Dr. Elizabeth Wilson

You can watch the video of this podcast at: youtu.be/PyZ1jDWFweI

[00:00:02] **Krissy Dilger:** Welcome to the “Community Meets Clinic” series, a collaborative podcast to introduce the clinicians, clinician scientists, and healthcare personnel working directly with individuals and families facing a rare neuroimmune diagnosis. Hear directly from those in the clinic and connect with the individuals whose focus is promoting quality of life for those diagnosed with a rare neuroimmune disorder.

[00:00:28] SRNA is a non-profit focused on support, education, and research of rare neuroimmune disorders. You can learn more about us on our web site at wearesrna.org. “Community Meets Clinic” is sponsored in part by Amgen; Alexion, AstraZeneca Rare Disease; UCB; and Genentech.

[00:00:52] My name is Krissy Dilger and I moderated this episode. I am pleased to be joined by Dr. Elizabeth Wilson. Dr. Wilson is a pediatric neurologist at Cincinnati Children's Hospital and serves as Director of the Multiple Sclerosis and Neuroimmunology Center there. You can view her full bio in the podcast description. Hi, Dr. Wilson. Thank you so much for joining me today. I'm so glad to have you on the podcast and I'm excited to learn a bit more about you, as well as the clinic at Cincinnati Children's Hospital. So, to start, can you tell me a little bit about yourself and what led you to neurology?

[00:01:36] **Dr. Elizabeth Wilson:** Sure. Yeah. And thank you for having me. I'm super excited to represent our clinic and partner with SRNA. So, this is a great opportunity. So, I will say that landing on pediatric neurology specifically was really a combination of my joy of working with kids and then this passion that grew for neurology.

[00:02:04] So, I loved working with kids even when I was pretty young. I was a camp counselor and worked with kids who had neurodevelopmental disabilities, and so that really introduced me to the overlap between the brain and how somebody's interacting with their environment and the world in general and that interaction really captivated me.

[00:02:27] And so when I went on to college, I was a neuroscience major, really just better understanding the biology behind that. And then when I went to medical school, I was torn. I was like, am I going to do neurology? Am I going to do pediatrics? And then I learned that child neurology was its own entity. And so, I matched into that residency and I'm so happy that I did because I think that it's exactly what I was looking for within that field as a start to my career.

[00:03:03] **Krissy Dilger:** That's awesome. And I'm grateful for people like you because neuroscience as a major must have been really grueling. I took one neuroscience class in my undergrad, and it was tough. Grateful for people like you who are able to thrive in that environment and under those, that rigorous discipline. What led you to focus on the rare neuroimmune disorders specifically?

[00:03:34] **Dr. Elizabeth Wilson:** So, I gained exposure to neuroimmunology when I was doing my neurology residency, and I found that those were the cases that I was just most interested in, and I really liked how every aspect of the care was individualized. So, you really had to look at the patient and where they were in their diagnosis in order to help come up with a treatment plan and then that relationship that you build specifically with the neuroimmunology patients, I think is pretty unique.

[00:04:14] They're changing so much throughout their life and in response to treatment. And so, the monitoring that you're doing, what you're seeing every time they're coming into the clinic, is just evolving so much and I really liked having that longitudinal relationship with them. And then more recently, even within the past five, 10 years, the field is just exploding.

[00:04:39] And so we have this amazing opportunity where we have these newer treatment options becoming available to these patients. And so, we're really getting even better at treating these conditions, which makes it just that much more rewarding to feel like you're really helping somebody to live the best quality of life that they possibly can have.

[00:05:03] **Krissy Dilger:** That's great. And I'm glad to hear you mention how things are evolving so rapidly right now in this field. And I do think that's a big draw for clinicians and scientists who want to be part of that and contribute to the field in a big way. Which leads me to my next question which has to do with research. So, do you have any particular interest areas that you are working on in research?

[00:05:33] **Dr. Elizabeth Wilson:** Yeah. So right now, the multiple sclerosis in neuroimmunology center as a whole has a lot of different research projects that are ongoing that I'm involved in. And so, anything from advanced neuro imaging to clinical trials, I dabble in a bit but my passion and what I've been doing for the past few years has really been in the social determinants of health. So, I partner pretty closely with the network of pediatric MS centers and their database on neuroimmune conditions.

[00:06:09] And so we've looked at the overlap between a patient's environmental stressors and the outcomes in neuroimmune conditions. And in the next few years we're going to be looking at how those factors can impact a caregiver for children who have neuroimmune diseases. And then as well as looking at race and ethnicity and how that's impacting our younger patients who have neuroinflammatory conditions. And I think that it's just such a huge area that we're really starting to dig into a bit more.

[00:06:48] So I'm really excited to see where that research takes us and what we can learn from it, so that we can help address all of those other aspects of somebody's life that's going to impact their health outcomes aside from just the medications that we can prescribe them.

[00:07:05] **Krissy Dilger:** That's a very interesting, and I think very important field of research. I'm also really intrigued by that line of thinking and that line of researching. We did a podcast with you, I believe a year or two ago regarding that topic. And if anyone listening wants to listen to it's still in our resource library on our website. And it's a great listen. Thank you for that work and I'm looking forward to also hearing new results in the next few years hopefully.

[00:07:46] **Dr. Elizabeth Wilson:** Yeah, happy to.

[00:07:49] **Krissy Dilger:** So that leads me to my next question. We want to highlight the clinic at Cincinnati Children's Hospital. We are happy to say that it is one of our centers of excellence in rare neuroimmune disorders. So, can you share about the multidisciplinary clinic team at Cincinnati and what specialist a

new patient might expect to see? How would they get connected to the clinic and kind of what would their experience be like in terms of getting an appointment?

[00:08:27] **Dr. Elizabeth Wilson:** Absolutely. And we're thrilled to have the center of excellence status through you guys because I think it really just affirms the dedicated group of people that we have working with this population. And I'm hoping that helps to open up some more experiences and education for our patients moving forward.

[00:08:49] But I think I'll talk first about how patients can come to us and get referred to us and then walk through what that journey might look like when they come to the clinic. So, we get referrals from all over the place throughout the US and then internationally, as well. Patients can refer themselves so they can just call and request an appointment.

[00:09:15] But we certainly get referrals from all different specialists, so neurologists in the community, as well as primary care providers or other specialists like rheumatologists will sometimes even refer to us. So very open in terms of the pathway to getting in. And then the first people that will be in contact with the patients are our clinic coordinator and our care coordinator, and they help throughout the whole process.

[00:09:46] Our clinic coordinator helps us to gather all of the records so that we can make sure that before we're meeting the patient, if it's for a second or third opinion, that we have all the information we need to help them, and then we'll schedule them in the clinic. And who they meet in that clinic is really going to depend on their specific needs.

[00:10:10] So we have a few different combined clinics where patients can see multiple providers at the same time or in the same space, and we'll triage patients into various pathways based on whatever their specific symptoms or diagnosis is. But everybody meets with a neuroimmunologist. That fellowship is trained in pediatric neuroimmunology.

[00:10:36] And then the other specialists that they can meet in the clinic would be our rheumatologist who has a specific interest in neurologic manifestations of rheumatologic diseases which is pretty unique. And she's amazing. And then they can also meet with our pediatric neuro-ophthalmologist. Which is a unique opportunity just because they're so rare.

[00:11:01] And so they're a really special person on our team that we learn a lot from. And then outside of that, in terms of just addressing somebody's cognitive mood and social needs, we have neuropsychologists that will do cognitive testing. We have psychiatrists and psychologists that can sometimes come to the clinic and meet with patients to help address that medical coping piece, having a new diagnosis or any of the mood symptoms that are often associated with our neuroimmune conditions.

[00:11:39] And then we have access to school liaisons to help navigate the school process and any kind of support that kids need in school, as well as social workers helping address any of those social hardships that patients may have. And then at Cincinnati, we're fortunate to have a very close relationship with our physical medicine and rehab team.

[00:12:01] And a lot of our patients will have some kind of deficits, whether it's some spasticity and difficulty with their tone or if they have some weakness. And the physical medicine and rehab team at Cincinnati has a specific group that works on neuro rehabilitation. And so, we're fortunate to partner with them and help with that physical rehab component that patients can sometimes struggle with.

[00:12:28] And then, those are the big people. You won't meet all of them, but you have access to all of them. And then in the background, there is also some research coordinators that might approach patients if they're eligible for a research study during their stay. And then we have brilliant neuro radiologists that are reading all of our imaging, like our MRIs and our CAT scans and our geneticists that do research in genetics.

[00:12:56] And so all of these people are thinking about you even if you don't meet them in the clinic. But it's a relatively large group with a lot of different people who are really invested in this patient population, and really do their best to make sure that we're addressing the needs that patients have and answering the questions that they come to us with. So, I feel very fortunate to work with all of them.

[00:13:22] **Krissy Dilger:** Great. Thank you for sharing and I am glad that we're able to have you on as a center because you certainly fit the bill. So, I can imagine as a clinician, especially when you're dealing with so much unknown, with these disorders as well, that it can be difficult. How do you take care of yourself emotionally and what do you do in your free time that might help you relax or reset?

[00:13:50] **Dr. Elizabeth Wilson:** Yeah, that's a great question and I was happy to see it listed. I honestly don't think that we get asked this too much. So, it was a fun one. Yeah, self-care is very important. I think going through this process is stressful for everyone involved. And so, the same is true, right for patients and caregivers or family caregivers. For me, I definitely rely on my family as a support system.

[00:14:20] They're really wonderful. I'm fortunate enough to have a husband who's also in medicine, and so he gets the day-to-day stresses and is a huge support person for me. I'm a strong believer in pet therapy and we have two dogs and two cats, so I get lots of loving from our pets, which also helps.

[00:14:42] And then like hobbies, having hobbies outside of medicine I think is also helpful. So, in the winter, I like baking as a creative outlet and then anytime that it warms up, I love being outdoors. I think nature is very healing. So, hiking anything by water I really enjoy those things.

[00:15:06] **Krissy Dilger:** Sounds great. And, I totally agree with you on the pet therapy. That's a great way to relax. Is there anything you'd like to share for people with these disorders who are considering your clinic for care?

[00:15:21] **Dr. Elizabeth Wilson:** Yeah, sure. I think we as a center really aim to just provide exceptional care to these children who are going through a very difficult thing. And we try to meet patients and families where they're at and provide really holistic care, which is where our multidisciplinary team comes in and why we're so large because we want to make sure that we're meeting every need that this patient has as best as we can, and really individualize the care for each patient.

[00:15:58] So it's not a cookie cutter model, by any means. And I think that for us, part of that is just making sure that we're offering access to research to the most up- to-date diagnostic and treatment options that are out there, so that our patients know that they're getting all of the options that are available to them and they're not limited in terms of their treatment because they're coming to our center.

[00:16:30] And then I think in general, we focus a lot on rehab, on getting kids back into a good quality of life as much as possible, back into daily functioning, and that's where our connection to our rehab team comes in. But also, we have a strong connection to the community. And so, we love doing things like this with us, SRNA, educating patients.

[00:16:55] We're doing a Walk MS event. We're hosting a family education day, which SRNA is helping to sponsor. And so, I think that is part of our mission as just a center and kind of speaks to the kind of care that we're trying to provide. But we're really there for the patients on an individual basis and we'll be happy to do whatever we can to try to help address their needs and get kids to live in their life as much as they can.

[00:17:26] **Krissy Dilger:** That's wonderful. So, my final question is, I always try to end on a positive note. What are you hopeful for in the future of rare neuroimmune disorders?

[00:17:38] **Dr. Elizabeth Wilson:** Yeah, I love this. I think that I, it's been such an exciting field and so much has changed since I started my training, but I think in the next few years, I'm really hopeful that we're going to get better at diagnosing these disorders faster and getting patients started on treatment sooner so that we can prevent as much deficits as possible.

[00:18:06] And I think ultimately my hope is that we're going to come up with or find some kind of biomarker, some kind of test that we can definitively say how active somebody's disease is, where they are in their disease process, to just help us tailor medicine even better. And hopefully maybe we'll get to a point where we can even prevent the first relapse or attack in some of these disorders, which I think would be outstanding.

[00:18:34] **Krissy Dilger:** Yeah, that's great. I think that's something I'm also hopeful for and we at SRNA are working to help fund and also just support however we can. We're hopeful for the future, as well. So, thank you for sharing and thank you so much for joining me and highlighting the clinic at Cincinnati Children's Hospital.

[00:18:57] **Dr. Elizabeth Wilson:** Thanks for having me. It was great to talk to you.

[00:19:02] **Krissy Dilger:** Thank you to our "Community Meets Clinic" sponsors, Amgen, Alexion, AstraZeneca Rare Disease, and Genentech, and UCB. Amgen is focused on the discovery, development, and commercialization of medicines that address critical needs for people impacted by rare, autoimmune, and severe inflammatory diseases. They apply scientific expertise and courage to bring clinically meaningful therapies to patients. Amgen believes science and compassion must work together to transform lives.

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