Tomo Suzuki: [Japanese speech]

00:00:37.980 --> 00:00:55.080

Tomo Suzuki: Hi everyone, my name is Tomo Suzuki, a publisher leading the Society General Publishing Team in Tokyo, and I'm delighted to introduce our first session here at the first-ever virtual Japan Wiley Research seminar.

Tomo Suzuki: Before we begin, there are a few housekeeping notes.

Tomo Suzuki: The session will be delivered in English with simultaneous interpretation into Japanese. You can select the language: you drag to listen in by going to the interpretation option in the menu at the bottom of your screen.

Tomo Suzuki: [Japanese speech]

Tomo Suzuki: All attendees are muted, so please submit your questions for the speaker by typing into the Q&A menu at the bottom of your screen.

Tomo Suzuki: If you have any technical issues, please let us know through the chat feature, and we will do our best to assist you.

Tomo Suzuki: The presentation is being recorded, and we will share the link for the recorded video with you as soon as it's available following the session.

Tomo Suzuki: Our speaker today is Chris Graf.

Tomo Suzuki: Chris is a Director of Research Integrity in the Open Research Team at Wiley.

Tomo Suzuki: He leads initiatives at Wiley that focus on transparency, reproducibility, and research integrity, often in partnership with researchers, universities, and other research stakeholders.

Tomo Suzuki: His is a program committee member for the 7th World Conference on Research Integrity.

Tomo Suzuki: He participates in stakeholder advisory and executive boards, working groups, and similar for the STM association FAIRsharing.org and the UK Reproducibility Network.

Tomo Suzuki: He previously held the position of co-chair of the COPE, Committee on Publications Ethics.

Tomo Suzuki: The integrity of peer review and what we publish has never been more important, and Chris is here today to share his thoughts on the impact of the pandemic, technology, and other trends and on what's next for research integrity.

Tomo Suzuki: Chris is a leader at Wiley on transparency, research, integrity, and publishing ethics, and we are delighted to have him here today.

Tomo Suzuki: As Chris goes through his presentation, please submit your questions as we go, in English or Japanese.

Tomo Suzuki: And we will have plenty of time for Q&A at the end.

Tomo Suzuki: So please join me in welcoming Chris.

00:03:50.430 --> 00:03:51.720

Chris Graf: Thank you Tomo.

Chris Graf: And thank you all for being here. It's my pleasure to spend the next hour with you talking about research integrity.

Chris Graf: So today we're going to start by exploring what we mean by research integrity and the roles that we have as editors and publishers in shaping its future.

Chris Graf: We're going to learn about current challenges from an editor and a publisher and a journal perspective and how everybody involved in research can help to uphold research integrity.

00:04:37.530 --> 00:04:38.580

Chris Graf: Here's the agenda.

Chris Graf: We'll start by looking at what we mean by research integrity.

Chris Graf: Then we'll look at the issues that we see.

Chris Graf: And then we'll do some case studies before finally looking at how we, as editors and publishers, can shape the future of research integrity.

00:05:03.600 --> 00:05:04.500

Chris Graf: Let's begin here with some thoughts about what we mean by research integrity. This is a quote from an editorial in *Nature* from 2019 and it says, “Start a conversation about research integrity, and many researchers will assume that you're talking about misconduct,” and I wonder whether that's true for you, the audience members, so let's do a poll and find out. One of my colleagues will begin the poll in Zoom, and then you can vote. So please could you put the poll up? Here we are.

Chris Graf: So it says the same as the slide: When you start a conversation about research integrity, what do you assume that the conversation will be about?

Chris Graf: You can vote whenever you're ready, but I will read out the options for you here.

Chris Graf: The first option would be you assume that it's about misconduct investigations into possible fraud, fabrication, or plagiarism. That's number one. Number two is: Perhaps you assume the conversation will be about systems that boost the quality and reliability of research.

Chris Graf: If you like number three, you can choose both of the two above answers, or, if you think it's totally different, something totally different comes to your mind, please choose number four.

Chris Graf: So, yes please vote now, and when votes have arrived, I imagine my colleague will close the poll, and we can talk to the results a little.

Chris Graf: Okay, I can't see the results. I'm wondering whether they're on a different screen.

Wiley Events Webinar: Chris, you'll be ready to see the results soon.

Wiley Events Webinar: We still have responses coming in. Okay I'm going to end the poll now. I’ll share the results.

Chris Graf: Okay. Lovely.

00:07:28.230 --> 00:07:41.100

Chris Graf: So you can see in front—thank you, colleague—you can see in front of you the poll results: 19% of people assume the conversation will be about misconduct, 15% of people thought that it will be about systems to boost the integrity and improve the integrity of research, and the vast majority of us chose that it would be about both of the above.

Chris Graf: And that's good, because that's where I voted, too. So let's move on and think about that in a little bit more detail.

00:08:12.330 --> 00:08:22.410

Chris Graf: The next slide is some from some guidance in Japan I imagine that you're aware of. It’s from JST, Japan Science and Technology Agency, you can see, and it's their conduct for responsible research activities for researchers. You can have a look at it on their website. So JST, in its guidance, also chooses both of those things: Yes conversation about research integrity would be about misconduct, but also about improving the system.

Chris Graf: I’ll read out the four points that the code makes. So they start by strictly condemning any misconduct in research activities, but then they move on to say that JST believes in honesty in research activities and how important that is for Japan, which seeks to develop itself through technology.

Chris Graf: And then they say that JST supports honest and responsible research activities, and also that JST will promote education in research ethics and reform research.

Chris Graf: So you can see that balance there from JST, and if you didn't already, read the booklet and do visit the website—there's a link to the website on this slide.

00:09:43.440 --> 00:09:45.810

Chris Graf: So that's nationally at Japan.

Chris Graf: Let's think beyond Japan and internationally.

Chris Graf: And a good point of reference here is the Singapore statement from the World Conference on Research Integrity, the WCRI.

Chris Graf: And this statement was the product of input and effort from 340 attendees of the WCRI meeting in 2010 from a diverse range of stakeholder groups, including researchers, funders, representatives of research institutions like universities, and also research publishers.

Chris Graf: And, once again, we see the emphasis on systems that boost the quality and reliability of research.

Chris Graf: The guidelines themselves list 14 responsibilities for stakeholders. Twelve of those are positive and affirmative steps that boost research integrity; only two of their recommendations relate to irresponsible research practices. So once again, we have the focus on improving the systems, as well as addressing misconduct.

Chris Graf: So nationally in Japan and internationally around the world, there is a great deal of effort going into systems and approaches that improve the integrity of research.

00:11:40.770 --> 00:11:43.530

Chris Graf: But of course we do see issues.

Chris Graf: This is how COPE, the Committee on Publication Ethics, thinks about and organizes data on the cases that editors and publishers like us see, into a formal taxonomy.

Chris Graf: Before I reflect on the items in the taxonomy there, a little reminder about COPE. So COPE is the Committee on Publications Ethics. It's a membership organization and provides support for editors, publishers, and other people involved in publishing ethics with the aim of moving towards a culture of publishing where ethical practices become the norm.

Chris Graf: And of course you, if you are a Wiley editor or journal manager, then you have membership of COPE.

Chris Graf: Wiley arranges for membership for all of its journals.

Chris Graf: Now back to the taxonomy: In the COPE taxonomy there are 17 main classifications of problems.

Chris Graf: And the bolded classifications on the slide are the most common issues that we see at Wiley when we look at the problems that we see.

00:13:24.900 --> 00:13:39.480

Chris Graf: So authorship, correction of the literature, data-oriented problems, questionable behavior, and plagiarism are the majority of the issues that we see at Wiley

Chris Graf: And those problems are on a continuum. They're all shades of grey.

Chris Graf: The figure on this slide is from a paper by Harvey Marcovitch and colleagues from 2010, and it illustrates the complexity that problems always present.

Chris Graf: We can see on the vertical axis, we have problems ranging from less serious to more serious, and then on the horizontal axis, we have problems ranging from the not intentional to the intentional.

Chris Graf: And if you look at the types of problem on the number list there, you can see that number 21 is illegal human experiments, and it's clearly a serious problem on the vertical axis, and also it's almost certainly an intentional problem—you can't do illegal human experiments accidentally.

Chris Graf: So it's quite clear that this number 21 would be in the top right-hand corner—not so much gray there, mostly black and white. But other problems sit somewhere else on those two axes. Imagine number 9: undeclared conflicts of interest.

Chris Graf: That could sit anywhere on the continuum depending upon the circumstances.

Chris Graf: And this is the point that the Marcovitch paper makes, is that there is a continuum of problems from honest error to outright fraud.

Chris Graf: What matters a great deal is intension behind the problem. And of course that's a quality which may be impenetrable to the observer from the outside; it may be impossible for us to understand the intention. And that makes assessing problems really quite challenging.

Chris Graf: At Wiley, we're also seeing problems are becoming increasingly complex.

00:16:27.900 --> 00:16:35.550

Chris Graf: Here's a figure from one of the COPE flowcharts—an infographic.

Chris Graf: It shows COPE’s guidance on systematic manipulation of the publication process, where an individual or a group of individuals have repeatedly used dishonest practices to manipulate the process at journals in some way, and frequently this occurs at scale across multiple manuscripts and also multiple journals.

Chris Graf: For example, we might have authorship manipulation and the inappropriate attribution of authorship of a piece of scholarly work by adding authors at revisions.

Chris Graf: Or, we might have peer review manipulation where the manipulation inappropriately influences the independent assessment of the research by using false identities or false emails.

Chris Graf: Or, we could have image manipulation, where Western blots or similar data are manipulated, resulting in the publication of fabricated or plagiarize research.

Chris Graf: And many of these characteristics come together when paper mills are involved, so when there is an organization behind the manipulation, not just a dishonest individual.

Chris Graf: What are the drivers here? Well “publish or perish” financial motivations, and there's a clear role for technology and editorial standards to help address these increasingly complex issues.

00:18:44.100 --> 00:18:54.150

Chris Graf: So let's pause for a moment. So far, we've covered the first two sections in our agenda. We've covered what do we mean by research integrity, and we've covered what issues do we see. Let's look now at some case studies of the kinds of things that we see as editors and as publishers to make some of the things that we've been talking about more concrete.

Chris Graf: The first thing, before we get into the case studies, is to remind everybody that journals don't investigate or make findings of misconduct; that's the job for universities or regulators to do.

Chris Graf: Instead, journals ensure that what they published is correct and that it conforms to expected legal and ethical standards, and that's what these cases show.

Chris Graf: Here’s the first case. I'll read the three lines at the top, and then we can do a poll, and then we'll explore that a little bit.

Chris Graf: So this case study is about what constitutes authorship, and here's the story.

Chris Graf: So a peer reviewer has agreed to review a manuscript, and they do it.

Chris Graf: After reviewing the manuscript they demand authorship, because they report that they had provided materials that were used in the research.

Chris Graf: The question is: Should they be an author?

Chris Graf: So let’s have a look at the poll. And the question for you is, or will be—oh it's on the screen now, very good—is does the case on this slide have an obvious solution?

Chris Graf: Is it black and white, with an obvious solution on that spectrum or continuum that we showed before, or is it actually gray and requires consideration and judgment? So please vote now and then we can discuss.

Chris Graf: Okay yeah, poll master, how you doing with the poll?

Chris Graf: Results still coming in?

Wiley Events Webinar: Yeah responses are still coming in. We’ll just wait for a couple of seconds more.

Chris Graf: Thank you.

Wiley Events Webinar: Okay I will end the poll now. Should I share the results?

Chris Graf: Yes, please.

Chris Graf: Okay.

00:21:56.970 --> 00:21:58.650

Chris Graf: Very good. So 25% of those of us who voted thought that this was quite clear, and the answer was black and white. Seventy-five percent thought that it's gray and requires some careful consideration. I think I’d agree that it does require careful consideration. Here are some of the things that need to be thought about.

00:22:23.490 --> 00:22:26.070

Chris Graf: The first thing is that authorship criteria require that each author has made a substantial contribution and takes accountability for the research.

Chris Graf: The most commonly cited guidelines for authorship are from the organization called the ICMJE, and the guidelines try to bring some clarity there, and they're quite us quite widely.

Chris Graf: We've seen cases where an individual has signed a materials transfer agreement that has stipulated authorship if materials are provided and used as a condition of providing those materials.

Chris Graf: And that's questionable, really. It may be that providing the materials is a significant contribution, but perhaps the author, the materials provider, needs to have done more than simply provide the materials to meet ICMJE authorship criteria, in which case, maybe an acknowledgement rather than authorship would be more appropriate.

Chris Graf: And certainly the reviewer should have declared a conflict of interest to the editor who invited the reviewer to peer review, because there is a direct relationship there and some sort of conflict.

Chris Graf: Anyhow, in the majority of cases where there are authorship disputes like this, the outcome is that the journal puts a manuscript on hold, usually until the issue is resolved by the institution where the work took place. And that seems appropriate, because it doesn't seem to me to be the journal’s job to

mediate in an authorship dispute; more, it seems to be the institution or university’s job to do that.

Okay, so I hope that you found it interesting. Let's move on to the second case, which works in just the same way: I’ll read the top of the slide and then we'll do a poll.

00:24:54.510 --> 00:25:10.200

Chris Graf: So this case is about plagiarism. And again, in a very simplified way, a reader alerts a journal to apparent plagiarism in a published article, and the reader requests a retraction.

Chris Graf: And the question is to you: What should the journal do? So let's have the poll for this slide please.

Chris Graf: Does this case this time, does it have an obvious solution? Is it on the one hand, black and white, with an obvious solution, or is the consideration and judgment required make this sort of a gray area. Please cast your votes, and then we can discuss again.

Chris Graf: How are we doing for results? Is it still coming in, or we nearly finished?

Wiley Events Webinar: Slowing down, but we're still having some people responding.

Chris Graf: Very good. Well when you're ready, please do share them.

Chris Graf: Great. Thanks for sharing the results, and thanks for voting if you voted. In this case, we see a, yeah, perhaps there's a few more people who thought that the case was black and white than last time. That's quite interesting to see. So let's talk about it a little.

00:26:51.090 --> 00:27:07.590

Chris Graf: So when we see a case of possible plagiarism, we like to think about a number of different things. So first, it's important to consider where in the article the text similarities occur.

Chris Graf: It's also important to consider whether it's direct copying and pasting, i.e., theft, or whether it's use of a prior published article more as inspiration.

Chris Graf: And then whether the new article, whether the data in article are authentic and the results are new.

Chris Graf: And so if the data are authentic and the results are new, then it's possible that a correction could be—not definitely but could be—the appropriate way to attribute and quote the text from the previous publication by the addition of that citation and proper attribution to the duplicated text.

Chris Graf: But if no, if there are no new data, then indeed a retraction could be appropriate here. And so it does feel a little more black-and-white, this one, than the last one.

Chris Graf: But I also think that there has to be more consideration—in fact, I always think there needs to be more consideration. So thank you for that one. Let's move on to the final case study.

00:28:36.420 --> 00:28:57.270

Chris Graf: And this is again about data fabrication, so the same setup for this question as for the previous ones: A peer reviewer receives an article and suspects the data manipulation in the manuscript. And the question is: What could the editor and publisher do?

Chris Graf: So please could you post the poll? Very good. And, again, is it obvious? Is it black and white to you, or is there some paper consideration that needs your judgment before you proceed? Please vote now.

Wiley Events Webinar: Responses are coming in, so we’ll wait a couple of seconds more.

Chris Graf: Okay, very good. You’re doing a wonderful job with the poll, thank you for that.

Chris Graf: So when you're ready, please post the results.

Chris Graf: Here we go.

Chris Graf: So this is interesting and nearly exactly the same results as for the previous poll. So a sizable minority, 33% of us, said that the answer was obvious here, and a more sizable majority thought that more consideration was needed.

Chris Graf: And I would agree. So it seems to me, to us at Wiley, that whenever there is a query about data fabrication, that more depth needs to be found, including perhaps requesting timestamped original data files to understand when the data was first originated, and then to raise the issue with the author's institution and request that they investigate.

Chris Graf: If the response from the investigation is clear and satisfactory, then peer review can proceed.

Chris Graf: But if the response from the institution suggests that actually there may well have been data fabrication, then of course, the manuscript needs to be rejected. So in a way, this is . . . while it needs more consideration, it feels as if the case, the way that I'm describing it, is one where the outcome is a little bit more clear.

Chris Graf: So good, I hope that you found those cases useful to get your mind into the space where thinking about these problems is always going to be an engaging and thoughtful exercise, but also an exercise that does need an outcome, because sometimes journals and editors and publishers are the only people that see these problems, and while we may not be responsible for resolution of the problem itself, we do have a responsibility to act.

00:31:32.970 --> 00:31:42.300

Chris Graf: So good, we've talked about what we mean by research integrity and the issues that we see. We've talked through some case studies. Let's finish off with a few thoughts about how we can shape the future of research integrity as editors and publishers.

Chris Graf: We're going to focus on five areas, systems; we're going to talk about thinking global, as well as local; we're going to talk briefly about policies and processes; training; and then open science, or better open research.

00:32:50.760 --> 00:32:58.680

Chris Graf: So this is citing the same editorial that we began the presentation with from *Nature* in 2019, and the key here is that for any solution, we all have a role. No one stakeholder can create a system that boosts quality and reliability of research alone.

Chris Graf: And what we need to focus on here, and I'll read you a quote from the article in *Nature*, is that as we've explored, research misconduct encompasses fraud and fabrication and plagiarism, and it's essential to deal with such dishonesty thoroughly and fairly, but doing this is patching up tear after the damage is done.

Chris Graf: Of course, research integrity includes investigations, but it's much much more; it's about creating systems that boost the quality and relevance and reliability of all research, and all of us have got a role that we can play there.

00:34:12.690 --> 00:34:25.980

Chris Graf: Next, we need to think about how we can foster best practice via local networks, and that means thinking globally, looking for global standards, and applying those locally.

Chris Graf: On this slide you can see at the top, a banner for the World Conference on Research Integrity, which is being held in 2022 in Cape Town, South Africa, and their mission is to bring together research integrity stakeholders, including researchers, leaders of universities, policymakers at a national level and international level, and people from across all disciplinary fields, from the basic through to the applied and natural and biomedical sciences right into the humanities and social sciences. It's a very rich meeting of minds, and I recommend that you think about finding out more about it. But also more locally would be the Asia Pacific Research Integrity Network, which meets this year in Seoul, in Korea, and has goals to reinforce the network for establishing research ethics in Asia-Pacific countries.

Chris Graf: Also, to exchange information and efforts that further put research ethics in each country ahead and set responsible codes of research that meet global standards. So the APRI is really thinking global and acting local.

00:35:57.180 --> 00:36:06.240

Chris Graf: And then, what about us as editors and publishers. Well, then we can in response establish clear policies and processes that elevate research integrity, which is, my good colleague, our good colleague Elizabeth Moylan from the Research Integrity Team at Wiley, she led our initiative to revise and enhance our research integrity and publishing ethics guidelines, which we make available to all of you editors and journals and helps to support you through new challenges.

Chris Graf: Our goal editorially should be to help authors to deliver as much clarity as is possible and a complete and rigorous account of what happened in their research so that readers of their research can trust the research. And that's what these guidelines set out: the standards that you can adopt to do exactly that.

00:37:07.620 --> 00:37:11.040

Chris Graf: The third recommendation will be to support collaborative training and reaching out with the things that we know about as editors and publishers with our knowledge and our expertise. On this slide is an example of collaborative training. It's from QUT in Australia, the Queensland University of Technology Library, in collaboration with the QUT Office for Research Ethics and Integrity.

Chris Graf: And that is the kind of collaboration that I’m talking about here: a library in a university and a research integrity team in a university collaborating, bridging those silos, and bringing their combined expertise to help researchers in this instance understand journal peer review and the impact on integrity.

Chris Graf: But also on the slide, there's a note in the bottom right-hand corner to a link online that describes some of Wiley’s work in this space. We did the same: We work with libraries at universities and research integrity teams at universities and a network of researchers in the United Kingdom. So again, break down barriers and silos and support researchers with the information and knowledge that we have that can help them.

Chris Graf: So that's another mission for us all to support collaborative training.

00:38:43.830 --> 00:38:52.980

Chris Graf: This slide’s all about ensuring openness. On the slide is Niels Mejilgaard from Aarhus University in Denmark, and he's the lead, or one of the lead authors, on an initial report from a European Commission-funded project called Standard Operating Procedures for Research Integrity SOPs4RI.

Chris Graf: This project will establish an inventory of relevant standard operating procedures and guidelines that research-producing organizations, universities and institutes, and funding organizations can draw on when developing governance and arrangements for promoting research integrity. And they found their guidance around nine topics. The final area with the red circle around it talks about ensuring openness and clarity and public engagement as a critical way to enhance research integrity.

00:39:55.380 --> 00:39:58.770

Chris Graf: And that is where we move on to talking about open research.

Chris Graf: Ensuring openness and clarity in publishing engagement specifically means for, at least for me and I think for editors and journals, open research.

Chris Graf: Open research, the theory is, will improve accessibility to research content, of course, but also reproducibility and the integrity of research outputs. So let's focus on three areas where Wiley supports open choices for researchers—open access, preprints, and open data—and explore those a little before we close.

00:40:40.590 --> 00:40:47.610

Chris Graf: The first is preprints. This is a research biologist in Berlin called Elijah Lowenstein, and he says in an article in *Scientific American* that he loves preprints, and I kind of agree. He also explains in the *Scientific American* article that a preprint is just a version, a draft version, of a potential journal article, and for Elijah Lowenstein, preprints are really great because they save time, they bring discussion of new findings online, they also let researchers share negative results that might otherwise never be published, and they foster an open research culture. Now Elijah isn't alone.

Chris Graf: Many other researchers are now embracing preprints in numbers that previously have not been seen.

Chris Graf: Preprints have been a tradition in some disciplines like physics since the 1990s, but other communities were much slower to embrace preprints. Since 2013, biologists have begun to embrace preprints using bioRxiv and this chart from the magazine *Science* has a timeline of the now explosion of preprinting.

Chris Graf: In fact, preprints are now growing many times faster than the number of journal articles are growing, albeit from a much smaller base. So preprints are much smaller in number, still, than journal articles—perhaps 3% of the biomedical literature—but it's that growth that's really important, and quite astounding actually, and the last 12 months in particular have really changed preprinting.

Chris Graf: There were times last year when every day, more than hundreds of preprints were being posted about COVID research every single day.

Chris Graf: And this tells us something important about how fast research and research publishing are changing and evolving when researchers are comfortable with the new open practices that they are embracing.

Chris Graf: So that's preprints, one open practice.

00:43:09.720 --> 00:43:20.160

Chris Graf: Let's talk very briefly about open data. This is Jean-Claude Bergelman, who used to lead open science and data policy at the European Commission.

Chris Graf: And he said at a meeting of the United Nations that pretty soon all science will be data science.

Chris Graf: I think that's a relatively safe comment right as we move into more technical and more data-rich ways of capturing data and communicating results. I think Bergelman is on the money, and funding organizations like the funding organization that he used to work for, the European Commission, but others around the world are becoming much more insistent that researchers share their data, or at least are ready to share their data. And so journals whiny and elsewhere are increasingly asking researchers to include a data availability statement in their articles, something that looks a bit like this, where the researchers have included a short piece of information to explain that their data on the breeding bird survey data from their particular study is available at a particular link.

Chris Graf: Most of the journals of Wiley don't require or mandate that to researchers share their data, but instead they mandate that researchers explain whether or not they've shared their data in the data availability statement.

Chris Graf: So that's open data. Let's focus briefly on open access.

Chris Graf: I seem to have frozen my slides. What can I do about that?

00:45:13.710 --> 00:45:24.900

Chris Graf: Well, maybe I could do it without the slides until they wake up. So there is evidence talking about open access to indicate that papers which are freely available obtain more citation—in fact 18% more citations, in the work from a researcher called Heather Piwowar, who looks in some detail at open research practices. It's also true that data from Wiley, our own data, suggests that this is true.
So for open access articles, at Wiley they receive three times as many downloads, twice as many citations, and five times as much attention from Altmetric scores.

Wiley Events Webinar: Hello, would you like me to share the slides for you? I have your slides if you like.

Chris Graf: That will be helpful, actually. If you could go to the final slide then, that would be really good Thank you.

Chris Graf: Because we’re nearly at time for questions.

Chris Graf: So it's true that Wiley articles are, when they are open, they do perform better for researchers.

Chris Graf: And that brings us back to the slide that I showed you a few minutes ago from Niels Mejilgaard and the standard operating procedures from the research integrity project, which highlighted the openness, that ensuring openness and clarity in public engagement with research output is critical for research integrity. So we've taken a journey through and what research integrity means, through the issues that we see and we've illustrated those with some case studies, and then we've talked about how journals and editors and publishers can drive quality and research integrity through five areas of work, landing on open research practices and enabling those. And I just would like to close by saying that newer practices, those newer research practices of preprinting, data sharing, and open access, they put greater openness and clarity and therefore enhanced integrity within easy reach of us as editors and journals and publishers, but also within easy reach of authors.

00:48:28.950 --> 00:48:36.750

Chris Graf: So, thank you very much. If you could call up the last slide, just so that I can say thank you to everybody for being here and for listening, I hope that it was interesting for you, and also to thank my good colleague Elizabeth Moylan, who you saw earlier on in one of my slides, who prepared an earlier version of these slides, and the good colleagues of our Integrity Publishing Group at Wiley who support all of us when we're dealing with sometimes-challenging problems. So thank you to IPG, as well.

Chris Graf: That's the end of my presentation. Thank you very much. Tomo, over to you.

Tomo Suzuki: Great, thank you very much for your presentation. So now let's move on to the Q&A session. And we have already had a couple of questions in the Q&A box, so let's start with the first one.

Tomo Suzuki: I believe a journal is responsible for the actions of peer reviewers. A journal recruits peer reviewers and arranges article peer review. So the question is, why is it not the journal’s responsibility to address a demand for publication by one its peer reviewers as unprofessional conduct?

Chris Graf: So that's a good question. I think that relates to, was it the second case? Anyway, the case where the peer reviewer—might have been the first case—where they peer reviewer reviewed the paper and said, “I provided materials for this experiment. I'm demanding authorship.” And that could be unprofessional conduct. I mean, the person who asked this question is correct: It could be unprofessional convert, but it could also be a legitimate claim for authorship, and it may be that the authors should have included the peer reviewer as an author. So, I mean, the point of that case study was to illustrate that careful consideration is needed before arriving at a conclusion, and I firmly agree with the question, that is the journals responsibility to act if a peer reviewer has behaved unprofessionally.

Chris Graf: Right? If the peer review has behaved unprofessionally. But of course, understanding that the peer reviewer has behaved unprofessionally takes some careful consideration.

Chris Graf: So the point of that case study was to emphasize the careful, in fact, the point of all of the case studies, was to emphasize the need for careful consideration before arriving at a conclusion. That is all. So yeah, good question. Thanks, Tomo, for sharing that one.

00:51:51.330 --> 00:52:13.980

Tomo Suzuki: Thank you very much, Chris, for answering the question. The second question is about authorship: So if authorship has significant contribution requirements, why do so many science journals have 15+ or more authors on papers? Is this automatically a problem?

Chris Graf: That's a really fun question, so thank you for asking that question, too. So the question is about the very large lists of authors.

Chris Graf: The answer is an interesting one. So the authorship criteria that I described from the ICMJE, the International Committee of Medical Journal Editors, does require a substantial contribution from each author and the number of other things, as well.

Chris Graf: That works very well in communities for medical research, but it works less well when research experiments are large-scale and involve really large pieces of equipment, like a large hadron collider, for example, and often in physics and particle physics, high-energy physics, the number of people that you see on research papers can be many more than the norm in medical research. And I think that's okay. I think that the ICMJE criteria were designed for typical medical research, and in other communities where there are many other contributors, although they may not have written on the paper, they have made some sort of important contribution.

Chris Graf: And the Community, I think, from my perspective, it's very okay for the community to adopt an authorship practice that is honest but different from the approach taken by the ICMJE.

Chris Graf: But it's also true, there is a trend in increasing numbers of authors, authorships, on papers, and that is an interesting aspect here.

Chris Graf: We're not really talking about the 200 authors end of the spectrum, from high energy particle physics, but more the life and biomedical sciences, where there might be seven or eight authors, instead of three or four. Again, I think that that's okay if those authors have made some sort of contribution. I wouldn't want to judge them harshly based upon the value of their contribution. I'd be more concerned about people who made no contribution being put onto the authorship list then somebody who had made a small but important contribution. For example, one of the more complex problems that we see dealing with at the moment in a chemistry journal: there is an author or a group of authors who have been submitting papers and then, with the first revision, they're adding one author and taking one author off.

Chris Graf: With the second revision, they add another author and take another author off. And then sometimes at proof stages, they're also changing the authorship.

Chris Graf: And this is, this is not an acceptable practice. It seems obvious simply from the changing in authorship throughout that either the authors at the start were wrong or misrepresenting the people who made a contribution, or at any point throughout, the authors, it seems, are not representative of those who made a contribution. So I'm more concerned about behaviors like that than I am about simply long lists of authors where everyone has made some sort of contribution. I hope that helps explain. Thank you.

00:56:30.930 --> 00:56:34.650

Tomo Suzuki: Thank you. There are some other questions coming.

Tomo Suzuki: So the next question is about also the peer review. I presume after investigating potential data fraud, which ends with no fraud found, the editors would appoint new peer reviewers or would it be fair to ask the previous peer reviewer who suspected fraud if they would like to continue?

Chris Graf: Yeah good question.

Chris Graf: So the question’s about imagining a paper submitted and then an investigation at university, and then what to do if the investigation finds no problem.

Chris Graf: And the first thing to say there is that often investigations take a long time, so there will probably be months between the submission of the paper, the investigation of the university, and then an outcome from that investigation. So that's a practical dynamic that may mean that you need to seek new peer reviewers.

Chris Graf: But I don't think that there is an ethical reason to choose new reviews necessarily. It may be that the previous peer reviewers have insights that are helpful, or it may be they no longer have time—a practical reason not to contribute. So yeah, I don't think there's an absolute requirement that the new peer reviewers are sought unless, of course, the old peer reviewers now have some sort of conflict. So it would depend on circumstances. If those peer reviewers had some sort of conflict with the authors now because of the investigation—not a conflict, a conflict of interest—then it would make good sense to find new peer reviews. So a good technical question, a hypothetical question.

Chris Graf: It's always rather difficult to deal with hypotheticals like that, because every case, the specifics of every case are important and change the recommendation. So again, the three case studies should have illustrated that to everybody, that it's never really black and white; everything needs to be considered in detail.

Chris Graf: That's what I'd say in response to that question. I hope, that's helpful. Thank you, Tomo.

00:59:24.240 --> 00:59:27.420

Tomo Suzuki: Thank you. There are some other questions but we are running out of time, so just a final quick question to ask.

Tomo Suzuki: So I agree that open data is important for science; however, what can we do if biased data is released? Is it possible to take measures such as withdrawal?

Chris Graf: So a question about poor-quality data that are released. So I think our responsibility is to make sure that the quality of the articles that we publish and the material contained within them is good.

Chris Graf: Okay? If the data are reported in a journal article and the data are found to be poor quality or problematic, then we would retract or withdraw the article okay for significantly unreliable data.

Chris Graf: That's our responsibility.

Chris Graf: The data might have been shared in an institutional repository or another repository to host the data, and while we obviously are interested in ensuring that that data is also taken down, it's their responsibility to do it, not ours, and so I suggest that we focus quite intently on the things that are clearly our responsibilities.

Chris Graf: And that's my answer. So thank you, Tomo.

01:01:11.310 --> 01:01:21.960

Tomo Suzuki: Thank you, Chris. Unfortunately that's all the time we have for Q&A. Thank you again to Chris for your presentation on this important topic.

Tomo Suzuki: And we are looking forward to continuing the seminar next week on March 16th to talk with our second speaker, Steven Ottogalli, about how technology and innovation in the publishing workflow are shaping the research publishing landscape right now.

Tomo Suzuki: And just a reminder: We will share a recording of this session and the next week's presentation after the seminar concludes next week. We will also follow up on questions that were not able to be answered during the session, too.

Tomo Suzuki: And thank you also to everyone who joined in today and for your great questions. We look forward to seeing you next week. Thank you very much.