UCONN | UNIVERSITY OF CONNECTICUT

CENTER FOR MHEALTH AND SOCIAL MEDIA

PROGRESS REPORT

AUG 2019- AUG 2020

The mission of the UConn Center for mHealth and Social Media is to advance the science of digital health by exploring novel applications of digital technologies to health problems, using technology to increase the impact and reach of health interventions, leveraging technology to gain a deeper understanding of health issues, and developing new methodologies with digital health tools to conduct clinical research. The Center's priorities are in the areas of research methodology and training.

CONTENTS

THE YEAR IN REVIEW

Given our research interests in digital health technologies and online behavior interventions, our Center was uniquely well-suited for the pivot to a virtual world. In fact, we had just completed the final round of in-person data collection on an R01, Get Social, one month prior to being ordered to work from home. From the very first week of lockdown, we've continued our research efforts at full capacity: recruiting participants, running interventions, analyzing data, and writing.

In the past year, our research efforts were divided across 13 ongoing grant-funded projects. We also submitted 12 grants proposals and published 25 scientific papers in peer-reviewed journals. In addition to peer-reviewed publications, our work and comments have appeared in numerous online articles on UConn Today, Time, CNBC, US News, and Shape Magazine. They are featured throughout this publication.

Our faculty advise 7 graduate students in Allied Health Sciences, graduating our first two students this past summer. We've been able to support 35 undergraduate students with hands-on experience working on projects in the past year. Faculty, staff, and students gave 9 invited talks and developed 16 presentations for national and international conferences.

The Center held 7 live webinars this year, which were recorded and posted on YouTube for on-demand viewing. We held three paid workshops that served as a continuation of themes explored in the 2020 Annual Conference, "Building an Evidence Base for Commercially Available Technology." These virtual events attracted hundreds of participants from around the globe.

Mug shots: How do we keep virtual lab meetings engaging? Show and tell! At the start of the pandemic, we incorporated a show and tell segment into our Monday updates, picking a new theme each week. Shown here is "Favorite Mug."
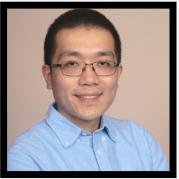
Faculty

Sherry Pagoto, PhD
Director
Professor
Allied Health Sciences

Molly Waring, PhD
Director of Methodology Core
Associate Professor
Allied Health Sciences

Ran Xu, PhD
Assistant Professor
Allied Health Sciences

Kim Gans, PhD, MPH
Professor
Human Development and Family Studies

Loneke Blackman Carr, PhD, RD
Assistant Professor
Nutrition

Joel Salisbury, MFA
Assistant Professor
Web and Interactive Media Design

Anne Oeldorf-Hirsch, PhD
Assistant Professor
Communication

Debs Ghosh, PhD, MPhil, MA
Associate Professor
Geography

Jolaade Kalinowski, EdD
Assistant Professor
Human Development and Family Studies

Staff

Jessica Bibeau, MA, PMP
Program Director

Joseph DiVito
Research Coordinator

Kaylei Arcangel, MS
Research Coordinator

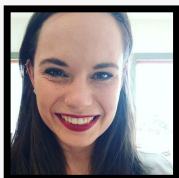**Jessica Deojay**
Program Assistant

Graduate Students

Jared Goetz
Graduate Research Assistant
Doctoral student, Health Promotion Sciences (Pagoto)

Kelsey Arroyo, MS
Graduate Research Assistant
Master's student, Health Promotion Sciences (Pagoto)
Degree conferred August 2020

Brooke Libby, MS, MPH
Graduate Research Assistant
Master's student, Health Promotion Sciences (Waring)
Degree conferred June 2020

Matthew Schroeder
Graduate Research Assistant
Master's student, Health Promotion Sciences (Pagoto)

Laurie Groshon
Graduate Research Assistant
Master's student, Health Promotion Sciences (Pagoto)

Valeria Herrera, RD
Graduate Research Assistant
Master's student, Health Promotion Sciences (Waring)

Undergraduate Students

Course Credit Research Mentees (Pagoto)
Kristen Dean
Conrad Poole
Leslian Vallejo-Bucheli
Alisha Chhabra
Justin Jones
Stephen Aledort
Savanna Hathiramani
Deevena Annavarjula
Michael Pinheiro
Morgan Jankowics
Lauren Bernstein
Eunices Pineda
Shannon Cassidy

Work-Study Research Assistants (Waring)
Quamyia Foye
Emanuela Pinci
Breajah Tyson

Course Credit Research Mentees (Xu)
Amanda Peters
Runshu Wang
Fangzhou Yu

Work-Study Research Assistants (Pagoto)
Sanaya Bankwalla
Makayla Urquhart
Monique Kern
Cindy Pan
Lauren Barber-Bryant
Sarah Barney

Honors Thesis Advisees (Waring)
Marta Holovatska
Lareyn Tetreault
Nicole Souza
Lauren Rudin

Course Credit Research Mentees (Waring)
Chloe Ho
Alma Jeri-Wahrhaftig
Indra Kapoor
Grace Heerspig
Emily Zimmer

Honors Thesis Advisee (Pagoto)
Lourdes Leguiza

Graduate Thesis Spotlight

Kelsey Arroyo, MS "An Exploration of Health Misinformation in a Facebook-delivered Health Education Intervention"

Kelsey's thesis project aimed to examine the extent to which misinformation was shared by participants in a Facebook-delivered health education intervention,

how misinformation was communicated, and which health messages elicited misinformation sharing. Using a mixed-methods approach, she found that participants shared little misinformation in a Facebook-delivered health education intervention. She also found that vaccine-related intervention posts elicited the most misinformation compared to other topics and that didactic posts elicited a greater proportion of participant comments with misinformation compared to narrative posts. Findings provide implications for delivering vaccine information, moderating online communities, and narrative health messaging. Kelsey's work was supported by a diversity supplement grant from the National Cancer Institute (NCI: 3R01CA218068-03S1; PIs: Arroyo, Stapleton)

Research

Submitted and Funded: $1,566,936

NHLBI R34HL145439 (PI: Pagoto) $709,180   9/1/2020–8/31/2023
Building Habits Together: Feasibility trial of an integrated mobile and social network weight loss intervention

We propose to build upon our previous work to create a behavioral weight loss program in which integrated technologies facilitate meaningful participant engagement and the execution of evidence-based behavioral strategies for weight loss.

Renewal: NIH 5K24HL124366-02 (PI: Pagoto) $662,613   04/01/20-03/31/25
Mentoring in mHealth and Social Networking Interventions for CVD Risk Reduction

This mid-career development award is designed to support mentoring in digital health research for cardiovascular disease prevention that leverages the resources of the UConn Center for mHealth and a transdisciplinary co-mentoring team. The Candidate's training model will equip mentees with: research methodology skills, knowledge of the "idea to market" process, opportunities to collect preliminary data, grant/manuscript writing experience, professional development, training in the ethical conduct of research, and "hands on" team science experience.

CAHNR Seed Grant (PI: Xu) $60,000   10/01/20-09/30/23
Developing a food image recognition technique to evaluate the nutrition information of restaurant foods and community food environment.

In this proposal we plan to (1) extend and develop a deep-learning-based food image recognition technique for nutrition assessment of restaurant foods, and (2) apply it to assess the community food environment in the Hartford area, (3) validate the deep-learning results with structured interviews and surveys at local restaurants.

NSF 2028341 (PI: Brown; Sub-PIs: Pagoto, Waring) $71,408   05/01/20-04/30/21
RAPID: Differential Impacts of the COVID-19 Pandemic on Undergraduate STEM Education by Student Gender, Race/Ethnicity, and Socioeconomic Status

We propose a mixed-methods study to describe in a representative sample of undergraduate STEM students from varied backgrounds: 1) the transition away from campus, 2) the challenges experienced, 3) the degree to which challenges affected attendance, academic performance, withdrawal rates, and college dropout rates, and 4) factors that facilitated success or failure among underresourced and underrepresented students.

Research

Submitted and Funded

NIH 1R01CA192652-01 (PI: Buller, Sub-PI: Pagoto) $25,364   09/01/20-08/31/21
Competitive Revision for Likes Pins and Views: Engaging Moms on Teen Indoor Tanning Thru Social Media

We propose to conduct a new study with the original sample of mothers to test the impact of social media messaging on COVID-19 mitigation (i.e., social distancing behaviors) and vaccination to examine the impact of different sources frequently providing this information.

Supplement NIH 1R01CA221854 (PI: Manne, Sub-PI: Pagoto) $38,371   08/01/20-07/31/21
Facebook Intervention for Young Onset Melanoma Patients and Families: Supplement title: An examination of knowledge gaps regarding ethical practices in social media research

The goals of the proposed research are to 1) identify knowledge gaps and areas lacking in consensus among researchers about various uses of social media in clinical trials research, 2) examine the nature of the variation in opinions, and 3) identify researcher characteristics associated with knowledge gaps.

Ongoing Projects

NIH K24HL124366 (PI: Pagoto) $491,310   04/07/15-03/31/20
Mentoring in mHealth and Social Networking Interventions for CVD Risk Reduction

This mid-career development award is designed to support a mentorship plan in mHealth research for cardiovascular disease prevention that leverages the resources and faculty of the UMass Center for mHealth. Mentees will receive guidance on research and professional development via writing groups, seminars, rotations, experiential learning, live and online courses, conference attendance, formal and informal meetings, and an online social network.

InCHIP Faculty Seed Grant (PI: Waring) $15,000   07/01/18-06/30/20
Development of an Instagram-delivered gestational weight gain intervention

The purpose of this project is to adapt our previously-developed online gestational weight gain intervention for delivery via Instagram.

NIH 5R01DK103944-02 (PI: Pagoto) $2,666,387   09/25/15-07/31/20
Get Social: Randomized Trial of a Social Network Delivered Lifestyle Intervention

The purpose of the study is to conduct a randomized controlled trial to compare the efficacy of an online social network delivered intervention to a traditional in-person group-based lifestyle intervention. We hypothesize that an online social network intervention will not be inferior to the traditional delivery approach.

Research

Ongoing

NIH 1R01CA192652-01 (PIs: Buller, Pagoto) $812,483   06/01/15-12/31/20
Likes Pins and Views: Engaging Moms on Teen Indoor Tanning Thru Social Media

This study proposes to develop and evaluate the effectiveness of a social media indoor tanning campaign to decrease mothers' permissiveness for, and prevalence of, indoor tanning by daughters and increase mothers' support for policy restrictions on indoor tanning by minors to improve the effectiveness of indoor tanning regulations.

NIH/NHLBI R34HL136979 (PI: Waring) $731,438   05/15/17-03/31/21
Delivering a Post-Partum Weight Loss Intervention via Facebook vs In-Person Groups: a Feasibility Pilot Trial

This project is testing a feasibility trial for post-partum weight loss being delivered in-person vs Facebook.

NIH 1R21CA226133-01 (PI: Pagoto) $376,782   04/01/18-03/31/21
Using a Narrative-Based Approach to Reducing Indoor Tanning

The purpose of this project is to develop and test the feasibility of a narrative-based social media intervention for indoor tanning that will ultimately be implemented by Skin Smart Campus, a national initiative co-chaired by the PI to promote skin cancer prevention policy and education on university campuses nationwide.

NIH 3R01CA218068-03S1 (PIs: Arroyo, Stapleton) $55,469   06/01/19-05/31/21
Participant Engagement and Sharing of Misinformation in a Cancer Prevention Facebook Group for Moms

The purpose of this diversity supplement is to conduct a mixed-methods analysis of participant engagement data from a large randomized trial (N=972) of a Facebook-delivered cancer prevention intervention. Findings will advance the field of social media interventions for cancer control by revealing insights on how to design effective prevention messages.

USDA/CAHNR Capacity Grant (PI: Duffy; Co-I: Waring) $30,000   10/01/18-09/30/21
Tailored messages for health promotion and obesity prevention using e-health and m-health

We will evaluate a nutrition and health message program delivered via internet and mobile technologies that is tailored to the individual's usual behaviors and the availability of healthy foods for obesity prevention in children in a clinical setting, middle-school students, and college students.

Research

Ongoing

NIH 1R01CA218068-01 (PI: Stapleton, Sub-PI: Pagoto) $486,807   07/15/17-05/31/22
Randomized Trial of a Social Media-Delivered Intervention Targeting Indoor Tanning Users

This project aims to develop an intervention for indoor tanning users that is delivered via secret groups using the social media site Facebook.

NIH R01CA210259 (PI: Buller, Sub-PI: Pagoto) $133,917   08/01/17-07/31/22
Using Technology to Scale-up an Occupational Sun Protection Policy Program

This project is testing sun protection practices for outdoor workers using an in-person vs. web-delivered intervention.

USDA/CAHNR Capacity Grant (PI: Waring) $19,994   10/01/19-09/30/22
How mothers evaluate and spread information related to child nutrition on social media

We will explore how mothers evaluate the veracity of child nutrition information they encounter on social media and examine factors influencing the spread of child nutrition misinformation in online social networks.

NIH 1R01DK115545 (PI: Jaser, Sub-PI: Pagoto) $373,921   07/01/18-06/30/23
Communication and Coping: Addressing Mothers' Needs to Improve Outcomes in Adolescents with T1D

The aims of this study are to: 1) evaluate the effects of the Communication & Coping intervention on diabetes- related outcomes; 2) evaluate the effects of the Communication & Coping intervention on psychosocial outcomes; and 3) explore the differential impact of the intervention across demographic factors.

NIH 1R01CA221854 (PI: Manne, Sub-PI: Pagoto) $499,364   06/01/18-06/30/23
Facebook Intervention of Young Onset Melanoma Patients and Families

This project involves a social media delivered intervention for melanoma patients and families.

UConn Designated as a Skin Smart Campus
Our team helped to secure UConn's distinction as an Indoor Tan-Free Skin Smart Campus. This effort included increasing educational and prevention efforts, like installing sunscreen dispensers around campus; read more in <u>UConn Today</u>. Dr. Pagoto also helps the initiative with its online presence. The Skin Smart Campus Initiative got a shoutout in <u>JAMA Dermatology</u> this year.

Research

Pending

NIH 1R01AI158818-01 (PI: Buller, Sub-PI: Pagoto) $54,569   04/01/21-03/31/24
Preventing COVID-19 with a Social Media Intervention: Vaccine Acceptance and Physical Distancing

The goal of this project is to increase adults aged 18-64 COVID19 prevention behaviors, specifically social distancing behavior and vaccine intentions, using a social media campaign designed to a) promote COVID19 NPIs and vaccination using principles of risk communication, b) improve adults' media literacy for digital messages to combat critical information and misinformation, and c) improve family communication on COVID19 NPIs and vaccination.

Weight Watchers AG200853 (PI: Pagoto) $335,890   02/02/20-01/30/21
Single arm trial of a multi-component commercial digital weight loss program

The goal of the proposed research project is to evaluate the feasibility, acceptability, and preliminary outcomes of an online multicomponent commercial weight loss program and to understand the relationship between program engagement and outcomes.
[Delayed due to COVID19]

NIH/NIAD R34 (PI: DiStefano, Co-I: Waring) $506,528   12/01/20-02/28/22
Sport Training to Reduce Injuries and Develop Excellence (STRIDE): Disseminating Primary Prevention Strategies to Keep Children Active for Life

The objective of this proposal is to plan a 4-year pragmatic trial in the northeast U.S. to test the STRIDE strategy on the reach, effectiveness of reducing musculoskeletal injuries, adoption, implementation, and maintenance of injury prevention programs.

Despite Dangers, Tanning Beds Still a Fixture in Gyms
Dr. Pagoto's work examining the prevalence of tanning beds in popular gym chains appeared as a research letter in JAMA Network Open in December 2019 and was quickly picked up by global publications including Washington Post, Reuters, Vice and US News & World Report. The study was also featured in UConn Today.

How is COVID-19 affecting college students?
Drs. Pagoto, Waring, and Brown (Penn State) are researching how the pandemic affects STEM students from underrepresented backgrounds. Their preliminary work, and how it may inform reopening plans, has been featured in Time, Inside Higher Ed, UConn's CAHNR Newsroom, and PSU Daily.

Publications

Peer-Reviewed

1. Manne, S, Kashy, D, Buller, D, Devine, K., Heckman, C, Pagoto, S., Frederick, S, Mitarotondo, A. Sun Safe Partners Online: A Pilot Randomized Controlled Clinical Trial, JMIR (JMIR 2020;22(9):e18037 doi: 10.2196/18037

2. Mejia, C., Libby, B.A., Bracken, M.L, Shanley, B., Holovatska, M.M., Wanik, J., Shanley, E., Waring, M.E. Interest in digital dietary support among adults with kidney failure receiving hemodialysis. Journal of Renal Nutrition. 21 Jul 2020, doi: 10.1053/j.jrn.2020.06.004 PMID: 32712067

3. Xu R. Statistical methods for the estimation of contagion effects in human disease and health networks. Comput Struct Biotechnol J. 2020 Jun 25;18:1754-1760. doi: 10.1016/j.csbj.2020.06.027. PMID: 32695268; PMCID: PMC7355717.

4. Adrian A, Francisco O, Xavier T, Perchoux, C, Balkau, B, Pagoto, S, Harding, JL, Czernichow, T, Fagherazzi, G, Insulin pricing and other major diabetes-related concerns in the USA: A study of 46,407 Tweets between 2017 and 2019. BMC Open Diabetes Research and Care. doi: 10.1136/bmjdrc-2020-001190. PMID: 32503810. PMCID: PMC7282343

5. Mailhot, T., McManus, D.D., Waring, M.E., Lessard, D., Goldberg, R., Bamgbade, B.A., Saczynski, J.S., Frailty, Cognitive Impairment and Anticoagulation Among Older Adults with Non-Valvular Atrial Fibrillation. JAGS. doi: 10.1111/jgs.16756

6. Sedney, C., Abu, H.O., Trymbulak, K., Mahawej, J., Wang, Z., Waring, M.E., Saczysnki, J., McManus, D.D. Sociodemographic, behavioral, and clinical factors associated with low atrial fibrillation knowledge among older adults with atrial fibrillation: the SAGE-AF study. Patient Education and Counseling. 2020 Jul:S0738-3991(20)30381-5. doi: 10.1016/j.pec.2020.07.008. PMID: 32690396.

7. Bamgbade, B.A., Sanghai, S.R., McManus, D.D., Lessard, D., Waring, M.E., Forrester, S., Pierre-Louis, I., Saczynski, J.S. Psychosocial and cognitive multimorbidity and health-related quality of life and symptom burden in older adults with atrial fibrillation: the Systematic Assessment of Geriatric Elements in Atrial Fibrillation (SAGE-AF) cohort study. Archives of Gerontology and Geriatrics. 2020 Sep-Oct;90:104117. doi: 10.1016/j.archger.2020.104117. Epub 2020 May 28. PMID: 32474170; PMCID: PMC7434686.

8. Pagoto, S, Geller, AC. Public health in the selfie generation. JAMA Dermatology. JAMA Dermatol. 2020;156(7):731–732. doi: 10.1001/jamadermatol.2020.0510

9. Sedrak, M.S., Soto-Perez-De-Celis, E., Nelson, R.A., Liu, J., Waring, M.E., Lane, D.S., Paskett, E.D., Chlebowski, R.T. Online health information-seeking among older women with chronic illness: analysis of the Women's Health Initiative. JMIR. 2020; 22(4): e15906. doi: 10.2196/15906 PMID: 32271152. PMCID: PMC73119595.

Publications

Peer-Reviewed

10. Xu R, Blanchard BE, McCaffrey JM, Woolley S, Corso LML, Duffy VB. Food Liking-Based Diet Quality Indexes (DQI) Generated by Conceptual and Machine Learning Explained Variability in Cardiometabolic Risk Factors in Young Adults. Nutrients. 2020 Mar 25;12(4):882. doi: 10.3390/nu12040882. PMID: 32218114; PMCID: PMC7231006.

11. Sanghai, S., Wong, C., Wang, Z., Clive, P., Tran, W. Waring, M., Goldberg, R., Hayward, R., Saczynski, J.S., McManus, D.D. Rates of potentially inappropriate dosing of direct-acting oral anticoagulants and associations with geriatric conditions among older patients with atrial fibrillation: the SAGE-AF study. J Am Heart Assoc. 2020; 9(6): e014108. PMID: 32146898. doi: 10.1161/JAHA.119.014108. PMCID: PMC7335533.

12. Saczynski, J.S., Sanghai, S.R., Kiefe, C.I., Lessard, D., Marino, F., Waring, M.E., Parish, D., Helm, R., Sogade, F., Goldberg, R., Gurwitz, J., Wang, W., Mailhot, T., Bamgbade, B., Barton, B., McManus, D.D. Geriatric elements and oral anticoagulant prescribing in older atrial fibrillation patients: SAGE-AF. J Am Geriatr Soc. 2020; 68(1): 147-154. doi: 10.1111/jgs.16178 PMID: 31574165. PMCID: PMC6952542

13. Pagoto, S.L., Conroy, D.E., Arroyo, K., Goetz, J., West, A.B., Mulcahy, S., Waring, M.E. Assessment of tanning beds in 3 popular gym chains. JAMA Netw Open. 2019; 2(12):e1918058. doi: 10.1001/jamanetworkopen.2019.18058 PMID: 31860102. PMCID: PMC6991224.

14. Pagoto, S.L., Waring, M.E., Xu, R. A call for a public health agenda for social media research. J Med Internet Res. 2019; 21(12):e16661. doi: 10.2196/16661. PMID: 31855185. PMCID: PMC6940852.

15. Cardel, M, Dhurandhar, E., Yarar-Fisher, C, Foster, M, Hidalgo, B, McClure, LA, Pagoto, S, Brown, N, Pekmezki, D., Sharafeldin, N, Willig, AL, Angelini, C. Turning chutes into ladders for women faculty: A roadmap for equity in academia. 2020, Journal of Women's Health. (Larchmt). 2020 Feb 11; doi: 10.1089/jwh.2019.8027. PMID: 32043918

16. Jaser, SS, Hamburger, ER, Pagoto, S., Williams, R. Meyn, A., Jones, A. C. & Simmons, J. H. Communication and coping intervention for mothers of adolescents with type 1 diabetes: Rationale and trial design. Contemporary Clinical Trials. 2019 Oct; 85:105844. doi: 10.1016/j.cct.2019.105844. Epub 2019 Sep 6. PMID: 31499228; PMCID: PMC6815728

17. Waring, M.E., Libby, B.A., Moore Simas, T.A., Bracken, M.L., Bibeau, J.L., Herrera, V., Wang, J., Pagoto, S.L. Delivering a postpartum weight loss intervention via Facebook or in-person groups: protocol of a randomized feasibility trial. JMIR Research Protocols. JMIR Res Protoc. 2019; 8(11): e15530. DOI: 10.2196/15530 PMID: 31778116. PMCID: PMC6908979.

18. Xu R, Frank KA, Maroulis SJ, Rosenberg JM. Konfound: Command to quantify robustness of causal inferences. Stata J [Internet]. 2019;19(3):523-50. https://doi.org/10.1177%2F1536867X19874223

Publications

Peer-Reviewed

19. Waring, M.E., Hills, M.T., Lessard, D.M., Saczynski, J.S., Libby, B.A., Holovatska, M.M., Kapoor, A., Kiefe, C.I., McManus, D.D. Characteristics associated with Facebook use and interest in digital disease support among older adults with atrial fibrillation: cross-sectional analysis of baseline data from the Systematic Assessment of Geriatric Elements in Atrial Fibrillation (SAGE-F) Cohort. JMIR Cardio. 2019; 3(2):e15320. DOI: 10.2196/15320 PMID: 31758791. PMCID: PMC6883367.

20. Marino, F.M.*, Lessard, D.M., Saczynski, J.S., McManus, D.D., Silverman-Lloyd, L.G., Benson, C.M., Blaha, M.J., Waring, M.E. Gait speed and mood, cognition, and quality of life in older adults with atrial fibrillation. J Am Heart Assoc. 2019; 8(22):e013212. doi: 10.1161/JAHA.119.013212 PMID: 31735113. PMCID: PMC6915300.

21. McManus, D.D., Kiefe, C., Lessard, D., Waring, M.E., Parish, D., Awad, H.H., Marino, F., Helm, R., Sogade, F., Goldberg, R., Hayward, R., Gurwitz, J., Wang, W., Mailhot, T., Barton, B., Saczynski, J. Geriatric conditions and prescription of Vitamin K antanogists vs direct oral anticoagulants among older patients with atrial fibrillation: SAGE-AF. Front Cardiovasc Med. 2019; 6:155. doi: 10.3389/fcvm.2019.00155 PMID: 31737647. PMCID: PMC6831524.

22. Abu, H.O., Lapane, K.L., Waring, M.E., Ulbricht, C.M., Devereaux, R.S., McManus, D.D., Allison, J.J., Kiefe, C.I., Goldberg, R.J. Religious practices and long-term survival after hospital discharge for an acute coronary syndrome. PLoS ONE. 2019;14(10): e0223442. doi: 10.1371/journal.pone.0223442 PMID: 31584980. PMCID: PMC6777785.

23. Wang, W., Saczynski, J., Lessard, D., Mailhot, T., Barton, B., Waring, M.E., Sogade, F., Hayward, R., Helm, R., McManus, D.D. Physical, cognitive, and psychosocial conditions in relation to anticoagulation satisfaction among elderly adults with atrial fibrillation: the SAGE-AF study. J Cardiovasc Electrophysiol. 2019; 30(11): 2508-2515. DOI: 10.1111/jce.14176 PMID: 31515920.

24. Vimalananda, V.G., Meterko, M., Waring, M.E., Qian, S., Solch, A., Wormwood, J.B., Fincke, B.G. Tools to improve referrals from primary care to specialty care. American Journal of Managed Care. 2019; 25(8): e237-e242. PMID: 31419100.

25. Thomas, D.D., Waring, M.E., Ameli, O., Reisman, J.I., Vimalananda, V.G. Patient characteristics associated with receipt of weight management medications among veterans Participating in MOVE! Obesity (Silver Spring). 2019 Jul;27(7):1168-1176. doi: 10.1002/oby.22503. Epub 2019 May 15. PMID: 31090207; PMCID: PMC6591039.

The Importance of #SciComm During COVID-19
Dedicated to science communication, Dr. Pagoto's comments have appeared in Shape Magazine in an article about wearing sunscreen working from home, in CNBC about how to counteract COVID-19 misinformation encountered online, and in ACE Fitness about the new normal for personal training. Our virtual conference got a shoutout in UConn Today.

Trainings

Free Webinars

In the 2019-2020 academic year, the Center hosted 7 free webinars, which averaged between 75-150 live attendees and have garnered over 3,000 views on YouTube. We plan to offer these webinars on a monthly basis in the upcoming year; see the upcoming webinars at mhealth.inchip.uconn.edu/events.

How to turn your science into a short video. Presented by Laurie Groshon and Matthew Schroeder. 31 August 2020.

https://youtu.be/xX77xUoOfE8

Moving your behavioral research online. Presented by Jessica Bibeau, MA, PMP and Kaylei Arcangel, MS. 27 July 2020.

https://youtu.be/jskjtn1C4Tg

Research Project Management Webinar Series, Part 2: Developing a plan to guide and manage your projects. Presented by Jessica Bibeau, MA, PMP. 15 June 2020.

https://youtu.be/fq0Lt43zIHY

Large national datasets assessing health-related use of the internet, technology, and social media. Presented by Molly Waring, PhD. 6 April 2020.

https://youtu.be/u-nfu1IfHss

Leveraging social media to recruit research study participants. Presented by Kaylei Arcangel, MS. 10 February 2020.

https://youtu.be/fbsp__K5xW0

An overview of methods for capturing and examining social media data for health research. Presented by Molly Waring, PhD. 9 December 2019.

https://youtu.be/B-wMT151NrY

Research Project Management, Part 1: Using project management tools to initiate and plan your projects. Presented by Jessica Bibeau, MA, PMP. 28 October 2019.

https://youtu.be/Wmw2VnU0eWA

Knowledge Bank:
View the catalog of Center-hosted webinars online at mhealth.inchip.uconn.edu/training We host free monthly webinars featuring our faculty and staff and experts from around the country.

Appearances

Invited Talks and Workshops

Center faculty and staff were invited to give 9 talks and workshops this past year on the topics of digital health research, research project management, and research productivity.

Pagoto, S. Leveraging technology for health behavior change. BF Skinner Keynote Lecture at Association for Behavior Analysis, May 2020. (virtual)

Bibeau J, Berteletti J, Massie K. A Project Management Guide for the Planning and Execution of Behavioral Research Trials. 41st Annual Meeting & Scientific Sessions of the Society of Behavioral Medicine (SBM), 1-4 April 2020, San Francisco, CA. [conference cancelled due to COVID19]

Pagoto, S. The problem of gym tanning beds. Invited speaker at the National Council for Skin Cancer Prevention April 2020 meeting. (virtual)

Pagoto, S. Sunscreen in a new light-- The State of UV Exposure and Sunscreen Use in America in 2020. Neutrogena/RPR presentation to the media. May 2020. (virtual)

Pagoto, S. Tips for increasing your research productivity. Webinar for Mount Sinai Department of Geriatrics and Palliative Medicine, January 2020.

Waring, M. Leveraging social media for weight management among childbearing women. Institute for Healthcare Delivery and Population Science, University of Massachusetts Medical School-Baystate, Springfield, MA. 13 November 2019.

Pagoto, S. Designing for healthy habits and better outcomes. Pre-conference seminar at Connected Health, Boston, MA, October 2019.

Pagoto, S, Can exercise increase your risk for cancer? The unexpected link between physical activity and melanoma. Exercise Oncology Twitter Conference, October 2019.

Pagoto, S. How to Disseminate Your Work on Social Media (and why you should). Webinar for Academy Health, Sept 2019.

Conference Presentations

1. *Schroeder, M.W., *Groshon, L.C., *Goetz, J.M., *Arroyo, K.M. & Pagoto, S. (May, 2020). Let's tweet about it: A content analysis of #HowIFightDepression tweets. Video poster presented at the 4th Annual UConn Center for mHealth and Social Media Conference, Storrs, CT. youtube.com/watch?v=gqLf7BNtgRk

2. *Goetz, J.M., Champion, G., *Rosen, A.O., *Arroyo, K.M., Waring M.E.,& Pagoto S.L. (2020). Bot vs human: Comparing engagement with automated vs. human-generated tweets from weight management apps. To be presented as a paper presentation at the 41st Annual Meeting of the Society of Behavioral Medicine, San Francisco, CA [conference canceled]

Appearances

Conference Presentations

3. *Schroeder, M.W., *Groshon, L.C., *Goetz, J.M., *Arroyo, K.M & Pagoto, S. (April, 2020). Let's tweet about it: A content analysis of #HowIFightDepression tweets. Accepted as a poster presentation at the 41st Annual Meeting of the Society of Behavioral Medicine, San Francisco, CA. [conference canceled]

4. *Libby, BA, Piera, P., *Holovatska, M.M., *Bracken, M.L., *Herrera, V., Xu, R., Moore Simas, T.A., Pagoto, S.L., Waring, M.E.. Presence of Safety Disclaimers in Instagram Posts about Physical Activity During Pregnancy. Video poster presentation by BL Libby at the 4th Annual UConn Center for mHealth & Social Media Conference, 14 May 2020, Storrs, CT [virtual] youtube.com/watch?v=DCx_P71s7wM

5. *Herrera, V., Zimmer, E., *Libby, B.A., *Bracken, M.L, Moore Simas, T.A., Pagoto, S.L., Waring, M.E. Are #eatingfortwo posts on Instagram promoting overeating during pregnancy? Video poster presentation by BL Libby at the 4th Annual UConn Center for mHealth & Social Media Conference, 14 May 2020, Storrs, CT [virtual]. youtube.com/watch?v=hd3QqtJ33VA

6. *Libby, BA, Piera, P, *Holovatska, M.M., *Bracken, M.L, *Herrera, V., Xu, R., Moore Simas, T.A., Pagoto, S.L., Waring, M.E.. Presence of Safety Disclaimers in Instagram Posts about Physical Activity During Pregnancy. Poster presentation by BA Libby at the 41st Annual Meeting & Scientific Sessions of the Society of Behavioral Medicine (SBM), 1-4 April 2020, San Francisco, CA. [conference cancelled]

7. *Herrera, V., Zimmer, E., *Libby, B.A., *Bracken, M.L., Moore Simas, T.A., Pagoto, S.L., Waring, M.E. How hashtags #eatingfortwo and #eatingfor2 are used on Instagram: a content analysis of pregnancy posts. Poster presentation by V Herrera at the 41st Annual Meeting & Scientific Sessions of the Society of Behavioral Medicine (SBM), 1-4 April 2020, San Francisco, CA. [conference cancelled]

8. *Arroyo, K.M., *Goetz, J.M., Waring, M.E., Berteletti, J., Buller, D., Walkosz, B., Baker, K., Hillhouse, J., Henry, K., Stapleton, J. & Pagoto, S. (April, 2020). Frequency and type of health misinformation in participant comments in a Facebook-delivered cancer risk reduction intervention. Accepted in symposium, "Tweet, Retweet, and Like It: The Spread of Health Misinformation in Online Communities" at the 41st Annual Meeting of the Society of Behavioral Medicine, San Francisco, CA. [conference cancelled]

9. *Groshon, L.C., *Schroeder, M.W., *Arroyo, K.M., *Goetz J.M., & Pagoto, S. (May, 2020). What the health? The media narrative of health-related social media research. Video poster presented at the 4th Annual UConn Center for mHealth and Social Media Conference, Storrs, CT. [virtual] youtube.com/watch?v=DHpXHOD-III
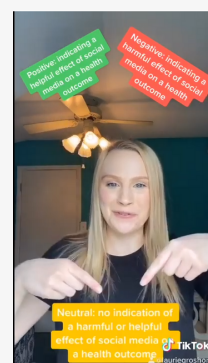
Appearances

Conference Presentations

10. Pagoto, S, Waring, ME, *Arroyo, K, Sidani, J, Chou, S. Tweet, Retweet, and Like It: The Spread of Health Misinformation in Online Communities. Symposium accepted for the 2020 SBM Annual Meeting, San Francisco, CA. [meeting cancelled]

11. Pagoto, S, Tiro, J, Guidry, J, Hoffman, B, Fuemmeler, B. Vaccine Hesitancy and Social Media: Looking Toward a Public Health Agenda. Symposium accepted for the 2020 SBM Annual Meeting, San Francisco, CA. [meeting cancelled]

12. Buller, D, Pagoto, S, Baker, K, Walkosz, B, Hillhouse, J, Henry, K, Berteletti, J, Bibeau, J. Twelve-month Outcomes of a Social Media Campaign to Prevent Indoor Tanning: A Randomized Trial. Paper accepted for the 2020 UV and Skin Cancer Prevention Conference, Mechelen, Belgium. [cancelled]

13. Palacz, K, Idziak, P, Wójtowicz, P, Łuszczyńska, A, Naughton, F, Hagger, M, Quested, E, Pagoto, S, Chamberlain, K, Kwasnicka, D. What does it mean to choose health? A photo-elicitation study. Paper accepted for the 2020 European Health Psychology Society Conference, Bratislava, Slovakia. [virtual]

14. Abu H, Asamoah O, Howard-Wilson S, Villamarin, V, Austin, J, Otabil E, Pagoto S, McManus, D. Community Based Assessment of The Prevalence of Cardiometabolic Diseases, Heart Healthy Lifestyle Practices, and Health Care Access Among African Americans in Central Massachusetts. Poster accepted at the New England Science Symposium [cancelled]

15. Kwasnicka, D., Hesse, B.W., Conroy, D., Waring, M., Hekler, E., Andrus, S., Tercyak, K.P., & King, A. Challenges and solutions of open science related to open access publishing, resource sharing, and citizen science. Panel discussion at the 41st Annual Meeting & Scientific Sessions of the Society of Behavioral Medicine (SBM), 1-4 April 2020, San Francisco, CA. [conference cancelled due to COVID19]

16. Bamgbade, B.A., Sanghai, S.R., McManus, D.D., Lessard, D., Waring, M.E., Forrester, S., Piere-Louis, I., Saczynski, J.S., Prevalence of Psychosocial and Cognitive Multimorbidity in Older Adults with Atrial Fibrillation: The SAGE-AF Study. Oral presentation by BA Bamgbade at the American Pharmacists Association (APhA) Annual Meeting & Exposition, March 20-23, 2020 in National Harbor, MD. [virtual]

 *denotes student mentee

Spreading science on social media: *Graduate students Laurie Groshon and Matthew Schroeder utilized TikTok to create and share engaging, one-minute poster videos for our Annual Conference.*

Annual Conference

Building an Evidence Base for Commercially Available Technology, May 14-15, 2020

Due to the pandemic, the 2020 Annual Conference was 100% virtual and focused on research that evaluates the reliability, accuracy, efficacy, or real world effectiveness of commercially available technology including mobile apps, sensors, devices, or social media platforms. We featured nationally renowned keynote speakers from academia and industry who have expertise in using commercially available health technologies in research. Attendees had the opportunity to participate in virtual breakout sessions to give them closer access to speakers for advice on anything from developing relationships with industry to innovative research designs. Conference attendees were able to apply for seed funding opportunities sponsored by the Center and Calm. Three workshops were held on Friday, May 15. Responses to the feedback survey indicated that people enjoyed the virtual format and 92% of respondents indicated they are very likely to attend our virtual conference in future.

Speakers

Yelena Wu, PhD (University of Utah)
Heather Patrick, PhD (Apple)
David Conroy, PhD (Penn State)
Brie Turner-McGrievy, PhD (University of South Carolina)
Aaron Coleman (Fitabase)
Jennifer Huberty, PhD (Arizona State University, Calm)

Attendees

206 Attendees from
50 Institutions
13 Companies
25 US States
7 Countries
4 Continents

Workshops

How To Write an Effective Seed Grant. Presented by Molly Waring, PhD.
Introduction to Social Network Analysis. Presented by Ran Xu, PhD.
Research Designs for Testing Commercially Available Technology. Presented by Sherry Pagoto, PhD and David Conroy, PhD.

Going virtual: *We used the app Slido to keep virtual attendees engaged through a networking, live polls, and Q&As. Dr. Yelena Wu, PhD (pictured) talked about her work with UV sensing devices and children.*
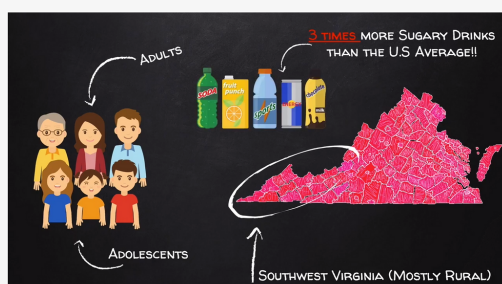
Annual Conference

Building an Evidence Base for Commercially Available Technology, May 14-15, 2020

Instead of a traditional poster, presenters produced a 1-minute video summarizing their research in any way they saw fit. Awards were given to the video with the most views and to those selected by our judges, Loneke Blackman Carr, PhD, RD and Joel Salisbury, MFA for Best Video Poster by a Student and Best Video Poster Overall.The 36 poster videos currently have over 2,000 views on YouTube; see them here on our YouTube playlist. On the conference feedback survey, 51% of respondents agreed or strongly agreed they viewed more video posters than they would have if visiting in-person posters.
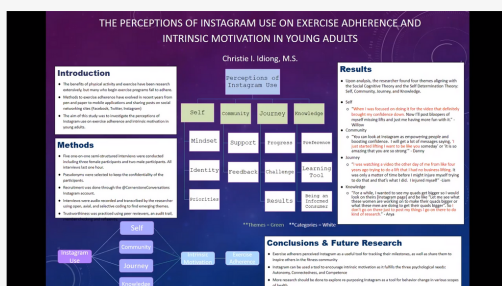
Best Poster by a Student
Brooke Libby, Presence of Safety Disclaimers in Instagram Posts about Physical Activity During Pregnancy. https://youtu.be/DCx_P71s7wM

Best Video Poster by a Non-Student
Maryam Yuhas, Response patterns and effects of a text message based sugar-sweetened beverage intervention for rural caregivers and children
https://youtu.be/hXt5pskkFVg

Most Viewed Video Poster
Christine Idoing, The Perceptions of Instagram Use on Exercise Adherence and Intrinsic Motivation in Young Adults. https://youtu.be/0xfDYe7bhIo

Save the Date: Annual Virtual Conference
May 13-14, 2021

The COVID-19 Pandemic: Media, Misinformation, and Science Communication