

JGI-UC Merced Internship Program

Ashleigh Papp October 28, 2021



Agenda



- √ The Joint Genome Institute (JGI)
- √ JGI-UC Merced Internship Program.
- √ Professional Development
- √ The Intern's Experience
- √ What's Next
- √ Stay in Touch



The 2018 JGI-UC Merced intern cohort with their mentors, along with JGI Director Nigel Mouncey and Internship founders/organizers Axel Visel, Suzanne Sindi and Zhong Wang.

The DOE Joint Genome Institute







JGI's Unique Role:

To provide the global research community with access to the most advanced integrative genome science capabilities for advancing solutions to bioenergy & environmental challenges









JGI-UC Merced Internship Program



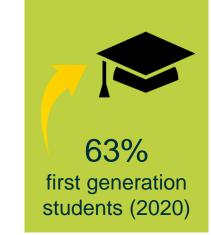
Since 2014, JGI has hosted ~50 students from UC Merced for an 8-week summer internship program.

The program was conceived by JGI scientists and UC Merced faculty to involve students in projects at JGI that provide hands-on experience in groundbreaking genomic research, and apply experimental and

computation tools to solve research problems.

While interning at JGI, interns also:

- √ Grow & develop professional skills applicable to any path
- ✓ Practice giving scientific presentations
- ✓ Network with JGI researchers and across Berkeley Lab

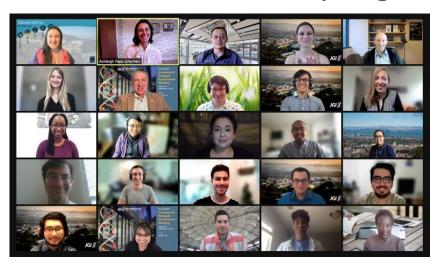


Developing the Next Generation of Genome & Data Scientists



2021 JGI-UC Merced Internship Program





- Students: range of majors & interests; graduate and undergraduate
- Process: mentors submit project proposals, students rank their top choices, program team pairs
- Enrichment: professional development, networking, Lab-centric meetings

Professional Development

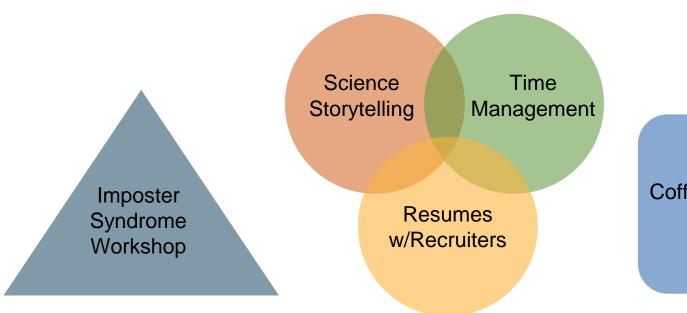


- Background:
 - This is JGI's flagship program, we look to this program as a model
 - External and internal evaluation of the program in 2020 & 2021



2021 Professional Development

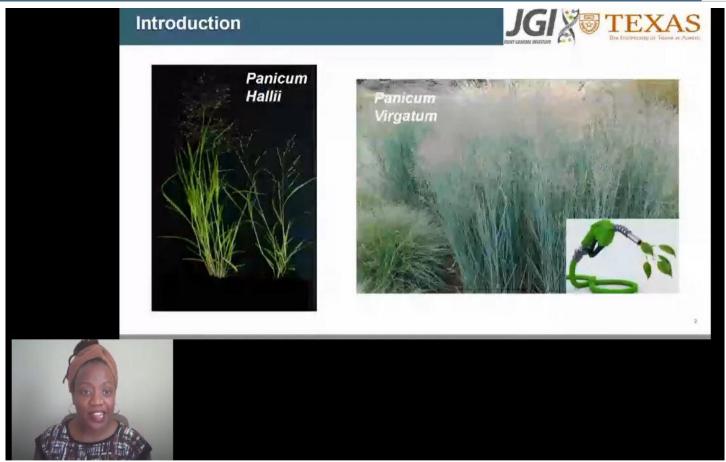




Alumni AMA
Coffee w/JGI Director Nigel
JGI All Hands
Friday Grooves

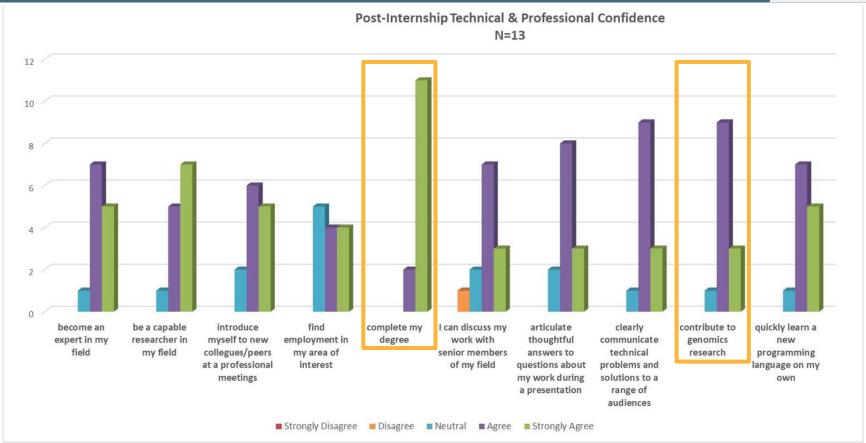
The JGI-UC Merced Intern Experience (video)





What's Next?





Please stay in touch!











bit.ly/Podcasts-by-JGI

Engaging the next generation workforce bit.ly/JGI-WD



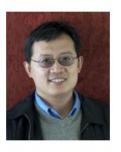
jgi-comms@lbl.gov

APPENDIX



Meet the JGI-UCM Program Team





Zhong Wang

Title: Co-founder of JGI-UC Merced Internship Program;

Computational Biologist

Email: ZhongWang@lbl.gov

Phone: 925-330-7734 (Mobile)



Natasha Brown

Title: Program Coordinator, JGI-UC Merced Internship Program;

Supply Chain Manager Email: nbrown@lbl.gov Phone: 925-639-5312



Axel Visel

Title: Co-founder of JGI-UC Merced Internship Program; Deputy,

Science, JGI

Email: AVisel@lbl.gov Phone: 510-495-2301 (Office)



Anne Mason

Title: Administrative Support, JGI-UC Merced Program;

Administrative Services Travel Coordinator

Email: abmason@lbl.gov Phone: 510-908-4099



David Gilbert

Title: JGI Education Partnerships; Senior Manager, JGI

Communications & Outreach Office

Email: degilbert@lbl.gov Phone: 510-495-8333



Ashleigh Papp

Title: Documentarian and Enrichment Coordinator;

Communications Specialist Email: apapp@lbl.gov

Phone: 925-998-6822

Meet the JGI-UCM Program Team (continued)





Suzanne S. Sindi

Title: Co-founder of JGI-UC Merced Internship Program; Assistant Professor at UC Merced

Email: ssindi@ucmerced.edu Phone: (209) 228-4224 Research Interests:

- Mathematical Biology
- Dynamical Systems
- · Computational Biology



A. Carolin Frank

Title: Co-founder of JGI-UC Merced Internship Program;

Associate Professor at UC Merced Email: cfrank3@ucmerced.edu

Research Interests:

- Environmental
- Symbiotic Microbiology
- Genomics



Jorge Arroyo

Title: Director, Undergraduate Research Opportunities Center

(UROC)

Email: jarroyo22@ucmerced.edu

Phone: (209) 228-4245



2022 Timeline



• Upcoming timeline for 2022 internship program:



Save the date! 2022 JGI Annual Meeting: August 29 - September 2, 2022

JGI History



1997 2004 2012 2018.... Structure The Human A Production A Next-Generation An Integrative Sequencing User Genome Science Genome Science Genome **User Facility User Facility** Project Facility Humans & animals Plants & microbes **INTEGRATIVE OMICS** Organismal interactions, DNA synthesis, metabolism Science Understand gene Sequence, assemble, Integrate sequence and

Mission

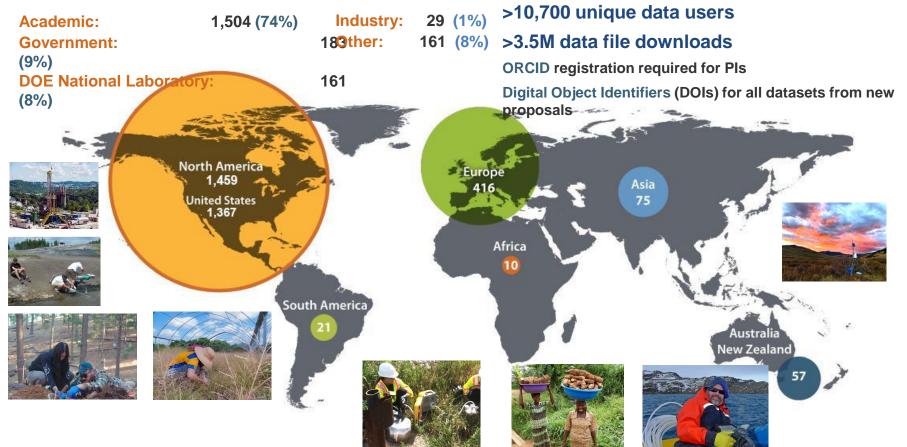
and annotate **GENOMES**

and genome **FUNCTION**

functional capabilities for systems-level BIOLOGY

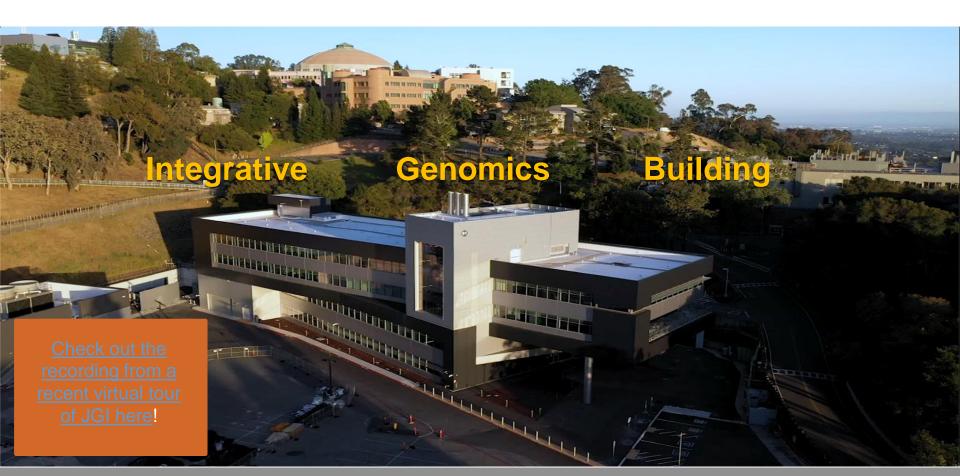
2,038 JGI Worldwide User Community in FY2020





Overview of National Labs & JGI (continued)





Overview of National Labs & JGI



Environment Health Energy

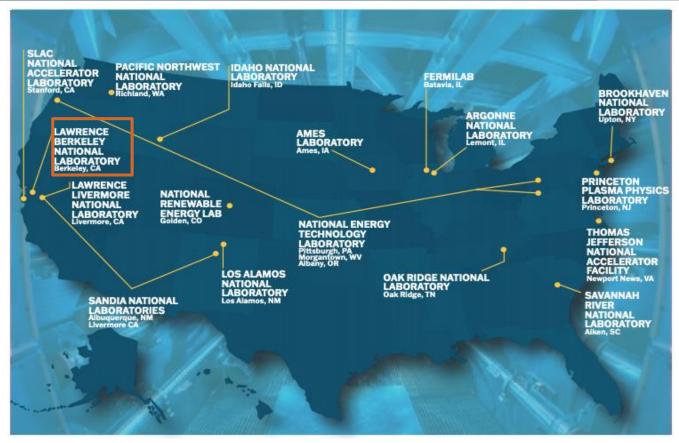


Image credit: DOE National Labs Report 2020

The DOE Joint Genome Institute







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To provide the global research community with access to the most advanced integrative genome science capabilities for advancing solutions to bioenergy & environmental challenges













Scientific Capabilities Enabling JGI User Community



Mission Areas



Carbon Cycling



Biogeochemistry



Programs



Fungal & Algal



Microbial

DNA Synthesis



Secondary Metabolites

Metabolomics



Capabilities



DNA Sequencing



Advanced Genomic Technologies



Computational **Analysis**



DNA Synthesis