Phase 1 Tasks	Q1	Q2	Q3	Q4	Q5	Q6
1.1 Modeling and simulation of biomimetic sensor						
1.2 Microfabrication process design						
1.3 PCB-based circuit design						
1.4 Testing and analysis of proof-of-concept prototype						

Phase 1 Milestones:
End of Q5 – complete modeling and design of biomimetic sensor; complete microfabrication plan and sensor prototype; complete PCB circuit.
End of Q6 – demonstrate the proof-concept prototype meeting Phase 1 requirements.

Phase 2 Tasks	Q1	Q2	Q3	Q4
2.1 Modeling and simulation of sensor banks with improved performance				
2.2 Microfabrication of revised sensor head				
2.3 Circuit design and integration				
2.4 Testing and analysis of integrated sensor				

Phase 2 Milestones:
End of Q3 – complete simulation and design of sensor banks with improved performance; complete microfabrication of revised sensor head; complete sensor amplification IC.
End of Q4 – demonstrate the integrated sensor meeting Phase 2 requirements.

Phase 3 Tasks	Q1	Q2	Q3	Q4
3.1 Modeling and simulation of revised and optimized micro sensor				
3.2 Microfabrication of final sensor design				
3.3 Complete integrated circuit design				
3.4 Testing and analysis of complete gradiometer				

Phase 3 Milestones:
End of Q3 – complete simulation and design of final optimized micro sensor; complete design and fabrication of sensor amplification IC with ADC; complete fabrication and integration of final sensor with IC.
End of Q4 – demonstrate the final gradiometer meeting Phase 3 requirements.