# Blake Langenbach

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#### EDUCATION

Master of Science in Public Health, Global Environmental Health Science, Industrial Hygiene 2019–2021 GPA: 3.87

Tulane University School of Public Health & Tropical Medicine

New Orleans, LA

Bachelor of Science in Neuroscience (BS)

2015-2019

Tulane University School of Science & Engineering

New Orleans, LA

Bachelor of Science in Public Health (BSPH)

2015-2019

Tulane University School of Public Health & Tropical Medicine

New Orleans, LA

University of Cape Town, South Africa

*Spring* 2018

# ACADEMIC AWARDS, SCHOLARSHIPS, & GRANTS

- The Frank W. MacDonald Environmental Health Sciences Outstanding Student Award (May 2021)
- o Board of Certified Safety Professionals Foundation Scholarship (November 2019)
- o NIOSH Training Program (Fall 2019)
- Marian Gaynor Yanamura Educational Fund Inc. Scholarship (2015–2019)
- Tulane Founders Scholarship (2015–2019)

- Newcomb-Tulane College Grant (March 2017)
- Taylor Grant (May 2017)
- Ann and John Rossi Study Abroad Fund (October 2017)
- o Office of Study Abroad Scholarship (October 2017)
- CIEE: GAIN Grant (November 2017)
- Dean's List (Fall 2017)

#### **FELLOWSHIPS**

Neurotoxic Chemicals Fellowship at US Environmental Protection Agency (EPA) Jan. 2021-March 2022

Oak Ridge Institute of Science and Education (ORISE)

*Master's Level (GS-09)* 

Durham, NC

- Developed rapid, quantitative in vitro screening assays for select neurotoxicants to identify genomic and proteomic foundations for developmental neurotoxicity endpoints and reactive oxygen species
- Progressed molecular biology skills through cortical cell culturing, assay development, analytical chemistry, and interpreting toxicology and epidemiology data

## NIOSH Industrial Hygiene Training Fellowship

June 2019-May 2021

*National Institute for Occupational Safety & Health (NIOSH)* 

New Orleans, LA

- Selected for a traineeship in Tulane University's Industrial Hygiene Program, awarded stipend and tuition support
- Maintained trainee appointment by coursework, research activities, and grade point average

#### PUBLICATIONS & ACKNOWLEDGMENTS

- o Langenbach, B.; Wilson, M. Per- and Polyfluoroalkyl Substances (PFAS): Significance and Considerations within the Regulatory Framework of the USA. Int. J. Environ. Res. Public Health 2021, 18, 11142. https://doi.org/10.3390/ijerph182111142
  - o Featured in February 2022 issue of NIOSH Research Rounds (RR)
- Kodavanti, P. R. S., Stoker, T.E., Fenton, S.E., and Curras-Collazo, M: Brominated Flame Retardants. In: R.C. Gupta, editor, "Reproductive and Developmental Toxicology", 3rd edition, Elsevier, San Diego, CA; pp. (2022).

- Kodavanti, P. R. S., Valdez, M.C., Yang, J.H., Curras-Collazo, M., and Loganathan, B.: Polychlorinated Biphenyls, Polybrominated biphenyls, Polychlorinated dibenzo-p-dioxins, and Polychlorinated dibenzofurans. In: R.C. Gupta, editor, "Reproductive and Developmental Toxicology", 3rd edition, Elsevier, San Diego, CA; pp. (2022).
- Cooksey E.M., Singh G., Scott L.C., Aw T.G. (2019) "Detection of coliphages and human adenoviruses in a subtropical estuarine lake" *Science of the Total Environment*. 649: 1514-1521

## RESEARCH EXPERIENCE

#### Clinical Research Assistant

June 2019–February 2020

Tulane University Clinical Translational Unit

New Orleans, LA

- Directly assisted with various clinical trials through subject recruitment, administrative work, laboratory processing, and engaging with vulnerable patients, specifically minority and homeless populations
- o Progressed biospecimen skills through patients' blood and urine collection, handling, and centrifugal processing

## Water Quality Research Assistant

February-December 2017

Tulane University School of Public Health & Tropical Medicine

New Orleans, LA

- O Assisted Dr. Tiong Gim Aw by assessing the detection, presence, and analysis of waterborne pathogens, *Legionella*, and viral species in diverse water samples taken from Lake Pontchartrain
- Expanded various laboratory skills in water sampling, ultrafiltration processing, DNA Extraction, autoclaving, and qPCR

#### **Ecology Research Assistant**

October 2016-May 2017

Tulane University School of Science & Engineering

New Orleans, LA

- Assisted Dr. Michael Blum through the collection, germination, and analysis of salinity and atmospheric carbon dioxide on coastal marsh plant *Schoenoplectus americanus* and its effects on soil accumulation and carbon cycling
- o Enhanced microscope skills with seed abstraction and learning germination techniques

#### PROFESSIONAL EXPERIENCE

## Associate Industrial Hygienist

July 2022–present

Paustenbach & Associates

Boulder, CO

- Offering industrial hygiene, occupational health, and environmental toxicology consulting for an array of clients
- Conducting literature reviews, exposure assessments, risk characterization, and litigation support for a variety of equipment and compounds, including respirators, asbestos, nicotine, and radionuclides

#### Industrial Hygienist at Rocky Mountain Regional Veteran Affairs Hospital

March 2022-July 2022

United States Department of Veteran Affairs (VA)

Master's Level (GS-11)

Aurora, CO

- Ensuring the workplace safety and maintaining occupational health of employees through: respirator fit testing, safety data sheets, hazardous chemicals and materials, and water sampling of cooling towers
- Responding to industrial hygiene issues across the hospital: air flow and pressure issues, ventilation, personal
  protective equipment gear, and toxic chemical inventory and waste

## **NEHA-STEP** Internship

December 2020–Febuary 2021

National Environmental Health Association (NEHA)

New Orleans, LA

- o Formulated an online community for Students and Emerging Professionals (STEP) focused in environmental health to promote engagement, resources, and discussion amongst peers
- O Contributed to the development of NEHA's Mentorship program with STEP

# **Graduate Teaching Assistant**

January 2020–May 2020

Tulane University School of Public Health & Tropical Medicine

New Orleans, LA

- Enhancing the Foundations of Environmental Health undergraduate course by assisting students' understanding of public and environmental health concepts through supplemental scientific articles and tutoring
- Assisting Dr. Lorelei Cropley through administrative work, handling materials, and grading coursework

#### Musician - Drummer / Percussionist

October 2019-present

Kota Dosa New Orleans, LA

- o Gigging musician able to adapt and play a variety of percussive styles with several live performances
- o Live shows in New Orleans: Apple Barrel, Poor Boys
- Live shows in New York: Bowery Electric, Ferns, The Broadway

#### Agricultural Apprenticeship

May-August 2017

Grow Dat Youth Farm

New Orleans, LA

- Advanced sustainable, organic urban agriculture skills: farm sustainability, soil building and mulching, composting, cover crop methods, harvest techniques, post-harvest handling, direct seeding and propagation, and greenhouse maintenance
- Led youth groups with task demonstrations and farm management while promoting cooperation, trust, and inclusiveness

Service Member

24 March-2 April 2017

Tulane University Global Brigades Chapter

Matagalpa, Nicaragua

 Participated in water, medical, dental, and public health brigades: helping a community dig trenches for water pipes; shadowing doctors and pharmacists and helping diagnose and treat 1203 patients in El Hular; assisted dentists in treating 25+ patients; constructing sanitation stations and concrete floor additions

# LEADERSHIP & ORGANIZATIONS

o Delta Omega National Honorary Society in Public Health, Eta Chapter: Member May 2021–present

o Global Scholars Program: Member

August 2019-May 2021

o Zeta Beta Tau Fraternity: Member & Risk Management Chair Februa.

February 2016–May 2019

University of Cape Town: Mountain & Ski Club, Surf Club, Wine Society: Member
 Tower and Crescent: Member

per Spring 2018

o Tulane University Neuroscience Association: Member

August 2017–December 2018

o Tulane University Pre-Med Society: Member

September 2015–August 2018 September 2015–August 2018

Mobile Ichihara Sister City Association: Student Ambassador to Ichihara, Japan

July 2012–July 2013

#### TECHNICAL SKILLS & CERTIFICATIONS

- Laboratory Skills: Cortical Cell Culturing & Brain Isolation (Rat) Assay Development •
   ROS/MTS/LDH/ELISA Assays Immunocytochemistry RNA Isolation SpectraMax iD5 & MiniMax Expertise
   Aseptic and Sterilization Techniques Neurotoxicant Selectivity & Handling Biospecimen Processing
- o Fieldwork Skills: Water Quality Sampling and Testing Ultrafiltration Methods Soil Sampling
- o Trainings & Certifications: Rats 101 IATA/DOT HIPAA BLS CPR
- o Language Skills: Spanish (conversational)
- o Interests: Geology Rock Climbing Biking Hiking Drumming