BIOGRAPHICAL SKETCH

NAME
Kristen Alanis

POSITION TITLE
Graduate student

CONTACT INFORMATION
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Indiana University 800 E. Kirkwood Ave.
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EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	MM/YY	FIELD OF STUDY
Indiana University, Bloomington	Ph.D.	Expected 2022	Analytical Chemistry
University of Illinois at Urbana-Champaign	B.S.	12/17	Chemistry

A. Personal Statement

I received my bachelor's degree in chemistry from the University of Illinois at Urbana-Champaign. While I was there, I worked in Dr. Mei Shen's research group where my focus was on detecting acetylcholine release at a single soma cell using nano-electrodes and scanning electrochemical microscopy (SECM). I began pursuing my Ph.D. in Fall 2018 at Indiana University, working in the Baker group. My research focus is on the development of chemically modified nanopipettes and nanoporous membranes to investigate their ion transport properties using scanning ion conductance microscopy (SICM). My interest is to couple these new tools with ion channel probes.

B. Positions

Professional Employment
Fall 2018- May 2019 Associate Instructor, Indiana University, Department of Chemistry

Awards
2019 National Institutes of Health: Quantitative and Chemical Biology Fellowship

C. Publications

2. Huang, K.; Zhou, L.; Alanis, K.; Hou, J.; Baker, L. A. Imaging Effects of Hyperosmolality on Individual Tricellular Junctions. *Chem. Sci.* **2020**, Advance Article. (https://doi.org/10.1039/C9SC05114G)

1. Welle, T. M.; Alanis, K.; Colombo, M. L.; Sweedler, J. V.; Shen, M. High Spatiotemporal Study of Somatic Exocytosis with Scanning Electrochemical Microscopy and NanoITIES Electrodes. *Chem. Sci.* **2018**, *9*, 4937-4941. (https://doi.org/10.1039/C8SC01131A)

D. Presentations

Posters

3. Alanis, K.; Zhu, C.; Lucas, R.; Siwy, Z. S.; Baker, L. A. "Coupling Ion Channel Probes with Synthetic Nanodevices". 10th Annual Watanabe Symposium, Indiana University Bloomington, October 2019.

2. Alanis, K.; Zhu, C.; Lucas, R.; Siwy, Z. S.; Baker, L. A. "Development of Synthetic Nanodevices for Iontronics". Turkey Run Analytical Chemistry Conference, Marshall, IN, September 2019.

1. Alanis, K.; Zhu, C.; Lucas, R.; Siwy, Z. S.; Baker, L. A. "Development of Synthetic Nanodevices for Iontronics". 6th Annual Materials Research Symposium, Indiana University Bloomington, July 2019.