Capstone II Final Demo Schedule

	Tuesday 4/16/2024		
Time	Team	Place	Advisors
3:00pm	8	Fenster 625	Falvo/Samy

	Thursday Class 4/18/2024		
Time	Team	Place	Advisors
2:30pm	1	Fenster 625	Crombie
3:00	4	Fenster 625	Son
3:30	13	Fenster 625	Son
4:00	6	Fenster 625	Kayaalp/Collins
4:30	12	Fenster 625	Androwis
5:00	3	GITC	Pfister/Hanna

	Friday Classs 4/26/2024		
Time	Team		Advisor
1:00pm	10	Venture Link	Crombie
1:30	5	Venture Link	Kallioniemi
2:00	7	Chen	Grasman
2:30	11	Chen	Grasman
3:00	2	GITC	Pfister
3:30	9	Fenster	Androwis

Capstone II Demo Guidelines

Prepare an agenda (see attached) for the demo showing what will be presented and by whom.

a. The demo should illustrate the basic functionality of the product and can be based on test case(s) from your test plan.

b. The demo should be less than 20 min.

THE NANOFIBER COLLECTOR
Demonstration Agenda

Presented by
Gutenberg Ahimon, Jiogy Grundy, Khadidiatou Guiro, Anna Lai, Duc Tran

Guideline to the Nanofiber Collector in Electrospinning

I Introduction (Gutenberg)
- i) Brief description of The Nanofiber Collector.

II Solution Preparation (Anna)
- i) Selection of polymers.
- ii) Creating a polymer solution.

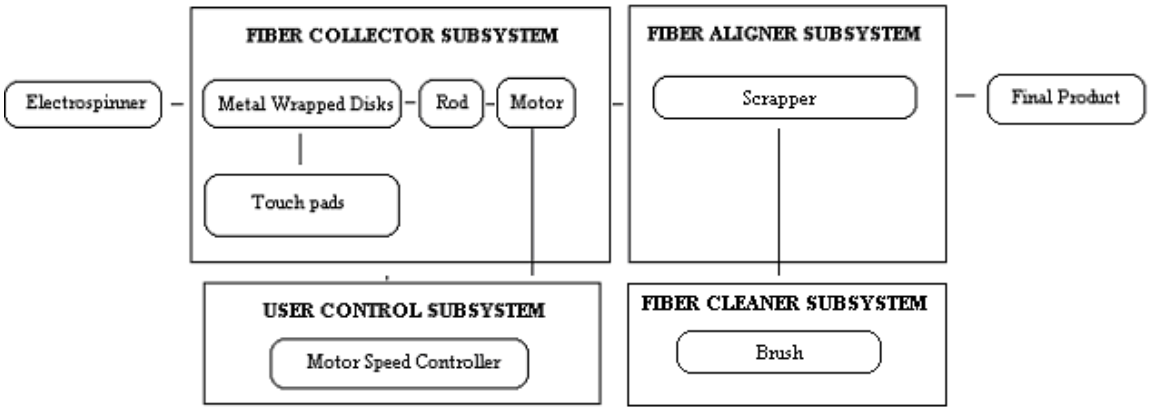
III Syringe Pump Interface/Motor speed controller (Khady)
- i) Functions available.
- ii) Setting pump rate.
- iii) Setting motor speed.

IV Assembly/Connecting The Nanofiber Collector (Duc)
- i) Illustrate proper assembly.
- ii) Illustrate proper connections.

V High Level Requirements/Electrospinning process (Jiogy)
- i) Description of HLRs met.
- ii) Description of the electrospinning process while spinning.

VI Testing/Improvements (Khady)
- i) Description of tests/results.
- ii) Aspects that need improvements.

System Architecture of The Nanofiber Collector



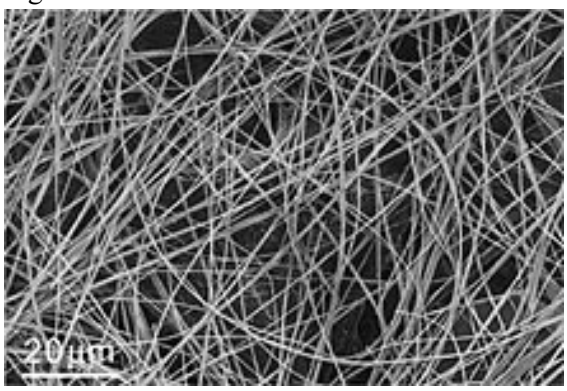
Initial Test Results Illustration

Figures A and B show Scanning Electron Microscopy images of electrospun fibers.

Figure A shows that the fiber alignment of a typical scaffold is in every direction. No regular pattern exists.

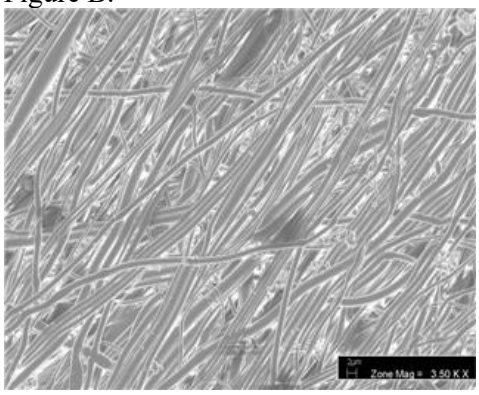
Figure B shows our first test results. The fibers here show a much greater alignment from lower left to upper right than the typical scaffold in Figure A.

Figure A.



SEM Image of Meshed Nanofibers

Figure B.



SEM Image of our 1st Test Results