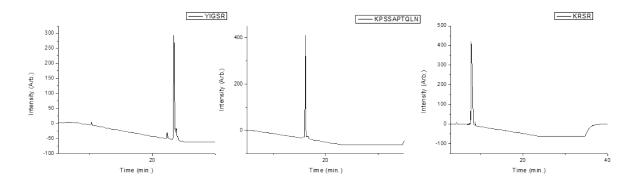
## Peptide microarrays for the discovery of bioactive surfaces that guide cellular processes: a single step azide-alkyne "click" chemistry approach

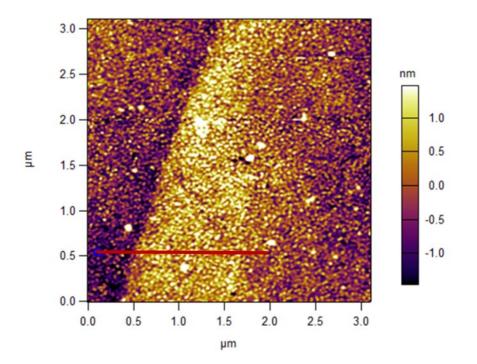
Douglas Zhang and Kristopher A. Kilian\*

Department of Materials Science and Engineering, University of Illinois, Urbana-Champaign, Illinois 61801, United States

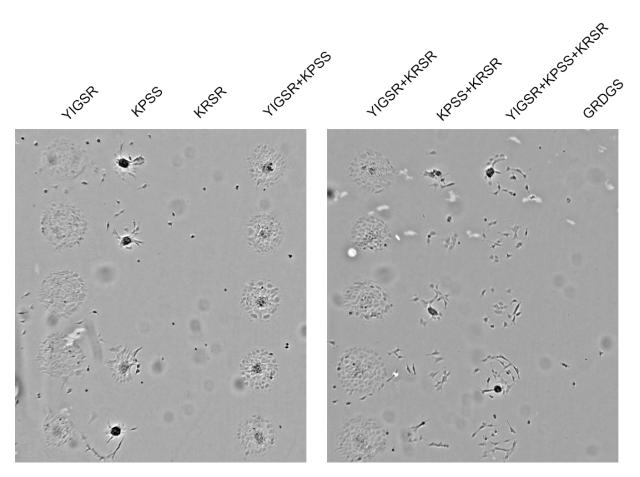
**Supporting Information**. HPLC traces of purified peptides; 10 day image demonstrating long term culture capabilities of spotted areas; and example of how surface coverage is quantified is provided. This material is available free of charge via the Internet at http://pubs.acs.org.



**Figure S1.** HPLC traces of alkyne-terminated peptides purified to >90.0%. A Waters XBridge BEH300 Prep C18 column was used with a flow rate of 2mL/min running a linear gradient from 2% Acetonitrile to 30% acetonitrile over the course of 30 min.



**Figure S2.** AFM measurement at the edge of a SAM formed by microarray spotting. The difference in height along the red line is approximately 1.5nm.



**Figure S3.** MEFs cultured on peptide combinations after 10 days in media still are localized to spotted regions and retain differential spreading properties on different peptides.

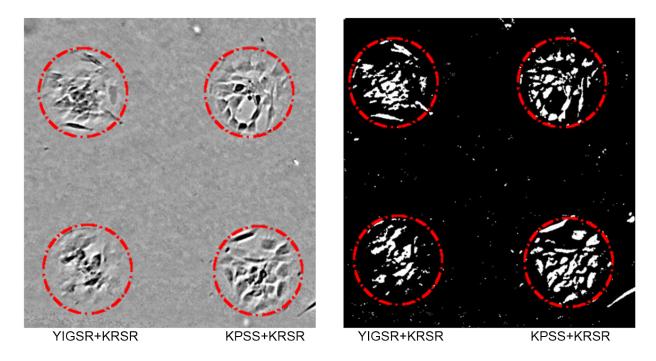


Figure S4. Quantification of ADSC surface coverage using ImageJ software.

## Table S1. Ellipsometric measurements of SAM thicknesses

Surface	Thickness (nm)
HS-C11-EG3	$1.22 \pm 0.21$
HS-C11-EG4-N3	$1.49 \pm 0.21$
Peptide	$1.66 \pm 0.21$