

Curriculum Vitae/Resume  
JACQUELINE GONZALEZ

University of Delaware, Chemical and Biomolecular Engineering Department  
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## EDUCATION

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**Cornell University**, College of Engineering, Ithaca, NY  
Bachelor of Science in Chemical Engineering, May 2013  
Overall GPA: 3.8/4.0, Dean's List all semesters

**University of Delaware**, College of Engineering, Newark, DE  
PhD Candidate in Chemical and Biomolecular Engineering  
Overall GPA: 4.0/4.0

## RESEARCH EXPERIENCE

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**PhD Candidate, Antoniewicz Lab, University of Delaware** Fall 2013 – Present

- Studied metabolism of *Escherichia coli* and *Methanosarcina acetivorans* for biofuel production
- Used  $^{13}\text{C}$ -labeled substrates to quantify intracellular fluxes and examine pathway utilization
- Measured labeling patterns and concentrations of metabolites using GC-MS

**Student Research Assistant, Therapeutic Tissue Engineering, Fischbach Lab, Cornell University** Summer 2011- Summer 2013

- Learned cell culturing and sterile techniques
- Examined the relationship between breast cancer and obesity
- Collagen gel fabrication, Immunohistochemistry, Protein Analysis via Western Blot and ELISA techniques
- Recipient of an Engineering Learning Initiatives Undergraduate Research Award
- Presented research at the BioExpo Annual Research Symposium and the Society of Hispanic Professional Engineers National Conference

## WORK AND TEACHING EXPERIENCE

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**Teaching assistant, University of Delaware** 2015

- Biomolecular Engineering (CHEG420) and Chemical and Biomolecular Principles 1 (CHEG831)
- Organized and held homework and exam review sessions
- Designed lesson plan and taught lectures

**Physical Sciences Counselor, Cornell University** Summer 2013

- Created activities and led physical sciences course for children ages 7-10

**Student Intern, Bristol-Myers Squibb, Hopewell, NJ** Summer 2012

- Engineered a cell line and utilized clones in the optimization and development of a bioassay
- Quantified receptor expression using flow cytometry

**Academic Excellence Workshop Facilitator, Cornell University** Fall 2010 – Fall 2013

- Directed cooperative learning session for first-year general chemistry course
- Created weekly lectures and worksheets that reviewed material taught in class

## AWARDS/GRANTS

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New York Science Supervisors Association Award in Chemistry, 2009  
Engineering Learning Initiatives Undergraduate Research Grant, Cornell University, 2011 and 2013  
Graduate University Fellow Award, University of Delaware, 2016  
Robert L. Pigford Teaching Assistant Award, University of Delaware, 2016  
Fraser and Shirley Russell Teaching Fellow in Chemical Engineering, University of Delaware, 2016

## SKILLS

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Microsoft office, Matlab, Mathematica, Origin, HTML  
Mammalian and bacterial culturing techniques, Anaerobic culturing techniques, GC-MS, HPLC