

**SALEM STATE UNIVERSITY**  
**UNDERGRADUATE**  
**RESEARCH SYMPOSIUM 2022**



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MAY 5, 2022 | 9:00 – 12:00 | HELD VIRTUALLY ON  
GATHER.TOWN

**9:00 – 9:15 WELCOME – GATHER.TOWN BALLROOM**

*Opening Remarks*

**President John Keenan**  
**Provost David Silva**

**9:15 – 10:00 ALL STUDENT PRESENTERS AT THEIR PRESENTATIONS**

**10:00 – 10:45 ODD-NUMBER PRESENTERS AT THEIR SPACES**

**10:45 – 11:30 EVEN-NUMBER PRESENTERS AT THEIR SPACES**

**11:30 – 12:00 ALL STUDENT PRESENTERS AT THEIR PRESENTATIONS**

SPACE

AUTHOR NAME(S) AND PRESENTATION TITLE

- 1 **Shannon Adam:** In Search of My Identity: A Multi-Cultural Upbringing  
Faculty advisor: Mary Melilli  
Media and Communications
- 2 **Sandrei Agno:** Managing Pain in Children: Barriers to Effective Care  
Faculty advisor: Nancy Ebersole  
Nursing
- 3 **Anastasia Aniagu:** Adolescents and E-cigarette Use: The Hidden Danger of Developing E-Cigarette and Vaping Associated Lung Injury  
Faculty advisor: Nancy Ebersole  
Nursing
- 4 **Grace E. Bertrand:** Resiliency in Child Welfare Workers Through the COVID-19 Pandemic  
Faculty advisor: Felix Amato  
Social Work
- 5 **Becky Butler:** Greener Medicines Using Verbascum Thapsus  
Faculty advisor: Christine MacTaylor  
Chemistry & Physics
- 6 **Antonio Cali, Brad Hubeny, and James Cullen:** Mass Accumulation Rate of Lake Sediment in Heart Pond, ME  
Geological Sciences
- 7 **Samantha Cloutier:** Medicinal uses expressed in Rhus Typhina endophytes  
Faculty advisor: Christine MacTaylor  
Chemistry & Physics
- 8 **Lucas Connatser:** Using Water Quality Data and Particulate Matter Chemistry to Investigate Low Dissolved Oxygen Concentrations In The Forest River Watershed, Salem MA  
Faculty advisor: Doug Allen  
Geological Sciences
- 9 **Emily Cote and Sara Mana:** Petrology, Geochemistry, and Tectonic Significance of Crosscutting Dikes in Nahant, MA

Geological Sciences

- 10 **Sophia Crowley:** Exploring the Line Between Representation and Exploitation of Disabilities in Entertainment Media  
Faculty advisor: Joanna Gonsalves  
Psychology

- 11 **Pascale Desir:** Living with Cardiovascular Disease: The Connection between Mental Health and Quality of Life  
Faculty advisor: Nancy Ebersole  
Nursing

- 12 **Luana Dos Santos:** Medicinal Properties of Oriental Bittersweet Endophytes  
Faculty advisor: Christine MacTaylor  
Chemistry & Physics

- 13 **Luana Dos Santos:** What impact does effective questioning have on student engagement?  
Faculty advisor: Luke Conlin  
Chemistry & Physics

- 14 **Demitra Dubuque-McManus, Lucas Connatser, and Douglas E. Allen:** Water Quality in the Ipswich River, Essex County, Massachusetts  
Geological Sciences

- 15 **Amanda Edmunds:** A Duet  
Faculty advisor: Betsy Miller  
Music and Dance

- 16 **Abigail Feener:** Fostering cohesive co-caring relationships between caregivers and families of Infant-toddler aged children  
Faculty advisor: Megan Schumaker Murphy  
Childhood Education and Care

- 17 **Marcos Fernandez:** Neuroplasticity and its Effects on Alzheimer's  
Faculty advisor: Changqing Chen  
Chemistry & Physics

- 18 **Caroline Foley:** Dressed For the Occasion: Fashion and First Ladies of the Nineteenth-

Century  
Faculty advisor: Alex K. Kyrrou  
History

**19 Erin Fyfe, James Cullen, Alyson Churchill, Korie DeBellis, and Jerry McManus:** High Resolution Record of Ice Rafted Detritus in Central North Atlantic Deep-Sea Sediment Core V30-100  
Geological Sciences

**20 Quinn Galante-Barrett:** Analysis of metabolites present in *Limonium carolinianum* endophytes  
Faculty advisor: Christine MacTaylor  
Chemistry & Physics

**21 Valerie Gaouette and Erkan Toraman:** Petrology, Geochemistry, and Tectonic Significance of Mafic Dikes in Salem, MA  
Geological Sciences

**22 Martine K. Geary-Souza, Samantha Pizzi, Neitza Sierra-Diaz, and Rebecca Vincent:** Comprehensive Implementation of Trauma Informed Care in Medical Settings: A Preliminary Framework (Phase One)  
Faculty advisor: Nathalie Saltikoff  
Social Work

**23 Aquissana Gomes:** D.O.S.E.  
Faculty advisor: Betsy Miller  
Music and Dance

**24 Anton Haunton and Renee Veresh:** Using  $\delta^{13}\text{C}$  and  $\delta^{15}\text{N}$  Stable Isotopes To Identify Suspects By Race/Ethnicity  
Faculty advisor: Lindley Hanson  
Geological Sciences

**25 Emilyann Hoard:** The Racialization of Gumball Waterson  
Faculty advisor: Rebecca Hains  
Psychology, Media & Communications

**26 Gracie Hogan:** Sport Related Performance Anxiety in Collegiate Student Athletes: Examining the Effects of Covid 19

Faculty advisor: Chris Schoen  
Sport & Movement Science

27 **Fred Jeffries:** The Molecular Pathophysiology of Late Onset Alzheimer's Disease  
Faculty advisor: Changqing Chen  
Chemistry & Physics

28 **Meghan Jones:** Medicinal uses of Rhus coriaria aka Sumac  
Faculty advisor: Christine MacTaylor  
Chemistry & Physics

29 **Ryan Jor:** Exploring the Medicinal Properties of Juniperus Virginiana L.  
Faculty advisor: Christine MacTaylor  
Chemistry & Physics

30 **Chloe Kollman-Veit:** How Our Relationships with Ourselves Impact Our Relationships with Others  
Faculty advisor: Christopher Mark  
Psychology

31 **Ava Kopellas and Sara Mana:** Characterizing the Petrology & Geochemistry of the Nahant Gabbro & Salem Gabbro-Diorite  
Geological Sciences

32 **Paul Kroyak:** Understanding the Rise of Right Wing Populism in the United States  
Faculty advisor: Daniel Mulcare  
Politics, Policy and International Relations

33 **Emma Lee:** Social Isolation and Loneliness in the COVID-19 Pandemic  
Faculty advisor: Martin Krugman  
Psychology

34 **Madison Lowe:** The First School Shooter: Examining Multiple Causation in a Case of Mass Murder  
Faculty advisor: David Gow  
Psychology

35 **Kaleesha Mathews-Donawa:** The Medicinal Properties of Limonium Discovered in its Endophytic Species  
Faculty advisor: Christine MacTaylor

Chemistry & Physics

- 36 Kyle McCaffery, Erkan Toraman, and Jeffrey R. Chiarenzelli:** Comprehensive Implementation of Trauma Informed Care in Medical Settings: A Preliminary Framework (Phase One)  
Geological Sciences
- 37 Abriana McCollim:** Witness Me  
Faculty advisor: Betsy Miller  
Music and Dance
- 38 Jared McCormack:** Training for Success in the Age of Globalization  
Faculty advisor: Ken Mullane  
Management
- 39 Gisady Mendoza:** Medicinal Properties of the Endophytes from *Prunus avium*  
Faculty advisor: Christine MacTaylor  
Chemistry & Physics
- 40 Serena Moge:** An Investigation Into the Role of Gamma Oscillations in Alzheimer's Disease and Future Treatment Options  
Faculty advisor: Changqing Chen  
Chemistry & Physics
- 41 Serena Moge:** How is the Collaborative Nature of a Group Affected by Gender?  
Faculty advisor: Luke Conlin  
Chemistry & Physics
- 42 Joice Oliveira:** Patient-Physician Communication; The Importance of Effective Communication for Surgical Procedures  
Faculty advisor: Patrice DeLeon  
Healthcare Studies
- 43 Marguerite Ortiz:** The Correct Response to 'Hey Boss Babe' is 'No': An Exploration of the Recruiting Techniques of Multilevel Marketing  
Faculty advisor: Nisreen Bahnan  
Marketing and Decision Science

44 **Ismenia Ovalles:** Understanding Alzheimer's Disease and Its Connection with Sleep Disorders  
Faculty advisor: Changqing Chen  
Chemistry & Physics

45 **Sam Pham and Camilla Deoliveira:** Endophytic Species Linked to Medicinal uses of Juniperus Virginiana  
Faculty advisor: Christine MacTaylor  
Chemistry & Physics

46 **Claudia Pueyo-Garcia:** The Impact of Disparate Treatment on Pregnancy Outcomes in Minority Women  
Faculty advisor: Nancy Ebersole  
Nursing

47 **Molly Robblee:** The Effect of Music Therapy Programs on Inmates' Anxiety, Depression, and Self-Esteem  
Faculty advisor: Amanda Howerton-Orcutt  
Criminal Justice

48 **Korina Rosario, Lindley Hanson, and Brad Hubeny:** Georadar Analysis for Geomorphic Evidence of Prehistoric Breaches at Nahant Tombolo, Massachusetts, USA  
Geological Sciences

49 **Emma Sanger:** Medicinally Useful Metabolites of Common Mullein Endophytes  
Faculty advisor: Christine MacTaylor  
Chemistry & Physics

50 **Anthony Santana:** Fact or Fiction: Investigating Whether the CSI Effect is a Valid Concern or Popular Myth  
Faculty Advisor: Gina Curcio  
Criminal Justice

51 **Olivia Sousa:** A Trip to Neverland  
Faculty advisor: Betsy Miller  
Music and Dance

52 **Lauren Wonson:** Medicinal Properties of Sea Lavender (Limonium)  
Faculty advisor: Christine MacTaylor

Chemistry & Physics

**53 Heather Wright:** Zora Neale Hurston, Their Eyes Were Watching God: Southern Food Culture and Regional Identity  
Faculty advisor: James P. Gubbins  
Interdisciplinary Studies

**54 Jamie Boghosian:** An Investigation into Which Techniques of Play Therapy are Most Effective Across a Spectrum of Behaviors in Children  
Faculty advisor: Joanna Gonsalves  
Psychology

**55 Mikayla Darden:** Adolescents with Migraine Headaches: Managing Triggers to Support a High Quality of Life  
Faculty advisor: Nancy Ebersole  
Nursing

**56 Cephora Duvivier:** Period poverty: How access to feminine hygiene products affects the psychosocial development of young women?  
Faculty advisor: Nancy Ebersole  
Nursing

**57 Emilee Guzman:** Treating Patients with Ventilator Associated Pneumonia (VAP): The Challenges of Implementing Nursing Bundles of Care  
Faculty advisor: Nancy Ebersole  
Nursing

**58 Grady Dick, Cam Greeno, Kyle Medeiros, Trevor Sweeney, Ryan Thebado, and Timmy Desmond:** People Behind the Parks: The Buffalo Soldiers  
Faculty advisor: KC Bloom  
Sport & Movement Science

**59 Josh Grasso, Tyler Guerriero, Erik Larsson, Sarah Monasterios, Michael Negri, and Evan Reddickah Mon:** People Behind the Parks: The CCC  
Faculty advisor: KC Bloom  
Sport & Movement Science



**Catherine Smith:** Patients, Providers and Perceptions: Achieving Quality of Care When  
60 Goals Are Not Aligned  
Faculty advisor: Nancy Ebersole  
Nursing

**Morgan McCarthy:** A Poke and Prod into the Attitudes of College-Aged Students Towards  
61 the COVID-19 Vaccines  
Faculty advisor: Pamela Leong  
Sociology

**Christian B. Weisse:** Dehumanization, Criminalization, Persecution, and Extermination: An  
62 Examination of the Legal Oppression and Horrific Violence Against Queer People in Nazi  
Germany  
Faculty advisor: Alex K. Kyrou  
History

## 9:00 – 12:00 WORLD LANGUAGES AND CULTURES | PRESENTED ON ZOOM

### TRANSLATION PORTFOLIO PRESENTATIONS

Faculty Advisors: Kristine Doll, Anna Rocca, and Elizabeth Blood

**Mathias Cardona**

9:00 - 10:00

**Valentina Espinosa Gil**

**Kelly Knizak**

### SPN 501 THESIS PRESENTATIONS

Faculty Advisor: Michele Dávila Gonçalves

10:00 - 12:00

**Rachael Couillard:** La ineficacia de los programas de ELL para estudiantes en-riesgo hispanohablantes en Massachusetts

**Ashley Hames:** Perspectivas de acceso y tratamiento para la salud mental en la comunidad Latinx de los E.E.U.U.

**Kaylan Harkins:** La brecha en el rendimiento académico: Cómo el racismo afecta a los estudiantes Latinx en la escuela

**Julieris Payero Núñez:** Los tabúes y consecuencias de la carencia de educación sexual en la República Dominicana

**Micaela Peysere:** El fútbol femenino: La comparación entre las desigualdades en Argentina y los Estados Unidos

**Rachelle Sireuil:** Relaciones caninas: La situación de los perros callejeros en EEUU y América Latina

**Samuel Zichela:** ¿Vale la pena incorporar el lenguaje inclusivo en el español?

## 10:00 – 12:00 WORLD LANGUAGES AND CULTURES | IN-PERSON | CC243

### FRE 501 THESIS PRESENTATIONS

Faculty Advisor: Elizabeth Blood

**Raymond Harris:** Le cas pour le créole: la pédagogie sensible à la culture dans l'enseignement des langues étrangères

**Samantha Stickney:** Les femmes oubliées de l'impressionnisme français

**Megs Ricci:** Comment les universités francophones soutiennent-elles les étudiants LGBTQIA+?

### ITL 501 THESIS PRESENTATION

Faculty Advisor Anna Rocca

**Mathias Cardona:** Il successo dell'immigrato italiano