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Planar peptide processing KIRK BALDWIN, ROBERT WILLETT, Bell Laboratories, Lucent Technologies — Spatial manipulation on small length scales of biological materials, in particular peptide based substances, is important both for implementing assays and for exploiting the properties of the materials set. In this talk we describe methods for patterning peptides in planar manipulations much as is exercised with materials in semiconductor processing: Controlled deposition into small length-scale patterns is accomplished through selective adhesion to patterned substrates or deposition through patterned masks, and removal of peptide films can be achieved through wet or dry etching techniques. These methods are shown to be applicable to at least the micron scale, and this technique summary presents an elemental tool-box for planar processing of this set of biological films. Collectively these techniques provide a "toolbox" of methods to accomplish rudimentary planar processing with peptides.

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