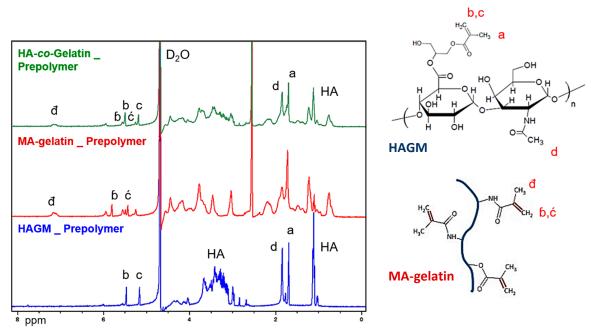
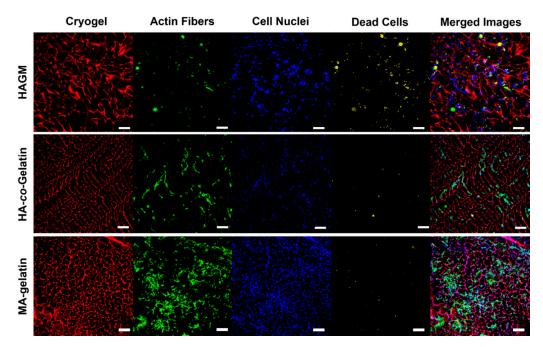
## Injectable Hyaluronic Acid-*co*-Gelatin Cryogels for Tissue Engineering Applications

## Mahboobeh Rezaeeyazdi<sup>1</sup>, Thibault Colombani<sup>1</sup>, Adnan Memic<sup>1,2</sup> and Sidi. A. Bencherif<sup>1,3,4,5</sup>\*

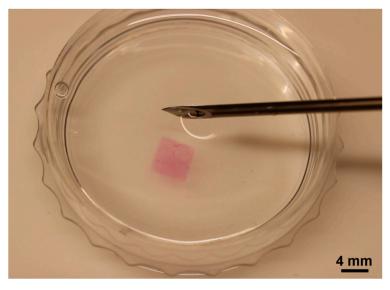
- <sup>1</sup> Department of Chemical Engineering, Northeastern University, Boston, USA; rezaeeyazdi.m@husky.neu.edu (M.R.); t.colombani@northeastern.edu (T.C.)
- <sup>2</sup> Center of Nanotechnology, King Abdulaziz University, Jeddah, Saudi Arabia; amemic@gmail.com
- <sup>3</sup> Department of Bioengineering, Northeastern University, Boston, USA
- <sup>4</sup> Harvard John A. Paulson School of Engineering and Applied Sciences, Harvard University, Cambridge, USA
- <sup>5</sup> Biomechanics and Bioengineering (BMBI)- UTC CNRS UMR 7338, University of Technology of Compiègne, Compiègne, France
- \* Correspondence: s.bencherif@northeastern.edu; Tel.: +1-617-373-7103



**Figure S1. Chemical characterization of polymers by** <sup>1</sup>**H NMR.** <sup>1</sup>**H** NMR spectra of uncross-linked HAGM (bottom), MA-gelatin (center), and HA-*co*-Gelatin (top) in D<sub>2</sub>O.



**Figure S2. Qualitative evaluation of cell viability.** Confocal microscopy images of  $2 \times 10^5$  mouse 3T3 embryonic fibroblast cells cultured for 1 days in HAGM, MA-gelatin, and HA-*co*-Gelatin cryogels. The cryogel wall is labeled with Rhodamine (red), cell nuclei with DAPI (blue), dead cells with Far-Red Fixable Dead Cell Staining (yellow), and cytoskeleton with Alexa Fluor 488-phalloidin (green) (scale bar =  $100 \mu m$ ).



**Video S1.** Injection of 4% (w/v) HAGM cryogel, 4% (w/v) MA-gelatin cryogel, and 4% (w/v) HA-*co*-Gelatin (50:50) cryogels through an 16G needle.