



## Pat Polowsky

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patpolowsky.com

### Education

#### University of Vermont

Graduation expected 2018

Master of Science

Food Science

#### Purdue University

Graduated with Distinction

Bachelor of Science

Food Science

GPA: 3.83/4.00

### Outreach Projects

#### Cheese Science Toolkit

[cheesescience.org](http://cheesescience.org)

A technical resource for cheesemongers, cheese buyers, and cheese connoisseurs

#### Cheese Flavor Wheel

[cheesescience.org/wheel](http://cheesescience.org/wheel)

Interactive flavor wheel built using the D3.js JavaScript library

#### Cheese Sensory Training

[cdr.wisc.edu/sensory/resources](http://cdr.wisc.edu/sensory/resources)

Resources related to the area of cheese sensory evaluation and quality control

### Computer Skills

#### Design

Adobe Illustrator (*Advanced*)

Adobe Photoshop (*Advanced*)

#### Web

HTML 5/CSS 3 (*Intermediate*)

JavaScript/jQuery (*Basic*)

D3.js (*Basic*)

### Work & Research Experience

#### Wisconsin Center for Dairy Research • Madison, WI

Feb 2015 - Nov 2016

Research Specialist - Cheese Research Group

- Taught cheese-related lectures as part of industry short courses
- Conducted sensory analysis for academic and industry-partner projects
- Trained and lead student hourly employees to become sensory panelists
- Developed educational tools and handouts related to cheese and sensory

#### Scientific/Technical Consulting

July 2015 - Present

Freelance

- Create visually-striking technical PowerPoint decks for industry clients
- Design infographics and information sheets for products and processes
- Give lectures relating to basic cheese chemistry and sensory analysis
- Ghost write content for social media and marketing materials

#### Madison College • Madison, WI

July 2015 - Nov 2016

Culinary Instructor - School of Professional and Continuing Education

- Created and taught classes for continuing education and enrichment
- Developed courses pertaining to the technical side of food and cuisine
- Taught in a lab setting with hands-on engagement activities
- Revised classes based on survey feedback and supervisor's suggestions

#### Epic Systems • Madison, WI

June 2014 - Feb 2015

Software Quality Assurance

- Identified defects in clinical pharmacy software (medication warnings)
- Worked closely with software developers to safeguard overall quality
- Created scripts and utilities to aid in workplace efficiency
- Aided in design of user interface and user experience of software

#### ConAgra Foods • Omaha, NE

May 2013 - Aug 2013

Research, Quality, & Innovation Intern

- Worked with the Snacks Innovation Team to explore future technologies

#### Whistler Center for Carbohydrate Research • W. Laf., IN

Aug 2011 - May 2012

Researcher

- Published research and presented at an international conference

#### Château Genibon-Blanchereau • Bordeaux, France

June 2012 - Aug 2012

Viticulture & Enology Intern

- Became familiar with large-scale processing and safety procedures

## Teaching Experience

### Workshops & Classes

#### Molecular Gastronomy 101 • Madison College | Madison, WI

Basic techniques in molecular gastronomy for home cooks and chefs

#### Cheese Appreciation • Madison College | Madison, WI

Overview of cheese varieties and common cheese flavors; science of cheese flavor

#### Cheesemaking at Home • Madison College | Madison, WI

Basic science of cheesemaking and tools/techniques to make cheese in the home kitchen

#### Chemistry of Baking • Badger Prairie Needs Network | Verona, WI

Understanding how common baking ingredients interact

### Lectures

#### Basics of Sensory Evaluation • Wisconsin Center for Dairy Research | Madison, WI

Overview of sensory science; part of Cheese Grading and World of Cheese shortcourses

#### Basics of Cheese Sensory • Wisconsin Center for Dairy Research | Madison, WI

Overview of cheese flavor/texture; part of Cheese Grading and World of Cheese shortcourses

#### Cheese Science 101 • Wisconsin Center for Dairy Research | Madison, WI

Overview of basic cheese science; part of the World of Cheese shortcourse

#### Mozzarella and Provolone • Wisconsin Center for Dairy Research | Madison, WI

Overview of mozzarella and provolone sensory/functionality; part of the Cheese Grading shortcourse

### Student Instruction

#### Student Sensory Panel • Wisconsin Center for Dairy Research | Madison, WI

Training undergraduate and graduate students in basic sensory science and evaluation

## Writing & Publications

### Periodicals

Polowsky, P.J. (2016). "Fat". In *The Oxford Companion to Cheese*. Ed. Dr. Catherine Donnelly. Oxford University Press.

Polowsky, P.J. (2016). "Shredding". In *The Oxford Companion to Cheese*. Ed. Dr. Catherine Donnelly. Oxford University Press.

Polowsky, P.J. (2016). "Sensory 101: Tools of the Trade". In *CDR Dairy Pipeline*. Wisconsin Center for Dairy Research.

Johnson, M.E. & Polowsky, P.J. (2016). "Cheese Curds: A Wisconsin Icon". In *CDR Dairy Pipeline*. Wisconsin Center for Dairy Research.

### Book Chapters

Polowsky, P.J., Coudé, B., Jimenez-Maroto, L.A., Johnson, M.E., & Park, Y.W. 2017. Flavor Characteristics of Non-Bovine Mammals Milk and Milk Products. In W.L. Wendorff, Y.W. Park, & G.F.W. Haenlein (Eds.), *Handbook of Non-Bovine Mammals*, 2ed. John Wiley & Sons, Ltd.

### Journal Articles

Polowsky, P.J., Janaswamy, S. (2015). Hydrocolloid-based nutraceutical delivery systems: Effect of counter-ions on the encapsulation and release. *Food Hydrocolloids*, 43, 658-663

## Conference Presentations

Polowsky, P.J. & Carpenter, J. Gotcha Questions: A Look at Technical Inquiries from Consumers. **2016 American Cheese Society Conference.** Des Moines, IA

Polowsky, P.J. Sensory 101: Basic Tastes of Cheese. **2016 American Cheese Society Conference.** Des Moines, IA

Polowsky, P.J. Mozzarella and Provolone Functionality: What Do You Want It to Look Like? Presented at the **International Cheese Technology Exposition.**(2016), Milwaukee, WI

Janaswamy, S., Polowsky, P.J. Hydrocolloid-based stable nutraceutical carriers. Presented at the **11th International Hydrocolloids Conference.**(2012), West Lafayette, IN

Polowsky, P.J., Janaswamy, S. Utilization of hydrocolloid-based fibers for the thermal protection and controlled release of nutraceuticals. Poster presented at the **Discovery Park Undergraduate Research Symposium.**(2012), West Lafayette, IN

## Volunteer Activities

### **Literacy Network • Madison, WI**

*Computer Literacy Tutor*

- Design and implement technology-related lesson plans
- Create handouts and tutorials on the basics of computers

### **Wonders of Physics - University of Wisconsin-Madison • Madison, WI**

*Outreach Presenter*

- Traveling to local schools on evenings and weekends to coordinate science demonstrations
- Operating Tesla coils, Van de Graaff generators, plasma spheres, air cannons, low-to-high power laser arrays, etc.

## Professional Certifications

### **Certified Cheese Professional (CCP)**

*American Cheese Society*

### **Aseptic Processing and Packaging**

*Purdue University*

## Summary

I'm passionate about science, food, and education. I enjoy presenting scientific information via graphic illustrations and interactive web pages. Attending graduate school the next few years and then hope to pursue a career in a food science or education related field. I'm always searching for new things to learn about.

Portfolio available at [www.patpolowsky.com](http://www.patpolowsky.com)