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Spark Podcast

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Dr. Teresa Chan (00:02):
Welcome to the MacPFD Spark podcast. This podcast is meant to inspire you to take the next step in your development journey as a faculty member. We're really excited to bring you all sorts of content, from inspiring you to teach or supervise differently, to leading and managing your team, to thinking about new creative ways or humanistic ways to actually do your work, and finally, to up your game in your scholarly practice. Are you excited yet? I certainly am. So sit back, listen and enjoy this latest episode of the MacPFD Spark podcast.

[music]

Speaker 2 (00:43):
Hello and welcome to the 27th episode of MacPFD Spark. Today, we will be listening to two discussions on the scholarly process. First, we will have the opportunity to listen to Jack Young discuss bibliometrics and quantifying scholarly impact. Next, we will hear a few scholarly secrets that may not necessarily have been tacitly known, from Dr. Shawn Mondoux. Please enjoy the episode.

Dr. Teresa Chan (01:15): Alright, hello everyone. This is another episode of MacPFD Spark, and I'm excited to bring you one of our esteemed colleagues from the Health Sciences Library. I have with me Jack Young. He's the Digital Projects librarian at the Health Sciences Library at McMaster, and he specializes really in a whole bunch of different things, like making sure that we understand all the different parts of the library, etcetera, etcetera, in a digital sense. But he's also branched into a lot of the technologies that we use to archive and understand impact, and so we're gonna talk a little bit about that particular topic today.

Dr. Teresa Chan (01:50):
Now I'll tell you a story to contextualize this a little bit, Jack, but a couple of years ago, I guess there was some kind of ranking, and McMaster wasn't showing up very much because a lot of us didn't have Google Scholar accounts. And so our department here, actually, the Department of Medicine has asked all of us to have a Google Scholar account, in fact, it's tied with some other things that we have to do every year.

Dr. Teresa Chan (02:06):
And so, now I have a... I had one before that, but a lot of my colleagues now have them, but why is quantifying people's scholarly impact like a thing? From your perspective, when did this become something that we needed to do?

Jack Young (02:20):
First of all, thank you for having me, having me on and I'm excited to be on here, and sharing the knowledge I have with your listeners. Bibliometrics, as a whole, which is the process of looking at information about research outputs and looking at data about research outputs and trying to answer questions using the data about the publications, for example that right to get out there. It's been around for at least half a century.

Jack Young (02:45):
The real difference is, it's only become really accessible to the mainstream relatively recently, so before all this, pre-computers, pre-internet, all of this information, it was all kept in physical books and it was kind of difficult to get your hands on. And so it was really sort of isolated to a specific type of researcher that could do this type of work, that could work with looking at things like the number of publications somebody might have or the number of citations to those publications.

Jack Young (03:11):
But recently, with the advent of these huge databases that are really quite user-friendly, there's become a lot more interest in using things like citations and publication counts and collaborations to get a clear sense of the impact of the work that we're making as a group of researchers.

Jack Young (03:33):
In particular, if we're talking about things like rankings in Google Scholar, these have become a sort of, really a point of interest for administrators across academia, because, well, you wanna get higher rankings, right? And so these ranking organizations, they all have their different methodologies for determining impact, and the one that you were mentioning there clearly was looking at Google Scholar profile, so then you see an interest in getting all faculty, all researchers invested in these profiles.

Jack Young (04:01):
As far as how this all came about, I think it's been a long evolving process, and I think the simple accessibility of these tools has really spurred interest recently in this type of thing. And we're seeing that what started as really a process of purely looking at things like evaluating how effective your research is or how much impact it's having, we see that there's a whole bunch of different avenues you can use this information for as well.

Jack Young (04:27):
Whether it's finding collaborators to work with, or promoting yourself and looking at trends in the direction that your research area is going in, so there's a lot of stuff outside of evaluation that's emerging too, as we get more access to this data.

Dr. Teresa Chan (04:39):
I do some work in social media research, so they're using things like citations as an outcome measure for if you have Altmetrics, which is proprietary... Well, actually, the Altmetrics, the capital A is the proprietary version of Alternative Metrics, which allows people to understand the social media

uptake and sharing of their articles across news outlets where they're cited, blogs, podcasts, sometimes tweets, Facebook shares, etcetera, etcetera.

Dr. Teresa Chan (05:05):
And so those are some of the alternative ways that people are looking at early impact, and that has correlated the past with actual and citations, which is something that a researcher at U of T, Gunther Eysenbach, had actually written about almost a decade ago now. And so we do know that there's some level of that, but increasingly journals are not getting in the game, to make sure that their papers get some attention, right? [chuckle]

Dr. Teresa Chan (05:28):
And there's the PlumX Metrics, which is an alternative metric as well, that's owned by one of the big five publishing companies, and then there's also Altmetrics, which is proprietary, separate, started by Jason Priem. So there are different ways that people are measuring these things, so it's not just citations or impact factor, which people know about, but we'll maybe go into a little depth of each one of these kind of phenomena. So can you tell me a little bit about what impact factor actually is?

Jack Young (05:55):
Impact factor was one of these first sort of hot metrics that came about. It's been around for quite some time. What impact factor really is, when you break it down, it's a journal metric, it looks at the impact of individual academic journals, and what it looks at is the average number of citations that an average article in that journal would receive, and I think it looks at a two-year period.

Jack Young (06:19):
So basically, if you were to look at the impact factor for a journal in 2017, it would look at how many times in 2017 articles from the previous two years had been cited, and it basically averages out that number. And so it's a way of sort of ranking journals based on the number of citations that an average article in that journal is expected to receive.

Jack Young (06:42): This type of metric was really popular... Is one of the early ones that became very popular in academia, because it didn't take as much sort of computing power to look at as something like metrics about an individual person. And so, I think it was Thomson Reuters that was doing this work, would compile the journal impact factor ranking every year, and it would publish it, so it was quite easy to access and you could really quickly get a sense of which journals were receiving the most citations year to year.

Jack Young (07:11):
The kind of tricky thing with impact factor is that everybody got really excited about it because it seemed like this very neat way of evaluating the types of places that you might be publishing, but we kind of over-bought into it. What we find now is that there's this legacy that continues today of evaluating researchers' work based on the journals they publish in.

Jack Young (07:36):
And while it may be interesting to know, if you're constantly publishing in a journal that's very highly cited, it may seem like it's harder to get an article in there, so it may tell you a little bit about a researcher's individual impact. We're not actually learning anything about the impact of that paper itself, we're learning about the impact of the journal.

Jack Young (07:54):
And so we're finding now is all these new emerging metrics which are able to be much more specific about the work of an individual researcher and tell us a lot more about the impact of a individual piece of research, instead of just looking at the journal as a whole. So while the impact factor did have a place for a long time in helping us better understand impact, and it kind of opened the door to a lot of these other neat metrics that are out there, as far as for evaluating individuals' research output, its time has passed, and there's a lot of new and exciting metrics that are much more useful when we're looking at how our own research is stacking up.

Dr. Teresa Chan (08:29):
Yeah, and it's interesting because I think for me as an author, I actually still think about impact factor to help guide where I might wanna go for my journals, but less because of what the journal can do for me, but more because it's historically something that we use to help us figure out our taste.

Dr. Teresa Chan (08:46):
That being said, hopefully as you become more established, so maybe I'm just at the cusp of that right now, where I'm realizing that people are following me on Google Scholar and I could publish in most journals. And if you subscribe to my Google Scholar, you'll get a push notification, 'cause I subscribe to other people, so I subscribe at the author level now.

Dr. Teresa Chan (09:03):
Rather than following the table of contents for New England, for instance, I just follow people who publish work in areas that I find exciting and interesting, and then when they come out I actually read by author rather than by journals. That being said, the top journals in my field, I do research in scholarship and medical education, I actually do take a look in their table of contents, 'cause of them, I discover new authors and new people, and then I search them out on Google Scholar and I subscribed to them then.

Dr. Teresa Chan (09:27):
So I think that there's really an interesting synergy between the way that you might functionally use some of these as an author, as a reviewer, as a citizen of and consumer of that research as well. It's just an interesting time, because on Google Scholar you can actually look at someone's H-index. Now, that's a different metric. Could you tell me a little bit more about that?

Jack Young (09:47): Yeah. H-index was kind of... There was noted problems with this journal impact factor, and specifically I'm talking about when individuals were reporting their own impact. So often where we were seeing impact factor popping up was when faculty members were going for a tenure review or a promotion, or maybe they're applying to a new position, and they'd included on their CV, the impact factor of the journals that they published. As if to say, I publish in this journal that has a very high impact factor, that means that my work must be of high quality.

Jack Young (10:17):
What we saw a transition to was, I think it was the early 2000s, the H-factor was a new metric that was introduced and widely adopted in academia as well. And H-factor was an improvement over impact factor when it came to reporting individual impact, in that it actually focused on the individual researcher themselves.

Jack Young (10:41):
What it looks at is productivity over time, so basically an H-index looks at how many articles you have as a whole that has a certain number of citations. So it's sometimes a bit difficult to explain, but the concept itself is relatively simple, it's just a bit hard to put into words, but it tries to account for the fact that you could have a researcher that's extremely prolific, they could publish thousands and thousands of papers and never get cited.

Jack Young (11:08):
And so the question is, what is the impact of just publishing, publishing, publishing without ever really getting much attention? Alternatively, you could have a researcher that has only published two or three papers, and maybe one of those papers got thousands of citations, and so it looks like they're really a superstar, when in fact, it was just one paper that happened to really hit, and maybe that was a paper where that person was the 100th author or something on it.

Jack Young (11:34):
So what the H-index does is it compares the number of publications you have and the number of citations each of those publications has received, to find a point on a graph where, for example, if you have an H-index of five, that means you have five publications that have at least five citations each.

Jack Young (11:53):
When your sixth publication reaches six citations, then you have an H-index of six. So basically in order for your H-index to continue to increase, you need to be publishing more papers and those papers need to be receiving more citations, so your H-index will grow over the course of your career. If somebody had a high H-index, let's say an H-index of 100, that means that they have at least 100 papers published, and that those 100 papers have at least 100 citations each.

Jack Young (12:24):
The number itself, it's not like an objective number, but it's helpful to see. It's helpful to compare productivity versus impact, impact being the citations that your work is receiving.

Dr. Teresa Chan (12:37):
I think about it as a two-dimensional figure, so as opposed to just a singular dimension, it's actually the intersection of two dimensions, citability and number of publications, and so it's about looking at that intersection between the two. So if you have three papers and they've all been cited three times, you have an H-index of three.

Dr. Teresa Chan (12:53):
If you have five papers and the, only three papers have been cited three times, then you still have an H-index of three. The smaller the number, the easier it is to understand. [chuckle] As your fourth or fifth paper that just came out this year, next you get some more citations, and now all of them have at least five citations, then you have an H-index now of five. That's how it grows over time, and you're right, some people get up to the hundreds. So definitely a person-level impact score.

Jack Young (13:18):
I think it's an important illustration of this fact that when we're talking about bibliometrics, when we're talking about research impact, it's never just one number that we should be considering, and H-index is a good illustration of how it's compiling actually two numbers together. We're looking at

both the number of publications and the number of citations those have received, to generate a new metric.

Jack Young (13:41):
What we see increasingly is, as more complex metrics are being created, that they're considering more and more numbers and trying to put them into one metric, and this idea of, we wanna look at things, we want these metrics to help inform our conversation, we're never boiling anybody's work down to just one number. That the idea is that this data helps provide a more well-rounded picture, and the more data that we have, the better we'll be able to tell a story.

Dr. Teresa Chan (14:07):
And yet at the same time, we are still using surrogates for quality, 'cause at the end of the day, what we're trying to do is say, "Oh, if someone's got a lot of papers that are highly cited, that means that other authors might be respecting them enough and thinking of them enough to cite them," and yet obviously in any system, once you have our rule, you can game the system.

Dr. Teresa Chan (14:26):
And so obviously, self-citations on Google Scholar are famously not excluded. Although in biomedical sciences, because of the sizes of our teams as opposed to other fields it's less important for us there, as fields in which you're supposed to have single author publications in those fields is really important. Self-citation would just mean that you're just gaming the system. Right?

Dr. Teresa Chan (14:44):
But I think in biomedical sciences, health sciences generally speaking, we have less of a stigma in that. Because I think physics is even more liberal, because on a single Higgs boson paper there are hundreds of scientists on the same paper, and so we're slightly better than that, like eight or nine or 10 is probably not out of the norm though, within our biomedical sciences and health sciences.

Dr. Teresa Chan (15:03):
It's definitely interesting to kind of think about all this stuff, but at the end of the day, we're using these citations as a surrogate for quality and so I think on the flip side, as someone who now is an associate professor, gets asked to review other people's files for a promotion, what I'm starting to see now is people are putting together exemplars of, "Here's the three papers I'm most proud of," as part of their package.

Dr. Teresa Chan (15:24):
To augment, again, more data. It's that idea of programmatic assessment, having a program of an assessment package that has different things, quant, qual, attestations, letters. That's how I think that we should be thinking about how we value people, is not just in a singular number of which journal is their most impactful paper in.

Dr. Teresa Chan (15:44):
That would not probably be a great measure of someone's success, but rather it's all of the above, and their teaching portfolio and their contributions to service, and all of those things. Their work as a clinician, for some people. And I think you're right, it can't just be one facet, and I think to cut it down to one facet is probably too trivializing, I think, for a person's body of work.

Jack Young (16:04):
Exactly, yeah. I think some... I don't know if they're misconceptions, but some common hesitancy towards metrics is this idea that, yes, we're gonna try and boil it all down to one number, we're trying to objectify impact. But as you said, it's a surrogate for impact, it can only go so far, and we can't rely entirely on numbers to tell us exactly what's going on. They can help us sort of inform the story of a piece of research impact. And yeah, the data, this data is available, so we're trying to make the best use of it that we can at this point.

Dr. Teresa Chan (16:35):
Well, interesting to look on the horizon is that there are some startups, and I'm aware of one called S-C-I-T-E, Scite, and it's an AI-driven start-up where they're trying to look at being able to better quantify for you whether people are agreeing with you, when they cite with you, when they're neutral to cite you, or whether they're disagreeing to cite you.

Dr. Teresa Chan (16:55):
'Cause for instance, even Andrew Wakefield and his famous famous paper about autism and vaccinations, which we know has been debunked and retracted, that paper still has citations. And so you can say he's a highly cited author in some ways, but every paper that cites him, generally speaking, is either his own or all the people disagreeing with him.

Dr. Teresa Chan (17:10):
And so it is something to consider when we're looking at citations, that right now they're just citations, because that's the way that historically we've looked at people in metrics, but I think in the coming years, we'll be looking at more nuanced things, right? When I get all metrics, I know when people are lambasting my paper, disagreeing with it.

Dr. Teresa Chan (17:27):
I can tell that not by sentiment analysis straight up, but I can click in and actually read and say, "Oh, people hate my paper." Or, "Oh, people like my paper." Or people are not sure what to make of my paper, so they're just re-tweeting it. [chuckle] Those are kind of things that I think we can start to understand.

Dr. Teresa Chan (17:42):
And as a scientist it's kind of really interesting, especially all metrics for me, is that I get a sense of what the reaction for my paper is, by clicking on that metric bubble or Plum metrics bubble or the other alternate metric bubble, and looking at that in engagement with my science, it helps me understand better what and how people are using it.

Dr. Teresa Chan (18:00):
Because I'm a big advocate to say that our researchers should be on social media in some way, and one of the reasons is so that you can adjust when people misinterpret your science. Because I think that we've seen the age of, what was that called? The post-truth era? Maybe the era of mistruths or misinformation, is another way people put it.

Dr. Teresa Chan (18:16):
But I think that we need to have solid scientists stick up for their own message and to communicate well to both consumers of the research that are clinicians, researchers, or even only public. Because if we don't do it for ourselves, then someone else is gonna do it for you, and that person, you may

not have any quality control over and there might be some really dangerous ways, especially for the health sciences for us to think about it.

Dr. Teresa Chan (18:39):
So definitely check out our McMaster Program for Faculty Development webinar on social media to see how you could get involved if you're interested. But I do think that there is increasing awareness of some of this, and metrics are a manifestation of that social phenomenon, that we can hopefully try to start to get behind so that we can improve science in all its different ways, whether it's in the communication of it after you've done.

Dr. Teresa Chan (19:02):
'Cause unfortunately the way the world is now, that just 'cause you finish your project doesn't mean you're finished with your project, and so I think a lot of the time you have to get out there and make sure that your project, in its ins and outs, in its limitations, are fully acknowledged.

Dr. Teresa Chan (19:19):
And when it gets picked up by the lay press or news outlets or blogs that you're engaging in that conversation so that you can make sure that people truly understand what you actually did. Because the most dangerous thing would be to let people just run amok with what you actually have done and spent years sometimes doing, and misinterpreting it.

Dr. Teresa Chan (19:34):
There's also other things called Scopus and Web of Science, and I'm just wondering if you can tell me a little bit about what those are? And you said to me earlier in our pre-conversation that maybe there's opportunities to think about these metric repositories as ways to find collaborators. Can you expound on that?

Jack Young (19:51):
To kind of expand on... Well, first I'll talk about Web of Science and Scopus, and with these are two other... So we mentioned Google Scholar already, these are two alternative citation indexes. Web of Science is kind of the birthplace of all of this, they were the first database, they started off as physical books, it was the Science Citation Index.

Jack Young (20:11):
It has now become a database with a very user-friendly interface that we at the library subscribe to, so all McMaster faculty, staff and students have full access to Web of Science. And so basically it's an article database, just like for example, PubMed, but as well as collecting information about the article, like the title, the author, the source, it collects information on all of the citations in that article as well, and it creates linkages between other articles in the database that cite one another, and so in that way it can generate a citation count.

Jack Young (20:46): Scopus is another database that's doing basically the exact same thing. It has slightly different coverage, slightly different features, but the real end goal of it is nearly identical to Web of Science, in that it wants to track citation activity across the articles indexed, and then allow researchers to use that information to do whatever it is they wanna do with this impacts content.

Jack Young (21:09):
So why are there these various tools that all do these different things? At the end of the day, the people that are making the tools are monetizing essentially this data. So instead of, we don't have one tool that... There's a lot of work that goes into developing these tools, we don't have one tool that captures every single piece of work that's out there. Instead we have these three separate tools.

Jack Young (21:28):
And there's other ones out there, but the ones that we have access to at McMaster are Google Scholar, Web of Science and Scopus, and they're all looking at citation activity of individual articles. And there's definite crossover between them, but there's definitely uniqueness to each of them as well, so they each cover different sets of journals that have been pre-defined, essentially.

Jack Young (21:51):
Most of the work that I do, I do around metrics, I do within Web of Science. Web of Science and Scopus. I tend not to use Google Scholar very often. The reason for that is Google Scholar is not a controlled environment the way that Web of Science and Scopus are. We can look at the exact journal list that's included within Web of Science. We'll never quite know every single bit of content that Google Scholar is going through and searching.

Jack Young (22:17):
Google Scholar is nice because it's free, Google Scholar is nice because certain ranking agencies use Google Scholar to determine output of certain universities, but then there are other ones that use Web of Science data. They all kind of are constantly shifting and moving. They're all trying to kind of get a foothold one over the other. And so at the library, we have access to all three, which is enables us to use whichever one is most useful for our particular use case.

Jack Young (22:41):
So if a researcher comes in a says, "Listen, I've been mandated to use Google Scholar," there's no way that we're going to steer them off of that. We're going to be able to help them with set up their Google Scholar profile as well and work through that. But if somebody's asking us to help them maybe do something that's a bit more controlled, like a bigger bibliometric analysis where the methodology is really, really sort of key, then we might use one of these tools that has a bit more structure to it, because it allows us to be transparent as to how we're finding this information, essentially.

Dr. Teresa Chan (23:09):
Yeah, Google Scholar. I find it, because you do actually can set it up to automatically update and, versus... I actually am super OCD, so I acknowledge all the updates and the edits myself, I have to approve everything, 'cause I think there's a certain level of rigour that I want to have in my profile. Because I'm gonna do it, I'm gonna do it right. Is the way I see it. [chuckle]

Dr. Teresa Chan (23:26):
Although other people have said it to auto-update, but then it sometimes trolls like web pages and just... There might be a blog post or something like that you wrote one time, where it might be... Or the worst is when it's like the table of contents and it archives that for some reason, and you're like, "Oh, that's not a publication." So I do try to filter.

Dr. Teresa Chan (23:43):
And it doesn't take long. I mean, I publish quite a bit, and people that know me will say that that's an underestimate, but maybe once a week I might get an update, so it's not that much. And so it is something to think about. The other thing that I've used it for, and I've written a paper about it and I put in the show notes, is you can use it to track a group of people, so you can create group accounts. They have to be tied to a Gmail account or something, like that.

Dr. Teresa Chan (24:05):
So I set up a group account for our McMaster emergency medicines team, and so we curate the list of people who are considered coauthors and we add authors to the group and we take out authors and papers from those authors if they're no longer a part of our group, to allow us to track our group's impact and stuff like that.

Dr. Teresa Chan (24:22):
You can't publish that profile in a public... It's not search-able, but if you keep the URL to that account, then you can kinda keep track of what people are publishing. It's easier for our admin people, they don't have to ask us anymore to send them papers, they just know that we published the paper 'cause they got a Google Scholar alert. So that's pretty cool.

Jack Young (24:41):
Yeah, ultimately with these tools it's about what you put in. You'll get out what you put in, essentially. So you can build one and let it... You could start a Google Scholar profile and let it auto-update, just with the understanding that it might not be entirely accurate when it comes time for you to do reporting.

Jack Young (24:58):
Alternatively, you could set up those auto-alerts that you mentioned, where you really... If you get a weekly alert, you can go and check and make sure that the stuff they're bringing in is accurate for you. So really, it's up to you as the researcher, the level of commitment you wanna put into maintaining these profiles.

Jack Young (25:13):
My recommend would always be, and I think you reflected that, Teresa, that once you get going, it doesn't take a whole lot of time, and I think that the benefit will continue to... I think you'll find it continues to become more and more beneficial as these sort of practices become more entrenched in research.

Dr. Teresa Chan (25:31):
The one that I can't keep on top of would be actually ResearchGate because it takes so much manual entry. I'm like, if research gate could just play ball with either ORCID or Google Scholar, I would be a happy gal, but I actually have to log in and separately upload. Usually now I work with other people that have ResearchGate accounts, that someone else has entered and I can just ride their coattails, but it is something that I found that some of these social platforms for researchers are not as robust as they could.

Dr. Teresa Chan (25:55):
What's nice about the ResearchGate platform is that if you wanna ask questions about nerdy stats or complicated computational statistics, there's usually other people that can answer those questions and engage with you about it.

Jack Young (26:08):
Yeah, it's a great social platform, but yeah, as you say, the integration between different tools, it's not so so good there. But that raises a really important point. It can get exhausting if you're trying to maintain all these different profiles, the nice thing is there are tools that do integrate.

Jack Young (26:25):
There's a recognition that there is a bit of fatigue when it comes to keeping track of your research in all these different places, and so you mentioned there ORCID, and I think ORCID is a really important sort of linchpin that holds a lot of these different systems together.

Dr. Teresa Chan (26:40):
What I know is that ORCID right now, it's allowing me to single sign-on to a whole bunch of journal portals, so I don't have to remember my separate login for each journal that I submit to, which is really nice. [chuckle] So I like that function. I also know that for... I mean, I'm not changing my name, but I know some women who are junior researchers will publish under one name and then they get married and then they change their name and now they have a different name, either hyphenated or a completely different last name.

Dr. Teresa Chan (27:06):
That's quite traditional in our culture in North America right now, in today's world still, and so it is something where I'm cognizant that if you're a young woman in science, I usually suggest that you consider getting an ORCID ID, so that later you can reconcile that that person who has a completely different name than you, even though it's the same first name, might actually still be you.

Dr. Teresa Chan (27:26):
And so that's something that I usually suggest to people, because then the ORCID ID is linked across your names. And maybe you're someone who is not a woman, but seeks to be one and you're a transgender person looking to transition. Again, ORCID ID would be helpful for that person as well. So there's lots of different use cases for why you might change your name over time, and ORCID helps you maintain your scholarly presence as a unified identity.

Jack Young (27:50):
Yeah, exactly. And even situations where sometimes you publish with your middle initial, sometimes you don't, sometimes you include your full first name, sometimes you don't, it's hard to keep track. If you have a long research career, you don't always remember what your first publication name was, and so these small details make it very difficult when it comes time to try and compile your work to find everything.

Jack Young (28:14):
Because there's so many variations, not to mention the fact, if you have quite a common name, and again, if you don't, the J Youngs of the world, and the T Chans...

Dr. Teresa Chan (28:22):
There's so many T Chans. So many T Chans. Even at McMaster, I'm the 38th T Chan. It's "Chan T 38" is my mnemonic. I know I'm not unique.

Jack Young (28:33):
You're very unlikely to be unique in the global research environment, and so it can be very difficult without some other form of identifier to really gather all your work together. And so as you mentioned, what ORCID does, it basically replaces your name with a unique number, and so by signing up for ORCID and by identifying your work within ORCID, what it can do is it can integrate with all these other systems tools, like Web of Science and Scopus, which I talked about earlier, and it can go into those tools and identify your work in those tools with your ORCID number.

Jack Young (29:07):
And so now the next time you need to compile all of your work into one place, you can run a search in one of these tools based on that number instead of using your name, and so it really quickly does that. On top of a lot of other things. It can look at, can connect grant databases, so if you wanna keep track of your funding. It feeds into our researcher profile system at McMaster, McMaster Experts.

Jack Young (29:30):
So again, it's a tool that's really helpful at saving you from having to set up profiles in all these different places, because it can act as sort of that central tool that feeds into all the other tools there.

Dr. Teresa Chan (29:42):
And a girl can dream that someday it'll interface with things like Common CV, and so that we wouldn't have to, it can be automated. So a girl can dream. But the other thing that it does interface with actually is something called Publons, and so Publons again owned by one of the big five companies. So if that's an issue for you, know about that.

Dr. Teresa Chan (30:00):
Publons is a cool little database that allows you to keep track of your peer review and editor kind of work, and so I actually have a Publons account and it integrates with my ORCID, and so now when I do a review, I get credit, like I did a review today for a journal online, and it automatically updated my Publons.

Dr. Teresa Chan (30:16):
But also that's linked to then also to my ORCID, so it's all just one unified data set now that can acknowledge that I've contributed to science in different ways and forms. And if that matters to you. Because some people, I know in some departments, in some organizations, you clearly will be given kudos for your work in fostering science and be on the back end of science, so that's definitely something that I know that some groups are giving active merit for some kind of... For that kind of service work.

Dr. Teresa Chan (30:43):
So definitely something that helps you do, and once I set it up, it was pretty easy, 'cause I just forward reviews and receipts reviews over to the Publons people now, and then all that happens is it automatically updates.

Jack Young (30:55):
And that's really encouraging too, again, looking at these alternative forms of impact, peer review is having a gigantic impact on the research landscape. And so I think you mentioned it earlier, there is this idea of, not gaming the system, there's this idea of us adjusting our approaches to research based on the metrics that we know are gonna be looked at, and so what we don't wanna see is everybody just turning to focus, "Oh, I'm only gonna write papers, I'm only gonna write publication articles, because that's the only way I can actually get credit for my citations."

Jack Young (31:29):
So it's really encouraging that we're seeing these are alternative metrics, things like peer review being included in considerations of the impact you're having. Because the last thing we wanna do is basically tell people how they can have an impact, because there's so many varied ways of having impact. So that's another advantage of having these various tools that look at all these different types of output and don't singularly focus on the research article as the one and only thing we care about.

Dr. Teresa Chan (31:54):
Yeah, I think that having a program of assessment for whoever you're assessing, whether that's a trainee or a faculty member, I think it's only better for us if we can better quantify and qualify what exactly that they're doing. So I think that's been a great conversation. Thank you so much, Jack. It's been really nice to riff on this nerdy stuff with you, and I hope that this is revealing to those of you who maybe didn't know a lot about these things.

Dr. Teresa Chan (32:19):
But Jack, your expertise is definitely well-respected and definitely much required. So hopefully, there'll be a faculty members who wanted to get some help us of this stuff, they can reach out to you. For those of the faculty members who are listening and wanna reach out to Jack or his colleagues at the Health Sciences Library, definitely do so.

Dr. Teresa Chan (32:33):
If you're a junior trainee and you're still listening to this for some reason, again, the library is there for you to engage with them as well. You could set up your ORCID ID now, even though you have no publications. Now is the best time, because otherwise you have to enter everything in, and now it's quite automated, so it's better to do it now before you get started.

Dr. Teresa Chan (32:51):
If you're well into to your career, then maybe do your Google Scholar so it finds all your publications first, and then you can use that to update your ORCID if you don't have one. Anyway, thanks so much, Jack, for tuning in and being a part of this podcast, we really appreciate having all sorts of people helping us develop our faculty.

Jack Young (33:08):
For sure. Thanks so much for having me. I hope to hear from some of your listeners.

Dr. Teresa Chan (33:13):
Wow, that was a really awesome first segment of the MacPFD Spark podcast, and now onto our second segment.

[music]

Dr. Teresa Chan (33:26):
Hello everyone, welcome back to the podcast. It is my pleasure to introduce one of my friends and colleagues, Dr. Shawn Mondoux. Shawn is a clinician, a leader and a scholar in his own right. So thank you for joining me, Shawn, on this podcast.

Dr. Shawn Mondoux (33:41):
Yeah, thanks for having me, this is great.

Dr. Teresa Chan (33:43):
So Shawn, we have this podcast series called Scholarly Secrets, and we call it that because basically we know that scholarship is something that you can learn some skills for during grad school or your PhD, or even a post-doctoral fellowship, but sometimes there are still secrets beyond that, right?

Dr. Teresa Chan (34:03):
So we know that the people who are highly successful have skills or things they do, and those are all the tacit knowledge that sometimes you can't convey in a textbook or a lecture, and so we've carved out this series that helps us explore with different kinds of scholars the kind of scholarship they do, and has them lay down in front of everyone the playbook for some of their secrets. Not all of them, but some of them. Ones that they think would apply. And I'm hoping that you can share some of those with us today.

Dr. Shawn Mondoux (34:31):
Yeah, so I never had any expectations or illusions that I would ever be called a scholar in my life. How about that? I was in a post-graduate training program in Iowa that had significant success in the way of scholarship, and always thought to myself that it just seemed like it was a lot of work, it was quite difficult, and I didn't know if it was something that I wanted to engage in.

Dr. Shawn Mondoux (34:54):
Five years out now, I wouldn't call myself a prolific person who's been doing a ton of scholarship, but I would say that I'm doing significantly more than I thought I was going to, and that the work that's being produced by the folks in the people I work with in the larger groups, it has been work that I'm proud of and I think has been impactful.

Dr. Shawn Mondoux (35:09):
And so for me, this has been a real 180 with regards to my expectations, and ultimately the question is, well, what does that mean and why did that happen? Which I think is what's the big question, is what are the secrets? How do you get there? And I think if anybody told you there was one big secret, then they'd probably be lying, but the first thing for me that's been the most impactful is finding...

Dr. Shawn Mondoux (35:33):
I hesitate to use the word "communities of practice", but at least individuals who had a like mind, who are motivated and who wanted to be part of a group of individuals who were interested in producing scholarship and content. Within those groups I think you need individuals, and for me it's

been, for example, individuals like you, Teresa, who've had a better lay of the land from a scholarship or an academic perspective than myself when you get started.

Dr. Shawn Mondoux (36:00):
So that they can really help direct and make the processes more efficient and not feel like you're kind of wallowing in this idea of what scholarship and value-added research work is.

Dr. Teresa Chan (36:12):
That's what a really good point, I think. The idea of having someone who is actually probably more of a proximal person or a near peer, they call it right, someone who has just really been there before. I think a lot of us who do clinical work probably had someone that was like one or two years ahead of us that we could learn some secrets from.

Dr. Teresa Chan (36:30):
It's why the first year resident is probably the best teacher a medical student could have, it's because they can still remember what it's like to be them and they can know, "Oh yeah, this is how you do this thing that all of us take for granted." And so I think in scholarship it's the same thing, if you can find that near peer it can be really powerful.

Dr. Shawn Mondoux (36:47):
I remember working with some of my peers who were quite successful researchers who were mentors of mine, back when I was a resident, and thinking to myself that maybe the reality that I was in as a junior person considering scholarship development or some element of my own research agenda, that they probably didn't remember what it was to be at this stage.

Dr. Shawn Mondoux (37:09):
Now, whether that's true or not, I'm not sure, but it really does help to have somebody who's been there recently and who at least knows academic, scholarship, political landscape of the environment in which you practice, and who can really direct you to be more efficient in the time you spend within those few years.

Dr. Shawn Mondoux (37:25):
It's really easy to wait for people or to look for connections, or to try to identify the right resources within your institution, but that all takes a ton of time, and I think for individuals who are just getting into it, it's a really dissuading kind of reality to go through that.

Dr. Shawn Mondoux (37:43):
And so having people that can guide you, coach you, mentor you, push you through that process sometimes, is highly valuable, and I think there's those individuals that can do that within your institution who are near peers, individuals who are successful and understand the lay land locally. And then there's groups who are content-based, like a community practice-based.

Dr. Shawn Mondoux (38:03):
So for example, here we have a really productive interested quality improvement in emergency medicine group, of about, I don't know, 10 or 12 people nationally, with a core group of about six or seven, I would say, who come together on almost all content that's related to quality improvement in emergency medicine.

Dr. Shawn Mondoux (38:22):
To produce guidelines, coaching materials, educational materials that all gets published out within our community. And having that small group of individuals who will bring you into projects or notify you of new work or keep you abreast of kind of what's happening in the field, I think has been equally as impactful.

Dr. Teresa Chan (38:41):
Yeah, so what you're saying is that you need a network of people that are your peers in the content area that you're interested in. Is that correct?

Dr. Shawn Mondoux (38:50):
Yeah, that's been a real win for us in our small group. It's allowed us to leverage both scholarship and research content, but it's also allowed us to leverage some political elements of finding a space around the table when we're discussing the national emergency medicine agenda, and to bring in the voice of quality improvement, but also the voice of patients.

Dr. Shawn Mondoux (39:10):
And at least the perspective of, "Well, this is what's happening in the science. This is the minimum requirement now, for example, producing a guideline or recommending a treatment." And so as we go ahead and do this, we need to consider these principles as we do that, and it's really allowed to have a voice in a more meaningful way, because we have an organized group of people who are speaking in the same voice and the same tone in the same context.

Dr. Teresa Chan (39:31):
I think of that group like your posse. It's your cohort, it's your... It's a colloquium of people who, whatever you wanna call it. One of my other friends, Deb Siegal, Dr. Deb Siegal who's a... Consultative haematology network that she's doing through Slack, and it's pretty cool. She and I kind of like brainstormed how to do that earlier on, and she's gone and done it. I'm an honorary hematologist apparently, 'cause she let me in.

[chuckle]

Dr. Teresa Chan (39:57):
It's just pretty awesome to see these communities pop up. So it's definitely not just in QIs, not just in emergency medicine, these are the things that people are doing all over. I think there's probably grant money in there. Deb probably knows how to get that. I'm not great at that part of things, but I do think that there are there these technologies you can leverage to do for relatively cheap or actually free, much of the same functionality that you might see in other circumstances.

Dr. Shawn Mondoux (40:19):
I agree. I think that those groups are augmenting and now that connectivity, at least in the age of the pandemic and Coronavirus, I think that the ability to leverage any kind of productivity, whether it's operational, academic, scholarship, even as humans for our own mental health and touching bases people, I think there's a lot of possibility and at least grant money out there now, and so we're all trying to explore that and leverage that and see what we can do.

Dr. Teresa Chan (40:43):
So that's point number two. Are there any other secrets that you can impart on people as things that they should try to take a stab at in their early career?

Dr. Shawn Mondoux (40:52):
There's such a variety of things here that can be thought of, and so I guess the question is, what's the next big thing for me? I see a lot of people who are afraid to engage in a voice for themselves, who feel that they're either uncomfortable to wade into a space because they don't feel like the value of the sponsorship or academic merit of what they have to say is significant.

Dr. Shawn Mondoux (41:16):
Probably what I would say is that those are the people that I tend to learn a lot from and try to spend some time encouraging. But really, nobody starts this thinking... Well, I shouldn't say nobody, maybe somebody does, but not a ton of people start this idea of scholarship thinking that they have all the answers. And I think the idea here is not to know that you are the ultimate voice of a certain content area for your first publication.

Dr. Shawn Mondoux (41:42):
The goal really is to just start by having something to say, and not being really ashamed of that idea, and doing the work to stand behind the value of what that means, but getting into this space slowly and not really feeling like an impostor. And I think, Teresa, you and I have talked about this a lot, that it's easy for folks to kind of wade into this academic idea coming out of residency and see themselves as like, "Well, I'm not a person who's academically successful yet and I don't publish stuff yet."

Dr. Shawn Mondoux (42:11):
It's hard for a lot of folks to feel enabled within that sphere, but I think it's not about having the best and only thing to say, it's about just starting with having a voice in the literature and in scholarship, and then growing with your interest from there. Because I think our voice and our interest grow together, and if we're doing something that we truly love and we're interested in, it's easy to become a little bit more of an expert in those content areas.

Dr. Teresa Chan (42:35):
I think from the point of view of, what I would say is that I think wading into academia can be a daunting thing. Because if you think about it, what do we do? We write something down and then we submit it and have people bash our work to pieces, then have to reassemble it in the style that the reviewers and editors want. And you just have to be strong enough to withstand that, and so I understand the impostor syndrome bit is fuelled by peer review.

Dr. Teresa Chan (43:04):
And although peer review can be that flame that actually makes you stronger, it is not like that when you're getting started. And so understanding that you're gonna feel insecure, 'cause guess what? If three people all give you lots and lots of feedback of your grant, about your paper, it can be a really daunting experience.

Dr. Teresa Chan (43:25):
And so trying to reframe those as in that growth mindset of you being, entering into this and these are three people, maybe even four, if you count the editor sometimes, they are giving you feedback

to improve, can really be helpful in reframing all of that. And if you do feel like an imposter, well these people are helping you become less imposter-y, in my mind, because they're giving you feedback.

Dr. Teresa Chan (43:50):
I mean, obviously, the desk rejects are very different, but if there's at least even a line or two from the editor, take that with a grain of salt, but also take it to heart in that there's some truth in there that can make you be a better, stronger scholar. And I sit here recording this podcast with you having just published my 130th paper, so you multiply that by how much...

Dr. Shawn Mondoux (44:13):
That's insane.

Dr. Teresa Chan (44:15):
How much bad advice and good advice I've gotten, but that every piece of advice... One of my role models in medical education, Kevin Eva once wrote, "The reviewer is always right." And he said that in an editorial as the editor in chief of Medical Education, a journal that I aspired to finally publish in, which is the 130th paper is in that journal finally. And I've had a lot of no's. I've had a lot of no's from Kevin. I've had a lot of no's from a lot of other people.

Dr. Teresa Chan (44:41):
I've had, "Oh, here's feedback, but we can't publish your work." I've had all of those things. If I were to see those things as a malign on myself as a scholar, I would not be here talking to you right now. I would not probably be in the position that I am right now. I'd probably still be crying in a ditch somewhere.

[chuckle]

Dr. Teresa Chan (45:00):
And so the thing is, is that we have this structure of peer review, and you're an editor at Canadian Journal of Immersive Medicine, I know. And I've been on the other side of both things now. I've been an author, I've been a review, and I've been an editor. And I know that when I go and volunteer my time to edit stuff or review stuff, I'm not wasting my time. I will accept something and I will put my fullest effort into helping that author improve in some way.

Dr. Teresa Chan (45:28): It might be that the editor still doesn't think it's ready, but I always try to frame my reviews as if I was gonna try to be the most helpful friend that this person could have. And hopefully, if that's something that everyone can do, that'd be great, but it's not always like that.

Dr. Teresa Chan (45:42):
And there's a meme that circulates on Twitter all the time called Reviewer Two, which is this characterization of the evil reviewer that gave you all these hateful and hurtful things, that demand you to have done a completely different study, which is not reasonable, obviously, 'cause you did the study you did. And that meme exists because there are reviewers out there that are the... I call them "mean guy and girl reviewers" and they do ask for ridiculous things and they do crap all of your work.

Dr. Teresa Chan (46:14):
If you've done a fully qualitative study, they explain how qualitative research is not worthwhile in their review, and you have to smile a nod to that. That can be hard, right? So as a junior scholar, just know that there are glimmers of truth, in that even maybe it just means that that journal doesn't have the reviewer base and the editor base to understand that. Because if people write stuff like that and I am the editor who oversees the review, I will either modify or redact or frame, "Reviewer two doesn't understand the role of qualitative methods. Can you explain a little bit more?"

Dr. Teresa Chan (46:49):
They'll actually, I'll get in there as an editor and frame that for the junior author. But it is something to think about, in that if one of the reviewers hates on your work, how do you reframe that, pick yourself up, dust off, and then revise that paper to make it better? So I do think that it's a hard road, and so the impostor syndrome is not really truly impostor syndrome when people are telling you you're not good enough. That's probably just being subjugated to some form of mild bullying.

Dr. Teresa Chan (47:19):
I think that what we need to do is just have near peers, and other people, and probably podcasts like this, that normalize that process. And maybe encourage everyone to be a little nicer in their reviews, 'cause someone's at the other end of that who's invested their blood sweat and tears into a project, right?

Dr. Shawn Mondoux (47:34):
Yeah, I think there's two things I would say to that, largely in agreement with what you said. The first impostors syndrome element is even feeling that you can get into that game in the first place. Which I think is the first hurdle, is to feel like you are clever enough, that you have enough to say to get into doing your first publication.

Dr. Shawn Mondoux (47:56):
And then that second element is getting to this idea of vulnerability comfort. Which I think is a necessary growth qualification to be able to put yourself in front of people or put your work in front of people and say, "Okay, tell me what I need to get better at, and tell me what I need to learn." And peer review is a form of that.

Dr. Shawn Mondoux (48:16):
But it also grows into this idea, and maybe I'm having a little bit of an academic renaissance these days in the way I'm thinking about how we need to interact with each other in academia. But truthfully, I think what this whole idea of an academy or what academia was meant to be, was to have people with differing opinions come to a specific place, and through discussing what they know and discovering what they don't know, create improved models and views of the world. And so only by actually being critiqued and welcoming critique can we kinda get better. I'm getting really philosophical.

Dr. Teresa Chan (48:53):
Oh yeah, you're heading right into Hegelian kinda philosophy right now and...

Dr. Shawn Mondoux (48:56):
Yeah, yeah. But I think this is important, and this is not something that going into this I knew, it's not something I thought about. In fact, I probably would have laughed off the idea that peer review is

some form of a growth mindset, "I can be a better person" thing. And to some degree, I'm not sure it makes me a better person, but it definitely makes my work better.

Dr. Shawn Mondoux (49:13):
But the whole idea is to come back to this notion of, well we, one, feel comfortable enough to get into the game in the first place." You don't need to be the biggest loudest, strongest voice. But you definitely do have something to say if you're even thinking about scholarship, education, quality improvement, whatever it is in a meaningful way so get into it.

Dr. Shawn Mondoux (49:34):
And two, the first few bumps are the hardest ones, but then after that you're gonna get much better at this idea. And that's the secret there, is to kinda tough it out. And I know that's awful advice, who says, "Tough it out."? But hopefully with the constructs of the first two things that I told you, have a near peer, and have a quality team around you, hopefully with those groups they can kind of cushion the blows enough to make you feel worthwhile and productive in that sphere.

Dr. Teresa Chan (50:00):
Those are great final thoughts. Thank you so much for a great conversation and we'll chat with you another time.

Dr. Shawn Mondoux (50:05):
Yeah. Thanks, Teresa.

[music]

Dr. Teresa Chan (50:06):

Thank you so much for tuning in to the MacPFD Spark Podcast. Just so you know, this podcast has been brought to you by the McMaster Faculty of Health Sciences and specifically the Office of Continuing Professional Development and the Program for Faculty Development. If you're interested in finding out more about what we can offer for faculty development check out our website at www.macpfd.ca that's www.M-A-C-P-F-D.ca. Many of our events are actually web events that are free. Finally, I'd like to thank our sound engineer Mr. Nick Hoskin who has been an amazing asset to our team, thanks so much Nick for all that you do. And also thank you to Scott Holmes for supplying us the music that you've been listening to. All right. So until next time this is MacPFD Spark signing off.