JP Flores

PhD candidate in Bioinformatics & Computational Biology interested in mechanisms of gene regulation. I'm passionate about innovation in science and equity & inclusion in the STEM workforce.



🛓 Download CV as a PDF

CONTACT

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- **y** ipflores_31
- github.com/jpflores-13
- @ jpflores.rbind.io
- in linkedin.com/in/johnpatrick-flores

SKILLS

R

HTML

CSS

Git

Photoshop

Illustrator

Made with the R package pagedown.

Source code available: github.com/jpflores-13/cv.

Updated: 2024-10-12.



EDUCATION

2025 2021

PHD CANDIDATE, BIOINFORMATICS & COMPUTATIONAL **BIOLOGY**

UNC Chapel Hill

◆ Chapel Hill. NC

· Graduate Certificate in Innovation for the Public Good

2021 2017

BA, CELLULAR & MOLECULAR BIOLOGY (PUBLIC **HEALTH MINOR)**

Occidental College

• Los Angeles, CA

RESEARCH EXPERIENCE

2025 2022

GRADUATE RESEARCH ASSISTANT

Chapel Hill, NC

Phanstiel Lab (UNC-CH School of Medicine)

· Developing and applying software in R, performing microscropy (DNA FISH) and -omics techniques (Hi-C, RNA-seq, ATAC-seq, CUT&RUN/ChIP-seq) to investigate the role of 3D chromatin structure in response to environmental

2021 2017

UNDERGRADUATE RESEARCHER

Schulz Lab (Occidental College Department of Biology) ♥ Los Angeles, CA

- · Utilize techniques such as DNA isolation, PCR, gel electrophoresis, and HPLC to find medical relevance of venom
- · Conduct fieldwork in Kauai to study and capture venomous cone snails

■ PROFESSIONAL EXPERIENCE

2024

SCIENCE POLICY INTERN

National Institutes of Health (NIH) Office of the Director

Pethesda, MD

· Assist in developing a public vision and framework for including patient and community voices in the design and conduct of NIH-funded clinical research. Help plan public consultations to develop recommendations regarding engagement methods for research employing novel technologies and will be prototyping equitable and inclusive approaches for patient and community engagement.

2021 2020

DATA SCIENCE INTERN

University of Utah David Eccles School of Business Sorenson Impact Center

Salt Lake City, UT

· Work alongside the data science team to provide customized data analysis for clients, write code, learn best practices around data sharing and security, as well as create data visualizations and dashboards. Familiarity with Tidyverse set of packages within the R programming language

2021 2020

STUDENT MANAGER OF THE STUDENT COALITION FOR HIGHER EDUCATION

University of Utah David Eccles School of Business Sorenson Impact Center

Salt Lake City, UT



♥ AWARDS & ACCOLADES

2025 2021

GRADUATE

- · American Society of Human Genetics (ASHG) Reviewer's Choice Abstract (2024)
- · American Society of Human Genetics (ASHG) Human Genetics Scholar (2024 - 2026)
- · Howard Hughes Medical Institute (HHMI) Gilliam Fellows Program (2024)
- · Occidental's 18 Young Scientists to Watch (2023)
- · Keystone Symposia Chromatin Architecture in Development & Human Health Underrepresented Trainee Scholarship (\$1200)(2023)
- · UNC Department of Genetics Retreat Poster Award (2022)
- · Participant, Initiative for Maximizing Student Development (IMSD), UNC Chapel Hill (2021-2022)
- · National Science Foundation Graduate Research Fellow(2021)

2021 2017

UNDERGRADUATE

- · Spotify Next Wave Award Winner (2021)
- · Trevor Moawad Leadership Award (2021)
- · Dean's Award: Service (2021)
- · Capstone Student Leader of the Year Award (2021)
- · Lucille Y. Gilman Memorial Award (2021)
- · rstudio::global(2021) Diversity Scholar (2021)
- · John W. McMenamin Award (2020)



■ FEATURES & INTERVIEWS

2025 2021

GRADUATE

- · Atlas of Inspiring Hispanic/Latinx Scientists, Author/Co-Organizer. Featured by the Fred Hutch Cancer Center and the IBEAM Department at Brown **IBEAM**
- · An Interview of Me by JP and Sarah: My R Journey, Hobbies, and the R Community (2023)
- · California private colleges fear affirmative action ban as Supreme Court prepares to rule (2023)
- · 18 Young Scientists to Watch (2023)
- · Three Win NSF Graduate Research Fellowships (2022)
- · John Patrick Flores'21: National Science Foundation Graduate Research Fellowship (NSF GRFP) (2022)

2021 2017

UNDERGRADUATE

- · New biology course explores the COVID-19 pandemic in real time (2020)
- · Meet JP Flores Occidental Baseball (2020)
- · S2, Episode 1 Off the Bench featuring Antonio Andrade and JP Flores (2020)
- · OxSEA seeks to clean the ocean and educate LA's youth (2019)
- · Staying for the summer: Undergraduate Research Center provides students and faculty with summer research opportunities (2019)

♣ TEACHING EXPERIENCE

2024

R & MULTILEVEL MODELING (MLM) WORKSHOP

C. Schiller Lab - UNC Chapel Hill School of Medicine

2024

PROMOTING INCLUSIVITY IN THE RESEARCH **ENVIRONMENT**

JEDI Leadership Fellows Program

Chapel Hill, NC

- · Workshop allowing researchers to recognize systemic barriers to inclusion and their impacts on individuals and society, take concrete steps to build supportive relationships with those from marginalized groups, and use their advantages to promote an equitable lab environment
- 2023

BCB 723 STATISTICAL GENETICS & GENOMICS

Curriculum in Bioinformatics & Computational Biology, Department of Genetics

◆ Chapel Hill, NC

2023

HOW TO LEARN TO CODE

University of North Carolina at Chapel Hill

Chapel Hill, NC

- · Summer miniseries about the basics of computer programming/coding for biological research
- · Curriculum Development Team & Teacher

I am passionate about empowering the next generation of diverse scientists, becuase talent is equally distributed but opportunity is not.

2023

WINSPIRE DANCING WITH DATA!

University of North Carolina at Chapel Hill

Ochapel Hill, NC

· Using the programming language R, high school students with marginalized gender identities, worked with data from Spotify. We explored which songs are the best to dance to, do homework to, cry to, and everything in between. Students gained experience in having fun in science, data wrangling & manipulation, data visualization, and science communication

2023

WINSPIRE DIGGING DEEPER

University of North Carolina at Chapel Hill

Ochapel Hill, NC

· Workshop covering the importance of diversity, equity, and inclusion (DEI) in science for high school students with marginalized gender identities

2023

ACADEMIC SUPPORT PROGRAM FOR STUDENT-ATHLETES TUTOR

Office of the Executive Vice Chancellor and Provost - UNC-CH

Chapel Hill, NC

2021

BIO 268 BIOSTATISTICS

Occidental College Department of Biology

Los Angeles, CA



TRAINING & CERTIFICATIONS

2023

EDX THE INCLUSIVE STEM TEACHING PROJECT

· Trained facilitator for the national, NSF-funded Inclusive STEM teaching Project (ISTP). ISTP supports the professional development of faculty, largely in STEM, as reflective, inclusive practitioners through a 6-week, free online course and associated learning communities. ISTP has reached 11,240 participants to date. Learning communities are small groups of faculty and sometimes PhD students and postdocs who meet to engage with the course content, contextualize it to the local department or teaching context, share their own experiences and create a community of practice. ISTP nationally trains facilitators like me to lead these learning communities.

2022

EFFECTIVE MENTORING TRAINING

· Foundation for developing competencies and skills in effective communication, aligning expectations, assessing progress and understanding, addressing equity and inclusion, fostering independence, cultivating ethical behavior, and being able to articulate a mentoring philosophy to others



ACADEMIC ARTICLES

2024	•	A BIOCONDUCTOR/R WORKFLOW TO IDENTIFY AND VISUALIZE DIFFERENTIAL CHROMATIN LOOPS F1000Research • JP Flores, Eric Davis, Nicole Kramer, Michael Love, Douglas H. Phanstiel
2024		THE POWER OF PODCASTING AS A PLATFORM FOR EQUITY IN SCIENCE Journal Of Cellular Physiology • JP Flores
2024		QUALITATIVE CONTENT ANALYSIS REVEALS FACTORS THAT INFLUENCE A SCIENTIST'S JOURNEY AND CAREER TRAJECTORY Est. submission Fall 2024 . JP Flores
2023		ABERRANT NUP98 CONDENSATES ACTIVATE LEUKEMOGENIC GENES VIA DISCRETE GENOMIC ENGAGEMENT Submitted • Jing Li, Shizhe Liu, Sunghwan Kim, Jacob Goell, Zachary Allen Drum, John Patrick Flores, Alex J. Ma, Barun Mahata, Mario Escobar, Jeong Hyun Ahn, Rosa Selenia GuerraResendez, Yuhao Zhou, Bo Yu, Michael R. Diehl, Gang Greg Wang, Douglas H. Phanstiel, and Isaac B. Hilton
2023	•	MARINER: EXPLORE THE HI-CS Bioinformatics • Eric S. Davis, Sarah M. Parker, Nicole E. Kramer, J.P. Flores, Manjari Kiran,
2022		ADVANCE U.S. INTERNATIONAL DIPLOMACY EFFORTS BY EXPANDING ELIGIBILITY IN THE EMBASSY SCIENCE FELLOWS PROGRAM Journal of Science Policy and Governance · Authored with Rami Major and Rachel Cherney
J		NON-ACADEMIC ARTICLES
2024		HOW DID HUMANS LOSE THEIR TAILS? GeneBites • Edited by Jayati Sharma
2024	•	EXPLORING RARE DISEASES IN THE 'DARK MATTER' OF DNA GeneBites

· Edited by Jameson Blount & Jayati Sharma

2024		TOWARDS A MORE COMPLETE GENETICIST'S TOOLBOX GeneBites
		· Edited by Richard Coca & Jayati Sharma
2023		WRITING ABOUT RACE IN BIOLOGICAL SCIENCE UNC TIBBS
		· Anna Wheless, Micah Hysong, JP Flores , Laura Raffield, PhD, Nikea Pittman, PhD , Gail Henderson, PhD
2021		ZOOM FATIGUE: JUST ONE COVID-19 COLLEGE EXPERIENCE CHALLENGE Inside Higher Ed
2020		LETTER TO THE EDITOR: OCCIDENTAL STUDENT-ATHLETES DEMAND ACCOUNTABILITY The Occidental
	Ē	INVITED TALKS / WORKSHOPS
2024		HYPEROSMOTIC STRESS INDUCES COMPLETE REWIRING OF CHROMATIN INTERACTIONS Invited Talk, UNC Department of Genetics Retreat Myrtle Beach, SC
2024		THE ROLE OF 3D CHROMATIN STRUCTURE IN RESPONSE TO ENVIRONMENTAL STRESS Invited Talk, Sixth Annual Dr. Samuel M. Nabrit Conference for Early Career Scholars • Providence, RI
2024		GRADSCHOOL 101 WORKSHOP: PUBLIC SPEAKING
2024	Ĭ	Cientifico Latino Graduate Student Executive Committee (GSEC) ◆ Remote
2024		BUILDING TOMORROW'S BIOMEDICAL WORKFORCE WEBINAR SERIES
		Frontiers in Research Metrics & Analytics
		• Building Tomorrow's Biomedical Workforce Webinar Series: A series of two webinars will cover broad systemic issues facing graduate and postdoctoral trainee populations in their education, training and career development; improving training environments by developing greater inclusivity, increased wellness and effective mentoring relationships; and will address needed government and institutional policy changes, systemic reforms, and federal government policies and actions.
2024		FLASH TALK: HYPEROSMOTIC STRESS INDUCES COMPLETE REWIRING OF CHROMATING INTERACTIONS
		Initiative for Maximizing Student Development (IMSD) Retreat • Chapel Hill, NC

2024		FROM WHERE DOES IT STEM?: HUMANIZING SCIENCE USING SCIENCE COMMUNICATION & STORYTELLING Seeding Postdoctoral Innovators in Research and Education (SPIRE) - IRACDA Conference • Chapel Hill, NC
2023	•	THE ROLE OF 3D CHROMATIN STRUCTURE IN RESPONSE TO ENVIRONMENTAL STRESS Invited talk, McDaniel College Department of Biology • Westminster, MD
2023	•	THE PEOPLE OF POSIT: BRINGING PERSONALITY TO R PACKAGES posit::conf(2023)
2021		STUDENT-EQUITY-CENTRIC: A VISION FOR THE FUTURE OF HIGHER EDUCATION University of Utah David Eccles School of Business Sorenson Impact Center Salt Lake City, UT
	₽	POSTER PRESENTATIONS
2024		HYPEROSMOTIC STRESS INDUCES COMPLETE REWIRING OF CHROMATIN INTERACTIONS American Society for Human Genetics (ASHG) • Reviewer's Choice Abstract
2023	•	HYPEROSMOTIC STRESS INDUCES COMPLETE REWIRING OF CHROMATIN INTERACTIONS UNC 6th Annual Chromatin & Epigenetics Symposium Chapel Hill, NC
2023		HYPEROSMOTIC STRESS INDUCES COMPLETE REWIRING OF CHROMATIN INTERACTIONS Keystone Symposium: Chromatin Architecture in Human Disease & Development • Victoria, BC
2023		HYPEROSMOTIC STRESS INDUCES COMPLETE REWIRING OF CHROMATIN INTERACTIONS 10th Annual Mid-Atlantic PREP & IMSD Research Symposium Blacksburg, VA
2023		HYPEROSMOTIC STRESS INDUCES COMPLETE REWIRING OF CHROMATIN INTERACTIONS 5th Annual Dr. Samuel M. Nabrit Conference for Early Career Scholars Providence, RI

HYPEROSMOTIC STRESS INDUCES COMPLETE 2023 REWIRING OF CHROMATIN INTERACTIONS Ourham, NC Duke Biomolecular Condensates Symposium FROM SEQUENCE TO ACTIVITY: SYNTHETIC 2019 NEUROEXCITATORY PEPTIDES FROM FISH-HUNTING **CONE SNAILS** Southern California Conference for Undergraduate Research San Pedro, CA FROM SEQUENCE TO ACTIVITY: SYNTHETIC 2019 NEUROEXCITATORY PEPTIDES FROM FISH-HUNTING CONE SNAILS Society for Intergrative and Comparative Biology Annual Meeting Austin, TX FROM SEQUENCE TO ACTIVITY: SYNTHETIC 2018 NEUROEXCITATORY PEPTIDES FROM FISH-HUNTING **CONE SNAILS** San Diego, CA Society for Neuroscience Annual Meeting SERVICE **EXTERNAL SERVICE** 2024 2017 · Host/Creator, From where does it STEM? podcast · Senior Editor, GeneBites

- Data Science Team, Graduate Student Engagement and Community (GSEC)
 Program, Cientifico Latino
- · Biomedical Science Advisory Board Member, Chapel Hill Carrboro City Schools Project Lead the Way
- Peer Mentor, Graduate Mentorship and Assistance Program Philippines (GradMAP)
- · Peer Mentor, Association of Filipino Scientists in America (AFSA)
- · Junior Varsity (JV) Head Baseball Coach, Chapel Hill High School
- · Pen Pal, Letters to a Pre-Scientists
- · Trained Facilitator, edX: The Inclusive STEM Teaching Project
- · Atlas of Inspiring Hispanic/Latinx Scientists, Author/Co-Organizer

2024 | 2021

INSTITUTIONAL SERVICE - UNC CHAPEL HILL

- · Leadership Group, UNC Biological and Biomedical Sciences Program
- Student Admissions Commitee, UNC Biological and Biomedical Sciences Program
- · Diversity, Equity, & Inclusion (DEI) Advisory Committee, UNC Genetics
- · Scientist Ambassador, North Carolina DNA Day Connect
- · Scientist Ambassador, Shadow a Scientist UNC
- Students in Training, Academia, Medicine, and Research Program (STAHR), UNC School of Medicine Office of DEI
- · Lead Peer Mentor, GeNe F1 UNC Department of Genetics
- Steering Committee Member, UNC Curriculum in Bioinformatics & Computational Biology
- · Peer Mentor, North Carolina A&T Bridges to the Doctorate Program
- Peer mentor, Summer Undergraduate Research Experience in Biological Mechanisms (SURE-REU)
- · First-Year Group (FYG) Peer Mentor, UNC Biological & Biomedical Sciences Program
- · Admissions Diversity Advocate, UNC Office of Graduate Education
- · Strategic Planning Steering Committee, UNC School of Medicine
- · Bench/ Peer Mentor, Educational Pathways in Genomics Research (EDGE) at UNC
- · Peer Mentor Advisory Board, Initiative for Maximizing Student Development (IMSD)
- · Peer Mentor/Interviewer, Chancellor's Science Scholars
- · Director of External Affairs, Science Policy and Advocacy Group (SPAG)
- · Invited Speaker Seminar Student Committee, Bioinformatics & Computational Biology, Department of Genetics
- · First-Year Group (FYG) Lead Peer Mentor, UNC Biological & Biomedical Sciences Program (BBSP)

2021

INSTITUTIONAL SERVICE - OCCIDENTAL COLLEGE

- · NCAA Division III Baseball Team, Occidental College Dept. of Athletics
- · Student-Athlete Advisory Commitee, Occidental College Dept. of Athletics
- · Diversity and Equity Board, Associated Students of Occidental College
- \cdot Students for Equity & Advocacy in STEM, Occidental College
- · Justice, Equity, Diversity, Inclusion (JEDI) Committee, Occidental College Dept. of Athletics
- \cdot ViSTA (Volunteers in Service of Tiger Admission), Occidental College Alumni
- · Alumni Secretary, Occidental College Class of 2021
- · Tour Guide, Occidental College Office of Admissions