The NNE-CTR Quarterly Newsletter

Winter 2024





Welcome to the NNE-CTR's Winter Newsletter

In this season of new beginnings, it seems fitting to start with the basics, as in, "Um, what is the NNE-CTR, anyway?" At the Northern New England Clinical Translational network ...

We inspire and fund researchers who solve public health and healthcare challenges in rural northern New England.

We're *matchmakers*: We partner researchers with communities, provide mentorship and guidance, and secure instrumentation and software, and, yes, provide funding.

We are a three-state network engaging Vermont, New Hampshire, and Maine.

And we're cohesively organized around a series of *cores*, all of which are set up to help investigators in the research process:

- The Biostatistics, Epidemiology & Research Design Core supports NNE-CTR members to conduct the highest quality clinical and translational research. Our Research Navigators provide expert guidance and assistance with the research process, from study design all the way through to statistical analysis and reporting.
- The Community Engagement & Outreach Core initiates, guides, and supports communityengaged research that addresses community priorities.
- The Pilot Projects Program Core provides financial support for research and/or community projects.
- The Professional Development Core, featured in this edition of the newsletter, supports investigators at all career stages through personalized mentoring, research navigation services, external career resources, and collaboration.
- The Tracking & Evaluation Core tracks the goals of the NNE-CTR and provides data on progress and outcomes across the network.
- The Translational Research Technologies Core provides all NNE-CTR members with support for clinical and translational research through access to state-of-the-art tools and technologies.
- The Administrative Core oversees and coordinates all of the above and answers any
 question (no matter how basic!) you might have about how the NNE-CTR can work with you.

The NNE-CTR Commitment to Health Equity







Gary Stein, Ph.D.

A Message From Our Pls

Strategically pursuing health equity has been the cornerstone of our NNE-CTR program. Organizationally, the combined capabilities of the NNE-CTR Cores synergize to identify and respond to community-specific and regionally-shared health and healthcare requirements. We are responsive to northern New England rurality as well as to needs and expectations of New Americans and Native Americans.

The Community Engagement and Outreach Core, an NNE-CTR centerpiece, has developed a paradigm for establishing community partnerships that are increasingly providing support for development of collaborative initiatives that are directly relevant to health and healthcare challenges. Research initiatives to identify and rectify regional limitations with COVID testing, COVID vaccination hesitancy, and the post-acute complications of COVID infection and treatment provided evidence-based confidence in the importance of NNE-CTR contributions to health and wellbeing. The BERD Core, with recent investments in data science capabilities, has linked patient Electronic Health Records with insights into clinical outcomes. And our Translational Research Technologies Core developed novel approaches for specimen preparation to expedite virus screening.

Emerging from the pandemic, NNE-CTR is committed to emphasizing health equity as we restore the momentum in the prevention, early detection, and treatment of chronic diseases and focus on the increasing social and healthcare complications that are associated with substance abuse, food insecurity, climate health, and the mental health crisis.

We would be remiss without acknowledging the importance of our Professional Development Core that is instrumental for mentorship of NNE-CTR members and collaborators throughout the career continuum. One of the most valuable roles of the Professional Development Core is the program that is committed to training and credentialling clinical coordinators who are pivotal for broadly accessible clinical research and clinical trials to alleviate northern New England health and healthcare disparities.

The Pilot Project Program is the engine that drives clinical and translational investigation and development of clinical trials that are aligned with requirements of northern New Englanders. Expanding NNE-CTR programs to maximize opportunities for health equity is a priority for us that is welcomed responsibility.

-- Gary & Cliff

All Politics is Local ... And That's a Good Thing



Stone arch bridge in Hillsborough, New Hampshire

Legendary House Speaker Tip O'Neill famously said, "All politics is local." This advice pairs well with another call to action from the other side of the planet: "Be the change you want to see in the world" is Gandhi paraphrased.

Today, we fret over the divisions that seem to be everywhere in the country and the world. We all want change.

Well, what if change is literally in our hands every moment of the day?

The NNE-CTR brings many people with a vast array of skills, under one roof,

and varied though our work may be, it's all related to one or both of the following: preventing illness or healing it. Therefore, our perspectives and our skills leave us uniquely positioned to help in ways that we may not always think about. Last summer, op-eds from The Boston Globe and the The New York Times came out about a month apart. In the former publication, Omer Aziz ends with this plea:

We need less scolding and more dreaming. This means putting forth a concrete, substantive, affirmative vision of the progressive project, one that will materially improve the lives of ordinary working-class Americans. It means genuinely fighting for social justice rather than just posting about it on social media. It means reestablishing a spirit of open debate. And it all begins by getting out of our bubbles and doing the democratic work of convincing people of our vision.

A few weeks later, writing in the New York Times, David Brooks asked, "What if we're the bad guys here?" and provides the startling fact that, in the last presidential election, Biden won only 500 counties to Trump's 2,500 but that Biden's counties accounted for 71% of the American economy.

The divide doesn't start or end with politics. Politics is just an expression of it. As we know in medicine, if you want to cure something, you have to get at the cause.

It seems an ironic feature of our times that you usually can tell something is a problem when organizations signal that the solution is a part of their core values. The web has given us the apt descriptor "slacktivism." Trainings and box-checking and acknowledgments at the bottom of our emails are the easy part. The hard work is old-fashioned and analog. It can't be digitized and mass-dispersed across our e-networks—where after all, we're generally just talking to each other. But

unlike the empty-calorie feeling that signaling leaves behind, doing the work leads to bone-deep satisfaction.

Many who swim in modern white-collar circles came from quite modest roots. We should be proud of the hard work and years it took to move into more privileged enclaves and more comfortable lives. But once there, as Matthew Stewart pointed out in The Atlantic, "We seem to be the last to notice just how rapidly we've morphed, or what we've morphed into." Stewart argues, with good evidence, that we (yes, we) are part of the top 9.9%. And so, it can become too easy to confuse, "I'm never going back" with dropping in for a visit. Because from time to time it's good for all of us to return home.

The road back is close by, the trip is an easy one, and we at the NNE-CTR are poised to make it a healing journey.

The bright side is that the road back is close by, the trip is an easy one, and we at the NNE-CTR are poised to make it a healing journey.

Consider: What if instead of being viewed as data scientists, we were viewed as neighbors trying to provide better healthcare? What if, instead of being seen as white coats with wordy titles and feet planted in labs and clinics, with pipettes and stethoscopes in our hands, we were seen as partners with fellow community members working to cure cancer? And what if, instead of being perceived as public health nags, we were just the people you run into at the dump?

What's the first step on that path? Here's an example: A former high-ranking Vermont politician, the fruit of fine Massachusetts schools and an ivy league university, coached a little league team in one of Burlington, Vermont's less privileged neighborhoods. Describing the experience, he mentioned the "Barnes salute," slang for the middle finger the youth would flash when they didn't agree with something he said.

This politician understood the importance of being with people where they live.

Rural northern New England is a place of small towns and individuals, of possibility. In a world moving further apart, the social fabric, while frayed, still holds here and is therefore fixable. The opportunities are endless for community members with not only advanced skills but also memories that recall what it was like to grow up cheek-to- jowl with people experiencing the very issues we're all working on today.

All politics is indeed local. And all issues eventually become political. There are budget shortages and community needs aplenty that require legions of volunteers. Serving a meal, driving someone to an appointment, reading with a child, or sitting on a dugout bench are all opportunities to start conversations, to apply our skills to a world in need, and to demystify what we do for the people we serve. For the new year, let's consider these not as chores but as gifts—as a way to begin the precious work of closing the divide.

Let's return home for a visit.



Investigator Spotlights

Editor's Note:

Beyond highlighting the groundbreaking work of NNE-CTR pilot project investigators, we have a nakedly ambitious goal: We want you to picture yourself in their shoes. All great projects start with an idea, and your NNE-CTR is here to support and promote the kind of research that makes for a healthier northern New England. If you have a great idea that could use a boost, consider our <u>pilot projects program</u>.





Seeing the Forest for the Trees

Pilot project investigator Dr. Tim Burdick on physician burnout, the promise of card studies in the digital age, and yes, trees

Dr. Tim Burdick is the Associate Chief Research Officer for Informatics at Dartmouth Health. He's also the principal investigator for an NNE-CTR pilot project that uses card studies to both learn about physicians' preferred methods of entering data and to better understand factors contributing to physician burnout. Awarded the grant in 2023, Tim's team already has one paper in progress.

This interview has been edited for length and clarity.

Matt: It's clear that you have a deep interest in rural health. When you think about the NNE-CTR's mission and your interests, what comes to mind?

Tim: With an aging population of family medicine providers, nurse practitioners, and PAs--both as they age out and also with people retiring early because of burnout--rural communities are already facing a crisis of lack of access. We need to be doing as much as we can to understand what's happening in those communities. So, developing new models of healthcare delivery and testing those out in the communities is something that I want to be spending the last 10 years of my career on.

Matt: So, before we get into defining what a card study is and what you're specifically researching, I was fascinated to read about the fact that, before you earned your medical degree and practiced family medicine, you started out in earth science, geography and environmental studies. And now you're doing healthcare informatics. What's the common thread?

Tim: The common thread is that I just like learning. So, I have kind of migrated from one subject matter and one career to another over time and interestingly find linkages between all of those things. So, when I got my master's degree in in forest ecology, I ended up taking a year of graduate courses in biostatistics and learned how to create large databases (for) measuring trees and measuring forests. It turns out it is actually the same as measuring and studying populations of people.

With an aging population of family medicine providers, we need to be doing as much as we can to understand what's happening in those communities.

Matt: So, you were interested in the health of forests at one point, and now you're interested in the health of people.

Tim: I'm interested in the wellbeing of communities and that includes the ecosystem of nature, the ecosystem of communities and populations. And then increasingly, it's very clear that there's a strong connection between wellbeing as human beings and our connection with nature.

Matt: Tell me about card studies in the macro sense. What are they and how have they been used in the past?

Tim: Card studies are a way to get inside the head of what a healthcare provider is thinking and why they're making decisions. The initial card studies go back probably 40 or 50 years, and the idea was that, traditionally a physician working in an outpatient office, they would have their white coat and they'd have 15 index cards stuffed into their front pocket. And on those index card would be pre-printed three or four questions.

So, every time they see a patient with sore throat, it says [for example], did you prescribe an antibiotic? Yes, or no? Did you do a strep test for this patient? Yes, or no? In the past and in other settings, we will often survey providers and ask them what they typically do. But that's inherently fraught with recall bias and they'll say, "Well, I think I almost always get a strep test before I prescribe an antibiotic." But when you go back and look, they're not actually doing it. And so, the card can be done in real time, as they're in the exam room with the patient or right after they come out of the exam room with the patient. So, it's likely to be more accurate.

The second benefit of the card study is that you can get large sample sizes of hundreds or thousands of responses. The individual burden of research burden on any one provider is quite small. This makes it easy to engage primary care providers, rural providers who are very busy and otherwise might not participate in research. It also gives you a larger diversity of samples [because] you're not just asking providers who work in an academic setting; you're getting people who work in small towns and rural areas. Ninety-nine percent of patient care happens in small outpatient clinics and yet 90% of the research that we do happens in academic medical centers and so it's much better aligned with what's actually happening out there in the world.

This card study is the first project in the country that we're aware of to take card study methodology that traditionally was on paper index cards and look at how you can translate that to two modern platforms.

Matt: Why did you want to do this particular card study project?

Tim: The project hits a couple different things for me. One is it's focused on primary care clinics, which is near and dear to my heart as a family doc, and it focuses on translational science. So

specifically, how do you study and improve how we do science? This card study is the first project in the country that we're aware of to take card study methodology that traditionally was on paper index cards and look at how you can translate that to two modern platforms. One is the electronic health record (EHR) platform, and number two is a phone app. What we don't know is which of those three methods--the paper cards, the phone app, or the electronic health record cards--is the most effective and is going to be adopted by primary care providers the most.

This pilot will lead to a larger randomized control trial. So, the net effect is not just the subject matter that we are studying, which in this case is burnout. But it's also developing and evaluating the research methodology itself. And so, I like anything that we can do that not only advances one topic but has the potential to improve and make more efficient how lots of researchers in lots of different domains could do their research down the road.

As we were saying our goodbyes on the video call, Tim put me in the interviewee's seat for a moment as he commented on a picture behind me and thus brought our conversation full circle. (Note: In statistics, fractals are both representative parts of a whole.)

Tim: I like the trees off to your right there. [Going back to] the first part of our conversation about nature and humans and well-being, the fractal patterns in trees actually have a specific imprint on our brain that produces positive brain chemistry. That's why you have that picture sitting next to you, because whether you are aware of it or not, that's producing positive brain chemistry for you.



Engineering and "Girl Scout Cookies": A Pilot Project Recipient Builds a Cancer-Killing Delivery Device

Dr. Rachel Floreani is a biomedical and mechanical engineer at UVM's College of Engineering and Mathematical Sciences. Now, before you read about her innovative cancer research, you'll want to know about alginate, which is derived from seaweed. So, here's your official definition, courtesy of Lee & Mooney: "Alginate is typically used in the form of a hydrogel in biomedicine, including wound healing, drug delivery and tissue engineering applications. Hydrogels are three-dimensionally cross-linked networks composed of hydrophilic polymers with high water content. Hydrogels are often biocompatible, as they are structurally similar to the macromolecular-based components in the body and can often be delivered into the body via minimally invasive administration."



Dr. Rachel Floreani

In other words, alginate beads can be used as tiny Ubers delivering medicine at the door of the places it's needed most.

This interview has been edited for length and clarity.

Matt: So, how does an engineer end up in cancer research?

Rachael: I think a lot of cool stories about medicine are around these little accidents or things that weren't supposed to happen. And so that's exactly how this came about. And I like to think that because I didn't work in cancer and because I had no idea what I was doing, that it actually worked-because no one was telling me that it wouldn't work.

Matt: How were you using your alginate beads?

Rachel: We wanted to see if we could get tissue to grow; we wanted to tissue-engineer lungs. And all we had in the lab at the time were lung cancer cells. And so, [we thought] if we give a growth factor to a healthy cell, it loves it, so we're just gonna use these cancer cells. And if they love it, then we know that our drug is active. [But] all the cells died. So, we said, 'What did we do wrong?' So, we did it again. The same thing with these cancer cells; they died. And we then got some regular cells and they survived. So, we sat down and we discovered that there are some studies that show that if you overstimulate a cancer cell with growth factor inside, it will die.

Because we were bypassing the growth factor on the outside of the [cancer] cell, when we stuck that growth factor in [the cancer cell] and it released out of our bead into the cytoplasm, the cancer cell didn't know what to do with that signal and the evidence out there essentially says that because that feedback loop was shut off, there's other feedback loops that essentially are causing the cell to go through apoptosis (cell death).

Matt: To sum up, the growth factor, delivered to a cancer cell via an alginate bead, becomes cancer-killing medicine, correct? Could you educate me a bit more on growth factors?

Rachel: A growth factor is a protein. It's a biomolecule, almost like a plastic. And our cells make this plastic and it has a really unique way that it likes to make shapes. So, these growth factors or these plastic chains will fold themselves into unique shapes so that they can deliver a message to another cell. And so, we call them growth factors because they will initiate a development or growth of a new tissue or cause the cells to multiply.

Matt: Let's talk about the role of alginate, the material you use to make beads that deliver the growth factor.

Rachel: It's a really simple sugar, so cells aren't afraid of it. First of all, it's not toxic. It's a plant sugar, a plant polysaccharide. Mammalian cells aren't affected by it. The body doesn't really do much to it, so it's a great molecule to play with. It's just a really versatile material. You can eat it.

The reason why I like using alginate is that in order to get a drug inside of a cell you need to be a stealthy as possible and you don't want to alert the cell. I essentially am trying to deliver this little cookie, this Girl Scout cookie. And the cells love the Girl Scout cookie. They love them. But inside of my Girl Scout cookies is the bomb, and so then once they bring the cookie inside then the bomb goes off, and here comes my growth factor, and this particular bomb is a harmful to cancer cells. [But] what we've shown is if we take normal cells, they also love the cookie. But then this bomb for cancer cells just ends up being another cookie for healthy cells.

Matt: Talk for a moment about your longtime collaborator Dr. Jeff Spees.

Rachel: Jeff and I have been working together for 12 years. My first day on campus when I told people about my work, they said you need to talk to Jeff. He's a great, great scientist and a great friend. He's in the Department of Medicine and he doesn't really do cancer research either. He's published on lung cancer, but he's really a stem cell biologist. He comes up with drugs for treatment after heart attacks. And I was always taking my vehicles, putting the drugs in them, and then his students would put them inside of his cells and it worked.

I'm an engineer and I believe that we really can make solutions simple, and when I look at what people have to go through to get treated for cancer, that's not a simple situation.

Matt: You've been clear that you're an engineer, not a cell biologist, an important distinction because you've said that your job is the delivery mechanism—the alginate bead—and as for exactly why the growth factor is killing cancer cells, you're inviting the cell biologists to jump in and find out. But in any case, it strikes me your cancer work is a reminder that engineering can be a very creative mindset. What are your thoughts here?

Rachael: I'm an engineer and I believe that we really can make solutions simple, and when I look at what people have to go through to get treated for cancer, that's not a simple situation. Those are very toxic chemicals. So, when I sit down, I think about, could I create something that's non-toxic that a cancer patient will receive? Maybe it's intravenously, but because it's not toxic, it only targets the cancer cells, so a person isn't gonna get weak, they're not gonna get sick, their hair is not gonna fall out.

Matt: What role did the CTR pilot project play for you with the Pilot Project funding?

Rachael: The funding did three things. One, it validated my [ideas] a little bit, as in, OK, there is some reason why I should be doing these experiments. The other thing it did is it provided funding to pay for someone to come in and do the work ... to help with supplies, trying to store old cells, a lot of that stuff. It would have taken four times as long if I wouldn't have had the money to pay the people to work on this project. And then the other thing is it gave us more data sets. And so we have now two more, three more cell lines where we show that it's been effective.

Matt: Does it make you more optimistic about getting future, more robust funding from different sources?

Rachael: Yeah, definitely. I think we really do have a good chance at a big grant and there are certainly other ones that we are gonna be putting in.

Matt: The NNE-CTR's mission is to improve rural public health in Vermont, New Hampshire and Maine in underserved communities. When I say those words, what do you think about regarding your research? And let me ask you to answer this question starting with your upbringing in rural Michigan.

People aren't sitting up in Highgate (Vermont) or in Gaylord, Michigan, where I'm from, trying to be resistant to medicine or trying to make it difficult or to not make their doctor's appointments. They can't take days off of work.

Rachel: We were in the middle of nowhere and my family was uneducated. My grandfather actually dug ditches for a living, and my dad did not have running water in his house until he was 16 years old—and he had five sisters.

So, when I think about simply treating people, keeping the cost down, we know we don't have to treat them like they're dumb. Growing up in a small town taught me all of that. People aren't sitting up in Highgate (Vermont) or in Gaylord, Michigan, where I'm from, trying to be resistant to medicine or trying to make it difficult or to not make their doctor's appointments. They can't take days off of work. And so yeah, I am very aware I did not grow up with a lot of privilege. I am very aware that there are a lot of people out there who are smart, who are able, but they live in secluded, isolated areas and they haven't been formally educated.

Matt: What comes to mind when I say the words "translational research"?

Rachael: I'm 100% glad you asked that. So, one thing that I don't get to talk about that much is the real translational [part]. And so, I was working with these beads, and I was trying to think, how would you actually deliver this to someone?

And so I sat down with [my engineering] students and I said all right, so let's imagine I have my drug, I have my growth factor. What else can I make with alginate? Now imagine you have a woman. She has cervical cancer and she lives in Highgate and she doesn't have a car. She doesn't have any family around and she can't make it to UVM five days a week for chemo. So, what my group came up with is a tampon applicator.

The gel would be released from the applicator just like a tampon. The idea is that a woman would take a box of 30 applicators home. And so every day she would take one out and deliver her own medicine locally for her cervical cancer. And what I loved is not only the fact that you have to treat people who can't get to the hospital, but also oftentimes people in rural communities aren't that educated and they might not have the patience or the luxury of time to learn how to do something. [But] if you were to tell a woman who has cervical cancer that she has to go home and insert this every day, she would do it.

The students did a great job, but it's just it's implementing it and getting people to really see that mechanical engineers, even ones that aren't cell biologists, can really solve these problems.

Matt: Is there anything that you would want to say about the NNE-CTR in particular to other investigators or potential investigators who might want to consider a pilot project?

Rachael: Yeah. The experience was great. The people are fabulous. People were there to help. I got so much advice whether it was solicited or non-solicited. It was great and people were only positive. It's not just a normal get-a-grant, do-the-science and then it's all done. I felt like people were really invested in what I had to say about what I did.

Core Focus: The Professional Development Core

"Research is hard." The NNE-CTR's Professional Development Core is Here to Make it Easier

When Dr. Ivette Emery says research is hard, she's not referring to the actual work. The Program Director of the Center for Clinical and Translational Science at MaineHealth is referring to the process of developing a proposal, negotiating the budget, obtaining funding and partners, and of course, gaining IRB approval. For even experienced researchers, a skilled guide can help save time and reduce frustration.



Kim Luebbers, MSHS, RN, BSN, OCN



Ivette Emery, Ph.D.

In a world of data, processes, and procedures, the NNE-CTR's Professional Development Core (PDC) offers researchers a human at the other end of every question.

Kim Luebbers, MSHS, RN, BSN, OCN, is Emery's University of Vermont (UVM) counterpart and Core Co-Lead. The Assistant Dean for Clinical Research and Director of the Office of Clinical Trials Research at the Larner College of Medicine said, "Research used to be less complicated than it is now. There are more rules and regulations and limited resources for teaching our health care professionals how to be researchers. We've seen time and again, based on their initial exposure to research, that these professionals are unlikely to go on to be researchers because the experience was difficult and administratively challenging. Young research professionals need good mentorship, they need structure, they need places to ask questions and someone to help put them on the right path and move them along."

Luebbers and Emery are joined in the Professional Development Core by Charles Irvin, Ph.D., who serves as Director of Mentorship and Career Development; Irwin Brodsky, MD, MPH, Core Co-Lead; and Research Navigators Jennifer Holmes, CCRP and Don Gage, Ph.D. The Core's mission is to support and mentor researchers as they address translational research with the goal of improving public health in northern New England. This includes help obtaining grants, designing research projects, working with institutional review boards, and publishing results. The Core also trains clinical coordinators.

The research ECHO is really for new investigators who want to know who their friends are."

Emery said, "You have a lot of friends who can help. We have navigators who can be a scientific partner to a new investigator and shepherd them through the process and through all the pieces of a research project—the aims and outcome measures, data collection, collaborators and the ethics and logistics."

According to Luebbers, "There are very nuanced aspects to conducting research. Depending on the type of study, the patient/participant population that they're interacting with, the type of research they are engaging in, there are different approvals and processes that research teams need to follow. These all play a factor in which path you take. There are a lot of similarities in the different possible research paths, but if you are not aware of the steps and the appropriate order in which to take [them] as a researcher, you can waste a lot of time and get frustrated with the system."

A good start for an aspiring or current researcher is the Clinical Research ECHO (Extension for Community Healthcare Outcomes) sessions. These sessions, open to all NNE-CTR members are planned by MaineHealth and UVM and explore research topics which serve an educational purpose but also provide opportunities for conversation and collaboration.

"The Research ECHO is group of health care professionals meeting to learn about the topic and research-related activities together. I find the ECHO to be accessible, especially now that it is conducted via Zoom. Attendees engage through the case presentation, where the topic is discussed based on actual experiences," said Luebbers.

The Navigator can develop a roadmap, engage appropriate resources and create a timeline for the team to be most efficient.

"What we try to do is give attendees is a half an hour of a little research and a take-home message, and then the other half an hour of, 'Tell us about a project that you're struggling with, a new idea that you don't know how to pursue, or a challenge that you can't work through," said Emery. "And [this is the time for] the rest of the participants to chime in. It's like, have you tried this thing? The research ECHO is really for new investigators who want to know who their friends are."

The PDC is not just for new investigators. "Even researchers with experience can benefit from meeting with a Navigator," said Luebbers. "The Navigator can develop a roadmap, engage appropriate resources and create a timeline for the team to be most efficient."

Emery and Luebbers acknowledge that a good mentor is both invaluable and can be hard to find. "What we would love is to increase the number of people who could be mentors," said Emery. To that end, Irvin, the Core's Director of Mentorship and Career Development, has created a nationally-recognized mentorship program. The NNE-CTR invites new potential mentors to get in touch via the NNE-CTR website.

Collaboration, Luebbers said, is "about connecting researchers. We meet with [them] and recognize that person would be a potentially great collaborator with the investigator we met with six months ago, and we introduce them. I love when we connect teams together, especially for translational science, when we connect clinician scientists and the bench researchers or two researchers that are working on similar science but are unaware of each other's interests."

This is where the NNE-CTR's three-state network comes in handy. "Having partners in Maine or New Hampshire can help broaden that group of potential collaborators. We also have worked with researchers outside of those institutions as well, because we don't have to limit ourselves to Vermont, New Hampshire, and Maine," said Luebbers. Emery adds, "This is why the NNE-CTR pilot project guidelines emphasize the importance of partnerships between researchers at MaineHealth and UVM."

All relationships require care, nurturing, and the human touch, according to both Emery and Luebbers, and that includes seeing and emphasizing the possibilities of the research project. "Whenever you want collaborators--and doesn't even need to be a co-PI--whenever you want the pharmacist and even the clinical research coordinators and other navigators [to join a project], "I think if you're excited about the science and you explain the science and you have funding or you are applying for funding, that's the time to build your team," said Emery. "If you're excited about the science, it kind of gets you over how hard it is to get all the logistics checked off."

This spring will mark the NNE-CTR's seventh year in existence. As the network learns more about the region's issues and expands its partnerships, big goals are ahead. Emery would like more engagement in small communities across the region. "What I would like to do better is to bring the physicians who are interested in doing research in rural locations into the network, so they have the support to do research."

One critical way to do that is to keep encouraging researchers by having one conversation at a time. For Luebbers, this will sometimes start with a call out of the blue. "I ask them to tell us a little bit about their research or what they are interested in, and that's just enough to start the conversation. We are not trying to change what they're doing for research. We offer resources and ideas that help support their research."

And, she adds, "People are really appreciative of the opportunity. It's a positive feeling that they come away with that there is a team to help support them navigate the research process."



What Are You Up to These Days?

Do you have a story to share or work you would like us to highlight? An idea that our members should know about? Let's put it in our newsletter. Email matthew.j.dugan@med.uvm.edu

