# Behind the Breakthrough Podcast - University Health Network

# Season 5 - Dr. Howard Abrams

# Transcript

## **BTB**

Hello and welcome to Behind the Breakthrough, the podcast all about groundbreaking medical research and the people behind it at Toronto's University Health Network, Canada's largest research and teaching hospital. I'm your host, Christian Coté. And on today's episode, Dr. Howard Abrams, an award winning physician, and a research scientist at UHN's Toronto Rehabilitation Institute Research Center called KITE, which stands for Knowledge, Innovation, Talent, Everywhere. Dr. Abrams leads a team that is pioneering an innovative solution to the gap in housing, and, health support options for elderly Canadians who want to age at home. Dr. Howard Abrams, welcome to Behind the Breakthrough.

# DR. HOWARD ABRAMS

Thank you, Christian.

## **BTB**

You've been saying for a while now that we need to explore alternate models of senior housing in this country. So let's break that down. First of all, help us understand why what's the challenge today, facing those Canadians who want to remain at home and age in place?

# DR. HOWARD ABRAMS

That's an excellent question, Christian. And there's two parts to that. How many elder Canadians will there be in the very near term? And what are the existing and planned options? To address the first part, the National Institute of Aging, estimated that by 2030 20% of the Canadian population will be over the age of 65. And that's a huge increase over a very short period of time. The second part is, what are the current options? And are we even meeting that need right now? And the shorter answer is, No, we haven't really kept up with the need. There's a shortage already. And in the very near future, we haven't had plans in place to meet that shortage. One of the problems is that most older Canadians want to age in place they want to age at home, as one of my colleagues says it's where they've lived most of their life, and they know how to do that best. And unfortunately, the pandemic kind of reinforced that, given some of the unfortunate consequences of infectious spread within the institutions, isolation away from their family, during times of stress.

## **BTB**

You're talking about long term care homes.

# DR. HOWARD ABRAMS

I'm talking about long term care homes, and other institutionalized options for older Canadians.

And in terms of long term care, really, in terms of options for aging Canadians, and housing supply, for those who want to live at home, what are the options out there?

## DR. HOWARD ABRAMS

There's a number of options, both private and public. And the larger question is, do we really have enough supply within all those options? So large, multi generational homes are no longer the norm, although in some communities, you still find them. So that's really not an option for the majority of aging Canadians. There is publicly available homecare that can supplement support in the home. But it's often not enough, or of the type that will support all the needs required to enable them to age with dignity at home. There are a number of long term care institutions starting with both public and private retirement homes. But again, the private homes, although some of them are excellent quality, are very expensive, and aren't a universal solution. Similarly, hiring additional private care at home is extremely expensive. public institutions, many again, have excellent quality, but they're long term care homes, not the preferred place for 96 to 98% of older Canadians, again, according to a study by the National Institute of Aging. So what we have is not only a lack of supply, but a lack of choice.

#### **BTB**

And from a physical and mental health perspective, what do we know about aging at home versus say, moving into a long term care or a retirement home?

# DR. HOWARD ABRAMS

You've been living at home most of your life, that's how you know, to do best. So people are comfortable in their surroundings. They know how to adapt as their abilities change. And we know that as you age, you become much more vulnerable to changes in your environment and your ability to cope. So someone who's maybe coping, maybe not 100% But coping well enough at home, if moved into an institution or suddenly unfortunately becomes ill and hospitalized is at very high risk for developing delirium, that is kind of confusion and deterioration of their physical status, so that they may need to require higher and higher levels of care.

## **BTB**

Okay, so you've outlined the need, the lack really of resources to accommodate that need. The demand is only going to get larger as you know, the so called Silver Tsunami of people retiring continues. So a solution you and your research team are championing is something called NORC. So just first really basic for us out there in the audience, what is NORC?

## DR. HOWARD ABRAMS

So NORC, N O R C stands for Naturally Occurring Retirement Community. And what a NORC is, is, it's an incidental collection of older adults who just happened to be living in the same place. So it's not a

purpose-built retirement home or community. It's just, we are able to identify in Toronto and I can go into that a little more detail. Many buildings, often aging apartment buildings, condos, etc. Where it just happens that a large minority or even the majority, up to 75% of the residents are older adults over the age of 65.

#### **BTB**

And the concept of a NORC, can you explain that like what's on offer, then to seniors who want to age in place, through this lens of a NORC?

#### DR. HOWARD ABRAMS

Just to backtrack a little bit, there's a bit of confusion between the term NORC as this is just a place where a bunch of older people happen to be living, and a NORC, where there's actually some kind of organized, mutual support among the residents, perhaps assisted by some outside agencies. So if you think about that concentration of seniors, then the creative opportunity and challenges, how can you optimize the efficiency and the quality of living when you can mutually support each other around things that people feel capable of helping with? And in addition, how can we use that concentration to more efficiently deliver needed services, like certain types of homecare services, certain types of health promotion, perhaps even group buying?

Really, the creativity is limitless. One of the key features and values of NORCs is that it's driven by the residents. It's driven by the people who live there. So one of our core values is community development. And we have a program to help seniors who are interested, become more effective community development agents, leaders, conflict resolution agents, and at the same time, say, hey, you know, we've got some things we can help you with, what do you think? So it's more about what their needs are, rather than what we think they should be doing. And led by the residents, rather than, we're going to tell you how it's going to be.

# **BTB**

So very much resident-driven....

#### DR. HOWARD ABRAMS

Exactly.

#### **BTB**

...to the population that's in that particular community or building.

# DR. HOWARD ABRAMS

Correct. And it may be very unique. Depending on the type of building it could be an aging apartment building built in the 1950s. With lower than average rents. It could be a high end, condo or Co Op. And

we're looking at the entire spectrum of socio economic and demographic groups in Toronto, of which there's a huge variety. We've been able to map out in Toronto, almost 500 buildings that have at least 30% seniors over the age of 65. So we have almost 500, NORC, eligible or NORC type buildings. And across Ontario, there's almost 2000.

#### **BTB**

Wow!

## DR. HOWARD ABRAMS

The total population of those exceeds the entire capacity of the long term care institutions.

#### **BTB**

Let's throw some context in here that because you mentioned 'we', you are a driving force behind the 2022 launch of UHNs NORC Innovation Center, which is the first of its kind in Canada, you're the medical lead. So talk to us about we, the NORC Innovation Center, what's the mission of the Center?

## DR. HOWARD ABRAMS

Let me just address the issue of who we are. And then I'll get to our mission. So we are Open Lab. So we are an innovation and design group that's under the umbrella of KITE at Toronto Rehab, as you mentioned at the beginning, so we are within UHN. We came up with this concept of developing a NORC Innovation Center [NIC], where we're going, Hey, we've got these amazing healthcare resources at UHN. There will be a number of people in these Norcs that require actual formal connection to the healthcare system and One to One Care. And just so happens that UHN has something called the Connected Care program within integrated care.

And so we thought, Well, why don't we partner with integrated care and become an entire health and social network? We can say health and social care, but it's more than care. It's you know, care always sounds to me a little hierarchical, like there's people providing care and there's people getting care and this is more about empowering people to have supported self management, nobody self manages. So I like the term supported self management. And so we can connect them directly into health services, either by assisting them to connect with their primary care provider, if they're having some trouble with that connection. Or as unfortunately, many people don't have a primary care provider, we can provide a nurse practitioner who can often address the issues that they're dealing with, or can organize connection to those resources within UHN that will help manage their care.

# **BTB**

And the mission of the NORC Innovation Center at UNH?

Helping older adults age in the place that they want to be, which is primarily at home, with choice and dignity. And we want to make that an integrated life experience across the spectrum of Social and Health living. So sometimes we conceptualize that if we have a circle of people who are relatively healthy, they want to stay healthy. And we have a circle of people who may be experiencing health issues, and they want to get healthy. And there's obviously overlap. We want to be able to address that whole spectrum, not just say, Oh, you've now got heart failure, let's connect you to a heart failure doctor, we want to say, Oh, you want to do age appropriate yoga. Great, we have a list of community agencies and volunteers, that would be happy to provide that. And we can help connect them up. Now, another group may not be interested in yoga at all, they want to do Tai Chi, let's say. So we have been cataloging what's available in the different neighborhoods. And it's impossible for any one healthcare provider to really understand what all the resources are in a community. But we've committed to not only cataloging them, but making one to one connection with them.

# **BTB**

So you talked a little bit about how you've identified something like 500, NORC-eligible communities, buildings in Toronto. I'm just curious, how do you choose what qualifies as a site to be a NORC?

#### DR. HOWARD ABRAMS

In the initial phase of this project? It's quite exploratory. And what we wanted to do was include buildings sort of across the geographic, and socio economic and demographic continuum. So we carefully selected sites that would represent those different groups. We have Toronto Public Housing, we have a Co Op, where you have sort of middle to upper middle class people. We have buildings where there's multiple ethnic and language groups within the building, and others that are fairly homogenous. I think one of the creative things that the team has done, aside from just identifying these buildings, while working with publicly available databases, and then, with a research database, we have the anonymized health data, by postal code.

And some of these buildings have so many residents they're their own postal code. So we can say, oh, that building, we know 20% of those people have type two diabetes, and 15% go to see a cardiologist. So we have health profiles of those buildings, we can say, oh, there have been so many 911 calls to a building, there's been this amount of healthcare resource usage. And so we're trying to again, get a spectrum of health status, not just buildings where everyone's pretty well, and not really in high need of services, to buildings where there's a significant burden of care that they're experiencing.

# **BTB**

So then take us the next step. What is the NORC Innovation Center, say for example, in this case, offer that building or this group of residents?

We started with this concept called NORC ambassadors. And we thought, if we're going to do community empowerment and community development, we need community champions. And so again, I mean, I can't say enough about the team that I work with. They're, they're quite phenomenal in their skill set. We have people who are very experienced in community development and a concept called relational caring, which is different than transactional caring. Transactional caring is, you come in you have pneumonia, you want an antibiotic. That's a transaction. A relation is, I know your family. I know your worries, your concerns. I know that your cough is maybe partly pneumonia, but there's other things going on. And it's about establishing those relationships.

So we have this NORC Ambassador Program, which is still ongoing, we're still recruiting. So we advertise in these buildings and say, is anybody interested in this? This is what the program looks like. And then we take them through a program of community development, relational caring group organization, as I said, conflict resolution, that type of thing. And now we have champions in the building. This is a developmental phase, I don't want to call it a pilot, because pilots tend to end and die and this is meant to be sustainable. We have different models and different intensities of NORC services. So some will have a Norc ambassador. And that person will be empowered to rally the residents and understand their needs, and help liaise and organize and work with us.

#### DR. HOWARD ABRAMS

Other buildings will be very intense, where we'll have a coordinator, residents in the building most days of the week, and sitting there so that residents who are walking by can come and say hello and say, Oh, I didn't know you were doing this, you know, we've always wanted to do something like this. And then try to understand, is this a need? Is this a concern of many residents, maybe we could do something as a group, or watching someone limp across the hallway and say, Oh, I see, you know, you're having a little trouble with walking. What's that about? Is there anything I can help with, and then perhaps connecting them either with a rehabilitation service or their family doctor who they may not have been able to contact. So we're trying different spectrums of intensity, just to see what works, what doesn't work, what sites need, what kind of services or what kind of catalyzation, I mean, we think of ourselves more as catalysts rather than providers.

#### **BTB**

And in terms of a NORC, one of these communities are all of these the spectrum of say health support services, for example, whether it's for, as you mentioned, say people with a high concentration of diabetes or cardiac issues, or perhaps physiotherapy, whatever the case may be, is the NORC helping to coordinate and bring all these services to that building?

## DR. HOWARD ABRAMS

Depends on the kind of service. So interestingly, podiatry is one of the big top 10 hits. Older people have difficulty reaching their feet, and managing their toenails, and their foot hygiene, and your feet are critical to your mobility and mobility is critical to your independence. So podiatry, it turns out is a real

must have, we're going to see whether we can get a podiatrist, if we have enough people in a building to come to the building that might be possible. Or we may individually set up appointments, and make sure that person has the transportation they need to get back and forth. And those types of things.

## **BTB**

Are any of these buildings - or do you anticipate these buildings - any some kind of physical retrofitting to be a NORC?

## DR. HOWARD ABRAMS

Yeah, ideally, landlords and building owners would recognize the value of having these older adults, as tenants, they are very reliable, they generally have a stable income, they don't have parties at two o'clock in the morning, or, or put graffiti in the elevator. And it may be that some of them will want to make available space that could become a more community approachable space. We have actually had one building where the owners did that. They renovated a large communal space at no cost to the residents. Whether that will be a general thing that happens, we don't know. I mean, this is partly what we're finding out.

#### **BTB**

Right? I know you've identified the 500, potential NORC community or buildings in Toronto, but you've actually identified a couple of sites are they up and running?

## DR. HOWARD ABRAMS

So they are in the process of up and running. So we have three sites that are up and running our intense sites, and the ones with the lighter touch are in the process of gearing up?

# **BTB**

And those three then just give us a sense then what have you discovered so far in terms of the demands of services, the kinds of services that are coming to the building, or you're helping to coordinate?

# **DR. HOWARD ABRAMS**

I think one of the things that surprised me a little bit was the level of demand for health care services. I was anticipating that most people would be relatively healthy, independently living people. It turns out that so far, most of the demand and it's, you know, it's not numerically most people but most of the requests have been connection to health care services. I think one of the benefits of that is we can do that. We know how to do that.

And what does it mean to say we help with connecting?

## DR. HOWARD ABRAMS

So, for example, a resident might come to the coordinator in the building and say, you know, my blood sugars are way out of control. And I don't know what to do with it. They referred me to a diabetes specialist, but it's eight months from now. And so our coordinator can contact the family doctor and say, you know, Mrs. So and So came to us. Do you want some help with this? Because we could potentially set up a connection with UHN. And the family doctor might say, No, I've got it. Thanks. You know, it just slipped off my radar, I'll take care of it. And that's ideal.

## **BTB**

I mean, do you become like an advocate?

#### DR. HOWARD ABRAMS

We become an advocate, we, we do not want to disrupt people's usual circle of care. If anything, we want to catalyze it to become a better service for the resident. Now, if the family doctor says, you know, I've been referring this person, and I just can't get them in anywhere, I'd love your help. Then we call our nurse practitioner who's with integrated care at UHN. And she will get a better understanding of the residents needs, in fact, a more comprehensive understanding, and then can make either supportive suggestions, or appropriate referrals within the UHN network.

#### **BTB**

What are the kinds of health needs are you discovering are on demand or needed at these three sites that you're now test running the concept?

#### DR. HOWARD ABRAMS

It's quite variable. Diabetes seems to be very common. Type Two Diabetes, cardiac issues, heart issues, heart failure, and UHN has very effective heart failure programs, even ones that support people in the home to help self manage, and we can get people set up with that. So the potential is virtually limitless. Based on can we cope with the demand that's going to come across, and this all remains to be seen, we don't have 500 buildings up and running, generating that level of demand. We have three at the moment and several others in the process. So the demand is quite manageable.

## **BTB**

So the three buildings right now are all plugged into services that come from UHN, if you get up to the 500, how would those buildings plug into the healthcare system?

Well, what we'd like to do is make this a self generating and self sustaining process. You know, Ontario has been broken into, OHTS, Ontario health teams. So we want to liaise with the health teams. And for example, a health team in some area outside of the GTA might say, Wow, we'd really like to do this for our residents. And one of the visions for the Norc Innovation Center is to become a resource. So we don't see ourselves in the long term in the business of setting up and running these, we will catalyze the development of them, we'll consult and advise groups that want to do that. But the original concept of NORC, going back into its origins in the 1970s was these were residents who got together and did this on their own. What we're able to do is bring a more thoughtful and perhaps creative approach.

## **BTB**

And evidence-based I'm guessing as well.

# DR. HOWARD ABRAMS

And evidence based, and the whole connection into integrated care. That's very unique. Because if you develop this on your own outside of any kind of formal healthcare system, you're, you're still in the same situation as any individual trying to get care. And we believe that this model is really very complementary to the whole Ontario Health team concept.

#### **BTB**

And I imagine to scale up this concept, collecting data and publishing will be key to helping assess the value of NORCs and making them attractive perhaps to other communities. What are the measures you're looking for, that would say, this concept of the NORC is a success here in Ontario?

## DR. HOWARD ABRAMS

Evidence, data is critical. That's the basis of change. It's certainly necessary. So we're very fortunate in that within our own group, we have some PhD researchers. And we're doing what we call implementation research where we're, we're actually studying how we're going about doing this. So we can tell people afterwards.

#### **BTB**

What works and what doesn't work.

## DR. HOWARD ABRAMS

This is how you do it.

## **BTB**

Right.

That's something that doesn't happen that often in science. We're also fortunate in that we are partnering with the women's aging lab at Women's College Hospital, and they're doing a larger kind of outcomes type research. So what most governments and payers are looking for is how many emergency room visits have we avoided? How many hospital admissions have we avoided? How many transfers to long term care? What's the reduction in 911 calls to the paramedics? Hard numbers. We'll even have data on total health care utilization, by building. So has that reduced now, it may go up in some areas if we're more successful in connecting to outpatient care. But it should go down on the inpatient side, which is really the expensive side of care.

# **BTB**

I know it's early days, have you got a sense of any reaction like in terms of in the medical or long term care community so far?

#### DR. HOWARD ABRAMS

Well, everyone we talked to thinks this is such an obvious idea. And most of them have an aging parent, or relative, who they say that would be great for my mother, or my aunt, because she's at risk of ending up in long term care, and she's terrified. And if we were able to organize mutual care within the residence, that would be ideal. So it's an idea that sells itself, we don't have to sell it.

## **BTB**

And you hinted at this earlier, like, there is a proven track record here, right of this concept working and it goes back decades. What's the history there just briefly?

## DR. HOWARD ABRAMS

Yeah, so briefly, we believe this started in New York City, where residents came together for mutual support. And, you know, this started probably at the beginning of human civilization, where, you know, tribes got together and helped each other out, you know, this was called a tribe or a village, it's not a new concept. We're trying to modernize it to the 21st century, and use the advantages of science to catalyze this current model.

# **BTB**

What I find interesting in all this, is UHN, a hospital is getting involved in the living arrangements and conditions and supports of the population it serves. It's essentially pioneering new ground in terms of its mission, because you're expanding what a hospital and their role should be in society, which I find fascinating. How well is that being received? What's your take on the fact that we're expanding this mission of a hospital and what it should be doing?

Well, I think UHN has a leading visionary position in this because as you said, in the older times, hospitals were places you went to die, then they became hospitals that you went to when you were really sick, because you could be cared for and potentially cured. We're now in a situation, and this has been building both because of demographics and other trends in the society, where the demands on the hospital to provide that care, that mission is really being stressed. We've been hearing for decades about backups in the emergency departments. Part of that is because there are people in the hospital who no longer need to be there, but there's nowhere for them to go, there isn't enough support at home. And there aren't enough long term care beds.

So hospitals have been grappling with this, doing heroic work to improve the efficiency within hospitals. But there's a certain limit to how efficient you can be and still provide good care. And so hospitals are identifying that really, they have to look at both sides of the demand, both before people get to the hospital. And once they're ready to leave. And that means going into the community and doing prevention at one end, and doing appropriate support at the other end. In healthcare, sometimes we ask, is the crisis bad enough yet? For institutions to actually feel like they now have to do something? And I think the crisis is bad enough.

#### **BTB**

Give us a sense then of the scope and scale of what you envision taking this NORC development to. Like, is it over the next few years, and then you'll publish and then hope for the best or what's the plan?

## DR. HOWARD ABRAMS

Our philosophy in Open Lab is we want to make change happen. So we talk about ourselves as we're not a research group, but we do research and publish. And we're not an operational part of the hospital. But we actually implement programs and run them. Our goal is to find these creative solutions, and then work out a sustainability plan. So we're not interested in a successful pilot that results in a publication that expands the knowledge, which is all legitimate goals. And then when the funding runs out, that's the end of the program. That's not the way we operate. What we want to do is take the funding, develop the program, and with it, develop a sustainability plan, so that groups that have the resources and the mandate to carry this forward, whether it's a community based group, or an NGO or a hospital or something in the private sector, would keep it going.

## **BTB**

So in essence, you're trying to maybe say create a NORC playbook that anybody can adapt or adopt?

#### DR. HOWARD ABRAMS

Exactly. And a center where people can come to ask us for help, or ask for advice, or help them connect to services or community groups. But we don't envisage ourself in the long term as operating Norcs,

A NORC Startup service.

#### DR. HOWARD ABRAMS

Yeah.

## **BTB**

You're more like consultation,

## DR. HOWARD ABRAMS

Consultation and catalyzing.

#### **BTB**

And right now, in terms of the costs of this phase of developing a NORC model, how is that being absorbed?

## DR. HOWARD ABRAMS

We are very fortunate in that we have a number of visionary donors who have seen this future and are willing to take a risk. What we do at Open Lab is often sort of leading edge not been done, I sometimes tell our donors that we could be the next best thing, or we could just be a complete failure. But we haven't been a complete failure to date. And I think our reputation is pretty solid out there that we do some very leading edge, creative things sort of in this space between what the private sector doesn't see as necessarily monetizable. And what the government is not yet prepared to do. So we often work in that space to create the solution, show the viability of it, proof of principle. Part of that is a sustainability plan.

## **BTB**

Do you have a timeline?

# DR. HOWARD ABRAMS

Yeah. So we know that our current line of funding is for 4.5 years. We're about a year into it. And we have been in discussion for an additional five years, based on our outcomes at the end of this phase.

# **BTB**

What's next for your NORC Innovation Center team? What should we look for?

I think what you should be looking for is some additional publications both in the policy realm, because part of one of the arms of this innovation center is looking at health policy and regulatory issues that either create challenges or are supportive of this model. I think we will be able to start talking about our results. Although our experience is that when you're really trying to change a model of care, it's a minimum of two to five years before it actually becomes something that people do on a regular basis and you actually start to see results.

# **BTB**

You're listening to Behind the Breakthrough, the podcast all about groundbreaking medical research and the people behind it at Toronto's University Health Network, Canada's largest research and teaching hospital. I'm your host Christian Coté. And today we're speaking with Dr. Howard Abrams award winning UHN physician and research scientist at UHN's Toronto Rehabilitation Institute Research Center called KITE. Dr. Abrams is pioneering an alternate model of housing that provides health and everyday supports that allow elderly Canadians to age in place. It's called a naturally occurring retirement community or NORC.

Now, Howard you were born and raised in Toronto, and you took a rather circuitous route to finding your calling in healthcare. You started in anthropology and ethnomusicology. At one point, you're living with a nomadic tribe in northern Kenya doing ecological research. When you reflect today, do those life experiences inform how you practice medicine?

## DR. HOWARD ABRAMS

Absolutely, I think people take different paths through life. Some people at the age of two know they want to be a plastic surgeon, and they are very strategic about pursuing that goal. And the advantage is that, if that's really the right thing for them, they're gonna get it. The problem with it is if they pursue that goal, and three years into their training, they realize I can't do this, I don't want to do this, then it becomes a crisis. Other people like myself, who are interested in everything, the advantage is, everything's interesting, the disadvantage is, it's really hard to focus.

## DR. HOWARD ABRAMS

Eventually, you have to decide what you're going to do in life. And so what initially looks like a bit of a random walk through life, when you look back. And it may be in retrospect, it looks like a falling of interests, culminating in a direction. And that's what it feels like to me. I mean, I still have relationships with those tribal people from 50 years ago, I was just there actually in February, with them hiking up into the forest and spending a night in a cave.

From there, you pivot to an engineering degree. We're not done yet, the circuitous route. You get an engineering degree and after that you finally enter medicine. So it sounds like you could have done anything. What was it then, I'm sure everyone is curious that convinced you healthcare and medicine is the place to be?

#### DR. HOWARD ABRAMS

Yeah, that was quite an evolution over time. It wasn't something I was considering. Initially, when I was living and working with this semi nomadic group, I really became interested in their livestock. So they are herds people, goats, sheep, cows, camels, and I thought, veterinary medicine might be really interesting. Also, my partner and I, an American ecologist, we were the only people with medical supplies in the area. And so people would start to come to us with injuries or illnesses. And we were treating vitamin A blindness and being gored by a water buffalo. So it was quite a mixture.

#### DR. HOWARD ABRAMS

And I started to think, Wow, you can really do a lot of good by being a doctor. Maybe that's what I want to do. So here's where I finally became strategic. I also was very interested in the way they adapted their life to the ecology of sort of the semi arid desert. And so I became very interested in dryland ecology. So when I came back to Canada, I enrolled in the University of Guelph, which had both a veterinary school and a non traditional engineering school that include water resource engineering. Because I thought, getting into vets and medicine is pretty tough. I wasn't sure I could do it academically. I'd been a good student, but not much of an applied student.

#### DR. HOWARD ABRAMS

So I wasn't sure whether I was up to the challenge. And I thought, well, if I can't do that, I'll do engineering. A little suspecting that engineering is a pretty tough course as well. Anyway, I was successful in the engineering course. But after a while, I decided, You know what human medicine is where I want to be. And I was accepted.

## **BTB**

Bottom line working in healthcare, and the practice of medicine is about being in the service of others, what draws you to being in the service of others?

#### DR. HOWARD ABRAMS

I think most ethical and moral philosophies have something in them, whether they're religious, or humanistic, or professional about trying to make the world a better place. And I say this, although I hope it doesn't sound too self promoting. I do say it with humility, I do try to do that, and have fun at the same time. And I think that's one of the most rewarding things in medicine is seeing the positive difference you can make.

And along this winding life's journey to work in medicine. What role did mentorship play in compressing your learning and getting you to where you are today?

# DR. HOWARD ABRAMS

Yeah, mentorship was extremely important. When I came into medicine from engineering, I was kind of surprised by the lack of evidence based thinking and poor systems of delivery. And my first mentor was one of the key people in Toronto for clinical epidemiology and evidence-based medicine. And he took me under his wing, and steered me in that direction.

#### **BTB**

Who's this?

#### DR. HOWARD ABRAMS

This is Allan Detsky, who's also a very well known figure in Toronto, medicine and internationally. And I owe him a great debt for that. As I progressed, and became more interested in the larger systems of care, creative solutions, I had a number of different mentors, Michael Baker, who was the Chief of Medicine at UHN. Bob Bell, who was a former CEO and Deputy Minister. And then a number of my colleagues in Open Lab, who came out of the design world, who were OCAD graduates, and showed me how to see medicine in a completely different way.

## **BTB**

How do you in turn mentor today?

# DR. HOWARD ABRAMS

I enjoy mentoring. I feel both the responsibility and tremendous gratification in responding to requests by students for advice for guidance. Before I came here, I was on a virtual call with two students in translational medicine, who were looking at a particular project and wanted some feedback. I really feel that responsibility to pass on whatever it is I have to offer and to encourage these young folks.

# **BTB**

That's great. I read were Elizabeth Blackburn, who is a Nobel Prize winner, was asked once about what the virtues of successful scientists and she said it takes resilience and persistence as well as being opportunistic and creative. Does that resonate with you?

Yeah, absolutely. Yeah, persistence is absolutely critical. There's also a judgement call around when persistence is no longer the right strategy. And it's time to pivot. And that's sometimes a very difficult call to make.

## **BTB**

And failure. Essentially, how do you navigate that? Because it's not like we're taught how to navigate failure in school.

## DR. HOWARD ABRAMS

Yeah. So failure is a two edged sword. When you talk to very successful people, they often say, you know, my greatest success came right after my biggest failure. And so we look at failure, where we try not to fail catastrophically, fingers crossed, knock on wood. But we talk about successful failures. So we sometimes say fail early and fail often to succeed sooner, learning by your failures that move you to the next level.

#### **BTB**

We live in a time now where, you know, there's great concern about the spread of misinformation, especially when it comes to health science. And the World Health Organization, I read a while back calls it an info demic. What's your take on the responsibility of medical research world scientists to take a greater role in telling the public about their work?

## DR. HOWARD ABRAMS

I think that's very important. I think, taking every opportunity that is presented to you, for example, this podcast, newspaper articles, appearing on the media, I think the thing that's really challenging now is social media. And that's, again, another two edged sword, it gives you tremendous audience and scope. But it can also provoke some very irrational and even violent responses, which was evident during the pandemic. So I think it takes bravery in a way that maybe it didn't take so much before, to be a public figure in healthcare.

#### **BTB**

And the challenge for many scientists also is, in terms of what you're talking about amplifying their work is to be accessible to the public, you know, not using academese. Do you have any guidance there?

# DR. HOWARD ABRAMS

There are actually tools to screen what you write to different education levels.

Are you talking about an Al filter of some kind?

## DR. HOWARD ABRAMS

Well, they started out as, you know, written guides, but there is probably AI now. So I'm reading Mark Carney's book Values. Mark Carney was the former governor of the Bank of Canada, then the Bank of England. And he's talking about the difference between value and values. Fascinating book. But one of the things he instituted at the Bank of England in order to make the decisions they made more accessible to the public was exactly that type of screening program. So every communication had to be run through this screen, to make sure that it was in language that just about anybody could understand.

#### **BTB**

There's a leadership author, I love to quote everybody who listens to the show knows, I love quoting Simon Sinek, who says people don't buy what you do, they buy why you do it. Why do you do what you do?

## DR. HOWARD ABRAMS

Tongue in cheek, I often say we have three criteria. It either does so much good in the world, that we have to do it. It's so much fun that we have to do it. Or we're being given so much money that we can't say, No. I think that it's more tongue in cheek than real. We do not chase the money. We have ideas, and then we look for the money to support them. But I think going back to what we were talking about, in terms of most ethical and moral codes, embodying something to do with making the world a better place, do unto others as you would have them do unto you, first do no harm, which is part of the medical credo. I think that's why I do what I do. Because I do want to contribute in a positive way.

# **BTB**

You're now a grandfather?

#### DR. HOWARD ABRAMS

Yes.

#### **BTB**

And at a stage of life where most would be retired or thinking of retirement. What keeps you going?

I think the main thing is that I love working with people who are younger and smarter than me. And they continually refresh my view of the world and bring in new ideas. And keep me feeling like I'm still somewhat relevant.

## **BTB**

You're being modest Howard! Do you have thoughts about a legacy?

## DR. HOWARD ABRAMS

I hope my legacy will be the values that my wife and I have passed on to our son that he will pass to his grandson and the impetus and the value of the careers of my colleagues that I've been privileged to participate in.

#### **BTB**

We'll leave it there. Dr. Howard Abrams, award winning UHN physician and research scientist at UHNs Toronto Rehabilitation Institute Research Center called Kite thank you for sharing your pioneering work and continued success.

## DR. HOWARD ABRAMS

Thank you very much. It's been a pleasure.

## **BTB**

For more on Dr. Howard Abrams and the UHN NORC Innovation Center, go to our website, or you can go to www.behindthebreakthrough.ca and let us know what you think we'd love to hear from you. That's a wrap for this edition of Behind the Breakthrough, the podcast all about groundbreaking medical research and the people behind it at the University Health Network in Toronto, Canada's largest research and teaching hospital. I'm your host Christian Coté. Thanks for listening