**Jeannette L. Tenthorey**

Division of Basic Sciences

Fred Hutchinson Cancer Research Center

Mail Stop A2-025, P.O. Box 19024

Seattle, WA 98109-1024

jtenthor@fredhutch.org

(860) 798-9820

**EDUCATION**

University of California, Berkeley Berkeley, CA

Ph.D., Molecular and Cell Biology (Immunology and Pathogenesis) 9/2011-5/2017

Reed College Portland, OR

B.A., Biology 9/2004-5/2009

**RESEARCH EXPERIENCE**

Post-doctoral fellow 11/2017-present

Fred Hutchinson Cancer Research Center — Advisor: Dr. Harmit Malik

Doctoral student 9/2011-5/2017

University of California, Berkeley — Advisor: Dr. Russell Vance

Thesis: Mechanism of NAIP inflammasome sensing of bacterial pathogens in the host cytosol

Post-baccalaureate research technician 11/2009-8/2011

University of California, San Francisco — Advisor: Dr. David Morgan

Project: Stimulation of E2 ubiquitin-conjugating enzymes by the Anaphase Promoting Complex RING domain

Undergraduate thesis research 9/2008-5/2009

Reed College, Portland, OR — Advisor: Dr. Jay Mellies

Thesis: Regulation of virulence in enteropathogenic *E. coli*: in search of a consensus DNA-binding sequence for Ler

Summer Undergraduate Research Program Summer 2008

NYU School of Medicine — Advisor: Dr. Jane Skok

Project: Nuclear localization of DNA repair complexes during rearrangement of the immunoglobulin heavy-chain gene

Undergraduate research assistant Summers 2003-2005

Yale University — Advisor: Dr. Gil Mor

Project: Development of a diagnostic assay for detection of ovarian cancer

**AWARDS AND HONORS**

Leading Edge Fellow, Howard Hughes Medical Institute 2021

Hanna H. Gray Fellow, Howard Hughes Medical Institute 2018

Damon Runyon Postdoctoral Fellowship (declined) 2018

Jane Coffin Childs Fellowship (declined) 2018

Ray Owen Young Investigator Award, Midwinter Conference of Immunologists 2017

Outstanding Graduate Student Instructor Award, UC Berkeley 2014

AAI Young Investigator Award (Ray Owen oral presentation award), 2014

Midwinter Conference of Immunologists

Chemical Biology in the Bay Area Symposium poster award 2014

NSF Graduate Research Fellowships Program Award 2012

Berkeley Fellowship for Graduate Study 2011

**PROFESSIONAL SERVICE**

Reviewer for: Science Immunology, Cell Systems 2021

Founder & Chair, Basic Sciences Postdoctoral Association 2020-2021

Chair, Gordon Research Symposium (Microbial Toxins & Pathogenesis) 2016-2018

Graduate divisional representative to faculty (IMP division, UC, Berkeley) 2015-2016

Member, Marian E. Koshland Seminar Series Committee (UC, Berkeley) 2014-2016

Member, Berkeley Center for Emerging and Neglected Diseases faculty search 2014-2015

Member, Graduate admissions committee (UC, Berkeley) 2013-2014

Graduate class representative (UC, Berkeley) 2011-2013

**PUBLICATIONS**

1. **Tenthorey, J.L.**, Young, C., Sodeinde, A., Emerman, M., and Malik, H.S. (2020). Mutational resilience of antiviral restriction favors primate TRIM5α in host-virus evolutionary arms races. eLife *9*, e59988.
   * bioRxiv doi: 10.1101/2020.06.12.149088
2. Duxbury, Z., Wang, S., MacKenzie, C.I., **Tenthorey, J.L.**, Zhang, X., Huh, S.U., Hu, L., Hill, L., Ngou, P.M., Ding, P., Chen, J., Ma, Y., Guoo, H., Castel, B., Moschou, P.N., Bernoux, M., Dodds, P.N., Vance, R.E., and Jones, J.D.G. (2020). Induced proximity of a TIR signaling domain on a plant-mammalian NLR chimera activates defense in plants. PNAS. *117*, 18832-9.
3. **Tenthorey, J.L.**, Chavez, R.A., Thompson, T.W., Deets, K.A., Vance, R.E., and Rauch, I.R. (2020). NLRC4 inflammasome activation is NLRP3- and phosphorylation-independent during infection and does not protect from melanoma. J. Exp. Med. *217*, e20191736.
   * bioRxiv doi: 10.1101/765313
4. Haloupek, N., Grob, P., **Tenthorey, J.L.**, Vance, R.E., and Nogales, E. (2019). Cryo-EM studies of the NAIP-NLRC4 inflammasomes. Methods Enzymol. *625*, 177-204.
5. **Tenthorey, J.L.\***, Haloupek, N.\*, Lopez-Blanco, J.R., Grob, P., Adamson, E., Hartenian, E., Lind, N., Bourgeois, N.M., Chacon, P., Nogales, E., and Vance, R.E. (2017). The structural basis of flagellin detection by NAIP5: a strategy to limit pathogen immune evasion. Science. *358*, 883-93. (\*These authors contributed equally.)
6. Rauch, I., Deets, K.A., Ji, D.X., von Moltke, J., **Tenthorey, J.L.**, Lee A.Y., Phillip, N.H., Ayres, J.S., Brodsky, I.E., Gronert, K., and Vance, R.E. (2017). NAIP-NLRC4 inflammasomes coordinate intestinal epithelial cell expulsion with eicosanoid and IL-18 release via activation of Caspase-1 and -8. Immunity. *46*, 649-59.
7. Rauch, I., **Tenthorey, J.L.**, Nichols, R.D., Al Moussawi, K., Kang, J.J., Kang, C., Kazmierczak, B.I., and Vance, R.E. (2016). NAIP proteins are required for cytosolic detection of specific bacterial ligands in vivo. J. Exp. Med. *213*, 657-65.
8. Girard, J.R., **Tenthorey, J.L.**, and Morgan, D.O. (2015). An E2 accessory domain increases affinity for the anaphase-promoting complex and ensures E2 competition. J. Biol. Chem. *290*, 24614-25.
9. **Tenthorey, J.L.**, Kofoed, E.M., Daugherty, M.D., Malik, H.S., and Vance, R.E. Molecular basis for specific recognition of bacterial ligands by NAIP/NLRC4 inflammasomes. (2014). Mol. Cell. *54*, 17-29.
10. Hewitt, S.L., Yin, B., Ji, Y., Chaumeil, J. Marszalek, K., **Tenthorey, J.**, Salvagiotto, G., Steinel, N., Ramsey, L.B., Ghysdael, J., Farrar, M.A., Sleckman, B.P., Schatz, D.G., Busslinger, M., Bassing, C.H., and Skok, J.A. (2009). RAG-1 and ATM coordinate monoallelic recombination and nuclear positioning of immunoglobulin loci. Nat. Immunol. *10*, 655-64.
11. Visintin, I., Feng, Z., Longton, G., Ward, D.C., Alvero, A.B., Lai, Y., **Tenthorey, J.**, Leiser, A., Flores-Saiib, R., Yu, H., Azori, M., Rutherford, T., Schwartz, P.E., and Mor, G. (2008). Diagnostic markers for early detection of ovarian cancer. Clin Cancer Res. *14*, 1065-72.

**SELECTED TALKS AND SEMINARS**

UT Southwestern, Immunology Symposium May 2021

Scripps Research Institute, Immunology & Microbiology Symposium April 2021

Icahn School of Medicine at Mount Sinai, Microbiology Dept. Jan 2021

University of Washington, Genome Sciences Dept. (student-invited seminar) June 2020

Retroviruses (Cold Spring Harbor Laboratory) May 2020

Gordon Research Conference: Microbial Toxins and Pathogenesis (Waterville, NH) July 2018

Midwinter Conference of Immunologists (Asilomar, CA) Jan 2017

Gordon Research Symposium: Microbial Toxins and Pathogenesis (Waterville, NH) July 2016

Bay Area Microbial Pathogenesis Symposium (San Francisco, CA) March 2016

Midwinter Conference of Immunologists (Asilomar, CA) Jan 2014

**TEACHING EXPERIENCE AND SCIENTIFIC OUTREACH**

Mentor training workshop, HHMI Spring 2020

Science fair project mentor, John Stanford International School (Seattle, WA) Spring 2018

Be A Scientist program to mentor 7th grade science projects (Berkeley, CA) Fall 2016

Science fair judge and organizer, Alameda Community Learning Center (CA) 2011-2016

Graduate student instructor, Molecular Immunology (UC, Berkeley) Spring 2014

Graduate student instructor, Immunology Laboratory (UC, Berkeley) Fall 2012

Teaching assistant, Microbiology (Reed College) Spring 2009

Head tutor, Biochemistry and Statistics (Reed College) 2007-2009

**STUDENTS MENTORED**

Serena Del Banco, post-baccalaureate student 2020-present

Candice Young, post-baccalaureate student 2019-2020

Rechel Geiger, MD/PhD rotation student Summer 2020

Caroline Langley, graduate rotation student Spring 2020

Afeez Sodeinde, undergraduate HHMI/EXROP scholar Summers 2018, 2019

Natasha Bourgeois, undergraduate HHMI/EXROP scholar Summer 2016

Nick Lind, graduate rotation student Spring 2016

Elise Adamson, undergraduate HHMI/EXROP scholar Summer 2015

Ella Hartenian, graduate rotation student Spring 2015

Aaron Schaller, graduate rotation student Fall 2014

Sarah Gilbertson, graduate rotation student Fall 2013

Rohaum Hamidi, undergraduate student 2013-2014