

Jill Sayes Dewey, Ph.D.

EDUCATION

Texas A&M University, Department of Biochemistry and Biophysics, College Station, TX (August 2010) Doctor of Philosophy; Major: Biochemistry; GPA: 3.91

Louisiana State University, Department of Biological Sciences, Baton Rouge, LA (May 2003)
Bachelor of Science; Major: Biochemistry, Minor: Chemistry; GPA: 3.91, graduated *Summa cum laude*

TEACHING EXPERIENCE

Assistant Professor, University of Saint Thomas Department of Biology, Houston, TX (August 2012-present)

- Plan and teach General Biology I & II lecture courses
- Teach General Biology I & II laboratory courses

Visiting Assistant Professor, University of Saint Thomas Department of Biology, Houston, TX (August 2011-May 2012)

- Planned and taught General Biology I & II lecture courses
- Taught General Biology I & II laboratory courses

Adjunct Professor, University of Saint Thomas Department of Biology, Houston, TX (August 2010-December 2010)

- Planned and taught General Biology I lecture course
- Taught General Biology I laboratory course

Teaching Assistant, TAMU Department of Biochemistry and Biophysics (January 2007-May 2007)

- Planned and taught twice weekly recitation classes for an undergraduate biochemistry course
- Attended lectures, held office hours, and proctored exams

Course Assistant, LSU Department of Biological Sciences (January 2004-May 2004)

- Planned and taught weekly review sessions for an introductory biology class of 800 students
- Attended lectures, held office hours, and proctored exams

RESEARCH EXPERIENCE

Principle Investigator, University of Saint Thomas (August 2012-present)

- Plan experiments to carry out structural and functional characterization of predicted *E.coli* inner membrane proteins
- Guide undergraduate student researchers in laboratory research and poster presentations for the UST Research Symposium

Graduate student research assistant, TAMU Department of Biochemistry and Biophysics (August 2005-May 2010)

- Performed genetic, biochemical, and biophysical research on the bacteriophage lambda holin protein
- Presented research at regional, national, and international scientific meetings and published research in peer-reviewed scientific journals
- Mentored one undergraduate (2 semesters) and two graduate students (6 week rotations each); duties included overseeing daily laboratory activities, instruction of concepts and methods, and evaluating student progress

Research Associate II, LSU Department of Biological Sciences (September 2003-June 2005)

- Performed research involving PCR amplification of transient receptor potential (TRP) channels within retinal amacrine cells

Undergraduate student research assistant, LSU Department of Biological Sciences (August 1999-May 2003)

- Performed research which involved developing RNA catalysts for the carboxylation of biotin
- Presented research at poster sessions for national scientific meetings

SERVICE

- First Year Experience (FYE) advisor at UST (August 2013-present)
- Member of UST's Library Committee (August 2013-present) and Faculty Social Committee (August 2013-present)
- Faculty mentor for IRACDA postdoctoral fellow at UST (August 2012-present)
- Coordinator for General Biology I & II laboratory courses at UST (August 2012-May 2013)
- Co-instructor for DREME/UST camp; led biology and health science-related laboratory exercises and interactive group activities for high school students (July 2012 and August 2013)
- Judge for Biology poster presentations at the UST Research Symposium (April 2012)
- Secretary of the TAMU Biochemistry Graduate Student Association (August 2007-May 2008)
- Judge for the Louisiana State Science and Engineering Fair, Junior Chemistry division (April 2004)

HONORS

- American Society for Microbiology (ASM) Division M Nestle Award for best bacteriophage paper in 2010
- 1st place in TAMU Biochemistry and Biophysics departmental graduate student research competition (2009)
- 3rd place in research presentation at Texas Branch ASM Meeting (2008)
- Molecular and Cell Biology (MCB) training grant recipient

PUBLICATIONS

Savva, C.G., **Dewey, J.S.**, Deaton, J., White, R.L., Struck, D.K., Holzenburg, A., Young, R. The holin of bacteriophage lambda forms rings with large diameter (2008) *Mol Microbiol* 69 (4): 784-793.

Dewey, J.S., Struck, D.K., and Young, R. Thiol protection in membrane protein purification: A study with bacteriophage holins (2009) *Anal Biochem* 390 (2): 221-223.

Crousillac, S., Colonna, J., McMains, E., **Dewey, J.S.**, and Gleason, E. Sphingosine-1-phosphate elicits receptor-dependent calcium signaling in retinal amacrine cells (2009) *J Neurophysiol* 102 (6): 3295-309.

Dewey, J.S., Savva, C.G., White, R.L., Vitha, S., Holzenburg, A., and Young, R. Micron-scale holes terminate the phage infection cycle (2010) *Proc Natl Acad Sci USA* 107 (5): 2219-23.

White, R., Chiba, S., Pang, T., **Dewey, J.S.**, Savva, C.G., Holzenburg, A., Pogliano, K., Young, R. Holin triggering in real time (2011) *Proc Natl Acad Sci USA* 108 (2): 798-803.

To, K., **Dewey, J.**, Weaver, J., Park, T., Young, R. P2Y: Functional Analysis of a Class I Holin (2013) *J Bacteriol* 195(6): 1346-55.

Savva, C.G., **Dewey, J.S.**, Moussa, S.H., To, K.H., Hozenburg, A., Young, R. Stable micron-scale holes are a general feature of canonical holins (2013) *Mol Microbiol* (Epub ahead of print; PMID: 24164554)

PRESENTATIONS

Sayes, J. and Grove, A. Developing RNA catalysts for the carboxylation of biotin. 221st ACS National Meeting. San Diego, CA, April 2001. Abstract no. CHED 572 (*poster presentation*)

Sayes, J., Grove, A., Johnson, L. and Strongin, R. Developing RNA catalysts for the carboxylation of biotin. 223rd ACS National Meeting. Orlando, FL, April 2002. Abstract no. CHED 307 (*poster presentation*)

Sayes, J., Wilkinson, S. P., Strongin, R., Waldrop, G. L. and Grove, A. Developing RNA catalysts for the carboxylation of biotin. 225th ACS National Meeting. New Orleans, LA, March 2003. Abstract no. CHED 874 (*poster presentation*)

Dewey, J.S., Savva, C.G., White, R.L., Struck, D.K., and Young, R.F. *In vitro* characterization of bacteriophage lambda holin. American Society for Microbiology 107th General Meeting. Toronto, Canada, May 2007. Abstract no. M-040 (*poster presentation*)

Dewey, J.S., Savva, C.G., White, R.L., Struck, D.K. and Young, R.F. *In vitro* characterization of bacteriophage lambda holin. Lost Pines Regional Meeting. Bastrop, TX, November 2007. Abstract no. 206 (*poster presentation*)

Dewey, J.S., Savva, C.G., White, R.L., Holzenburg, A., and Young, R.. The lambda holin forms micron-scale holes in the bacterial membrane. American Society for Microbiology Texas & South Central Branch Annual Meeting. Austin, TX, November 2008 (*platform presentation*)

Dewey, J.S., Savva, C.G., White, R.L., Holzenburg, A., and Young, R. The lambda holin forms micron-scale holes in the bacterial membrane. Biochemistry and Biophysics Research Competition. College Station, TX, May 2009 (*platform presentation*)

Dewey, J.S., Savva, C.G., White, R.L., Holzenburg, A., and Young, R. The lambda holin forms micron-scale holes in the bacterial membrane. 18th Evergreen International Phage Biology Meeting. Olympia, Washington, August 2009. Abstract no. L-4 (*platform presentation*)

Vo, T., Navarro, M., Maldonado, J., Radford, E., Cover, B., and **Dewey, J.** A purification plan for predicted *E.coli* membrane proteins YecN and YidH. University of St. Thomas Undergraduate Research Symposium. Houston, TX, March 2013 (*poster presentation*)