

Madison Alise Toonder

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EDUCATION

Stanford University Online High School, Graduation: June 1, 2019
220 Panama St, Stanford, CA 94305
4.0 Unweighted GPA

AWARDS AND SPECIAL RECOGNITION

- i. Top 30 abstract finalist, research poster presenter, 67th Annual International Wildlife Disease Association Conference – Attendance sponsored by University of Miami
- ii. Awarded 2nd place in nation for STEM Mathematics by Broadcom MASTERS USA (October 2015)
- iii. Muhlenberg College Summer Residential Brain Camp, scholarship awarded, competitive application (May 2018)
- iv. International Go Blue Awards “Blue Hatchling” Finalist (October 2017)
- v. 1/7 international youth delegate at the 2018 World Ocean Day event "Sea Youth Rise Up" in Washington, D.C. – met with congress and led march on World Ocean’s Day (June 2018)
- vi. One of Business Insider’s “Most Brilliant Scientific Discoveries that People Under 15 Have Made This Year” <http://www.businessinsider.com/broadcom-masters-finalists-2015-10> (October 2015)
- vii. 1st place in Senior Environmental Category of the Florida State Science and Engineering Fair (March 2016)
- viii. 1st place in Senior Animal-Plant-Behavioral-Environmental Sciences Category at the 2017 St. Johns County Science Fair (February 2017)
- ix. Awarded SeaWorld and Busch Gardens Environmental Excellence Award (October 2016)
- x. Keynote speaker at SeaWorld & Busch Gardens Youth Environmental Excellence Awards (August 2017)
- xi. Keynote speaker at Guana Tolomato Matanzas National Estuarine Research Reserve (GTM NERR) “Friends of the Reserve” Annual Membership Meeting (December 2016)
- xii. Recipient of Stanford Online High School’s Award for “Outstanding Achievement in Textual Analysis and Argumentation”; Dr. Claire Dawkins
- xiii. Northrup Grumman Earth Day Celebration (2015-2018)
- xiv. Received scholarship to apply for and attend Tufts University Cummings School of Veterinary Medicine “Adventures in Veterinary Medicine” 2-week pre-collegiate intensive (August 2016)
- xv. National Beta Club Elected Leadership
- xvi. National Honors Society Member
- xvii. Awarded 4-year scholarship to New College in Sarasota at Florida State Science and Engineering Fair (March 2018)
- xviii. Applied for and was accepted into Duke University’s Global Researcher Summer Academy (2017)

EXTRACURRICULAR ACTIVITIES

- i. Elected Vice President and Executive Board, National Beta Club (2017-2018)
- ii. Stanford University Online High School UNICEF Club Co-Founder, Co-President, and Director of Education & Outreach Research (2017-2018)
- iii. Founder and President of Pre-Veterinary Club at Stanford University Online High School (2016-2018)
- iv. Appointed to a two-year position on SeaWorld & Busch Gardens Youth Advisory Council as Conservation Committee Co-Chair (2016-2018)
- v. Stanford University Online High School AP Biology Study Group Founder and Director (2017-2018)
- vi. Founder and President of Biotech Study Club (2016-2017)
- vii. Elected Vice President of Operation Teddy Bear Non-Profit Club (2016-2017)

COMMUNITY INVOLVEMENT

- i. Brevard Zoo Teen Docent and Animal-Handler (2015-2018) 400hrs/yr
- ii. SeaWorld & Busch Gardens Youth Advisory Council (2016-2018) 100hrs/yr
- iii. Jackson Veterinary Hospital Intern (2015-2018) 70hrs/yr
- iv. Volunteer Head Coach of the St. Johns County YMCA Youth Volleyball team (2017-2018) 80hrs/yr

RESEARCH PROJECTS

- i. Direct activation of the GABA_A Receptor by *Citrus aurantium bergamia*: Characterization of a novel modulator comparable to benzodiazepines
- ii. Method Comparison of Capillary & Split Beta Electrophoresis: A Novel Approach to Identify and Characterize Sea Turtle Health in a Clinical Setting (2017-2018)
- iii. Comparative Study of Resilient *Alligator mississippiensis* Immunity in Relation to *Chelonia mydas* Lysozymes Utilizing Antimicrobial Activity Assays Against *E. coli*, *M. luteus* and *P. fluorescens*: A Novel Approach to Reduce Sea Turtle Susceptibility to Fibropapillomatosis (2016-2017)
- iv. The Effects of Disproportionately Increasing Chemical Active Ingredients in Ascending SPF's of Micronized Chemical Sunscreen as Compared to Non-Nanosized Uncoated Zinc Oxide Natural Alternative Sunblock on Gape Rate, Behavior and Filtration Capacity of *Crassostrea virginica* (2015-2016)

REFERENCES – Current Research Mentors

- Carolyn Cray; Associate Director of Acute Phase Protein Laboratory, Avian & Wildlife Laboratory, Division of Comparative Pathology, Clinical Professor of Pathology & Laboratory Medicine, Professor of Microbiology & Immunology, University of Miami
- Justin Perrault; Associate Director of Research at Loggerhead Marinelife Center
- Chris Fischer; CEO and Founder of OCEARCH
- Nicole Stacy; Clinical Assistant Professor of Aquatic Animal Health, Large Animal Clinical Sciences, University of Florida College of Veterinary Medicine
- Lidia Castro; Lead Veterinary Technician, Disney's Animal Kingdom
- David Ray; Associate Professor of Biological Sciences at Texas Technical University
- Nikki Dix; Associate Research Director of Guana Tolomato Matanzas National Estuarine Research Reserve (GTM NERR)