



REPORT

4th Meeting of the German Nagoya Protocol HuB Network (4. GNP HuB Stammtisch)/Taxon-Omics Workshop

15 September 2021, 13:00-15:45 p.m. (online meeting)

On 15 September 2021, the fourth regular online meeting of the GNP HuB Network, i.e. the “Stammtisch”, took place. This time, we teamed up with the Taxon-Omics priority program and put together a simulation of an Access and Benefit Sharing (ABS) process.

Live Q&A for beginners who watched the “Nagoya Protocol for Newbies” video

Since the simulation required basic knowledge about the Nagoya Protocol and ABS, beginners were encouraged to watch the [“Nagoya Protocol for Newbies”](#) video before the meeting and they had the opportunity to come early and ask any questions they had left.

Welcome and overview of the program

The meeting started with a quick welcome to the participants by GNP HuB manager Elizabeth Karger. She quickly introduced the GNP HuB and the [Taxon-Omics priority program](#), a DFG-funded program that brings together 30 German institutions using new approaches to taxonomy. There was also a short welcome video by Dominik Begerow from Taxon-Omics.

Impulse presentations on ABS documentation

The first presentation was held by **Evanson Chege Kamau** on the topic **“ABS documentation and tools available to support researchers”**. He showed a diagram with all the required ABS documents: Prior Informed Consent (PIC), Mutually Agreed Terms (MAT), Material Transfer Agreement (MTA). In a first step, the researchers have to inform the provider about the nature and extent of the research project so that the provider can give his consent (PIC). The next step is the negotiation of the terms and conditions of access and use between the provider of the genetic resources and the user, resulting in the MAT. The MAT can look different from case to case depending, for example, on whether it is a commercial or non-commercial research project. Once PIC, MAT and MTA are agreed upon, researchers can apply for a permit with the national authorities. It is important to note that depending on the country, other documents may be needed to obtain a permit.

The presentation finished with some recommended tools for researchers: they can look at the DFG guidelines and model clauses or Evansons Chapter in the book “Research and Development” (by Kamau/Winter/Scholl, 2015). These tools can be used to educate oneself, as a reference in negotiations or in case of disagreement during negotiations.

The second presentation came from **Josphat Matasyoh**. He took the participants through his **experiences with the ABS negotiations** in one of his research projects. The project involved several cooperation partners, also in Germany. He pointed out that the required ABS documentation depends on the stage of the process. In Kenya, before you start the process, you need a research proposal, a consortium agreement, a grant letter, a letter of support from the local institution, a research permit from the National Commission of Science, Technology and Innovation (NACOSTI) and sometimes also a research authorization from the Kenya Wildlife Service (KWS). This research project took place in 2014, right after Kenya signed the Nagoya Protocol, so the ABS systems were not in place yet. In this case, a PIC was negotiated between the local researchers, the KWS and the local community around the forest. The PIC was only signed by the Kenyan university, not the European partners. This is different in new projects, now all collaborators sign. In this project, the MTA was negotiated and signed right after the PIC. Then the Kenyan authorities informed the collaboration partners that they needed to negotiate the MAT as well. The last step was to get an access permit from the National Environmental Management Agency (NEMA).

The main challenge for the researchers during the negotiations was to convince the Kenyan authorities how the project was beneficial to the Kenyan state. They wanted to see what the roles of local collaborators would be, if capacity building of Kenyan staff and students would take place, whether there would be technology transfer and whether there were intellectual property protection measures. Joseph concluded that in hindsight, ABS processes require a lot of time and money which is usually not considered when preparing a project, but should be taken into account. It is also important to have a strong collaboration with local researchers and to incorporate capacity building and technology transfer in the project.

After the presentations, there was a question about whether they did any technology transfer in this project, since the funding conditions in Germany often make training/capacity building easier than moving equipment to foreign countries. It was pointed out in response that some funding agencies do make technology transfer possible. However, researchers in the provider country often don't have the resources for the maintenance of the machines, so this needs to be considered beforehand.

ABS process simulation

Before participants went into breakout groups for the simulation, Elizabeth Karger and Robin Schmidt gave a quick overview of how it was going to be structured. They pointed out that normally, the goal of ABS negotiations is getting the required ABS documentation, but that for the simulation, participants should focus more on the road that leads to that goal, i.e. the negotiation process. The groups were encouraged to start with a quick introduction round and to then check whether all participants have understood the case. The case studies were fictional and all took place in the “Union of Middle Earth (UME)”. The UME is a party to the Nagoya Protocol and has uniform ABS laws across its member states.

In order to structure the simulation, the groups were supposed to go through the GNP HuB's [ABS Strategy Checklist](#) and to look at the UME ABS Regulation. The regulation specifies which permits are needed and how the application process works. The checklist guides researchers through the preparation for the ABS process, helps them to define red lines, to determine which benefits they can share and to think about possible future research. Afterwards, the contract and its conditions were supposed to be looked at by the groups. There was also going to be some information from the competent national authority given to the group by the moderators and the groups were then supposed to address their concerns. The outcome of the simulation would be randomly selected. In the aftermath of the simulation, there should be a reflection. Each group had a moderator, a few lead scientists who should know the case well and persons responsible for going through the sections of the checklist.

Project I: Species delimitation in asexually reproductive plant species

- Methods: Target Enrichment, RADSeq, Flow Cytometry
- Collection: on the steppes, tissue samples, plant material for a herbarium and living plants for cultivation will be collected

Right at the beginning, the group noted that it is part of the project to publish the gene sequences in public databases which is legally important and that the sampling will take place in indigenous territory but that there is no traditional knowledge involved. They went through the checklist and the regulation. These were the results of the discussion:

- It is important to start early and to get information, e.g. from the ABS Clearing House (AB-SCH) and to make sure that the permits apply to all collaboration partners. Researchers should try to make the Mutually Agreed Terms (MAT) as broad as possible to include many scenarios and partners.
- The regulation states that the indigenous people need to be involved and that the researchers need Prior Informed Consent (PIC).
- Researchers can ask the National Focal Point (NFP) or the Competent National Authority (CNA) to find out who from the local community they should contact.
- The statutes of the university need to be checked in order to find out who has the right to sign the permit.
- It is important to be transparent about where the sequencing will be done.
- Benefit-sharing: there is a collaboration agreement with local researchers and the foreign researchers will probably finance the field campaign, results and data will be shared, replica of the samples will be stored with the collaboration partners.

The contract conditions were also discussed and it was noted that it needs to be specified how many species are covered by it and whether the material can be taken out of the country. The group also identified a red line: with the current contract, they would not be able to publish their sequences in public databases which is a vital part of their project. This would have to be renegotiated for sure. In the end, the group agreed that the contract should definitely be sent to the legal department of their institution, but that the NFP might be open to discussions if they explain the project well.

Project II: Overcoming the linnean shortfall using nanopore sequencing

- Method: Oxford Nanopore Sequencing (ONS)
- Collection: in the forest, tissue samples and plant material for a herbarium will be collected

Two groups worked on this project. The first group put their focus on going through the contract and finding points that might need to be negotiated. As in the first project, they made the possibility of publication of the sequences in public databases a red line for the talks with the national authorities. They also felt that some aspects needed to be specified or better defined, e.g. what exact material will be collected and sequenced or how exactly the state defines the term “utilization”. The group felt it is important to change perspectives before the negotiations and to think about what the interests of the State could be. This helps in formulating the benefits that can be shared, in this case for example publications.

The second group focused more on working with the checklist. They considered the different negotiation elements mentioned in the checklist and worked on finding their negotiation positions. They tried to imagine different possible negotiation angles and discussed which parts of the contract might be controversial.

Project III: Proteomic fingerprinting for species identification

- Methods: DNA-Barcoding (COI), MALDI-TOF MS
- Collection: in coastal waters, whole specimens will be collected

This group first wondered whether their project will only consist of taxonomic work and therefore not be in scope of the ABS Regulation. Once they had determined that the regulation did apply to their research, they identified the process through which they would need to secure approval from the competent national authority. As for the other projects, they felt that it was a “red line” for them to be able to publish their results in public databases. This point should be explicitly explained to the authorities. They also considered it important to be able to share environmental samples and research data beyond the project. They were aware that in order to negotiate these points into the contract, they would need to explain potential benefits of the research to the authorities, in this case for example, the proactive involvement of the local partner in the research who would also have access to optimized proteomic fingerprinting. They also thought about offering that the material can be maintained in a registered collection in the provider country so that it does not need to be taken out of the country.

Reflection

After the group work, everyone met in the plenum once again to reflect and exchange on the simulation.

The participants found going through ABS Checklist very useful. It showed that a lot of facets have to be considered prior to the ABS negotiations. Projects need to be planned well and in advance especially if there are partners from many different countries involved. Researchers should consider

all the possibilities of what could be done with the material, also in the future. It is helpful to specify and define what you want to do (what kind of material you will collect, where it will be collected and what is going to be done with it) already in the project proposal. It can also be helpful to change your perspective and to think about what the benefits for the provider country could be. Furthermore, it is necessary that lawyers and scientist work together on the contract and during the negotiations. Researchers should define their red lines in advance but should consider that there are red lines for provider states as well. It is crucial to remember that every case is unique which is why negotiations are so important.

Summary and outlook

This Stammtisch was an experiment – trying out an interactive simulation in a digital format. Most of the participants learned something during the workshop although time was short. It became clear that in order for ABS negotiations to be a success, researchers should start planning early, define their red lines and be clear about the objectives of their project to the provider country.

The next Stammtisch is planned for the end of the year. This time, it will take place without GNP HuB Manager Elizabeth Karger as she is going on maternity leave for the next few months. Dr. Scarlett Sett from the DSMZ will take over the help desk during that time.