It is exciting to be back 100% in-person on campus after one year of online courses and virtual meetings due to the COVID pandemic. I am very proud of our MARC scholars and all they have achieved in the past year! Despite the pandemic, our MARC scholars continued to learn, develop their research and communication skills, and expand their network of mentors. The first cohort of MARC students graduated during the past academic year and are currently enrolled in various graduate programs across the US. The second cohort just came back from their exciting summer research experiences at different institutions, while the third cohort is actively conducting and promoting biomedical research at LSU. I can’t wait to hear about all their accomplishments in the upcoming year. Geaux Tigers!

Graça Vicente, Ph.D.
Director, Maximizing Access to Research Careers (MARC) Program
Boyd Professor and Charles H. Barré Distinguished Professor of Chemistry
Rachael Coates, Junior
Major: Biological Sciences
Faculty Mentor: Dr. Elizabeth Martin, Assistant Professor, LSU Department of Biological and Agricultural Engineering
Research Topic: Identifying the role of MAPK15 in triple-negative breast cancer

Macallister Davis, Senior
Major: Chemistry
Faculty Mentor: Dr. Victor Garcia-Lopez, Assistant Professor, LSU Department of Chemistry
Research Topic: Artificial molecular machines to interrogate and modulate cell function

Sarah Delhaye, Senior
Major: Biological Engineering
Faculty Mentor: Dr. Adam Melvin, Associate Professor, LSU Department of Chemical Engineering
Research Topic: 3D cell migration

Maya Dunn, Junior
Major: Chemistry
Faculty Mentor: Dr. Graça Vicente, Professor, LSU Department of Chemistry
Research Topic: Synthesis and functionalization of asymmetric bis(borondifluoro) fluorophores based on pyrrole and pyrazine

Alexa Gonzales, Senior
Major: Microbiology
Faculty Mentor: Dr. Jeremy Brown, Professor, LSU Department of Biological Sciences
Research Topic: Evolution and biodiversity of SARS-CoV-2 genomes

Sarah Jimenez, Senior
Major: Biological Engineering
Faculty Mentor: Dr. Elizabeth Martin, Assistant Professor, LSU Department of Biological and Agricultural Engineering
Research Topic: Evaluation of estrogenic effects of phytochemicals on breast cancer cell lines

Katy Knecht, Junior
Major: Chemistry
Faculty Mentor: Dr. Noemie Elgrishi, Assistant Professor, LSU Department of Chemistry
Research Topic: Solution stability studies on nitrogen oxyanions

Jemiah Maxi, Junior
Major: Biological Sciences
Faculty Mentor: Dr. Tammy Dugas, Professor, Department of Comparative Biomedical Sciences, LSU School of Veterinary Medicine
Research Topic: Effects of environmentally persistent free radicals on vascular health

Zoe Patton, Senior
Major: Chemistry
Faculty Mentor: Dr. Justin Ragains, Professor, LSU Department of Chemistry
Research Topic: The synthesis and investigation of selenonium chloride salts

Kaitlyn Perkins, Junior
Major: Biological Sciences
Faculty Mentor: Dr. Sita Withers, Assistant Professor, Department of Veterinary Clinical Sciences, LSU School of Veterinary Medicine
Research Topic: Investigating tumor microenvironment in canine and human osteosarcoma

Kyron Thomas, Junior
Major: Chemistry
Faculty Mentor: Dr. Andrew Maverick, Professor, LSU Department of Chemistry
Research Topic: Chromism of platinum based complexes

Chelbye Turner, Senior
Major: Chemistry
Faculty Mentor: Dr. Tammy Dugas, Professor, Department of Comparative Biomedical Sciences, LSU School of Veterinary Medicine
Research Topic: 2-D cell culture model to test whether particulate matter air pollution induces vascular dysfunction

MARC Graduates

Iyana Charles
B.S., Kinesiology
Post graduation: M.S. program; Johns Hopkins University

Alejandra Ham
B.S., Biological Engineering
Post graduation: M.S. program in Biological Engineering, LSU

Mia Goodson
B.S., Psychology
Post graduation: Applying to Ph.D. programs in clinical neuroscience

Calli Nguyen
B.S., Biological Sciences
Post graduation: M.S. program in Biomedical Sciences and Health Equity, Baylor College of Medicine

Aaryana Jones
B.S., Biological Sciences
Post graduation: Applying to graduate programs

Kiara Warren
B.S., Psychology
Post graduation: Ph.D. program in clinical psychology, LSU
Summer Research Experiences

This past summer, the second cohort of MARC scholars conducted research at an extramural site to further develop their research skills and foster personal and career development. The SRE 2 experience formally connects MARC scholars with mentors, research projects, and potential graduate programs at other institutions.

Macallister Davis
Dr. Kjersti Aagaard, Baylor College of Medicine

Sarah Delhaye
Dr. William Polacheck, University of North Carolina, Chapel Hill

Alexa Gonzalez
Dr. Cintia de Paiva, Baylor College of Medicine

Sarah Jimenez
Dr. Jane Grande-Allen, Rice University

Zoe Patton
Dr. Bill Wuest, Emory University

Chelbye Turner
Dr. Jeffrey Berger, NYU Langone

"The thing that I most enjoy about research is that I know that although it may not seem like it at the time, the research I do today adds to the preexisting scientific knowledge and could very well make a difference in the lives of cancer patients one day, either by informing current treatment plans or by discovering new treatment options."

- Rachael Coates, LSU MARC Junior and 2022-23 Astronaut Scholar

Distinguished Researchers

MARC graduates Calli Nguyen, Mia Goodson, Alejandra Ham, and Aaryana Jones were named 2022 Distinguished Researchers. The LSU Distinguished Undergraduate Researcher designation recognizes the achievements of outstanding LSU undergraduates who participate in a track of educational and research activities leading to a final and public presentation or publication of a faculty-mentored undergraduate scholarly project. Distinguished Researchers are honored at a special medal ceremony in their graduating semester and the designation is noted on their transcripts.

Presentation Awards

LSU MARC Scholar graduate Iyana Charles received first place for the College of Human Sciences and Education at the 2022 LSU Discover Day.

Macallister Davis, MARC senior, received an Outstanding Presentation in Chemical Synthesis Award at the 2022 Gulf Coast Undergraduate Research Symposium at Rice University and third place monetary poster award for the College of Science at 2022 LSU Discover Day.

LSU MARC Scholar graduate Mia Goodson received first place for the College of Humanities and Social Sciences at the 2022 LSU Discover Day.

Chelbye Turner, MARC senior, received second place for her poster under the College of Science division at the 2022 LSU Discover Day.
2022 Tiger Twelve

Alejandra Ham

MARC scholar and graduate Alejandra Ham received a 2022 LSU Tiger Twelve designation, which recognizes 12 outstanding seniors per year that contribute positively to the life of the campus, surrounding community and society, and who demonstrate commitment to intellectual achievement, inclusive excellence, leadership, and service. Learn more

MARC scholar and graduate Mia Godson received the 2021 Paul C. Young Outstanding Graduate in Psychology Award. Mia was a Supplemental Instruction (SI) Leader since her sophomore year and successfully defended her honors thesis through Dr. Paul Soto’s Behavioral Psychopharmacology Lab looking at the effects of olanzapine on weight gain and sucrose preference in mice.

Conference Presentations

Iyana Charles
LSU Discover 2022

Alexa Gonzalez
LSU Discover 2022

Katy Knecht
LSU Discover 2022

Oluwatobi Ojemakinde
ABRCMS 2021

Rachael Coates
LSU Discover Day 2022

MARC Graduate Student
2022 AT Research Conference 2022

Sarah Delhaye
LSU Discover 2022

Mia Goodson
LSU Discover 2022

Calli Nguyen
LSU Discover 2022

Chelbye Turner
2022 LS-PAC Model Conference

Macallister Davis
LSU Discover Day 2022

Alesandra Ham
LSU Discover 2022

Zoe Patton
LSU Discover 2022

Kiara Warren
LSU Discover 2020

2022 NOBCChE Conference 2022 GCURS at Rice University

Sarah Jimenez
2022 LSU Discover Society for Biomedical Engineering Conference 2022

2022 NOBCChE Conference

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Graça Vicente, Ph.D.
Director, Maximizing Access to Research Careers Program
Boyd and Charles H. Barré Distinguished Professor of Chemistry

Tyrsi Williams-Carter, Ph.D.
Assistant Dean of Mentorship, Education, & Research
LSU Graduate School

Gabella Nelson
MARC Graduate Student, supported by the LSU College of Science

Mahannah El-Farrah
MARC Graduate Student, supported by the College of Human Sciences & Education.

Gretchen Schneider, Ph.D.
MARC Manager

marc.lsu.edu