Centre for Personalised Medicine podcast

2025-26: the year in review



(Our podcast logo features a section of the artwork 'A Lifetime of Measures' by Aneesa, aged 12, from Oxford High School, the stunning winning entry to our 2022-23 Youth Art Competition).

SPEAKERS

Rachel Horton, Anneke Lucassen, Susie Weller, Nishtha Bharti, Carla Cohen, Louisa Chenciner, Sally Sansom, Francesca Dakin

Rachel Horton
Hi, I'm Rachel Horton, an affiliate member at the Centre for Personalised Medicine, or CPM. This episode is all about our highlights from the last year, and joining me to discuss them are Anneke Lucassen, the CPM director, and Susie Weller, deputy director. Thanks very much for being here. Can we kick off by talking about what your aims have been for the CPM this year?

Anneke Lucassen
The CPM is a partnership between St Anne's College and Oxford Centre for Human Genetics, and our aim really is to have all sorts of multidisciplinary discussions about attempts to personalise medicine. So we really want to move beyond the technological advances to see how they can and also should be applied in society. We do that through a whole range of ways, but I think it's just such a privileged centre to be part of because we have the ability to tackle those issues from a range of different perspectives, and we have a really fantastic team of research fellows who help us with that, and affiliate members who help us with that, and I'm really delighted that this year we've created a new post, which is the Deputy Director for CPM, and Susie is the excellent first incumbent in that

post, and so I'm really looking forward to working with Susie on planning bringing our strategy to life even more over the next year.

Susie Weller
Yes, I'm really excited to be the new deputy director, and as part of my role, I'm helping to broaden the reach and strengthen the relationship with some of the teams based in the Nuffield Department of Medicine, particularly the Centre for Human Genetics.

Anneke Lucassen
And this year, we've deliberately explored not only the exciting science, the genomics, and various risk stratification, prevention, and new therapies, but also the questions that ask whether these advances actually help people, issues of equity, sustainability, public trust, and policy and implementation issues in the National Health Service, as well as the experience of patients and families.

So we've tried to make the CPM a place where enthusiasm for innovation can be held alongside careful scrutiny. The question isn't really only can we personalise this, but should we, and for whom should we personalise it, and at what costs and what downstream disadvantages do we need to look out for? So our strategy frames this around effective personalised medicine being available for all, and our events this year have really reflected that ambition.

Rachel Horton
Thank you. So let's go into some specifics about some of the events we've held. At the start of the year, I really enjoyed sitting on a fascinating workshop discussing the future of low carbon health and care, and Louisa Chenciner, one of the CPM Junior Research Fellows, was very involved in setting it up. Louisa, please can you tell us about the workshop?

Louisa Chenciner
So, just over a year ago, we co-hosted the Future of Low Carbon Health and Care workshop with GCHU, which is the Global Centre on Healthcare and Urbanisation, and the NIHR, which is National Institute of Health Research, Research Collaboration for Oxford and Thames Valley.

And the event itself was held in the Hub, which is the university's first Passivhaus event space, which means that it's very energy efficient. And the afternoon was opened by Professor Sara Shaw, who talked about the need for—the urgent need for—low-carbon, climate-resilient and equitable health and care systems. And particular themes that kind of arose from that talk were around the existing environmental impacts of health and care systems, the health and social harms posed by climate change itself, particularly as we see more extreme weather events, and the need to ensure continuity of care within a more climate-resilient health system, as well as some of the potential, what we call co-benefits, so wider benefits, of considered and equitable climate action.

And following on from this, there were two panel discussions which spanned interdisciplinary perspectives on the journeys, or routes, to low-carbon futures. And then later, a more, I suppose, pragmatic panel, which I chaired, on the kind of current state of the situation within the health and social care system and what needs to happen next. And that sparked some really interesting discussion from the audience about some of the challenges, but also some of, potentially, some of the opportunities to make these changes, and obviously in a timely way, given the climate emergency that we are dealing with.

And I think the most important aspect of the event was the level of audience contributions and discussions, and the way in which it also sparked collaboration. And one example is that myself, Sarah Briggs, who is a former CPM Junior Research Fellow, and Professor Sara Shaw went on to publish an article in Perspectives on Public Health on the steps to prioritise climate action and sustainability in the UK government's ongoing health and social care reforms, which include, you know, the three key shifts that we've all heard so much about in the ten-year plan.

And then, more recently, we also co-hosted, the Centre for Personalised Medicine, an online webinar with the Oxford Local Nature Partnership, which is focused on ways of bringing—you know, well, the webinar itself was focused on bringing, you know, green space, nature and biodiversity into our NHS estates and also patient pathways in a way that can benefit both people and nature. And we had speakers from both the local trusts, so Oxford University Hospitals, as well as Oxford Health Foundation Trust, and also the Centre for Sustainable Healthcare.

And I think the event built on quite strong momentum within that original workshop on how we can support equitable access to green and, indeed, blue spaces, including on kind of valued community sites. So that includes, you know, NHS sites as well as other community spaces.

Rachel Horton
Thanks so much, Louisa. This year we also had our yearly research showcase, and each year this has a different theme. And this year it was new frontiers in personalised medicine, and we heard about some really exciting research. Susie, I know you were really involved in developing the showcase, and I'd love to hear what your highlights were from the day.

Susie Weller
Thank you, Rachel. Yeah, this is the third year that we've held the research showcase, and the idea is to bring together researchers and practitioners across different disciplines and at different career stages. And this year, the focus, as you say, was on new frontiers in personalised medicine.

And I think for me, there were sort of three key highlights during that event. It was it was really nice to hear about the diverse range of research that the junior research fellows and the CPM were undertaking. So we had presentations on

things like the Human Cell Atlas as a legacy resource. There was a presentation on patient and caregivers reported outcomes for genomic sequencing for rare disease diagnoses, and through to things like digitalised and AI-enabled general practice, as well as some presentations around really exciting public engagement activities that CPM have been involved in. So that was great to hear about that.

I think one of the highlights from the showcase every year is the Pechakucha session for postgraduates and early career researchers. And these this is a kind of like lightning talk style presentation where people have to put put together 20 image-based slides. They have 20 seconds per slide, and it's a really nice way of encouraging early career researchers to think about how to communicate their research to an interdisciplinary audience. So that was always really exciting highlight of the showcase for me. And then I think the third highlight really was the panel session, which. Looked at new frontiers of personalised medicine across a range of different contexts, from developing developments in genetic testing through to things like penetrance and cancer treatment, how results are conceptualised, the importance of environmental justice, and service delivery as well. So a really exciting collection of presentations on that day.

Rachel Horton
Thank you, Susie. The research showcase is always such a great day. Another key event this year was a day-long symposium discussing direct consumer testing, and we heard a real range of perspectives on how medical tests you can buy for yourself are shaping and affecting healthcare. CPM Junior Research Fellows Sally Sansom and Francesca Dakin are joining us to tell us more.

Sally Sansom
Thanks, Rachel. So we had a fantastic whole day seminar on Tuesday the fifth of May earlier this year, as you mentioned on on direct to consumer testing and the different opportunities and challenges that these types of technologies present. We were thrilled to be joined by really eminent speakers from academia, the clinical setting, and also industry as well. And so the event was structured around three key themes. So first off, we started by talking about developments in direct-to-consumer medical testing, and here especially we heard from the industry representatives and and how they're approaching their their technologies in in the market. That was followed by a session on the implications of DTC testing for clinical practice and patient pathways, and then this was followed by a section on the ethical, philosophical, and regulatory considerations. So, all in all, a really interesting and fantastic day.

Francesca Dakin
Yeah, it was it was a wonderful day. We opened the day with a fantastic lecture from Professor John Powell, who's in my department, the Department of Primary Care Health Sciences. We then moved on to Deborah Cohen, who is an author and investigative journalist, who was speaking to us about social media and the rise of direct consumer testing, and then we moved on to more discussions from the industry perspective with representatives from Hertility and StoreGene sharing their points of view.

Sally Sansom
Yes, it was a really fantastic lineup. And then in the second theme, focused on clinical practice and patient pathways, we had a presentation from Sharon Dixon, who's an NIHR doctoral research fellow in in Fran's department, providing a general practice perspective, followed by Tim Child, who is an associate professor of reproductive medicine here at Oxford, who provided a perspective from reproductive medicine and hormone and fertility health, followed by Dimitrios Koutoukidis, also an associate professor here at Oxford, who provided a dietetics and and gut health and nutritional perspective, and then concluding with yourself, Rachel, who shared a really valuable perspective on the clinical genetics side of things.

Francesca Dakin
Yeah, and when we returned for the third theme towards the end of this really jam-packed day, we were zoning back in on the ethical, philosophical, and regulatory considerations of these DTC tests, and we opened that third session with our very own Professor Anneke Lucassen, who is the director of the CPM, and then we explored some of the practical ethical issues that these tests might sort of raise with Alberto Giublini, who's one of our senior research fellows at the Uehiro Institute, and we then moved on to a really interesting discussion on the regulatory considerations of these tests, which was led by Professor Anthony Harnden, who is the chair of the MHRA alongside Dr Joseph Burt, who's head of diagnostics and general medical devices at the MHRA. It was really interesting to tie those ethical considerations from an academic perspective, with practical policy issues, and we wrapped up the day with a lovely closing discussion led by Anneke herself. I think the whole thing really paid off, it was a long nine-month effort which really came together, largely led by Sally, and our fantastic Thea Perry in the CPM. And I think all of that hard work paid off and we're hopeful that these discussions are going to continue into the new academic year. We're planning on doing a follow up symposium day to this event, to see how the issues we explored this time are expanding as the industry progresses.

Sally Sansom
Absolutely, Fran, and it was very much a joint effort on the on the planning and delivery side of things. Of course, with fantastic support from Thea Perry, our events coordinator, and so for those who weren't able to join us on the day, we're pleased to share that many resources are available on our website, including recordings of the presentations, a blog written by a work experience student who we were thrilled to have with us on the day, as well as a beautiful depiction of the day through visual minutes.

Rachel Horton
Thank you. I hugely enjoyed the event. I thought was brilliant, and it's great to hear your reflections on it. In July, we hosted a one-day workshop exploring cultural safety in genomic medicine. CPM affiliate member Nishtha Bharti was key in organising this, and it builds on her ongoing work exploring cultural safety and equitable practice in genomic medicine. Nishtha, please could you tell us more about it?

Nishtha Bharti
Thanks, Rachel. This workshop grew out of research I've been doing over the last couple of years. I initially started by looking at how ethnicity is understood and used in genomic medicine. But through interviews with healthcare professionals over a period of time, the conversations became much broader— around identity, around belonging, around healthcare inequities, and that led us to the idea of cultural safety.

At its heart, cultural safety asks us to think about how our own practices, the relationships we build, and the systems we work within shape people's experiences of healthcare.

So in July this year, we brought together 15 professionals working across genomic services in England for an interactive workshop. We talked about patient interactions, working across language and cultural differences, the use of interpreters, but also about healthcare professionals themselves— whether people feel they belong, whether they feel able to speak up, and how much of themselves they feel able to bring to work.

What was particularly valuable for this workshop was simply creating the space for such conversations. Participants were incredibly open about their experiences, and there was a real appetite to continue this kind of dialogue. And for us, it also helped shape how we think about the next phase of our work on cultural safety and equity in genomic medicine.

Rachel Horton
Thanks so much, Nishtha. One event I'm especially curious to hear more about is one that Junior Research Fellow Carla Cohen did for sixth form students, called Coding for Biologists. Carla, please tell me all about it.

Carla Cohen
Thank you, Rachel. So, back in August, I took part in an outreach programme which is based at St Anne's College, with a number of Year 12 students who were taking part in the 'Aim for Oxford' programme.

So, this is a programme that encourages children from state schools in the North East of England to think about applying to Oxford. It takes place across the course of the academic year in Year 12, culminating in August in a residential visit where they get to stay at the college and take part in a number of activities across the week. These students are all interested in taking science- or medicine-based subjects, and on one of the mornings they have a choice of different sessions to go to, one of which was my session about coding for biologists.

So, by background, I'm a medical researcher, and I used to be a lab-based scientist, but about five years ago I learnt how to code, and now my main projects involve data analysis. And I wanted to kind of share the importance of that, and how much fun it can be, with these students, because I feel like when people are considering careers in biology, they might not think that you actually

need to be able to code, or that coding could be a useful skill that you might want to kind of develop alongside your biological knowledge.

So, what I did in this kind of one-hour tutorial with about twelve students was, first of all, I did a kind of a quick introduction about the importance of this kind of work, and then we actually did some live coding. So, we used the R programming language, basically because I didn't expect any of them to have done it before, because often in schools now people might have learnt some Python, so I didn't want people coming in with varying levels of experience.

So, we did it in R, and basically what we did is we analysed a dataset of sports results, so from the athletics decathlon event. So, we have data from about forty athletes across two different competitions. So, we've got their results for, you know, javelin, high jump, long jump, and so on.

So, we can start off doing some kind of fairly basic statistics, looking at things like, you know, what was the furthest javelin throw, then kind of maybe comparing different sports. So, looking at, for example, if you're good at the high jump, are you also good at the long jump? And then kind of going on to kind of finishing off with a sort of a more sophisticated statistical approach called principal components analysis, where you can kind of look at all of the ten different sports together and have a look at kind of which sports might impact their overall score the most. So, you can think about if you're training to be an Olympian, which discipline you might focus on.

So, basically, we did that over the course of about 45 minutes, and the students were really, really engaged. They really enjoyed it, I think. They were able to pick it up very quickly. And then at the end, we just kind of wrap up talking a bit about why we might want to do this in biology and, obviously, with relevance to personalised medicine as well.

Rachel Horton
Thanks, Carla. That sounds like that must have been a really inspirational experience for those students.

So, as you can see, we run a really varied mix of events each year, and if you're interested in personalised medicine, there will be definitely something for you. And as a regular thing each year, we also have two brilliant lectures. Our annual lecturer this year was Professor Trish Greenhalgh, who gave an amazing talk looking at personalised medicine from a primary care perspective. Anneke and Susie, I'd love to hear your reflections on it.

Susie Weller
I just think it's really it was a great talk in terms of it was incredibly accessible and engaging, and I think Trish drew in a really wide and varied audience.

Anneke Lucassen

Yeah, I think it was a really important corrective, if you like, to some of the more technological enthusiasm in the field, because she really reminded us that medicine is already personalized in in the best sense. Good clinicians tailor the care to the person in front of them and their particular circumstances and comorbidities and what matters to them. And I think quite often we think of personalised medicine as something about genomics or something about advances in technology making better, but we must remember that the personalisation of care could indeed be threatened by that those advances in technology and Trish brought that out beautifully.

Rachel Horton
Thank you. And our Dr Stanley Ho Memorial Lecture this year was by Professor Tim Elliott, who took, who spoke about his really exciting research exploring the role of the immune system in preventing cancer. Anneke and Susie, what did you take away from the lecture?

Anneke Lucassen
So my one of my takeaways from the lecture was that a lecture is much more effective through the medium of chocolate, given that he distributed chocolates to illustrate how the immune mechanism works. But sort of on a less frivolous level, I think that thinking about prevention across biological, clinical, and public health levels. Personalised cancer prevention is scientifically compelling, but it also raises lots of questions about who should be eligible, how we identify that risk, the different costs of the different types of vaccines that might be produced, and how such interventions are made accessible to a sort of wide audience.

And I think the thing to say about that lecture was that I thought it really complemented the CPM's earlier work with Oxcode and Oxford Cancer on vaccines aimed at early cancer-related changes. So the promise is really considerable, but we must remember that responsible innovation means building evidence, governance, governance, and equity considerations right from the start.

This year the lecture was held in Macau for the very first time, and that reflects that the Stanley Ho Medical Development Foundation originated in Macau, and that was a really interesting visit. But also, we learned a lot about how Macau, which is a Portuguese-speaking university, has really gone up the ranking in world university tables and has now overtaken the previous number one university in Brazil. So it is going places, and it was a really interesting trip just to hear how they're developing a medical school. And the audience at the lecture were really well informed, and in fact, although the lecture is broadcast, the discussion session afterwards was almost the same length as the lecture itself, and that isn't available. But that was really where the whole topic came to light because the. The questions from the audience were so smart, and the interaction between the speaker and the audience was really, yeah, very interesting.

Rachel Horton
That sounds brilliant that it generated so much discussion, and any lecture which you take chocolate away from sounds pretty good to me. So, you can watch both those lectures via our website, and there's loads more on there to explore, so please do take a look. We've got reports, we've got podcasts, explainers, blogs, and pretty much every lecture that's been given to the CPM there'll be a recording somewhere on that website if you have a look around.

My personal favourite page on the CPM website is our Art and Science Connection page, which links to our yearly schools art competition. And every year, I'm just stunned by the quality of the entries that we get sent from schools across the country. And this year was the fourth year we've run it, and we asked for art on what personalized medicine means to you.

And we had some incredibly imaginative entries. And the winning entry, which was by Frida from Fallibroome Academy in Macclesfield, with this incredibly clever sculpture, which sort of showed a patient and a clinician looking at each other through like a series of clear panels with information written on them. And I just loved that idea of a clinician having to look through layers of data before finally seeing a patient, and I thought it was really original and compelling. And Susie, was your favourite one the person made of like a double helix?

Susie Weller
Yes, it was actually. So I have the privileged position of being able to, I'm not on the judging panel, but the position of being able to have a look at the entries before they go out to the judging panel, and that was my personal favourite actually.

Rachel Horton
Yeah, I thought there were some such great ones, and I wish I could show them to you over the podcast, but you'll have to visit the website and look them up. And we're running the competition again this year, looking at talking to families about genetics and health. So if you know any secondary school teachers or creative young people aged 11 to 13, please do let them know about it. So that's the roundup from our last year. Let's talk about what's happening next.

Anneke Lucassen
So we've got quite a few events planned already. We can tell you a bit more about those in a minute. But more broadly, we're continuing to develop our work across the six themes we identified in our strategy. So that's diagnosis and treatment, risk and prevention, evolving health system boundaries, and then the cross-cutting themes of equity, sustainability, and lived experience, and our aim is to keep asking how personalised medicine can become not just more sophisticated, but more useful, fair, and sustainable for everyone.

Susie Weller
So we've got already got a range of events planned over the next year, and the first one is a workshop called 'Living in limbo', in which we're bringing together

patients, patient support groups, and researchers to look at the experiences of those living without a diagnosis for a rare condition, and that will be in October.

Anneke Lucassen
And I'm really looking forward to the second 'Making progress with newborn screening', with genomic newborn screening, that you, Rachel, led on the first one, and have already started leading on the second one. I think this is also in response to many people asking us, 'Are you going to have another workshop?' And it would be great to follow up on some of the discussions that we held in the first meeting, so I'm really looking forward to that because one of my aims for the Centre is to make the conversations more ongoing and keep events, or to to make sure that once we tackle a topic, we follow it up again over time to see how things have changed and what new challenges need to be addressed. So this is, I think, a really nice example of that.

Susie Weller
So one of our new initiatives for this year is a series of films and documentary screenings, all related to personalised medicine, that we hope to hold on a termly basis, with Q and A discussion afterwards, and the first one will be in November, and we're very lucky to be joined by the film director, who'll be answering questions about the film.

Anneke Lucassen
Then of course we've got our annual lectures to look forward to, so they are annual lecture, and then the Stanley Ho Memorial Lecture, which this year will be held in Oxford, and we're hoping to add a third annual lecture to the CPM calendar, which is then a collaboration with the Centre for Human Genetics, which ran its first John Bell lecture in recognition of Professor Sir John Bell setting up the Centre for Human Genetics 25 years ago, and so that will be a third collaborative venture that will add to our CPM diary.

Susie Weller
And of course, we'll be hosting the research showcase again this year, which will be our fourth one. We're planning towards that at the moment.

Anneke Lucassen
And the other thing that we have already started on, and we want to continue this year, is update to professional guidelines on consent and confidentiality and justice elements when it comes to genomic medicine. And the CPM is leading the revision of those, so I'm really excited to bring a sort of policy element into the work of the CPM.

Rachel Horton
Thank you. So it sounds like next year is going to be full of great things as well, and thank you so much for joining us to look back at the last year. It's been a really full and interesting one, and lovely to have the chance to reflect on it. There's always loads going on at the CPM, so if you're interested in personalised

medicine, please do follow us on social media or sign up to our mailing list to keep in touch and find out more.