



MERRIMACK COLLEGE



I want to welcome you to explore this year's

MERRIMACK COLLEGE RESEARCH & CREATIVE ACHIEVEMENT CONFERENCE

The Research and Creative Achievement conference is a celebration of student research and creative endeavors. Drawing upon our Augustinian roots of seeking truth through inquiry and dialogue, this annual conference provides an opportunity for both graduate and undergraduate students to showcase their efforts in expanding knowledge within and across academic disciplines.

Successful academic research requires curiosity, creativity and a willingness to go where the evidence leads. These projects exemplify such efforts. These projects are the fruits of sustained and meaningful collaboration with faculty and fellow students and are often the capstone of a baccalaureate or master's degree program. Many of these projects are informed by and through community partnerships that serve to enrich the scholarship, research and creative activity of our students and faculty. These partnerships are critical to strengthening our institutional mission of fostering civic responsibility, addressing societal issues and contributing to the public good.

We are excited to celebrate our student researchers, faculty collaborators and mentors who have shown resilience in a complicated and challenging time, as it serves as a testament to perseverance, resourcefulness and creativity. Their efforts highlight the importance and value of meaningful inquiry. On behalf of Merrimack College, I applaud the excellent student and faculty scholarship represented here and take great pride in their accomplishments.

John "Sean" Condon, Ph.D.
 Provost and Senior Vice President for Academic Affairs



ACKNOWLEDGEMENTS

The completion of this undertaking could not have been possible without the assistance and participation from so many whose names may not all be enumerated. Their contributions are sincerely appreciated and gratefully acknowledged. We would especially like to express deep appreciation to the faculty and community partners who supported and mentored student research creative achievement during this academic year.

We would also like to acknowledged the Office of the Provost, the Office of Development and Alumni Relations, the Office of Communications, the Center for Excellence in Teaching and Learning, IT, and the RCAC committee for going above and beyond in their support for the 2023 Research & Creative Achievement Conference.



SCHEDULE OF EVENTS

TOLLE LEGE | HELD IN CASCIA HALL

2 P.M. 20th Annual Tolle Lege Reception

An annual celebration of faculty research, presented by McQuade Library

STUDENT RESEARCH & CREATIVE WORK | HELD IN THE MPR

3:30-6 P.M.

Undergraduate and Graduate Student Presentations

ENGINEERING SENIOR DESIGN PRESENTATIONS | HELD AT 530 TURNPIKE ST.

4-6:15 P.M.

Engineering capstone projects allow students to apply their engineering education to solve open-ended, complex engineering problems. We are showcasing the capstone projects from the Civil, Computer, Electrical, and Mechanical Engineering programs.

VISUAL AND PERFORMING ARTS STUDENT EXHIBITION | HELD IN THE ROGERS CENTER FOR THE PERFORMING ARTS AND THE MCCOY GALLERY

3:30-6 P.M.

Celebrates the creativity and hard work of our VPA students majoring in Art and Art History, Music, Theatre and Graphic Design. Participating students are: Nicholas Andriotakis, Danielle Castino, Isabella Collins, Jeffrey Converse, Sahana Gorur, Mary Landers, Charles McGarigle, Lily Seremet, Michael Gravante, Joshua Heath, Em Wood, Jenna Gordon, Allison Hamel, Nicole Martin, Robert Fernandes, Joshua Mendonca, Elise Persicketti, Leanne Santerre, and Kyle Sweeney.





20TH ANNUAL TOLLE LEGE RECEPTION

In 2003 McQuade Library established the Tolle Lege Collection - a special collection of faculty, staff, student, and alumni published work - to recognize and celebrate the academic scholarship of the Merrimack College community. Each year, authors published during the previous academic year are honored with a reception, and selected contributors speak about their work.

Representing the College's five schools, this year's speakers include the following faculty members:

SCHOOL OF SCIENCE AND ENGINEERING

Development of Research to Inform the Design and Improvement of Mathematics Education for Teachers

Julia St. Goar, Ph.D. Associate Professor, Mathematics

WINSTON SCHOOL OF EDUCATION AND SOCIAL POLICY

Lessons from a Study of Cognitive Aging Ruth McKenzie, Ph.D. Assistant Professor, Human Development and Human Services

GIRARD SCHOOL OF BUSINESS

An Examination of the Relationship Between Sport Fandom & Physical Health

Aaron Mansfield, Ph.D. Assistant Professor, Sport Management

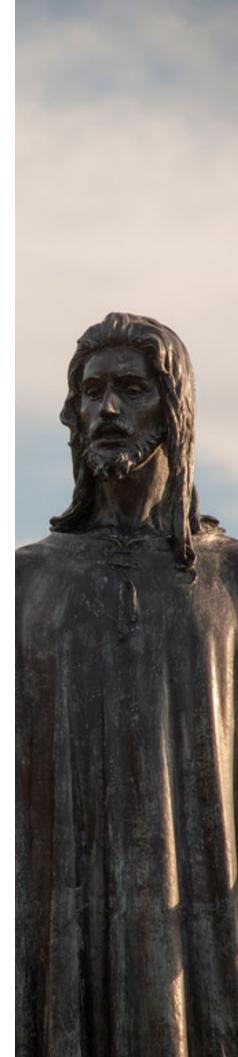
SCHOOL OF LIBERAL ARTS

Mechanisms for Change in a School-Based Intervention Program

Gwyne White, Ph.D. Assistant Professor, Psychology

SCHOOL OF HEALTH SCIENCES

Exercise for the Prevention and Treatment of Chronic Disease Nicholas SantaBarbara, Ph.D. Graduate Director and Assistant Clinical Professor, Exercise and Rehabilitation Sciences



UNDERGRADUATE AND GRADUATE STUDENT RESEARCH AND CREATIVE WORK: THE SCHOOL OF SCIENCE AND ENGINEERING

- 1. Cooperative Finance Based Scheduling Joseph Chalhoub, Graduate
- 2. The Effect of MAP Kinase Inhibitors in Combination with Clorgyline to Treat Candidiasis Infection
 Sarah Montgomery, Jared Smith,
 Graduate
- 3. Gut Bacteria of Entomopathogenic Nematode as a Potential Antifungal Rebecca Kendall, Taelyr Czech, Katelyn Leal, Vanni Morello, Graduate
- 4. Natural Medicine The Inhibitory Impacts of Curcumin, Ursolic acid, and Crocetin on Breast Cancer Cells Makayla Richard, Emmalee Foley, Leonardo Venturotti, Graduate
- 5. Abundance of Microplastics in Tap vs. Filtered Water Jenna Dubrule, Hunter Laubstein, Quinn Kellogg, Layan Abdel Karim, Deana Hutcheson, Graduate
- 6. Investigating The Effect of Curcumin and Ursolic Acid on Mitochondrial Bioenergetic Function Carlos Reyes, Amanda Clarke, Graduate
- 7. Assessing the Effect of Certain Plant Metabolites on the Growth and Proliferation of Human Breast Cancer Cells

Lauren Nixdorf, Bridget Shanahan, Graduate

8. Using the Antioxidants Ascorbic Acid, N-Acetyl-L-Cysteine, and Melatonin to Improve Embryo Health in Mice

Maureen Rosenthal, Graduate

9. Molecular Detection of Antibiotic Resistant Bacteria in the Merrimack River

Danielle T. Pintone, Graduate

10. The Inhibitory Impacts of Curcumin, Ursolic acid, and Crocetin on Breast Cancer Cells

Makayla Richard, Leonardo Venturotti, Emmalee Foley, Graduate



11. Analyzing Mimicry Through the Lens of Evolution: A Scientific Literature Review

Nick Tenczar, Undergraduate

- **12. Middlesex Sheriff's Office** *Zachary Fiore, Undergraduate*
- **13. Synthesis of Polyactive Nylon** *Sydney Babb, Itzel Guzman, Thavary Hay, Undergraduate*
- 14. Behavioral Effects of Exposure to Silver Nanoparticles at Environmentally Relevant

Concentrations in the Siamese Fighting Fish, Betta splendens and the Potential Role of Aquatic Plants in Bioremediation

Sedona Gillard, Undergraduate

- **15. Final Design Presentation** *Jake Howlett, Justin Applebee, Jake Festa, Killian Colemna, Andrew Malek, Undergraduate*
- 16. Blue Line Extension West: Dartmouth Street Station Aiden Coleman, Sean Janerico, Ally Jones, Kelly Redford, Logan Salvi, Undergraduate
- 17. CEN4901 Senior Engineering Capstone Presentation John Liddy, Allan Barata, Maddie Vaine, Daniel Fox, Olivia Orlowska, Undergraduate
- 18. CEN4901 Senior Engineering Capstone Presentation
 Ashley Ryan, Undergraduate
- 19. Mechanical Engineering Senior Design: VEX V5 Robotics Spin Up Competition Zachary Pond, Brendan Fitzgerald, Kevin Costa, Madysen Wallace, Braden Likhite-Koehler, Undergraduate
- 20. Physiological Responses of Lycopersicum esculentum to Phytohormone Gibberellin Heather Marszalkowski, Lorena Corbelli, Undergraduate

- 21. Isolation and Characterization of Mycobacteriophage Milcery Madison Medeiros, Undergraduate
- 22. Effects of Curcumin, Ursolic Acid, and Crocetin on MDA-MB-231 and MCF-7 Breast Adenocarcinoma Cells Makayla Richard, Emmalee Foley, Leonardo Venturotti, Undergraduate
- 23. Intro to Engineering Wind Turbine Project

Skye Tucker, Nick Beacher, Trey Tankersley, Undergraduate

24. Robobros: VEX Robotics Senior Capstone

Zachary Camino, Rachel Chanley, Ryan Kless, Yash Nandwana, Francisco Quintana, Undergraduate

- **25. The Winning Wind Turbine** *Lydia Melaschenko, Yasmine Qureshi, Mari Leonard, Undergraduate*
- 26. Design Project Capstone Presentation: VEX Robotics Erik Wunderlich, Modesty Butler, Collin McCabe, Mason Tidd, Nicholas Bordenca, Undergraduate
- 27. Factors Contributing to Medication Adherence in Patients with Alzheimer's Disease and Related Dementias Laney Tillman, Undergraduate
- 28. Abundance of Microplastics in River Water

Jenna Dubrule, Leo Venturotti, Christian Mann, and Victor Privetera, Undergraduate

29. Spectroscopy of Comet C/ 2022 E3 To Determine Which Compounds Are Present

Leonardo Venturotti and Duston Christopher, Undergraduate

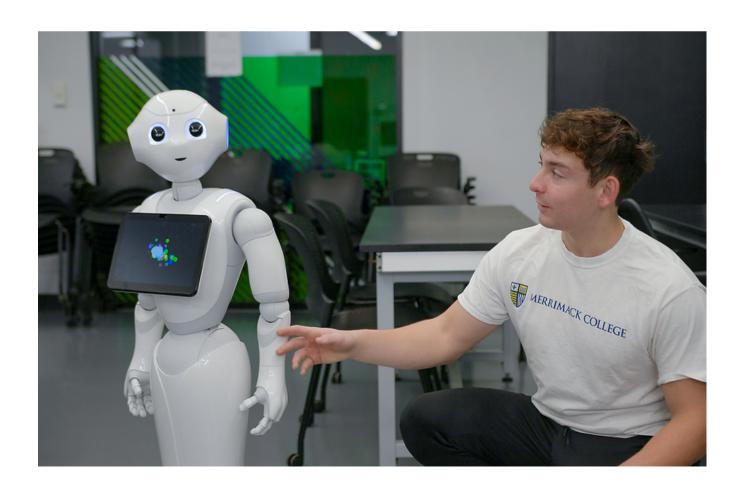
30. BIO4081 Sophia Obering, Undergraduate

31. Design, Construction, Testing, and Reconstruction of a VEX-U Competition Robot With a Holonomic Drivetrain Parker Todd, Austin Kalinowski, Andrew Gardner, Brandon L'Heureux, Sean Maloney, Undergraduate

32. Presentation on My Experience at Lawrence Court Service Center Daniel Tolan, Undergraduate

33. Vex Robot *Molly Murnane, Allyn French, Justin Bettencourt, Drew Hailey, James LeFave, Undergraduate*

34. Antioxidant and Antiproliferative Effects of Curcumin, Ursolic Acid, and Crocheting on MDA-MB-231 and MCF-7 Breast Adenocarcinoma Cells Makayla Richard, Emmalee Foley, Leonardo Venturotti, Dr. Josephine Modica-Napolitano, Dr Azam Noori (Faculty Mentor), Undergraduate



UNDERGRADUATE AND GRADUATE STUDENT RESEARCH AND CREATIVE WORK: THE GIRARD SCHOOL OF BUSINESS

35. Merrimack Alternative Investment Fund

Merrimack Alternative Investment Fund, Ryan Zollo, Paul Papageorgiou, Graduate

36. Under Armour: A Strategic Analysis *Kaylee Thomas, Undergraduate*

37. Early College Policy Fellow Presentation

Arline Ortiz, Undergraduate

38. Critical Business Analysis of Five Below Inc.

Emma Rotondo, Undergraduate

39. Bitcoin: An Examination of its Classification as a Commodity and the Prospects for Regulatory Frameworks in Light of its Unique Characteristics Cameron Strong, Undergraduate

40. X-Culture Business Plan: Finnish Schools International

Charlotte Cute, Undergraduate

41. Student Motivation & Learning Strategies in Merrimack College's Undergraduate Program lan Woods, Undergraduate

42. Understanding Corporate Social Responsibility at Capri lan Woods, Undergraduate

43. Merrimack Investment Fund Performance Merrimack Investment Fund,

Undergraduate

44. Should You Study Abroad with Semester at Sea? Kiley Martel, Undergraduate

45. Dealing with Attrition: Predictive Modeling and Visualization
John Centofanti, Undergraduate

46. A Strategic Analysis of Home Depot *Samantha Grenier, Undergraduate*

47. Predictive Analysis: Employee Attrition

John Centofanti, Undergraduate



UNDERGRADUATE AND GRADUATE STUDENT RESEARCH AND CREATIVE WORK: THE SCHOOL OF LIBERAL ARTS

- 48. The Glue of Society: Why Literature Studies are Essential Sean Brenner, Undergraduate
- 49. Transgender People in the Incarceration System and the Impacts It Has on Them Mentally and Physically Victoria Duff, Undergraduate
- 50. Feminism and Femininity: The Conflicting Roles of Romance Publishers, Authors, and Novels as Representative of the Feminist Movement Meghan Zeytoonian, Undergraduate
- 51. Social Media Influencing Plastic Surgery Kiera Scott, Undergraduate
- 52. Happily Ever After: The Influence of Heteronormative Marriage on Queer Love
 Madison King, Undergraduate
- 53. Proposal for Implicit Bias Training for Clinicians

 Madelyn Mallaghan, Undergraduate
- 54. The Bitter Pill: Why No Medical Male Birth Control?
 Grace Wilson, Undergraduate
- 55. Internship at the Virtual Court Service Center Kaitlyn Collins, Undergraduate
- 56. Transgender People in the Incarceration System and the Impacts It Has on Them Mentally and Physically Victoria Duff, Undergraduate
- 57. Annual Student Exhibition
 Nicholas Andriotakis, Danielle Castino,
 Isabella Collins, Jeffrey Converse,
 Sahana Gorur, Mary Landers, Charles
 McGarigle, Lily Seremet, Michael
 Gravante, Joshua Heath, Em Wood,
 Jenna Gordon, Allison Hamel, Nicole
 Martin, Angela Mayes, Robert Fernandes,
 Joshua Mendonca, Elise Persicketti,
 Leanne Santerre, Kyle Sweeney,
 Undergraduate

- **58. Tips: To Pool or Not To Pool?** *Noah Surman, Undergraduate*
- **59. Dogs Make It Better** *Alexandra L. Glinsky, Undergraduate*
- 60. Gazing Outside the Box: Does Where We Look Affect our Creative Problem Solving? Caitlin Wahl, Undergraduate
- 61. Multi Tasking: Good or Bad? Hailey Kiley, Alison Hannon, Briana Normandin, Abigail Kraunelis, Undergraduate
- **62.** Multiply Your Ability to Multitask JaZelle Lampkin, Stephanie Messina, Abigail White, Undergraduate
- **63. Make Me Think About It**Gabriella Lombardo, Meghan Doyle,
 Christopher Fruland, Kaitlyn Collins,
 Undergraduate
- 64. Race of the Senses: Audio vs Visual Cues Christopher Sokol, Stephen Landers, Angelina Zampine, Izzy Garcia, Undergraduate
- 65. Have You Seen Me?: Effects of Deeper Processing on Memory Sophia Lanzilotti, Kelly Barclay, Emily Burke, Anna McCarthy, Undergraduate
- 66. Stigma in Mental Health and Likeliness to Seek Help: Gender Differences Sarah Simpson, Undergraduate
- 67. Does Multitasking Multiply Reaction Time? Olivia Snow, Hannah Fitzpatrick, Sarah Simpson, Alethea Keamy, Undergraduate
- 68. Levels of Memory Processing and Memory Recall Peter McAllister, Brianna Malerba, Elizabeth Sypek, Undergraduate

69. Dive Deeper: Does Deep Processing Help With Memory?

Alissa Gonzales, Austin Kenison, Raegan Porfido, Katie DiFruscia, Undergraduate

70. Stop. Did You See That?Alexandra Glinsky, Nicole Hennessey, Maxwell Pojednic, Serena Frisella, Undergraduate

71. Fins Versus Fuzz Hannah Iskra, Meghan Knowles, Ryann Young, Undergraduate

72. The Memory Cocktail: Letter Distinction and Adult Beverages Meghan Stratton, Isabella LeBrun, Angela Mayes, Reise Speroni, Undergraduate

73. The Gender Pain Gap *Gaby Sarraf, Undergraduate*

74. Do You Remember?Sarah Broderick, Sydney Blades,
Christopher O'Neil, Ali Carr,
Undergraduate

75. Does Eye Movement Behavior Change When Doing a Creative Task Compared to a Non Creative Task? Caitlin Wahl, Undergraduate



UNDERGRADUATE AND GRADUATE STUDENT RESEARCH AND CREATIVE WORK: THE SCHOOL OF NURSING AND HEALTH SCIENCES

- 76. Diagnosis and Treatment of Interphalangeal Joint Dislocation of the First Toe in a Collegiate Women's Soccer Player: a Case Study Noel Riley, Graduate
- 77. Latarjet Procedure for Chronic Left Shoulder Dislocation and Instability in a Collegiate Football Player: A Case Study Elizabeth Kashian, Graduate
- 78. Performance, Return to Competition & Re-Injury After Tommy John Surgery in MLB Pitchers: A Case Study Madeline Grady, Graduate
- 79. NeuroCatch: The Science Behind Your Brain's Cognitive Function and How It Can Be Used in Concussion Return To Play: A Case Study Erica Crowley, Graduate
- 80. STAT3 Modulates CD4 + T Mitochondrial Dynamics and Function STAT3 Regulates T Cell Function Emelia Zukowski, Marco Sannella, Graduate
- 81. Utilization of Lower Extremity of Force Production Testing in Post ACL Surgical Repair in Female Collegiate Athletes: A Case Study Matthew Quinlan, Graduate
- 82. Comparing and Contrasting Surgical Techniques for an Achilles Tendon Rupture: A Case Study Megan Rumenapp, Graduate
- 83. Compare and Contrast: Acute Shoulder Dislocation Versus Chronic Shoulder Instability Return to Play. A Case Study Ashley Turner, Graduate
- 84. The Use of the TB12 Method for a Patient Who Suffers From Cerebral Palsy: A Case Study William Celorier, Graduate

- 85. Understanding Eating Disorders in Collegiate Athletics: Relationships Between Physical and Mental Health of Athletes
- Rachel St.Pierre, Graduate
- 86. Evaluation, Management, Outcomes, and Return to Play Criteria for Overhead Athletes with Superior Labral Anterior-Posterior Pathologies Charles MacDowell, Graduate
- 87. Voodoo Flossing: Therapeutic Rehabilitation Techniques for Musculoskeletal Injuries Kelly Pittendreigh, Graduate
- 88. InterX: Neurostimulation Technology for Pain Reduction: A Case Study Madison Withers, Graduate
- 89. Return to Play Following a Spontaneous Pneumothorax: A Case Study Sydney Leeds, Graduate
- 90. Diagnosis and Treatment of Osteochondral Defects of the Knee: A Case Study
 Meredith Morin, Graduate
- 91. A Faith-Based Healthcare Approach: Parish Nurse Program Taylor Carreiro, Graduate
- 92. The Diagnosis, Treatment, and Progression of MTSS

 Jordan Manuel, Graduate
- 93. The Mental Health Effects of Acculturation in African Immigrants Geofred Osoro, Graduate
- 94. Is Neural Tension Greater in the Dominant or Non-Dominant Arm? Evan Jones, Undergraduate

95. Hip, Knee, and Ankle Motion Ascending Versus Descending Stairs Julia Taylor, Undergraduate

96. The Effect of Anxiety Among Children with Developmental Disorders Receiving Occupational Therapy Brooke Toothaker, Undergraduate

97. Physiological Effects of Chronic Aerobic Exercise in Hot Temperatures on VO2 Max Madison Cote, Undergraduate 98. The Effect of Music Tempo on Runner's Speed
Cecelia Barron, Undergraduate

99. What the Health Olivia Griffin, Undergraduate

100. The Importance of Educating Society on Social Determinants Within our Healthcare System Cristina Cedrone, Undergraduate



UNDERGRADUATE AND GRADUATE STUDENT RESEARCH AND CREATIVE WORK: WINSTON SCHOOL OF EDUCATION AND SOCIAL POLICY

101. How Sleep Education Can Impact Sleep and Anxiety Levels in Adolescents

Laura H. Johnson, Graduate

- 102. Program Analysis of the Restorative Justice Practices at an Urban Alternative Middle School Kristen O'Connor, Graduate
- 103. The Effects of Mindfulness Practices on Anxiety and Depression Levels in 6th Grade Students Kristen Foley, Graduate
- 104. Increasing Awareness and Understanding of the Shop Selection Process at a Technical High School Erin Bruce, Graduate
- 105. Breathing Exercise Intervention on Learning Lab Students' Test Anxiety and Academic Performance Tiffany Costello, Graduate
- 106. The Effects of Mindfulness Practices on Anxiety and Depression Levels of 7th Grade Students Ally Harradon, Graduate
- 107. Conflict Styles/Management Lesson For Seventh Grade Students Haley Flaherty-Dawson, Graduate
- 108. School Counselors and School Adjustment Counselors in Massachusetts running groups Reem Chniouli, Graduate
- 109. Does Participation in a Social Emotional Learning Group Impact Self-Esteem Levels of 6th Grade Students? Martha Vosnak, Graduate
- 110. Efficacy of the DESE Scope and Sequence for Eighth Grade Post-Secondary Planning
 Spencer Benoit, Graduate
- 111. Mindset Matters: Freshmen Males' Mindset and Academic Performance Julia Marshall, Graduate

- 112. Catching Our Kids Before They Fall: Experiences in Implementation of a Universal Mental Health Screening Karthika Streb, Graduate
- 113. Impact of Early College Participation on College Outcomes for Urban Youth Mackenzie Reardon, Graduate
- 114. Motivation to Learn in an Urban High School Haley Normandin. Graduate
- 115. College and Career Awareness for English Language Learner Students Laura Reid, Graduate
- 116. School Based Social Work Support and 6th, 7th, and 8th Grade Student Success Kristina Talambekos. Graduate
- 117. This is A Study Examining the Connection Between Attendance and Academic Outcomes for Middle School Students

 Kylie McGilvray, Graduate
- 118. Utilizing a Career Awareness Intervention to Foster Career Decision Skills in Ninth Grade Students at Billerica Memorial High School Jessica Almeida, Graduate
- 119. Increasing FAFSA Completion Rates in an Urban High School Deborah Kosnar, Graduate
- 120. Effectiveness & Impact of Attendance Policy Changes in Student Outcomes

 Daniela Greene, Graduate
- 121. A Place for Women in Higher Education: A Literature Review Emma Cannistraro, Graduate
- 122. Campus Visits and College Awareness + Self-Efficacy Justin Scott, Graduate

123. Cognitive Restructuring on Student's Self-Efficacy & Academic Motivation Levels Molly Hayes, Graduate

124. Outcomes of a Mental Health Literacy Program in an all Male Private School Jacob Beaudoin, Graduate

125. Saint Michael School NEASC Survey Alexis Marie Viering, Graduate

126. A Student's Perspective on Drop Out of Urban High School & Re-entry into Education Carina Lawrence, Graduate

127. The Importance of Academic and Social Language When Working With EL Students Katie O'Brien, Graduate

128. Self-Reports from 6th Graders at an Urban Middle School Tina McNeil, Graduate

129. G.I.R.L.S Program Effectiveness on Adolescent Self-Esteem *Erin Claflin, Graduate*

130. Anxiety, Depression, and So Much More: The Effects of the Imposter Phenomenon on Minoritized College Students Nancy Pocoli, Graduate

131. School Avoidance Behaviors in Emerging Bilingual Students Kelsey Leonard, Graduate

132. The Effectiveness and Ethics of Employing Restorative Justice Practices in Response to Sexual Assault on College Campuses

Anastasia Kranz, Graduate

133. The Psychological, Social, and Physiological Impacts on Fatherless Sons: A Systematic Literature Review Jordan Raffalli, Graduate

134. Investigative Support Internship with Defense Criminal Investigative Service (DCIS)
Yasmine Yilgor, Graduate

135. Understanding the Experiences of Student Leaders of Color: How Student Affairs Professionals Can Support Their Success

Valerie Mamish, Graduate

136. The Impact of High School Mentorship- Will High School Students Who Participate in a Mentoring Program Show Improvement in Academic Performance and Measured Levels of Confidence? Kendra Gordon, Graduate

137. Immigrant Students in Higher Education and College Access Jennifer Rose, Graduate

138. The Benefits of Emotional Intelligence Training Brittany Dempsey. Graduate

139. Evaluating Academic Success/stress/performance in college student athletes Brian Dervin, Graduate

140. Can a Nature-Based Urban Preschool meet the competencies laid out by State Standards? Jessica Noke, Graduate

141. Why Is Male Retention and Enrollment Declining in Higher Education Institutions?

Ivy Irwin, Graduate

142. Addressing Compassion Fatigue in Social Workers Who Serve Children and Families
Kiara Selena Torres, Graduate

143. How Can Educators Best Support Latinx LGBTQ+ Youth With Their Mental Health?: A Systematic Literature Review Saira Saez, Graduate

144. Trauma-Informed Sex Education as an Intervention for Youth Affected by Adverse Childhood Experiences (ACES)

Sara Elkerm, Graduate

145. Faculty Journeys in the Higher Education System in the United States Diana Coello Baguero, Graduate

- 146. Mental Health of International and Immigrant Students in the U.S. Maha Nassar, Graduate
- **147. Annotated Biography** *Deanna Conte, Graduate*
- 148. Effective Prevention Practices for Eating Disorders in Female Athletes Taylor Darrell, Graduate
- 149. Improving CSEC Interventions: Centering the Voices of Survivor's and Service Providers Haleigh King, Graduate
- 150. Challenges for Children in Accessing Mental Health Intervention Via the Emergency Department A Systematic Literature Review Blanca Valencia, Graduate
- 151. Afghan Refugees in the United States
 Vanessa Kaddaras, Graduate
- 152. Misunderstandings and Misconceptions of English Learners in General Education

 Meredith Lane, Graduate
- 153. Narratives as a Teaching Tool for Emergent Bilinguals
 Kim Silverman, Graduate
- 154. The HBCU Student Experience and Educational Outcomes
 Mysia Perry, Graduate
- 155. CTE: Education of the Future Kelvin Roberts, Graduate
- 156. The Importance of Student Activism and How Colleges Can Best Support Activism Efforts Myracle Sadie Fielding, Graduate
- 157. The Exigency of Interagency Collaboration Within the United States and Between International Agencies on the Safekeeping of Our Borders. Magdalini Poulimeni, Graduate
- 158. Restorative Justice in Student Conduct: Principles, Limitations and Recommendations for Exploration James Kelly, Graduate

- 159. Alarm Clock Theory: How to Wake a Student Up to Midterm Grades Emily Leal, Graduate
- 160. The Effects of Anxiety on Students' Academic Success Mandy Laporte, Graduate
- 161. Belonging Through Group-Work: Designing Experiences That Engage Diverse Students in Stem Gateway Courses

Stephanie Brincklow, Graduate

- 162. Examining Best Practices for Foster Youth Success in Higher Education
 Molly Magrane, Graduate
- 163. Supporting English Language Learners in Post Secondary Education Maria Carolina De Almeida Rangel Ferraz, Graduate
- 164. Ways to Prepare Teachers to Teach El Students/Immigrant Students Meghan Dzialo, Graduate
- 165. Learning Communities within Higher Education
 Lauren Hamilton, Graduate
- 166. Breaking Barriers to Achievement: How Higher Education Can Help More Students Succeed Jennifer I.O. Enaboakpe, Graduate
- 167. Helping Students with Disabilities Thrive In Higher Education Olivia Casey, Graduate
- 168. Undocumented Student Support and Experiences in Higher Education Alyssa Badgio, Graduate
- 169. How First-Generation College Students Can be Better Supported Throughout Their Transition into College Elizabeth DeLong, Graduate
- 170. Self Help and Wellness Library Alaina DiBlasi, Graduate
- 171. The Trauma of Immigrants and Refugees in the Classroom *Tiana Powell, Graduate*

- 172. Support for Students with Limited or Interrupted Formal Education Rachel Adam, Graduate
- 173. The Whole Student Experience Connor Nickerson, Graduate
- 174. Guidance/Counseling in the Classroom for English Learners Timothy Lang, Graduate
- 175. Aerobic Exercise as an Intervention for Children With ADHD: A systematic Literature Review

 Jessie MacInnes, Graduate
- 176. School Climate at Center Elementary School in Tewksbury, MA Taylor Anderson, Graduate
- 177. Early Elementary Students Awareness and Acceptance of Peers With Disabilities Alani Simmons, Graduate
- 178. The Development of Substance Abuse & Risky Behaviors in College Students
- Emily Valenzuela, Graduate
- 179. Pa'lante: Latinx Student Success and Retention
 Kevin Lopez Giraldo, Graduate
- 180. English Learners in Special

Education *Kelsey Callahan, Graduate*

- 181. Making Meaningful Connections with Families of English Learners Giana Marks, Graduate
- 182. From Jim Crow to Juan Crow: Examining the Legal Challenges Confronting Undocumented Students in Southeastern Post-Secondary Education
- J. Carlos Rodriguez Flores, Graduate
- 183. Juvenile Probation Internship Experience
 Jacqueline Rosney, Graduate
- **184. Understanding Personalities** *Huntyr Poulin, Undergraduate*

185. Educational Gag Orders and School Censorship: Challenging Historical Narratives and Legislative Backlash

Emma Jones, Undergraduate

- 186. A Presentation on my Experience at the Court Service Center Ciara Cox. Undergraduate
- 187. Internship: Student Security Victoria Mantia, Undergraduate
- 188. The Association between Exercise and Mental Health in Middle-Aged Adults
 Kaitlyn Sok. Undergraduate
- 189. My Internship Experience With The Massachusetts State Police Crime Laboratory
 Eliza Daly, Undergraduate
- 190. Spring 2023 Criminology & Criminal Justice Internship Abigail Low, Undergraduate
- 191. Back the Blue: Interning at Haverhill Police Department Mikayla Melahn, Undergraduate
- 192. Internship: Middlesex Sheriff's Office at Billerica House of Correction and Jail

Isabella LeBrun, Undergraduate

- **193. Effects of Weathering Grade 3** *Caitlin O'Brien, Jillian Darois, Undergraduate*
- 194. Playing with Magnets in Second Grade

Emma Margossian, Kailyn Bowie, Undergraduate

- 195. Sound and Vibration Relationships with Second Graders
 Abigail Sperrazza, Talia Casale, Corinna Corriveau. Undergraduate
- **196. Erosion with 2nd Graders** *Alessia Puccio, Katharine Duray, Undergraduate*
- 197. Playing with Magnets in Second Grade Kailyn Bowie, Emma Margossian, Undergraduate

198. Sound and Vibration in Second Grade

Ashley Rapoza, Emily McCormick, Undergraduate

199. Properties of Matter With Second Graders

Catherine Johnson, Katelyn Distasio, Undergraduate

200. Grade 2 Takes on Properties and **Materials**

Nicole Stagg, Emma Zimon, Undergraduate

201. Teaching Properties of Materials to 2nd Graders

Amber Bean, Aries Mustoe, Undergraduate

202. Properties of Materials with Second Grade

Fabielys Martinez, Gabriela Scarpelli, Undergraduate

203. Earth Science with Second Graders Elizabeth Belmonte, Sydney Haskin, Undergraduate

204. Static Electricity with Second Graders

Abigail Garside, Emily Gosselin, Undergraduate

205. Properties of Matter in Second Grade

Kali Rowe, Erica Surabian, Undergraduate

206. Seeds in the Eyes of Second Graders

Bridget Slocum, Allison Mallett, Undergraduate

207. Massachusetts State Police Internship

Lauren Baudo, Undergraduate

208. My Internship with North Andover Police Department

Patrick Feeney, Undergraduate

209. Internship at Court Service Centers of Lawrence, Massachusetts Alexander Perry, Undergraduate

210. Massachusetts State Police Crime Lab: A Day in the Life of a Forensic Scientist Emma Mastovsky, Undergraduate

211: My Undergraduate Internship Experience

Lily Ryan, Undergraduate

212: A Poster Presentation of my Internship Experience Jacob Di Martino. Undergraduate

213: Racial Literacies: What Teacher Candidates Know and What They Need to Know

Paige Salvi, Isabel Fernandes, Undergraduate

214: My Internship at the Orange Police Department

Ryan Miller, Undergraduate

215: Criminal Justice Internship: State **Auditors Office**

Jackson Fortune-O'Brien, Undergraduate

216: Internship: Burlington Police Department

Cameron Casella, Undergraduate

217: Liberal Education and Legal **Training** Michelle Maffe, Undergraduate

218: My Time at the Burlington Police Department

Thomas Driggs, Undergraduate

219: An Analysis of Race and Ethnicity in Education

Jasmine Gonzalez, Undergraduate

220: Internship: Law Offices of Maria C. Rogers, PLLC

Aislin Terenzio, Undergraduate

221: Building a Better Bystander: A Proposal for New Bystander Intervention Practices at Merrimack College

Lillian Schaefer-Calderon. Undergraduate

222. Turco Legal Internship Abigail Raymond, Undergraduate

223. An Intership With the International Institute of Greater Lawrence Marlaina Linnane, Undergraduate

224. Framingham Public Schools System: Safety & Security. Georgia Parker, Merrimack College Georgia Parker, Undergraduate

225. My Internship at the Orange, CT Police Department Ryan Miller, Undergraduate

226. My Internship With The Massachusetts State Police Sean Walsh, Undergraduate

227. Implicit Bias and Differential Treatment in K-12 Education: Gender & Race

Cintia Khouzami, Undergraduate

228. Middlesex County Sheriffs Office Zachary Fiore, Undergraduate

229. Early College Policy Fellow Presentation Arline Ortiz , Undergraduate

230. Middlesex District Attorney's

Hannah Jeffers, Undergraduate

231. The Virtual Court Service Center Kaitlyn Collins, Undergraduate

232. Working with MCPD Melanie Turano, Undergraduate

233. Internship: Lawrence Court Service Center Daniel Tolan, Undergraduate

234. Juvenile Probation Internship Experience

Jacqueline Rosney, Undergraduate

235: Merrimack College Police Department: Student Security Internship Arianna Rose Vitacca, Undergraduate

236: My Internship With North Andover **Police**

Patrick Feeney, Undergraduate

237: Lawrence Police Department LLEAPS n' Bounds Program Intern Kyannah Hernandez, Undergraduate

238: Immigrations Impact on Feelings of Trust and Belonging Haley Alcott, Graduate

239: Salem New Hampshire Police Department James Ference, Undergraduate

