

Project Workflow & Personnel



01 PROJECT IDEA

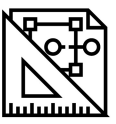
Will, comes up with a project to address IBD and brings together a team including a co-investigator, clinical research coordinator, patient nurse, postdoc and lab technician.

Principal Investigator - Will DePaolo

A Principal Investigator is the primary individual responsible for the preparation, conduct, and administration of a research grant, cooperative agreement, training or public service project, contract, or other sponsored project in compliance with applicable laws and regulations and institutional policy governing the conduct of sponsored research.

Co-Investigator - Scott Lee

Co-Is are key personnel who have responsibilities similar to that of a PI on research projects. While the PI has ultimate responsibility for the conduct of a research project, the Co-PI/Co-I is also obligated to ensure the project is conducted in compliance with applicable laws and regulations and institutional policy governing the conduct of sponsored research.



02 PROJECT DESIGN & DEVELOPMENT

With the help of a postdoc, Will develops and designs a project determining what type of patients will be needed, what samples to collect, what experiments to run and which experts may need to be consulted. Will continually evaluates and adjust the project direction and scope as needed.

03



PATIENT RECRUITMENT & SAMPLE COLLECTION

Patient recruitment and sample collection begins under the management Kindra Clark-Snustad, Clinical Research Manager. To assist Kindra on a daily basis with patients are both a Clinical Research Coordinator and Research Nurse. Samples are provided to lab staff.

Clinical Research Manger

Direct the activities of workers engaged in clinical research projects to ensure compliance with protocols and overall clinical objectives

Clinical Research Coordinator

Recruit patients, sample / data collection, write IRBs (Institutional Review Board), maintain sample Databases

Research Nurse

Monitor and document each patient's progress

CMiST Laboratory

The lab is tasked with performing experiments, creating and maintaining sample tracking and storage in the biorepository, and assisting the PI in developing experiments.

04



SAMPLE IDENTIFICATION & SELECTION

The lab conducts the first step and crucial step for all CMiST projects - identification and selection of bacteria from each sample.

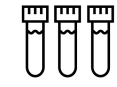
Postdoctoral Fellow

Oversee and manage the research technician and the equipment used in this project (MALDI-TOF, anaerobic chamber). Any questions or issues that arise will be addressed by the Postdoctoral Fellow and he/she will also train the artist and the Research Technician.

Research Technician

The research technician will process and plate biopsy samples, perform tissue culture, identify colonies using MALDI-TOF, assist with in vitro assays in and expand and propagate cell lines.

05



EXPERIMENTS & DATA COLLECTION

After the lab has identified and selected the bacteria relevant to the project, they can design and execute experiments that will meet the stated objectives of the project.

CMiST Lab Staff

Oversee and manage the research technician and the equipment used in this project (MALDI-TOF, anaerobic chamber). Any questions or issues that arise will be addressed by the Postdoctoral Fellow and he/she will also train the artist and the Research Technician.

Bioinformatics Expert (currently outsourced)

Bioinformatics is an interdisciplinary field of science combining several areas of expertise to develop computational methods for analyzing and interpreting biological data. Microbiome research has reached a point where bioinformatics has become a critical component to all studies. Currently, we outsource this expertise but, are hopeful to hire a bioinformatics specialist to on only reduce lag time between data analysis and discovery but, also capitalize on the huge amounts of data that are generated with these projects.

06



DATA ANALYSIS

Analyzing the data is perhaps the most exciting part of any research project as this is when we get a glimpse of how things might work.

Biostatistician

A biostatistician is needed to help analyze and interpret the data and possible help to define and determine the next steps. This role may also monitor how the project is conducted to ensure that the integrity of the results will not be compromised.

Bioinformatics Expert (currently outsourced)

The bioinformatics person will also be critical at this stage to provide further support to the team by analyzing and interpreting the data and helping to further refine experiments as needed.

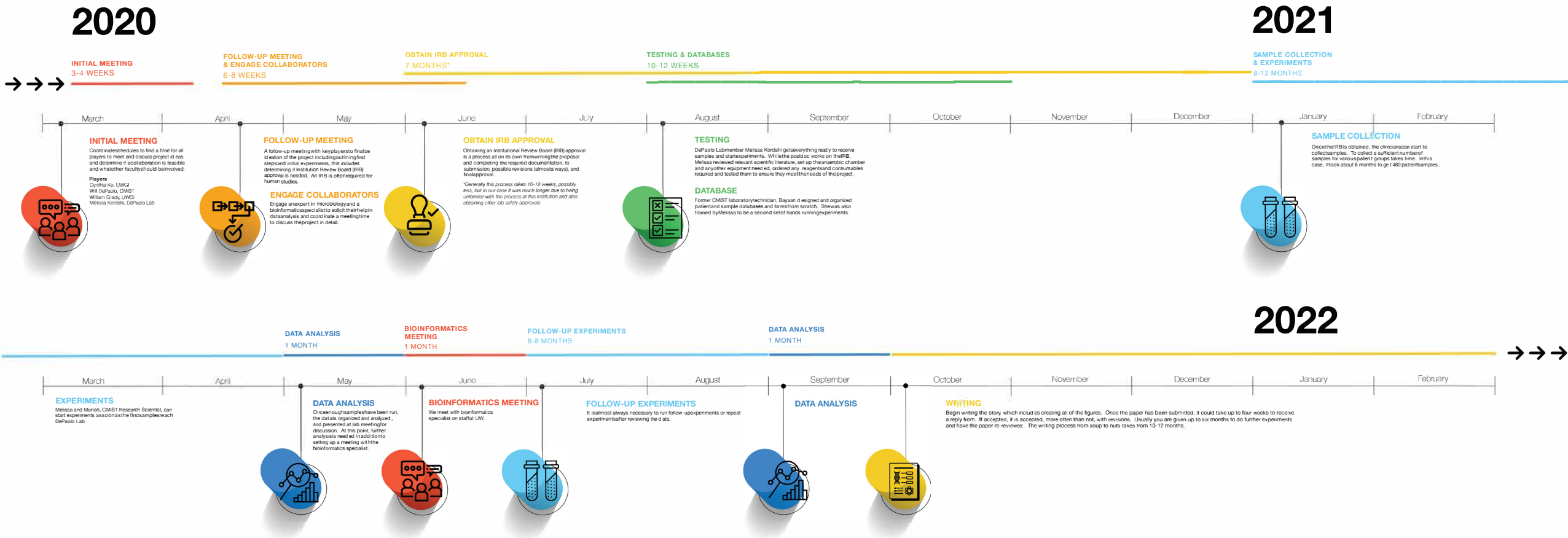
07



REVIEW & REFINE

The research team will review the data analysis provided and refine future experiments and refine or redefine the objectives of the project based on the data analysis.

Research Life Cycle



Timeline
 Year 1 – Ideation to Experiments
 Year 2 - Experiments to Writing
 Year 3 - Writing to Publication
 Year 4 - Further Funding & Research

And so it goes on. The research life cycle continues in the same fashion but, with new information, insights and discoveries.