



Nourhan Nashaat Abdelhafez Ali

Visiting scholar at University of Missouri,
Columbia , MO, USA

✉ norhannashat@hotmail.com ☎ 5739707873 📍 Columbia, Missouri, USA

📅 September 13th, 1992 📄 J1 visa

🔗 <https://scholar.google.com/citations?user=ZbBDKkQAAAAJ&hl=en>

♀ Female

👤 PROFILE

Dynamic and dedicated PhD candidate and Veterinary Physiologist with extensive research experience in reproductive biology, focusing on oocyte quality, DNA damage repair mechanisms, and autophagy. I have a record of collaborative research leading to high-impact publications, including co-first authorship in *Nature Communications*. Skilled educator with 10 years experience in teaching physiology courses to veterinary and medical students. proven ability to manage complex research projects, maintain laboratory animal colonies, and integrate multidisciplinary approaches to advance scientific understanding in reproductive health. Multilingual communication with strong leadership and organizational skills, committed to scientific excellence and innovation. Currently a visiting scholar at University of Missouri, Columbia, MO, USA since October 14th ,2021.

🎓 EDUCATION AND WORK EXPERIENCE

10/2021 –

Expected on February,
2026

PhD in Veterinary Physiology

Assiut University, Egypt and University of Missouri , Devision of animal sciences ,Columbia, MO, USA.

I am in a joint scholarship for my PhD in University of Missouri, Columbia, Mo, USA since October 14th, 2021 and expected to finish on February ,2026

Assiut, Egypt

Master of Veterinary Physiology

Assiut University, Egypt (2015–2019)

Assiut, Egypt

Bachelor of Veterinary Medical Science

Assiut University, Egypt (2014)

I graduated with Excellent with Honor degree (2nd on my class)

Work Experience

• Visiting Scholar

University of Missouri, Columbia, USA | Oct 14, 2021 – Present

- Conduct advanced research on DNA damage repair and autophagy in mouse oocytes.
- Manage mouse colony including genotyping, breeding, and colony health monitoring.
- Present research progress in monthly seminars and biweekly updates.
- Collaborate internationally and lead experiments on two major projects simultaneously (one published in *Nature Communications*, one under revision in *Nature communications*).

• Assistant Lecturer

Faculty of Veterinary Medicine, Assiut University, Assiut, Egypt | 2019 – Present

- Teaching practical physiology courses to veterinary students.
- Responsible for organizing and leading student practical sessions for multiple years.
- Contributed to curriculum development and student mentoring.

- Delivered lectures and seminars on reproductive physiology and molecular biology.

- **Demonstrator**

Faculty of Veterinary Medicine, Assiut University, Egypt | 2015 – 2019

- Assisted in teaching physiology courses for medical, pharmacy, dentistry, and veterinary students.

- Developed practical laboratory exercises and student assessments.

Research Skills and Technical Expertise:

I am using a lot of techniques during pursuing my PhD in University of Missouri :

- Confocal microscopy and live imaging.
- Western blots.
- Microinjection of mice and porcine oocytes (familiar with piezo system).
- Comet assays.
- Immunostaining.
- Genotyping.

PUBLICATIONS

- **Sun, Fei; Ali, Nourhan Nashat; Londoño-Vásquez, Daniela; Simintiras, Constantine A.; Qiao, Huanyu; Ortega, M. Sofia; Agca, Yuksel; Takahashi, Masashi; Rivera, Rocío M.; Kelleher, Andrew M.; Sutovsky, Peter.**

Evidence that reduced autophagy is a major cause of inefficient DNA damage repair in mouse oocytes.


Available at SSRN 4178535, 2022.

- **Sun, Fei; Ali, Nourhan Nashat; Londoño-Vásquez, Daniela; Simintiras, Constantine A.; Qiao, Huanyu; Ortega, M. Sofia; Agca, Yuksel; Takahashi, Masashi; Rivera, Rocío M.; Kelleher, Andrew M.**

Increased DNA damage in full-grown oocytes is correlated with diminished autophagy activation.

Nature Communications, Volume 15, Issue 1, Article 9463, 2024.

Note: Co-first author (equally contributing).

DOI: 10.1038/s41467-024-53559-w (<https://doi.org/10.1038/s41467-024-53559-w> )

- **Jannaman, Elizabeth A.; Ali, Nourhan N.; Soto-Moreno, Edgar; Trowbridge, Kalyn; Reed, Laura; Schoolcraft, William B.; Balboula, Ahmed Z.; Yuan, Ye.**

P-566: Presence of cytoplasmic microtubule organizing centers and their potential role in regulating spindle positioning in human oocytes.

Presented at ASRM 2022 Scientific Congress & Expo, 2022.

- **Jannaman, Elizabeth A.; Ali, Nourhan N.; Soto-Moreno, Edgar; Trowbridge, Kalyn; Reed, Laura; Schoolcraft, William B.; Balboula, Ahmed Z.; Yuan, Ye.**


Presence of cytoplasmic microtubule organizing centers and their potential role in regulating spindle positioning in human oocytes.

Fertility and Sterility, Volume 118, Issue 4, Page e346, 2022.

- **Elmileegy, Ibtisam M.H.; Hafiz, Nourhan N. Abdel; Yousef, Mohamed S.; Abdelâ, Mohammed A.; Ahmed, Ahmed E.; El-Sherry, Taymour M.**

Effects of Kisspeptin-10 on the steroidogenic capacity and metabolic aspects of bovine granulosa cells in vitro.


Journal of Advanced Veterinary Research, Volume 12, Issue 3, Pages 290–295, 2022.

DOI: 10.5455/javr.2022.b290 (<https://advetresearch.com/index.php/AVR/article/view/983> )

- **Soto-Moreno, Edgar J.; Ali, Nourhan N.; Kuller, Florian; Nasufovic, Veselin; Frolikova, Michaela; Tepla, Olga; Masata, Jaromir; Trauner, Dirk; Patterson, Amanda A.; Arndt, Hans-Dieter.**

Spindle-localized F-actin regulates polar MTOC organization and the fidelity of meiotic spindle formation.

Accepted in **Nature Communication** september 19th, 2025

<https://doi.org/10.1038/s41467-025-63586-w> 

- Chasi Olivares, B.E., J.P. Nascimento Andrade, P. Monteiro, B. Castro, E.S. Moreno Martinez, E. Anta Galván, A. Nourhan, J.B. Cole, M. Wiltbank, F. Peñagaricano, A. Balboula, and M.S. Ortega. 2025.

Association of fertility traits with markers of oocyte competence in dairy cattle.

Accepted in J. Dairy Sci.

- **Nasser Sayed Abou Khalil, Norhan Nashat Abdel Hafiz, Heba Galaa Mohamed (2016):** Effects of lumpy skin disease on primary and secondary stress responses in naturally infected Egyptian cows.

The 13th Scientific Congress of the Egyptian Society for Cattle diseases (Scientific Research and the development of Livestock), 1-4 February, Hurghada, Egypt, pp:72-79

SKILLS

Computer Skills:

- Microsoft Office Suite
- ICDL (International Computer Driving License), obtained March 31, 2013
- EndNote X7
- Statistical programs: SPSS 16.0, GraphPad Prism 5
- Image analysis software: ImageJ, Imaris

Time Management skills

- Prioritize my tasks: i can put my work and tasks a head of everything i might be dealing with as a personal issue or a problem at work with a college or anyone.
- Planning and time scheduling: i put everything i will do on a calendar with reminders so that i can keep track of everything i am doing and not miss a thing.
- Focus and concentration: i have the ability to focus completely on the task i am doing and finish it perfectly on time despite the obstacles i might have during my day.

Organizational and Leadership Skills

- Demonstrated leadership in establishing a new department at the Faculty of Veterinary Medicine, coordinating with engineers and faculty members.
- Managed and led two batches of veterinary students, ensuring timely completion of coursework and practical sessions.
- Maintained organized records and documentation for laboratory experiments and teaching materials.
- Effectively balanced multiple research projects simultaneously, meeting deadlines and achieving publication goals.
- Managed a mouse colony independently, overseeing genotyping, weaning, and breeding programs.

Communication and interpersonal skills

- Good communication skills gained through my experience as an assistant lecturer at Assiut University.
 - Excellent contact with foreign people gained from my Participation in conferences.
 - If there is a problem, I am opened to negotiation and solving the conflict in the best way possible without leaving anyone unsatisfied.
 - I can be great in teamworking and leading if i have to.
 - I have the ability to build friendships and good relationships with colleagues from different labs.
- Besides being social and love to make new friends and make good relations with people that allows me to make a lot of friends during my work at the university of missouri as a visiting scholar.
- Collaboration: i also collaborated with other laboratories in different projects in my field area and i have two other papers still preparing for publishing from these collaborations.
 - Emotional intelligence: i have the ability to calm down after a stressful situation either at work or a personal situation and just think carefully before doing anything.
 - I can be very patient doing a hard job that is not getting me any results, do multiple trials and not give up until i do it right and solve the problem.

LANGUAGES

Arabic, English and German

- **Arabic:** Native
- **English:** Proficient (C1–C2)
- **German:** Basic (A1)

ACADEMIC COURSES

Premaster courses:

- 1-physiology of digestive system with Excellent degree.
 - 2-fish physiology with Excellent degree.
 - 3-physiology of male and female reproductive system with Excellent degree.
 - 4-endocrine system with Excellent degree.
 - 5-statistical analysis with Excellent degree.
- From 2014-2017: responsible for teaching the practical part of physiology courses for medical, veterinary medical, pharmacy and dentistry students at Faculty of Medicine, Assiut University, Egypt.
- from 2018 till 2021: responsible for teaching the practical part of physiology for veterinary medical students at Faculty of Veterinary Medicine, Assiut university, Egypt.

ATTENDED PROGRAMS/WORKSHOPS

- 2014: training in a local pharmacy
- 16-17/12/2014: Training program of (Effective Presentation)
- 13-14/12/2014: Training program of (Quality Standards in Teaching 2)
- 10-11/1/2015: Training Program of (Quality Standards in Teaching 1).
- 4-5/1/2015: Training Program of (International Publishing of Research).
- 22-23/4/2015: Workshop on (Applications of Bioinformatics in Molecular Biology).
- 24-25/3/2019: Training Program of (Scientific Research Funding and Grants).
- 14-15/4/2019: Training program of (Conference Organization).
- September and October/2019: Preparation Course for IELTS.

CONFERENCES AND SEMINARS:

- "Scientific Research and the Development of Livestock," 13th Scientific Congress of the Egyptian Society for Cattle Diseases, February 1–4, 2016, Hurghada, Egypt.
- "The Importance of Scientific Research and Community Participation in Livestock Development Locally and Regionally," 18th Scientific Conference, Assiut University, November 5–7, 2019.
- Society for the Study of Reproduction (SSR) 54th Annual Meeting, December 15–18, 2021, St. Louis, MO.
- 19th Annual Gilbert S. Greenwald Symposium on Reproductive and Developmental Sciences, October 13–14, 2022, University of Kansas Medical Center.
- 21st Annual Gilbert S. Greenwald Symposium on Reproductive and Developmental Sciences, November 7–8, 2024, University of Kansas Medical Center.
- Poster presentation at the Graduate Forum, University of Missouri, Columbia, MO, September 2024.
- Regular presentations and seminars as part of the Visiting Scholar program at the University of Missouri, including monthly research progress seminars and bi-weekly brief presentations.

AWARDS AND MEMBERSHIPS

Membership:

- Egyptian society for cattle diseases

Awards:

- Travel award recipient for international conferences (21st Annual Gilbert S).