeed. Thank you, Neill, Kate, and Beth for guiding me and grounding me (this may not be a Broadway Playbill dedication, but I'm working my way up to it!). Lastly, I thank the Lord for His strength and for all the ways he has broken me down just to build me back up.

Natasha Koval

Creative Occupations and the Precipitating Factors of Burnout

First Faculty Mentor: Dr. Geri Mason, Economics

Second Faculty Mentor: Dr. Baine Craft, Psychology

Post-graduation plans: Natasha plans on settling into Seattle and taking a break from academic pursuits for a few years. She wants to find an economic-related job while reacquainting herself with music, art, and other life-giving activities. In the future, she hopes to pursue a graduate program relating to urban economic development.

Acknowledgments: The deepest thanks to all the faculty members that helped me in this project: Dr. Mason, thank you for believing in me and being one of the best models of strength and vulnerability; Dr. Craft, thank you for your availability and investment in this project; Dr. Chaney, thank you for being a constant light throughout this process; Dr. Thorpe, thank you for your guidance and care. To my family, thanks for being pushing me out of my comfort zone. And finally, to my best friend, Emma, thank you for the unconditional love and encouragement.

Alex Moore

Representation and Resistance: Artistic Confrontations of Images of Racial and Ethnic Minorities in American Media

Faculty Mentor: Dr. Kimberly Segall, Social Justice and Cultural Studies

Post-graduation plans: Alex is looking forward to a summer of soaking in the Seattle sun with friends, scooping vegan ice cream, trying her hand at freelance journalism, and figuring out what else she likes to do when she has no homework. Long-term, Alex has many vocational dreams including, but not limited to, hosting her own late-night talk show. But her main aspirations are to be joyful, curious, adventurous, grateful, compassionate, humble, and committed to creating and caring for community wherever she ends up.

Acknowledgments: Thank you first and foremost to my parents for encouraging me to be a life-long learner and for supporting me throughout my time at university. I love you and I am forever grateful for all the ways you have invested in me, including allowing me to spread my wings and fly away to Seattle. Thank you to my professors for creating a safe space for me to learn in and outside of your classrooms. Through your lessons and your love, I have learned so much about the world, about God, and about myself. And thank you to my friends. Without you all I would never have made it. You have taught me the definition of community and shown me the value of living life together. You have taught me the power of both humor and vulnerability. You have taught me so much and given me so many memories to cherish. Especially you, Kiana. Now let's go change the world!

Sarah E. Owen

An Exploration of Math Trauma Through Ability Grouping and Teacher Language in Elementary Schools

First Faculty Mentor: Dr. Jerilynn Lepak, Math Department and School of Education

Second Faculty Mentor: Dr. John Hossler, Math Department

Post-graduation plans: Sarah was recently hired to teach fourth grade at a Seattle-area school. After a year of student teaching online, she plans to spend the summer preparing her classroom and enjoying time with friends and family. Sarah is marrying fellow U-Scholar, Tristan, in June and they are excited to make a home for themselves in Seattle while Tristan completes his schooling.

Acknowledgments: I would like to thank my Faculty Mentors Dr. Lepak and Dr. Hossler for their time, encouragement, and wonderful, challenging ideas. Another huge thank you to my parents for their continual support and for their role in first inspiring me to be a teacher. These four incredible educators have each played a role in inspiring me to become a teacher who sees their students as people first, valuing them each for their unique giftings. Thank you as well to the whole Honors Community, in which I have formed relationships which are among the most influential and joyous in my life.

Joshua C. Padilla

Modeling biliary polycyclic aromatic hydrocarbon metabolites in fish using high performance liquid chromatography with fluorescence detection, principal component analysis, and partial least squares analysis

Faculty Mentor: Dr. Karisa Pierce, Chemistry

Post-graduation plans: Josh plans to pursue a doctorate in analytical chemistry, focusing on multidimensional separations and chemometrics.

Acknowledgments: I would first like to thank Dr. Karisa Pierce and Dr. Elizabeth Frame for their guidance and their help in envisioning a viable project when things seemed hopeless. Along with Dr. Pierce, I also thank Dr. Bartlett and Dr. Schofield for fostering my love of chemistry throughout my undergraduate career. Thank you to my family for their unending love and support. Finally, thank you to all the friends I've made during my time at SPU -- especially the wonderful people I've grown closer to in this difficult year. I love you all.

Hannah Roosendaal

The Martin Square Squeak

Faculty Mentor: Dr. Lane Seely, Physics

Post-graduation plans: For now, Hannah will work to pay back student loans and enjoy time at home with her niece and niece's sibling due this summer.

Acknowledgments: My family and Lauren Isaak for always supporting me, Lane Seeley for always believing in me, and Taylor Petrucci for the sweatshirt.

Suzanne Stafford

***Mycoplasma genitalium* reduces antibody-antigen association kinetics**

Faculty Mentor: Dr. Ben McFarland, Chemistry

Post-graduation plans: Suzanne will be going to medical school through the United States Air Force after first pursuing EMT certification this summer.

Acknowledgments: I would like to thank my parents, Ron and Sharon, for listening to me talk about my project, whether or not they understood my jargon.

Chea-Mun Tan

The 1Malaysia Development Berhad (MDB) Scandal: Exploring Malaysia's 2018 General Elections and the case for Sovereign Wealth Funds

First Faculty Mentor: Dr. Hau Nguyen, Economics

Second Faculty Mentor: Dr. Doug Downing, Economics

Post-graduation plans: Chea-Mun plans to work full-time with the government in hopes of pursuing her interest in public service. Chea-Mun's experience thus far has contributed to her keen interest in policymaking, foreign policy, and diplomacy. After gaining work experience in the public sector, Chea-Mun has plans to return to graduate school.

Acknowledgments: First and foremost, I would like to thank my amazing family for their ceaseless support, guidance, and love. Dad, Mom, Lene, and Ler— thank you for always grounding me and cheering me on. In addition, my college experience has been greatly shaped by the professors that have challenged me to consider different perspectives and stay curious. I have enjoyed so much of what the Economics, Political Science, and Honors departments have offered in the last few years, and am incredibly thankful to every professor who has endowed me with the skills, knowledge, and resources to excel. Thank you to Dr. Hau and Dr. Downing for serving as my primary Faculty Mentors for this project, offering the best guidance and critique. A special thank you to Dr. Dadzie for sparking my interest in Economics and pushing me to do my best work. Lastly, thank you to my beloved friends who have walked with me in the crazy, exciting, and uncertain times that college has thrown our way. To Amanda, Lizzy, and my SPU/CG pals, I will forever cherish the times we've shared, and am earnestly looking forward to our future adventures.

Eryn Tan

The Realistic Desirability of Perfection in Thomas More's Utopia and John Milton's Paradise Lost

Faculty Mentor: Dr. Tom Amorose, English

Post-graduation plans: Eryn intends to work for a year or two in Penang, Malaysia before pursuing a master's degree in publishing. She is excited to experience the working world and hopes to get a job in editing.

Acknowledgments: Thank you to my father for giving me financial and emotional support throughout my time at SPU. I hope I can repay you for everything you've blessed me with. Thank you also to my mother and my siblings for encouraging me in all my endeavors. Finally, thank you to Dr. Amorose for somehow being both the comedic relief and the guiding hand in my studies.

Elizabeth M. Thompson

Ba'ath Party Archives and the Khmer Rouge Records: The Importance of Cultural Accessibility

First Faculty Mentor: Dr. Alissa Walter, History

Second Faculty Mentor: Dr. Alberto Ferreiro. History

Post-graduation plans: Elizabeth will be taking a gap year to gain archival experience, work, and hopefully safely travel. Then in the fall of 2022 she will be attending the University of Washington to get her master's degree in library and information science.

Acknowledgments: First, I would like to thank my peers and every professor I had during my four years. Each of you shaped my education and worldview for the better. I would like to thank Dr. Walter for the inspiration and push to tackle this project. Thank you Dr. Ferreiro for the discussions and advice that shaped both this project and my love for history. Dr. Ewald, I cannot express how thankful I am for your support these past four years and your willingness to help. Finally, thank you to my family, friends, and coaches who have been sounding boards and stress relievers these past four years.

Tristan P. Wine

Developing Synthetic Pathways to 1, 2 and 3-methylbiphenyl and Their Nitrated Isomers to Determine the Regiochemistry of the Nitro Group and Relative Reaction Rates Compared to Toluene, Biphenyl, and Each Other

Faculty Mentor: Dr. Kevin Bartlett, Chemistry

Post-graduation plans: After graduation, Tristan will be getting married to fellow Honors student Sarah Owen. In the fall, Tristan will start his first quarter at the University of Washington as a chemistry doctorate student. After getting his degree in organic synthesis, he wants to teach organic chemistry at a small liberal arts university like SPU. His other career interest is in medicinal chemistry, working on synthetic pathways for drugs in the pharmaceutical industry.

Acknowledgments: First, a big thank you my loving parents, sister Tahlia, and fiancé Sarah, who have given me so much support in my time at SPU. I also thank my parents and my opa for helping support me financially as well. My time at SPU has been marked by professors who have poured into me academically, personally, and spiritually. Thank you, Dr. Bartlett, for always being willing to talk with me about organic chemistry, hearthstone, the Wheel of Time, or teaching (and for often supplying Taco Bell to fuel the conversation). I aspire to have your heart for students and passion for teaching well. Thank you, Dr. McFarland, for helping me understand scientific writing and the importance of creativity in science. Thank you, Dr. Gray, for helping me realize my love for teaching. I also thank all my Honors professors, who have always kept me from forgetting my humanity in the sea of science coursework. Finally, I thank all the stellar faculty in the biology and chemistry department who have made learning exciting and fun

Commissioning Prayer

God, you have called us into being through love.
You have joined us to one another in love.
How good and pleasant it is when
your people dwell together in unity.

Today we ask that you grant each of these
University Scholars the strength to carry
your blessing from this place to their next.
May they be at home in any land,
for all their earth is yours.
May the lamp of your word guide
their feet on all the paths of life.

Grant each of these students a deep fullness
of being and spirit as they go from here.
Grant them your fullness in glory and joy,
now bearing new shape,
Lord — transformed in your likeness.

Lord, we pray you make clear to
them each road on their journey.
Make safe to them each step.
Should they stumble,
may you hold them close.
If they fall, lift them up.
When they are hard-pressed with evil, deliver them,
we pray, and bring them at last to your glory.
Bless the work of their hands.

Finally, shine your light upon these your people today,
precious Lord, that we can see the glory of your
eternal life in all our goings and comings.

In the name of the Father, Son, and Holy Spirit.
Amen.

