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Featured Faculty Mentor/Student Team

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Featured Faculty Mentor/Student Team

Providing undergraduates with experiential learning opportunities is the most enjoyable and effective teaching experience of my now more than 35 years of teaching and research. Whether teaching structured laboratory courses, training undergraduate research assistants, or mentoring undergraduate research and Honors projects, these interactions provide students with an important context to the variety of subjects covered in their academic programs and insight into real-life application of their learning. As a research mentor, I greatly benefit from these interactions, from staying connected with the undergraduate programs, their challenges, and opportunities, to helping shape novel ideas and pursuing new research directions. Additionally, most of the undergraduate research projects I mentored generated preliminary or additional data for publications and research grants.

This was the case with Alessandro's project. He was already conducting research on the effects of cyclic heat stress on broiler production with Dr. Billy Hargis' research team when he approached me about his idea to investigate the effects of cyclic heat stress on immune system function in broiler chickens. Specifically, he wanted to know how the natural defenses, like the acute inflammatory responses, are affected by heat stress conditions. Once agreed to go forward with this idea for his Honors project, Alessandro prepared a well-researched project proposal, successfully applied for research funding from the Honors and Bumpers Colleges, set-up the animal experiments, including daily care and facility maintenance, prepared all the materials, and participated fully and enthusiastically in all aspects of treatment application, sample collection, and processing. Some samples had to be analyzed the day of collection, requiring long days and teamwork with all members of my research group, while he independently carried out analyses of preserved samples over many months post collection. Alessandro did an outstanding job, carrying out all aspects of his ambitious research project and thesis efficiently with great care and precision.

I am so very proud of his accomplishments and thankful for the opportunity to have worked with this talented and resourceful student as mentor, advisor, and teacher. Our student-mentor teamwork has led to a new research direction and funding for my program, and, most importantly, contributed to Alessandro's pursuit of graduate studies at Clemson University and continued commitment to a career as a scientist and researcher.



Dr. Gisela Erf
Faculty Mentor of
Alessandro Rocchi

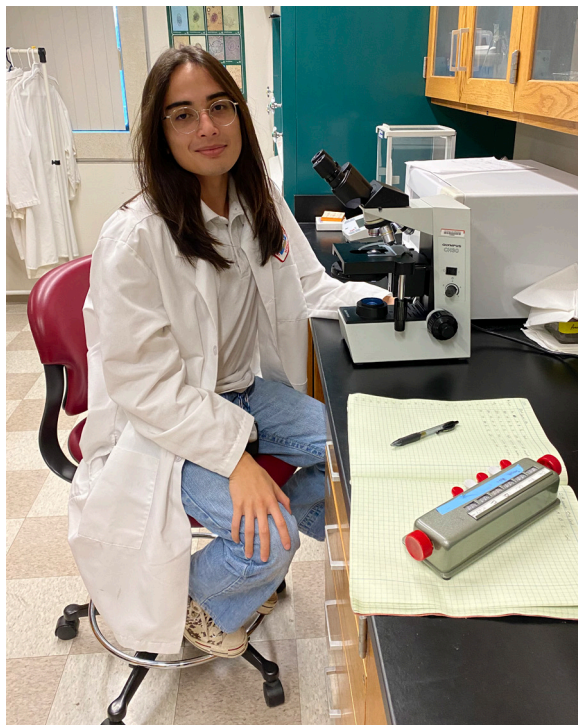
Gisela Erf, Professor, Tyson Professor in Avian Immunology,
University of Arkansas System Division of Agriculture's
Department of Poultry Science

Featured Faculty Mentor/Student Team

Being a part of the honors program was one of the most fruitful opportunities in my four years at the University of Arkansas. Completing my undergraduate research at Dale Bumpers College allowed me to feel accomplished and unquestionably proud of what I was able to achieve during my time there.

As a sophomore, I chose Dr. Gisela Erf in the department of Poultry Science as my mentor and given the opportunity, I would do it all again. Dr. Erf served as a superb mentor, kick-starting me into a newfound love for research. She went above and beyond to truly make my experience unforgettable and enjoyable throughout my entire research project. Working with Dr. Erf gave me a small window into what it feels like to be a graduate student, giving me the liberty to conduct my own research, guiding me along the way, and providing me with a love for basic sciences. With this, I was able to learn what a healthy student-advisor relationship should look like and how to really connect with your professors.

Other than with my research, I was able to learn how to navigate the world of academia. Dr. Erf helped me to develop soft skills in communicating and collaborating with others. With this, I was also able to learn a plethora of skills both in the lab and my academic writing for my future endeavors. Pursuing my undergraduate research also played a large influence on my career path as I now depart from the University of Arkansas to pursue a Master's at



Clemson University. Along my academic I journey I will always carry that which I have learned under Dr. Erf's mentorship. My experience as a part of the Dale Bumpers College honors program has been genuinely unforgettable.

Alessandro Rocchi,
May 2023 Honors graduate in Poultry Science

IN THE LAB: Alessandro in the University of Arkansas System Division of Agriculture's John Tyson Center For Excellence in Poultry Science Lab using a light microscope and counter to perform differential leukocyte counts on Wright-stained blood smears from broilers to measure the percentages of each white blood cell type. Photo by Aaron Forga.



Alessandro Rocchi
Bumpers Student