# I-Teams Global Project Form

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| MIT Sloan VCPE Club<br>DESHPANDE CENTER FOR TECHNOLOGICAL INNOVATION | **Project Name:**<br>**Nano-Contract Printing: Bridging Nano-Lithography with Industrial Production** | **Project Manager:**<br>Dr. Francesco Stellacci<br>**Sponsors:**<br>Deshpande Center<br>Seed Capital Partners | **Revision: Draft 1.0**<br>**Date: 1-26-04** |

## Project Description

### Overview:

Nano-devices are the wave of the future, but creating them remains an extremely slow process.

This project seeks to develop a new method called nano-contact printing, or NCP. If successful, it will enable the quick reproduction of a large number of nano-patterns and nano-devices.

The advantages are impressive. NCP would enable the inexpensive production of a large number of complex nano-devices in a short amount of time. In particular, the team will use NCP to fabricate DNA gene chip arrays. These arrays, containing 40,000 different DNA strands, are used for various genomics applications. NCP enables printing gene chip arrays in just 3 steps, relative to 50 or more steps using current processes, and thus could enable mass production at very low cost.

### Project Goals:

To identify a path to commercialization and high value market segments, describe the current competitive landscape, and identify and articulate the value proposition for alpha/beta customers. The team will develop a business plan in order to seek funding for a new venture.

### Stakeholders:

- Deshpande Center
- MIT VCPE
- Dr. Francesco Stellacci
- Jeff Fagnan, Seed Capital Partners

## Strategy and Resources

### Current team members:

Dr. Francesco Stellacci, Principal Investigator
Jeff Fagnan (Principal, Seed Capital Partners), Catalyst
Rich Kivel (CEO of MolecularWare), Advisor

### Team members needed:

Ideal candidates will have a BS degree in Biochemistry, Materials Science, Chemical Engineering or Electrical Engineering, and will currently be pursuing either an MBA or advanced engineering degree. Candidates will bring either professional or prior research experience in biotechnology, drug discovery or MEMS / IC chip manufacturing.

### Project Stage:

☐ Ready for market (start company less than 1 year)
Team is well under way and has potential customers → ready to start a company

☒ Ready for market with some effort (1-2 years)
Prototype in progress and still looking for customers/markets

☐ Long-term research (more than 2 years)
Exploring: need business plan

### Milestones:

May 2004: Proof of Concept of DNA printing