

Cheyenne Star Summers

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Professional Summary

PhD candidate in Animal Science with a strong background in animal health, research project design, and team leadership. Research experience includes fetal programming, metabolism, and endocrinology, with hands-on expertise in broodmare management, foal care, and equine breeding facility operations. Demonstrated ability to lead research initiatives, manage cross-functional teams, and effectively communicate between academic and industry stakeholders. Committed to applying scientific knowledge to advance animal health and performance.

Education

University of Connecticut <i>PhD, Animal Science</i>	Storrs, CT August 2023 – May 2026
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University of Illinois at Urbana-Champaign <i>MS, Comparative Bioscience</i>	Urbana, IL August 2019 – May 2021
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University of Illinois at Urbana-Champaign <i>BS, Animal Sciences</i>	Urbana, IL August 2019 – May 2021
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Research Experience

University of Connecticut, Department of Animal Science <i>Graduate Research and Teaching Assistant, Reed Lab</i>	Storrs, CT August 2023 – Present
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- **Equine Reproduction Research:** investigating the effects of metabolic syndrome on ovulation induction in mares, including the use of transrectal ultrasound and glucose tolerance tests.
- **Periparturient Care & Sampling:** assists with mare parturition and collection of colostrum, placental, and blood samples to support data-driven research on mare and foal health.
- **Multispecies Research Experience:** supports bovine and ovine research projects, including sample collection, glucose tolerance tests, LPS trials, liver/muscle biopsies, necropsies, and weight tracking in a multigenerational sheep study.
- **Data Analysis & Lab Management:** manages laboratory scheduling for personnel across experiments, utilized R Studio for data analysis, and ensured seamless coordination of animal care and sample processing.
- **Mentorship & Communication:** Mentors undergraduate students in animal handling and lab techniques, and presents research findings at academic conferences and oral presentations.

University of Illinois, Department of Comparative Bioscience <i>Graduate Research and Teaching Assistant, Bagchi Lab</i>	Urbana, IL August 2019 – May 2021
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- **Gene-Edited Mouse Model Research:** Led trials using gene-edited mouse models of pregnancy to investigate genetic influences on maternal and fetal health.

- **Colony Development & Management:** Developed and managed two high-health gene-edited mouse colonies, each derived from two founders.
- **Research & Analysis:** Conducted tissue dissection, preparation, histology, DNA isolation, and PCR for experimental analysis.
- **Mentorship & Training:** Mentored new lab members in research techniques, ensuring high-quality data collection and training in live animal and wet lab assays.
- **Collaboration & Dissemination:** Collaborated with other lab groups on research objectives and presented findings at academic settings.

Professional Experience

University of Connecticut Department of Animal Science

Storrs, CT

Research Assistant 2, Govoni Lab

December 2022 – August 2023

- **Multigenerational Ovine Research:** Led data collection in a study focusing on the effect of poor maternal nutrition on fetal programming in a second generation, second parity group of sheep.
- **Comprehensive Sampling Procedures:** Conducted blood collection, collected morphometric measurements, weight tracking, and glucose tolerance tests in sheep to support data-driven research.
- **Lambing Operations & Neonatal Care:** Oversaw lambing processes and provided neonatal care, maintaining detailed health and data records for all research lambs.
- **Experimental Protocol Implementation:** Assisted in designing and executing experimental protocols for maternal nutrition research, ensuring consistency and accuracy across all phases of the study.
- **Lab Personnel Coordination & Experimental Logistics:** Organized scheduling for lab personnel, ensuring efficient animal care, data collection, and sample processing across experimental tasks.

University of Illinois Department of Animal Sciences

Urbana, IL

Research Specialist in Agriculture, Equine Unit

June 2021 – December 2022

- **Equine Reproduction Facility Management:** Managed an AALAC-accredited equine facility housing 80 university- and client-owned horses, including stallions, broodmares, yearlings, weanlings, and foals, ensuring proper care and welfare.
- **Research Facilitation & Client Relations:** Coordinated research between principal investigators and university-owned horses, forged and maintained client relationships, and handled billing, record-keeping, and compliance with university oversight.
- **Horse Care & Management:** Oversaw and attended the parturition of 27 broodmares during the 2022 foaling season, coordinated emergency and routine veterinary care, and handled and collected commercial breeding stallions for artificial insemination purposes.
- **Staff Supervision & Training:** Led a team of 17 student employees and interns, implemented training programs for safe horse handling and basic veterinary care, and facilitated communication among veterinarians, farm staff, and horse owners.
- **Outreach & Teaching:** Collaborated with faculty on outreach initiatives, taught animal science classes, and coordinated preparation, transport, and all care of yearlings for multi-day sales.

Freedom of Movement Dressage & Eventing

White Heath, IL

Barn assistant

October 2018 – June 2019

- **Equine Care & Daily Management:** Provide care for a variety of performance and pleasure horses, ensuring their health, nutrition, and overall well-being.
- **Advanced Horse Handling:** Skilled in working with horses of diverse temperaments and backgrounds, including stallions and ex-racehorses.
- **Facility Maintenance:** Perform routine maintenance tasks to support the cleanliness, functionality, and safety of the barn and surrounding facilities.

University of Illinois Veterinary Teaching Hospital

Urbana, IL

Large Animal Clinic Student Caretaker

July 2017 – May 2018

- **Clinic Biosecurity & Sanitation:** Maintained strict biosecurity protocols throughout the clinic to prevent cross-contamination and support animal health.
- **Facility Cleaning & Preparation:** Sanitized stalls, chutes, and surgery suites between animals to ensure a clean, safe, and sterile environment.
- **Animal Care Support:** Assisted in the daily care and handling of university-owned horses and livestock, contributing to their well-being and routine management.

University of Illinois Department of Animal Sciences

Urbana, IL

Lead undergraduate employee, Equine Unit

August 2016 – May 2019

- **Facility Oversight & Leadership:** Assumed management responsibilities in the absence of the farm manager, ensuring smooth daily operations, care, and safety of horses across the facility.
- **Staff Scheduling & Delegation:** Created work schedules, delegated tasks, and led undergraduate student teams to support efficient and effective farm operations.
- **Training & Skill Development:** Trained new student workers in fundamental farm tasks, safe horse handling practices, and proper equipment use to maintain a productive learning environment.
- **Equine Care & Medical Assistance:** Administered basic veterinary-directed medical care, assisted in foaling, and conducted hands-on reproductive procedures including semen collection and processing.
- **Comprehensive Horse Handling:** Skilled in the daily handling and care of stallions, broodmares, foals, and yearlings, ensuring high standards of welfare across all groups.

6 S Farms Inc.

Witt, IL

Farmhand

June 2016 – August 2016

- **Comprehensive Livestock Care:** Provided daily care for cows, heifers, calves, and a bull, ensuring proper feeding, handling, and monitoring of herd health.
- **Milking Operations:** Conducted twice-daily milking of the herd, following hygienic practices and maintaining consistency in routine.
- **Equipment Sanitation & Farm Maintenance:** Assisted with cleaning and sanitizing milking equipment and completed general maintenance tasks to support overall farm operations.

University of Illinois Department of Animal Science

Urbana, IL

Undergraduate Employee, Dairy Unit

January 2016 – May 2016

- **Milking & Cow Hygiene:** Independently carried out milking and ensured hygienic milking standards for approximately 50 cows.
- **Livestock Care:** Delivered routine care and monitoring for cows, heifers, and calves, supporting their health and welfare.
- **Veterinary-Assisted Treatment:** Administered mastitis treatments under veterinary supervision, contributing to effective herd health management.

Teaching Experience

Horse Breeding Farm Management – University of Connecticut Spring 2024/2025

Graduate Teaching Assistant

- Mentors students on breeding practices and management of stallions, broodmares, and foals
- Oversees the handling of breeding stallions by students
- Responsible for helping students perform daily teasing checks on broodmares throughout the semester

Foal Watch – University of Illinois Spring 2022

Instructor

- Taught students about equine parturition
- Directed students on how to assist during birth and post-foaling care
- Responsible for providing students with hands-on experience during the foaling process

Working with Farm Animals – University of Illinois Fall 2021/2022, Spring 2022

Instructor, Equine

- Educated students on safe horse handling
- Provides students with the opportunity to learn basic horse care and maintenance

Veterinary Histology – University of Illinois Fall 2019/2020, Spring 2020/2021

Graduate Teaching Assistant

- Aided in administrative tasks, including proctoring exams and handling student concerns or conflicts
- Organized and led several laboratory sections throughout the course
- Responsible for answering student questions, reviewing content, and facilitating discussion

Foal Watch – University of Illinois Spring 2017/2018/2019

Undergraduate Teaching Assistant

- Organized and scheduled all shifts throughout the semester
- Facilitated student involvement in the foaling process
- Responsible for responding to overnight calls throughout the semester

Invited Talks & Guest Lectures

Endocrinology of Farm Animals – University of Connecticut Spring 2025

- *Equine Endocrinology*

Livestock Industries and Career – Delaware Valley University Spring 2025

- *Navigating Graduate School in Animal Science*

Horse Breeding Management – University of Connecticut Spring 2025

- *Stallion Management*
- *Physiology of Pregnancy*
- *Management of the Pregnant Mare*
- *Parturition*
- *Physiology of Lactation*
- *Weaning*

Horse Science – University of Connecticut Spring 2025

- *Equine Reproductive System and Disorders*

Horse Science – University of Connecticut Fall 2024

- *Equine Reproductive System and Disorders*
- *Muscular System and Disorders of the Horse*

Horse Breeding Management – University of Connecticut Spring 2024

- *Physiology of Pregnancy*
- *Management of the Pregnant Mare*
- *Parturition*

Horse Science – University of Connecticut Spring 2024

- *Equine Reproductive System Disorders*

Introduction to Animal Science – University of Connecticut Fall 2024

- *Introduction to Equine Reproduction*

Leadership

American Society of Animal Science July 2024 – July 2026

National Graduate Director

- **National Leadership & Governance:** Serve as a voting member on the National Executive Board of the American Society of Animal Science (ASAS), contributing to organizational decision-making.
- **Graduate Student Representation:** Advocate for graduate students in Animal Science by participating in board meetings and influencing policies relevant to student interests.
- **Conference Programming & Student Engagement:** Plan and oversee student-focused events at the Annual ASAS Meeting, while supporting peer networking and professional development opportunities.

American Society of Animal Science August 2023 – August 2025

Northeast Section Graduate Director

- **Regional Leadership & Governance:** Serve as a voting member on the Northeast Section Executive Board of the American Society of Animal Science, contributing to monthly meetings and organizational planning.
- **Graduate Student Advocacy & Networking:** Provide a graduate student perspective in board discussions and collaborate with fellow members to support student engagement and professional development initiatives.

Animal Science Graduate Student Association

August 2023 – May 2024

Secretary

- **Graduate Student Event Coordination:** Assisted in planning and executing networking and professional development events for graduate students within the Department of Animal Science at UConn.
- **Meeting Documentation & Communication:** Recorded and distributed minutes for all department meetings, ensuring clear and timely communication among members.

Comparative Biosciences Research Trainee Group

January 2020 – December 2020

Secretary

- **Records & Financial Documentation Management:** Organized and maintained comprehensive records of group activities, including detailed fiscal reports.
- **Meeting Minutes & Communication:** Recorded and distributed minutes for board and monthly meetings, facilitating effective communication among members.

University of Illinois Department of Animal Science

Fall 2017 – Spring 2019

Animal Science Ambassador

- **Student Outreach & Academic Advising:** Enthusiastically informed students about opportunities within Animal Sciences and guided them in developing personalized academic pathways.
- **Recruitment & Engagement:** Served as outreach personnel to prospective students, promoting the program and fostering interest in the field.

Conference Proceedings

Impacts of maternal nutrition during gestation on second parity F2 offspring growth and metabolism – ASAS Annual Meeting, 2025 (Talk)

Effect of an insulin bolus during intravenous glucose tolerance tests in horses – ASAS Annual Meeting, 2025 (Poster)

Impact of maternal body condition on maternal metabolism and foal metabolism – ESS Meeting, 2025 (Talk)

Effects of maternal body condition on colostrum, foal weight, and foal IgG concentrations – ASAS Annual Meeting, 2024 (Talk)

Effects of maternal nutrition during gestation on second parity F2 offspring growth and organ weights – ASAS Annual Meeting, 2024 (Poster)

Awards & Recognitions

Certificate of Excellence, Graduate Research Forum

April 2025

University of Connecticut

Awarded for outstanding oral presentation on “Impact of maternal body condition on maternal metabolism and foal metabolism.”

Professional Affiliations

American Society of Animal Science (ASAS) – Member

Equine Science Society (ESS) – Student Member

Skills

Technical

- Use of ultrasound to monitor follicular development and pregnancy detection in horses
- ELISA
- Radioimmunoassay
- Radial immunodiffusion assay
- SNAP test for neonate foals
- BRIX refractometer reading
- Multi-species jugular blood collection
- Stallion semen collection and processing
- Artificial insemination
- Parturition and associated emergency assistance

Software/Data Analysis

- R Studio
- ANOVA
- T-tests

Leadership & Communication

- Team management and leadership
- Equine reproduction facility and animal management
- Dissemination of research
- Coordination across teams to achieve objectives
- Teaching
- Public speaking