# Alexander Vonderschmidt, MS, RDN

**Doctoral Researcher** — Population Health & Sustainable Food Systems

Dynamic researcher skilled in bridging epidemiological analysis with sustainable food systems to address public & environmental health challenges. Committed to advancing research and policy development, I leverage advanced analytical methods including microsimulation modeling and machine learning to inform health and food policy. Adept at managing complex project initiatives, I effectively balance doctoral research alongside impactful government consulting and a competitive joint-country fellowship.

#### **RESEARCH & TECHNICAL EXPERIENCE**

#### **Doctoral Researcher**

Sep 2022 - present

The University of Edinburgh | Edinburgh, Scotland

- Employ microsimulation modelling to predict health and environmental impacts of diet transitions, informing governmental policy in the UK
- Leverage integrated machine learning techniques to enhance accuracy of diet disease risk prediction and develop a novel model for anemia risk prediction
- Conduct large-cohort data analysis of dietary patterns & food substitution trends

#### Research Consultant

Oct 2023 - present

ClimateXChange | Edinburgh, Scotland

- Co-investigator of £50,000 grant: Understanding the climate impact of food consumed in Scotland, resulting in government report & policy workshops
- Lead systematic review on trends in Scottish consumption patterns and evaluation of resultant direct and indirect environmental impacts; 7,000+ publications screened

**Doctoral Fellow**, Lower Saxony-Scotland Fellowship

Apr - Dec 2023

European Centre for Advanced Studies | Lüneburg, Germany

- Created a project analyzing international global food self-sufficiency and trade dependencies with implications for governmental policy & sustainable agriculture

## Graduate Research Assistant → Research Assistant

Jun 2020 - Aug 2022

Cornell University | Ithaca, NY

- Led the design and implementation of a nutrigenomics assay methodology pipeline for an NIH R01 grant project, coordinating with multiple labs and research teams
- Performed advanced multivariate regression analysis and from-scratch dietary pattern score coding, investigating diet—lung function associations
- Trained through the WHO/Cochrane/Cornell Institute for Systematic Reviews in Nutrition for Global Policy Making
- Cochrane systematic review co-author: contributed to 10,000+ publications screened, data extraction, analysis, report writing, GRADE risk of bias assessment

# **Graduate & Undergraduate Teaching Assistant**

Jul 2017 - May 2021

Cornell University ('20 - '21) & Kansas State University ('17 - '19)

- Courses taught: Nutrition and Disease (NS 4410) & Nutrition, Health, and Vegetarian Diets (NS 3030) at Cornell, Nutrition and Health (FNDH 340) & Food Production Management (FNDH 342) at Kansas State

Dietetic Intern Aug 2019 - Jun 2020

Cornell University & Strong Memorial Hospital | Ithaca & Rochester, NY

- Clinical rotations: ICU, Oncology, Pediatric (+PICU & NICU), Endocrine, Cardiac, Transplant, and weekly volunteer evening shifts at community clinic
- Assisted in the development and implementation of a 'Healthy Pantry Initiative' for Foodlink's network of 200+ Upstate NY food pantries

#### **CONTACT**

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#### **SKILLS**

#### Techniques:

- Epidemiological analysis
- Biostatistics
- Clinical nutrition
- Simulation modelling
- Disease risk prediction
- Machine learning algorithms
- Large cohort analysis, including complex survey-weighted designs
- Systematic review (+Cochrane) and evidence synthesis
- French language proficiency (C2)

### Tools and frameworks (GitHub):

- R
- Python
- SAS
- HTMI
- Covidence & RevMan
- Microsoft suite

## **EDUCATION & CREDENTIALS**

The University of Edinburgh PhD - Food Systems, 2025 (anticip.)

## Cornell University

MS - Nutritional Epidemiology, 2021 **RDN - Registered Dietitian** Nutritionist, 2020 (#86106159)

Kansas State University

BS - Dietetics & Nutrition, 2019 BA - French Literature, 2019 +Université Lumière-Lyon-II, 2018

Full CV including publications, awards, honors, etc. available at <u>axvonder.com</u>