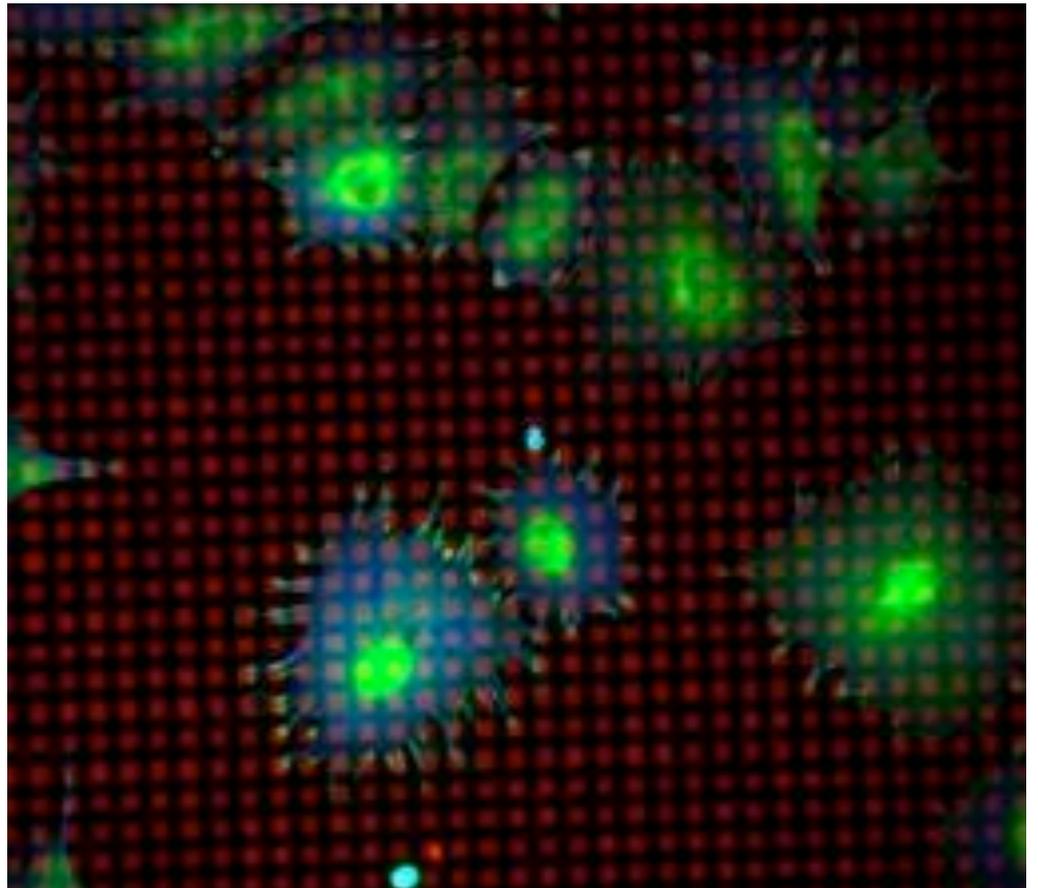
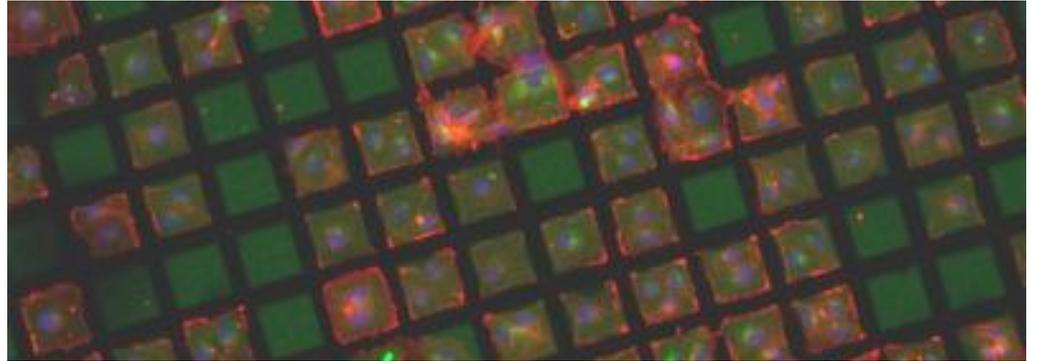
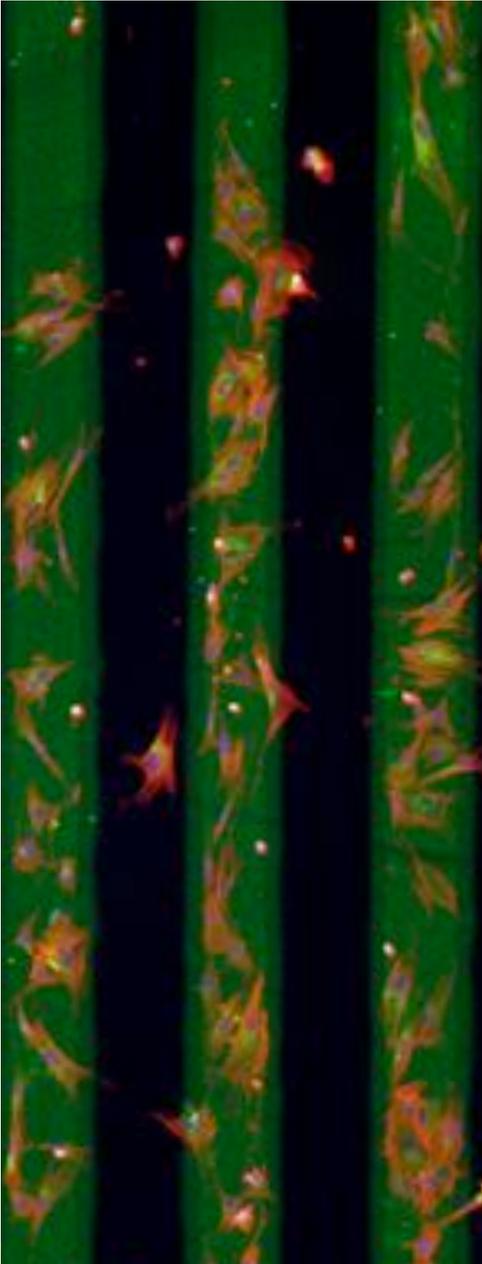
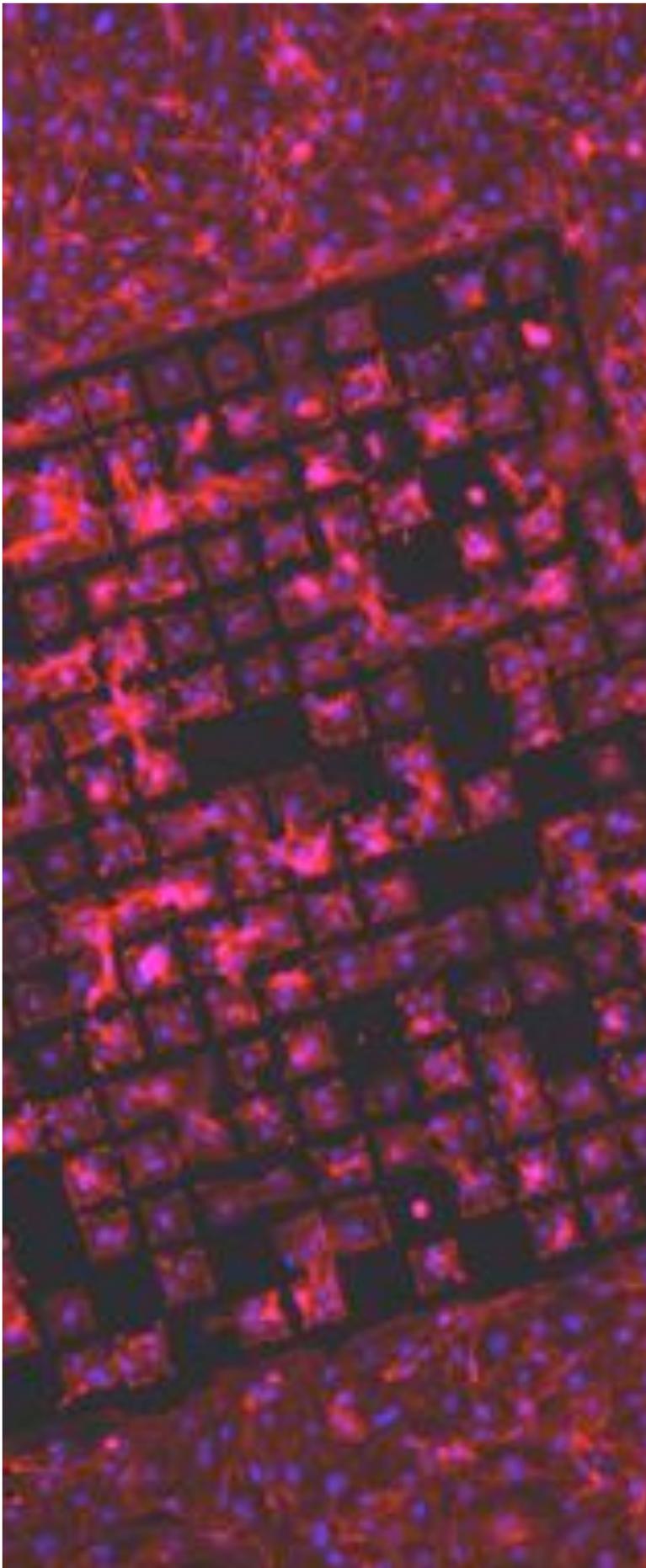


Information-rich microenvironments™

Protein micropatterned substrates for cell culture





BioWrite™

micropatterned substrates

Intelligent Substrates introduces the BioWrite line of protein micropatterned substrates for cell and tissue culture. These substrates provide a new level of experimental control over cell structure and function.

Define the location, size, and shape of cultured cells using patterns of extracellular matrix proteins.

The cellular microenvironment influences such vital cell functions as adherence, metabolism, mechanics, growth, DNA replication, and protein synthesis.

Intelligent Substrates offers a collection of substrates with stock patterns and a custom patterning service.

Line and grid patterns of fibronectin and laminin are immediately available in high- and low-resolution on common substrates including glass coverslips, glass-bottomed dishes, and quartz coverslips.

With micropatterned areas of 2 mm² (high-resolution) or 1 cm² (low-resolution), BioWrite substrates can redefine your cell culture experience.

Lines

Resolution	Protein line width (µm)	Pitch (µm)
High	5	10
High	15	30
High	30	45
Low	80	160
Low	200	280

Square Grids

Resolution	Protein grid size (µm)	Pitch (µm)
High	5	10
High	15	30
High	30	45
Low	80	160
Low	200	280

Substrate Design Center™

Protein patterned substrates give unprecedented control over the size, shape, location, and function of plated cells. But who has the time to learn microcontact printing, photolithography, or complex surface chemistries when there is important cell biology to do? Intelligent Substrates can make your simple or complex, custom BioWrite micropatterned substrates quickly and affordably.

Design your pattern with features as small as 3 μm , submit it through the Substrate Design Center at www.IntelligentSubstrates.com. Intelligent Substrates will contact you to discuss the specifics of your pattern, your protein, and your substrate. After the final specifications of your substrate are confirmed, Intelligent Substrates will make and express ship your micropatterned substrates to you.

Applications

Use BioWrite substrates to find and identify cells faster, simplify quantification and analysis, identify important structural components, average responses across similar cells, and control for variations in cell size and shape in your experiments.

Stem cell growth and differentiation

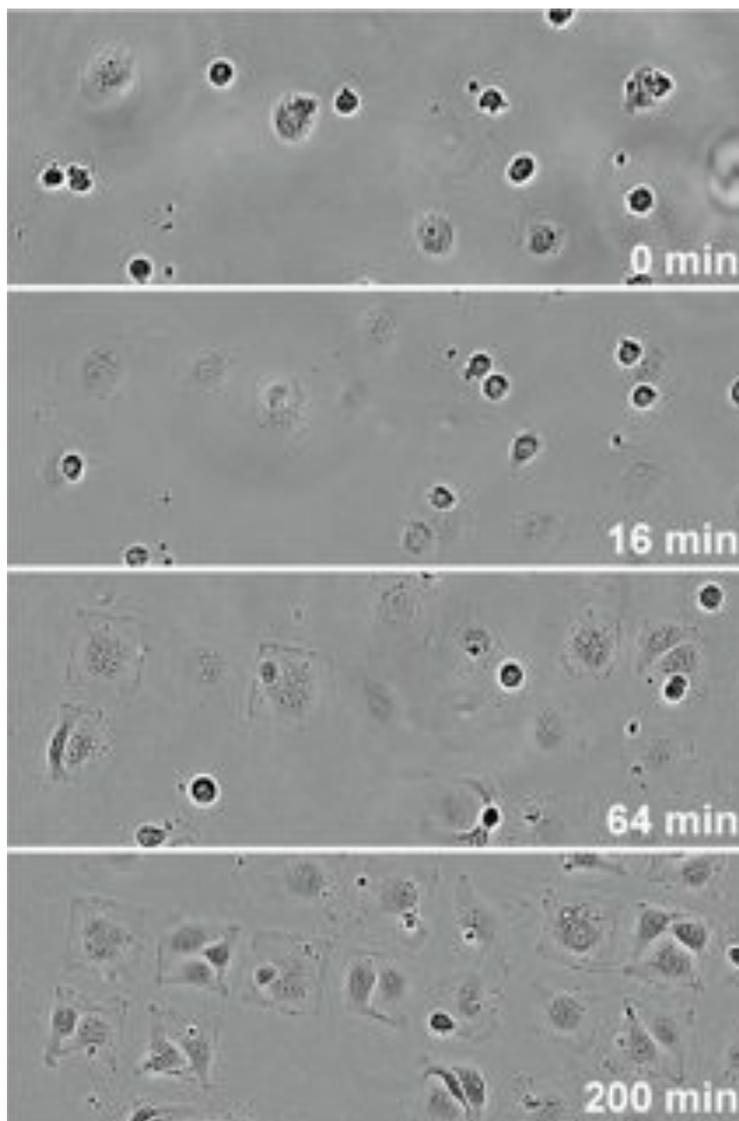
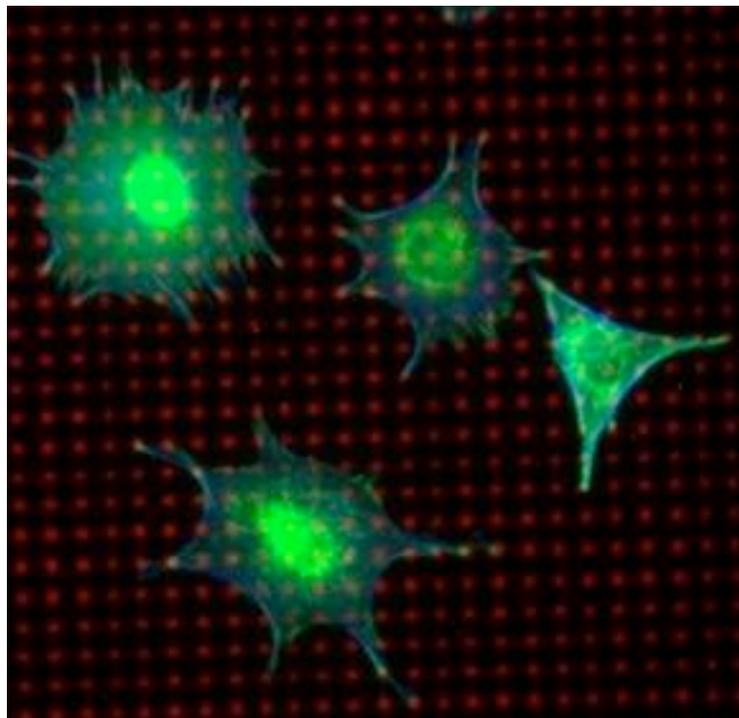
Investigate stem cell differentiation on BioWrite micropatterns of different proteins, dimensions, shapes, and nearest-neighbor distances.

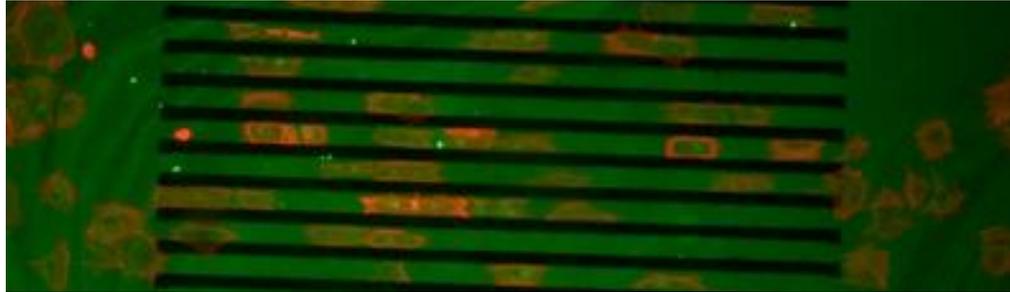
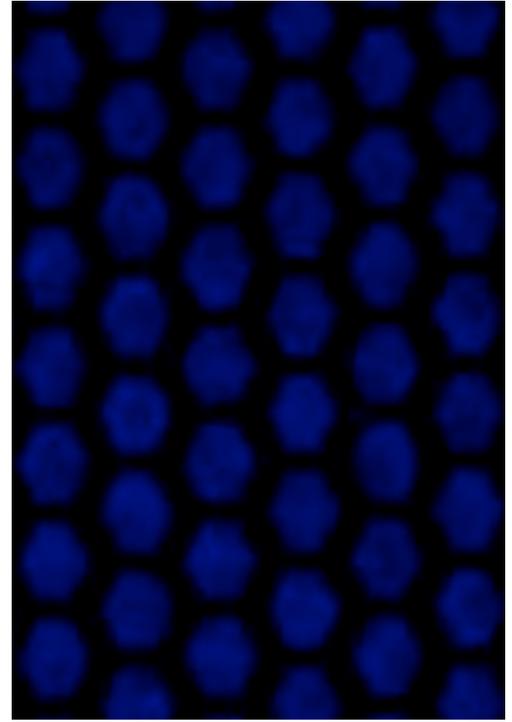
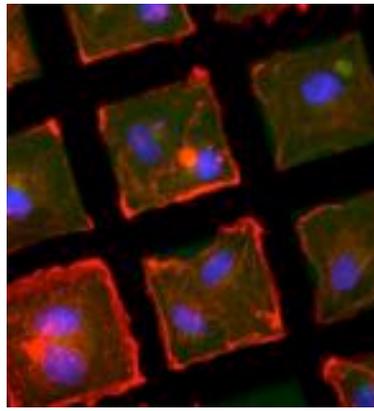
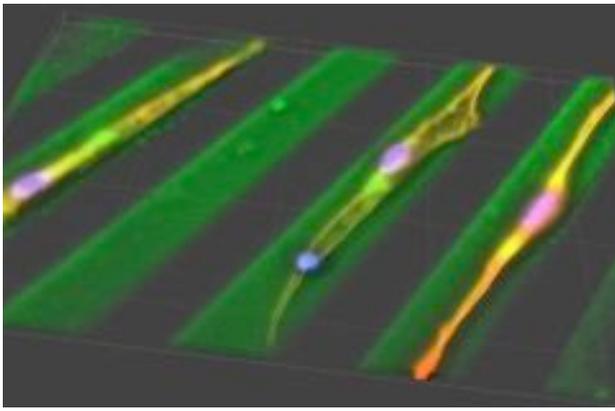
Cellular migration and dynamics

Examine cell motility and dynamics with live cell imaging as cells interact with custom micropatterned substrates of lines or asymmetric shapes.

Cell morphology

Control cell morphology and cytoskeletal organization using BioWrite micropatterns.





Intelligent Substrates

3500 Boston St.
Suite 414, MS-71 Baltimore, MD 21224
T 410-982-6609 F 866-300-3221
www.IntelligentSubstrates.com