Anna: Flowers, they grow just to die/feelings, they come just to hide

I don't wanna outgrow my own little part/Too scared to let go So I'll find a better spot

Stephen: This is Road to Resilience, a podcast about facing adversity. I'm Stephen Calabria. What you're hearing is a song by an 18-year-old patient at Mount Sinai's Louie Armstrong Center for Music and Medicine. The patient, named Anna wrote, recorded, produced, and engineered the whole track. which is called "That's Why I'm Like This."

The song was crucial in enabling Anna to manage complex emotions, and to find her voice at an age in which it can be difficult to build autonomy and confidence. Anna's story is but one small example of the clinical treatment and the research pioneered by the Armstrong Center and its team of music therapists.

One such music therapist at the Armstrong Center is Caitlin Bell, who worked with Anna personally, and is an active researcher in a two year study undertaken by the Armstrong Center. The study, known as the Assessment of Music Experiences in Navigating Depression, or AMEND study, allows researchers to investigate the clinical and socially prescribed impact of music and music therapy on distinct populations susceptible to depression. We're excited to have Caitlin on the show to discuss her work with the Armstrong Center.

Anna: That's why I'm like this, I guess.

Stephen: Caitlin Bell. Welcome to Road to Resilience.

Caitlin: Thank you very much. Thank you for having me.

Stephen: To kick us off, what is music therapy and how does it differ from other kinds of therapy?

Caitlin: Broadly speaking, music therapy is using music in a clinical and evidence-based way, using music interventions, to accomplish individualized goals within the therapeutic relationship. And music therapy is done by credentialed professionals who complete approved music therapy programs. So, essentially, it's incorporating the musical experience into the therapeutic relationship.
Stephen: So, how is it determined that a given patient could uniquely benefit from music therapy?

Caitlin: Music therapy isn't something that is indicated for every client, every patient, but every client or patient would go through an assessment process to determine whether or not music therapy might be beneficial for that person.

It might be to promote wellness. It might be to manage stress or express themselves. It might be for pain management or to improve socialization or communication skills. It might be for rehabilitation purposes. So there's so many reasons why you might use music to promote or to execute goals, but it's not always necessarily indicated, and an assessment would determine that.

Stephen: There are many music therapy programs nationwide and throughout the world. What is it about Mount Sinai's Louis Armstrong Center that you would say is particularly unique?

Caitlin: We practice at the Louis Armstrong Center for Music and Medicine, medical music psychotherapy. So, we're focusing on the mind, the body, and the spirit of each person. We really take a holistic approach to music therapy and music psychotherapy within the medical setting and both inpatient and outpatient settings.

Stephen: Mind and body. So, obviously, music would affect the mind. In what ways would it affect the body?

Caitlin: Music can affect the body in terms of, say, someone is recovering from a stroke. Say, someone is dealing with a significant amount of pain. We might use music for something like tension release. Or, to help with regaining speech. So there are all types of ways that we can physically approach music from a physical perspective in order to target someone's physical goals.

Stephen: So, at the Armstrong Center, what are the different areas that the music therapists cover?

Caitlin: We work across the lifespan, inpatient and outpatient. We work from the NICU all the way to end of life and palliative care.

Stephen: I'm sorry, what does NICU stand for?
Caitlin: The Neonatal Intensive Care Unit, all the way through to palliative care. So, we work in many different departments across the hospital, from inpatient psychiatry, outpatient psychiatry, neonatal intensive care unit, pediatric ICU, medical ICU. We work in radiation oncology and, really, everywhere in between. And then, of course, we have our Louis Armstrong Center for Music and Medicine outpatient clinic, where we are integrating with the community, as well.

Stephen: What does that entail?

Caitlin: So, our Louis Armstrong Center for Music and Medicine outpatient clinic, we work with all types of people who come in for individual or group music therapy sessions. We might work with somebody who is a musician or a performing artist who might be coming in for something like performance anxiety, or maybe they have experienced an injury, as a musician, which many musicians do, from playing their instruments.

We also might work with a child who's been diagnosed with autism. We work in the New York City public schools with a program that we have called our Asthma Initiative Program, where we work with students and schools to work on enhancing their breath support as well as their emotional well-being. So, there's all types of reasons why someone might come to our clinic. It's to receive that continuity of care from inpatient to outpatient.

Stephen: As far as a music therapist themselves, how does one get involved in this? Do they typically come from music and then make the transition into medicine, or is it the other way around? How does it usually work?

Caitlin: One of the wonderful things I think about the profession is that we come from all walks of life. And someone might come into music therapy from an undergraduate level and study music therapy from undergraduate if they choose to go to graduate and perhaps pursue a PhD. But some people come in at the Master's level, and come from all different walks of life.

I've came from a performance background as an undergraduate in vocal performance and found my way into music therapy as a result of several different community projects that I was working on that just inspired me and influenced me to pursue music therapy as a profession, because of the way that music connects us. There was just this enhanced meaning behind the work that
motivated me to pursue music therapy. But absolutely, we come from walks of life.

[00:07:39] **Stephen:** You are one of the leaders of the AMEND study here at the Armstrong Center. What is the AMEND study and what is your involvement?

[00:07:50] **Caitlin:** I'm involved in the AMEND study, which was developed by Dr. Joanne Loewy at the Louis Armstrong Center for Music and Medicine. AMEND stands for the Assessment of Music Experiences in Navigating Depression, and our center was awarded a two-year grant to support a National Endowment for the Arts Research Lab, which is in partnership with Carnegie Hall and the Weill Music Institute.

[00:08:17] And our team at the Louis Armstrong Center, in the past, has studied how music and anxiety can affect disease progressions in diagnoses such as cancer, pulmonology, stroke. And with this new AMEND lab, we'll be investigating how music affects mood through a variety of music and music therapy experiences.

[00:08:42] **Stephen:** What methods do you use to gather data on patient well-being and patient outcomes as far as music therapy?

[00:08:50] **Caitlin:** In our AMEND study, and one of the primary assessment tools that we use at the Louis Armstrong Center is a method developed by Dr. Joanne Loewy called the "tour of the room" assessment.

[00:09:03] And the tour of the room assessment investigates 13 areas of inquiry. And these include things like self-awareness, awareness of self and others, thematic expression, listening, performing, how someone engages in a collaborative experience or relationship, range of affect, motivation. So there's all these different areas of inquiry that we are investigating in a tour of the room assessment.

[00:09:32] And in addition to this data that we're collecting in the AMEND study, we're also going to be using measurements to collect depression inventory. So, for the children's arm of the study, we're going to be using the CDI, or the Children's Depression Inventory, in addition to the Connor Davidson Resilience Scale.

[00:09:55] So those are two scales that are commonly used in order to assess depression as well as resilience in a person.
So an assessment of depression is measured completely differently in an adult than it is in a child.

There are different scales and the differences, the children's scale is, essentially, questions that a child is able to interpret and answer for themselves.

What would be a question that a child couldn't answer or interpret that an adult could?

So, an example question from the children's depression inventory would be, in the past two weeks, pick one of these: "I am sad once in a while." "I am sad many times." "I am sad all the time." So, essentially, the language is just kind of simplified in order for them to be able to interpret. The adult inventory would have slightly more nuanced questions.

Okay, you also led off with talking about how patients are assessed on knowledge of self and knowledge of, what was it, a group?

Awareness of self and others.

Yes, awareness of self and others. What does that mean?

One of the things that we might be assessing in an assessment in terms of, like, how aware is someone of themselves? How aware are they of the people around them?

In the context of music therapy, that might look like the way that they engage in the music. It might be the way that they engage in, say, an improvisation. It might be a way that they speak about music or the way that they interact with the therapist.

One of the things I didn't mention is social prescribing. Social prescribing is kind of what we're doing in this AMEND study, looking at how we can kind of socially prescribe music or music experiences or music therapy to attend to someone's well being.

How does the delivery of music therapy, both in patients with depression and those otherwise, differ in a group setting versus one-on-one? Because you do both of those, right?
Caitlin: Yes, we do both individual and group music therapy. Group music therapy can look, because there are so many people with so many different goals in a group setting, you know, we're all unique individuals.

We all come in with our own special unique needs. And so a lot of group goals might be about socialization. It might be about camaraderie. It might be about community engagement or and having that self-expression be affirmed by someone else. So there's a lot of communication, socialization, interpersonal connection that I think can exist in a group setting through music, whereas individual might be slightly more catered or nuanced to meet the specific needs of that particular individual.

Stephen: Is there a profile that the typical AMEND patient fits?

Caitlin: We're going to be looking at four different sub populations. Children and adolescents, college students, parents of infants who are in the neonatal intensive care unit and individuals who have been diagnosed with mild cognitive impairment.

And in the first year of the study is when we're going to be looking at children and adolescents between the ages of 7 and 21. And individuals who would qualify for the study would be those who are interested in attending to their mood through music, or those who might be at risk for low mood or depression.

Stephen: Are children typically, obviously everybody is an individual and everything is different with different populations, but generally speaking, would you say that children are easier to treat than adults?

Caitlin: One of the things that I think is remarkable about children, adolescents, young adults, is that there is sort of an intuitive resilience and creativity, I think, that exists in many young people, which makes, I certainly, I would acknowledge that I have a bias, but I think it makes working with young people so interesting and so intriguing because they can tend to be so creatively engaged in the music therapy process.

Stephen: Let's talk about the music itself. Are there certain notes, chords, time signatures that are all but universally effective in treatment? Or are the patient responses mostly subjective?

Caitlin: I think patient responses are, are subjective. Absolutely. One of the biggest things that it's, that is important to consider as a music
therapist are the cultural differences that can exist in every single person's walk of life.

[00:15:02] So, a certain chord might make one person feel uplifted and inspired, and that same exact chord for somebody else might be something that tweaks them and or gives them some sort of unpleasant memory. So, we always need to consider cultural differences and part of that is in the assessment.

[00:15:25] One of the ways that we look at relationship with music is looking at someone's song of kin, and that is a song or an artist or a genre of music that is a part of that person's individual walk of life, and how can we use that patient-preferred music or client-preferred music to engage musically and to deepen the therapeutic process?

[00:15:50] Stephen: And I guess that question also extends towards the instruments themselves. So, are there certain instruments that are more likely to yield a positive outcome than others? Or again, is it completely subjective?

[00:16:03] Caitlin: Well, one of the ways that we might assess this, when a person is coming in to a music therapy assessment, is to have them participate in Dr. Loewy's tour of the room assessment. So, if it feels okay for you to be the subject here for a moment, I could give you an example of some of the things that we might explore in a tour of the room assessment.

[00:16:23] Now, this wouldn't be every single instrument, because there is a huge array of instruments that we explore, but I can give you a couple. And what I might ask is if you would like to, tell me anything that any of these instruments, when you hear these instruments, what does it remind you of? It can be anything that comes to mind.

[00:16:44] Do you like it? Do you dislike it? So, i'm just going to play a couple of instruments and I'm just going to have you respond With anything that comes to your mind. Does that feel okay?

[00:16:53] Stephen: Sure. Anything that comes to mind? Um, the first thing is metal, because it has a metallic sound. Echo, because so much of that one seems rooted in, I don't know, the echo that emanates from it. Um, I don't know, these are terrible answers, but...

[00:17:20] Caitlin: They're great answers. There's no right or wrong, and that's one of the things about our Tour of the Room assessment. There's not a right or wrong answer about it. Just gathering information.
Stephen: And also, looking at, what is that called?

Caitlin: This is called a happy drum.

Stephen: A hapi drum.

Caitlin: And not happy, it's H A P I, happy drum.

Stephen: Hapi drum.

Caitlin: Should we do another one?

Stephen: Sure.

Okay, that I would think is a xylophone. Is that right?

Caitlin: It's a type of xylophone. It's an African marimba.

Stephen: An african marimba. Okay. So the, as opposed to the hapi, this one's notes are far tighter, with less of an echo. It's also wood based as opposed to metallic. Um, and I imagine it would be far easier to play an actual song, because it's not as echoey and you would be able to fit in more notes into it. I wouldn't say that I feel a particular emotional bond with either of them.

Caitlin: Sure.

Stephen: But, maybe I could.

Caitlin: Anything that it reminds you of?

Stephen: Let's see, one song in particular that I think uses this xylophone is a White Stripes song, and perhaps it's cultural differences because, my people are southern Italian and I don't recall either of these in the southern Italian, but, no, nothing in particular

Caitlin: So I'm getting a lot of information just about your your personal history there and I would wonder if you listen to the White Stripes. Is that a band that you enjoy?

Stephen: Yes. Yes.
Caitlin: And you come from an Italian background.

Stephen: Yes. Now, in a treatment setting, what would the next steps be?

Caitlin: The next steps would be, say we listen to 25 sounds. I've gathered all of this information. Sounds that you like, sounds that you didn't like, sounds that reminded you of something, sounds that you connected to or didn't connect to.

And then it might be, what do you want to hear more of? What sound do you want to hear more of? And would you like to hear that sound played with another sound? Or would you like to hear that sound on its own? Do you want to play that sound? Or would you like me as the therapist to play the sound? So we're looking at, is there collaborative interest?

Is there independence? Is there autonomy? Is there a range of affect? What type of music are they going to engage in? Are we going to play a familiar song? A song that the person knows? Or are we going to improvise and make something up on our own? So, it could look a million different ways, and we're really just following and meeting the patient where they are, and following where they want to go next.

One of the greatest things, and Dr. Loewy always says that, the assessment is is one of the, if not the most interesting, moment, where two people are coming together in this first meeting and there's so much information there that we get to explore and discover together in that assessment.

Stephen: And based on that, you determine what the instrument is, typically, that a given patient would like to work with or have used in their therapy, what songs that might elicit, be they original songs or covers, as it were.

Caitlin: Sure.

Stephen: A crucial component of resilience is realistic optimism, the ability to take things as they are while still looking forward to a brighter day, a brighter future. Could you talk a little bit about how music therapy is able to instill a greater sense of optimism in patients who are struggling with depression?
Caitlin: I mean, as you said, I think resilience can be interpreted as, you know, a combination of mood and behavioral self-management in the face of adversity or, or striving to find meaning in difficult situations.

And music, I think, can be such an intuitive aspect of the process or the road to resilience. I think it's one of the most natural ways that we as human beings can tap into finding meaning, finding something that gives us inspiration or purpose, and it's non-pharmacological. It's a way that we can find connection to others.

It's a way that, we can be inspired and feel a sense of hope. And so I think music lends itself quite naturally to tapping into resilience.

If they exist at all, what are the adverse effects of music therapy of which you have to be mindful?

Caitlin: One of the things that comes to mind, particularly in my work with teenagers and young people is one of the things that we may often look for is, how one engages with music, for instance, a young person might be using music in a way to ruminate on difficult feelings in a way that is not necessarily tapping into resilience, but is actually making them feel worse.

One of the things that we might assess is, how is a person engaging in music, and is it something that is promoting health and well being, or is it something that's bringing someone down? And if that's the case, then we might either try to redirect and try and get that person to develop coping strategies that could help them use music more productively, and it might just not be indicated.

Just anecdotally, I feel better when I listen to music that I listened to as a teenager. Just stuff that is in my marrow that I have a history of making me feel better. How does memory play into the efficacy of music as a treatment for depression?

Well, I think that goes back to our Song of Kin, right? What songs did you connect to in your personal history and how did they influence your identity formation? And so I, I think these songs that are innately ingrained in us, that have grown with us, that have been a part of our identity and part of our personal history can certainly be a space, a point of entry, a place to start, to
begin the journey to, to well-being, because those songs have stayed with us for a reason.

[00:23:46] So we're looking at four sub-populations. We're looking at children and adolescents. We're looking at college students. We're looking at individuals who have been diagnosed with mild cognitive impairment, as well as parents of infants who are in the neonatal intensive care unit. With each of these populations, we're looking at their song of kin.

[00:24:08] So what is their personal musical preferences and what is their personal musical history? And then we're looking at how they might engage in music and depending on the assessment, we will move forward with various interventions. That could look like music improvisation. It could look like songwriting.

[00:24:25] It could look like lyric analysis. There's so many different, music listening for relaxation, there's so many different types of interventions, but the first and primary, point of entry is the assessment to kind of determine what, how we will open up the therapeutic process.

[00:24:41] Stephen: Now, I I understand that the Armstrong Center isn't going into this study alone. There are also partners that are involved. Could you talk a little bit about who these partners are and what they contribute and what interests they have in the outcome of the study?

[00:24:57] Caitlin: Sure. We have been awarded a two year grant to support a National Endowment for the Arts Research Lab that's in partnership with Carnegie Hall's Weill Music Institute. We're also partnering with Third Street Music School Settlement, as well as Cooper Union. And all of these places have a particular vested interest in the study, in order to explore how mood and music are related and how each of these institutions can support their students, the populations that they work with, in better supporting them through music.

[00:25:32] Especially, I think, we've seen since the COVID-19 pandemic, there's been a lot of mental health need. And so, each of these institutions has a particular vested interest in supporting their groups and attending to their mood.

[00:25:49] Stephen: Another component of resilience is facing fear, meeting it head-on. Maybe it's a fear you've never encountered. Maybe it's a fear that you did encounter and has haunted a person for their whole life. Talk a little bit about in music therapy, what role does encountering and facing and overcoming one's fear or fears, what role does that really play, if at all?
Caitlin: Well, I think music can be used as a way to tap into one's self confidence and self esteem. One of the ways that I see in my work with young people is how can we use music as a way to tap into their sense of mastery, children and adolescents, and of course, I'm speaking to my work with children and teens.

Of course, this goes across population, but across many populations, but children and teenagers, they learn so quickly and they have such a great and amazing ability to master something so much quicker than adults do. And so, one of the ways in music therapy that we can look at overcoming fear and obstacles and building confidence is through that sense of mastery and, and perhaps it's learning an instrument or writing a song that they can take ownership of and that they can feel.

And, and just with the ease of how quickly they learn, it almost is an intuitive process bringing that in. And I've seen so many of my clients overcome enormous obstacles as a result of getting up and performing a song that they've been learning or, or writing a song that they feel particularly proud of.

And it's just, it serves as that kind of transitional object that boosts their, their confidence and helps them push forward in their, in their growth and development.

Stephen: Now, I imagine also, perhaps more than any population, it's music therapists themselves who derive a great deal of satisfaction and meaning and purpose and joy from not just their work, but also from music itself. When music therapists are coping with the difficulties of the role, how often is music itself also a safe haven?

Caitlin: I find that being a music therapist is one of the most rewarding professions and there is such a sense of personal gratification that I think comes from the job. But it's also a profession that requires a great deal of self care. So, if one is not attending to their own needs, it's going to be very, very hard for us to meet the needs of our clients and the people that we work with.

And we all have different methods of self-care. I feel like I can only really speak for myself in the way that I use music for my self-care, but it's certainly a part of my process and certainly a part of what I do outside of my job. Whether that's listening to music or writing music or working collaboratively on a project with other musicians or artists.
It's a huge part of my personal life and one that I find that I do have to intention, the longer I work in the profession, what I find is that when I'm using music outside of my work, I'm more intentional about it. I'm more intentional about the way that I use it, more than I used to be, I think, before I became a music therapist to strike a balance, I think, between my professional life and my personal life.

And ensuring that when I am using it personally, that I'm using it intentionally for myself as a means of self care. It might not look like, You know, as a music therapist, we're tapping into all different music from different cultures and different backgrounds and, so in my personal life, I'm going to make sure that I'm tapping into my personal history and my, my background and what, how I, how I enjoy music and how I like to listen to music.

Stephen: Can you pinpoint the most popular song, the most popular artist, the most, I mean, you're not a jukebox, but, is there a particular song or artist or even melody that is most requested amongst your patients and that seems to yield the most positive outcomes?

Caitlin: Hmm, yeah. I mean, it really, of course, it really depends on the, the group or the person that you're, you're working with. There are songs that tend to frequently come up, but it really depends on, on the age. The age or, or the population or the, or the background. There are certain songs that I think are great for students to know, in terms of beginning or, or learning music therapists.

So, anything that is kind of universally popular, something like a "Stand By Me," or an "Amazing Grace," or a "Lean on Me," or "Three Little Birds," these types of songs that I think can be really, really great for students or beginning music therapists to be able to kind of have a repertoire, a book that they can easily tap into that have these universal messages of hope, I think can be a great place to start.

But in terms of most-requested or most-played songs, that's a more challenging answer because, again, we all come from so many different backgrounds and I think it can be important for, you're, you're absolutely right. We're like, we're not jukeboxes. We're not karaoke machines. So, we don't necessarily, many people can, but don't pull songs out of a hat. But to have a good place to start with is important.
Stephen: Right. And as you sort of touched upon, just because a given song or artist is something that a patient wants to hear, that doesn't necessarily mean that that's going to make them feel better.

Caitlin: Sure. Absolutely. And it doesn't necessarily mean that I know how to play it, so it might be, "Can you sing it for me?" or "Can you show me the song? Can we listen to it together? Maybe we learn it together." And I think that is a huge part of the assessment process as well as, well, what is the song to this person and how do we engage in it?

Stephen: Right, right. And you're not about to play like, you know, dubstep on a ukulele.

Caitlin: That would be very hard, but you know, challenge accepted.

Stephen: Yeah. So that's for next episode.

Aside from cultural differences, and everything that accompanies that, can you pinpoint the differences between the types of music that an adolescent or a young adult might request or be interested to hear and learn, versus that which a geriatric patient might be interested or someone who is of middle age. What do you think?

Caitlin: Yeah, I think a lot of it depends on what they what they're surrounded by in their daily lives as well as You know, the time period when one grew up can be hugely influential in terms of what someone's musical preferences are.

I find that I am constantly with young people learning new things, learning new artists, learning what's popular, what's, what are the trends. And so one of the challenges I think with the young people is, what's out there and how quickly things are influenced and rapidly changing around social media.

Those trends are, are just as rapidly changing. And so I think it is quite a challenge to just kind of do your best to stay on top of it. But there's no perfect timeline or perfect path to that.

Stephen: We led off this episode with a song that was written and composed by one of your patients insofar. As you're able to talk about it without giving away any personal information or identifying information, could you tell us a little bit about that patient and what her journey was?
Caitlin: Sure. So, she wrote, recorded, produced, engineered. She did that entire song on her own. So I think that speaks to, to many different aspects of her growth and development, as well as attending to her well being.

You know, I found that in my time working with her, there's been a huge focus on attending to her well-being through music, and certainly, I think, in terms of self-expression and confidence-building and autonomy, as well as exploring her own identity. Identity formation at that stage in development in life is really kind of the primary task of what's happening at that stage in life.

"Who am I?" is really the question that we're seeking to answer at that stage in life. And I find that this sample of this song could not be more representative of that period of development, where one is seeking to answer the question, "Who am I?" while kind of stepping out on their own for the first time and standing on their own two feet and feeling what that feels like, which can feel a little wobbly for people when they're kind of stepping out on their own for the first time.

Stephen: Well, that's it for my questions. Was there anything else you wanted to say?

Caitlin: I want to say thank you so much for putting a light on music therapy and spreading the good word about the work that we do. I think it's an ever-developing profession and one that I think can be highly collaborative and interdisciplinary and it's just wonderful to get to chat with you today about music therapy.

Stephen: I actually had one more question for you.

Caitlin: Great.

Stephen: Is there a song that you play for yourself, perhaps at the end of a really long day, that always makes you feel better?

Caitlin: Yes, this is a great question and I think it's a great exercise for music therapists and any creative arts therapist is how do you use your own modality to start and end your day? I've been challenged with this before as a way to intentionally practice self-care before and after. And I wonder if, if I should play as, should I?

Stephen: Sure, yeah.
Caitlin: Yeah? Yeah? Okay. So this is a Kacey Musgraves song called Rainbow. And I think it's a great representation of resilience.

When it rains, it pours, but you didn't even notice. It ain't raining anymore. It's hard to breathe when all you know is the struggle of staying above the rising water line. The sky is finally open, the rain and wind stop blowin but you're stuck out in the same old storm again. You're tied to your umbrella, darling, I'm just trying to tell ya that there's always been a rainbow hanging over your head.

Stephen: Caitlin Bell is a music therapist with Mount Sinai's Louis Armstrong Center for Music and Medicine. For more information about the Louis Armstrong Center and its Sound Journeys Family Concert Series, visit musicandmedicine.org or check out the Facebook page at Louis Armstrong Center for Music and Medicine.

That's all for this episode of Road to Resilience. If you enjoyed it, please rate, review, and subscribe to our podcast on your favorite podcast platform. This podcast is a production of the Mount Sinai Health System. It's produced by me, Stephen Calabria, and our executive producer, Lucia Lee. From all of us here in Mount Sinai, thanks for listening, and we'll catch you next time.

Caitlin Bell, thank you so much for being on the show.

Caitlin: Thank you very much for having me.