# Tara E. Mokhtari

### **Education**

Massachusetts Institute of Technology: Cambridge, MA

September 2008 – Present

Department of Chemistry

Bachelor of Science expected June 2012

Current GPA: 4.9/5.0

University of Minnesota: Minneapolis, MN

Fall 2006 – Fall 2007

Non-degree candidate during junior and senior year of high school.

GPA: 4.0/4.0

Harvard College: Cambridge, MA

Summer 2006

Non-degree candidate

GPA: 4.0/4.0

Breck School: Minneapolis, MN

2006 - 2008

High School Diploma

GPA: 4.0/4.0

# **Experience**

Associate Advisor Fall 2010 – Spring 2011

McCormick Hall

Massachusetts Institute of Technology: Cambridge, MA

#### **Pharmaceutical Development Intern**

Summer 2010

**Upsher-Smith Pharmaceuticals** 

Maple Grove, Minnesota

- In Vitro intestinal stability investigation
- Instrumentation and techniques utilized:
  - High-performance liquid chromatography (HPLC)
  - Liquid chromatography-mass spectrometry (LC-MS)

#### **Undergraduate Research (UROP)**

Spring 2010 - Present

Laboratory of Stephen J. Lippard

Massachusetts Institute of Technology: Cambridge, MA

Platinum anticancer agents subgroup member

#### Research Assistant

#### Laboratory of Ronald G. Brisbois

Summer 2009

Macalester College: St. Paul, MN

- Scope and limitations study of copper(I)-catalyzed azide-alkyne "click" chemistry
- Instrumentation and techniques utilized:
  - o Proton nuclear magnetic resonance spectroscopy (H¹ NMR)
  - o Gas chromatography-mass spectrometry (GCMS)
  - Thin layer chromatography (TLC)
  - Flash-column chromatography

#### Research Assistant

#### Laboratory of Walter C. Low

Summer 2007

University of Minnesota: Minneapolis, MN

- Investigated the role of microRNA in the development of glioblastoma brain tumors
- Techniques utilized:
  - o Neural stem cell culturing

- o Glioma cell (GL261) culturing
- o microRNA microarray

Course Tutor and Grader, Introduction to Solid State Chemistry (3.091) Massachusetts Institute of Technology: Cambridge, MA

Fall 2009

# MIT Society of Women Engineers, Executive Board

**Spring 2010 – Spring 2011** 

Girl Scout Outreach Co-Chair

### **Relevant Coursework**

## **Biology**

•	Introductory Biology (7.013)	Spring 2009
•	Genetics (7.03)	Spring 2010

#### Chemistry

Introduction to Solid-State Chemistry (3.091)	Fall 2008
Organic Chemistry I (5.12)	Fall 2009
Organic Chemistry II (5.13)	Fall 2010
Biological Chemistry I (5.07)	Fall 2010
Biological Chemistry II (5.08)	Spring 2011
Thermodynamics and Kinetics (5.60)	Fall 2009
Principles of Inorganic Chemistry I (5.03)	Spring 2010

## **Relevant Labwork**

### Introduction to Experimental Biology and Communication (7.02)

•	Block 1: Biochemisty and Recombinant DNA	Spring 2010
•	Block 2: Yeast Display Technology	Spring 2010
	Block 3: Genetics and Development	Spring 2010

### **Introduction to Experimental Chemisty (5.35)**

	Module 1: Fundamentals of Spectroscopy	Fall 2009
•	Module 2: Synthesis of Coordination Compounds and Kinetics	Fall 2009
	Module 3: Fabrication of a Polymeric Light Emitting Device	Fall 2009

#### Biochemistry and Organic Laboratory (5.36)

	Module 4: Expression and Purification of Enzyme Mutants	Spring 2011
	Module 5: Kinetics of Enzyme Inhibition	Spring 2011
•	Module 6: Organic Structure Determination	Fall 2010

### Organic and Inorganic Laboratory (5.37)

■ Module 7: Introduction to Organic Synthesis Spring 2011

### **Activities and Interests**

National Society of Collegiate Scholars MIT Symphony Orchestra, principal violist MIT Chamber Music Society Pi Beta Phi sorority, MA gamma

MIT Society of Women Engineers Aviation, private pilot's license training Tae Kwon Do, first-degree black belt Intramural Soccer