
Maria Walker

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AufenthaltstitelB

EDUCATION

INSTITUTION	PROGRAM	YEAR
University of Zurich	PhD Cancer Biology	January 2023 - Present
University of Toronto	MSc Chemistry	September 2018 - December 2019
University of Victoria	BSc Biochemistry (Minor: Chemistry)	September 2013 - May 2018

INDUSTRY LABORATORY WORK EXPERIENCE**leadXpro AG, Switzerland****Research Associate** July 2020 – December 2022

Laboratory specialist focusing on mammalian and insect cell culture for the purpose of structure based drug discovery. Nanobody/macrobody expression, purification, and characterization. Obtained skills in transient transfection, baculovirus transfection, and various purification techniques (SEC, IMAC, IEx) with corresponding technology knowledge (eg. AKTA, FPLC systems).

ACADEMIC LABORATORY WORK EXPERIENCE**Voula Kanelis Laboratory, University of Toronto****Research Associate** June 2019 – June 2020

Structural biology research focused on human heart disease mutations of potassium ATP channel SUR2A subunits. Acquired knowledge on membrane protein expression and purification methods. Combined NMR characterization techniques with *in vitro* studies to differentiate disease causing mutant forms.

Andrew Beharry Laboratory, University of Toronto (Masters of Science, Chemistry)**Graduate Researcher** September 2018 - May 2019

Research in synthetic production, characterization and testing of small molecules targeting DNA repair proteins in cancer proliferation for photochemotherapy drug development. Organic chemistry techniques were used to synthesize novel small molecule drugs, and *in vitro* testing was performed to characterize efficacy. Drugs were finally tested in *in vivo*, with delivery and drug efficiency evaluated using fluorescent microscopy.