

Interview with Dr. Mitchell H. Brown

UTMJ Interview Team (Aidan McParland, Austin Pereira)



Dr. Mitchell H. Brown

Mitchell H. Brown, MD, MEd, is an associate professor in the Department of Surgery at the University of Toronto. He is the Residency Program Director for the Division of Plastic and Reconstructive Surgery at the University of Toronto, a program that includes 26 residents and more than 15 clinical fellows. Dr. Brown's plastic surgery practice is focused primarily on reconstructive and aesthetic breast surgery and body contouring.

He operates at Women's College Hospital as well as at The Cumberland Clinic™ surgery center.

Dr. Brown earned his medical degree from the University of Western Ontario Faculty of Medicine in London, Ontario. He completed his residency in plastic surgery at the University of Toronto and then received a master's degree in education.

A frequent lecturer in the areas of body contouring and reconstructive and aesthetic breast surgery, Dr. Brown is a member of the Canadian Society of Plastic Surgeons, the Canadian Society for Aesthetic (Cosmetic) Plastic Surgery, the American Society of Plastic Surgeons, the American Society for Aesthetic Plastic Surgery, the American Association of Plastic Surgeons, the International Society of Aesthetic Plastic Surgery, and the College of Physicians and Surgeons of Canada.

Dr. Brown served on the Expert Advisory Panel for Health Canada regarding the safety of silicone gel breast implants and has lectured extensively on his approach in the use of breast implants, both nationally and internationally.

Dr. Brown is the founder of Breast Reconstruction Awareness (BRA) Day, which he launched in Canada in 2011. Since that time, the movement has spread to over 30 countries worldwide.

UTMJ: Can you tell us a little about yourself and the surgical work you are involved with?

MB: Of course. I completed medical school at the University of Western Ontario, after which I completed a surgical internship at Toronto Western. I then went on into plastic surgery residency training here in Toronto. After residency, I completed a year-long fellowship in surgical education that involved a masters in education and some research work looking at acquisition and teaching of technical skills in a non-surgical en-

vironment. I opened my practice at Women's College Hospital and have been there for 20 years. I have been very involved in academic surgery during that time. Clinically, my focus has been on aesthetic and reconstructive breast surgery, and academically my focus has largely been on education. I have been the program director for plastic surgery at the University of Toronto for the past 10 years.

UTMJ: Out of the variety of surgical subspecialties currently present in the medical field, what drew you to plastic surgery?

MB: I think you are probably discovering now as medical students that you migrate into certain fundamental buckets pretty early. You are either a surgical personality or a medicine personality, or maybe a primary care personality, and it is somewhat easy to move in those directions. But then how do you move within those buckets? For me, I can't tell you exactly why but ever since I can remember, I wanted to be surgeon. To me that's what medicine was all about, so that was an easy choice, but figuring out what type of surgery was a bit more challenging. I was drawn to a bunch of things. I really liked vascular surgery. I really liked gynecologic surgery quite a lot at one point in time as well. In third year of medical school I did a plastic surgery rotation and the surgeon that I worked with was a very prominent hand surgeon. I just got blown away by hand anatomy. I thought it was the coolest thing, and the hand is a big component of plastic surgery so that was the initial draw. And of course, it's interesting that after 20 years of practice I no longer do any hand surgery, so you migrate in different directions, but it was probably hand surgery and the anatomy of the hand that drew me to plastic surgery.

UTMJ: You are quite involved in the plastic surgery program here as the program director, so could you talk a little bit about your work in medical education, or more specifically residency education?

MB: Most of my work in education today is primarily focused on administration work. The research I had done for the first half of my practice was largely based on technical skill development and technical skill

acquisition. Some of the research work that we have migrated to in the last few years has focused on the reliability of interviews and the use of interviews in the residency selection process.

UTMJ: Building off of that, The Royal College of Physicians and Surgeons has recently suggested that surgical residencies in Canada will be taking on a competency-based format in the future, rather than a traditional 5-year length. What are your thoughts on this change?

MB: So this is a reality. All training programs in Canada, starting this year, are moving towards a competency-based curriculum in a tiered way. We have been using competency-based assessments for a while, but competency-based teaching and curriculum is something new. So that is the new reality, getting away from a time-based model and moving towards a competency-based model. It is going to be a challenge, but it makes sense in principle for sure. From a practical point of view, there will be many challenges in terms of implementation, but the idea that trainees should go through and acquire a competency, and then once you have acquired that competency move on to the next one just intuitively makes sense. Each of the programs across Canada are working in their own unique way to plan for this; plastic surgery is targeted for implementation in 2019.

UTMJ: Do you know which program will be coming first?

MB: Programs that are starting this year, July 1st of 2017, are Otolaryngology head and neck surgery, and I believe Anesthesia might be the second one.

UTMJ: Are you for or against this type of residency educational training?

MB: I don't think you can be for or against, rather you have to be progressive in terms of change in education. There is great value in moving towards a competency-based system, but there are tremendous challenges as well.

UTMJ: What would you say is one of the major challenges?

MB: How do you schedule a whole group of residents when some may acquire a competency in two weeks, and some may take 6 weeks, and how do you move them from place to place from a practical point of view. And the number of assessments that are going to be necessary on a day-to-day basis for a competency-based curriculum is probably triple to quadruple what it is now,

so faculty engagement and faculty time is going to be a huge challenge.

UTMJ: Building on residency, what tips would you have for a medical student who is on the fence about pursuing a career in surgery? In plastic surgery?

MB: As it relates to plastic surgery specifically, or I would say that as it relates to anything, it has got to be passion. What I have told our residents for years, when you make a decision to go and do an undergrad degree and then work hard through that and reach a plateau, and become accepted to medical school and you get into medical school and work really hard for 4 years, and you graduate and you are going to work hard for 4 or 5 or 6 years in a residency program, you don't owe anyone anything, just yourself. So if you are going to do all that work and not end up practicing in something you are passionate about and that you love, then you have really made a big mistake. So you have to love what you are going to do, and how do you figure that out? Well you try to become exposed to it. The exciting things about plastic surgery are that it's a creative field. It's a field in which there is not a cookie cutter approach. In some surgical specialties, there are two to five operations that you just do over and over again, and there is nothing wrong with that; some people love that. I could do a surgery tomorrow that is something I have never done before, and I have been in practice for 22 years. That is because plastic surgery is a field that is based a lot on principles and then knowing how to apply those principles to each of the unique situations going forward. The other exciting thing about plastic surgery is that it is a quality of life specialty. It is wonderful to save lives and to extend lives; that is a tremendous thing and we would all applaud that. Treating cancer and treating disease is phenomenal. However, plastic surgery is more about improving people's quality of life, so you have very happy, very appreciative patients. I think that is one of the big draws for many people.

UTMJ: You have recently taken an active role with initiating/promoting Breast Reconstruction Awareness (BRA) Day, could you speak a little bit about your involvement with this event?

MB: A huge focus of my practice is reconstructive breast surgery and for quite a few years we would see patients come in who had undergone mastectomies for breast cancer and had worn a prosthesis for a period of time, and then came in to see me for breast reconstruction. And it would be a common question to ask

why are you here now. You had your mastectomy 10 years ago. What is it about today that is making you consider breast reconstruction? It wasn't uncommon for people's answers to be that they didn't know there was even such a thing as breast reconstruction, that they had just found that out now. That kind of shocked me. So it was really a recognition that when we looked at numbers, we saw that a very small minority of women who had had mastectomies were undergoing reconstruction. Lots of women just weren't even aware that it existed, which I felt was unacceptable. So the idea was to try to create at least a single day to promote awareness of breast reconstruction. So the acronym for Breast Reconstruction Awareness Day became 'BRA' Day. We decided to hold it on a single day during breast cancer awareness month in October, and we held the first one in 2011. After contacting a variety of colleagues across Canada, we said listen, let's just try to have something in every province across Canada. So I think in the first year we had seven or eight programs in different cities running all on the same day. It happens on the third Wednesday of October, and initially it was quite successful. The United States took notice of this and asked if they could start their own program in 2012, and it took off quite significantly from there. They had programs right across the country. It was promoted by several celebrities such as Patti LaBelle and Jewel, who actually wrote a song superficially for this event to help raise money. Then by the third year, it started to become much more global. In 2016, we had events really all across Canada and there were over 250 events in the United States. BRA day took place in over 30 countries world-wide, so it has been quite a nice success. It is really built on three main pillars: access, education, and awareness. And that is what we are trying to deliver: educate patients, educate women, make sure that there is access, and make sure that they are aware about their options.

UTMJ: Were you involved with any of the promotion of this day around the world?

MB: So, indirectly yes, but the short story is that when you have a good idea that makes sense, you don't need to promote it much. The idea that you should help to promote access and information for reconstructive breast surgery is a pretty simple thought, and who would think that's a bad idea? It's good for surgeons, patients, and it's good for their families. And I suppose that through my international work, I knew a number of plastic surgeons worldwide, and it was easy to send thoughts about this idea, and a number of surgeons jumped on the idea and wanted to start it in their

country. Thirty countries is a start, but there are a large number of countries in the world, and we are looking to triple that number moving forward.

UTMJ: Where do you think the field of plastic surgery is going in the future?

MB: It's a pretty evolving field. I would say that one of the big areas that will evolve is the concept of tissue engineering. Instead of repairing structures, the focus would be on replacing them, the ability to grow organs or structures. To some degree, we do that today with stem cell technology. You can take stem cells from fat and mix it in a mold with cartilage cells and grow in a template for a new ear. I think there is tremendous promise. We are trying to grow breast tissue today, but wouldn't it be amazing if we can replace those cells entirely. The transplant field is enormous, including facial and hand transplantation. The first Canadian hand transplant was performed in Toronto at the Toronto Western Hospital last year, and that was very exciting.

UTMJ: What are challenges facing plastics or some misconceptions facing the field as well?

MB: Misconceptions are easy. If you go out into the field and ask somebody about plastic surgery, they think of aesthetics. And there is nothing wrong with that because aesthetic surgery is an important part of what we do. I think a big part is branding plastic surgery. The division at Toronto is Plastic and Reconstructive Surgery to ensure people know that it's not just aesthetics, but also reconstructive. One of the biggest threats is fragmentation of the field. Plastic surgeons don't hold an anatomical autonomy on any part of the body. Neurosurgeons have the brain and the central nervous system and no one encroaches on that, orthopaedic surgeons treat the bones, and cardiac surgeons treat the heart and vessels, whereas plastic surgeons treat all anatomical parts of the body, so because of that, there is encroachment by various other surgical subspecialties. It is more a specialty of principals and practice than anatomical autonomy.

UTMJ: Do you think this will happen in our lifetime (the encroachment of different specialties leading to the endangerment of plastic surgeons)?

MB: No I don't think so but I do think that the field of plastic surgery must be very aware of what they are, how they function, and how they collaborate with other specialties.

UTMJ: Plastics has a significant amount of elective procedures, and one of the problems with the Canadian health care system is the wait time with elective health care procedures. Can you speak about this growing issue?

MB: I don't think this problem is specific to plastic surgery. There is a real erosion of elective surgery time. If you are an orthopaedic surgeon treating someone with chronic tendonitis injury and they are scheduled for surgery, it may be bumped for trauma. We deal with this all the time in plastics. In the end, I think it's a global problem. We have a health care system with a single payer [the government] that doesn't have enough money to pay for the health care required by the country. That's a much bigger picture that is not unique to plastic surgery.

UTMJ: You took a real leadership role in the Toronto Annual Breast Surgery Symposium. Can you expand more on that event and why you decided to take such a significant role?

MB: There was a real local expertise in breast surgery so my colleague Dr. John Semple and I decided to start an annual symposium for breast surgery. We have had great success with it. It is the largest breast surgery symposium of its kind in Canada, and we have drawn surgeons from all over the world to speak. I think that it has been very well received as a key annual CME [Continuing Medical Education] event within the Department of Surgery.

UTMJ: What are some of the major innovations in plastic surgery that can change the field moving forward?

MB: I think we have touched on some of them, tissue engineering, fat transplantation, hand transplantation, but I would look to one of our residents in the surgeon-scientist training program who is doing some phenomenal work on simulators, specifically on cleft palate repair. Creating high fidelity models to allow people to learn how to complete high impact surgeries on models rather than people. And I think there is a real need for that. Society is prepared to accept, only to a certain level, trainees to perform work on them. The budget limitation in hospitals requires us to get in and out and finish operations quickly, and our teaching time is limited. To find models to teach people to learn how to perform surgeries effectively is critical due to these limitations. I think this is one of the most important innovations in our field today.

UTMJ: You touched on passion as being one of the main drivers for any individual striving for any surgical subspecialty, and you have great longevity and success as a surgeon, so is it your passion for surgery that drives you?

MB: I think it goes back to you have to do what makes you happy and what you enjoy. I love what I do as a plastic surgeon. And you have to be malleable and flexible. I haven't done the same thing for the last 20 years. First few years I did sarcoma reconstructive surgery and trauma surgery, and spent a period of time travelling and teaching, and a period of time as program director. You make changes as you go along to adapt with your practice. But for most of us, the best days are the days you sit in the operating room and treat patients, so when that passion is gone it might be time to re-evaluate what you want to do.

UTMJ: How do you find the balance of clinical work, research, and administration, as well as a healthy life outside of plastic surgery?

MB: You have to be organized and find out what works for you. And times have changed; 20 years ago there were different expectations. Today, there is more awareness of work-life balance and young adults and new surgeons have a greater appreciation of work-life balance. The generation before me had even less. You have to be cautious and be sure that you carve out time for your personal life outside of medicine for family and personal time, or else you burn out. How do I do that? I have a great assistant that sets out personal block times for myself, and I stick to those block times or else they are filled with meetings and other obligations.

UTMJ: You mentioned burnout. How do you compare the burnout rates of plastic surgery to that of other surgical subspecialties?

MB: I don't know for sure, but I would say low. I think largely because there is a high job satisfaction in the plastic surgery field.

UTMJ: Any final remarks that you would like to add?

MB: In first year medical school, you have your whole careers ahead of you. I would tell the first year medical student to take your time, keep your eyes open, and look at many different things. And finally, find what drives your passion.