

## Cátia P. Dombaxe

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<b>Research Interests</b>	My research is focused on regenerative medicine and tissue engineering. I am fabricating a biomaterial based on goldfish extracellular matrix proteins to aid in tissue regeneration and functional recovery after spinal cord injury in mice.
<b>Education</b>	<p><b>Cornell University</b>, Ithaca, NY Aug 2021 – Aug 2026 (Expected) <i>PhD Candidate, Biomedical Engineering</i> <i>Committee: Yadong Wang (Chair), Christopher Schaffer, David Putnam</i> <i>Affiliations: Tissue regeneration, Drug delivery, Biomaterials</i> <i>Certificates: Women’s Entrepreneurship, Becoming a Resilient Scientist, Advanced Graduate Teaching Cohort</i></p> <p><b>Weill Cornell Medicine</b>, New York City, NY Jun 2023 – Jul 2023 <i>Advisor: Dr. Theodore H. Schwartz</i> <i>Conducted clinical research and shadowed Doctors and Surgeons for 8 weeks at New York Presbyterian Hospital</i></p> <p><b>Cornell University</b>, Ithaca, NY Aug 2021 – May 2023 <i>Master of Science in Biomedical Engineering</i> <i>Affiliations: Spinal cord regeneration, Proteomics, Hydrogels</i></p> <p><b>Methodist University</b>, Fayetteville, NC Aug 2016 – Dec 2020 <i>Bachelor of Science, Chemistry with conc in Forensic Sciences</i> <i>Advisors: Stephanie Hooper</i> <i>Senior Project: “Using Gas Chromatography to test toxic substances in weight loss supplements”</i></p> <p><b>Colorado State University</b>, Ft. Collins, CL Jan 2018 – Apr 2018 <i>Semester at Sea</i> <i>Study Abroad: Mexico, Hawaii, Japan, China, Hong Kong, Vietnam, Myanmar, India, Mauritius, South Africa, Ghana, Morocco, Portugal.</i></p> <p><b>United World College</b>, Maastricht, NL Aug 2014 – May 2016 <i>International Baccalaureate</i></p>
<b>Selected Fellowships, Honors, and Awards</b>	<p><b>NYS Spinal Cord Injury Research Board Predoctoral Fellowship</b> July 2023 <b>CTI Graduate Teaching Fellowship</b>, Cornell University July 2023 <b>Diversity Programs in Engineering Graduate Student of the Year</b> May 2023 <b>Cornell Graduate Diversity Early Career Service Award</b> May 2023 <b>Cornell BioEntrepreneurship Fellow</b>, Cornell University Apr 2023 <b>2023 Maribel Garcia Community Spirit Award</b>, Cornell University Apr 2023 <b>Migrations Art Competition</b>, Cornell University Dec 2022 <b>Mendelevium Medallion Award</b>, Methodist University Dec 2020 <b>Academic Highlight Award</b>, Angola 35 Degrees Sep 2020 <b>Outstanding Forensic Science Graduate</b>, Methodist University May 2020 <b>The Forensic Sciences Honor Society</b>, Methodist University May 2020 <b>John F. Conn Award</b>, National Chemistry Honor Society Nov 2019 <b>Undergraduate Research and Creativity Grant</b>, M. University Jan 2019 <b>Semester at Sea Spring Voyage</b>, Davis UWC Scholarship Oct 2017 <b>The National Society of Leadership and Success</b>, M. University Oct 2018</p>
<b>Publications</b>	Desai, R.; Kapur, Z.; Hammond, B.; <b>Dombaxe, C.P.</b> ; Tabae, A.; Anan, V.K.; Kacker, A.; Schwartz, T.H;. Hydroset Closure is a Safe and Efficacious Adjuvant for

Skull Base Reconstruction following Endoscopic Resection of Suprasellar Tumors. *In Preparation.*

Chen, Y.; **Dombaxe, C.P.**; D'Amato, A.R.; Ntekas, I.; Welch, H.; Van Herck, S.B.M.; Wang, Y.; Long-Term Evaluation of a Metal-Ligand Crosslinked, Biodegradable Elastomer Arterial Graft in a Rat Model. *In Preparation.*

**Dombaxe, C.P.**; Zhang, F.; Niemeyer, J.; Schwartz, T.H. Understanding the Role of RP58 Gene in Glioma Progression Using Free Behaving Calcium Imaging in Mice. 2023. Oral Presentation at the BME7900 Seminar - Immersion Term Poster Session.

**Dombaxe, C.P.**; Vecellio, M.; Kasamba, L.; Walker, D. The Detection of Latent Bloodstains Covered with Three Types of Current Top-Selling Paint/Primer Mixtures Using Bluestar. 2020. Oral Presentation at the State of North Carolina Undergraduate Research and Creativity Symposium.

**Dombaxe, C.P.**; Vecellio, M.; Kasamba, L.; Walker, D. The Detection of Latent Bloodstains Covered with Three Types of Current Top-Selling Paint/Primer Mixtures Using Bluestar. 2020. International Association for Identification's Identification News. Volume 50, pp. 22-23.

**Dombaxe, C.P.**; Vecellio, M.; Kasamba, L.; Walker, D. The Detection of Latent Bloodstains Covered with Three Types of Current Top-Selling Paint/Primer Mixtures Using Bluestar. 2020. Oral Presentation at the American Academy of Forensic Sciences 72nd Annual Scientific Meeting and Methodist University 9th Annual Undergraduate Creativity Symposium.

- Work Experience**
- Graduate Coordinator for Student-Faculty Engagement** Dec 2022 – Present  
*Cornell University Office of Inclusion Student Engagement* Ithaca, NY  
Planning, organizing, and hosting events for the greater graduate community. Creating programs to increase engagement between graduate student and faculty.
- Graduate Research Assistant** Aug 2021 – Present  
*Cornell University* Ithaca, NY  
*Department: Biomedical Engineering*  
Conducting research on spinal cord injury. Developing a biomaterial and studying its effects in tissue regeneration and functional recovery after spinal cord injury.
- Graduate Teaching Assistant** Aug 2021 – Dec 2022  
*Cornell University* Ithaca, NY  
*Department: Chemistry and Chemical Biology*  
*CHEM 2070, General Chemistry I, Fall 2021*  
*CHEM 2090, Engineering General Chemistry, Spring 2022*  
*CHEM 2070, General Chemistry I, Fall 2022*  
Prepared and facilitated pre-laboratory presentations. Supervised three-hour laboratory periods twice a week. Enforced all safety regulations and actively provided advice and assistance to students as they conducted work in the lab.
- Analytical Chemist** Jan 2021 – Jun 2021  
*Eurofins Lancaster Laboratory – Regeneron Pharmaceuticals* Rensselaer, NY  
Worked under the leachable team and specialized in Gas Chromatography Mass Spectrometry. Complied with all IOP's Environmental, Health Safety policies / procedures associated with the tasks to be performed and oversaw and implemented new ways for the organization of sample management.
- Forensics Laboratory Assistant** Aug 2020 – Dec 2020  
*Methodist University* Fayetteville, NC  
Assisted professors in set up and tear down of laboratory assignments. Cleaned labs

and crime scene rooms. Assisted with research projects, and took inventory of labs and crime scene equipment regularly.

**Student Head Supervisor** Jan 2019 – Dec 2020  
*Methodist University Tutoring Center* Fayetteville, NC  
 Participated in the development of Tutoring Center programs, procedures, and activities. Scheduled and overseen the work of short-term tutors, student tutors. Recruited, selected, and trained student tutors and provided day-to-day coordination of the assigned activities of the Tutoring Center.

**Chemistry Laboratory Assistant** Sept 2016 – May 2017  
*Methodist University Chemistry Department* Fayetteville, NC  
 Cleaned and sterilized laboratory instruments and equipment. Maintained laboratory instruments to ensure proper working order. Prepared chemical solutions for chemistry labs, following standardized formulas and provided technical support and assistance to chemistry faculty.

**Invited Talks**

<b>Cornell University BME 5010 Seminar</b>	Nov 2023
<b>Graduate Student Panel for Cornell’s Alumni Affairs</b>	Nov 2023
<b>Women Entrepreneurship Cornell: Role Model Conversation</b>	Sept 2023
<b>Cornell Graduate School’s Dean’s Welcome Panel</b>	Aug 2023
<b>Women Entrepreneurship Cornell: Role Model Conversation</b>	Aug 2023
<b>Cornell Medicine Biomedical Imaging Master’s Career Seminar</b>	Jul 2023

**Student Research Mentoring** **Undergraduate Students**

● Ruth Ogbemudia, Cornell University	Spring 2023 – Present
● Molly Veerkamp, Cornell University	Fall 2022 – Present
● Anthony Dee, Cornell University	Fall 2022 – Spring 2023

**Activities** Biomedical Engineering Society (BMES), Black Graduate and Professional Student Association (BGPSA), Women Entrepreneurs (W.E.) Cornell, Cornell Engineering Leadership Certification, Cornell University Graduate School Newsletter Focus Group, National Society of Black Engineers, Graduate and Professional Student Assembly Programming Board.

**Professional Development**

<b>Bank of America Women’s Entrepreneurship Program</b>	Sept 2023 – Present
<b>Cornell Technology Innovation Fellowship</b>	Apr 2023 – Present
<b>BioTech I-Corps Regional Course</b>	May 2023 – Jun 2023
<b>Cornell Advanced Graduate Teaching Cohort</b>	Apr 2023 – May 2023
<b>Cornell Engineering Leadership Certification</b>	Jan 2023 – Aug 2023
<b>Women Entrepreneurship at Cornell</b>	Sept 2022 – Apr 2023
<b>NIH Becoming a Resilient Scientist</b>	Sept 2022 - Nov 2022
<b>Consultant Program, Accenture</b>	2022
<b>ACS Outreach Training Program</b>	2020
<b>Learning Python Certificate</b>	2020
<b>Cybersecurity Foundations Certificate</b>	2020
<b>Emerging Leaders Certification</b>	2020
<b>International Tutor Certificate</b>	2019 – 2020
<b>Medicolegal Death Seminar Training</b>	2018

**Leadership and Outreach** **Diversity, Equity, and Inclusion (DEI) Committee Co-President** Apr 2023 – Present  
*Cornell University Biomedical Engineering* Ithaca, NY

<b>Graduate Student Life Advisory Council, Member</b> <i>Cornell University Graduate School</i>	Jan 2023 – Present Ithaca, NY
<b>ELSO Speaking Groups Program, Facilitator</b> <i>Cornell University English Language Support Office</i>	Mar 2023 – Aug 2023 Ithaca, NY
<b>Community Engagement Co-Chair</b> <i>Cornell University Biomedical Engineering Society</i>	Dec 2022 – Apr 2023 Ithaca, NY
<b>Graduate Mentoring Program, Mentor</b> <i>Cornell University Graduate School</i>	Feb 2023 – Present Ithaca, NY
<b>CUEmpower Mentor</b> <i>Cornell University Diversity Programs in Engineering</i>	Sept 2022 – Feb 2023 Ithaca, NY
<b>Chemists for Outreach and Graduate Inclusion</b> <i>Cornell University Chemistry Outreach</i>	Aug 2021 – Dec 2022 Ithaca, NY
<b>Vice-President of Student Activities Committee</b> <i>Methodist University</i>	Jan 2019 – Dec 2020 Fayetteville, NC
<b>Head of Public Relations</b> <i>Methodist University African Student Organization</i>	Aug 2018 – Dec 2019 Fayetteville, NC
<b>Global Ambassador at Semester at Sea</b> <i>Methodist University African Student Organization</i>	Aug 2018 – Dec 2020 Fayetteville, NC
<b>Empowering Local Women in Kenya</b> <i>United World College Maastricht</i>	2015 Maastricht, NL
<b>Volunteer at Kuzola Orphanage Luanda, Angola</b>	2012 – 2015