

Morgan A. Jacobellis, M.S

SCIENTIST II

CONTACT INFORMATION

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PROFESSIONAL PROFILE

Ms. Morgan Jacobellis is a toxicologist in ToxStrategies' Health Sciences practice with expertise that supports human health and ecological risk assessment projects. Her work includes conducting systematic and targeted literature reviews, evaluating toxicological evidence, and supporting the development of regulatory, product-related, litigation, and environmental assessments. She has supported chemical exposure hazard identification and mechanistic evaluations, with experience integrating toxicological, epidemiological, and mechanistic evidence. Ms. Jacobellis has evaluated scientific literature to support regulatory assessments, including research examining potential relationships between ultra-processed foods (UPFs) and adverse health outcomes. In this work, she has characterized the scientific and regulatory landscape by developing and executing structured literature search strategies and evidence reviews across multiple scientific databases and regulatory agency websites.

Ms. Jacobellis earned her M.S. in Environmental Toxicology from Clemson University. Her thesis research investigated the effects of an epidemiologically derived mixture of persistent organic pollutants on metabolic health, particularly affecting childhood birthweight. She evaluated environmentally relevant chemical mixtures using *in vitro* systems and incorporated mechanistic components relevant to adverse outcome pathway (AOP) development, including key events associated with metabolic disruption. She has experience using mammalian *in vitro* models to evaluate the effects of environmentally relevant chemical mixtures on metabolic health. She has performed cell viability assays, transactivation reporter assays for the PPAR nuclear receptor family, and Mitochondrial Stress Tests, and has evaluated metabolic pathway effects HepG2 (hepatic) and C2C12 (skeletal muscle) cells.

Ms. Jacobellis also has experience using *in vivo* ecological models to examine herbicide exposure effects on invertebrate behavior and regeneration endpoints. She is proficient in bioinformatics and computational biology tools such as Blast, Phytozome, Cytoscape, PaperBlast, EFI Enzyme Similarity Tool, Muscle, UniPort, and iTol, which she has used to support sequence analysis, functional annotations, and biological dataset interpretation.

Ms. Jacobellis also has experience conducting human-centered research assessing consumer perceptions and responses. She has supported structured observational research examining participant reactions, where she contributed to characterizing behavioral responses. Additionally, she has used statistical analysis programs such as StatPlus and GraphPad Prism to analyze and visualize data sets. Ms. Jacobellis has presented her research at regional and national scientific meetings, has reported her results in peer-reviewed journals, and has facilitated lectures and discussions for biology and environmental sustainability undergraduate courses.

EDUCATION AND DEGREES EARNED

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|------|---|
| 2026 | M.S., Environmental Toxicology, Clemson University, Clemson, SC |
| 2021 | B.A., Sustainability Studies, <i>with departmental honors</i> ; Minors in Health and Wellness and Leadership Development, Stony Brook University, Stony Brook, NY |

PROFESSIONAL ASSOCIATIONS

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| 2025–Present | Society of Toxicology |
| 2025–Present | Carolina Society of Environmental Toxicology and Chemistry |
| 2023–Present | Southeastern Society of Toxicology |

HONORS/AWARDS

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| 2025-2026 | Clemson University: Graduate Research Assistant STEM & Industry Grant |
| 2026 | Carolina Society of Environmental Toxicology and Chemistry: Second Place Microscopic Talk |
| 2026 | Carolina Society of Environmental Toxicology and Chemistry: First Place Poster Award |
| 2025 | Southeastern Society of Toxicology: First Place Masters Platform Presentation |
| 2025 | Clemson University: Graduate Professional Development Course Grants in Aid of Research |
| 2025 | Clemson University: Graduate Travel Grant; Travel to 65th International SOT Orlando, FL |
| 2024 | Southeastern Society of Toxicology: Second Place Masters Poster Presentation |
| 2023 | Southeastern Society of Toxicology: First Place Masters Poster Presentation |
| 2019-2021 | Stony Brook University: Dean's List |

CERTIFICATIONS

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| 2023 | BSL-2 Biosafety and Aseptic Technique Training for Mammalian Cell Culture, Clemson University |
| 2023 | Blood Borne Pathogen Training, Clemson University |
| 2019 | Responsible Conduct of Research, The CITI Program (Credential 30435514) |
| 2024 | CPR/AED/First Aid, American Red Cross Training Services |
| 2022 | Human Research, The CITI Program (Credential 30435513) |
| 2019 | Human Participant Research Ethics, Institutional Review Board (IRB) |

PEER-REVIEWED PUBLICATIONS

Baldwin WS, Bloom MS, Chung KW, Dasgupta S, DeLorenzo ME, Hunt KJ, Key PB,..., **Jacobellis MA**, et al. 2025. Toxicological, chemical, social, and economic challenges associated with PFAS and replacement aqueous film-forming foams (AFFF). *Toxics* 13(9):732; doi: [10.3390/toxics13090732](https://doi.org/10.3390/toxics13090732).

Garcia MM, Pearce JL, **Jacobellis MA**, Baldwin WS, Hunt KJ, Bain LJ. 2025. Mixtures of *p,p'*-DDE, PCB153, BDE47, and PFOS alter adipocytic differentiation of 3T3-L1 cells. *Toxics* 13(11):975; doi: [10.3390/toxics13110975](https://doi.org/10.3390/toxics13110975).

Pochron ST, Sasoun S, Maharjan S, Pirzada WU, Byrne S, Girgis M, **Jacobellis MA**, Mitra JA, et al. 2024. Toxicity of a common glyphosate metabolite to the freshwater planarian (*Girardia tigrina*). *Sustainability* 16(2):842; doi: [10.3390/su16020842](https://doi.org/10.3390/su16020842).

PRESENTATIONS AND ABSTRACTS

Jacobellis M, Garcia M, Bain L, Pearce J, Hunt K, Baldwin W. Disruption of energy homeostasis by chemical mixtures containing persistent pollutants in HepG2 and C2C12 cells. Platform presentation, Carolina Society of Environmental Toxicology and Chemistry, North Carolina State University, Raleigh, North Carolina, 2026.

Moriarty C, Smith M, Hagerty M, Smith S, Garman B, Cherry J, **Jacobellis M**, et al. PFOS and PFOA alter mitochondrial metabolism in myoblasts. Poster presented at Carolina Society of Environmental Toxicology and Chemistry, North Carolina State University, Raleigh, NC, 2026.

Jacobellis M, Garcia M, Bain L, Pearce J, Hunt K, Baldwin W. Disruption of energy homeostasis by chemical mixtures containing persistent pollutants in HepG2 and C2C12 cells. Symposium presentation, Clemson University, Clemson, SC, 2026.

Jacobellis M, Garcia M, Bain L, Pearce J, Hunt K, Baldwin W. Disruption of energy homeostasis by chemical mixtures containing persistent pollutants in HepG2 and C2C12 cells. Platform Presentation, Southeastern Society of Toxicology, Clemson University, Clemson, SC, 2025.

Jacobellis M, Garcia M, Bain L, Pearce J, Hunt K, Baldwin W. Disruption of energy homeostasis by chemical mixtures containing persistent pollutants in HepG2 and C2C12 cells. Abstract 4564, Society of Toxicology 64th Annual Meeting, Orlando, FL, March 2025.

Jacobellis M, Garcia M, Bain L, Pearce J, Hunt K, Baldwin W. Disruption of energy homeostasis by chemical mixtures containing persistent pollutants in HepG2 and C2C12 cells. Poster presented at Southeastern Society of Toxicology, Auburn University, Auburn, AL, 2024.

Jacobellis M, Bain L, Baldwin W. Disruption of energy homeostasis by PFAS mixtures. Poster presented at Southeastern Society of Toxicology, University of Georgia, Athens, GA, 2023.

Jacobellis M, Blaby-Haas C. Selective pressure responsible for pathway evolution of arsenic tolerance in bioenergy algae. Poster presented at Science Undergraduate Laboratory Internship (SULI) Presentations, Brookhaven National Laboratory, Upton, NY, 2021.

Jacobellis M, Khan S, Prizada W, Maharjan S, Sasoun S, Girgis M, Byrne S. AMPA (α -amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid) affects the regeneration rate of the planarian (*Girardia tigrina*). Poster Presented at Stony Brook University Undergraduate Research and Creative Activities (URECA), Stony Brook, NY, 2021.

Prizada W, Khan S, Maharjan S, **Jacobellis M**, Sasoun S. Observing planarian regeneration upon exposure to AMPA. Poster presented at Stony Brook University Undergraduate Research and Creative Activities (URECA), Stony Brook, NY, 2021.