Molly Stanley, Ph.D.

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EDUCATION

2017 Ph.D., Neuroscience, Washington University in St. Louis (WUSTL)
2012 B.A., Human Biology, University of Kansas, *Highest Distinction*
2012 B.A., Psychology, University of Kansas, *Highest Distinction*

POSITIONS HELD

2023-Now Associate Director, Undergraduate Neuroscience Program, UVM
2022-Now Assistant Professor, Department of Biology, University of Vermont
2017-2022 Postdoctoral Research Fellow, Zoology, University of British Columbia
2022-2022 Postdoctoral Teaching Fellow, Zoology, University of British Columbia
2011-2012 Student Research Technician, Pharm. & Tox., University of Kansas

FUNDING

Current funding:

2024-2027 NSF BRC-BIO, "*Amino acid taste coding mechanisms and modulation in D. Melanogaster"*, Principal Investigator, $444,326

Recently submitted proposals:

2025 NIH-R21, "The impacts of combination of Western diet and binge drinking on liver and brain health", Co-PI, $411,125 (pending review)
2024 NIH-R01, "Insulin and sweet taste: mechanisms of metabolic-gustatory integration", Principal Investigator, $1,175,000 (resubmission in progress)
2024 Whitehall Foundation, "*Investigating the impact of hunger/satiety hormones on taste cell function"*, Principal Investigator, $300,000 (not granted)
2023 Whitehall Foundation, "*Characterizing a Unique Set of Taste Cells in Drosophila"*, Principal Investigator, $300,000 (not granted)
2023 Mallinckrodt Foundation, "*Investigating direct connections between sweet taste and insulin in the fruit fly (Drosophila)"*, Principal Investigator, $225,000 (not granted)

Previous funding:

2022 OVPR EXPRESS Grant, University of Vermont, internal competition
Principal Investigator, $2095 USD
2013-2016 National Science Foundation Graduate Research Fellowship DGE-1143954
Graduate student, $102,000 USD

PUBLICATIONS

Google Scholar: https://scholar.google.com/citations?user=r11k9ZkAAAAJ&hl=en
NCBI Bibliography: https://www.ncbi.nlm.nih.gov/myncbi/molly.stanley.1/bibliography/public/
*=*co-first authors*, [G / U]=*UVM graduate/undergraduate student*, [#]=corresponding author

Publications in various stages of submission and peer review:

Biswas, P., Bako, JA., Liston, B., Yu, H., Wat, LW., Miller, CJ., Gordon, MD., Huan T., **Stanley, M.,** Rideout, EJ. (2025) Insulin/insulin-like growth factor signaling pathway promotes higher fat storage in *Drosophila* females. *bioRxiv*.
(contribution 20%) doi: https://doi.org/10.1101/2024.11.18.623936 (accepted)

[G]Guillemin, J, [U]Davis, G., Audette, K., [UC]Avonda, T., [U]Freed, E., [U]Vitters, A., [UC]Woods, B., [UC]Wagner, E., [UC]Schwartz, L., [UC]Orsmond, I., [UC]Hampp, B., [UC]Burdick, M., [UC]Gause, P., [UC]Taylor, S., [UC]Asaro, B., [UC]Sperber, A., [UC]Zoller, KA., [#]**Stanley, M**. (2025) Amino acids activate parallel chemosensory pathways in *Drosophila*. *bioRxiv*.
[UC]=*undergraduates from BIOL4635 CURE class*
(contribution 100%) doi: https://doi.org/10.1101/2025.03.10.642418 (submitted)

[G]Arntsen, C., [U]Grenon, J., Chauvel, I., Fraichard, S., Dupas, S., Cortot, J., Audette, K., [#]Musso, P-Y, and [#]**Stanley, M**. (2025) Artificial sweeteners differentially activate sweet and bitter gustatory neurons in *Drosophila*. *bioRxiv*.
(contribution 100%) https://doi.org/10.1101/2025.02.06.636883 (in revision)

[G]Arntsen, C., [U]Ingersoll, M., [U]Earle, L., [#]**Stanley M**. (2025) Insulin receptor signaling in gustatory cells suppresses taste sensitivity and sugar feeding in *Drosophila*.
(contribution 100%) (in revision)

Carroll, CM*., **Stanley, M***., Raut, RV., Constantino, NJ., Irmen, RE., Mitra, A., Snipes, JA., Raichle, ME., Holtzman, DM., Gould, RW., Kishida, KT., Macauley, SL. (2022) Acute hyper- and hypoglycemia uncouples the metabolic cooperation between glucose and lactate to disrupt sleep. *bioRxiv*.
(contribution 60%) https://doi.org/10.1101/2022.09.15.507967 (under review)

Junca, P., **Stanley, M.**, Musso, P-Y., Gordon, MD. (2021) Modulation of taste sensitivity by the olfactory system in *Drosophila*, *bioRxiv*.
(contribution 40%) https://doi.org/10.1101/2021.03.30.437740 (paused)

Macauley, SL., **Stanley, M.**, Caesar, EE., Moritz, WR., Carroll, CM., Day, SM., Baxter, GA., Bice, AR., Cruz-Diaz, N., Grizzanti, J., Mahan, TE., Culver, JP., Remedi, M., Nichols, C., Karch, CM., Cox, L., Diz, D., Bauer, AQ., and Holtzman, DM. (2021) Sulfonylureas target the neurovascular response to decrease Alzheimer's pathology. *bioRxiv*.
(contribution 40%). https://doi.org/10.1101/2021.08.11.455969 (in revision)

Peer-Reviewed Publications

1. Li, J., Dhaliwal, R., **Stanley, M.,** Junca, P., Gordon, MD. (2025) Functional imaging and connectome analyses reveal organizing principles of taste circuits in *Drosophila*. *Current Biology*, 5:S0960-9822(25)00499-3.
(contribution 20%) https://doi.org/10.1016/j.cub.2025.04.035

2. [G]Gacy ,T., [#]**Stanley, M**. (2025) *In vivo* calcium imaging of taste-induced neural responses in adult *Drosophila*. *Journal of Visualized Experiments*, (217) e67917
(contribution 100%) DOI: doi:10.3791/67917

3. [G]Guillemin, J., Li, J., Li, V., McDowell, SAT., Audette, K., [U]Davis, G., Jelen, M., [U]Slamani, S., [U]Kelliher, L., Gordon, MD, [#]**Stanley, M**. (2024) Taste cells expressing *Ionotropic Receptor 94e* reciprocally impact feeding and egg laying in *Drosophila*. *Cell Reports*, 43, 114625.
(contribution 100%) DOI: 10.1016/j.celrep.2024.114625

4. [G]Arntsen, C.*, [G]Guillemin, J.*, Audette, K., [#]**Stanley, M.** (2024**)** Tastant-receptor interactions: insights from the fruit fly. *Frontiers in Nutrition*, *11*, 1394697.
(contribution 100%) DOI: https://doi.org/10.3389/fnut.2024.1394697

5. Grizzanti, J., Moritz, WR., Pait, MC., **Stanley, M**., Kaye, SD., Carroll, CM., Constantino, NJ., Deitelzweig, LJ., Snipes, JA., Kellar, D., Caesar, EE., Petit-Mee, RJ., Day, SM., Sens, JP., Nicol, N., Dhillon, J., Remedi, MS., Kiraly, DD., Karch, CM., Nichols, CG., Holtzman, DM., Macauley, SL. (2023). KATP channels are necessary for glucose-dependent increases in amyloid-beta and Alzheimer's disease-related pathology. *JCI Insight*, 8(10):e162454.
(contribution 25%) DOI: 10.1172/jci.insight.162454

6. McDowell, SAT., **Stanley, M**., Gordon, MD. (2022). A molecular mechanism for high salt taste in *Drosophila*. *Current Biology*, 32, 3070-3081.
(contribution 75%) DOI: 10.1016/j.cub.2022.06.012

7. **Stanley, M**., Ghosh, B., Weiss, ZF., Christiaanse, J., Gordon, MD. (2021). Mechanisms of gustatory lactic acid attraction in *Drosophila*. *Current Biology*, 31, 1-13.
(contribution 100%) DOI: 10.1016/j.cub.2021.06.005

8. Jaeger, AH.*, **Stanley, M.***, Weiss, ZF., Musso, P-Y., Chan, RCW., Zhang, H., Feldman-Kiss, D., Gordon, MD. (2018). A complex peripheral code for salt taste in *Drosophila*. *eLife*, 7:e37167. (* *denotes equal authorship*)
(contribution 75%) DOI: 10.7554/eLife.37167

9. Andrew, RJ.*, Fernandez, CG.*, **Stanley, M.**, Jiang, H., Nguyen, P., Rice, RC., Buggia-Prevot, V., De Rossi, P., Vetrivel, KS., Lamb, R., Argemi, A., Rathbun, E., Krause, S., Xu, G., Wagner, SL., Parent, AT., Holtzman, DM., Thinakaran, G. (2017). Lack of BACE1 S-palmitylation reduces amyloid burden and mitigates memory deficits in transgenic mouse model of Alzheimer's disease. *PNAS*, 114(45):E9665-74. (contribution 30%) DOI: 10.1073/pnas.1708568114

10. **Stanley, M.,** Macauley, SL., Caesar, EE., Koscal, LJ., Moritz, W., Robinson, GO., Roh, J., Keyser, J., Jiang, H., & Holtzman, DM. (2016). The effects of peripheral and central high insulin on brain insulin signaling and amyloid-beta in young and old APP/PS1 mice. *The Journal of Neuroscience*, 36(46):11704-11715. (contribution 100%) DOI: 10.1523/JNEUROSCI.2119-16.2016

11. **Stanley, M.**, Macauley, SL., Holtzman, DM. (2016). Changes in insulin and insulin signaling in Alzheimer's disease: cause or consequence? *Journal of Experimental Medicine.* 213(8):1375-85. (contribution 100%) DOI: 10.1084/jem.20160493

12. Harris, RA., Tindale, L., Lone, A., Singh, O., Macauley, SL., **Stanley, M.**, Holtzman, DM., Bartha, R., Cumming, RC. (2016). Aerobic Glycolysis in the Frontal Cortex Correlates with Memory Performance in Wild- Type Mice but Not the APP/PS1 Mouse Model of Cerebral Amyloidosis. *The Journal of Neuroscience*, 36(6):1871-78. (contribution 25%) DOI: 10.1523/JNEUROSCI.3131-15.2016

13. Ising, C., **Stanley, M.**, Holtzman, DM. (2015). Current thinking on the mechanistic basis of Alzheimer's and implications for drug development. *Clinical Pharmacology & Therapeutics*, 98(5):469-71. (contribution 60%) DOI: 10.1002/cpt.200

14. Macauley, SL., **Stanley, M.**, Caesar, EE., Yamada, SA., Raichle, ME., Perez, R., Mahan, TE., Sutphen, CL., Holtzman, DM. (2015). Hyperglycemia modulates extracellular amyloid-β concentrations and neuronal activity in vivo. *Journal of Clinical Investigation*, 125(6):2463-7. (contribution 70%) DOI: 10.1172/JCI79742

15. Murray, M., **Stanley, M.**, Lugar, HM., Hershey, T. (2013). Hippocampal volume in type 1 diabetes. *US Endocrinology*, 9(2):91-4. (contribution 85%) DOI: 10.17925/EE.2014.10.01.14

***Published Commentaries*:**

16. **Stanley, M.**, McDowell, SAT., Gordon, MD. (2020). A fly rhodopsin sheds light on thermal taste. *Cell Calcium*, 91:102259. (contribution 90%) DOI: 10.1016/j.ceca.2020.102259

TEACHING

Certificates:

2019: CIRTL Practitioner, University of British Columbia, Postdoc Teaching Internship
2017: CIRTL Associate, Washington University in St. Louis, Teaching Center Program

New Courses Developed:

2023 BIOL 204/4630, Advanced Genetics Lab (Course-based Undergraduate Research Experience, CURE), UVM

2023 BIOL 371B, Genetic Tools in Neuroscience (graduate seminar), UVM

Courses taught at the University of Vermont:

- NSCI 2100, Exploring Neuroscience + Lab Coordinator, Fall & Spring 2024-2025
- NSCI 2100/2105, Exploring Neuroscience (with Dr. Anacker), Fall 2023
- BIOL 204/4630, Advanced Genetics Lab (CURE), Spring 2023, 2024
- BIOL 371B, Genetic Tools in Neuroscience, Spring 2023

***Previous Courses*:**

2022 BIOL 371 Principles of Neurobiology 1, University of British Columbia
2016 BIOL 4933 Molecular Biology at the Cutting Edge, WUSTL

Guest Lectures:

2023-2024 NSCI 030- First-year Neuroscience Seminar
2023-2025 BIOL 096- Life Sciences CURE Lab
2023 BIOL 030 First-year Biology Seminar
2022 CHEM 121 Quantitative Analysis, University of Vermont
2021 COGS 401 Cognitive Systems, University of British Columbia
2019-2021 Science 101 (outreach course), University of British Columbia
2019 BIOL 260 Fundamentals of Physiology, University of British Columbia
2017-2018 BIOL 455 Comparative Neurobiology, University of British Columbia
2015-2017 BIOL 4933 Molecular Biology at the Cutting Edge, WUSTL
2015 Neuroscience Summer Course, Priory High School, St. Louis, MO

***Teaching Assistant*:**

2013 BIOL 404 Laboratory of Neurophysiology, WUSTL
2011 BIOL 1012 General Biology Lab for Non-Majors, University of Kansas

MENTORSHIP

Undergraduate Trainees at UVM

2025-Now Emmi Sturm (NSCI credits)
2025-Now Madison McCuin (NSCI credits)
2025-Now Julia Neefe (NSCI credits, Honors Thesis)
2025-Now Devon Michaelson (co-mentored with Dr. Nunez, BIOL and Honors Thesis)
2024-Now Erika Araujo (work study, Summer research associate)
2024-Now Sofia Puccio (BIOL credits)
2024-Now Ava Vitters (BIOL credits, Honors Thesis)
2024-Now Samantha Gibbons (BIOL credits)
2024-Now Ella Freed (Summer Research Award, NSCI credits)
2024-Now Max Terraciano (NSCI credits)

2024 Tucker Avonda (BIOL credits)
2023-Now Luke Proud (co-mentored with Dr. Nunez, BIOL credits, Honors Thesis)
2023-Now Jake Grenon (NSCI credits, Summer research associate)
2023-Now Lindsey Earle (NSCI credits, Summer research associate, Honors Thesis)
2023-2024 Macy Ingersoll (Summer Research Award, BIOL credits)
2023-2024 Grace Davis (Summer research associate, NSCI credits, Honors Thesis)
2023 Jessica Cerniglia (Summer research associate)
2023 Will Turner (NSCI credits)
2022-2023 Samy Slamani (BIOL credits)
2022-2023 Liam Kelliher (BIOL credits)

Undergraduate Thesis Committees

2025 Kara Wentzel (anticipated November, Chair)
2025 Adeline Haacker (member)
2025 Lillian Hand (Chair)
2025 Luke Proud (Co-advisor)
2024 Grace Davis (Advisor)
2024 Brendan Cox (member)

Graduate Trainees at UVM

2024-Now Tynan Gacy, Neuroscience Graduate Program, PhD student
2023-Now Jaqueline Guillemin, Biology Graduate Program, PhD Candidate
2022-Now Christian Arntsen, Neuroscience Graduate Program, PhD Candidate

Graduate Thesis Committees

2025-Now Harrison Morse, Pharmacology AMP (Chair)
2024 Dolan, Educational Leadership & Policy Studies PhD (Defense Chair)
2023-Now Dan Peipert, Neuroscience PhD
2022-2024 Caroline Dumas, Biology PhD

SERVICE

In the Biology Department at UVM

2024-2025 Lecturer search committee member (biology/neuroscience)
2023-2024 Tenure-track faculty search committee member (cell biology/neuroscience)
2022-Now Biology Department Communications & SciComm Internship creator

Across departments/colleges at UVM

2025-Now Brain Exercise Initiative, Faculty Advisor, Vermont Chapter
2023-Now Associate Director, Undergraduate Neuroscience Program, UVM
2022-Now oSTEM, Faculty Advisor, Vermont Chapter

Across Vermont

2023-Now Vermont Society for Neuroscience (Treasurer), organize annual forum

Scientific field contributions

2024-2025 Co-Chair, Neural Circuits and Behavior Session, DROS25 conference
Grant panels: National Science Foundation (2022), Ad hoc reviewer (2024)

Manuscript reviews*: Current Biology*, *Nature Metabolism*, *Scientific Reports*, *PLOS Biology*, *Biological Research*, *JoVE*, *Journal of Molecular Neuroscience*
Memberships*:* Genetics Society of America, Society for Neuroscience, Faculty for Undergraduate Neuroscience

Previous service as a trainee (select):
2018-2022 VP Finance, executive member, Postdoctoral Association, UBC
2016-2017 Mentor, NIH Blueprint-ENDURE St. Louis Neuroscience Pipeline
2013-2017 Co-President, OUTgrads, WUSTL

SEMINARS & PRESENTATIONS

Invited Talks:

- "*How to tell a science story with social media"*
  UVM BiLDs Program seminar, Burlington, VT, 2025
- "*Cutting-edge tools in Drosophila reveal novel features of gustatory neural circuits"*
  UVM Pharmacology, Seminar, Burlington, VT, 2024
- "*A set of taste cells impacts feeding and egg laying in Drosophila melanogaster"*
  UVM Neurological Sciences, Seminar, Burlington, VT, 2024
- "*A novel set of taste cells impact multiple behaviors in Drosophila melanogaster"*
  Middlebury College, Seminar, Middlebury, VT, 2023
- *"Characterizing a unique subset of taste cells in Drosophila melanogaster"*
  Neuroscience, Behavior, and Health Forum, Burlington, VT, 2023
- *"Characterizing a unique subset of taste cells in Drosophila melanogaster"*
  Queen's University Biology Dept. Seminar, virtual, 2023
- *"Food-brain connections in Drosophila: taste, metabolism, behavior, & health"*
  UVM Biobehavioral Group Seminar, Burlington, VT, 2022
- "*Over the rainbow: my journey (so far) as a queer neuroscientist"*
  Scientific QUEERies Seminar, virtual, 2021
- *"Mechanisms of lactic acid taste in Drosophila"*
  University of British Columbia, Comparative Physiology Seminar, virtual, 2021
- *"Unique properties of salt taste coding and state-dependent behavioral output in Drosophila"*. Canadian Association for Neuroscience Meeting, Toronto, ON, 2019

Conference Posters (select):
^{G} / ^{U}=*UVM graduate/undergraduate student, underline=presenting author*

- ^{U}Earle, L., ^{G}Arntsen, C., ^{U}Ingersoll, M., **Stanley M**. "Dopamine and insulin receptor signaling in sweet taste cells influence protein and sugar sensing in *Drosophila melanogaster*". Neuroscience, Behavior, and Health Forum, University of Vermont, 2025 *(*Best undergraduate poster award*)

- **Stanley, M**. *"Giving students a "taste" for research: using fruit fly chemosensation in a course-based undergraduate research experience (CURE)"*. Society for Neuroscience

Annual Meeting, Chicago, IL 2024

- [G]Arntsen, C., [U]Ingersoll, M., [U]Earle, L., **Stanley, M**. "Insulin receptor signaling modulates 'sweet' sensitivity in *Drosophila melanogaster*". Society for Neuroscience Annual Meeting, Chicago, IL 2024

- *Davis, G., *[G]Guillemin, J., Audette, K., [U]Freed, E., [U]Avonda, T., **Stanley, M**. "Amino acids activate parallel chemosensory pathways in *D. melanogaster*". Society for Neuroscience Annual Meeting, Chicago, IL 2024

- [G]Guillemin, J., [U]Gibbons, S., Li, V., McDowell, S., Audette, K., [U]Davis, G., Nunez. J., Gordon, MD., **Stanley, M**. "*Ionotropic Receptor 94e* modulates multiple behaviors that impact fitness in *Drosophila melanogaster*". Society for Neuroscience Annual Meeting, Chicago, IL 2024

- [G]Arntsen, C., [U]Ingersoll, M., [U]Earle, L., **Stanley, M.** *"Insulin receptor signaling modulates 'sweet' sensitivity in Drosophila melanogaster"*. International Symposium on Olfaction and Taste, Reykjavik, Iceland, 2024

- *[U]Davis, G. *[G]Guillemin, J., Audette, K., [U]Cerniglia, J., **Stanley, M.** *"Amino Acids activate parallel chemosensory pathways in Drosophila"*. International Symposium on Olfaction and Taste, Reykjavik, Iceland, 2024

- **Stanley, M.**, *[G]Guillemin, J., Li, V., [U]Davis, G., Audette, K., McDowell, S., Jelen, M., [U]Slamani, S., [U]Kelliher, L., Gordon, MD. *"Labellar chemosensory cells expressing Ionotropic Receptor 94e impact multiple behaviors"*. International Symposium on Olfaction and Taste, Reykjavik, Iceland, 2024

- [U]Davis, G., Audette, K., [U]Cerniglia, J., **Stanley, M.** *"Amino Acids activate parallel chemosensory pathways in Drosophila"*. Neuroscience, Behavior, and Health Forum, University of Vermont, 2024.

- [G]Arntsen, C., Ingersoll, M., Earle, L., **Stanley, M.** *"Insulin receptor signaling in sugar-sensing gustatory neurons impacts 'sweet' sensitivity"*. Neuroscience, Behavior, and Health Forum, University of Vermont, 2024

- ***Stanley, M**., *[G]Guillemin, J., Li, V., [U]Davis, G., Audette, K., McDowell, S., Jelen, M., [U]Slamani, S., [U]Kelliher, L., Gordon, MD. *"Labellar chemosensory cells expressing Ionotropic Receptor 94e impact multiple behaviors"*. Neurobiology of *Drosophila* meeting, Cold Spring Harbor, NY, 2023

- [G]Arntsen, C., **Stanley, M.** *"Insulin receptor signaling in sugar-sensing gustatory neurons impacts 'sweet' sensitivity"*. Neurobiology of *Drosophila* meeting, Cold

Spring Harbor, NY, 2023

- [U]Davis, G., [G]Guillemin, J., **Stanley, M.** *"Describing a novel ionotropic receptor in Drosophila melanogaster feeding behavior"*. Student Research Conference, University of Vermont, April 2022

- **Stanley, M.,** Ghosh, B., Weiss, ZF., Christiaanse, J., Gordon, MD. *"Mechanisms of lactic acid taste in Drosophila melanogaster"*. Society for Neuroscience Meeting, virtual, 2021

- **Stanley, M.,** Ghosh, B., Weiss, ZF., Christiaanse, J., Gordon, MD. *"Mechanisms of gustatory attraction to lactic acid in Drosophila melanogaster"*. International Symposium on Olfaction and Taste, virtual, 2019

Conference Talks (selected from abstracts):

- *Attractive 'sour' taste: mechanisms of lactic acid gustatory detection"*. Canadian Fly Meeting, virtual, 2021

- *"Taste mechanisms of lactic acid attraction in Drosophila"*. University of British Columbia, Postdoc Research Day, Vancouver, BC, 2018

- "*The effects of peripheral and central high insulin on brain insulin signaling and amyloid-beta in young and old APP/PS1 mice*". Society for Neuroscience Meeting, San Diego, CA, 2016

- *"Hyperinsulinemia minimally affects extracellular amyloid-beta in vivo"*. Knight Alzheimer Disease Research Center Seminar, St. Louis, MO, 2016

- *"Detecting rapid fluctuations in extracellular metabolites in vivo with shifting brain activity"*. Washington University in St. Louis Neuroscience Retreat, Grafton, IL

AWARDS

2022	Mentoring Award, Department of Zoology, University of British Columbia
2021	CAN-CIHR-INMHA Brain Star Award
2021	"Best Talk, 2nd Place" award, Canadian Fly Meeting
2019-2021	D.M. Centre for Brain Health Postdoctoral Trainee Award, UBC
2020-2021	Trainee Professional Development Award, Society for Neuroscience
2017	Barbara Jakschik Award, Washington University School of Medicine
2014-2016	Markey Pathway in Human Pathobiology Fellowship, WUSTL
2012	Robert Tweed Hersh Memorial Award in Human Biology, Univ. of Kansas
2011	Amgen Summer Research Scholar, WUSTL
2009-2012	Psi Chi International Honor Society in Psychology
2007-2011	C.L Burt Geographic Scholarship, University of Kansas

COMMUNITY SERVICE/OUTREACH

2024	Science Cafe 4-H Outreach Event, Burlington, VT
2024	Women in Science invited speaker, Burlington, VT
2019-2021	Lecturer & volunteer, Science 101 Program, Vancouver, BC
2013-2017	Neuroscience team leader, Young Scientist Program, St. Louis, MO
2012-2017	Presenter & volunteer, Saint Louis Science Center, St. Louis, MO
2012-2013	Volunteer, Youth Exploring Science, St. Louis, MO