

Institute for In Vitro Sciences, Inc.  
30 W. Watkins Mill Road, Suite 100  
Gaithersburg, MD 20878

## Curriculum Vitae

# Kayla Cantrell

### Education

2018 Bachelor of Science in Biological Science  
Minor in Molecular Biology, Biochemistry, & Bioinformatics  
Towson University

### Experience

September 13, 2021--Toxicologist I, Study Director  
Present

Assist commercial clients to develop appropriate *in vitro* toxicology programs for their products. Interact with industry, animal welfare groups and government as necessary to discuss use of *in vitro* methods. Oversee *in vitro* toxicology assays that address irritation, corrosion, and photosafety, as well as compliance of assays, documentation, and data under GLPs. Study Director for *in vitro* toxicology assays including, but not limited to: Bovine Corneal Opacity and Permeability (BCOP) assay, kinetic Direct Peptide Reactivity assay (k-DPRA) and Short Term Exposure (STE) assay in Statens Seruminstitut Rabbit Cornea (SIRC) cells. Participate in identifying, developing, and commercializing novel *in vitro* toxicology assays. Producing manuscripts detailing IIVS' scientific activities. Organizing and/or participating in other IIVS programs as assigned.

May 29, 2021– Senior Biologist, Team Coordinator  
September 13, 2021

Demonstrates a diverse set of lab skills and exhibits technical proficiency in a diversity of *in vitro* assay systems. Makes scientific judgements on how to manage priorities and problems. Independently performs non-routine assignments. Demonstrates leadership ability, exceptional skills, knowledge, judgement and initiative.

Exhibits organizational and communication skills to balance the lab team and sponsor needs. Coordinates incoming studies with management and client services teams to balance team schedules. Supports Training Specialist with oversight of specific training activities in order to diversify team strengths. Reviews protocols, delegates tasks, and provides constructive feedback in order to support the Study Director team.

January 16, 2019 – Specimen Archivist  
June 1, 2022

Maintains the records for wet tissue samples collected, microscopic slides, and paraffin blocks received. Assures proper inventory and archival of items stored on site or with an off-site vendor. Upholds all documentation in compliance with Good Laboratory Practices (GLP).

May 25, 2020– Biologist III  
May 29, 2021

The position of Biologist III entails increased knowledge, ability and competence in carrying out scientific protocols; helps develop and conduct special assays with little supervision, collecting biological data; performing calculations and graphing data. Clearly demonstrates initiative and leadership. In most instances, the biologist may have attained a high level of proficiency or expertise where only minimal supervision of the biologist may be required.

May 29, 2019 – Biologist II  
May 24, 2020

Under moderate supervision, demonstrates mastery of basic techniques, and performs some specialized technical assignments in the performance of studies. Responsible for proficiently performing, recording, and reporting data from standard, custom, and novel assays. Uses and maintains scientific equipment. Often assists using specialized techniques. May make independent technical judgements, commensurate with experience. Requires demonstrated commitment to quality, safety, GLP compliance, understanding of scientific principles and rationale for assay systems. Shows initiative and leadership.

May 29, 2018 – Biologist I  
May 29, 2019

Under close supervision, perform basic technical assignments in the performance of in vitro or cell culture studies. Responsible for performing, recording, and reporting data from standard studies. Use and maintain scientific equipment such as centrifuges, laminar flow hoods, 96-well plate readers, incubators, microscopes, micropipettors, computers, etc., and other duties as assigned. Opportunities to assist in specialized techniques or studies.

August 1, 2017 – Laboratory Assistant  
May 28, 2018

Under close supervision, performs basic technical assignments while maintaining a clean and well organized laboratory including but not limited to, autoclaving, managing receipt and disposal of materials, monitoring and recording equipment functionality. Also performs equipment maintenance according to the associated SOPs and documents all work performed in accordance to the GLP regulations.

### Publications

K. Cantrell, K. Bouchard, G. Price, J. Filbert-Findley, M. Conahan, and A. Hilberer. Approaches in the Evaluation of Equipment Used for In Vitro Phototoxicity Testing to Ensure Proper Assay Performance and Regulatory Compliance. In: *2020 Annual Meeting Abstract Supplement*, Society of Toxicology. Abstract no. 3908.

Price, G., Cantrell, K., Hilberer, A., Raabe, H. General Behaviors of Surfactants in the Bovine Corneal Opacity and Permeability (BCOP) Assay. In: *2023 Annual Meeting Abstract Supplement*, Society of Toxicology. Abstract no. 3651

Hilberer A., Rittaco G., Bouchard K., Cantrell K., Oeda S., Kobayashi H., Atobe T., Suttinont C., Hirota M., Kouzuki H., Api A.M., Gerberick G.F., Ryan C. Evaluation and Transferability of a New Approach Methodology to Address Photoallergy Potential. In: *2023 Annual Meeting Abstract Supplement*, Society of Toxicology. Abstract no. 3649

Andrew J. Keebaugh, Megan L. Steele, Rebecca A. Clewell, Hans Raabe, Elaine A. Merrill, Yaroslav G. Chushak, Argel Islas-Robles, Allison Hillberer, Kayla Cantrell, David R. Mattie. Development of Preliminary Candidate Surface Guidelines for Air Force-Relevant Dermal Sensitizers Using New Approach Methodologies.