

## **Korin Albert**

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### **CURRENT POSITION**

PhD Candidate in the Laboratory of Dr. David A. Sela, Department of Food Science  
*University of Massachusetts Amherst, Amherst, MA*, February 2015 to present

Currently leading and contributing to studies on the mammalian gastrointestinal microbiome, with a focus on the genomics of *Bifidobacterium* spp. from humans and other mammals

### **EDUCATION**

Pursuing Doctor of Philosophy in Molecular and Cellular Biology  
*University of Massachusetts Amherst, Amherst, MA*, Fall 2014 to present  
Cumulative GPA 3.41

Bachelor of Science in Biology, Cum Laude  
*University of Scranton, Scranton, PA*, Fall 2010 to Spring 2014  
Cumulative GPA 3.64

### **PRIOR RESEARCH EXPERIENCE**

Rotation PhD Student in Dr. Eric Bittman's Laboratory, September 2014 to January 2015  
Molecular and Cellular Biology Graduate Program  
*University of Massachusetts Amherst, Amherst, MA*

Used PCR and cloning techniques to study genes that control circadian rhythms in a mutant Syrian hamster model

Research Intern in the National Institute of Standards and Technology Analytical Organic Chemistry Laboratory

NSF Research Experience for Undergraduates Program, May 2013 to August 2013  
*College of Charleston, Charleston, SC*

Studied differences in lipid profiles of animals living in a wildlife refuge with a necrotizing lipid disease using ESI-MS/MS

Research Intern

Brain Injury Outcomes Clinical Trial Coordination Center, June 2012 to August 2012  
*Johns Hopkins Medicine, Baltimore, MD*

Studied the correlation between blood clot volume, morbidity, and mortality in stroke patients enrolled in a Phase III clinical drug trial

### **HONORS AND AWARDS**

- Emerging Leaders in Nutrition Science, American Society for Nutrition, Nutrition 2018, Boston, MA
- Graduate School Dissertation Research Grant, University of Massachusetts Amherst, Fall 2017
- Travel Award, FASEB 2017 SRC Origins and Benefits of Biologically Active Components in Human Milk, Lisbon, Portugal, July 2017

### **TEACHING ASSISTANT EXPERIENCE**

- Molecular Biology, *University of Massachusetts, Amherst, MA*, Fall 2016, Spring 2017 and 2018
- Introductory Biology Laboratory, *Amherst College, Amherst, MA*, Fall 2017
- Biology of Social Issues, *University of Massachusetts, Amherst, MA*, Spring 2016
- Introductory Biology Laboratory, *University of Massachusetts, Amherst, MA*, Spring 2015 and 2017
- Introductory Biology Discussion, *University of Massachusetts, Amherst, MA*, Fall 2014 and 2015

## **PUBLICATIONS AND PROFESSIONAL PRESENTATIONS**

The Comparative Genomics of *Bifidobacterium callitrichos* Reflects Dietary Carbohydrate Utilization within the Common Marmoset Gut. **Albert, K.**, Rani, A., and Sela, D.A. *Microbial Genomics*. 2018.

Invited Talk, Nutrition 2018, Boston, MA. “Pangenome analysis of bifidobacteria isolated from primates link host dietary carbohydrates with bacterial coevolution and function in the gut microbiome”.

Draft Genome Sequence of *Bifidobacterium longum* UMA026, Isolated from Holstein Dairy Cow Feces. **Albert, K.** and Sela, D.A. *Genome Announcements*. 2018.

Draft Genome Sequences of *Alloscardovia macacae* UMA81211 and UMA81212 Isolated from the Feces of a Rhesus Macaque (*Macaca mulatta*). **Albert, K.** and Sela, D.A. *Genome Announcements*. 2017.

Invited Talk, FASEB 2017 SRC Origins and Benefits of Biologically Active Components in Human Milk. Lisbon, Portugal, July 2017. “Genomic signatures of indigestible oligosaccharide and nitrogen utilization in the genus *Bifidobacterium*”.

The Host Microbiome Regulates and Maintains Human Health: A Primer and Perspective for Non-Microbiologists. Thomas, S., Izard, J., Walsh, E., Batich, K., Chongsathidkiet, P., Clarke, G., Sela, D., Muller, A., Mullin, J., **Albert, K.**, Gilligan, J., DiGuilio, K., Dilbarova, R., Alexander, W., and Prendergast, G. *Cancer Research*. April 15 2017.

Poster, Pioneer Valley Microbiology Symposium. University of Massachusetts Amherst, MA. January 2017. **Albert, K.**, Kundmann, A.C., Levantovsky, R.M., Sela, D.A. “The evolution of breast milk carbohydrate utilization in the *Bifidobacterium* pangenome”.

Poster, Institute for Applied Life Sciences Opening Event. University of Massachusetts Amherst, MA. October 2016. **Albert, K.**, Kundmann, A.C., Levantovsky, R.M., Sela, D.A. “The evolution of breast milk carbohydrate utilization in the *Bifidobacterium* pangenome”.

Poster, American Society for Microbiology Annual Conference. Boston, MA. June 2016. **Albert, K.**, Kundmann, A.C., Levantovsky, R.M., Sela, D.A. “Comparative genomics and molecular evolution of bifidobacteria colonizing the gastrointestinal tract of mammals”.

Invited Talk, Pioneer Valley Microbiology Symposium. University of Massachusetts Amherst, MA. February 2016. “Isolation and identification of bifidobacteria colonizing the gastrointestinal tract of mammals”.

Poster, Molecular and Cellular Biology Program Retreat. University of Massachusetts Amherst, MA. February 2015. **Albert, K.J.**, Coomey, J., Romero, S., Bittman, E.L. “Effects of the dupler mutation on *Per1* and *Bmall* expression in fibroblasts using a luciferase reporter plasmid”.

Poster, Council on Undergraduate Research REU Conference. Arlington, VA. October 2013. **Albert, K.J.**, Bowden, J. “Shotgun lipidomics analysis of plasma and liver samples from pansteatitis-affected African catfish”.