

China Dix

(she/her)

EDUCATION

August 2019-May 2023 Bachelor of Science in Neuroscience with Biology concentration
Loyola University New Orleans
3.72

HONORS AND AWARDS

2019-2023 Dean's List (Maintained a cumulative GPA of 3.50 or above)
2019-2023 Dean's Scholarship (University Funded)
2023 Outstanding Academic Achievement: (Highest Neuroscience GPA CO' 2023)

RESEARCH EXPERIENCE

August 2022- August 2023 **Research Assistant/Mouse Colony management, Earls Lab**
Loyola University New Orleans
Supervisor: Laurie Earls, Ph.D.
Main Project:
The Earls lab is interested in understanding the genetic mechanisms that contribute to the shift seen in social behavior with normative aging. A longitudinal study using a three Chamber social apparatus on mice of varying maturity is being used to investigate this idea.

- Weekly maintenance (daily health checks, cage cleaning, record keeping of breeding pairs) of research colony (20+ mice)
- Performed Transformation and Ligation reactions in support of genetics/social behavior research
- Perform Polymerase Chain Reaction (PCR) and gel purification for genotyping and molecular cloning purposes
- Lead the collection of behavioral data (3-chamber social apparatus to assess patterns of social behavior in mice of varying ages) for longitudinal study on social behavior in mice as it relates to a novel micro peptide (Plasticity Associated Neural Transcript Short) and the shift in social behavior with age
- Presented preliminary research findings at university sponsored annual undergraduate research symposium

May 2022- August 2022 **Research Intern, NeuroSURP**
Rutgers University/ RWJ Medical School
Supervisor: David Barker, Ph.D.
Main Project:
The Barker lab is interested in understanding the neural mechanisms behind cocaine Addiction using a conditioned place preference behavioral assay.

- Managed stock levels and prepared essential lab solutions for weekly use (ie: Ethanol, PFA, PB, Sucrose) for an 8+ person lab group
- Assisted laboratory team in sterilization and autoclaving surgery and perfusion tools
- Performed Perfusions of mice following collection of fiber photometry data during CPP behavioral sessions
- Preserved, cryosectioned and mounted targeted brain sections (LPO) on charged slides following Cocaine CPP behavioral assay

- Participated in weaning of mice
- Practiced daily mice scruffing to assist in intraperitoneal injections (IP) for Cocaine Conditioned Place preference behavioral assay
- Presented 15-Min presentation discussing the relationship between a cocaine conditioned place preference model and Lateral Preoptic GABAergic and Glutamatergic connections

June 2021-August 2021

Research Affiliate, SMART (Summer Multicultural Access to Research Training)

University of Colorado Boulder

Supervisors: Ryan Bachtell, Ph.D.

- Collaborated with University of Colorado Boulder Ph.D. students and faculty in developing a professional research proposal in an applied neuroscience research lab

May 2021-August 2021

Research Intern, National Institute on Drug Abuse (NIDA)

Placed: University of Colorado Boulder

Supervisors: Ryan Bachtell, Ph.D.,

Main Project:

Understand the genetic contributions to opioid dependence in rat models, using a self-administration behavioral model. Understanding the genetic contribute with the goal of develop abuse deterrent strategies in communities disproportionately affected by drug addiction

- Supported principal investigator and other research leaders in handling of animal subjects during self- administration assay
- Analyzed and scored recorded thermal nociception tests on rats using J-watcher video scoring software, in an effort to understand changing pain threshold of rats experiencing drug withdrawal
- Presented a formal 10-minute research proposal on the genetic contributions to opioid dependence in rat models.

PROFESSIONAL EXPERIENCE

September 2022-April 2023

Washington University School of Medicine

Laboratory Animal Technician I

- Provide animal husbandry care to 700+ cages of mice daily
- Accurately report and record rodent illnesses to Veterinarian Staff
- Perform Daily Observation Checks on 3000 + rodents to ensure proper wellness, dietary needs and enrichment are maintained
- Perform weaning of mice according to IACUC standards
- Keep record of daily animal census and sanitation of animal room
- Communicate with researchers, principal investigators, managers and supervisors on daily animal care.

August 2022-October 2023

Madewell

Sales Associate

- Inventory processing for monthly product roll out
- Assist in inventory processing for monthly product roll out and preparing packages for shipment

- Maintain cleanliness and organization of store product and assist in visual merchandising of the store
- Complete Direct Inventory transfers of damaged and miscellaneous product
- Aid in training of new associates

August 2019- May 2021

**College of Nursing and Health
Student Administrative Assistant**

Loyola University New Orleans

- Maintained current and past College of Nursing and Health Student records (retention tracking, student registration information organization, transfer of student record between various platforms)
- Assisted the Dean's Assistant in daily administrative tasks

August 2021- May 2023

**Monroe Library
Desk Assistant**

Loyola University New Orleans

- Assist students, faculty and staff in renting out and returning library material and provide research support to students and faculty
- Aided in new hire orientation and training to both faculty and staff
- Managed private and university associated library multimedia room rentals
- Assured the maintenance and upkeep of library equipment and materials and facilitated library in maintaining accurate inventory and upkeep of resources

LEADERSHIP EXPERIENCE

August 2020- May 2021

University Programming Board Coordinator

Loyola University New Orleans

- Coordinate and implement campus wide events and programs geared towards improving school morale and promoting inclusion and diversity
- Manage marketing, budget, run of show and volunteers for each event
- with assistant director of Student Life and Ministry on event details and needed resources

May 2020- August 2020

Student Life and Ministry Associate

Loyola University New Orleans

- Assist new students and parents with questions related to new student registration, orientation and transitioning into student life
- Aided in the daily operations (daily collection of mail, setting up media for conferences and renting out school materials, answering emails)
- Acted as a liaison between students and faculty
- Participated in recruitment and onboarding of faculty members.

August 2020-May 2021

Minority Association for Pre-medical Students Executive Board

Loyola University New Orleans

- Manage social media marketing and recruitment of new members
- Oversee marketing requests and media for organizational meetings and programs related to Pre-health topics
- Coordinate and recruit panelist to speak with students concerning pre-health application processes and materials

PUBLICATIONS

POSTERS

Dix, C., Avery, L., Buford, D., Holmes, D., “Effect of Ethanol and Benadryl on Vascular Pulsations in Lumbriculus variegatus- Blackworm species” Presented at Loyola University New Orleans, Bio-inquiry Section F01; 2019 December; New Orleans, LA

Dix, C., Bachtell, R., Hale, L., Duffy, E., “Identifying genetic contributions to Opioid dependence in rat models” Presented through the University of Colorado Boulders’ Institute on Behavioral Genetics and the National Institute on Drug Abuse; 2020 August; Boulder, CO

Dix, C., Kragness S. Ph.D., Guidroz, A., Earls, R. L Ph.D., “Micro peptide control of social memory with age” Presented at Greater New Orleans Society for Neuroscience Poster session at Louisiana State University Health Sciences center, Loyola University New Orleans, Tulane University; 2022 December; New Orleans, LA

PROFESSIONAL PRESENTATIONS

Dix, C. “Can genetics influence social behavior with age”, Presented through Loyola University New Orleans for the Biology Undergraduate Research Symposium, 2023 April; New Orleans, LA

Dix, C. “Cocaine conditioned place preference for examining LPO GABAergic and Glutamatergic connections”, Presented through Robert Wood Johnson Medical School and Rutgers University NeuroSURP program, 2022 August; New Brunswick, NJ

PROFESSIONAL TRAINING

2020-2023

CITI Training, Online Courses

- Orientation to Animal Care
- Working with the IACUC
- Reducing Pain and Distress in Laboratory Mice and Rats
- Working with Rats in Research Settings
- Working with mice in Research Settings
- Online Biosafety/Bloodborne Pathogen refresher
- SBE Researcher

2023

Purina Certification

- Received Purina Certification on animal care and use in laboratory settings

ADDITIONAL SKILLS

Programming: SPSS (Intermediate), Prism (Beginner) , JMP (Intermediate),

Applications: Microsoft (Word, PowerPoint, Excel, etc.), Google Applications (Docs, Slides, etc.), Canva

Training: CITI online courses (Orientation to animal care, Online biosafety refresher, Working with the IACUC, Working with rats/mice in research settings)

Certifications: Purina Certified (Animal Research)