How to Set Up a Research Project

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Among the numerous factors that will be decisive for the success of a research project, wise and foresighted strategic planning well before the start of the actual work is one of the few that can largely be controlled by the responsible individuals. Conversely, in case substantial time and resources ultimately result in less than expected, and we all sometimes face this experience, it feels much less intimidating when the causes were just not foreseeable. Which risk factors can be anticipated and strategically included in a dependable planning of a research project? During the workshop, the following criteria will be touched in a discussion-oriented atmosphere:

- o Motive: Just need a publication, or plan a PhD or career for your lifetime?
- o Conceptual design of the goals: Hypothesis driven vs. descriptive / landscaping project design and goal-oriented planning vs. dynamic project management
- o Epistemology: from "just a thought" over idea, hypothesis, theory and accepted truth
- o Time frame
- o What-If-Scenarios: Think of "Plan B"
- o Resilience is part of the plan
- o Financing: Solid planning, potential funding sources, successful grant application writing
- o Strong background lab / environment / where to go? To the best!
- o With whom should we collaborate? Competition?
- o Which role do (economical) conflicts of interest play?
- o Patent issues
- o Statistics / how much statistical power can you afford: include a statistician *before* you start
- o Where to publish / common requirements in terms of width, depth and scope
- o Ethics in animal experiments and patient data / written patient owner consent to use patient data etc.

Literature:

1. Aldridge J (2012): The Research Funding Toolkit: How to Plan and Write Successful Grant Applications. SAGE, ISBN-10: 0857029681
2. Wingate LM (2014): Project Management for Research and Development. Auerbach, ISBN-10: 1466596295
3. https://en.wikipedia.org/wiki/Epistemology