



# MASTER RESEARCH PROJECT PROPOSAL

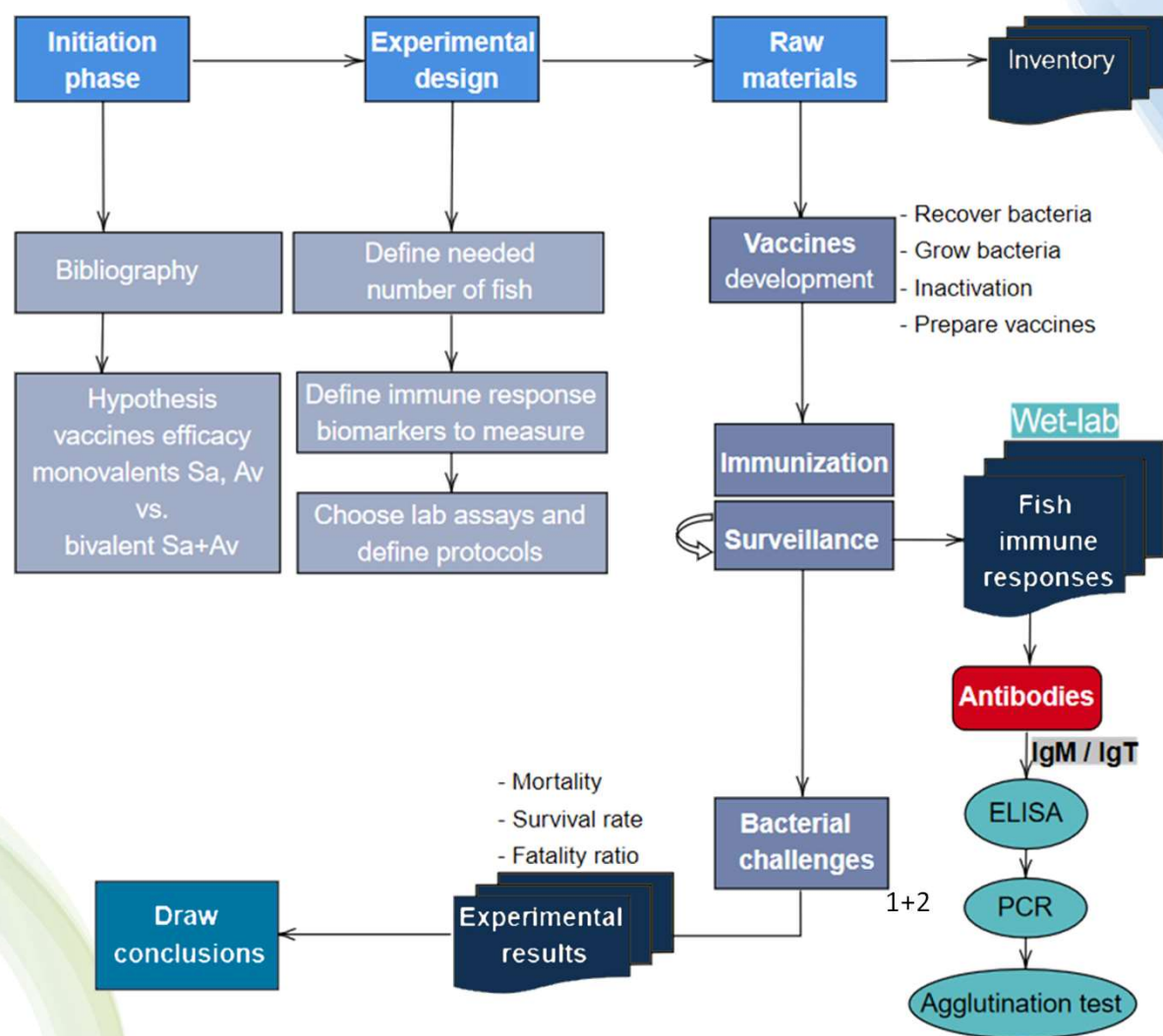
Systemic and mucosal immune responses of Nile tilapia to monovalent and bivalent vaccines against bacteria *Streptococcus agalactiae* and *Aeromonas veronii*.

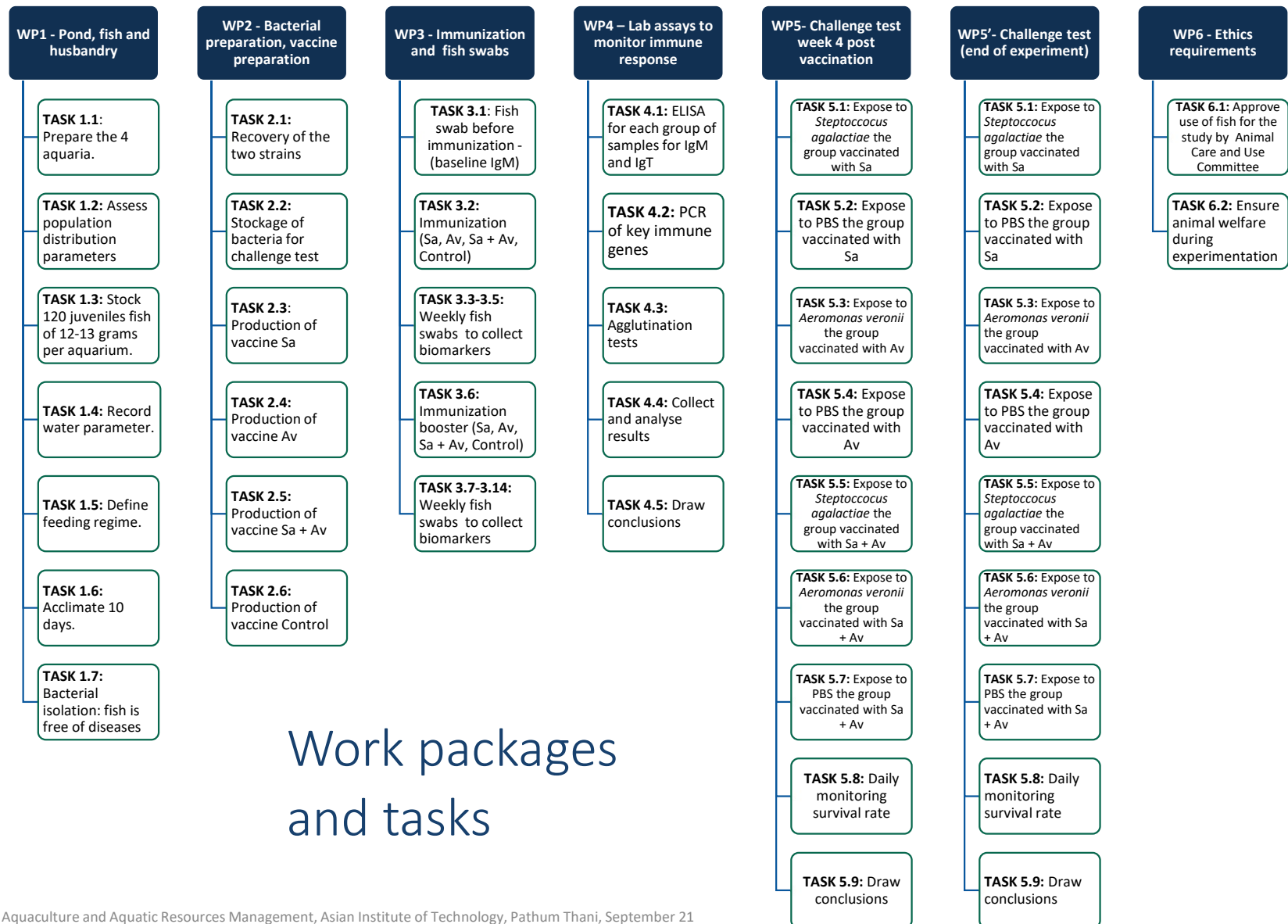


Quentin ANDRES

MSc. Aquaculture and Aquatic Resources Management @Asian Institute of Technology, Pathum Thani, Thailand  
September 2021

# Conceptual framework

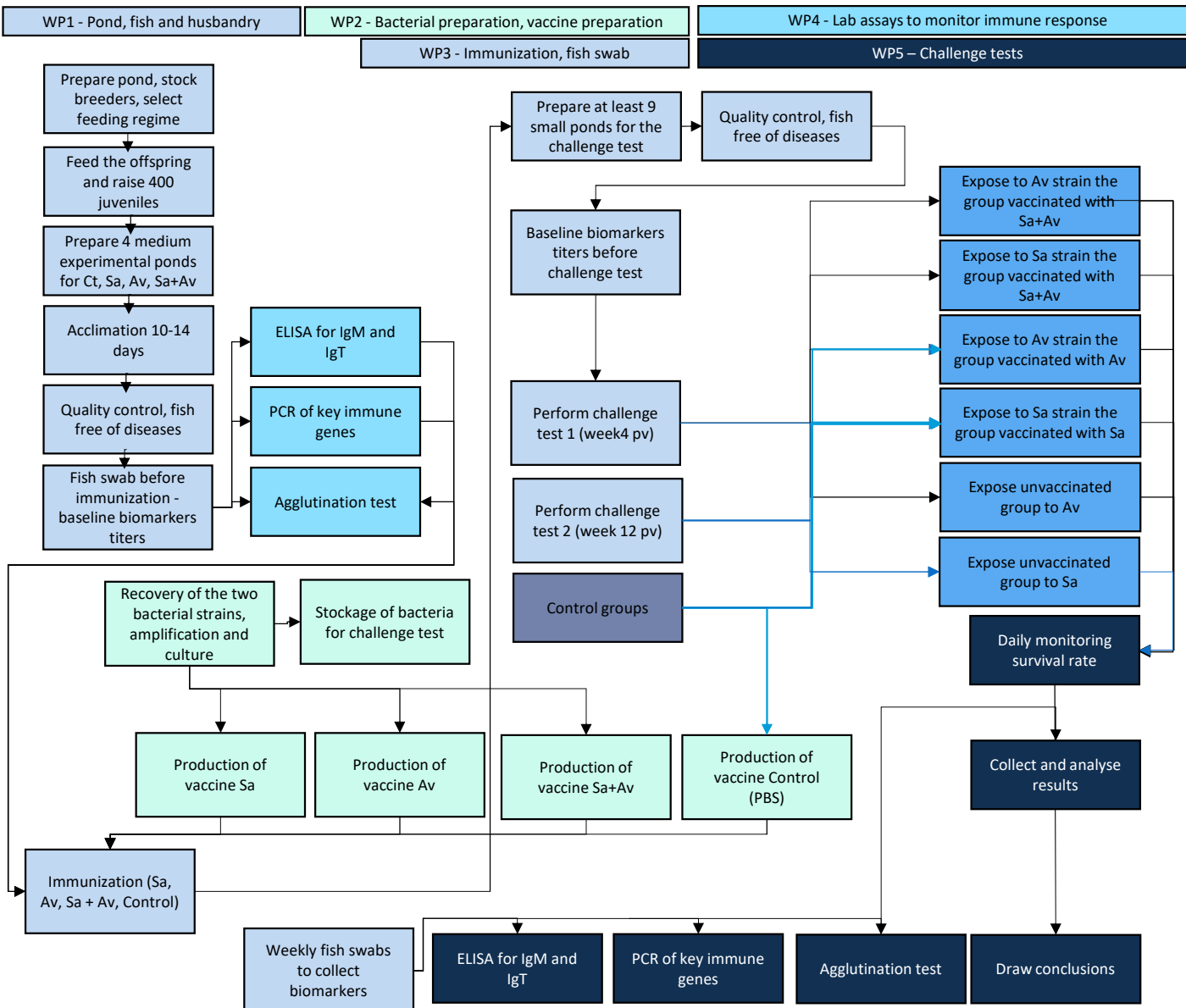


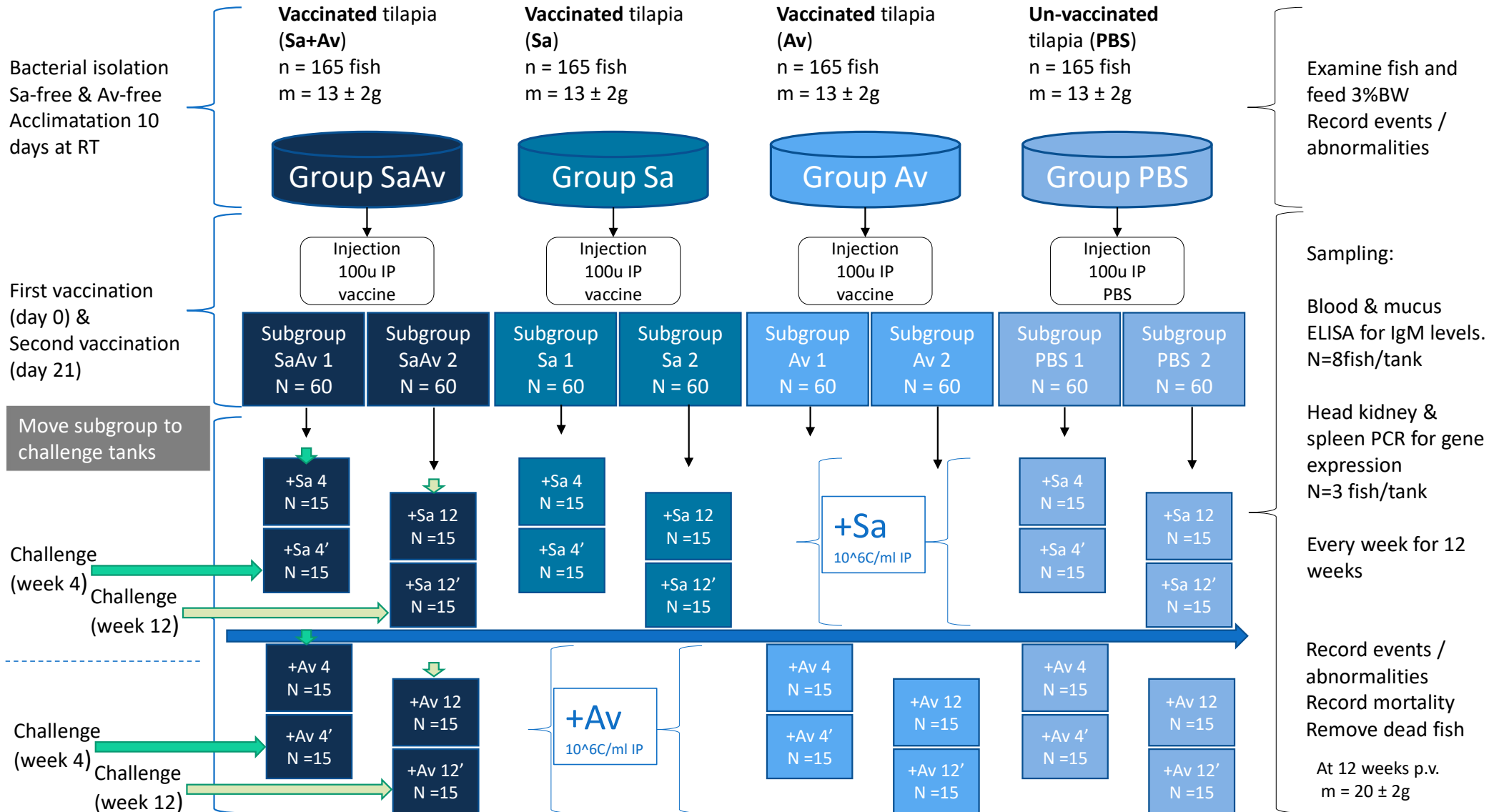


## Work packages and tasks

# Workflow and work packages

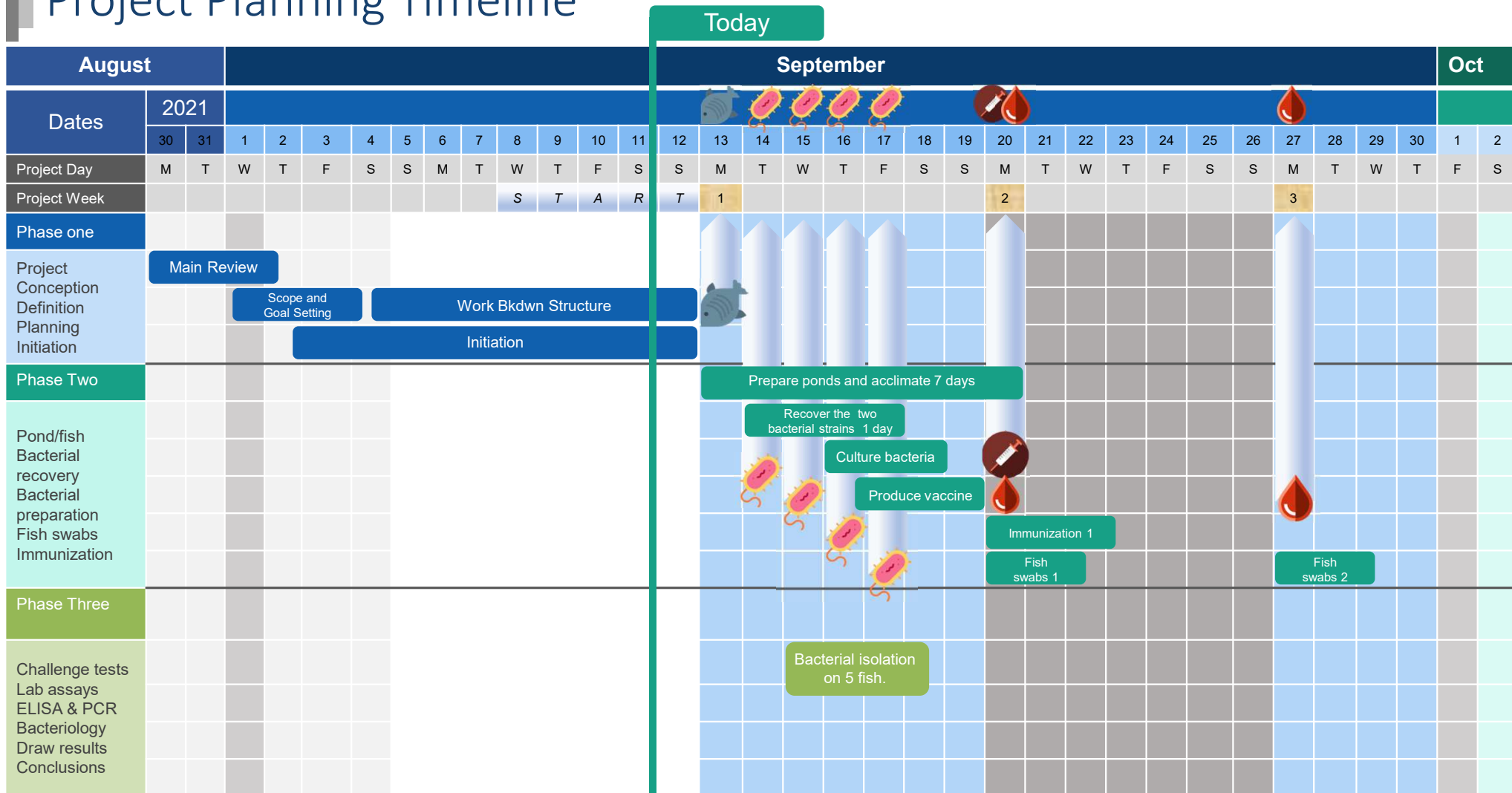
Experimental design ->





# Project Planning Timeline

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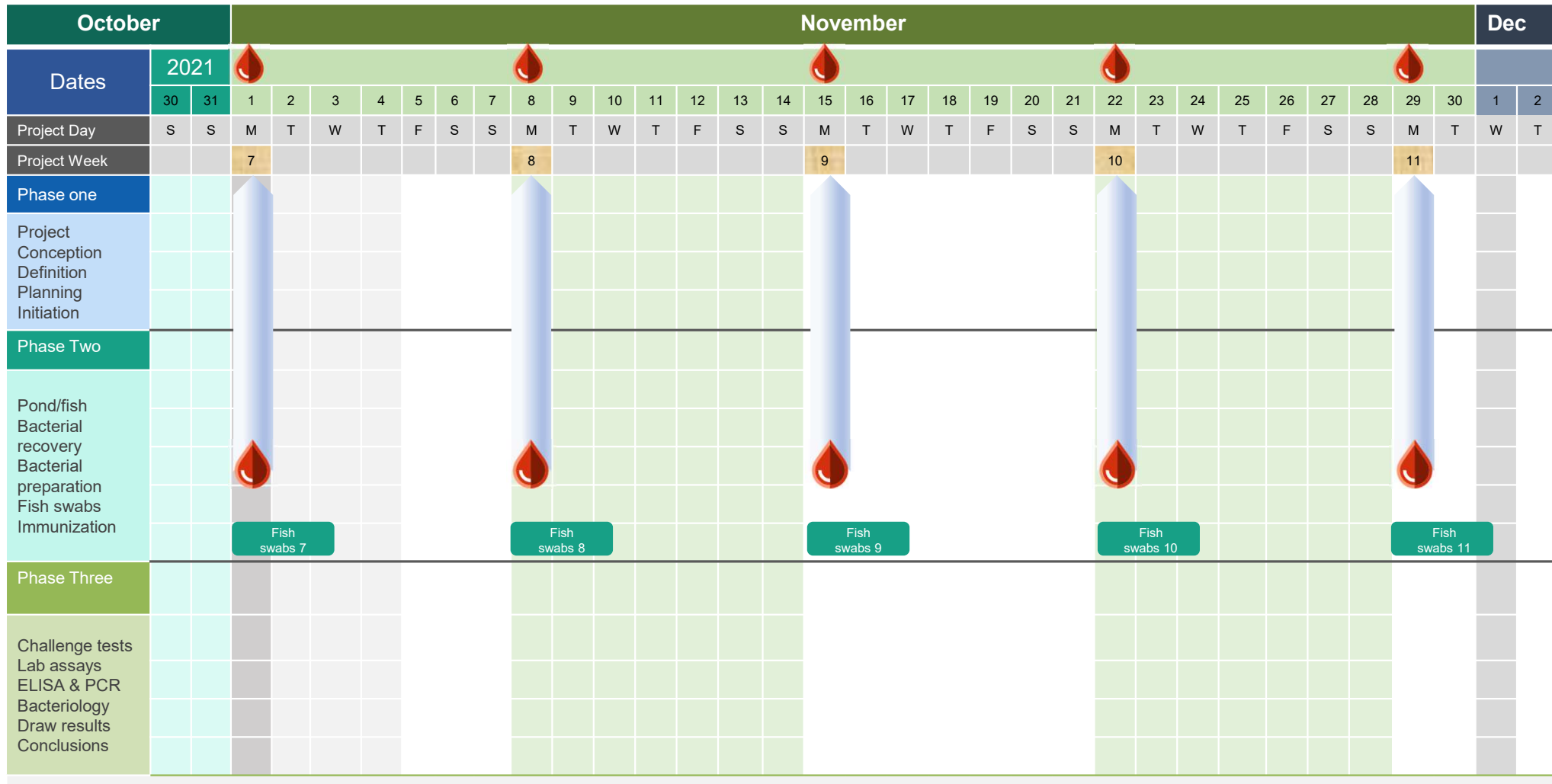


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September			October																												Nov			
Dates	2021																																	
	29	30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1
Project Day	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M
Project Week						3							4							5							6							7
Phase one																																		
Project Conception																																		
Definition																																		
Planning																																		
Initiation																																		
Phase Two																																		
Pond/fish Bacterial recovery																																		
Bacterial preparation																																		
Fish swabs																																		
Immunization																																		
Phase Three																																		
Challenge tests																																		
Lab assays																																		
ELISA & PCR																																		
Bacteriology																																		
Draw results																																		
Conclusions																																		

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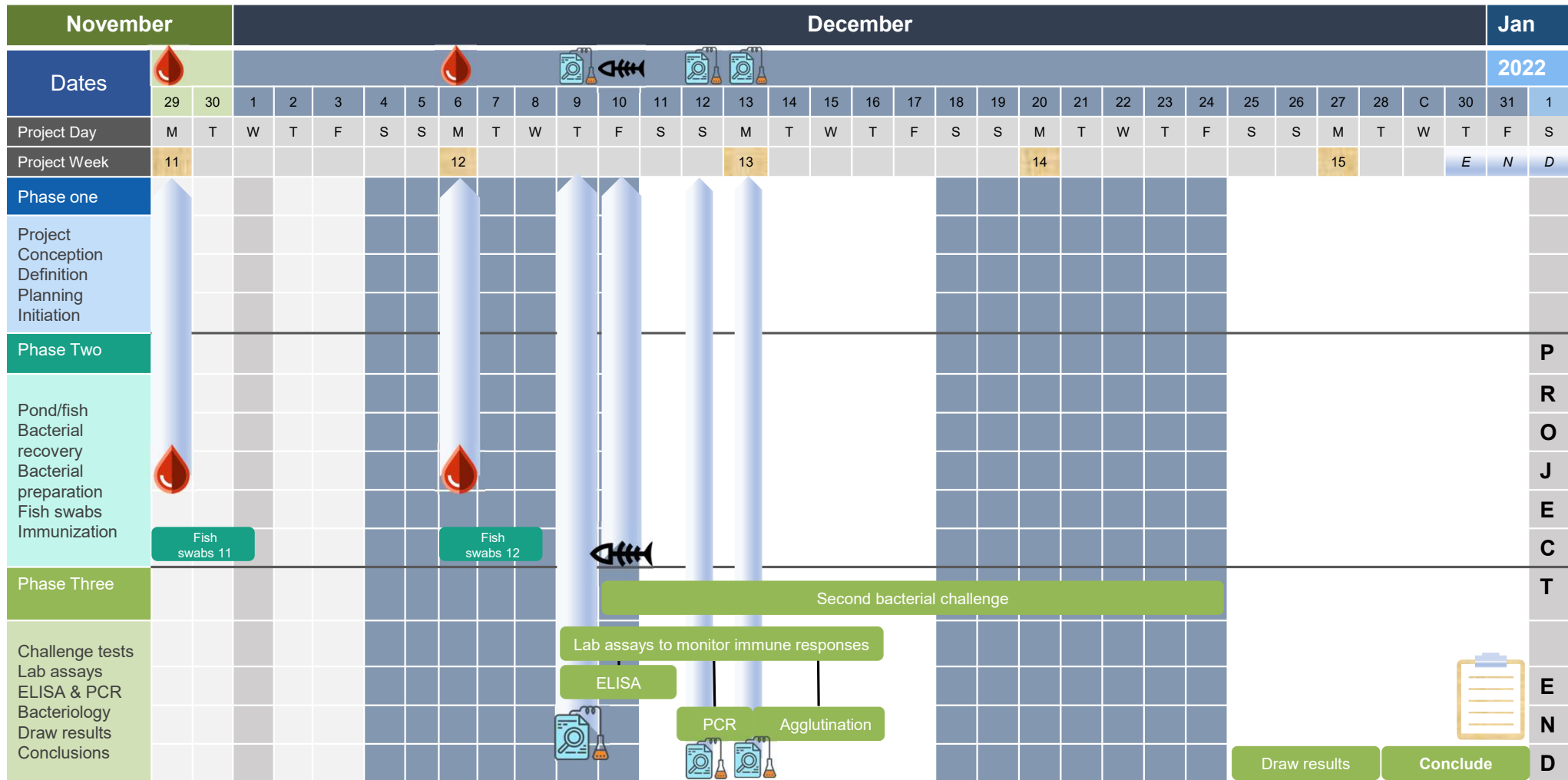
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Thank you !