# Neidi Negrón-Rodríguez

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#### **EXPERIENCE**

January 2006-Present

## Prather Lab, Massachusetts Institute of Technology (MIT)

Cambridge, MA

Research Assistant

- Investigated the effects of varying gene levels in representative systems in *E.coli* to derive some fundamental relationships between gene dosage and final product that may allow the construction of optimal recombinant microorganisms for metabolic engineering applications.
- Combined biochemical and molecular biology concepts to construct computer code (MatLab) to optimize productivity of transferred metabolic pathways in terms of recombinant gene dosage.

January-July 2005

#### **Abbott Laboratories**

Barceloneta, PR

Associate Process Support Engineer. Abbott Pharmaceuticals PR, Ltd. - Fermentation Plant.

- Provided technical assistance, like monitoring, troubleshooting and optimization of the recovery manufacturing processes.
- Wrote process validation and related engineering study protocols and oversaw their execution.
- Led the cleaning validation labor in the recovery manufacturing area, including execution of carryover studies and cleaning procedures' periodic validation reviews.
- Modified manufacturing direction modules.
- Administered and tracked the Management of Change (MOC) documents of the Recovery Process Support Department.

Summer 2004

### **Abbott Laboratories**

Lake County, IL

Engineering Summer Intern. Abbott Diagnostic Division - Equipment Engineering Department.

- Coordinated work in cross-functional teams, including areas such as Validation Quality Group, Device Operations and Specification Development.
- Wrote necessary documentation for equipment qualification for manufacturing facilities and oversaw qualification approval process until completion.
- Developed communication and interpersonal skills while working with other engineers, operators and external vendors/suppliers.
- Designed equipment, using AutoCAD, to be implemented for the use of operators.
- Tested manufacturing materials in laboratory, which resulted in effective support of a manufacturing line.

#### **EDUCATION**

Sept. 2005-Present

## **Massachusetts Institute of Technology (MIT)**

Cambridge, MA

Ph.D. Candidate, Department of Chemical Engineering.

- Thesis: Optimization of Recombinant Gene Dosages for Metabolic Engineering in Escherichia coli.
- Advisor: Prof. Kristala L. Jones Prather

June 2005

## University of Puerto Rico at Mayaguez (UPRM)

Mayaguez, PR

Bachelor of Science in Chemical Engineering, Summa Cum Laude

• GPA: 4.0/4.0. Minor in Environmental Engineering.

**SKILLS** 

**Computer:** Windows operating systems and Microsoft programs (Word, Excel, and Power Point), MATLAB and AutoCAD.

**Language:** Fluent in Spanish and English. Basic knowledge of French.

### AWARDS/ACTIVITIES

- Lemelson Minority Engineering Presidential Fellow (2005-2006)
- Luis Stefani Rafucci Award, Highest Academic Achievement Class of 2005 UPRM
- Luis C. Monzón Award, Best Chemical Engineering Student Class of 2005 UPRM
- Faculty of Engineering Academic Excellence Award, Class of 2005 UPRM
- President's Award for Educational Excellence (by Bill Clinton) 2000, 1996 & 1994.
- Graduate Student Council Course X: Chemical Engineering (2006-2007)
- MIT Association of Puerto Rican Students (2006-2007)