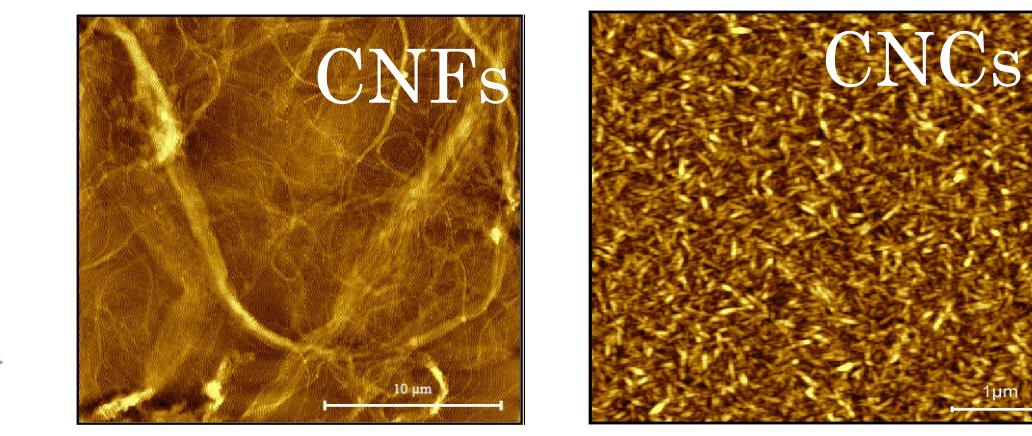


Bio Nano Materials for Advance Health Applications

Diego Gomez-Maldonado

Background

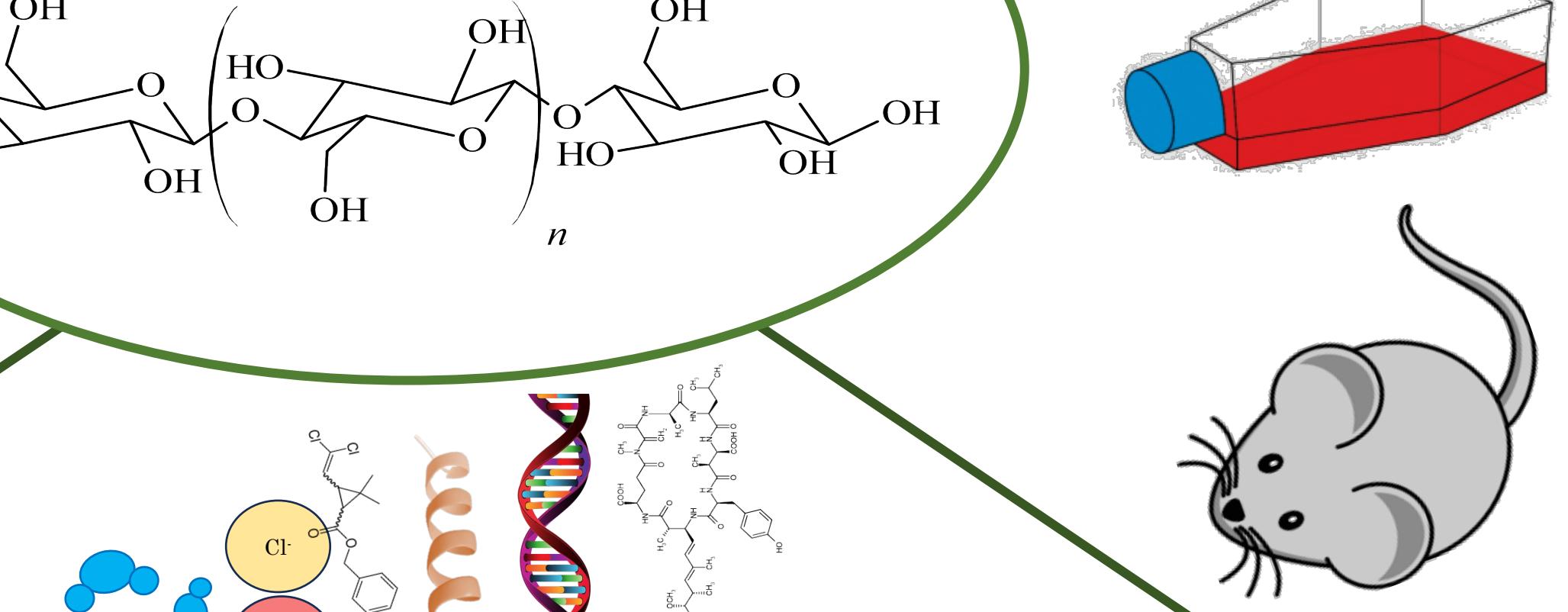
Nanoparticle Assembly and Isolation



Supramolecular Material Formation



(Bio)polymer chemistry

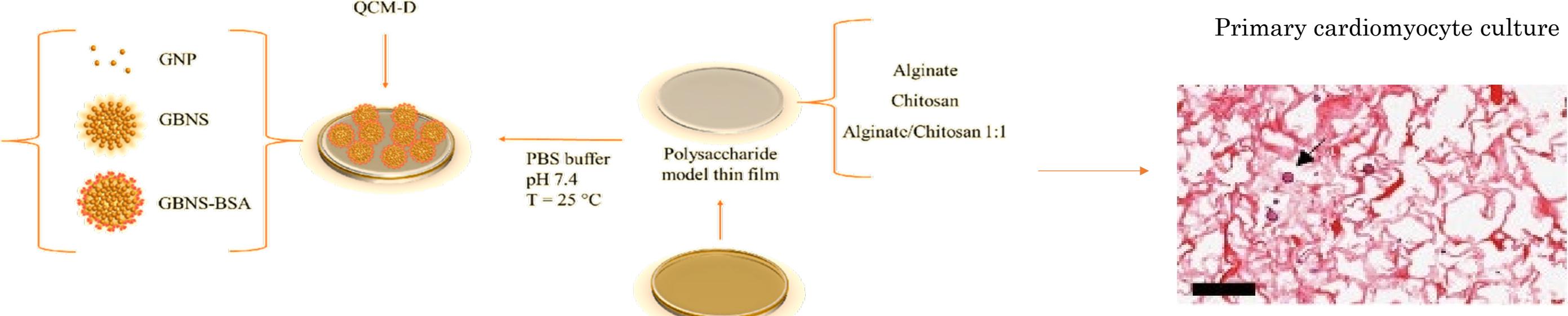


In Vitro and In Vivo Testing



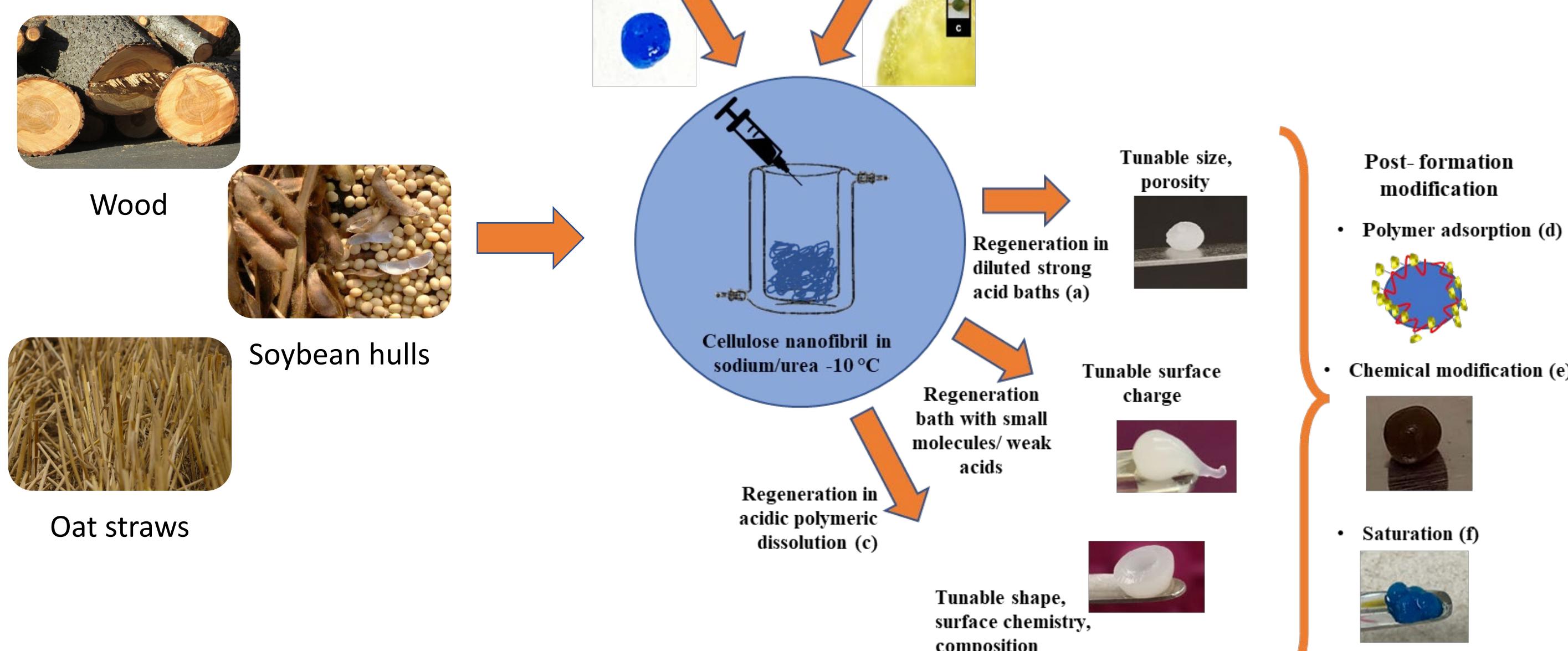
Interfacial Interactions

Gold Nanoparticles Interaction with Hydrogel Films for Cardiac Tissue



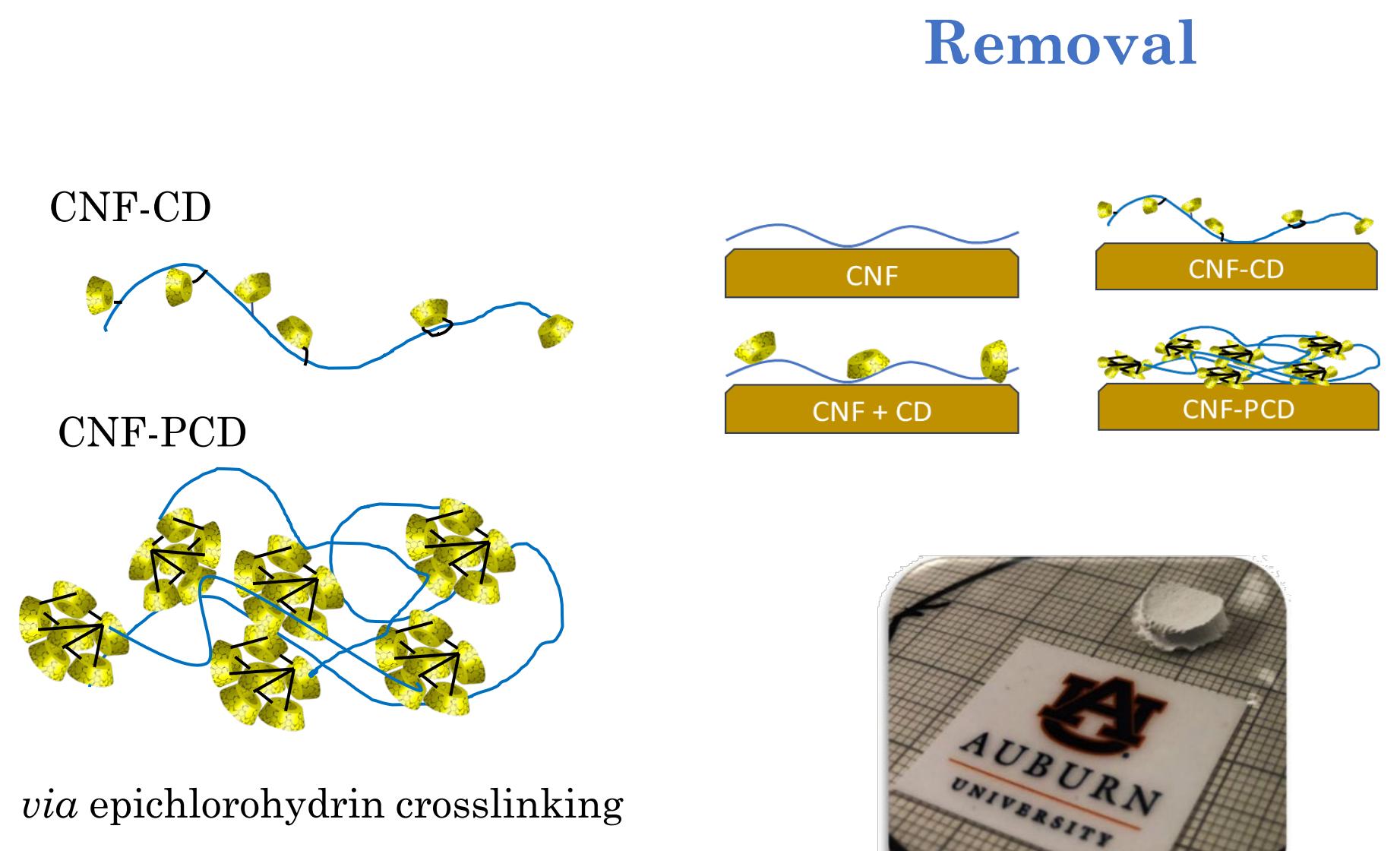
Gomez-Maldonado, D., et al. (2023). *Appl Nanosci* 13, 5807–5819

Regenerated Cellulose Hydrogels as Sustainable Platform



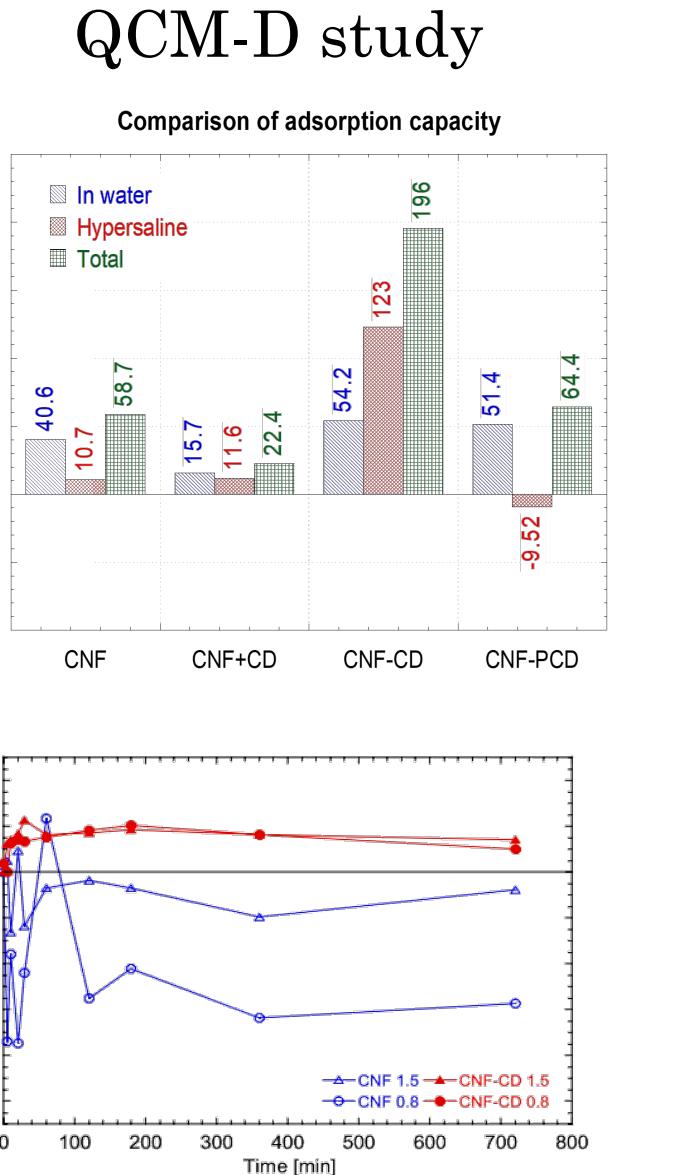
- a) Gomez-Maldonado D, et al. (2022). *Water, Air, & Soil Pollution* 233 (8), 340
- b) Gomez-Maldonado D, et al (2021) *Cellulose* 28(10), 6073-6087
- c) Gomez-Maldonado D, et al. (2021). *Biopolymers* 112(8), e23434
- d) Gomez-Maldonado D, et al (2022) *Surfaces and Interfaces* 33, 102192
- e) Gomez-Maldonado D, et al. *Under preparation*
- f) Gomez-Maldonado D, et al. (2023). *Environ. Sci.: Nano, Advance Article*

Cellulose-Cyclodextrin Copolymer Generation for Microcystin-LR Removal

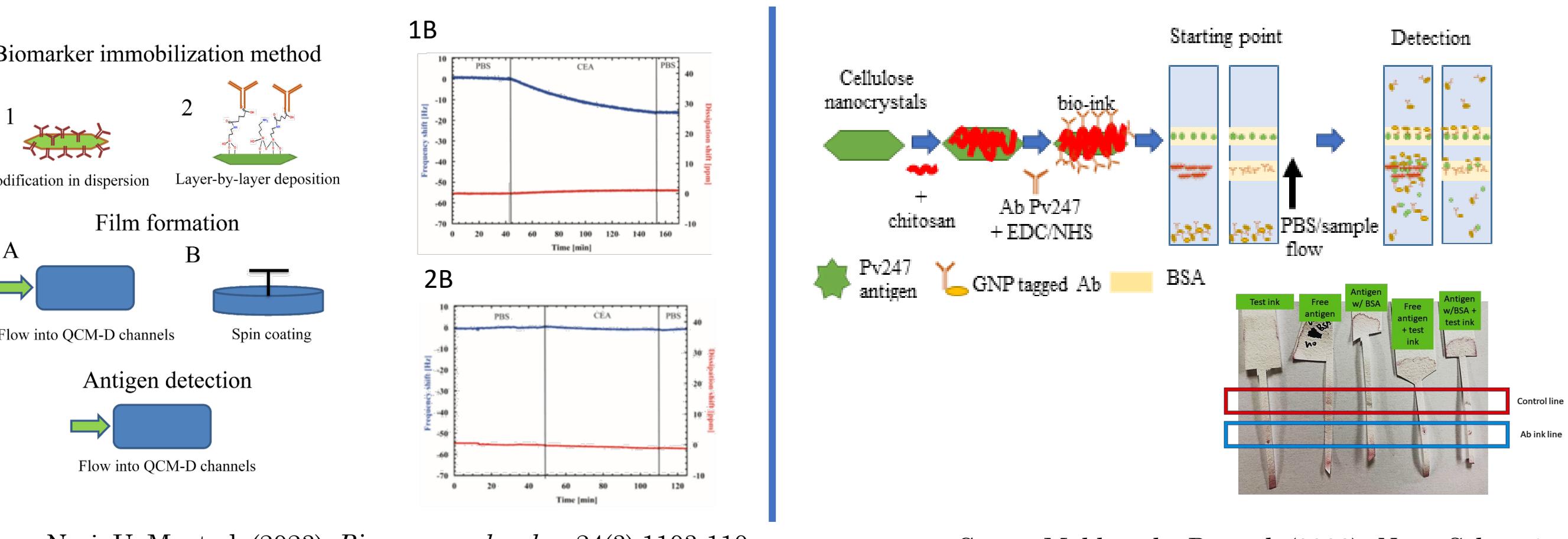


Gomez-Maldonado, D. et al. (2019). *Polymers* 11:2075.
Gomez-Maldonado, D. et al (2021). *J Porous Mater* 28:1725–1736.

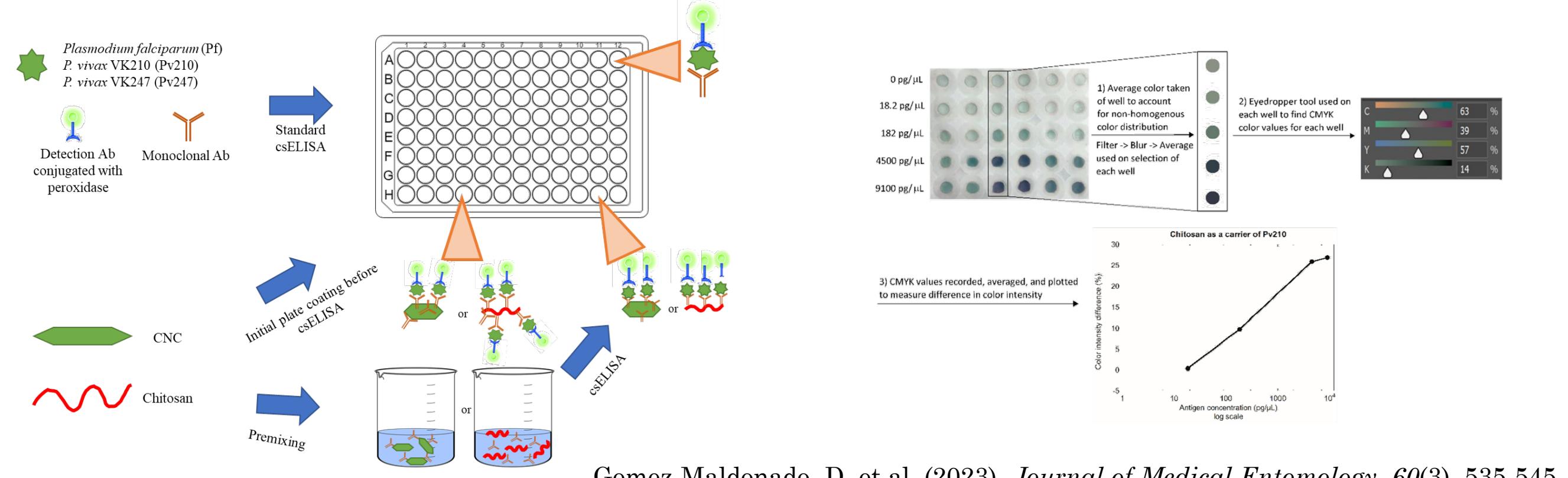
QCM-D study



Paper-Based ASSURED Biosensing

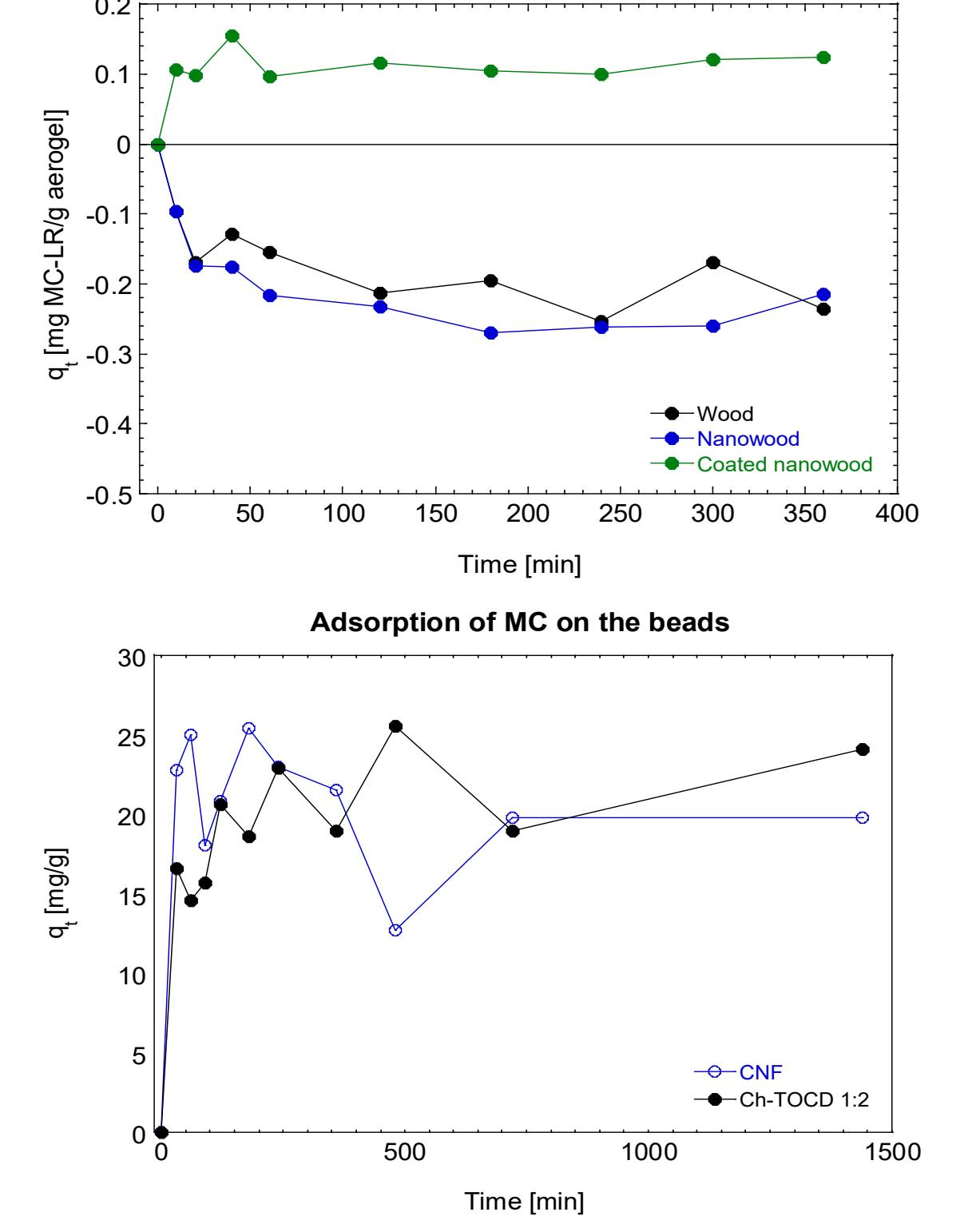
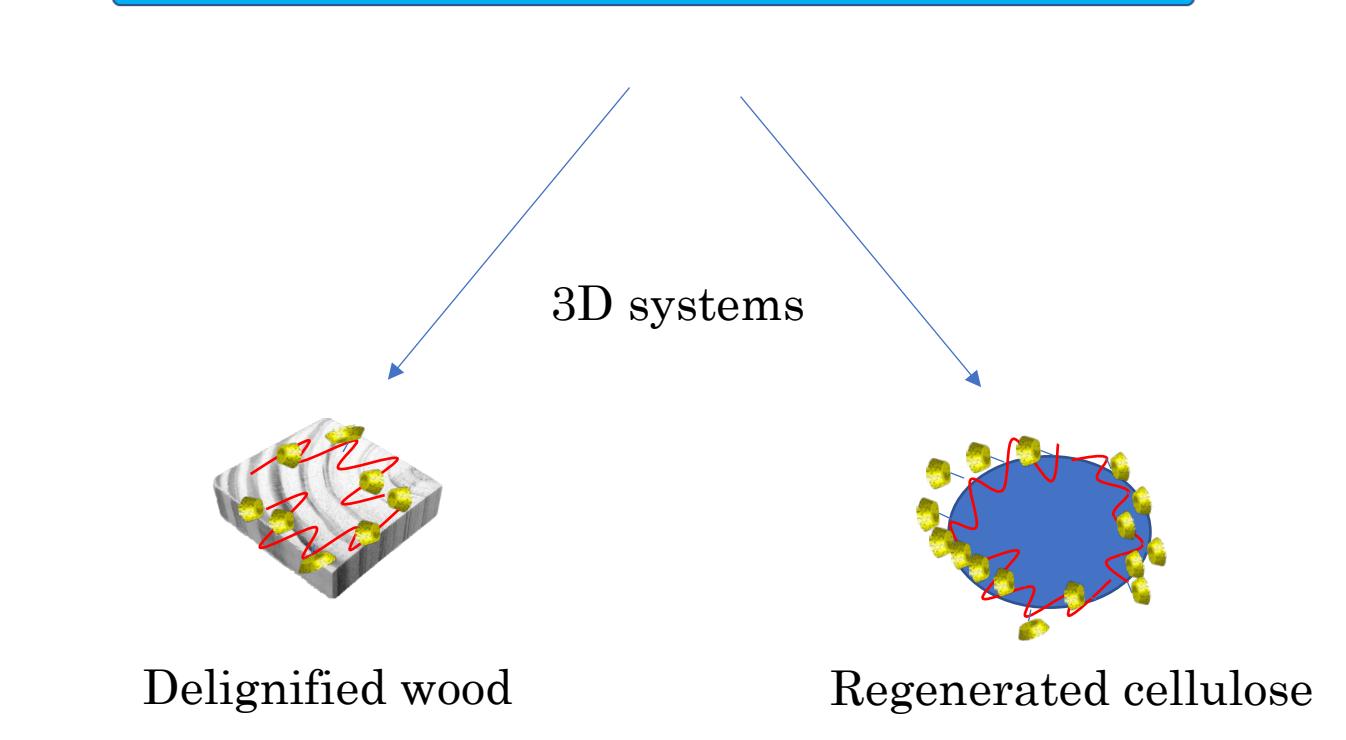
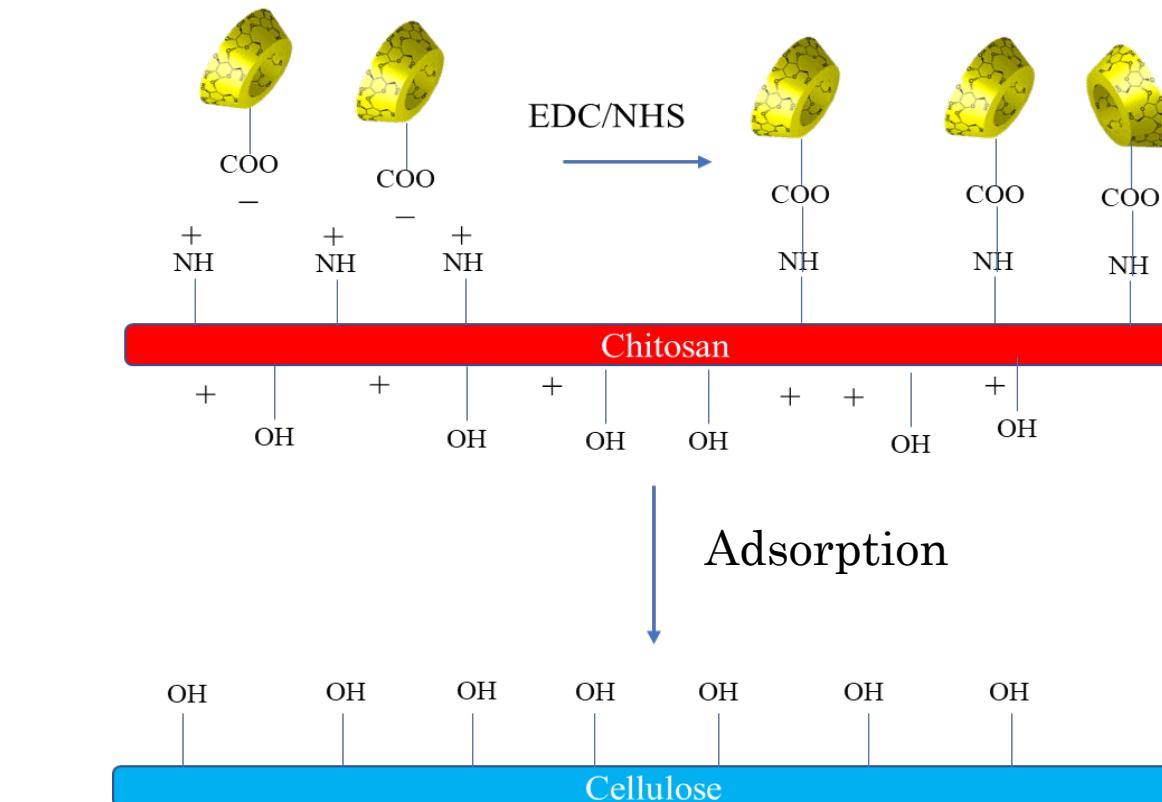


Nori, U. M. et al. (2023). *Biomacromolecules*, 24(3) 1103-1110
Gomez-Maldonado, D. et al. (2023). *Nano Select*, 1



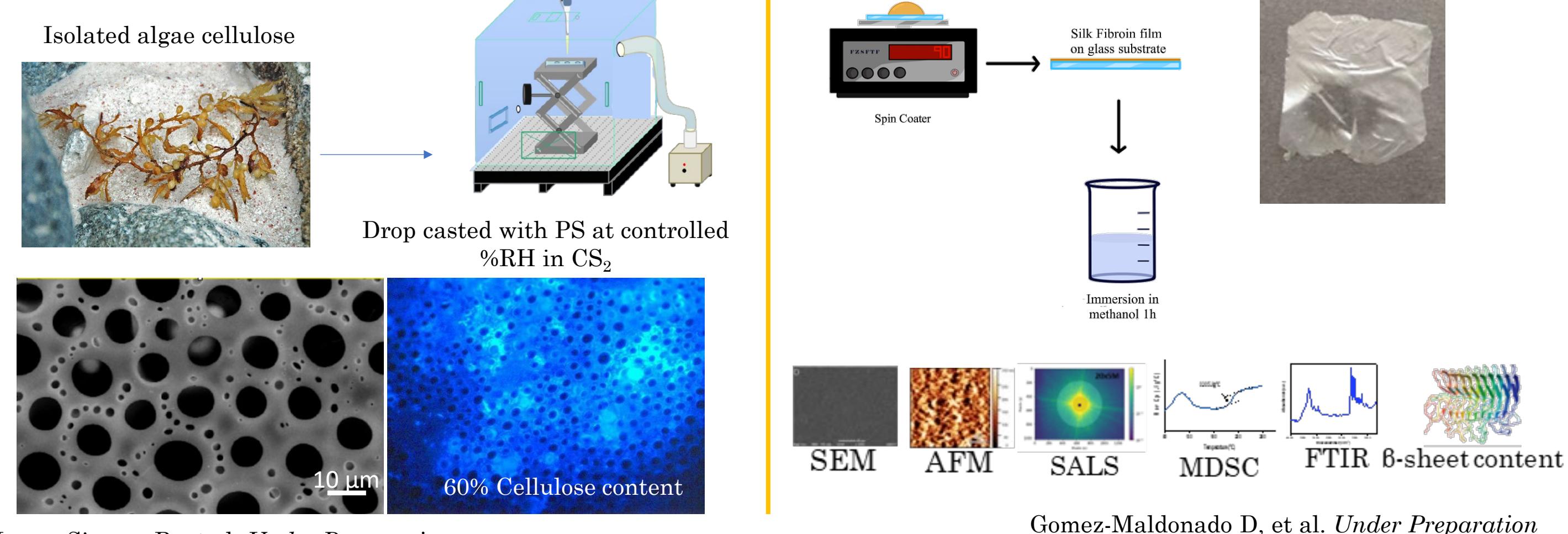
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Development of Active Coating for Emerging Contaminant Removal



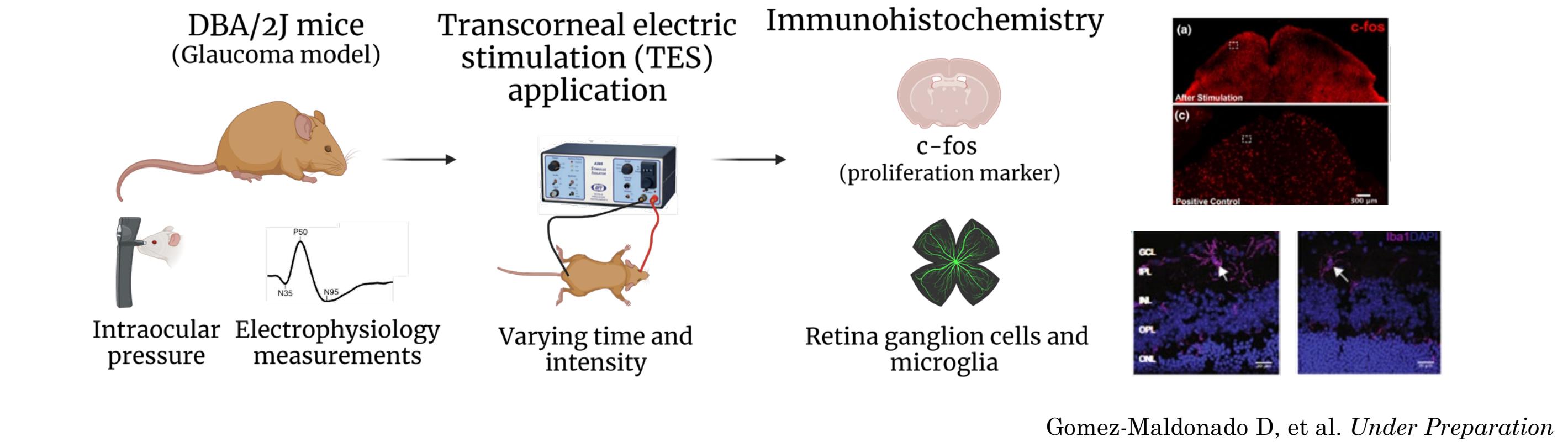
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Nanostructured Bio-Based Films



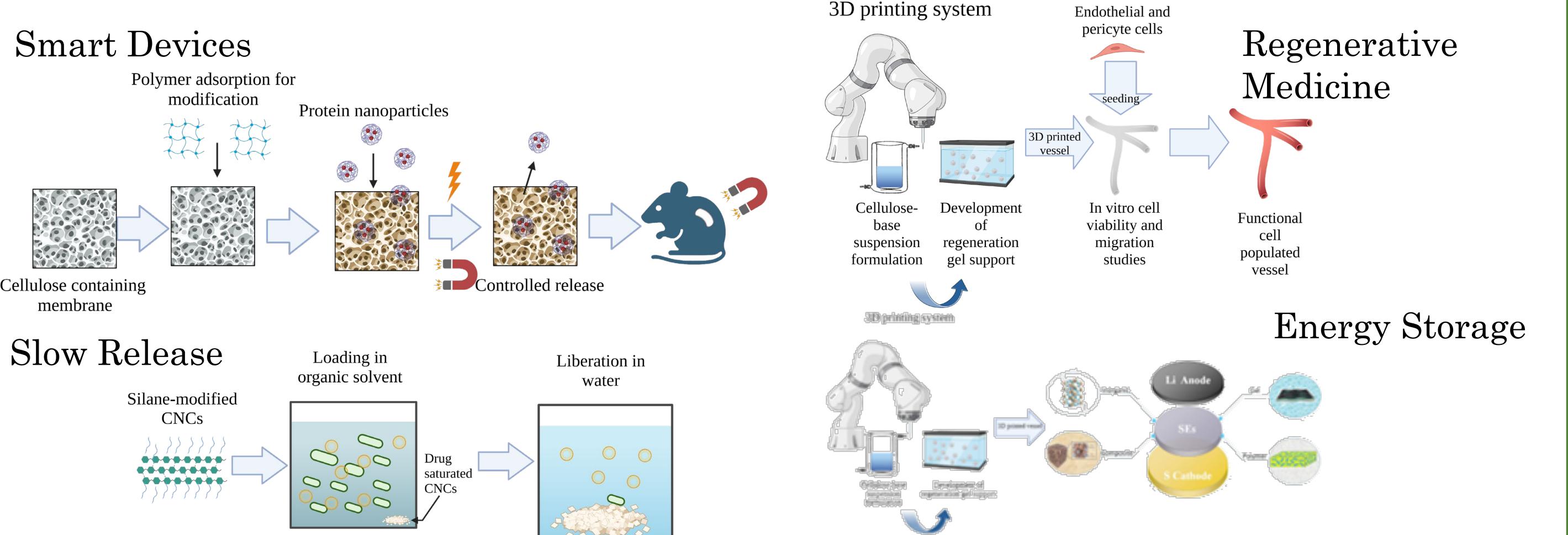
Lopez-Simeon R, et al. *Under Preparation*

Transcorneal Stimulation for Glaucoma Treatment



Gomez-Maldonado D, et al. *Under Preparation*

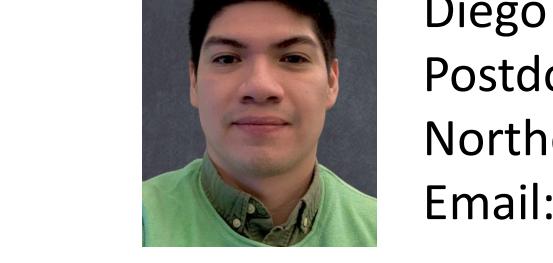
Future Directions



Acknowledgements:



Affiliations:



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