**Amy Fetters**

*Curriculum Vitae*

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| Professional Address:  Department of Biology  California State University Bakersfield  9001 Stockdale Hwy  Bakersfield, CA 93311 | Personal address:  4409 Hillsborough Dr.  Bakersfield, CA 93309  Email: afetters@csub.edu  Phone: (630) 200 - 0985 |

**EDUCATION**

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| Expected Graduation: 2022 **M.S.** | **Biology**  California State University Bakersfield  *Thesis Advisor*: Dr. Rae McNeish  *Thesis*: “Anthropogenic pollution dynamics: Distribution and degradation of anthropogenic litter and microplastics in aquatic and terrestrial habitats”  *GPA*: 3.84 |
| May 2019  **B.S.** | **Biology**  Loyola University Chicago, IL  *Minor*: Psychology  *GPA*: 3.67 |

**PROFESSIONAL** **EXPERIENCE**

**Biological Technician April 2020 – Present McCormick Biological Inc. – Bakersfield, CA**

* Perform biological field surveys throughout the San Joaquin Valley, CA
* Identify and protect sensitive biological resources
* Monitor construction activities to ensure biological compliance

**Graduate Teaching Associate January 2020 – Present California State University, Bakersfield – Biology Department, Bakersfield, CA**

* Teach introductory biology labs for science majors and non-majors
* Address student concerns and provide multiple learning resources

**Graduate Researcher Fall 2019 - Present California State University, Bakersfield – Biology Department, Bakersfield, CA**

* Organize and conduct field work in various sites throughout Bakersfield, CA
* Collect and categorize anthropogenic litter from environmental sites
* Analyze microplastic content in a variety of environmental matrices
* Teach and mentor undergraduate research students
* Participate in literature reviews with peers and professors

**Seasonal Laboratory Intern Clarke Environmental – Roselle, IL Summer 2019**

* Collected mosquitos from a variety of traps in the Chicagoland area
* Compiled and documented daily collection data in a web-based system
* Identified species of mosquitos in larval and adult forms
* Taught and demonstrated responsibilities of a laboratory intern to corporate employees through an Operational Immersion Program

**Undergraduate Researcher Fall 2017 – May 2019 Loyola University Chicago – Biology Department, Chicago, IL**

* Collected water, sediment, and fish samples from sites in the Chicagoland area
* Performed digestions of organic matter from sediment and tissue samples
* Prepared samples for analysis of microplastic content
* Analyzed microplastic content in water, sediment, and tissue samples
* Isolated microplastics to prepare for polymer type identification

**TEACHING EXPERIENCE**

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| March 2021 | **Invited Guest Lecturer** – Aquatic Ecology, CSUB |
| Spring 2021 | **Teaching Associate** – Principles of Biology Lab, CSUB |
| Fall 2020 | **Teaching Associate** – Principles of Biology Lab, CSUB |
| Fall 2020 | **Teaching Associate** – Introductory Animal Biology Lab, CSUB |
| July 2020 | **Invited Guest Lecturer** – Human Ecology, CSUB |
| Spring 2020 | **Teaching Associate** – Principles of Biology Lab, CSUB |

**PRESENTATIONS**

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| **Oral – March 2021** | “Anthropogenic structures impact the abundance and distribution of anthropogenic litter and microplastics in an intermittent river” CSUB Student Research Competition |
| **Oral – November 2020** | “Riverine litter: bridges impact the distribution of anthropogenic litter in a freshwater river” CSUB Grad Slam Competition |
| **Oral – September 2020** | “Anthropogenic structures effect anthropogenic litter and microplastic distribution in an intermittent river” CSU COAST Annual Meeting |
| **Poster – June 2020** | “Anthropogenic structures effect anthropogenic litter and microplastic distribution in an intermittent river” Society of Freshwater Science Virtual Annual Meeting |
| **Poster** - **April 2019** | “Microplastic in aquatic food webs: Museum specimens and ingestion experiments reveal controls on microplastic ingestion by freshwater fish” LUROP Undergraduate Research Symposium, Chicago, IL |

**AWARDS**

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| Fall 2020 – Spring 2021  Fall 2020 – Spring 2021  2015 - 2019 | Student Research Scholars Award Recipient, CSUB  Title XI Graduate Collaborative Research Program Award Recipient, CSUB  Loyola’s Damen Scholarship, Loyola University Chicago |
| 2015, 2017-2019 | Dean’s List, Loyola University Chicago |
| Spring 2018 | John Felice Rome Center Scholarship, Loyola University Chicago |

**ACTIVITIES AND INVOLVEMENT**

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| January 2020 - Present  Fall 2019 - Present  Fall 2018 – Spring 2019 | **Member –** Society of Freshwater Science  **Member –** Graduate Student Fellowship, CSUB  **Finance Coordinator** - Loyolacore, Loyola University Chicago |
| Fall 2018 – Spring 2019 | **National Society of Collegiate Scholars** - Loyola University Chicago |
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**RESEARCH AND ANALYTICAL SKILLS**

**Field**:

* Collection of water and sediment samples from streams, rivers, and lakes
* Collection of fish and macroinvertebrate samples from streams
* Stream discharge, dissolved oxygen, and pH measurements of waterways
* Zooplankton and phytoplankton collection
* Water collection using a Van Dorn sampler
* Performing a riparian assessment
* Performing a benthic substrate survey
* Wildlife identification throughout the San Joaquin Valley, CA

**Laboratory**:

* Extraction of microplastics from water and sediment field samples
* Anthropogenic litter processing and categorization
* Dissection of fish digestive tissues
* Digestion of organic material using Fenton’s reagent
* Filtering of water, sediment, and tissue samples for microplastic analysis
* Microplastic identification using a dissecting microscope
* Separation of microplastic particles for polymer type identification
* Macroinvertebrate and freshwater fish identification
* Following protocol to prepare samples for polymerase chain reaction (PCR) and gel electrophoresis
* Performing various microbial techniques to identify an unknown bacterial species
* Using aseptic techniques when handling microorganisms
* Performing RAMP West Nile Virus testing