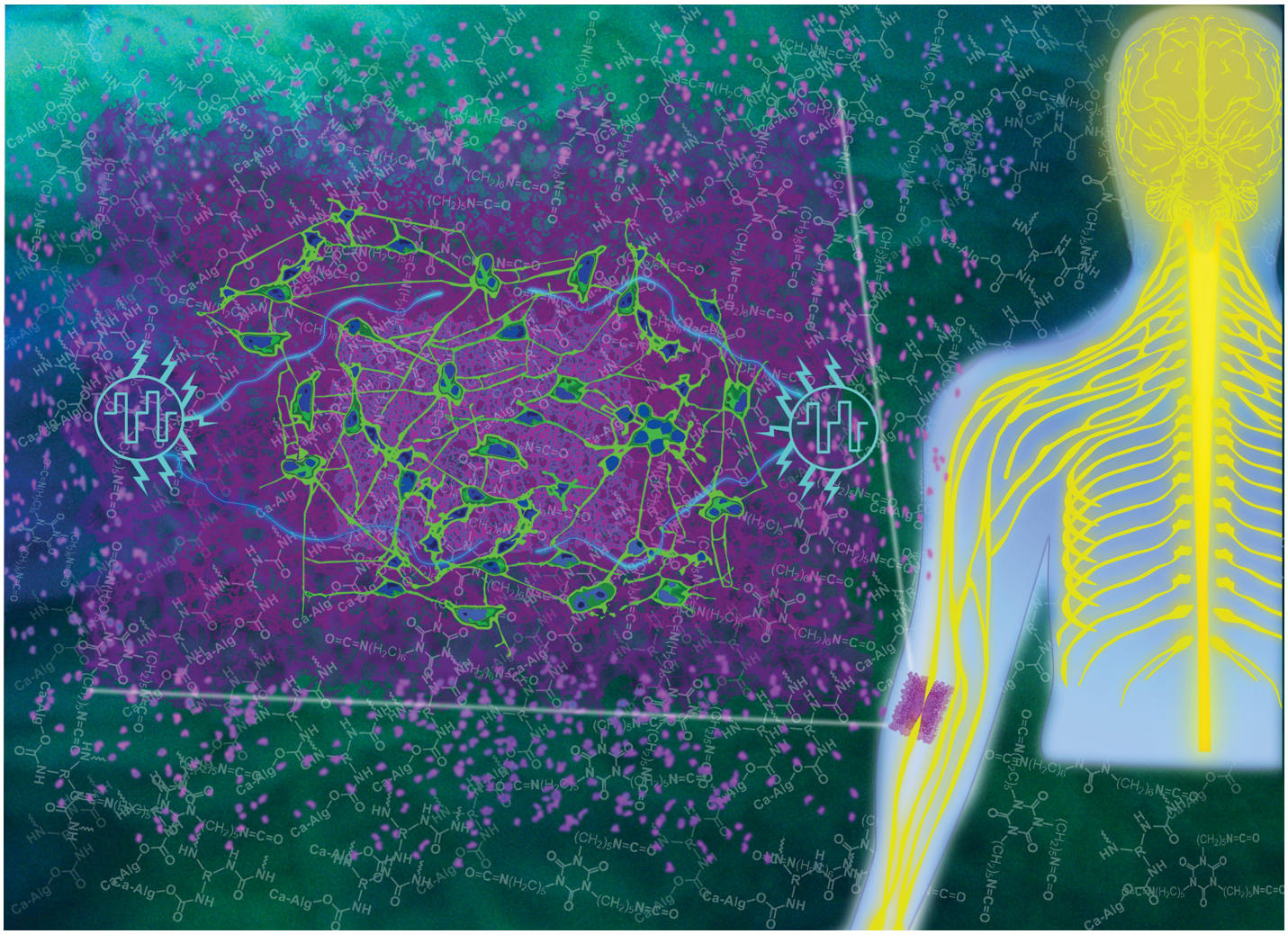

Showcasing research from Professor Firouzeh Sabri's laboratory, Department of Physics and Materials Science, The University of Memphis, Memphis, TN, USA.

Customization and tuning of the degradation rate of X–Ca–alginate aerogels in the presence of PC 12 cells

Aerogels are a class of materials with great promise in the medical field as they have been proven to increase nerve regeneration. Degradable aerogels provide a new era of biomedical implants. In this study, polyurea-crosslinked calcium alginate (X–Ca–Alg) aerogels were studied *in vitro*, in the presence of DC bias. Aerogels showed a rapid change in area and stiffness as a function of incubation time and increased with the DC bias. The physical properties and kinetics of degradation of X–Ca–Alg aerogel formulations strongly correlate with the type of triisocyanate used for crosslinking.

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See Firouzeh Sabri *et al.*, *Soft Matter*, 2026, **22**, 2259.

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