

# Cindy Tipping

22 Olde Lantern Road ▶ Bedford, NH 03110 ▶ (603)-809-2131 ▶ [Cindy.Tipping@umassmed.edu](mailto:Cindy.Tipping@umassmed.edu)

---

## EDUCATION

### *Bachelor of Arts in Chemistry*

May 2008

Saint Anselm College, Manchester, NH

## EXPERIENCE

### *Research Associate / Lab Manager*

May 2009 – December 2010

Principal Investigator: Andrew C. Zelhof, Ph.D

Indiana University, Bloomington, IN

- Drosophila husbandry and genetics
- basic molecular biology techniques:
  - DNA isolation, PCR, gel electrophoresis, ligation, transformation, sequencing
- Cell culture
- Microscopy (light, fluorescent, and electron)
- Solution prep
- Ordered supplies
- Shipped materials to other laboratories
- Guided and supervised graduate students
- Maintained a clean and neat work area for all lab members

### *Research Associate*

January 2011 – Present

Principal Investigator: Phillip Zamore, Ph.D

University of Massachusetts Medical School, Worcester, MA

- Drosophila husbandry and genetics
  - Guide graduate students and post-docs
- Manage Cabbage Looper colony
  - husbandry
- basic molecular biology techniques:
  - RNA/DNA isolation, PCR, gel electrophoresis, ligation, transformation, sequencing
- Biochemistry
  - Oligo gel purification
  - 5' DNA phosphorylation with gamma-ATP
- CRISPR Cas9
  - sgRNA guide preparation, in vitro transcription, gel purification, cell culture transfection, donor creation
- Cell culture
- Microscopy (light, fluorescent, and electron)
- Protein purification
- USDA Level 2 Clearance with Animal and Plant Health Inspection Service
  - Maintain and Renew Insect permits
- Manage independent research project

## PROMOTIONS

### *Research Associate II*

September 2010 – December 2010

Principal Investigator: Andrew C. Zelhof, Ph.D

Indiana University, Bloomington, IN

## **Research Associate II**

October 2014 – February 2019

Principal Investigator: Phillip Zamore, Ph. D  
Howard Hughes Medical Insistitute  
University of Massachusetts Medical School, Worcester, MA

## **Research Technician III**

February 2019 – Present

Principal Investigator: Phillip Zamore, Ph. D  
Howard Hughes Medical Insistitute  
University of Massachusetts Medical School, Worcester, MA

## **PUBLICATIONS and PRESENTATIONS**

Ge DT, Wang W, Tipping C, Gainetdinov I, Weng Z, Zamore PD. The RNA-binding ATPase, Armitage, Couples piRNA Amplification in Nuage to Phased piRNA Production on Mitochondria. bioRxiv 445825

Ge DT, Tipping C, Brodsky MH, Zamore PD. 2016. Rapid Screening for CRISPR-Directed Editing of the Drosophila Genome Using white Coconversion. G3.6(10):3197-3206.

Wang W, Han BW, Tipping C, Ge DT, Zhang Z, Weng Z, Zamore PD. 2015. Slicing and Binding by Ago3 or Aub Trigger Piwi-Bound piRNA Production by Distinct Mechanisms. Mol Cell. 59(5):819-30.

Zhang Z, Koppetsch BS, Wang J, Tipping C, Weng Z, Therkauf WE, Zamore PD. 2014 Anitsense piRNA amplification, but not piRNA production or nuage assembly, requires the Tudor-domain protein Qin. EMBO. 33(6):536-9.

Nie J, Mahato S, Mustill W, Tipping C, Bhattacharya SS, Zelhof AC. 2012. Cross species analysis of Prominin reveals a conserved cellular role in invertebrate and vertebrate photoreceptor cells. Dev Biol. 371(2):313-20.

Zhang Z, Xu J, Koppetsch BS, Wang J, Tipping C, Ma S, Weng Z, Therkauf WE, Zamore PD. 2011. Heterotypic piRNA Ping-Pong requires qin, a protein with both E3 ligase and Tudor domains. Mol Cell. 44(4):572-84.

Oke A, Mishra M, Lebel C, McDonald E, Plummer Z, Cook TA, Zelhof AC. 2010. Pph13 and Orthodenticle Define a Key Regulatory Pathway for Photoreceptor Cell Morphogenesis and Function. Development. 137. 2895-2904.

Donais Mary Kate, Jakubowski H, Lebel C. Determination of Tin in Ancient Bronze Coins by Flame Atomic Absorption Spectrometry, *Analytical Sciences Digital Library e-Undergraduate Research*, [www.asdlib.org](http://www.asdlib.org).

Society for Applied Spectroscopy-New England Section Annual Student Research Poster Session, Natick, Massachusetts. "Metals in Drainage System Deposit and Lead Pipe from an Italian Excavation Site", April 22, 2008.

## **LEADERSHIP ACTIVITIES**

### **Saint Anselm College, Women's Ice Hockey Team**

2006-2008

#### Captain

Served as a team leader and liaison to coaching staff. Demonstrated ability to set individual and team goals, motivated players, organized pre-season activities and exhibited competitive spirit. Excelled in all aspects of the sport contributing to overall team success. Member since 2004.

### **Saint Anselm College, Student Athletic Advisory Committee**

2005-2007

Aimed at linking student athletes with the campus faculty. Fundraising for Make-A-Wish Foundation.