

ERICA WARKUS, M.D., PH.D.

EMERGENCY MEDICINE PHYSICIAN

CELL:

EMAIL:

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EDUCATION

EMERGENCY MEDICINE RESIDENT PHYSICIAN Sarasota Memorial Hospital Florida State University	Jun 2020 – Present <i>Sarasota, FL</i>
DOCTORAL DEGREE IN MEDICINE (M.D.) John A. Burns School of Medicine University of Hawai‘i at Mānoa	Jul 2013 – May 2020 <i>Honolulu, HI</i>
DOCTORAL DEGREE IN PHILOSOPHY (PH.D.) Specialty: Developmental and Reproductive Biology Department of Anatomy, Biochemistry and Physiology University of Hawai‘i at Mānoa	Jul 2015 – May 2018 <i>Honolulu, HI</i>
U.S. STUDENT FULBRIGHT RESEARCHER Specialty: Echinoderms and Coastal Marine Conservation Ecology University of California, Los Angeles Udayana University, Denpasar	Nov 2012 – May 2013 <i>Bali, Indonesia</i>
U.S. FULBRIGHT CRITICAL LANGUAGE ENHANCEMENT PROGRAM Critical Language: Indonesian Bahasa Wisma Bahasa & U.S. Student Fulbright Program	Dec 2012 – Mar 2013 <i>Yogyakarta, Indonesia</i>
BACHELOR OF SCIENCE Graduated <i>Summa Cum Laude</i> and with Honors National Merit Scholar and Four-Year Scholarship Award Recipient Major: Conservation Biology & Ecological Sustainability Barrett, the Honors College, Arizona State University	Aug 2008 – May 2012 <i>Tempe, AZ</i>

PROFESSIONAL SUMMARY

EMRA REPRESENTATIVE TO NIH/NIAID EMERGENCY DEPARTMENT COVID-19 INNOVATIONS ADVISORY BOARD Four-year appointment as the official EMRA representative	Sep 2022 – Present
EMERGENCY MEDICINE PHYSICIAN State of Florida	Jul 2022 – Present
CHIEF RESIDENT OF WELLNESS Florida State University at Sarasota Memorial Hospital	Apr 2022 – Present <i>Sarasota, FL</i>
EMERGENCY MEDICINE RESIDENT PHYSICIAN Florida State University at Sarasota Memorial Hospital	Jun 2020 – Present <i>Sarasota, FL</i>
Selected Professional Accomplishments: <ul style="list-style-type: none">• Authored residency program research templates	Aug 2022

- Authored documents to guide ECC providers on charting processes within a new electronic medical record. Jul 2022
- Created and implemented a program-wide resident-led wellness initiative using residency houses and points. Jun 2022
- Created electronic resident evaluation forms to reduce time spent on evaluations. Apr 2022
- Initiated and led a pain-management subcommittee working group to create a hospital-wide strategy to enable patients with history of addiction to avoid inadvertent administration of opioid pain medications. Apr 2022
- Created the COVID-19 order set for the Emergency Department Aug 2021
- Reduced the number of sepsis fallouts in the Emergency Department by 1) facilitating prehospital fluids being counted toward sepsis resuscitation 2) Improved provider charting of sepsis interventions and time of sepsis onset. Jul 2021
- Initiated original prospective research projects on: Prehospital transport of septic patients, Peripartum Cardiomyopathy screening, incidence and staging, resident wellness, and a role-playing board game to teach medical students and residents empathy, effect of AI in CT identification of pathology. Aug 2021 - Present

Selected Hospital Committee Memberships:

1. Utilization Review Committee Oct 2021 – Present
2. Pharmacy And Therapeutics Committee Oct 2021 – Present
3. Sepsis Committee Nov 2020 – Present

Florida State University Emergency Medicine Residency at Sarasota Memorial Hospital Program Representative:

1. Graduate Medical Education Committee, Wellness Sub-Committee Apr 2022 – Present
2. Graduate Medical Education Committee Jun 2020 – Jun 2021

AWARDS AND HONORS

International Foundation for Ethical Research (IFER) Graduate Fellowship	Oct 2017
ARCS® Honolulu Chapter Scholar of the Year Award	May 2017
ARCS® Ellen M. Koenig Foundation Award in Medicine	Mar 2017
International Foundation for Ethical Research (IFER) Graduate Fellowship	Oct 2016
U.S. Student Fulbright Critical Language Enhancement Award	Apr 2012
U.S. Student Fulbright Award to Indonesia	Mar 2012
National Science Foundation (NSF) Partnerships for International Research and Education (PIRE) Fellowship, Bali, Indonesia	Jun 2011
National Science Foundation (NSF) Research Experiences for Undergraduates (REU) Fellowship, Tempe, AZ	May 2011
National Science Foundation (NSF) Research Experiences for Undergraduates (REU) Fellowship, Boston, MA	Jun 2010
National Merit Scholar Foundation Award	Aug 2008
National Merit Scholarship Award	

PUBLICATIONS

WARKUS, E. L. L., and Marikawa, Y. (June 2018). *Fluoxetine Inhibits Canonical Wnt Signaling to Impair Embryoid Body Morphogenesis: Potential Teratogenic Mechanisms of a Commonly Used Antidepressant*. *Toxicological Sciences*, 165(2), 372-388.

WARKUS, E. L. L., and Marikawa, Y. (May 2018). *In Vitro Morphogenesis in Developmental Toxicity Testing: Assay Validation and the Search for Teratogenic Mechanisms*. [Developmental and Reproductive Biology, University of Hawai'i at Mānoa]. Scholar Space. <<http://hdl.handle.net/10125/62304>>.

WARKUS, E. L. L., and Marikawa, Y. (January 2017). *Exposure-Based Validation of an In Vitro Gastrulation Model for Developmental Toxicity Assays*. *Toxicological Sciences*, 157(1), 235-245.

WARKUS, E. L. L., Yuen, A. A. Y. Q., Lau, C. G. Y., and Marikawa, Y. (January 2016). *Use of in vitro morphogenesis of mouse embryoid bodies to assess developmental toxicity of therapeutic drugs contraindicated in pregnancy*. *Toxicological Sciences*, 149(1), 15–30.

PATENTS & COPYRIGHTS

WARKUS, E. L. L. “*The Sarasota Model: Operational Proposal for Longitudinal Residency Houses in a Resident-Run Wellness Initiative*.” United States Copyright Office, Registration No. TXu 2-325-526. Jul 2022.

WARKUS, E. L. L. “*X: Play for Your Life*.” United States Copyright Office, **SUBMITTED**. Jun 2022.

WARKUS, E. L. L. “*In Vitro Morphogenesis in Developmental Toxicity Testing: Assay Validation and the Search for Teratogenic Mechanisms*.” United States Copyright Office, Registration No. TX 8-647-445. Oct 2018.

PRESENTATIONS

ORAL PRESENTATIONS

Warkus, E. L. L. (Accepted). *Loving Mothers' Hearts: The Utility of Maternal Cardiothoracic bedside ultrasound in the Emergency Department*. [Sono Soapbox Presentation; National Conference] Society of Academic Emergency Medicine Annual Conference 2023, Austin, TX.

Warkus, E. L. L., O'Keefe, K. (Accepted). *X: Play for Your Life - An interactive, role-playing board game to cultivate cognitive empathy in clinical practice*. [Panel Presentation; Regional Conference] Sarasota Memorial Hospital, Sarasota, FL.

Warkus, E. L. L., O'Keefe, K. (2023). *X: Play For Your Life - An Interactive Learning Exercise To Build Empathy and Teach Medical Students How to Address Intimate Partner Violence in the Clinical Setting*. [Podium Presentation; Regional Conference] Lakeland Regional Medical Center, Lakeland, FL.

Warkus, E. L. L., Taber, W., Caputo, N., LeBoutillier, L., Wilbert, R., Meyers, E., Frank, M. (Oct. 2022). *Emergent Medicine: Impact of Prehospital Red Lights and Sirens (RLS) on Time to Antibiotic Administration in Sepsis Alert Patients*. [Oral Presentation; National Conference.] Annual Meeting of the American College of Emergency Physicians (ACEP), San Francisco, CA.

Warkus, E. L. L., Holland, R., Brown, G., Hill, W., Addae, Y., O'Keefe, K. (Jun. 2022). *Loving Mothers' Hearts: Screening for Undiagnosed Cardiomyopathy in Peripartum Women*. [Oral Presentation; International Conference.] Florida State University International Research Conference at Sarasota Memorial Hospital, Sarasota, FL.

Warkus, E. L. L., Caputo, N., Taber, W., LeBoutillier, L., Wilbert, R., Meyers, E., Frank, M. (Jun 2022). *'E' For Emergent: An Analysis of the Use of Prehospital Red Lights and Sirens (RLS) and Time*

to Antibiotic Administration in Sepsis Alert Patients. [Oral Presentation by Dr. Marshall Frank]. Florida State University Annual Research Day, Sarasota, FL.

Warkus, E. L. L., Castro, M., Temple, S., Holland, R., Brown, G., Hill, W., Addae, Y. (Aug 2021). *Loving Mothers' Hearts: Bedside Ultrasound to Screen for Undiagnosed Cardiomyopathy in Peripartum Women*. [Oral Presentation; Regional Conference]. New Speaker Series for CME; Symposium by the Sea: Annual Meeting of the Florida College of Emergency Physicians, Naples, FL.

Warkus, E. L. L., Castro, M., Temple, S., Holland, R., Brown, G., Hill, W., Addae, Y. (Jun 2021). *Loving Mothers' Hearts: Using Bedside Ultrasound to Screen for Undiagnosed Cardiomyopathy in Peripartum Women*. [Oral Presentation]. Florida State University Annual Research Day, Sarasota, FL.

Caputo, N., Taber, W., LeBoutillier, L., Wilbert, R., Meyers, E., Frank, M., **Warkus, E. L. L.** (Jun 2021). *'E' For Emergent: An Analysis of the Use of Prehospital Red Lights and Sirens (RLS) and Time to Antibiotic Administration in Sepsis Alert Patients*. [Oral Presentation]. Florida State University Annual Research Day, Sarasota, FL.

Warkus, E. L. L., Marikawa, Y. (Apr 2017). *Developing a stem cell-based test for chemicals that cause birth defects*. [Oral Presentation]. Annual ARCS Scholar Presentations, Honolulu, HI.
*Awarded ARCS Scholar of the Year.

Warkus, E. L. L., Marikawa, Y. (May 2018). *Developing a test to detect teratogens using in vitro morphogenesis of P19C5 stem cells*. [Doctoral Dissertation Defense]. Developmental and Reproductive Biology Graduate Program, University of Hawai'i at Mānoa, Ka'aka'ako, HI.

Warkus, E. L. L., Nakasone, D., Hall, S. (Mar 2012). *Spatial associations between surface rocks and succulents in the Agua Fria National Monument*. [Undergraduate Honors Thesis Dissertation Defense]. Barrett, the Honors College at Arizona State University Tempe, Tempe, AZ.

Warkus, E. L. L., Barber, P. (Aug 2011). *Coral Head Biodiversity Associations: Examining community interactions between arthropods and echinoderms*. [Oral Presentation; International Conference]. National Science Foundation (NSF) Partnerships for International Research and Education (PIRE) Diversity Project Symposium with USAID at the Indonesian Biodiversity Research Center, Bali, Indonesia.

Warkus, E. L. L. (Nov 2011). *Ectoparasite loads of tropical understory birds on an altitudinal gradient*. [Oral Presentation]. Council on International Educational Exchange Tropical Ecology and Conservation Poster Symposium, Biological Research Station, Monteverde, Costa Rica.

POSTER PRESENTATIONS

Warkus, E. L. L., Caputo, N., Celina R., O'Keefe, K. (2023). *X: Play for Your Life - An interactive, role-playing board game to cultivate COGNITIVE EMPATHY in clinical practice*. [ePoster Presentation; Accepted for presentation March 22, 2023.] Council of Residency Directors in Emergency Medicine, Academic Assembly 2023. Las Vegas, NV.

Warkus, E. L. L., Kamm, S., Bonar, P., Gerber, J. (2023). *Resident-Led Wellness: Fostering the Skills Emergency Medicine Residents Need to Thrive Using an Innovative Longitudinal Mentorship Model*. [ePoster Presentation; Accepted for presentation March 22, 2023.] Council of Residency Directors in Emergency Medicine, Academic Assembly 2023. Las Vegas, NV.

Caputo, N., Taber, W., Scaturro, N., Wilbert, R., Meyers, E., Frank, M., **Warkus, E. L. L.**, (2023). *EMERGENT MEDICINE: Potentially life-saving interventions performed during the prehospital transport of septic patients*. [Poster Presentation.] Lakeland Regional Medical Center, Lakeland, FL.

Warkus, E. L. L., Taber, W., Caputo, N., LeBoutillier, L., Wilbert, R., Meyers, E., Frank, M. (Oct. 2022). *Emergent Medicine: Impact of Prehospital Red Lights and Sirens (RLS) on Time to Antibiotic Administration in Sepsis Alert Patients*. [Oral Presentation; National Conference.] Annual Meeting of the American College of Emergency Physicians (ACEP), San Francisco, CA.

Warkus, E. L. L., O'Keefe, K. (2022). *X: Play for your life. An interactive learning exercise to build empathy & foster productive, clinically relevant discussions when caring for survivors of intimate partner violence*. [Poster Presentation; Regional Conference.] Symposium by the Sea: Annual Meeting of the Florida College of Emergency Physicians, Bonita Springs, FL.

Warkus, E. L. L., O'Keefe, K. (2022). *Stage-based interventions to improve emergency medicine provider efficiency when treating survivors of intimate partner violence*. [Poster Presentation; Regional Conference.] Symposium by the Sea: Annual Meeting of the Florida College of Emergency Physicians Bonita Springs, FL.

Taber, W., Caputo, N., LeBoutillier, L., Wilbert, R., Meyers, E., Frank, M., **Warkus, E. L. L.** (2021). *'E' For Emergent: An Analysis of the Use of Prehospital Red Lights and Sirens (RLS) and Time to Antibiotic Administration in Sepsis Alert Patients*. [Poster Presentation; Regional Conference.] Symposium by the Sea: Annual Meeting of the Florida College of Emergency Physicians, Naples, FL.

Taber, W., Caputo, N., LeBoutillier, L., Wilbert, R., Meyers, E., Frank, M., **Warkus, E. L. L.** (2021). *'E' For Emergent: An Analysis of the Use of Prehospital Red Lights and Sirens (RLS) and Time to Antibiotic Administration in Sepsis Alert Patients*. [Poster Presentation; Virtual Conference.] Sarasota Memorial Hospital New Innovations Conference, Sarasota, FL.

Warkus, E. L. L., Marikawa, Y. (2017). *Applying the Daston validation panel: in vitro embryoid body morphogenesis identifies teratogenic exposures at physiologically relevant concentrations*. [Poster Presentation; National Conference.] The Teratology Society Annual Meeting, Denver, CO.

Warkus, E. L. L., Marikawa, Y. (2017). *Applying the Daston validation panel: in vitro embryoid body morphogenesis identifies teratogenic exposures at physiologically relevant concentrations*. [Poster Presentation/Competition]. ARCS Scholar Presentation for Scholar of the Year, Honolulu, HI.
*Awarded ARCS Scholar of the Year.

Warkus, E. L. L., Marikawa, Y. (2017). *Brought to life: In Vitro Morphogenesis of Embryoid Bodies as a Screening Assay for Developmental Toxicants*. [Poster Presentation]. John A. Burns School of Medicine Biomedical Sciences Symposium, Ka'aka'ako, HI.

Warkus, E. L. L., Marikawa, Y. (2016). *Auguries of Innocence: A Morphology-based Test to Identify Teratogens In Vitro*. [Poster Presentation]. John A. Burns School of Medicine Biomedical Sciences Symposium, Ka'aka'ako, HI.

Warkus, E. L. L., Marikawa, Y. (2014). *Use of in vitro morphogenesis of murine stem cells to model teratogenic effects of psychoactive drugs*. [Poster Presentation]. John A. Burns School of Medicine Biomedical Sciences Symposium, Ka'aka'ako, HI.

Warkus, E. L. L., Nakasone, D., Hall, S. (2012). *Spatial associations between surface rocks and succulents in the Agua Fria National Monument*. [Poster Presentation; National Conference]. Ecological Society of America (ESA) Annual Meeting, Portland, OR.

Warkus, E. L. L., Nakasone, D., Hall, S. (2012). *Spatial associations between surface rocks and succulents in the Agua Fria National Monument*. [Poster Presentation]. Barrett, the Honors College Celebrating Honors Symposium of Research and Creative Projects, Tempe, AZ.

Warkus, E. L. L., Barber, P. (2012). *Coral Head Biodiversity Associations: Examining community interactions between arthropods and echinoderms*. [Poster Presentation; International Conference]. American Association for the Advancement of Science (AAAS) Annual Conference 2012, Vancouver, Canada.

Warkus, E. L. L., Nakasone, D., Hall, S. (2012). *Spatial associations between surface rocks and succulents in the Agua Fria National Monument*. [Poster Presentation; Regional Conference]. Central Arizona Phoenix Long-Term Ecological Research (CAP-LTER) Annual Symposium, Scottsdale, AZ.

Warkus, E. L. L., Wagstaff, M., Morello, S., Etter, R. (2011). *Algal dominance and allelopathic effects of algae in the Gulf of Maine*. [Poster Presentation; National Conference]. National Conference on Undergraduate Research, Ithaca College, Ithaca, NY.

Warkus, E. L. L. (2011). *Ectoparasite loads of tropical understory birds on an altitudinal gradient*. [Poster Presentation]. School of Life Sciences Annual Symposium, Arizona State University, Tempe, AZ.

Warkus, E. L. L., Wagstaff, M., Morello, S., Etter, R. (2011). *Algal dominance and allelopathic effects of algae in the Gulf of Maine*. [Poster Presentation; National Conference]. American Association for the Advancement of Science (AAAS) Annual Conference 2011, Washington DC.

**Awarded Honorable Mention for Undergraduate Research Poster.*

Warkus, E. L. L., Wagstaff, M., Morello, S., Etter, R. (2010). *Algal dominance and allelopathic effects of algae in the Gulf of Maine*. [Poster Presentation]. National Science Foundation (NSF) Research Experiences for Undergraduates (REU) Poster Symposium, University of Massachusetts, Boston, MA.

ONGOING RESEARCH PROJECTS

[195711] Effect of artificial intelligence augmentation on the identification of pulmonary emboli in the Emergency Department- A retrospective review.

[1847771] ECHO2 - assessing educational impact of cardiac ultrasound performed using curvilinear probe as a tool to measure ejection fraction on transthoracic views.

[1924868] An educational, role-playing board game and clinical decision tool as a method to build empathy and facilitate evidence-based medical practice for clinical providers.

[1892896] Peripartum Cardiomyopathy Research Project: An Open Access Online Survey.

[1892897] Incidence of peripartum cardiomyopathy (PPCM) at a single maternity center - A retrospective review.

[1924868] A Longitudinal Resident-led Wellness and Mentorship Structure to Improve Emergency Medicine Resident Educational Experiences and Academic Success.

LOVING MOTHERS' HEARTS: Using Bedside Echocardiography to Screen for Undiagnosed Cardiomyopathy in Peripartum Women.

'E' FOR EMERGENT: A prospective assessment of the use of red lights and sirens in the transport of septic patients.

CERTIFICATIONS AND TRAINING

MEDICAL DOCTOR

Jul 2022 – Present

State of Florida

RESIDENT PHYSICIAN
State of Florida

Jun 2020 – Present

CURRENT CERTIFICATIONS:

- Basic Cardiac Life Support
- Advanced Cardiac Life Support
- Pediatric Advanced Life Support
- Advanced Trauma Life Support
- Human Subjects Research Protections Training

PROFESSIONAL ACTIVITIES

Graduate Medical & Education Wellness Sub-Committee Representative for the FSU Emergency Medicine Residency Program at Sarasota Memorial Hospital	Apr 2022-Present
Utilization Review Committee, Non-voting Member (Resident Physician)	Oct 2021-Present
Quality Improvement and Patient Safety Committee, Non-voting Member (Resident Physician)	Oct 2021-Present
Infection Prevention and Control Committee, Non-voting Member (Resident Physician)	Oct 2021-Present
Bylaw Revision Committee, Non-voting Member (Resident Physician)	Oct 2021-Present
Physician User Group Committee, Non-voting Member (Resident Physician)	Oct 2021-Present
Sepsis Committee Member (Resident Physician)	Dec 2020-Present
Graduate Medical & Education Committee (GMEC) Representative for the FSU Emergency Medicine Residency Program at Sarasota Memorial Hospital	Jul 2020-Jul 2021
Founder of Kūpuna & Kōkua, a non-profit helping the elderly of Hawai‘i during the first months of the COVID-19 pandemic	Mar 2020-Mar 2021
Medical Student Mentorship Program Mentor	Sep 2013-May 2015
President of the John A. Burns School of Medicine Research Interest Group	Sep 2013- May 2015
McGuire Fund Committee Treasurer	Sep 2013- May 2015
Supplemental Instruction Leader, Arizona State University Employee	Aug 2011-May 2012
Member, AIESEC International Student Networking Organization, Arizona State University Chapter	May 2010-present
School of Life Sciences (SOLS) Mentor Arizona State University, Tempe, AZ	Aug 2009-May 2010

PROFESSIONAL AFFILIATIONS

American College of Emergency Physicians	Oct 2019 – Present
Emergency Medicine Residents Association	Jun 2020 – Present
Society of Academic Emergency Medicine	Jul 2022 – Present
Academy for Women in Academic Emergency Medicine	Jul 2022 – Present
Florida College of Emergency Physicians	Jun 2020 – Present

COMMUNITY SERVICE

FOUNDER, EMWRAP.ORG Emergency Medicine Writing, Rhetoric and Practice Medical Literature and Arts Platform	Apr 2022 – Present
FOUNDER, THE PREGNANCY-REGISTRY.ORG	Feb 2022 – Present <i>In Progress</i>

A pregnancy registry for all pregnant women.

FOUNDER, PERIPARTUM CARDIOMYOPATHY RESEARCH INITIATIVE
Community Research Organization. PPCMResearch.wordpress.com

Jul 2021 – Present

FOUNDER, KŪPUNA & KŌKUA
Non-Profit COVID-19 Community Relief Organization

Mar 2020 – Apr 2021
Honolulu, HI

LANGUAGES

English – Native Speaker

Spanish – Basic Proficiency

Indonesian – Professional Fluency

COMPUTER SKILLS

Proficient in Excel, ImageJ, StatPlus, SPSS, PowerPoint, Word, Docear, Mendeley, VUE, RedCap, IRBNet

EXTRACURRICULAR HOBBIES AND INTERESTS

Jun 2018 - present Rock climbing
Jun 2017 - present Brazilian JiuJitsu
Jun 2013 - present Competitive archery (NFAA State Champion, 2013), Archery hunting
Aug 2012 - present Freediving / Spearfishing
Aug 2011 - present Dancing (country two-step swing, West Coast swing, zouk, salsa)
Feb 2010 - present Scuba Diving (PADI Dive Master)
Dec 2006 - present Short essay and fiction writing for competition and publication
Other interests: Painting, basket weaving, dog training, car maintenance and repair, cooking, long boarding, speedskating, running, paddling and tennis
Travels: Japan, Indonesia (9 months), Costa Rica (6 months), Haiti, Panama, Thailand, Taiwan, Singapore, Malaysia, Australia, Mexico, Canada, Japan, Germany, Austria, England, and France.

REFERENCES*:

Kelly O’Keefe, MD, FACEP, Founding Program Director at Florida State University Emergency Medicine Residency Program at Sarasota Memorial Hospital, Sarasota, FL

Reuben Holland, MD, FACEP, Medical Director, Emergency Care Center, Core Faculty at Florida State University Emergency Medicine Residency Program at Sarasota Memorial Hospital, Sarasota, FL

**Additional references available upon request.*