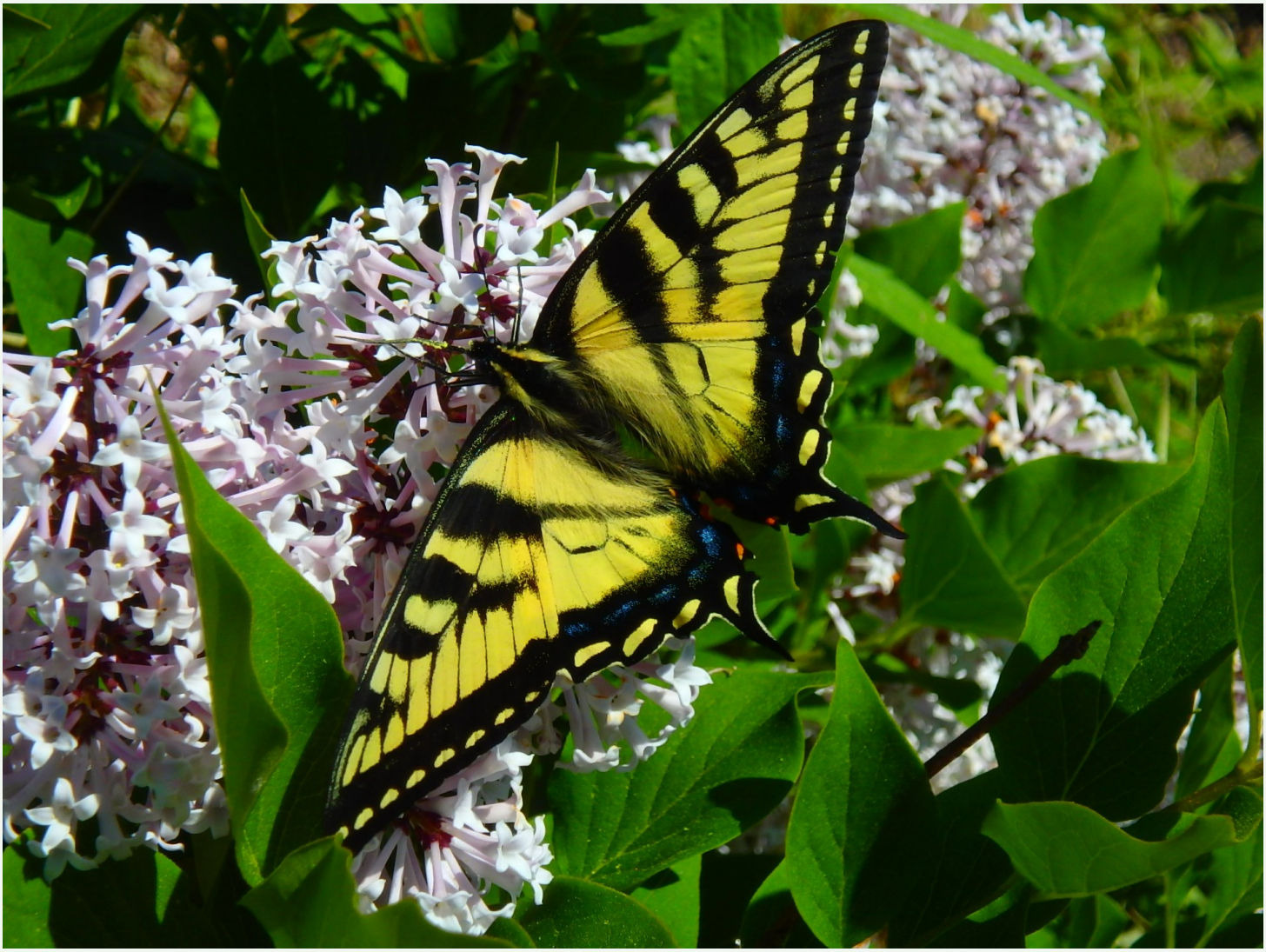
# The NNE-CTR Quarterly Newsletter

NORTHERN NEW ENGLAND CLINICAL & TRANSLATIONAL RESEARCH NETWORK

**Spring 2025**



## Contents


A Message from Our PIs ..... 2

Remembering Who We Are .....3

Clinical Research Scholar Program .....4

Erika Ziller on Publicly Available Data .....10

Core Focus: Translational Research Technologies .....12

Members in the News: Susan Miesfeldt, MD .....16

New Multimedia Piece from the Tracking and Evaluation Core .....17

What Are You Up to These Days? .....18

Clifford Rosen, MD

# A Message from Our PIs

Gary Stein, Ph.D.

## Navigating Complexities of Northern New England Health and Healthcare

For the past eight years, the NNE-CTR focus has been initiation and expansion of our commitment to northern New England health and healthcare. The NNE-CTR Rural Health Community and Engagement Core, now an obligatory component for CTR programs, has been instrumental for engaging communities throughout our northern New England catchment area in bidirectional communication while identifying regional specific and shared health and healthcare requirements. Emphasis has been on collaboratively developing initiatives that address regional challenges. Our NNE-CTR partnership with the Northern New England COOP Community and Practice-Based Research Network has effectively supported collaborations with primary care practices to provide guidelines and support for healthcare providers in rural and urban primary care practices throughout Vermont, Maine, and New Hampshire, to engage in clinical investigation and clinical trials that have been predominantly available only in academic medical centers. While the NNE-CTR is providing research infrastructure, technology, and mentoring in clinical and translational investigation at academic medical centers and in community-based practices, the collaborations are increasing patient participation in clinical research and clinical studies.

Our NNE-CTR is positioned for effectively responding to the evolving NIH priorities in both investigation and healthcare delivery. Chronic and acute disease are ongoing and expanding responsibilities. Evolving utilization of data science with integration of the Electronic Health Record to maximally address health and healthcare requirements in our northern New England catchment area will be increasingly important. We are prepared to navigate complexities for extramural funding of clinical and translational research to provide support for developing initiatives with assurance that all components of our programs are compliant with policies and requirements. Most important, we are confident that our NNE-CTR is positioned to accelerate progress in advancing capabilities for the prevention, early detection, treatment, and survivorship of acute and chronic disease.

—Gary and Cliff

# Remembering Who We Are

The NNE-CTR is still quite young, but as a precocious eight-year-old, we've accumulated some impressive wins. We've accomplished this by fulfilling our funder's vision of identifying local health issues, listening to local concerns, and devising solutions that are not only local but international as well.

We have reached across our three-state region to innovate, convene, collaborate, and communicate. We've built teams and shared knowledge. We've made discoveries and progress in a wide array of areas from prenatal care to opioids, from prostate cancer to strokes, from aging to mental health to cancer research, and to so much more.

That's who we are.

In response to recent federal policy changes, people are scrambling to provide responses and answers and, perhaps most of all, justifications. It's a truism of the public relations world that if you don't tell your story, someone else will. And so, the current best-seller is a tale of waste and institutional inefficiency. Justifications—only requested when someone doesn't already understand--are the crows that come home to roost.


The story is paper thin.

We got here because we haven't told enough of our own stories in the past. So, how do we change that? We remember who we are, and we commit to contributing to the conversation. We have a million stories--of benefits and improvements and advancements, of longer, healthier, happier lives, of how each dollar invested leads to many more in benefits delivered. Stories of hope and possibility.

We start by talking about the benefits of what we do, not the process, about the bottom line, not the fine details. We practice our elevator pitches. If it takes a paragraph to explain a concept, we see if we can get it to a sentence. And we stay relentlessly positive.

Then, we share our message with anyone who will listen. Write an op-ed. Offer yourself for interviews. Join or form a group of like-minded colleagues. Create a public forum in your town. Even everyday conversations help, as research shows that personal networks extend far beyond our contact lists to literally thousands of people we've never met. Trust that every piece of communication is another message in a bottle that will find its shore.

And when we're done? We do it again. Because the world needs to hear our message, and if we truly want to center health and wellbeing in the national conversation, it is going to take all of us.

It all starts by remembering who we are: We are the NNE-CTR, and every day we're doing truly meaningful work to improve the health of the people of northern New England and beyond.

That's a heck of a story.

*If you'd like help developing a story of your own, reach out to me: matthew.j.dugan@med.uvm.edu*

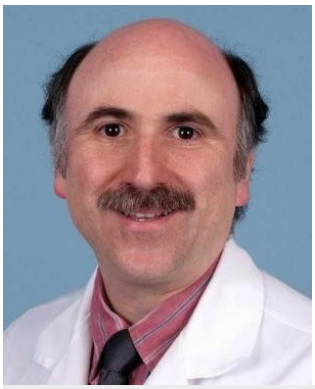
# Bringing Back the "Triple Threat": The NNE-CTR's Clinical Research Scholar Program

**Who this article is for:** If you're a clinician seeking to do more research, you'll find this piece of particular interest. You'll learn how the NNE-CTR's Clinical Research Scholar Program can fund and support your work, including paying for your research time.

***The Clinical Research Scholar Program*** *supports early-career clinical researchers in becoming independent investigators by providing both support for protected time to conduct scholarly activities and assistance in developing a mentoring team. Eligible candidates are NNE-CTR members who are junior faculty (assistant professor or equivalent) with clinically relevant degrees (e.g., MD, DO, PhD, PharmD, ScD, PsyD, NP, RN). The program is run out of the NNE-CTR's Professional Development Core.*

*For this article, we spoke with NNE-CTR Professional Development Core leaders Irwin Brodsky, MD, from MaineHealth and Kim Luebbers, MSHS, RN, BSN, from UVM's Larner College of Medicine, as well as 2023-2024 clinical research scholar Leigh-Anne Cioffredi, MD, of the University of Vermont Health Network. Below are their insights on the various aspects of the program. Quotes have been edited for length and clarity.*

**On the origins and basics of the Clinical Research Scholar Program at the NNE-CTR ...**


Irwin Brodsky, MD, MaineHealth

**Irwin:** The West Virginia University College of Medicine had created this thing called the Clinical Research Scholars Program. And we said, "Gosh, what's that and how do we do that?" The clinical research scholar grant, as we have it, is for people trying to pivot [because] they went onto purely a clinical track and then they say, "I missed that research environment I had when I was a fellow. I wish I could go back to doing some of that, I have some ideas."

**Kim:** It's really hard for early investigators or people who aren't in research at all to make that leap because it's sort of on their free time, their personal time that they have to make these initial leaps. And so, giving them some time so that they can work on the things to make them successful--and that may be a project, that may be education--is really valuable.

**Leigh-Anne:** It's one year, so for an individual to be successful in this, they really need to have an idea of what they're already doing. And I think that they (the reviewers) look at the applications with that lens as well [looking for] somebody who's not yet established but who could benefit just from that extra little bit of protected time to be able to breathe so you're not just constantly writing grant after grant after grant hoping one lands.

**On the background of the idea …**

**Irwin:** If you can imagine back to the days when [the medical profession] wasn't as technologically sophisticated, we found out about diseases by just some clinician looking at a pattern and saying "Wow. Something's

very strange about this patient. I've seen two other patients like this and I can't figure out what it is, but I'm going to do some investigation and figure this out." Any clinician could become an academic clinician that way.

Folks as old as me can remember something that was called the triple threat. The triple threat was somebody with a medical degree, an MD or a DO who not only sees patients, but is also an educator, gives lectures and teaches trainees and does research, [and] has his or her own laboratory working either basic science or in clinical science. And that was pretty common.

All those things became rare as hen's teeth later on, and [today] it takes so much technological training to be able to run a laboratory. It's essentially led to what we call team science. But still, those people who are Ph.Ds. also never see the disease they're working on walk into a room [because a patient has it]. They know the mouse with it, but it never sits down and talks to them, so [the Ph.Ds.] need to have those sort of researcher clinicians as well. And so there is maybe a little bit of a renaissance [with] more clinicians delving more into research after a time when they were told, "You can't do this unless you're a PhD." What we're hoping is that there are more people who take the initiative to try to include a research facet in their careers.

**Kim:** There are people who are recruited here because they want to be 100% clinical and they're very good at their job. But [department chairs] have to be ... open to the fact that plans sometimes change. [Sometimes] faculty members come here and they don't know anything about research [but] having been exposed to it, someone might take a trajectory different than what their original plan was.

Kim Luebbers, MSHS, RN , BSN, OCNMD, University of Vermont

**Leigh-Anne:** We're set up here at UVM pretty darn well to support early investigators if you're able to get in, if you have the support of your department. And it's a lot easier for your department to support you if somebody else is helping to pay for some of that time.

**On the mechanics of the program …**

**Irwin:** [Clinicians] are really not allowed time off [for research] and are working extraordinary hours to meet the requirements of their institutions as clinicians and so if you want to give somebody that time away to do research, time away from their clinical duties, you have to come up with some way to offset monetarily the cost.

**Kim:** Their department chair has to give a letter of support and talk about what they're going to do to help support them being successful in this. But [the key] is the investment of the time. So, we literally buy 20% of their time. Ten percent is funded through us, and 10% through the [clinician's] department. So, they've got some skin in the game to help them be successful and come up with a mentoring plan and those types of things.

**Leigh-Anne:** I came right to UVM after residency. I'm a pediatric hospitalist by training and I came here as a full-time clinician with no real big intentions to do research. Except that I couldn't stop myself. My curiosity just continues to drive my everyday life, and so I took it upon myself to kind of grab small

research projects, small grants. I went and got one of the grants from the medical center [but many grants] prohibit funding time, so the clinician time cannot be part of that type of grant.

So, when I saw that [the Professional Development Core] was doing the research scholar opportunity, I was like, "Yes! This is exactly what we need for up-and-coming researchers who didn't come to UVM on a contract that includes protected time for research but still have the initiative to do so."

**On what the researcher, their department and the greater system gain through the program …**

**Irwin:** I think that some of these department heads and division chiefs would like to have a more academic teaching and research-oriented department or division. They're just not exactly sure how to do it. And we give them an excuse.

> *"When I saw that [the Professional Development Core] was doing the research scholar opportunity, I was like, "Yes! This is exactly what we need."*

The payback apart from the partial reimbursement they get for the time can be multifaceted. They may want, for example, somebody to be able to do clinical trial work in this area because having clinical trials attracts patients. Certainly, in cancer medicine, this is really, really common. If you don't have clinical trials going on for new things for difficult cancers, then you won't attract patients.

The second thing is many of the residency programs and fellowship programs of these departments and divisions require a research arm. You have to expose the fellows to research activity. You have to expose your residents. Sometimes the residents have to have a research project and having one or two people in your division that do research comes in handy.

When I make the case to the administrators of the clinical enterprise as to why it's a good thing to let their clinicians go and do research, I say because it makes them better clinicians. They become better doctors. They develop a network, so they're doing research. They don't only know people in their institution. They know people all across the country, potentially around the world, working in the same research area they are. And that's very, very helpful.

**Kim:** Leigh-Anne in particular has been involved in the pediatric clinical trials network; (UVM pediatric pulmonologist) Kelly Cowan has an infrastructure grant here. [Leigh-Anne has] been working on that, but by getting some research scholar protected time, it has allowed her to really jump into that bigger arena to be collaborating with other investigators on clinical trials … and the protected time is really her launching pad. So, the [NNE-CTR] is connecting her to other researchers who are interested in things that she's doing, and the research scholar grant is allowing her to work on writing grants, writing manuscripts for the research she's doing, applying for extramural funding, while also getting her educational foundation in there as well.

Leigh-Anne Cioffredi, MD, UVM Health Network

**Leigh-Anne**: I have been looking at how cannabis exposure impacts certain regions of the brain in kids who are exposed to cannabis prenatally. We [found]

evidence that there are changes in how the brain is connected in specific regions. So, for me, as a pediatrician, you know, really timely, really exciting stuff. I am hoping to publish soon. And [the results] are able to inform the next study that I will be doing.

**On the popularity of the Clinical Research Scholar program …**

**Irwin:** I think it is a growing movement. When you apply for medical school out of college, you're looking for research experience. As a matter of fact, if you don't have research experience, you might as well not apply. [Medical school admissions officers] are looking for altruism and lots of community service in order to be selected for medical school. They're looking for leadership, ability and creativity. And then they put you through medical school, and you get a job that uses none of those.

[Rather, it's] "You're gonna see X many patients a day. Please don't dawdle. Get through them as fast as you can. Don't let your billings be late." [And clinicians ask], "Wait, where's that creativity, that research, that community involvement thing that you said I needed?" So, these people are selected for characteristics that they're not allowed to use later.

*"For me, as a pediatrician, this is really timely, really exciting stuff"*

**On the advice and mentoring available through the Professional Development Core ...**

**Kim:** Sometimes people … are very ambitious about what they can accomplish and so giving them that feedback [is important]. Part of the mentoring and guidance that they get is about what's feasible and doable. We meet with them and [tell them], based on our past experiences, what the committee's looking for based on what's really feasible. Like, "You're going to accrue 100 patients, but you only have 20," that kind of thing. So, you know, providing some guidance around those things.

**On project flexibility …**

**Irwin:** Though we look for people who are going to do research, this clinical research scholar money does not necessarily have to go to the conduct of a research project. So for example, if there was a member of our clinician pool who had been doing some research work on the side and now wants to write a grant based on the preliminary data that he or she had already gathered, [they] could use the time afforded by the Clinical Research Scholar funds writing the grant and get paid for it. There is [also] room in this program to give [money] to somebody who is going to use it to write a paper, for example, on previous work they've done.

**Leigh-Anne:** It's not a huge grant application, but I think that it has a lot of potential to provide the support that we just don't have … that missing piece. [The NNE-CTR] welcomes everybody to say like, "Hey, if you have a research idea, come and apply."

**On advice for interested applicants …**

**Kim:** There are specific parameters around who can apply for this funding, like they have to be no more than 10 years from their terminal degree.

**Irwin:** It's certainly more helpful, I think, for younger early career participants. We want to create a pipeline that will last for a little while.

We recommend that they just contact one of us at the Professional Development Core, just go through the website and just call and say, "Can I set up a meeting and talk with you about this? I have this idea." We may get other people from the [NNE-CTR] also to meet with that person. And we really try to talk with them as much as we can because we want it to be a successful effort.

At least six months ahead of time and potentially as long as a year ahead of time, they ought to be thinking about it, imagining it, talking with their own department about it, talking with some potential team members or mentors who could help them with it. It takes months to do that before we get to the point of "I'm going to put a letter of intent in and then apply."

Those people who we choose internally also have to be approved by NIH. So, we send their proposal to the National Institute of General Medical Science that funds the NNE-CTR grant, and they have to approve it. So essentially, [clinical research scholars] are NIH-funded investigators.

**On the experience needed to apply …**

**Irwin:** [Applicants] don't have to have a long track record. Even people who have very little publication [experience] or so forth, if they've been working on another project on the side with somebody getting a little bit of experience and have mentors and talk to them about their new ideas for the project and start to make it feasible … [if they] do the leg work ahead of time, it's much, much more likely that that person will be successful.

*"Applicants don't have to have a long track record."*

So yes, the earlier the better. Because then we can tell them, "No, no, don't put in the application next month. Why don't you go and work all these things out and get them really set as close to in-stone as you can, and then [for example] next summer would be a good time for you to [submit the application]."

**On the career path available to clinical research scholars beyond the program …**

**Kim:** The research scholar proposal makes [potential research scholars] really sit down and think about, "What do I need to do to be successful?" So, mentorship, networking, navigator support--any of those kinds of things. And it helps them build on that, and whether that's a multi-million-dollar lab in five years or a multi-site clinical trial through the ISPCTN (IDeA States Pediatric Clinical Trials) Network, the pathways they can go down are almost limitless.

**On advice for unsuccessful applicants …**

**Kim:** Just because they don't get it the first year, some of the people, we encourage them to try, try again because we only have so much funding, right? So, it's not that they didn't have a good idea. [Maybe] some-one else had a better idea or had a better grant application. [We might say], "Do some tweaking on your application. Here's a grant writing workshop." That kind of thing. Sometimes the pitch is the part that

pushes them into the funding category.

**On the enjoyment of being involved with the Clinical Research Scholar Program …**

**Kim:** You never know whose little, small idea is going to make a big effect, and that's the thing with research. This is the cool part of being an academic organization and being involved in research. It is hard to be successful in research, but they have a passion. It is very much why I do some of the things that I do--both because it's important to our community, 100%, but [also] I love finding someone who has a really cool research idea and a passion about it. Their aim is to help and improve things, and it's really energizing to be part of that.

> *"You never know whose little, small idea is going to make a big effect."*

**Irwin:** We're just looking for more people out there who say, "This is my dream, this is what I want to do." [And we] say, "All right, tell us what you're interested in. Let's see how we can help you."

# Ziller Presents on Publicly Available Data Sources

In general, as any scientists knows, gathering good data requires time, money, and expertise. But what if data were cheap to obtain or even free?


Erika Ziller, Ph.D., UVM

Erika Ziller, Ph.D., says that there are somewhere between 700 and 2000 or more federal and state databases available to researchers, "So there is no shortage for those people who are interested in working with secondary data out there." These sources come with various restrictions and costs—for example, Medicare and Medicaid claims data. But, said Ziller, "Many are available for free or low cost and able to be readily downloaded with very little difficulty."

Among other entities, the federal government has hundreds of data sets that can be used for health-related research. Sources range from public health surveillance data to large-scale national surveys.

Ziller, the Director of UVM's Health Services Research Center and Northeast Rural Health Research Center, said these databases have been critical to her work. She noted the advantages of using them: the data are drawn from large samples over long periods of time, are easy to obtain, contain information on many different conditions as well as information on underserved populations, provide the opportunity for trend analysis, and are ideal for new collaborations or student and trainee projects.

"I've pretty much built my entire career on figuring out really interesting research questions that you can answer with publicly available data and securing funding to do so," she said.

Among the many databases available, Ziller focused on six.

She cited the *National Health Interview Survey*, an annual survey that's been conducted since the 1950s covering many areas of health including access, service use, and clinical conditions. Included are economic and sociodemographic characteristics such as whether respondents dwell in rural or urban areas. Using this source, Ziller is currently working on topics such as the urban-rural differences in chronic pain. She's also working with people from the UVM Cancer Center studying the health and wellbeing of recent cancer survivors across a variety of outcomes.

Another data set she turns to is the *Medical Expenditure Panel Survey*, which has been conducted since 1996 and provides extensive information on costs and medical conditions. Using this database, Ziller has found that rural dwellers with mental health diagnoses typically receive an improper ratio of medication-to-mental health counseling.

Conducted annually since 1990 with over 60,000 respondents starting at age 12, the *National Survey of Drug Use and Health* asks about mental health and substance use. Researchers have used the survey to study suicide among veterans, and Ziller has relied on it to research rural-urban differences in adolescent tobacco use.

The *National Ambulatory Medical Care Survey* was launched in 1973 and has been conducted annually since 1989. It contains information on individual patient visits and on providers as well. Recent studies include trends in diabetes medication prescribing and comparing tobacco screening and treatment in rural versus urban settings.

The CDC's *Behavioral Risk Factor Surveillance System* is an annual survey first conducted in 1984 with around 400,000 adult respondents, making it the largest U.S. health survey. It includes extensive information on population

health risk factors such as diet, exercise, and environmental influences, and allows researchers to break down the data by urban and rural settings. Recent study topics from researchers using the database have included the effects of changed mammography guidelines, social isolation, lung cancer screening, and rural-urban differences in adverse childhood experiences.

The *Health Care Utilization Project* has been gathering hospital discharge data since 2006. This resource, unlike the others, does come with a cost for access, but provides significant data on the 30 million emergency department and seven million hospitalizations per year. Recent study topics have included appendicitis imaging trends, adolescent self-harm, firearm injuries, rural opioid poisoning, and trauma.

Ziller cautioned that publicly available data can have gaps and shortcomings, including questions that change from year to year and unavailable variables, for example, a lack of distinction between rural and urban information. Also, most surveys exclude people living in nursing homes and correctional facilities.

Finally, the data require specialized analyses, in which case Ziller advised, “Reach out to the BERD Core (the NNE-CTR’s Biostatistics, Epidemiology, and Research Design core) or others if you’re needing help because [with] complex survey data, you need to know how to analyze those.” Ziller also invited queries, saying, “I and my research team are always looking for collaborators.”

Ziller maintains her own spreadsheet of databases and said she plans to make a broader resource listing available via her Health Services Research Center.

# Core Focus

## Translational Research Technologies Core

# Bringing Researchers and Clinicians Together Around Cutting-Edge Technology

**Who this article is for:** You'll find this article of interest if you're a researcher interested in the kinds of technologies that are available to you through the UVM-MaineHealth alliance, or if you're a member of an NNE-CTR core looking to guide potential researchers.

*Welcome to our ongoing Core Focus series where we chat with the NNE-CTR's cores about how they work with investigators and with each other to create strong projects that result in solid research. This issue features the Translational Research Technologies Core (or TRTC). This core is composed of Core Lead Frances Carr, Ph.D. of the University of Vermont, Core Co-Lead Aaron Brown, Ph.D., of MaineHealth, and Core Director Douglas Taatjes, Ph.D., of UVM.*

*The TRTC supplies researchers with technologies in four broad areas: molecular, imaging, tissues and organisms, and research services. The team stresses the importance of doing solid research by building on collaborations and bi-directional communication. Here, Fran and Aaron explain how they work with investigators. Quotes have been edited for length and clarity.*

**Q:** Before we talk about some of the particulars of the TRTC, I think readers might be interested in the fact that you've both started businesses based on work that began in the lab. Could you give a quick summary?

**Aaron:** I went and did my Ph.D. at Jackson Laboratory, but through the University of Maine System. Four of us from the lab I was in, we started a company called Bar Harbor Biotechnology. So, it was the first spinoff company ever out of the Jackson Laboratory. [The] company was basically concerned with genetic testing in research models--mouse models, that sort of stuff.

Aaron Brown, Ph.D., of MaineHealth is the TRT Core Co-Lead

**Fran:** Just [this year] I started my own company. It's based on a discovery we have in the lab for a new endocrine cancer therapy. It's a synthetic thyroid hormone that targets one of the families of hormone receptors.

**Q:** What you do for researchers is right there in the name: translational research technologies. So, let's start with the basics. What does that look like when you're interacting with researchers?

**Fran:** [We start with], What's the question that you're trying to answer? And that is part and parcel of what our integrated shared resources do. It's not techniques so much as the approaches that you might take. So, you sit down and say, "Are you looking for a new diagnostic? Are you looking for treatments?" [We]

engage deliberately with the person to get them to articulate more about the question that they're trying to answer. And then, [we] come back in partnership and collaboration, saying, "Well, these are the different approaches that you can take and we can generate some preliminary data for you for your pilot project if you want."

Frances Carr, Ph.D. of the University of Vermont is the TRT

**Aaron**: There's a lot of education and training involved, too, in that. Even for me as a more of a basic researcher, I may go to UVM and set up a consultation and learn about a technology they have that I don't really know anything about and I just need to know. And you can imagine from a clinician's standpoint, they even probably need even more education and training on the stuff that we can offer because they're not in the lab every day and seeing this sort of stuff.

**Fran**: Even just mentioning the technology to folks who aren't in laboratory-based research has no context. It's very much having that conversation and not throwing back technology, but approaches. And also, we have focus on rigor and reproducibility. So, you can do a lot of shotgun kinds of experiments, you know, and if we didn't have that consultation for those who aren't necessarily immersed in the scientific method you could get data but it will be meaningless.

So, there's a tremendous focus on "How reproducible are your results going to be? How many times do you need to do it? What are the different methods? How reliable are the methods you need to validate the tools that you're using? Here's how you do it." The education is pretty broad around the whole research question with attention to rigor and reproducibility, which matters if we're going to impact human health.

**Q:** You're both busy people in your own labs and in the roles where you spend the bulk of your time in your respective institutions, UVM and MaineHealth. How does the entity known as the NNE-CTR help to improve research overall in our northern New England area?

**Fran:** What's been to me exciting about the [NNE-CTR] is our partnership with Maine; it's been from my perspective, very, very helpful. I'm a huge supporter of the shared resources, as they are integral and critical for advancing the research enterprise. So it's all part of the same enterprise thinking about how shared resources need to be cutting edge.

**Aaron:** We do a bunch of different things. Our core provides support for all these other cores [and] we also provide educational resources whether it's trainings or seminars.

**Fran:** [Finding] new opportunities to create new methods and approaches is foundational to advancing the research, but also for being competitive in getting extramural funds. I come at it from that perspective and I'm a user of [the technology as well]. I can use my own lab as an example. I'm doing the basic science that would be associated with the TRTC, but gosh darn it, I hope [the synthetic thyroid hormone] is a new therapy that impacts people with cancer here and beyond in rural communities and beyond.

**Q:** During the course of our interview, I've been a little surprised that you haven't jumped first to the technology. Instead, you've talked about collaboration and communication.

**Fran:** I would say equipment is nice, but it's scientific personnel, it's scientific expertise to help with analyzing the data, help with making connections as a matter of fact as well. [The TRTC] is a great place to form new collaborations.

**Aaron:** Through the NNE-CTR, there's this whole idea of collaboration taking off and this is good, and that's one of the things that Fran and I do. UVM has a lot more high-tech equipment because they're bigger than we [at MaineHealth] are, but I've really enjoyed sort of facilitating collaborations where people will come to me first and say, "You're the director of the TRTC. Wanna run this instrument to do these experiments?" Then I'll make the

connection and then we do a consultation. So, there's a lot of feeding in other scientists to where they need to go.

**Fran:** It is the broader collaborations [that matter], and definitely Maine has areas of strength that we do not have, [for example] the [MaineHealth] BioBank and finding other partnerships throughout Maine. So we actually support each other in complementary ways. I think we may have equipment technology, but it's really the scientists that are getting together and the whole research enterprise.

> *"Through the NNE-CTR, there's this whole idea of collaboration taking off is good, and that's one of the things that Fran and I do."*
>
> *—Aaron Brown*

**Q:** A common theme I've found through my interviews with the various NNE-CTR cores is that they want to tell others about the value of collaboration with their core. So here's your soapbox. What do you want to say to other cores and our membership and beyond?

**Fran:** [One thing] that I would like to see more of is, I'll call it science in the public interest. And we need to be able to convey … through the breadth of mechanisms that we have through the NNE-CTR what it is that we do. Why do we need this technology? Who cares about sequencing, et cetera? Why does it matter? So it's that piece that says, hey, we need partnerships where possible to advance these discoveries. And it's going to improve people's lives.

**Aaron:** It's nice to talk to and try to set up collaborations with surgeons to get samples and things like that. So now your project is moving from basic research and you have the knowledge of the person that's working on the front-line and what can we do for them. Are there some experiments or pilot experiments that we can do to prove that this might work? But to have the clinical researchers or surgeons and so forth be a part of this is I think, a really good goal.

One of the things that we're really trying to do now is to basically interview the clinicians and find out what they're doing. [For example] we have this new metabolic interest group and we have 10 or 15 endocrinologists on this call and we say, "Tell us what the problems are. What are the things that you're facing in the clinic and can we help and can you help us?" It's kind of like a back and forth thing; they're learning about our research and we're learning about what they do in the clinic. And so I'm hoping that that in the long run will up everybody's game.

The TRTC is probably more focused on the basic research but if you look at the membership [of the NNE-CTR], it's probably mostly clinicians. So, how can we connect there? I think that's important. Increasing basically the regional collaborative use of our resources is probably one of the top [goals].

**Fran:** Where I'd like to see more [communication is], what are the other (NNE-CTR] cores actually doing where we have an opportunity to collaborate? Again, that piece of sharing why what we do is important. And thinking about the healthcare providers in community centers, there have to be opportunities to engage, one, just for sharing the excitement [about new developments], but also to see about possibilities of other kinds of partnerships.

# NNE-CTR Members in the News

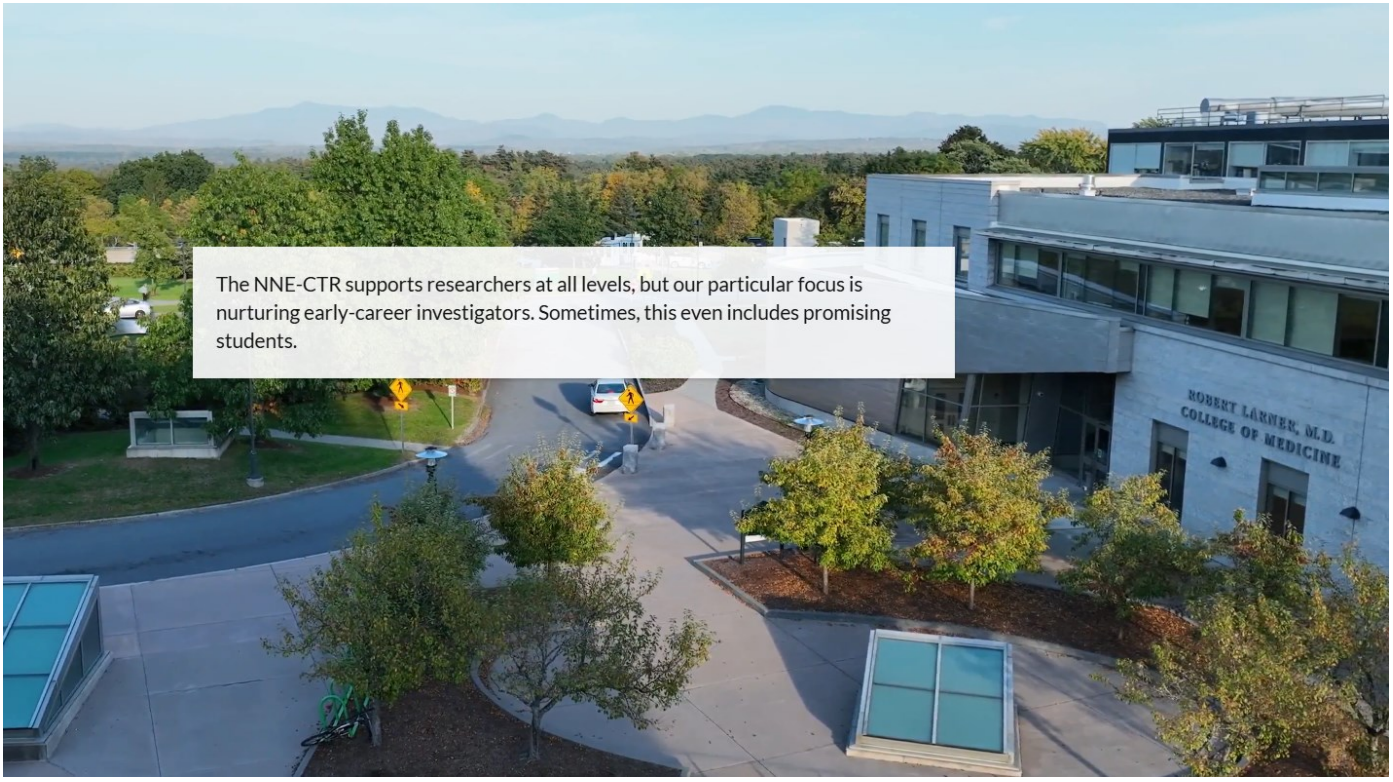
Susan Miesfeldt, MD, MaineHealth

A central goal of the NNE-CTR is to support and train early-career investigators as they work on proof-of-concept projects with two goals in mind: to provide evidence that their work deserves increased funding, and to gain experience in the world of research funding. In 2021 and 2022, we were excited to support the promising work of Drs. Srinidi Mohan and Susan Miesfeldt as they sought to develop a blood test that would help treat an aggressive form of breast cancer. We are excited to share with you the news that their work has resulted in a product now awaiting FDA approval. To read more, check out this article from the Portland Press Herald's Joe Lawlor.

# Tracking and Evaluation Core Releases Multimedia Story on Researchers

It's easy for us all to get caught up in the busy day-to-day. But it's good to look up from that to-do list now and then to reflect on what we accomplish here at the NNE-CTR.

The Tracking and Evaluation Core is tasked with measuring what we do, and, amid all the numbers and graphs, they take the time to creatively (and beautifully) provide stories that make it all clear. Check out their latest profiles here and here and take a moment to pat yourself on the back because, truly, we do this together.



# What Are You Up to These Days?

Your work, your perspectives and your voice matter as we build our NNE-CTR community and seek to improve the health of our neighbors in northern New England. Do you have a story to share or work you would like us to write about? Let's put it in our newsletter. Email matthew.j.dugan@med.uvm.edu