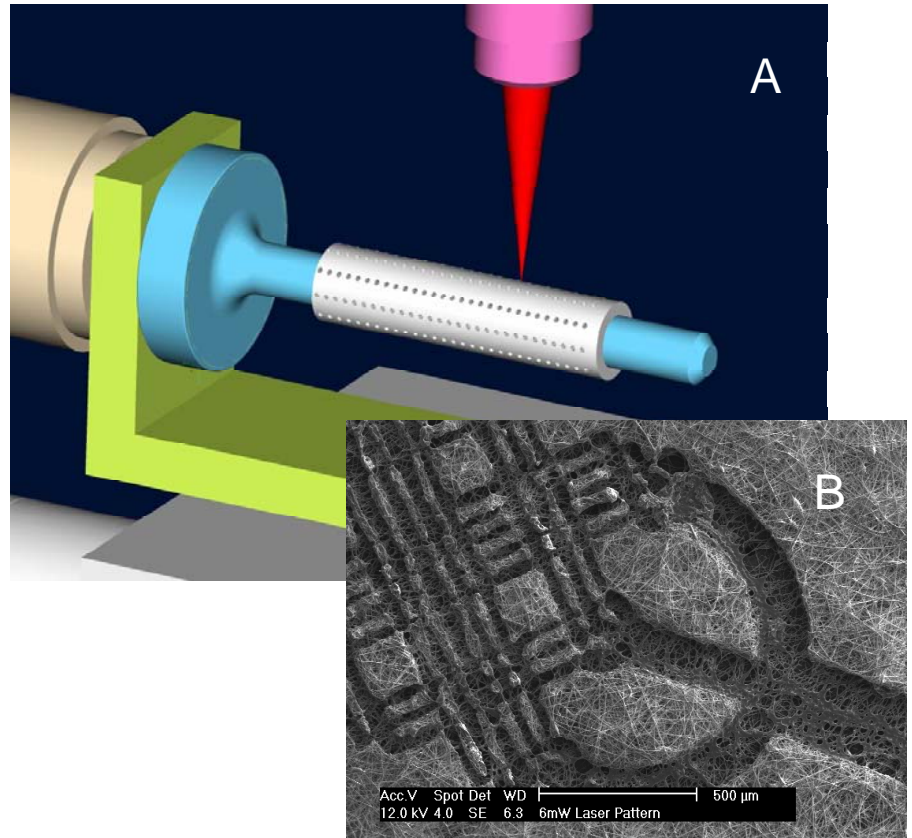


# Polymer scaffolds created to grow blood vessels

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Polymer nanofibers are commonly produced using electrospinning, in which a polymer spun onto a surface creates a nanofiber array. When these arrays are seeded with cells, they can be used as scaffolds to grow a wide range of human tissues, including blood vessels. To guide cell growth, a femtosecond, ultraprecise laser is used to burn a pattern into the scaffold surface. The polymer is spun onto a rotating mandrel (in blue, Figure A), and a femtosecond laser is used to create the pattern (Figure B) into which the cells are placed.



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