Team Name	Project title	Wiki	Description	Problem	Solution
Queens-Canada	Velcrion	https://2020.igem.org/Team:Queens_Canada	Biosensor for monitoring in vivio levels of phosphate, potassium, parathyroid hormone, FGF23 and glucose	Lack of real-time and fast detection of phosphate levels	Complex of biomarker binding proteins and fluorophore pairs (for FRET)
Nantes	The A3 project	https://2020.igem.org/Team:Nantes	Sulfuric acid production from degraded algae	Green algae overgrowth on water: green tides produce H2S which causing toxic effects resulted several deaths of dogs, horses, humans	Enzyme cocktail for algae cell wall degradation, sulfate reduction into H2S and chemical conversion of the latter into sulfuric acid
NEFU-China	BOLD	https://2020.igem.org/Team:NEFU_China	Landmine detection biosensor	Detection of landmines left after wars have weaknesses and limitations, including substantial cost, high misdetection rates, susceptible to electromagnetic interference, etc.	Engineered bacteria inside the device can sense DNT (dinitrotolene) and its metabolite THT, and then produce optical signal
Moscow	HaploSense	https://2020.igem.org/Team:Moscow	Hepatit C virus genotype detection	Expensive testing or the impossibility to perform tests in peripheral regions. Clinical importance of genotype differentiation, often wrong genotype determination	CasX-based portable detection system
EPFL	Espress'EAU	https://2020.igem.org/Team:EPFL	Pesticides detection in drinkable water using yeasts	Detemination of trace amount of pesticides is usually performed in analytical laboratories, thus villagers cannot fastly on-site assess quality of water	Low-cost, easy-to-use on site yeast based biosensor