

## **Professor Ruth Zadoks notes**

### **Australia-Brazil Virtual Research Collaboration**

**In second half of Thematic session 2.3, there were three break-out rooms.**

**The first break-out room discussed the Human-Animal-Environment Nexus and notes were kindly provided by Prof Daniel Paiva.**

This was a very busy room, and the participants discussed the importance of basic science to better understand the Human-Animal-Environment nexus and the spread of pathogens. The lack of funding for such basic research was identified as the main limitation to be overcome.

Not having attended this session, I found that priority interesting, because in Australia, we increasingly discuss the need to use social sciences to better understand the Human-Animal-Environment nexus. Personally, I would be quite interested in participation of more social scientists in future One Health meetings.

In the breakout room, the idea of building a connection between Australian and Brazilian researchers to apply for international grants had strong support.

**The second room focussed on foodborne pathogens, with notes taken by Farhana Rahman and Nancy Prichard.**

Like the water and sewage room, this was a small breakout room. I attribute this to the fact that many participants in the One Health session were interested in multiple break-out topics, and most of us ended up in the human-animal-environment nexus room, because human-animal-environment really captures the essence of One Health. In addition, aspects of food borne pathogens had already been covered in the first break-out session, in the room discussing livestock and food security, especially around food of aquatic origin. In fact, there may have been sufficient people with an interest in aquatic systems to consider making this the topic of a meeting. Food production, food safety, pathogen surveillance and recycling of nutrients, toxins, and antimicrobial resistance genes could all be discussed in such a meeting.

In the breakout room, we discussed a rare silver lining to the Covid cloud, which is the fact that it has rekindled the interest of governments and medical professionals in infectious diseases. Before Covid, they were predominantly interested in non-communicable chronic diseases such as diabetes and cardiovascular disease. Now, pathogens are back on the agenda.

Pathogen surveillance in the context of food safety mostly happens at or close to the point of consumption in Brazil. This is different from the situation in Australia, where the farm-to-fork concept is embraced, and food safety issues are addressed in primary production if possible. For example, we try to control Salmonella and Campylobacter in our pigs and chickens and not just in our meat.

Another difference is that in Australia the primary production sector is an important funder of scientific research into animal health and welfare and also food safety. By contrast, most research funding in Brazil comes from federal or state governments. That said, the Brazilian Association of Animal Protein does fund research that can help overcome economic barriers to food production and exports, particularly in the swine and poultry sector.

The final topic we discussed was the translation of scientific research into policy and practice, which seems to be more common or easier in Australia than in Brazil at the moment. This conversation led to the suggestion for a possible bilateral workshop on research translation and impact.

Over the course of the discussions, and I am not sure whether they were in the Food security room or the Food safety room or both, we also noted the wealth of languages, cultures and disciplines represented in the meeting, and the fantastic opportunities that diversity of backgrounds creates for multidisciplinary understanding of One Health issues.

### **Last but not least, the EMCR room**

There were no formal notes from the Early and Mid-Career Researcher rooms, but I received feedback from the two EMCRs that I had nominated to participate, one on the Brazilian side and one on the Australian side. I didn't have to ask them for feedback, they sent it to me to let me know how much they had enjoyed the experience.

One early career researcher wrote "I joined the EMCR group, which was really helpful as I met a representative from the Australian Government in Brazil who can facilitate access to new opportunities available for funding. Thank you so much for the invitation to this event."

This is echoed by the other EMCR, who said "The event was a great experience to talk with other scientists and explore possibilities of collaboration. I joined the EMCR room and participated in a really interesting conversation. [...]. It was really good to meet other EMCR and talk with them. I hope we have an opportunity to meet in person as well."

To me these comments epitomize the three key points that I would like to finish with:

First, gratitude to the organizers for bringing us together in such a structured and productive manner.

Secondly, great appreciation for the inclusion of EMCRs. They are the future. Just being invited to this Virtual Research Collaboration has been a massive boost for some of them, and I have high hopes for the projects and collaborations they may initiate and lead.

Finally, the wish to meet again, virtual if necessary and helpful, but if and when possible, we all hope to meet in real life.

Thank you, or Muito obrigada.