Date: September 5, 2024
Meeting Title: Discussion with Grégory Resch on Phage Therapy and Machine Learning Approaches
Attendees: Grégory Resch and Abdullah

- **Introduction:** Grégory introduced himself as the head of a lab focused on producing phages, especially for lung-related infections. His team has treated three patients and is working on a fourth. This project started in February of this year.
- **Research Paper:** Grégory discussed a research paper titled Computational Prediction of Interspecies Relationship through Omic Data Analysis and Machine Learning. The project had 1.5 million Swiss francs in funding, with a team of four, including a physician and a machine learning engineer.
- **Model Validation:** They developed a yes/no model for phage-bacteria matching, using genomic data to predict the effectiveness of phages against bacterial strains.
- **Lab Methods:** His lab is currently using a method called the "drop test assay" for testing bacteriophages.
- **Recommendation to Contact Carlos:** Grégory recommended contacting Carlos Pena, who handled the machine learning and bioinformatics aspects of their research. Carlos is the head of a high school (HEIG), and Grégory suggested reaching out to him for insights on machine learning and phage therapy, with Grégory CC'd in the email, carlos.pena@heig-vd.ch.
- **Phage Therapy Guidance:** Grégory advised you to consult Carlos for more guidance on machine learning and data analysis related to phage therapy.
- **Network in Charité Hospital:** Grégory mentioned he has a network in Charité Hospital in Berlin, where they also work on phage therapy.
- **PhD Offer:** Grégory expressed interest in you potentially doing a PhD in Carlos lab, as Carlos needs people with your interests and skills.