

German-Mexican University Collaboration to Promote Academic Exchange between Forensic Doctors in Mexico and Germany – CoCiMex

Mid-term Meeting – Zoom Meetings, 8 December 2021









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German-Mexican University Collaboration to Promote Academic Exchange between Forensic Doctors in Mexico and Germany – CoCiMex

Mid-term Meeting - Zoom Meetings, 8 December 2021

On behalf of the German Foreign Office (AA), the Deutsche Gesellschaft für internationale Zusammenarbeit GmbH (GIZ) is implementing the project "Strengthening the Rule of Law in Mexico". In Mexico, more than 70,000 people are considered officially disappeared. At the same time, there are thousands of as yet unopened graves and over 37,000 unknown dead. The aim is to provide relatives with certainty by identifying more of the unknown deceased, thereby contributing to social peace in Mexico and strengthening trust in the Mexican constitutional state.

In this context, the German Academic Exchange Service (DAAD) is funding the programme "German–Mexican University Collaboration to Promote Academic Exchange between Forensic Doctors in Mexico and Germany – CoCiMex". Over a period of 13 months, the DAAD-GIZ cooperation will establish a German-Mexican research collaboration in the field of forensic identification, thus improving the reputation of forensic medicine in Mexico and creating the conditions for the application of the results of the bilateral university cooperation in forensic medical institutes in Mexico.

German-Mexican University Collaboration to Promote Academic Exchange between Forensic Doctors in Mexico and Germany – CoCiMex

Mid-term Meeting – Zoom Meetings, 8 December 2021

Wednesday, 8 December 2021 (16.00-19.20 UTC+1 | 9.00-12.20 UTC-6)

UTC+1 Germany	UTC-6 Mexico		
15.45	8.45	Login (15 min)	
16.00	9.00	Opening of the virtual mid-term meeting (3x5 min)	
		Ilona Daun Project Manager German Academic Exchange Service (DAAD), Germany	
		Dennis Nehb Policy Officer Embassy of the Federal Republic of Germany in Mexiko City, Mexiko	
		Maximilian Murck Head of Project "Strengthening the Rule of Law in Mexico" Deutsche Gesellschaft für Internationale Zusammenarbeit – GIZ	
		Words of welcome by each of the organisers and context of the kick-off	
16.15	9.15	Project presentations (2x30 min)	
		University of Münster UdG UOBJA Interdisciplinary analysis of bone finds: forensic and genetic identification	
		UK Hamburg Eppendorf INACIPE INCIFO FGE German-Mexican university collaboration between forensic doctors (each presentation 15 min + 15 min Q&A)	
17.15	10.15	Short break (10 min)	
17.25 10.25 Project presentations (2x30 min)		Project presentations (2x30 min)	
		University of Bonn UNAM UABJO FGE Oaxaca Virtual anthropology & databases for human identification in Mexican populations	
		University of Frankfurt UdG ICJF UABJO The importance of documenting and linking AM- and PM-data (each presentation 15 min + 15 min Q&A)	
18.25	11.25	Short break (10 min)	

18.35	11.35	Special topic: AM/PM Data Analysis (2x15 min)
		Topic 1: German-Mexican collaboration
		Topic 2: Administration and communication
		Carlos Fierro, Facilitator
19.05	12.05	Wrap-up and next steps (15 min) Carlos Fierro, Facilitator
19.20	12.20	End of the meeting

SYSTEMATISATION REPORT

Prepared by Carlos Fierro, Facilitator (16 December 2021)

MIDTERM WORKSHOP 8 December 2021 Virtual Meeting

List of abbreviations used in this document:

CoCiMex	German-Mexican University Collaboration to Promote Academic Exchange between Forensic Doctors in Mexico and Germany
COVID-19	The SARS-CoV-2 (coronavirus) disease that emerged in 2019
DAAD	German Academic Exchange Service (Deutscher Akademischer Austauschdienst)
GIZ	Germany's state-run international development agency (Deutsche Gesellschaft für Internationale Zusammenarbeit)

1. MIDTERM WORKSHOP PREPARATION

1.1. Background

On behalf of the German Foreign Office (AA), Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ) is implementing the project "Strengthening the Rule of Law in Mexico". In this context, the German Academic Exchange Service (DAAD) is funding the programme "German-Mexican University Collaboration to Promote Academic Exchange between Forensic Doctors in Mexico and Germany" (CoCiMex). Over a period of 13 months, the DAAD-GIZ cooperation will establish a German-Mexican research collaboration in the field of forensic identification, thus improving the reputation of forensic medicine in Mexico and creating the conditions for the results of the bilateral university cooperation to be applied at forensic medical institutes in Mexico.

Among the activities involved in the CoCiMex programme, the DAAD was responsible for organising this midterm event in order to present the advancements of the projects to date and to evaluate the programme's general development from the perspective of the participants from Mexico and Germany.

This report summarises the midterm event and the results it achieved.

1.2. Objective

The purpose of the midterm event was to evaluate the development of CoCiMex and identify any necessary improvements for the remainder of the programme.

1.3 Methodology and preparation of the event articipants

The DAAD was responsible for organising the event, establishing the agenda, sending invitations and templates for the participants' presentations, and organising the logistics. GIZ collaborated in the process in Mexico.

Due to the health and travel limitations related to the COVID-19 pandemic, this event was carried out in a virtual format via the Zoom web platform, with participants connecting from their respective cities in Germany and Mexico.

The logistics and technical management of the event were arranged in collaboration with the event agency MICHEL IRS. Professional simultaneous German-Spanish translation was provided.

1.4. Participants

A total of 24 academic and institutional experts participated in the event, including the representatives of collaborating institutions and organisers.

1.5. Agenda

The agenda of the event can be summarized as follows:

Login

Opening of the virtual midterm meeting

Words of welcome by each of the organisers and remarks on the context of the kick-off

- Ilona Daun, Project Manager, German Academic Exchange Service (DAAD), Germany
- Dennis Nehb, Policy Officer, Embassy of the Federal Republic of Germany in Mexico City, Mexico
- Maximilian Murck, Head of Project "Strengthening the Rule of Law in Mexico",
 Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

Project presentations

- University of Münster | UdG | UOBJA
 Interdisciplinary Analysis of Bone Finds: Forensic and Genetic Identification
- UK Hamburg Eppendorf | INACIPE | INCIFO | FGE
 German-Mexican university collaboration among forensic doctors

Short break

Project presentations

- University of Bonn | UNAM | UABJO | FGE Oaxaca
 Virtual anthropology and databases for human identification in Mexican populations
- University of Frankfurt | UdG | ICJF | UABJO
 The importance of documenting and linking AM- and PM-data

Short break

Special topic: AM/PM data analysis

Feedback session on the development of the programme:

- Topic 1: German-Mexican collaboration
- Topic 2: Administration and communication

Wrap-up and next steps

End of meeting

2. MIDTERM EVENT PROGRESSION AND RESULTS

Wednesday, 8 December 2021

2.1. Registration

Fifteen minutes before the beginning of the session, the Zoom platform was opened to allow the participants to connect and be ready to participate. A registry of all the connected participants was kept by MICHEL IRS.

2.2. Opening of midterm event and welcome addresses

The event began with some introductory remarks from the facilitator and the host from MICHEL IRS. After that, welcome addresses were given by:

Ilona DAUN

Project Manager German Academic Exchange Service (DAAD), Germany (connected from Bonn)

Ms Daun began by greeting the participants and noting the six months that had passed since they had been able to meet in Mexico. She described looking forward to seeing how they had progressed and what they had achieved within the framework of their collaborations. She also pointed out that the meeting was intended as an opportunity to report any stumbling blocks or ambiguities and request any information or support that was still needed from the DAAD.

Ms Daun went on to say how pleased she was that Mr Nehb was attending from the German Embassy, along with Katharina Fleckenstein and Victor Aurioles from the DAAD's branch office in Mexico. Regarding the midterm event itself, she explained that a virtual whiteboard would be used to collect questions, suggestions, and requests for subsequent discussion and clarification. The request for AM/PM DNA analysis would also be a topic on the agenda.

DENNIS NEHB

Policy Officer

Embassy of the Federal Republic of Germany in Mexico City, Mexico

In his welcome address, Mr Nehb began by looking back on symposium from the previous October, which he described as an extraordinary experience that offered a glimpse of the excellent cooperation undertaken up to that point and how committed all the participants were. He said it was evident that all Mexicans – and the Mexican government in particular – have a great interest in delving into the subject of forensic identification and make progress in this regard.

Mr Nehb also touched on the various conversations that had taken place at the political level, describing them as very promising and instrumental in the evolution that had taken place in Mexico. In November, Mexico had become the first country to be visited by the United Nations Committee on Enforced Disappearances at the request of the Mexican government, which demonstrated the government's will to delve deeper into this field. The committee had since visited 13 federal states in Mexico, which had given it a clear idea of what is happening in the country. In addition, Mr Nehb noted that the press conference at the end of the visit had showed that there were still some points to improve regarding forensic identification. Mr Nehm concluded his remarks by encouraging the participants to take advantage of the current moment and underscored the German Embassy's interest in the event.

MAXIMILIAN MURCK

Head of Project , "Strengthening the Rule of Law in Mexico", Mexico

Mr Murck greeted his fellow participants from Ciudad Victoria (northern Mexico), where an agreement was about to be signed with the State Attorney General regarding the possible analysis of DNA tests and the identification of fingerprints in Germany, along with the establishment of a centre for identification in Tampico, Mexico. He also noted a number of other positive developments, including the United Nations' agreement to deal with these matters at the highest political level and the related technical doors that had opened.

Referencing two colleagues who were still available to work on related issues at the GIZ in Mexico, Mr Murck cited the more than 1,000 fingerprints that had been collected and the opportunity to collaborate and demonstrate more results in the area of DNA identification. He described this as a very positive dynamic in spite of the horrific context at hand. Finally, Mr Murck expressed his organisation's pleasure in seeing projects proceed from Coahuila to Oaxaca and his hope that the participants could support each other more with the knowledge available in Mexico.

CARLOS FIERRO

Facilitator Ecuador (connected from Quito)

Mr Fierro thanked all the preceding speakers for their welcome addresses before offering his own greetings to the participants. He reviewed the agenda and then invited the next speakers to present the advancements in their projects. Summaries of the projects were then presented, followed by questions and answers from the participants.

2.3. Presentation

2.3.1. Presentation

University Hospital Münster | UdG | UOBJA Interdisciplinary Analysis of Bone Finds: Forensic and Genetic Identification Maximillian Haagen, Doctor, Institute of Legal Medicine Marielle Venemann, Head of Section, Forensic Molecular Biology, Institute of Legal Medicine



QUESTIONS

Aurora:

Are other institutions interested in giving samples for DNA testing besides Coahuila and Oaxaca?

ANSWERS

Maximillian:

The University of Guadalajara is one, and they have samples of many bones. When I am in Mexico we can recover the data from this database. It is not clear how much we could use from these samples here in Germany, but there are other interested parties in Oaxaca.

What are the limitations you mentioned for sampling – are they related to costs or technical capacity?

Marielle:

The limitations are not due to a lack of competency; in my experience there are many doctors who are very qualified, but the acquisition of automatic methods for sampling is costly and we are looking for funding. There are many protocols, and we want to recover this technical knowledge, but we are working on extraction protocols and some security procedures need to be observed.

Andrés

More than technical knowledge, there are other limitations. The university has robots for the automated extraction of DNA, but they are not located in the same place

where DNA processing is carried out. This can lead to complications like cross-contamination, and for that reason, the infrastructure needs to be increased. In other words, the equipment is more of a factor than knowledge. What Marielle showed is very interesting because there is a great difference in the amount of material that can be obtained in automated and manual procedures. At the moment, we are seeing that we can reproduce the results of analysis, so we will look for the best protocols. When we conduct this "train the trainers" programme, we could count on having the best results, so we are very motivated to begin.

2.3.2. Presentation

University Medical Center
Hamburg-Eppendorf | INACIPE | INCIFO | FGE
German-Mexican University Collaboration
Among Forensic Doctors
Antonia Fiztek, Resident Medical Doctor
Institute of Legal Medicine
University Medical Center
Hamburg-Eppendorf



QUESTIONS

Anja:

INACIPE did not sign the agreement? Are they still part of the project or not?

ANSWERS

Antonia:

INACIPE said they could continue to assist us, but there is no agreement. The agreements with the other institutions have been signed.

Citlalli:

Fingerprints have been obtained with scanners and software will be used to send the corresponding images.

2.3.3. Presentation

University of Bonn | UNAM | UABJO | FGE Oaxaca

Virtual anthropology & databases for human identification in Mexican populations **Lumila Menéndez**, Principal Investigator Department of Anthropology of the Americas University of Bonn



QUESTIONS ANSWERS

Franziska:

Lumilla:

INACIPE did not sign the agreement? Are they still part of the project or not?

We don't know exactly. It is something we could think about for an upcoming phase.

Víctor:

Whatever the case, a cold room is important for the projects.

Andrés:

Is the DAAD is considering a second phase of the project?

This question was set aside for the next portion of the event.

2.3.4. Presentation

University Hospital Frankfurt | UdG | ICJF | UABJO
The importance of documenting and linking AM- and PM-data
Franziska Holz, University Hospital Frankfurt
Axel Rivera Martínez, Forensic Medical Service

Alicia Fonseca Muñoz, Universidad Benito Juárez



COMMENTS

Gabriela:

We are in the process of signing an agreement with the Instituto Jaliciense de Ciencias Forenses, which will be the responsible for postgraduate programmes. We are also working with the University of Guadalajara on an AM database that will make it possible to match data.

ADDITIONAL COMMENT ON THE PRESENTATIONS

Aurora:

To Lumilla: GIZ in in the process of bidding to acquire a cool room in Altamira at a cost of about €17,000 per refrigerator, but this figure could vary. As for photography, we can help in distributing images through our partners or even social networks.

To Axel: We are signing an agreement with Tamaulipas on genetic data, which will show that the related legal factors have been overcome.

2.4. Special topic of discussion: AM/PM sampling

The facilitator raised the topic of Ante Mortem/Post Mortem (AM/PM) analysis, which was received from the DAAD. The following introduction was read:

"There is a specific request from GIZ as to whether the German partner universities could analyse AM and PM samples in Germany as part of their collaborations and funds. If so, the GIZ project would like to know how many AM and how many PM samples (tissue or bones with DNA material; no complicated cases) can be taken in January, February, and March. The aim is to establish an institutional cooperation with Germany at the beginning of the year in order to analyse thousands of DNA samples in Germany. At the beginning of December, GIZ signed an agreement with the public prosecutor's office in Tamaulipas in order to have a `legal' basis."

The facilitator opened the discussion among the participants.

Ilona: The idea is to calculate the amount of funds needed in the intermediate timeframe and in case there is an extension of three months for the projects. We also need to know whether it is possible to do the required analysis with the funds currently available, and if not, what additional amount is needed. There are many technical aspects we are not able to answer, but maybe Aurora could help on this.

Aurora: Well, the topic takes me a little by surprise; anyway, we have been trying to figure out ways to send samples to Germany and manage the legal problems this could raise, since the samples should be used later in judicial processes. We are interested in both bone samples and samples from the relatives of the deceased. It is a complex problem in Mexico, as you know, since the samples are usually very degraded or burned in the states where we are working. That's the current overview, so the question is, how many samples can be processed under these circumstances?

Marielle: For us, it is very important to know in which format the data is required, if the data will be used in a database, if we need to collate the AM and PM data, or if it is only needed to create DNA profiles. Regarding the markers, this is not a problem; we can code the CODIS markers. We only need to know which markers to use, but that is very simple. So the only thing we need to know is in which format the data is needed and if we are talking only about typing or also about interpretation, since that is important to calculate the cost.

A comment to Ms Daun: It is not possible to do that with the current project funds. We did not allocate many funds for laboratory material because that was not the focus of the project, so those funds were never asked for. We would like to process some 400 samples per week, but it is possible that some of them will produce no results due to the quality of the samples.

Benjamin: We will still be talking to the institutes in Hamburg and Münster in the next two or three days, and we have a previous price list; I think that 100 samples a week is possible, but it is important to avoid sending overly complicated samples since those will take more time; my understanding is that we want to maximise the amount of data processed. So, only BUCCAL SWABS and material from relatives. In our case, we will need more funds than those currently available from the DAAD.

Ilona: Originally we did not anticipate those funds, so now we need to know how much will be needed to request them. Each project needs to calculate those figures, since each has its own assignation agreement.

Maximillian: I would like to propose having a specific meeting on this subject, since we are talking about many topics here. Today, we are signing the first agreement between GIZ and the Prosecutor's Office to analyse samples in Germany, and that is the first step in guaranteeing legal security. The next step is to figure out how to support Tamaulipas, because legally and contractually, we cannot say that we will pay X for Y samples: We have to solicit bids publicly at the European level and so on. So the idea is to determine whether the DAAD projects have the funds to analyse those samples, because bidding will take many months. The question is whether there is the chance to analyse samples in Germany, and if so, how many. Finally, we have a contract between GIZ and the Prosecutors' Office. I propose having a virtual meeting to discuss these issues or hear other possibilities. So, again, my question is whether it is possible to use the DAAD's project funds for this analysis. In Tamaulipas we have identified some 100 samples, but we don't know how many relatives.

Marielle: Regarding the samples, we could process 100 samples as Maximillian just said, so yes, we could process those with the current funds of the "train the trainers" project.

Franziska: Marielle is right. In our case, as Max said, there are some funds, so we can do it for 100-200 samples.

Benjamin: We can analyse some cases among the three German universities.

Maximillian: We are verifying with Coauhila how to send the samples to Germany. We are optimistic that we could probably send some samples in January. The idea is to work with samples that can progress forward with relatives and so on.

Lumilla: I was not aware of that project on analysing the additional samples. We will be analysing a lot of tomography and photography, but at the moment we do not have time for a January-March timeframe. If this continues, we can work on reducing the scope of work, probably to 50 per week. We can't afford this now, but if there is a longer-term project, we could help on that.

2.5. Feedback from project participants

The participants were asked to give their feedback on the execution of the projects so far. A "virtual whiteboard" was used with the software Jamboard, which enabled everyone to put their ideas on virtual sticky notes.

Two topics were selected as discussion axes:

- 1. Added value of the Germany-Mexico collaboration
- 2. Administration and communication

The results of the Jamboard exercise are summarised in the table below.

Topic 1: Germany-Mexico collaboration			
Aspects most relevant to the success of the bi-national collaboration?	What can be improved for the rest of the programme?		
 Teamwork among professionals Trust and open, clear communication among project partners It is very important to have good communication among partners; quick answers and reliability in fulfilling tasks are key. Bi-cultural exchange to determine the strengths and weaknesses of each country Knowledge of different working methods Strengthening cooperation in order to contribute to the identification of the unknown deceased The opportunity to know and observe how work is done in Germany, and for German scientists to stay in Mexico and observe efforts first-hand Knowing the differences between working methods in Mexico and Germany Sharing technical and scientific information and the differences in how the institutions work Mutual enrichment in connection with a major national problem in Mexico Teamwork and learning from each other 	 Clearly define needs, recommendations, perspectives, possible collaboration areas, and areas in which it is difficult to collaborate or doing so takes a lot of time The short time frame Remove bureaucracy when it comes to the time frame of requesting and using money! Better communication by the DAAD (GIZ?) that is more straightforward so that the project partners can pass on information and do not have to correct themselves at a later stage Promote the extension of the projects once the perspectives have been established Streamline the administrative procedures for the transfer of funds Address difficulties in legal processes with the institutes and the DAAD within the given timeframe Less bureaucracy in administrative procedures Better understanding of the difficulty with deadlines due to the pandemic 		

Topic 2: Administration and communication How would you assess the What administrative issues What can be improved? communication in and still need to be resolved? among the projects? Very good Avoid penalising the Transfer of funds receiving universities It has been good Signing of contracts Very good with Ilona with interest on Transfers for and Anja the management scholarships Good in general, of money, since the Budget projections. Is but which management of the it possible to extend communications money has been slow the duration of the should go to the DAAD, and bureaucratic. projects? GIZ, or the universities Select key points in Finalising the needs to be defined. the discussions since transfer of money Communication is you have the whole and payments for good, but there are project briefs before purchases and some coincidences meetings. supplies among projects. Administrative issues Completing acquisitions and In these midterm between countries are defining the possibility meetings, key points always challenging. should be part of the Collaboration is to send DNA samples discussion to make getting better and to Germany everyone aware like in closer between the Money transfers and the time frames for this last session. projects, which is very Proportionally very spending it important. Transfer of funds good, but some With more practice in this kind of project, Signing of contracts improvements are one can know which Transfers for needed (some project difficulties could exist scholarships partners seem to be very busy with the and how to resolve Budget projections. Is mass of their projects) them. it possible to extend It has been a little More flexibility to the duration of the difficult due to make changes or projects? the administrative improvements during Finalising the and organisational the execution of the transfer of money differences. projects and payments for **Excellent with Mexican** More openness to purchases and partners, very good projects supplies with the DAAD (thanks Completing acquisitions and to Anja and Ilona) defining the possibility Communication among project leaders to send DNA samples could be improved to Germany Money transfers and Communication is the time frames for always about listening to each other. spending it

After the work with Jamboard, the facilitator asked for further clarifications, especially from the DAAD and GIZ regarding the ideas and questions that emerged during the exercise.

Ilona: Yes, I can say something about the administrative obstacles: Unfortunately all of this is due to German legislation. These are German governmental funds, so it is not a DAAD issue, and it has not been possible so far to extend the periodicity for fund assignments; it has also been impossible to adapt the right of fund allocation, so there could be projects that we cannot fund. In that case interest may be required, but in my experience in recent years – especially in programmes with GIZ – it has always been possible to make the changes required. Here in Germany we are in close contact with Anja Munzig, and as we already said, please ask all the questions you have. If it is not possible to make changes, is because of the German legislation, and we can do nothing about it.

Regarding the timeframe of the project, we are looking for an extension of three months, so it will be necessary to update your financial plans, calculate how much more funding you will need, and tell us by the 15 December so we can decide whether the three-month extension is possible or not. If there is more information on this, we will notify you in due time. Concerning the assignment of fund agreements and interest, these are standard contracts used to fund DAAD projects worldwide. Of course, the idea is not to punish people for not using the funds. This is something we do not have complete control over; it is another department in charge of the financial management.

Another point is that all GIZ projects are evaluated by an independent and external audit that usually takes up to 12 months. The most important rule is to not spend funds without receipts or invoices, which is standard for public funds at all levels.

Aurora: We all have learned in this process; the agreements between universities and also with the Prosecutor's Offices have been difficult. We look forward to the success of these agreements and are helping with all the contacts we have that can be useful. I'm sorry if we have come up short in some aspects, but it is difficult to make contacts in the Prosecutor's Offices. We are here to help, so count on us for contacts or meetings and help with databases.

Marielle: Why there is so much bureaucracy in these projects? Other projects, like those from the German Research Foundation, have simpler requirements.

Ilona: I do not really know how the German Research Foundation works. We work with GIZ or other governmental funds; other institutions probably have other procedures.

Lumilla: Will there be a second phase of the project? From our perspective the scale and effort we have made are huge for an 18-month project. We understand that this three-month extension is for the first phase. We would like to know well in advance if the extension will exist or not in order to plan accordingly.

Ilona: We will notify you about this extension well before Christmas. Regarding a second phase, we could start conversations around March or April before reaching a decision, and we will try to decide on this as soon as possible in order to let you know in a timely manner.

Another thing I would like to ask is that if you will be travelling to Mexico, please contact GIZ directly for security reasons.

Aurora: For GIZ, the security issues in travelling to the states in which you will be working are very important.

Franziska: I would like to ask for more time for some activities, such as presentations for the midterm event. We need more time to prepare.

2.6. Next steps

The facilitator asked what the upcoming activities and milestones are in the programme. The following table summarises the next steps:

ACTIVITY	DEADLINE / STEPS
Statistics of the projects	Monday, 13 December
Updated intermediate financial planning (including a projection for an additional three months)	Wednesday, 15 December
Invoices and receipts for financial reports	28 February 2022
Final programme event	It will depend on whether the proposed extension is granted. The final meeting may be in April or May 2022 depending on the circumstances.

QUESTIONS	ANSWERS
Franziska:	Anja:
Is there a format for the reports and invoices?	Yes. They are in the portal. I will send them to the Mexican participants.
Will there be a final event in Mexico, or will it be held in a virtual format?	Ilona:
	It depends on the circumstances. If the pandemic allows for travel, there could probably be an event in Mexico. If not, it will likely be in virtual format, or it might take place in Germany.
Alicia:	Ilona:
There are currently some restrictions on travelling to the EU for people vaccinated with CanSino or Sputnik. Do you know if those restrictions will be eased or if the travel could be postponed?	The travel changes only can be done during the execution of the programme, so the travel could be extended up to June or even August if an extension of the project is approved.

2.7. Workshop closure

As the end of the official part of midterm event, closing words were given by:

Ilona Daun

Project Manager German Academic Exchange Service (DAAD)

Thank you all. It has been fascinating to see all the progress of the projects in such a short time and under such difficult conditions. We hope there will be a three-month extension of the programme, or even a second phase. We are counting on you will be in touch. Do not hesitate to contact us in any case. Have a nice week, a merry Christmas, and a happy new year!

Aurora Pérez

Forensic Advisor

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

Congratulations to everyone. We are thankful that all of you have been interested in these projects and are helping so many people in urgent need with this difficult issue.

It was so nice that you had the chance to interview the relatives of the victims; it has contributed a lot to the projects. We are here to help and to facilitate communications with your counterparts. Merry Christmas and happy new year to you all!

3. WORKSHOP CONCLUSIONS AND REMARKS

Regarding the execution of the event, all the invited participants attended and the presentations and group work occurred on time and successfully. The participants had the opportunity to express their feedback on the execution of the project so far during the virtual sessions, as did DAAD and GIZ cooperation representatives. In this concern, the event can be considered successful.

The virtual platform and connections and the coordination by the organisers were satisfactory and worked quite well. Considering the above, the CoCiMex midterm event was a total success and fulfilled its purposes and objectives.

END OF REPORT









GENERAL INFORMATION

Name of institution

Institute of Legal Medicine, University Hospital Münster

Short profile of institution/faculty

At the Institute of Legal Medicine in Münster we are responsible for the four surrounding state prosecutor's offices and perform about 400 autopsies a year. In addition to forensic-medical questions concerning the dead and the living, our institute deals with toxicological as well as molecular-biological investigations. We analyse about 1400 DNA traces annually and provide an average of 100 identity reports on unknown corpses as well as tissues and bones. Important research foci are forensic age assessments of living adolescents and young adults, the identification of new psychoactive substances and tissue-specific as well as age-dependent DNA methylation for the assessment of unknown DNA traces.

Partnerships with Mexico/Germany

Universidad de Guadalajara Universidad Autónoma Benito Juárez de Oaxaca Fiscalía General del Estado de Coahuila de Zaragoza (associated partner)

THE CHALLENGE

Previous Meetings, Events and Discussions in the course of this DAAD-Call made clear that forensic scientists in Mexico struggle with systematic issues beyond the sheer number of unexamined DNA-samples. Consequently, in addition to finding a way to help with the analysis of DNA-samples, this project focuses on developing long-lasting collaborations, training, and qualifying future forensic scientists in the field of Forensic Genetics and Human Identification, as well as building a Database for reference Material that will help estimating the post-mortem interval (time since deposition) of human skeletal remains.

THE APPROACH

Firstly, we will perform a series of networking events in order to establish and strengthen the bonds between partners with various professional backgrounds. It is of major importance that this will not only include the participating partners of this project but also the other parties that answer this DAAD call as well as international partners.

Secondly, we will perform "Train the trainers" activities in forensic molecular genetics to spread the knowledge of DNA based identification of human skeletal remains, which will then be passed on to students of a master's program "Forensic Genetics and Human Identification" at Guadalajara University. The Curriculum of this program will be developed with, and approved by, University officials in Guadalajara.

Thirdly, we will establish a database for "bone finds" (BFD) that will form a basis for estimating the post-mortem interval (time since deposition) of human skeletal remains.

Interdisciplinary
Analysis of Bone
Finds: Strengthening
Forensic and Genetic
Identification of
Human Skeletal
Remains in Mexico

THE INTENDED IMPACT

Through these initiatives, we will strengthen institutes of forensic medicine in Mexico and lay the foundation for future, international and interdisciplinary collaborations. These will, in the long term, lead to improved methods for human identification that can speed up the process of solving identification cases in Mexico. Hence, we can strengthen the confidence of Mexican society in the rule of law in Mexico.

RESULTS ACHIEVED DURING THE FIRST 6 MONTHS

What was supposed to be an act of bureaucracy proved to be a time-consuming challenge, but the grant agreement as well as the subrecipient transfer agreements are now signed and in place, which forms the base for future work and money transfers.

During the Symposium in October we had the chance to finally meet our partners in person, which facilitates the personal exchange. Also by presenting our project, we acquired new potential partners that are interested in adding further bone samples for the BFD.

Unexpectedly, we had the chance to get deep insight into the work of the 'colectivos' and found that our work with bones and plans for the BFD has the potential to be an actual and immediate help.

The Database that is used for BFD is in development and the IT-service in charge already had counselling interviews with the involved partners in Mexico as well as insight into their IT-systems through their collaboration with Frankfurt.

In preparation for the "Train the trainers event" we collected experimental bone samples for DNA extraction. A short validation study was conducted for manual DNA extraction from bone samples. We found that Prepfiler chemistry works for both manual and automated extraction, while automated extraction shows by far higher DNA extraction efficiency. We started working with Signature and Kintelligence kits to prepare for the Train the Trainers event starting in February. We made contact to further experts with experience in DNA extraction from challenging bone samples.

The Curriculum for the Master's program at University of Guadalajara has been finalized and approved by university officials. The program can now be implemented within the university to start in 2022. Due to the contracts not being in place and therefore hampering money transfers to Mexico, the position allocated for this work could not be filled as planned.

But a position was formed and filled by an expert to work on the curriculum from the start of the project. This person did not receive the allocated payment from the project. At the time of finalizing this document no solution for this problem had been found. •

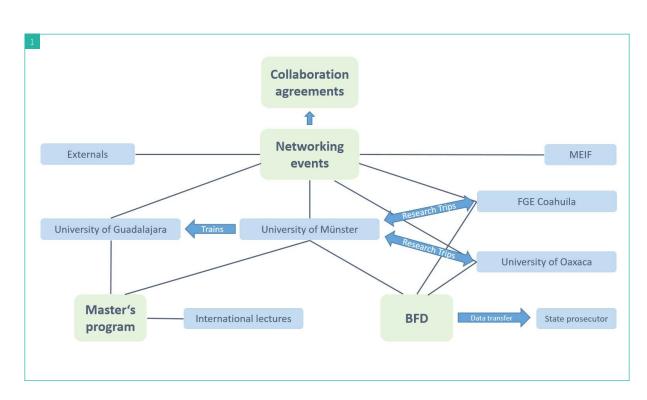
OUTLOOK
POSSIBLE
FURTHER
ACHIEVEMENTS/
CHALLENGES UNTIL
END OF FUNDING
PERIOD

The greatest challenge we are currently facing concerns the ongoing pandemic situation and the delay at the start of our project that interfered with our plans for networking events. The circumstances made it impossible for us to plan the events in 2021, which lead to serious challenges in spending the funding correctly and as indicated in the budget. The problem of the delay at the beginning of the funding period in combination with the fact that funding is subject to annual cycles puts our project in a difficult position with a real risk of not being able

very difficult position with a real risk of not being able to perform all activities as planned. Nevertheless, we will do all we can to achieve the goals of this project.

Therefore, we currently plan a meeting in early February that includes our partners as well as the partners from the other CO-CIMEX contributors (Frankfurt, Hamburg and Bonn). By booking everything in advance as well as obtaining the needed daily allowance for the guests before the end of the journey, we will avoid the budget provided by the DAAD being lost due to unspent funds. Due to the fact that the Universities in Guadalajara and in Oaxaca are both partners of multiple German partners, we will need to sort out which scientist is supported by which partner, in order to avoid doubled funding. Once the frame is set, members of the GIZ as well as the MEIF will be invited to join us. It will begin with a joint conference to share the current state of the project in order to identify common problems and their interinstitutional solutions. After our conference, the Mexican partners will visit the different forensic institutes.

A small group of scientists from the University in Guadelajara will then split from the group and start their "train the trainers program" in our DNA-lab, for which visa-issues are being sorted out right now. During their stay, the scientists will be trained in DNA extraction from bone, general forensic DNA analysis, and data interpretation and kinshipt analysis for identification purposes..





In January, another trip to Mexico is planned in order to examine bone samples that are being collected in Mexico and add first data to the BFD. The software will be in a working state by then, which will give us the opportunity to further improve the back-end of the software in order to ensure easy use. During our stay, we will have seminars covering the practical aspects of bone analysis for the estimation of the post mortem interval.

It remains obvious that the current epidemic results in uncertainty especially when it comes to travel plans. But those issues set aside, the first six months of this project taught us that the amount of administrative work by far exceeds that of comparable international projects. It has constrained our work and will continue to do so. Nevertheless, we anticipate to meet our project goals due to the efforts put in by all the contributors and the cutbacks we are accepting. However, we believe that the work that will be done by the end of this pro-

ject should be regarded as a foundation rather than a finished project. A foundation consisting of a legal framework and first scientific results, that can only develop its full potential if properly used in the future. The current problems Mexico is facing will not be solved by our one-year term projects, but our projects set the foundation for long-lasting, sustainable changes and results, which will help to strengthen Forensic and Genetic Identification in Mexico. Therefore, we strongly propose an extension of the project.

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PHOTOS AND GRAPHICS

1 Road map | 2 Examples representing the three main procedures. a Right femur with the typical morphological correlate of a high postmortem interval. b A series of fresh bone cut sections taken from samples of different ages. c The positive control test for assessing the chemiluminescence using a blood sample.







GENERAL INFORMATION

Name of institution

Institute of Legal Medicine, University Medical Center Hamburg-Eppendorf, Germany

Short profile of institution/faculty

The University Medical Center Hamburg-Eppendorf (UKE) has been one of Europe's leading hospitals since it was founded in 1889. With more than 11,000 employees and more than 1700 beds, the UKE is one of the largest employers in the City of Hamburg. The Institute of Legal Medicine (ILM), part of the Diagnostic Center of the UKE, offers a comprehensive range of forensic medical services for the Hamburg metropolitan region. The ILM has its own working areas for forensic pathology, radiology, toxicology, molecular genetics and clinical forensic medicine as well as forensic age diagnostics, odontostomatology and anthropology. Due to its interdisciplinary structure, the institute is actively involved in operational case analyses of the surrounding state criminal investigation departments.

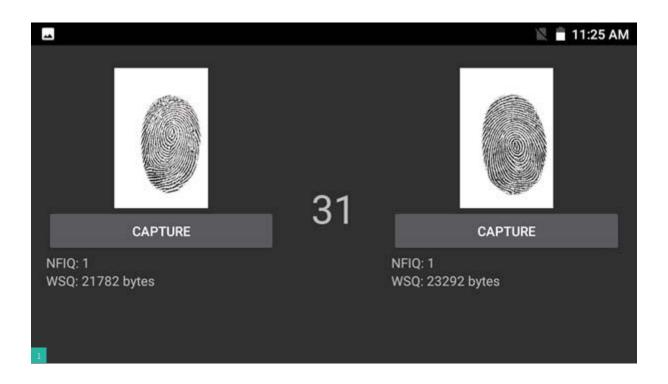
Partnerships with Mexico/Germany

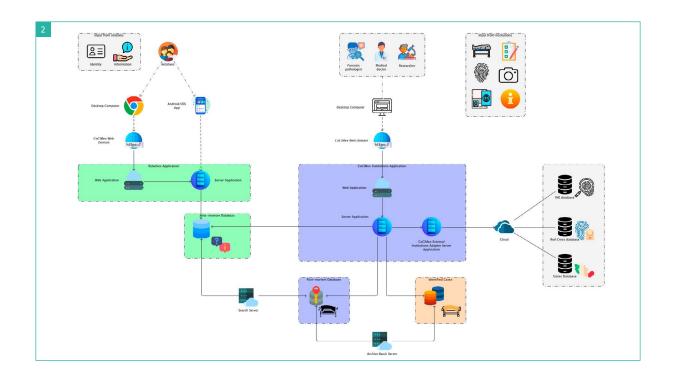
INFICO, FGE, UNAM

THE CHALLENGE

Development of a sustainable, interdisciplinary, and multi-professional forensic medical collaboration, as well as a capacity for identification of missing people and unknown deceased in Mexico, through a partnership between the Mexican and German partners using state-of-the-art scientific and technical methodology with bilateral collaboration with associated companies, such as DERMALOG/ACERTA (Acerta Computación Aplicada, S.A. de C.V.). The Identification program will focus on the identification of officially disappeared persons (AM, ante-mortem data) and

Holistic approach
towards a safer
society – Identification
of unknown deceased
and supportive
academic exchange in
forensic sciences in
Mexico





unknown deceased (PM, post-mortem data). Therefore, a mergeable, unified AM (application-based) and PM (web-based) database for relatives and professionals will be established with the help of a German IT-Team.

THE APPROACH

Curricula: Bilaterally developed curricula on site (or online), harmonization of the level of education and training of various professionals in the fields of forensic pathology, foren-

sic anthropology, forensic molecular genetics and forensic fingerprints with the initiation of topic-specific continuing education programs.

Identification program: Uniformity of AM and PM databases for institutions with the option to transfer the database into existing platforms and vice versa. Firstly, exchange and merge identification variables of existing databases in Mexico City. Secondly, definition of necessary variables for AM- and PM database for safe identification. Thirdly, development of unified, easily accessible AM and PM database (application, web-based) und strict data protection.



Community engagement to advertise the APP and unified database shall be performed through advertising campaigns. The collection of the AM data on site in Mexico will be performed by all cooperation partners. Therefore, mobile workgroups shall be established to reach the relatives and advertise the campaign in different regions. The collection of the PM data will be initially performed through all cooperation partners. However, main responsibility for data



collection lies with the Mexican cooperation partners. To perform dactyloscopic comparison of fingerprints, ready-to-use fingerprint scanners for PM analysis are already acquired.

THE INTENDED IMPACT

The AM database shall be easily accessible for relatives, using an application on their mobile devices (APP) or website. The PM database for forensic specialists shall be an access authorization-regulated database. The goal is to connect both databases, to be able to use already-existing data and to link to matching data. Supplementation of fingerprint matches through DERMALOG / ACERTA databases is possible. A unified, nation-wide applicable database, the integration of the relatives, and the practical application of the achieved outcomes shall contribute to a holistic approach and the identification of officially disappeared persons and unknown deceased throughout Mexico.

A: Strengthening the Institutes of Legal Medicine in Mexico

1. Agreement between University of Hamburg and UNAM (MoU)

- 2. Agreement between UKE and INCIFO
- 3. Agreement between UKE and FGE
- 4. Visit of Mexican Team (FGE) in Hamburg, Germany in September 2021
- 5. Visit and Stay of German Team (UKE) in Mexico-City in October-November 2021
- Visit of Mexican partners (Genetics) in Hamburg, Germany in December 2021
- 7. Planned Workshop in "Human Identification" in April 2022 at INCIFO, Mexico-City

B: Identification Program in Mexico

- 1. Exchange of variables and contents of existing databases (INCIFO, FGE, OAXACA (ILM Frankfurt), INTERPOL)
- 2. Market analysis for already existing databases in

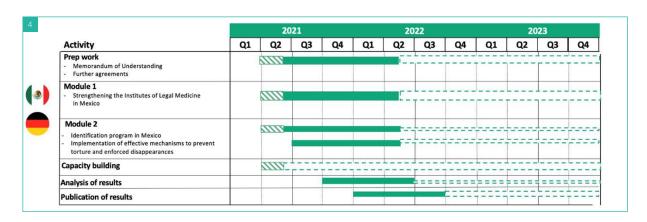
OUTLOOK
POSSIBLE FURTHER
ACHIEVEMENTS/
CHALLENGES UNTIL
END OF FUNDING
PERIOD

Mexico City - Red Cross, INE

- 3. Definition of necessary variables for secure identification
- 4. Starting with Backend and Frontend development of the Am and PM Databank
- 5. Implementation of the mobile fingerprint scanners (DERMALOG) at INCIFO and FGE
- Development of fingerprint-scanner software on the mobile devices to capture and save the fingerprints in the exact order.

A: Strengthening the Institutes of Legal Medicine in Mexico

- Workshop in "Human Identification" in April at INCI-FO, Mexico-City
- 2. Visit of Mexican Team in Hamburg, Germany in 2022
- 3. Visit and Stay of German Team (UKE) in Mexico-City in Spring 2022.



B: Identification Program in Mexico

- Practical work using the APP (am database)
- 2. Practical work using the pm database
- 3. On-going identification of unknown deceased at scene.

Challenges:

Considering the complexity of the processes and international requirements from the Mexican and German sides, and the DAAD regulations, we face problems with the timeframe of the funding for 2021. The total time for this project was limited to 13 months, which made a step-by-step approach difficult.

Internal processes and DAAD processes would need to be streamlined to meet the final deadlines in 2021.

The overarching problem is the COVID19 restrictions worldwide, which have made it impossible for the team from the German side to travel or even conduct internal university processes in the first four months of the project.

Accordingly, the 2021 appropriation would need to be available for drawdown over the 2021/2022 year-end, so we request that it be carried forward to 2022.



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PHOTOS AND GRAPHICS

1 Example of a captured fingerprint on the mobile fingerprint scanner by DERMALOG | 2 Conceptual application solution for am and pm database (using Visual Paradigm) | 3 German Team in Mexico-City, Mexico | 4 Project Timeline (using Microsoft Power Point) | 5 Citlalli Treviño in Hamburg, Germany, performing minimally invasive biopsies













GENERAL INFORMATION

Name of institution

Rheinischen Friedrich-Wilhelms-Universität Bonn (Department Anthropology of the Americas, University of Bonn).

Short profile of institution/faculty

From the moment the University of Bonn was established as a research university 200 years ago, it has strived to answer the greatest scientific, social, and technological questions. It ranks 4th in Germany and 87th globally (Shanghai Ranking). Some indicators of success include Nobel Prizes, Fields Medals, Leibniz Prizes, as well as third-party funding amounting to around 154 million Euros.

The University of Bonn has six Clusters of Excellence, the largest number in Germany. The Department Anthropology of the Americas focuses on studying the indigenous societies of Latin America across space and time. As an inter-disciplinary subject, it combines methodological approaches from cultural and social anthropology, ethnography, archaeology, biological anthropology, ethnohistory, linguistics and other related disciplines. At present, the University of Bonn is the only academic institution in Germany that has this specialization.

Partnerships with Mexico/Germany

Universidad Nacional Autónoma de Mexico Universidad Autónoma Benito Juarez de Oaxaca Universidad de Guadalajara

THE CHALLENGE

The present project is focused on improving the databases for the unidentified persons and applying cutting-edge methods from Virtual Anthropology (VA) for advancing on the identification of Mexican individuals coming from forensic contexts. For this, we will focus on assessing whether the inner ear, frontal sinuses, and teeth are relevant phenotypes for human identification. Within this research agenda, we plan to create retrospective and prospective databases with imaging and postcranial data, as well as conduct morphological analysis on endocranial and dental features of both identified and unidentified individuals. We will be focusing on the analysis of individuals from Oaxaca, but we will build a large comparative data-set including individuals from other states.

THE APPROACH

This project has six objectives:

- 1) Investigate the unidentified persons from Oaxaca state;
- 2) Set up a project database and repository for the identified and unidentified persons in Mexico City and Oaxaca;
- 3) Train Mexican experts, researchers, and students on Virtual Anthropology techniques;
- 4) Apply Virtual Anthropology techniques to analyze craniofacial phenotypes for human identification;
- 5) Build up a work network on Databases for Unidentified Persons and Virtual Anthropology Techniques for Human Identification;
- 6) Publish and communicate the results of the project to a wide audience.

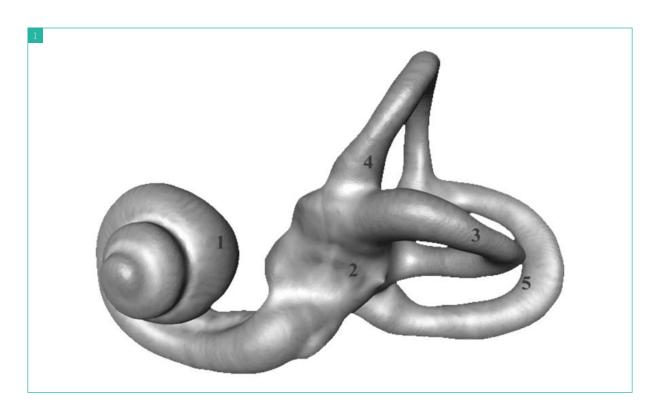
We are a team of experts with diverse backgrounds. Researchers working at the Universities will train students and experts on the use of morphometric techniques. Forensic experts at

Virtual
Anthropology &
databases for
human identification
in Mexican
populations

the Institute of Experts Service Oaxaca will provide a diagnostic of the current databases. Together, we will build up a repository and database, as well as validate the endocranial morphometric techniques for individuals from Mexico.

THE INTENDED IMPACT

- Database improvement in Oaxaca (Activities 1-2).
- Prospective and retrospective compilation of imaging and postmortem data of identified persons from Mexico City and Oaxaca (Activities 3-4).
- Workshops and curricular Biometric Seminar design for master's students from University of Guadalajara (Activities 5-6).
- Phenotypic characterization of individuals from Mexico City and Oaxaca (Activities 7-8);
- Establish an expertise committee on databases for unidentified persons and virtual anthropology techniques for human identification (Activities 9-10);
- Submission of manuscripts and presentations at scientific events (Activities 11-12);
- Talks for relatives of missing persons (Activity 13);
- Development of three bachelor's thesis projects (Activity 14).



RESULTS
ACHIEVED
DURING THE FIRST
6 MONTHS

a) AGREEMENTS: During the first six months of the project, we were able to sign the transfer agreements with UABJO and UNAM. We are still waiting for signing the MoU with University of Guadalajara. We also motivated an agreement between UABJO and the Experts Institute for an office space for this pro-

gram. We signed an agreement with a Hospital from Oaxaca to get access to CT-scans and X-rays for patients, and to use the CT-scanner to scan skulls from the non-identified individuals at the Experts Institute.

- b) TRAINING: We hired six student assistants and one postdoc who are making progress on different aspects of the project. We designed four undergraduate students' thesis's that will be developed in the context of this project. We gave two courses on virtual anthropology to students and forensic experts (Mexico, Oaxaca).
- c) IMAGING REPOSITORY: We collected CT-scans from individuals from Mexico from different hospitals and repositories. We had a meeting with relatives and "colectivos" to start working together on a facial photographic database of disappeared persons.
- d) DATA ANALYSIS: We created a database with non-identified skeletons from the Expert Institute in Oaxaca. We started scanning some skeletal elements from the non-identified persons.
- e) COMMUNICATION OF RESULTS: We had a meeting with relatives and "colectivos" to share our project and protocol. We presented the project at the Foren-

sic Science Meeting held in Mexico. We are currently writing an article for the webpage "Human Identification". We created a webpage for sharing the progress of our project (www.mexhumanid.com).

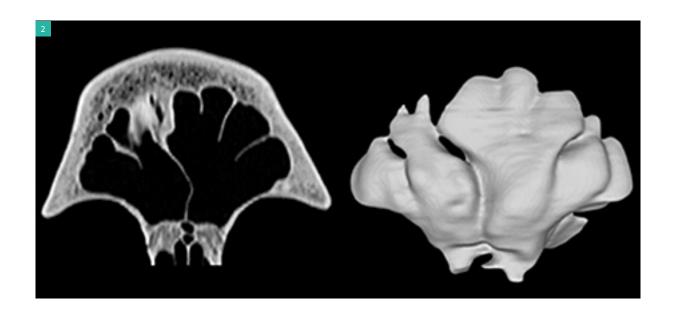
OUTLOOK POSSIBLE FURTHER ACHIEVEMENTS/CHALLENGES UNTIL END OF FUNDING PERIOD

Further achievements to be reached before 30.5.22:

- a) AGREEMENTS: We expect to sign the agreement with University of Guadalajara.
- b) TRAINING: We will continue overseeing the four students' thesis.
- c) IMAGINING REPOSITORY: We will create a database with photographs, to start the superimposition looking for matches between photographs and CT-scans of non-identified skeletons. We will continue surface-scanning postcranial skeletal elements of non-identified skeletons. We will CT-scan the skulls and pelvis from non-identified skeletons at Expert Services Institute.
- d) DATA ANALYSIS: The postdoc will start the superimposition looking for matches between photographs and CT-scans of non-identified skeletons, in addition to calculating differences in landmarking photographs and CT-scans. Students will start studying frontal sinus and bony labyrinth variation in Mexican populations.
- e) COMMUNICATION OF RESULTS: We will publish papers showing the results and progress of our data analysis. We will organize a workshop with relatives of missing people and "colectivos" sharing our results.

Main challenges of the project:

- a) AGREEMENTS: It took a long time signing the agreements, and so a lot of time (and maybe resources) were wasted.
- b) TRAINING: Usually is a long-term process, we are not sure this can be accomplished in a year. It should be continuous and systematic to achieve good results.
- c) IMAGING REPOSITORY: Anonymization, permits, property.
- d) DATA ANALYSIS: Need for new software for specific analysis.
- e) COMMUNICATION: N/A.
- f) OTHERS: 1) There is a lack of communication among the project leaders (or assistants) that could interfere in the development of the individual projects. If several projects have the same partners, and work with the same bodies/skeletons, how could we work without interfering with each other's agenda/research design? This aspect was not covered in previous meetings; 2) It is not easy handling the budget for the Experts Service Institute in Oaxaca through the UABJO. UABJO will buy equipment for Experts Service Institute, but it will be property of UABJO.



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PHOTOS AND GRAPHICS

- 1 Model reconstruction of the human bony labyrinth from CT-scans. References: 1 (Cochlea), 2 (Vestibule), 3 (External ductus),
- 4 (Superior ductus ampulla), 5 (Posterior ductus). Credit: José Braga Wikimedia Commons (modified by Lumila Menéndez) |
- 2 Frontal sinuses used for personal identification. The structural complexity of the phenotype can be seen on the radiograph (left) and on a CT scan (right) Credit: Quinto-Sanchez Mirsha-UNAM









GENERAL INFORMATION

Name of institution

- IInstitute of Legal Medicine, University Hospital Frankfurt, Goethe University (GU), Frankfurt am Main, Germany
- Departamento de Morfología, Centro Universitario de Ciencias de la Salud, Universidad de Guadalajara (UdG)
- Departamento de Biologia, Universidad Autónoma Benito Juárez de Oaxaca (UABJO), Oaxaca de Juárez, Oaxaca
- Instituto Jalisciense de Ciencias Forenses "Dr. Jesús Mario Rivas Souza" (IJCF)

Short profile of institution/faculty

The Institute of Legal Medicine in Frankfurt am Main and its departments of forensic medicine, toxicology, biology (including entomology and DNA-Analyses), molecular pathology and medical law, provide medico-legal services for the metropolitan region of Frankfurt and the south of Hesse. The institute offers education and training to students of the Goethe University Frankfurt, the Technical University Darmstadt, and the Hessian Police Academy, as well as for members of the Hessian State Criminal Police Office (HLKA), the Federal Criminal Police Office (BKA) and various public prosecutors' offices. The everyday routine work includes external post mortems, autopsies, examinations of victims of violence and living persons for age determination, and expert opinions for public prosecutors and courts.

The University of Guadalajara is the second largest tertiary institution in Mexico. It is made up of 16 university and secondary education centres. The University Centre of Health Sciences (CUCS) has three divisions: Basic, Clinical and Health Promotion, which groups 19 departments that support ten undergraduate educational programmes, 67 medical specialties, six in dentistry, ten for nursing, 17 masters and 10 doctorates. The Morphology department has an amphitheatre, a museum of morphological sciences, a tissue and developmental biology laboratory, and uses virtual reality and the Anatomage table for teaching. The CUCS also works in collaboration with a teaching hospital, the Civil Hospital of Guadalajara, as well as other hospital institutions and the IJCF.

The Autonomous University Benito Juárez de Oaxaca is recognized as the main institution of higher education in Oaxaca, the state with the greatest biological, ethnic and linguistic diversity. The university is constantly modernizing, updating its programs with the national reality, in order to provide the best preparation to the students of these postgraduate programs. UABJO is joining efforts with national and foreign institutions, which contribute to the training with frontier methodologies that allow their graduates to provide citizens with a highly efficient service in the forensic area.

The Jalisco Institute of Forensic Sciences "Dr. Jesús Mario Rivas Souza" is a decentralized public body of the Executive Branch of the Government of the State of Jalisco with its own patrimony and legal personality. Its main mission is to recover, process and aggregate expert elements, which are certified by their forensic laboratories to provide information that reinforces the resolution and application of justice in the State of Jalisco.

Partnerships with Mexico/Germany

Universidad de Guadalajara (UdG), Guadalajara, Jalisco Universidad Autónoma Benito Juárez de Oaxaca (UABJO), Oaxaca de Juárez, Oaxaca Instituto Jalisciense de Ciencias Forenses Dr. Jesús Mario Rivas Souza (IJCF), Guadalajara, Jalisco

THE CHALLENGE

The focus of the project lies in the joint creation of a pragmatic approach to facilitate and hasten the identification process of unknown bodies, and to raise the chances for unknown decedents to be identified.

Due to the high number of unidentified bodies and the tremendous consequences for the affected families and civil society, it is necessary to find solutions that make the bereavement of the families less traumatic and painful. This requires scientific assessment of the current situation, open communication and transparent action.

The importance of documenting and linking AMand PM-data

As a prerequisite, awareness for the importance of documenting and linking AM data of missing persons and PM data of unknown decedents needs to be strengthened: in education, training, research, procedure, and in all institutions involved in the identification process.



THE APPROACH

The project involves training of professionals and student education, as well as routine work, especially in hospitals and medico-legal services. Due to a collaboration in the past between the German project partners and the IJCF, the challenges in the identification process are well known. Local needs and particularities will be taken into account, to achieve, within the given limits of what is possible for the project, the best benefits for the respective partners. Necessary IT support was announced in close coordination with GIZ Mexico.

The UdG, which is developing the program "Specialization in Legal Medicine" and cooperating with the IJCF, will support the training of future forensic specialists. An exchange with the IJCF will be promoted.

In the Hospital Civil, a teaching hospital of the UdG, a study will be carried out to gain knowledge about the potential use of external features, especially tattoos, of patients and volunteers to allow identification, when needed.

Together with UABJO, the taking of AM- and PM-data in the state of Oaxaca will be analyzed and worked on. The multicultural society and the multitude of languages will necessitate coordination efforts to realize a standardized data-acquisition.

THE INTENDED IMPACT

Contributions to the development of new teaching modules at the UdG will lead to more awareness and knowledge among the students concerning the identification of unknown bodies. Training of forensic doctors in medicolegal services will lead to an improvement in documentation of AM- and PM-data.

A scientific study at the Hospital Civil, teaching hospital of UdG, will help to obtain data from patients and volunteers on specific physical characteristics (especially tattoos) and to show how such data can be used in the identification process in the future. A further structuring of the AM and PM data at the IJCF will lead to an increase of in-house-identifications. Any improvement in the identification process will lead to a better relationship between the IJCF and the society which is the basis for rebuilding trust in medicolegal services.

In Oaxaca, the standardized acquisition of AM and PM data will be a solid basis for their needs in the identification process. The structured data should be potentially matchable with other states or databases. In order to make the project effective and economic, the work is carried out in coordination with the project of the University of Hamburg.

RESULTS ACHIEVED DURING THE FIRST 6 MONTHS

Representatives of all project partners participated virtually in the annual meeting of the German Society of Legal Medicine (DGRM) in Munich in September 2021, and in presence at the "Simposio Internacional de Identificación Humana" in Mexico City in October 2021.

For some months now the UdG has been supported in the development of the curriculum of the postgraduate programme for doctors - the "Specialisation in Forensic Medicine" programme. At the annual meeting of the German Society of Legal Medicine, the UdG presented the curriculum of its programme. In the meantime, the study programme has been approved by the Council of the University Centre of Health Sciences at the session on 25 November and will subsequently be decided by the General University Council in the near future. Given the importance of this programme in the training of future forensic



specialists, work has been carried out in cooperation with the IJCF. A new agreement is currently planned to be signed between the UdG and the IJCF to work together in the education and training of future forensic experts.

The study of the documentation of physical features, especially tattoos, in patients and volunteers at the Hospital Civil of Guadalajara has been planned and approved by the Ethics Committee of the Civil Hospital of Guadalajara. The research team is currently about to start the work at the hospital by taking photographs, filling out identification forms and conducting interviews for the physical, demographic and socio-cultural characterization of the volunteer participants. For members of the research group of the UdG and the Hospital Civil, a workshop about forensic photography has been designed and carried out, including practical bedside exercises and a handbook.

At the IJCF, the PM data of unidentified bodies has been analyzed in order to structure available data for further identifications. The harmonization of data and the implementation of supplementary modules in the institute's own software is in progress.

A designated research department of the UABJO could be established in the Servicios Periciales in Oaxaca and cooperation agreements between the institutions were signed. Drafts for two research projects to analyze the identification of unknown deceased persons in Oaxaca were designed and started.

Together with colleagues from UdG, HC and IJCF, a manuscript on how to document tattoos as a means of identification has been written. It is intended to be handed in for publication in a scientific journal.

In 2022, a working stay of Mexican project partners in Germany is planned in coordination with other CoCiMex projects (Bonn and Münster).

OUTLOOK
POSSIBLE
FURTHER
ACHIEVEMENTS/
CHALLENGES UNTIL
END OF FUNDING
PERIOD

Together with UdG, work will continue in the implementation of the curriculum, as well as the integration of academic staff as guest lecturers and the exchange of resident doctors between the University of Frankfurt and University of Guadalajara. The study at the Hospital Civil will be conducted, and the results are intended to be published and used for identification purposes as well as for future projects and discussions. IT support is arranged by GIZ. The joint venture with the Hospital Civil of Guadalajara shall be continued.

In the IJCF, further structuring and evaluation of the existing data will be carried out to the extent possible in order to exploit the identification potential. Depending on the implementation of the planned acquisitions, networking with other CoCiMex project partners, including the field of virtual anthropology, is planned.

The possibility of DNA examinations of samples of unknown deceased persons or relatives of missing persons by the Institute of Legal Medicine in Frankfurt is still to be decided from the legal side.

At the UABJO, together with the Servicios Periciales of the State of Oaxaca, a study will be developed for the first time for the documentation and classification of tattoos as a means of identification in unidentified bodies, as well as a study concerning the identification process in Oaxaca. The development of scientific manuscripts is planned. Therefore, the first research laboratory within the Servicios Periciales, called "Forensic Research Center (CinFor)", in agreement with the UABJO, will start operating. The main objective is to develop future research within the center. IT support is to be arranged by GIZ.



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PHOTOS AND GRAPHICS

1 Expert Services in Oaxaca, housing the Forensic Medical Services (SeMeFo) | 2 Mural in Guadalajara | 3 Photo workshop at the Hospital Civil, together with the UdG



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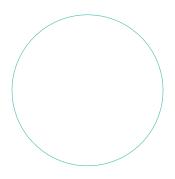
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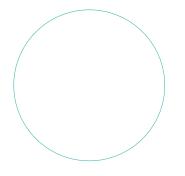
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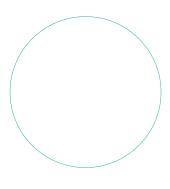


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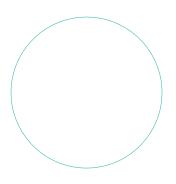
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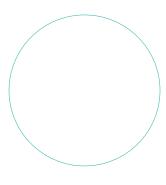
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