# INNOVATION

The connective tissue between research, education, and care

## MaineHealth

#### **INNOVATION CENTER**

#### INTELLECTUAL PROPERTY & TECH TRANSFER

TRANSFORMING CARE

MaineHealth Innovation builds connections to drive diversity of thought, educates to produce creative problemsolvers, and funds to accelerate ideas. By leveraging the ideas, insights and expertise of all care team members to develop novel solutions to our unmet care needs, we are working together so our communities are the healthiest in America.

April 2024 | <u>View Archived Issues</u> | created by Erin McCue

## IN THIS ISSUE

- Innovation Ignite Fund Awardees at the Forefront of Bias Detection in Emergency Department Documentation
- Advancing Novel Stimulant Use Disorder Treatment through Collaboration
- Webinar Series for Bioscience Startups
- 2024 Kickoff: Future of Healthcare Founder Residency
- Making Strides with MaineHealth Patents
- Bringing Innovation Design Thinking to the Cardiovascular Service Line
- Welcome Spring 2024 Innovation Cohort!

- MaineHealth In the News
- Nurturing Joy with SMHC's Care Companion
  Program
- Innovation To Go! Across the System
- Call for Applications: Interprofessional Innovation in Education Award - Deadline April 12
- Opportunities Connect, Educate & Fund
- MaineHealth Innovation Joins MHIR Monthly Staff Meeting
- SMHC Tackles Length of Stay



SUSAN AHERN Vice President of Innovation Susan.Ahern@ mainehealth.org

## A Note from Susan

Susan Ahern - Vice President of Innovation, MaineHealth

Hi Colleagues,

The United Nation's designated **April 21<sup>st</sup> as World Creativity and Innovation Day** to raise awareness of the role of innovation in all aspects of human development! In that same vein, I am thankful that

22,000 care team members voted to include Innovation as a 6<sup>th</sup> value back in 2017. This issue is packed with awesome highlights of the curious and courageous colleagues who are hard at work, advancing a breadth of novel ideas that are truly making a difference.

Please view our newest short video below and say Hi! (Healthcare Innovation

MaineHealth Innovation 2023 Celebration Video

With kind regards, Susan

## Innovation Ignite Fund Awardees at the Forefront of Bias Detection in Emergency Department Documentation

Members of Dr. Isha Agarwal's study team (Liz Scharnetzki, PhD and Jess DiBiase, MPH, pictured here) presented a poster at the annual meeting for the Society of Personality and Social Psychology (SPSP) in San Diego this past February which outlined preliminary results from their Innovation Ignite Fund Award, Using Natural Language Processing to Detect Bias in



*Emergency Department (ED) Clinical Notes.* SPSP is the world's largest organization of personality and social psychologists, and the annual convention is the most highly anticipated event for social and personality psychologists working in academia, non-profits, government, and private sectors to present and discuss research.

The team's presentation, "You Came to the Wrong Place": Cues of Belongingness versus Exclusion in Emergency Department Documentation, spotlighted the unique, one-of-a-kind database of emergency department clinical notes they have been developing. The team ultimately hopes to leverage this database to assess linguistic cues of belonging versus exclusion, a key manifestation of bias, in ED clinical notes using Natural Language Processing. The SPSP poster focused on describing the emergency department patient population and related clinical notes. For example, initial descriptive statistics suggest that word count frequencies vary by acuity score, length of stay, and emergency department NEDOCS score, such that notes are shorter when patients have lower acuity, spend longer in the emergency department, and when the emergency department is busy. The team also presented their methodological plan for adapting, pilot testing, and refining validated measures to identify the presence and type of linguistic cues that may signal belonging or exclusion in ED clinical notes. This work was wellreceived by SPSP attendees!



# Advancing Novel Stimulant Use Disorder Treatment through Collaboration

On March 15, MaineHealth Innovation Ignite Fund Awardees Leah Bauer, MD, Christine Wyman, LCSW, LADC, CCS (pictured), and Maggie Jansson, MPH, RN, CLC participated in the Maine Substance

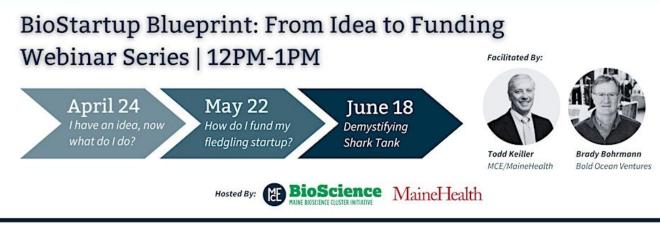
**Use Disorders (ME SUD) Learning Community's 2<sup>nd</sup> Annual Conference** where they shared insights on the use of *Contingency Management for the Treatment of Stimulant Use Disorder*. Their presentation addressed the growing prevalence of stimulant use

disorder in clinical settings, advocated for the implementation of contingency management as an evidence-based treatment, and outlined the design of their project tailored to treat this population.

During the presentation, they highlighted collaborations with MaineHealth Innovation, The State of Maine, Co-Occurring Collaborative Servicing Maine, Spurwink, Richard Rawson, PhD, and Contingency Management Innovations, which were instrumental in initiating the project. It was announced that all stakeholders within MaineHealth recently reached an agreement on the launch of the Contingency Management pilot program, and the team anticipates enrolling their first patients within the coming month.

## Webinar Series for Bioscience Startups

Join MaineHealth Innovation and Maine Center for Entrepreneurs for a 3-part BioStartup Blueprint webinar series. Todd Keiller, Director of Intellectual Property and Technology Transfer at MaineHealth and BioInnovate Program Manager at Maine Center for Entrepreneurs, and Brady Bohrmann, Managing General Partner at Bold Ocean Ventures and MaineHealth Intellectual Property and Business Development Committee member will talk about starting up a new bioscience, life science, or healthcare venture from idea to funding! <u>Learn More and Register</u> <u>Here!</u>



April 24 I have an idea, now what do I do? May 22 How do I fund my fledgling startup?

This session will cover crucial considerations before forming a company. What intellectual property assets do you possess, and what measures should be taken to safeguard them? Has your value proposition been thoroughly validated through customer discovery? What are the elements of a good business plan, and what legal steps merit attention? Featuring Andrea Suter, Esq. and Partner of Pierce Atwood, LLP.

This session will explore the diverse funding landscape in Maine, both dilutive and nondilutive. The panel will cover the best practices for preparing and approaching funding sources. What milestones must your company achieve to access these funding opportunities? Which aspects of your company are pivotal when seeking support from these sources? June 18 Demystifying Shark Tank

What is it like to deal with venture firms, and how is it different from other funding avenues? What criteria must a venture firm consider before committing to investment? How do they make this decision? What transformations does your company undergo when you take on venture funds?

## 2024 Kickoff: Future of Healthcare Founder Residency

Join us on Thursday April 25th, 5-7pm for the 2024 Kickoff: Future of Healthcare Founder Residency!

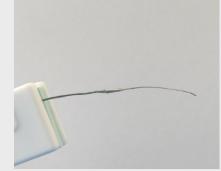
Be among the first to hear about the companies joining the Future of Healthcare Founder Residency, as we unveil the 2024 cohort of the program that's turbocharging Maine's growing healthcare technology industry. The Thursday, April 25th Kickoff Event serves as a celebration of our 2023 cohort's achievements and the official launch of the 2024 Future of Healthcare Founder Residency. Join us as we meet the new cohort of companies who will help shape the future of healthcare! We will also explore successful collaborations between Future of Healthcare Founder Residency companies and partners MaineHealth and Northern Light Health.

Designed in partnership with Mainehealth, Northern Light Health, and Maine Venture Fund, the Roux Institute's Future of Healthcare Founder Residency is the first of its kind in northern New England. Participants of the program received a \$50,000 investment and opportunity to engage with top clinicians and healthcare experts, investors, mentors, and growth-accelerating programming.

#### **Event Details**

**Title:** Future of Healthcare Founder Residency: 2024 Cohort Kick-Off **Location:** The Roux Insitute, 100 Fore St, Portland, ME / Virtual option included in





## Making Strides with MaineHealth Patents

MaineHealth continues to forge ahead with significant advancements through its Bonfire and Ignite Investments, focusing on Soft Robotic Angiography (SRA) (pictured), Collapsible Aerosol Particle Enclosure (CAPE), Therapeutic Activity of Immune Checkpoint Inhibitors, Surgical Balloon Spacer, and Safety Garment.

**Rob Ecker, MD,** co-founder of SRA, has secured two patents and awaits the issuance of a third. Meanwhile, led by **Samir** 

Haydar, DO, the CAPE team (Kaitlyn Main, MD and Elizabeth Hamilton, MD) has obtained its first issued patent and filed for another for their improved air handling system. This collaboration with patent partners Dave Eagleson and Kara Held at the Baker Company and Paul Tyson from Thermoformed Plastics of New England has been crucial to this endeavor. Furthering the momentum, Peter Brooks, PhD, and his team have been issued patents in Canada and Europe for the Therapeutic Activity of Immune Checkpoint Inhibitors, complementing their already issued patent in the United States. Jeremy Lott, MD, and Erich Russell, MD, have received a provisional patent for their surgical balloon spacer, designed to revolutionize the safety and efficacy of ablation procedures. Additionally, Cohort participant, Nanci Goudey, RN, MPH, has filed for the Safety Garment provisional patent.

Congratulations to all innovators! Exciting innovations are underway at MaineHealth, shaping the future of healthcare technology!

## Bringing Innovation Design Thinking to the Cardiovascular Service Line

MaineHealth Innovation is excited to collaborate with a dedicated workgroup lead by James Powers, MD and Sanjeev Francis, MD with Executive Sponsorship by Marco Diaz, MD and project management from Sarah Chang, Improvement Specialist II. This project, titled Improving Patient Access to Optimal Coronary Artery Disease Treatment (IMPACT-CAD), aims to enhance patient care pathways.

Our partnership was initiated with two immersive working sessions, designed and facilitated by Carla Muniz, Innovation Lab Program Manager. These sessions, rooted in design thinking principles, were instrumental in igniting the creative process to generate innovative solutions.

The first session centered on crafting a **Customer Journey Map**, a visual representation illuminating patient needs, actions, touchpoints, and pain points throughout their referral journey to Maine Medical Center (MMC). To lend a diverse perspective from outside of healthcare, **Shannon Coffin, Vice President of Community Partnerships at Good Shepherd Food Bank**,

offered expertise in transportation and logistics.

Next, an **Ideation Session** was held with the objective of generating new ideas to improve access for cardiac transfer patients from referring hospitals. The diverse perspectives contributed by participants generated a portfolio of ideas, which will be further explored and refined by the workgroup.



Back row left to right: Katrina Jacobson, Innovation Administrative Specialist III, Laurie Burton, RN, R7 Manager, Cameron Donaldson, MD, Interventional Cardiologist, James Powers, MD, Division Director Cardiology, Shannon Coffin, Vice President of Community Partnerships at Good Shepherd Food Bank, Kathy Mercier, NP, Cardiac Advanced Practice Provider, Susan Ahern, Vice President Innovation

Front row left to right: Carla Muniz, Innovation Lab Program Manager, Richard Veilleux, Cardiovascular Service Line Program Manager, Sarah Chang, Improvement Specialist II

**Not pictured:** Nate Mick, MD FACEP, Associate Chief Medical Officer/Vice President of Medical Affairs, Dan Kavanaugh, MBA, Senior Director - Patient Flow and Access

"We truly appreciate the great work from the innovation team. It resulted in a fun and productive meeting. Look forward to further collaboration." -Dr. James Powers

## Welcome Spring 2024 Innovation Cohort!

Eight MaineHealth care team member projects have been selected to join the Spring 2024 MaineHealth Innovation Cohort, an 8-week program designed to empower teams to advance their "back of the envelope" ideas. The first session, scheduled for April 11, will see participants sharing their innovative concepts and kickstart early investigations to propel their projects forward. Throughout the program, teams will focus on refining their pitch, conducting customer discovery, discussing minimum viable prototypes, and exploring intellectual property considerations. Stay tuned for updates on these exciting projects!

#### Angela Leclerc, PA, Elizabeth Herrle, MD FHM, FACP, Meredith Beauregard, MSPA, PA-C, Mark Goode, MSPA, PA-C | Maine Medical Center (MMC)

• MaineHealth Educational Programming Application (MEPA)

#### Lauren Ciszak, MD, Eva Weinstein, Olivia Weinstein, RDN, Marin Johnson, MS | MMC

• Rewire Health - Mobile Culinary Medicine Education for Rural and New Mainer Populations

Melissa Zelaya-Floyd, PhD, Alec Luro, PhD, Patricia White | MMC

• iPACE<sup>™</sup>

Patrick Tierney, Eric Worthing, MD | LincolnHealth

• Baby Warmer Rail System

## Shelby McDonnell, MS, Heather Stephen, RN, Andrew Pixley, RN, BSN, Marie Simoneau, Ardyce Peters, MS, Juan Pama-Vargas, MD | MMC

• Living Kidney Donor Mobile Device App for Follow-Up Tracking

#### Shinya Amano, MD | Maine Medical Partners

Bug Bite Stickers

#### Todd Lamoreau, PT | Mid Coast Parkview Health

• Neck Saver Laptop Holder

Sam Woodworth, MD | MMC

• Inspiring Enduring, Child-Like Curiosity: Creating an Illustrated Book for Internal Medicine Learners

## MaineHealth In the News

Mainebiz highlighted the collaborative efforts of MaineHealth's Doug Sawyer, MD, Chief Academic Officer, Robert Kramer, MD, Cardiac Surgeon, and Felistas Mazhude, MPH, Project Manager - Research, in partnership with The Roux Institute's Rai Winslow, Data Scientist, shedding light on the transformative potential of artificial intelligence (AI) in the medical field.



Discover how AI is revolutionizing healthcare practices in this <u>compelling story</u>.

## Nurturing Joy with SMHC's Care Companion Program

It has long seemed a paradox to me that such depletion of joy in work can pervade as noble and meaningful an enterprise as healthcare. What we in the healing professions and its support roles get to do every day touches the highest aspirations of a compassionate civilization. We have chosen a calling that invites people who are worried and suffering to share their stories and allow us to help. If any work ought to give spiritual satisfaction to the workers, this is it. "Joy," not "burnout," ought to rule the day."

-Donald M. Berwick, MD, President Emeritus and Senior Fellow, Institute for Healthcare Improvement

These stirring words from Donald M. Berwick, MD, President Emeritus and Senior Fellow at the Institute for Healthcare Improvement, set the stage for a recent workshop at Southern Maine Health Care (SMHC). **Deborah LaPointe, Companion Educator,** alongside **Lynn Lessard, Companion Program Supervisor,** initiated a session facilitated by Carla Muniz, Innovation Lab Program Manager, focusing on infusing "Joy into Work" within the SMHC Care Companion program.

In a concerted effort to diversify perspectives and tackle shared challenges collaboratively, the workshop welcomed both Care Companions and Registered Nurses. Participants spent time building **Empathy Maps**, a team exercise aimed at understanding the thoughts and emotions of specific groups through their lived experiences. From there, teams engaged in **Ideation**, a creative process aimed at swiftly generating a plethora of innovative ideas.

The Care Companions expressed gratitude for the opportunity to voice their perspectives and emerged with fresh insights aimed at enhancing team communication and fostering a sense of belonging. Through initiatives like these, we continue to cultivate environments where joy prevails, reaffirming our commitment to the well-being of both patients and caregivers alike.



## Innovation To Go! Across the System

Innovation To Go!, MaineHealth Innovation's initiative aimed at raising awareness about the services available to care team members through on-site visits, has been a resounding success! Visit Erin McCue, Innovation Coordinator, at an upcoming location:

Franklin Memorial Hospital | TODAY! 4/1 from 11am-1pm MHIR | 4/11 from 1pm-2pm



MaineHealth Innovation is dedicated to fostering innovation across the MaineHealth system. If you are interested in a pop-up visit, please email <u>innovation\_center@mainehealth.org</u>

# Call for Applications: Interprofessional Innovation in Education Award

The Interprofessional Innovation in Education Award is a collaboration between the Maine Medical Center Department of Medical Education and MaineHealth Innovation and supports novel ideas that solve an unmet healthcare professional education need. In the spirit of interprofessional collaboration, this award requires that the team is representative of more than one health profession and the innovative idea applies to learning and development across multiple health professions. <u>Applications</u> are open and accepted through April 12, 2024.

#### Connect Events

Innovation Brewing Ideas Coffee Corner 1st Tuesday of the month, 8:30-9:30 am April 2 Join Here Educate Learn + Discover

Intellectual Property Information Session 2nd Wednesday of the month, 7:30-8 am April 10 Join Here Fund Seed Funding

Interprofessional Innovation in Education Award Application deadline April 12 Apply Here



## MaineHealth Innovation joins MaineHealth Institute for Research (MHIR) Monthly Staff Meeting

MaineHealth Innovation recently joined MaineHealth Institute for Research (MHIR)'s Monthly Staff Meeting. This collaboration underscores the dedication to working closely together, fostering synergy within the academic affairs partnership. During the meeting, we had the opportunity to showcase Innovation initiatives, encouraging collaboration among our teams. With over 100 attendees, it was a successful session for all involved!

## **Innovation Stories**

We're mapping stories across MaineHealth to highlight incredible innovative work happening around the system and to inspire others to share their stories. Do you have an innovative story that you would like to share? Email <u>innovation\_center@mainehealth.org</u>

Southern Maine Health Care Tackles Length of Stay Southern Maine Health Care (SMHC) recently demonstrated the power of innovation through its approach to addressing rising inpatient length of stay (LOS). Recognizing the importance of diversity of thought, SMHC's executive leadership tasked a multidisciplinary team with developing solutions. Led by Andy Powell, MD, and Ger Webster, RN, the team included members from various departments who collaborated to implement Interprofessional Bedside Rounding, a novel approach to inpatient care.



Through months of ideation and collaborative efforts, the team devised a groundbreaking strategy to geographically cohort patients on a single floor. Armed with colored sticky notes, the team mapped out patient flow from the Emergency Department to floors, changes to Epic, and the role of nursing, medical hospitalists, and case management, enabling collaborative rounds.

Supported by SMHC leadership and facilitated by **Alex Reppond, MS, Southern Region Operations Transformation Manager,** this initiative exemplifies the transformative power of innovation, where the collision of ideas leads to novel solutions. SMHC's story shows how organizations can overcome challenges and drive success through innovation and diversity of thought. To read the full story, <u>click here</u>.

#### MaineHealth Innovation Center Programs

Innovation Cohort | Innovation Fund | Innovation Blender | Innovation Workshops Brewing Ideas Coffee Corner

#### The MaineHealth Innovation Team:

<u>Susan Ahern</u> - Vice President of Innovation <u>Todd Keiller, MBA</u> - Director of Intellectual Property & Technology Transfer <u>Erin McCue</u> - Innovation Program Coordinator <u>Carla Muniz, M.Ed.L</u> - Innovation Lab Program Manager <u>Katrina Jacobson</u> - Administrative Specialist III

Let us know how we can help support innovation: innovation\_center@mainehealth.org

Can't Find Us Online?



MaineHealth Innovation | 22 Bramhall Street, and The Roux Institute, 100 Fore Street, Portland, ME 04102 innovation.mainehealth.org

Unsubscribe innovation center@mainehealth.org

Update Profile |Constant Contact Data Notice

Sent by innovation\_center@mainehealth.orgpowered by

