

Santa: Broadcasting from the University of British Columbia, this is *Blue and Gold Cast*. I'm Santa Ono, the President and Vice Chancellor of UBC. On this season of the *Blue and Gold Cast*, I'm speaking with the people who are leading some of the most innovative and creative work coming out of our campuses. The question of academic integrity is a big one for all universities.

Today on this show, I'll be speaking with two scholars working to improve scholarly integrity at UBC. Dr. Ross Hickey is an associate professor in UBC's Department of Economics. Jacqui Brinkman is the Director of Graduate Student Professional Development at the UBC Faculty of Graduate and Postdoctoral Studies. Both Ross and Jacqui are involved with UBC's Scholarly Integrity Initiative, which aims to help UBC's researchers and scholars do responsible work.

Ross, Jacqui, welcome to *Blue and Gold Cast*. Thank you so much for being on the show today. Let's start with some introductions. Jacqui, what is your current role at UBC?

Jacqui Brinkman: I am currently the Director of Graduate Student Professional Development in the Faculty of Graduate and Postdoctoral Studies.

Santa: What about you, Ross?

Ross Hickey: I'm an Associate Professor of Economics, jointly appointed to the Faculty of Management and the Faculty of Arts and Social Sciences at the Okanagan Campus of UBC.

Santa: Today, we're talking about scholarly integrity. I'd love to know how you both define scholarly integrity. Jacqui, what does that term mean to you?

Jacqui: To me, scholarly integrity has to do with the procedures and behaviors of really researching responsibly. It's around research. Having research that we conduct at the university, doing it with honesty, doing it with care, being diligent in the research that's being done, so that it really reflects reality, it can be reproducible and that it's really accessible more broadly beyond the institution.

The conversations around scholarly integrity also provide opportunities to consider our roles at the institution as well as beyond. To me, that's scholarly integrity. It's everything around the behaviors, norms and practices around the research we do at the institution.

Santa: What does it mean to you, Ross? It's the same thing for you or is it slightly different?

Ross: I was going to say, just look at the norms and the values and practices that are really discipline-specific as well, with which we engage in our research. It's really about having an ethical standard that you apply to your own work that keeps you in good standing within the community of peers that you're a member of.

Santa: Jacqui, can you tell us about UBC's scholarly integrity initiative in general, and how did it come to be?

Jacqui: UBC's scholarly integrity initiative in the Vice-President research and innovation office came to be through many conversations amongst colleagues. Really, it's a central resource for educational materials, around topics, around how to ethically conduct research. It really began with Greg Martin, myself and others, discussing how it would be great to have a central repository.

We were fortunate to get funding through the Academic Excellence Fund. A initiative came up, there was an opportunity to provide funding, having a centralized resource was something I'd wanted for years, and so the two aligned and that's how it came to be. Really, as Ross mentioned, the disciplinary differences in these topics, so it was an ability to bring together different stakeholders on campus and to develop the resources that are meaningful in different areas on the various topics of scholarly integrity.

Santa: Jacqui, it sounds like you've been involved in this initiative from before its inception then. Is that correct?

Jacqui: My history with responsible conduct of research as it's also known, hails back to-- I started at UBC within the Faculty of Medicine, working at the Heart and Lung Research Institute at St. Paul's hospital. It was while I was in Faculty of Medicine, that I started a responsible conduct of research course with Dr. Susan Porter. That course began in the spring of 2007 and still runs to this day within Faculty of Medicine, even though now Dr. Porter and I are both within graduate and postdoctoral studies, her being the Dean and Vice Provost. It's something very dear to our hearts in supporting the graduate research enterprise at UBC.

Santa: Ross, tell me about you, more about you and your role at UBCO and how you got involved in the scholarly integrity initiative?

Ross: I'm an economist and I'm a social science researcher. I do research on charitable giving and the tax treatment of charitable donations, as well as charity operations and organizations. I have returned from a two-year leave of absence at the University of Melbourne. One of the first emails I got after I returned, was inviting me to join this initiative and I accepted.

I think I was asked in part because I helped with doing some of the legwork on building the Research Data Center here at the Okanagan campus. It's a statistics Canada access point for confidential micro data. That's something I've worked with throughout my academic career, is a confidential micro data. I think that that's partly why I was asked to be involved in this project because of my-- When we think about working with data, personal data that other people have graciously surrendered to the government and allow researchers to access, there's quite a few protocols that are important to keep in mind to make sure that the data maintains its privacy and confidentiality.

When I was asked to participate, I just thought, this sounds like a great initiative. I think it's very important. I also thought, it was a nice way for me to reacquaint myself with what's been going on at UBC.

Santa: Now scholarly integrity is clearly a part of our everyday lives as researchers. As you know, I'm a scientist as well, it's not just the policy at institution. Ross, what

are some of the major challenges that you're addressing with regards to scholarly integrity, as part of this initiative?

Ross: Two things I think, are worth talking about here. One, I've already mentioned briefly about data, the importance of data, privacy, confidentiality, just the ethical use of data. Making sure that we're using data, it's data that we have the informed consent of the subjects. For example, with human data, the informed consent that the subjects to use that data for the kinds of questions that we're actually trying to answer.

That's an important part of this initiative, is that we have a lot of resources available and case studies that researchers can work through to familiarize themselves with some of the challenges that they may encounter, and ways to address those ethical challenges that come with working with data. The other thing I think it's important that I liked about this initiative, because as someone who's participating in that committee, I didn't create all the resources, I'm really just one of the early guinea pigs to be able to take a look at some of these resources that were made available to scholars.

One of the ones I really appreciate is also thinking about authorship and collaboration. I've done quite a bit of interdisciplinary research since I joined UBC and I wish I'd had access to some of these resources in the past because with interdisciplinary research, there are different norms about authorship, for example, and how to broach those conversations. It's not always easy, particularly for people who are in different stages of their academic career when working with people that are more senior.

I think that these resources really, they're a great way to help researchers deal with-like you said, the everyday encounters that we have to make these ethical decisions.

Santa: I drill down on that one topic about authorship because being a scientist, it's something I've thought about. Traditionally, the principal investigator of the laboratory gets their name at the very end as the senior author. Usually, the first author is the person who's done bulk of the work. That becomes a little bit difficult to ascertain when there are multiple groups and maybe several people have done the same amount of work.

Identifying who should be the first author is problematic and you do things like add asterisks beside the two or three people who might have been the primary movers and say, they contributed equally and then try to do it alphabetically or something like that. I want to ask you a little bit about the senior author role and I'm sure you've thought about it.

Usually the argument goes their name deserves to be on the paper as an author in that revered position at the end, because without them the question might not have a foundation, it might be based upon several years of scholarship in that laboratory or in that group. Others argue if it weren't for the principal investigator, the resources wouldn't exist to support the experiments that are part of the research.

Then there are others who say, "Well, that's crazy." That it actually should be direct participation in the research itself, or its analysis or interpretation. As you know in

some cases that's not the case. Senior authors are there simply because it's their laboratory and they have obtained the grant and they may or may not have had much involvement in experiments, or their interpretation, and so you must have thought about that. What do you think?

It even translates to recognition, because you'll have people who win the Nobel prize where they are just the principal investigator, and then you have the postdoc or the graduate student or a junior researcher that's left off the Nobel prize list, because they're not recognized as the senior author. What do you think about all that?

Ross: That's a really interesting question. Full disclosure, as the economist I think that the importance of capital in the production of anything is important. It's not just labor. As you said, it's not just the labor that makes the research happen it's the capital, the infrastructure, the lab and the funding that's available to the team. We do have to recognize that as an important input in scholarship that takes place.

In economics we tend to do a alphabetical ordering for joint work. That's the norm that's been around as long as I've been an academic. I appreciate it. My last name is Hickey I fall in the middle. I feel it's not so bad for me, but I have co-authors with last names near the end of the alphabet and I sometimes feel a little bad for them, because the truth is that with that alphabetical ordering some people are in the et all category for much of their career in economics, and that's quite a disadvantage.

When we think about who is getting credit for the work, and the order of authors, I don't mean to diminish it at all. I think it is incredibly important, but as I said within disciplines people know what the ordering means. When we think about evaluating research contributions from those outside of our own research community, it's very difficult to look at someone's CV and make an inference about their contribution to their work based on where they showed up in the order of authors.

If we do that with our own norms in mind about what the order of authors infers from our discipline and project it onto other disciplines, we can make mistakes very easily. For example, I don't know what all the practices are in different disciplines about how authorship is ordered. No matter which way we decide to think about ordering authors or recognizing in print, the contributions of researchers, there's always power and balances and opportunities for some people to claim credit that may be undeserved, and other people to not receive the credit that actually is deserved for the work that they do.

I think that as academics, I take a long run view on this. If you are a net contributor to your academic community that won't be overlooked for too long. I really do believe that if you're a participant in the community, you go to conferences, you disseminate your research, you participate as a peer reviewer, you do all the things that one does when one is involved in their academic community.

I don't think people's talents will be ignored. That's a classical economist approach to this, that in the long run, these things might work out. Of course you could also say, "Well, in the short run, people's careers are cut short, because they aren't getting recognition perhaps for their contributions." I think that's where perhaps an initiative like this can cause people to have conversations about what authorship means for people's careers, how important it is for us to try to get it right, why we should try to

have those conversations and how we can arm ourselves as researchers to have those conversations with people, recognizing the power imbalances that may be present.

It would be a shame for someone to have done the work that gets a Nobel prize and not receive the recognition for it, but I also think that knowing what I know about how the Nobel prize is awarded, and it's quite peer reviewed. Peer input is the primary determinant of that award. I don't think that they're going to overlook too many contributions given the method that they're using to adjudicate that award.

Santa: I think those are all good points. I wanted to ask you a question Jacqui what scholarly integrity issues resonated most with you while working on this entire initiative from its very inception? What are the issues that resonate with you?

Jacqui: We could talk for an entire podcast on authorship. I think the one thing that hadn't come up is responsibility for the work. We talk about credit for the work, and people want to attribute to who actually did the work, but it's a gray area in what does significant intellectual contribution to a work actually mean, and how people interpret that could be to different. I think that with me, and with the responsible conduct of research scholarly integrity course that we developed, what was so great was creating spaces for these conversations.

We would have graduate students, postdocs and faculty members in the room, and we would be having conversations with case studies on topics such as why is it important to not have a sloppy notebook? Why is it important to really track and keep good data, so that we can go back and look at our work months, years later and know exactly what we did. Why is that important?

Then also conversations around who cares about our research and who are we responsible to as researchers at the university? Thinking about all of those people that have vested interest in the research that we do. The government that funds our work, the institution itself who provides resources for us to be here, the general public who funds the government who provides that research that we do.

There's lots of people that have an interest in the research that comes out of universities. We have a responsibility to then share that research back with them. I think really the other point in this is that some of these topics it's just like we're supposed to know them. As part of a university you just know this, but we don't. I think that providing this resource and case studies and information where you can have explicit conversations within disciplines on what is expected, why is it important to share our data? What's the fundamental reason why it's important to do that?

What does authorship mean? What does that mean within our discipline? What is significant intellectual contribution to our work and how might that senior author have intellectually contributed to that paper? When you have authorship on a paper and get credit for that work, what does that mean? What responsibility do you have for that work? Then not to just have it as credit for credit's sake back to the career advancement and some of the reasons around that.

I think data management authorship are some of the bigs, but some of those topics that we are just supposed to know, and yet we don't necessarily explicitly discuss with the policies and reasons behind it alongside those conversations.

Santa: Well, everything you say resonates with not only myself, but should resonate with an academic community of scholars. Thank you for that. Here's a question. In all the universities that I have been fortunate to either serve or to do research and they've included McGill university, Harvard university, Johns Hopkins here at UBC, University College London, when you say that people are just expected to know these things, nobody ever really explicitly discusses it, or it's very rare why is that the case?

Is it that there's a failure in thinking about how we need to educate those responsible behaviors? Is it that people are too busy and focused on research productivity, recognizing that it's important? Why doesn't it occur in any of these institutions where I've actually served?

Jacqui: I think it's occurring more than it used to occur and I think that that's a positive thing. I think there's lots of professional societies that have taken this on. I think a lot of journal articles now have really explicit contributor-ship policies, so I do think some of the dynamics are changing. I think a lot of programs have instruction on data management. It may be time when we just think back about the ethical decision-making that we make, why is it an ethical issue taking the time to really think about some of those foundational things?

I think sometimes we just don't take the time to talk about them and yet when you plan the seed with a group of faculty members and post docs, off they go. These are the things that really resonate and people enjoy having conversations about and enjoy being challenged on. It's just having the spaces to have these conversations and I think, I do see it more often now than I did when I started at UBC 18 years ago.

Santa: Ross, what happens in the Okanagan? Do you have a hardwired moment in a new graduate student's career at UBCO where you discuss scholarly integrity or where you discuss authorship and what it means, and what is that scholarly contribution? Does that happen?

Ross: We don't have a lot of graduate programming at the Okanagan campus. Many disciplines rely on an interdisciplinary graduate studies program and they do have some professional development course work in that, but as you know, with counter descriptions broadly defined and up to the individual instructor to determine what the content of that course would be.

That's only required for the interdisciplinary graduate studies students in the bench sciences, there are graduate programs and what they do. I don't know what their onboarding is for new students but I think-- Just if I can say on the question that you and Jacqui were discussing about why don't we see this? I think you alluded to it already in our previous discussion. There are winners and losers. The status quo of us not discussing authorship, for example, it's not that the research doesn't happen, [chuckles] the research still takes place. It's just, some people are getting credit for it and some people may be not getting as much credit for it.

I have heard stories of people as graduate students who've done work that then surprisingly found later that that work was incorporated in a publication that they were unaware of so. I think when these conversations don't happen, that means that there are winners in terms of credit claiming and losers in terms credit claiming as well, I would say.

Santa: Which underscores the importance of this initiative. Thank you for that perspective. I have a last question for both of you. What are your visions for building a culture of scholarly integrity and what role can this initiative play in your vision?

Ross: What I really like about this initiative is that we have a set of resources here that allows people to engage in a discussion without judgment and I feel mistakes happen, things go wrong, things don't always go as planned and that's true in the practice of our research when we are doing the actual work, but it's also true in terms of our judgment that sometimes there are mistakes that are made and accidents that happen.

We need to have healthy conversations about that and not necessarily in an accusatory way. There's a quote that I oftentimes tell my students who said that he wouldn't assume maliciousness when incompetence would suffice.

If we think about things that go wrong, oftentimes it's a mistake and there's no ill intent, but we have to have an open conversation about these things, nonetheless and I think if we are in a world where we're not having open conversations about this, it's easy for people to, I think, adopt a position that people are being greedy with credit claiming, or people are cutting corners on their research, just trying to think about their careers and thinking about the maliciousness, as opposed to the fact that when things go wrong, it might just be a mistake and if we have conversations about this, we may actually have much less of these mistakes taking place.

Santa: Thanks, Ross. Jacqui.

Jacqui: I think that a lot of research integrity initiatives focus on the big ones, fabrication, false and plagiarism and really egregious examples of misconduct and not the slippery slopes and the cutting corners that really can negatively impact the quality of research that's being done at institution. I think what I really like about this scholar integrity initiative and the approach, is the educational aspect of it and the conversational aspect of it.

It's providing case studies and tools and resources to have these conversations on how can we do the best research possible? What resources are available to us at the university to help with that. What are the norms and expectations? What happens if I make a mistake? How do I learn from that mistake and so moving forward, I'm not repeating that mistake? Then also, how can mentors help more junior researchers to understand how the research that should be done in their area and what to be expected and so I think that it can help just to have space and create spaces for dialogue on these topics.

Santa: Thank you so much for talking about your vision, but also the importance of this initiative. Ross, Jacqui, thank you so much for being on *Blue and Gold Cast* today.

Dr. Ross Hickey is an associate professor in UBC's department of economics, Jacqui Brinkman, this is the Director of Graduate Student Professional Development at the UBC Faculty of Graduate and Post-doctoral Studies. That does it for this episode. You can find links to our guest's work as well as previous editions to the show at blueandgoldcast.com. You can also find us on your favorite podcast app, like Apple Podcasts, SoundCloud, or Stitcher. You can tweet at me @UBCprez, that's prez with a Z . I'm Santa Ono. Thank you for listening.