

Curriculum Vitae
Sassia Omar Mohamed Regeai
Associate Professor of Medical & Molecular Genetics
BSc, MSc, PhD

Personal Information:

- **Name:** Sassia Omar M. Regeai ساسية عمر محمد الرقيعي
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Educational History:

- **2006 Doctor of Philosophy (PhD) in Biology.** (*Speciality area in Molecular Genetics*)
Department of Biology, Faculty of Science, National University of Ireland Maynooth (NUI Maynooth), Maynooth - Ireland.
Thesis Title: complete sequence and phylogeny of mtDNA genome of *Heterorhabditis bacteriophora* and an investigation of interpopulation genetics and mtDNA evolution within the genus *Heterorhabditis*
- **1997 Master of Science (MSc) in Zoology** (*Speciality area in Medical Genetics*).
Department of Zoology, Faculty of Science, University of Tripoli, Tripoli - Libya.
Thesis Title: Hemoglobinopathies prevalence and gene frequency in different locations in Libya.
- **1988 Bachelor of Science (BSc) in Zoology.**
Department of Zoology, Faculty of Science, University of Tripoli, Tripoli - Libya.
Project Title: The infestivity rate of *Ancylostoma duodenale* larvae in Al Wanin tribe.
- **1983 High School Diploma. Marietta High School, Marietta, Georgia - USA.**

Employment History:

- **2023 - Present: Associate Professor,**
Department of Histology and Genetics, Faculty of Medicine, University of Tripoli, Tripoli - Libya.

Responsibility: Teaching **Medical Genetics** and **Histology** for undergraduate and **Epigenetics**, and **Cell & Molecular Biology** for postgraduate students. In addition to supervising several MSc. Projects.

- **2021 - 2022 Associate Professor,**
Department of Life Sciences, School of Basic Science, Libyan Academy of Postgraduate Studies, Janzour - Libya.

Responsibility: Teaching (Medical Genetics and Molecular Biology), supervision of postgraduate students and coordinator of **Biomedicine Division**.

- **2019 - 2021 Assistant Professor,**
Department of Life Sciences, School of Basic Science, Libyan Academy of Postgraduate Studies, Janzour - Libya.

Responsibility: Teaching (Medical Genetics and Molecular Biology), supervision of postgraduate students and coordinator of **Biomedicine Division**.

- **2017 - 2019: Assistant Professor,**
Department of Zoology, Faculty of Science, University of Tripoli, Tripoli - Libya.

Responsibility: Teaching and supervision of undergraduate and postgraduate students. Lecturing the following courses: **Genetics (Zo 214), Medical Genetics (Zo 424), Molecular Biology (Zo 426), and General Zoology I & II**. In addition to supervising several BSc Projects.

- **2012 - 2013: Part Time**
Department of Life Sciences, School of Basic Science, Libyan Academy, Janzour - Libya.

Responsibility: Teaching **Molecular Biology**.

- **2007 - 2012: Part Time**
Faculty of Medicine, Pharmacy, Medical Technology, University of Tripoli, Tripoli - Libya.

Responsibility: Teaching **General Zoology I & II**.

- **2007 - 2017: Lecturer,**
Department of Zoology, Faculty of Science, University of Tripoli, Tripoli - Libya.

Responsibility: Teaching and supervision of undergraduate students. Lecturing the following courses: **Genetics (Zo 214), Medical Genetics (Zo 424), Molecular Biology (Zo 426), and General Zoology I & II**. In addition to supervising several BSc Projects.

- **1998 - 2002: Assistant lecturer,**
Department of Zoology, Faculty of Science, University of Tripoli, Tripoli - Libya.

Responsibility: Teaching and supervision of undergraduate students. Lectured the following courses: **General Zoology I & II, Genetics** and supervising several BSc Projects.

- **1993 - 1997: Teaching Assistant,**
Department of Zoology, Faculty of Science, University of Tripoli, Tripoli - Libya.

Responsibility: Taught the laboratory part of the following courses: **General Zoology I, Genetics, Histology, Marine biology, and Insect taxonomy.**

- **1990 - 1993: Secondary school teacher,**
Al-Majed High School, Ain Zara, Tripoli - Libya.
Responsibility: Taught 10th and 11th grade **general Biology** classes.

Postgraduate Examiner:

- MSc in the *Department of Life Sciences, School of Basic Science, Libyan Academy of Postgraduate Studies, Janzour - Libya.*
- MSc in the *Department of Zoology, Faculty of Science, University of Tripoli, Tripoli - Libya.*

Membership:

- **Member of Science Society,** *Tripoli - Libya.*
- **Member of Libyan Biology Association,** *Tripoli - Libya.* .
- **Member of Friends of Libyan Environment Association,** *Tripoli - Libya.*

Research Interests:

- Types and prevalence of genetic diseases among Libyan population.
- Types of variants (mutations) of genetic diseases among Libyan population.
- Transgenerational inheritance.
- Inter and intra species genetic diversity.
- Reproductive toxicity and infertility.

Teaching Interests:

- Genetics
- Epigenetics
- Genomics
- Medical Genetics
- Molecular Genetics
- Molecular Biology
- Molecular Diagnostics

Skills:

- Expert in several molecular biology techniques including: electrophoresis, hybridization, gene cloning, Southern blotting, PCR, RFLP, AFLP, and SSCP.
- Familiar with genomic and proteomic databases such as NCBI, PDB, and EMBL.
- Proficient in teaching, good in experimental design and writing papers.
- Excellent communication skills and team work.

Publications:

- Aljazzaf, B., **Regeai, S.**, Elghmasi, S., Alghazir, N., Balgasim, A., Hdud Ismail, I. M., Eskandrani, A. A., Shamlan, G., Alansari, W. S., Al-Farga, A., & Alghazeer, R. (2023). Evaluation of Antidiabetic Effect of Combined Leaf and Seed Extracts of *Moringa oleifera* (*Moringaceae*) on Alloxan-Induced Diabetes in Mice: A Biochemical and Histological Study. **Oxidative medicine and cellular longevity**, 2023, 9136217. <https://doi.org/10.1155/2023/9136217>
- **Regeai, Sassia**, Abuser S., El Jaafari H, El Mabrouk, Z., and Shibani, Naema S. (2021). Reproductive and Histological Toxicity of Transdermal Exposure to Aluminum Chloride in Male Mice. **Al Academia Journal for Basic and Applied Sciences**. 3 (1): 1-9.
- Abuser S, EL Mabrouk Z, El Jaafari H, Shibani N, **Regeai S.** (2021). Effect of Pesticide Indoxacarb on the Thyroid Gland in Swiss Albino Mice. **Khalij-Libya J Dent Med Res**. 5(2):23–30. <https://doi.org/10.47705/kjdmr.215204>.
- **Regeai, S. O.**, Fitzpatrick, D. A., Burnell, A. M., & Kakouli-Duarte, T. (2021). Characterization of the complete mitochondrial genome of the insect-parasitic nematode *Heterorhabditis bacteriophora*: an idiosyncratic gene order and the presence of multiple long non-coding regions, *Nematology*, 24(1), 37-54. doi: <https://doi.org/10.1163/15685411-bja10110>
- **Regeai, Sassia O.**, Abuser, Salma A., and Shibani, Naema S. (2021). Low semen quality and adverse histological changes in testes of adult male mice treated with bee venom (*Apis mellifera*). **Open Veterinary Journal**. 11 (1): 70-79.
- **Regeai, Sassia Omar** and Shibani, Naema Saad. (2020). Embryotoxicity and teratogenicity of honey bee venom (*Apis mellifera*) in pregnant female mice during organogenetic period. **Al Academia Journal for Basic and Applied Sciences**. 2 (2): 1- 11.
- Shibani N., and El Jaafari H., El Mabrouk Z., **Regeai S. O.**, and Abuser S. (2017). Reproductive toxicity of pesticide Indoxacarb (Avaunt^R) and the protective role of Selenium in male mice. **Libyan Bulletin for Studies**, 13: 259-276.

- Abuser S., Shibani N., and El Jaafari H., **Regeai S. O.**, and El Mabrouk Z. (2017). Pathological effects of pesticide Indoxacarb (Avaunt^R) on kidney of female mice. *Libyan Bulletin for Studies*, 13: 220-230.
- Al-Griw M., Treesh S., Al-Ghazeer R., **Regeai S.** (2017). Environmentally toxicant exposures induced intragenerational transmission of liver abnormalities in mice. *Open Veterinary Journal*, 7(3): 244-253.
- **Regeai S. O.**, Abuser S., Shibani N., and El Jaafari H. (2016). The Effect of Pesticide Chlorpyrifos (Dursban^R) on Sperm Parameters and Testicular Tissue in Mice. *Libyan Journal of Veterinary and Medical Sciences*, 2(2): 13-18.
- El Jaafari H. and **Regeai S. O.** (2010). Toxic effects of carbon tetrachloride (CCl₄) on kidney and liver tissues of mice. *Journal of Faculty of Education Al-Fatah University*, 5:14-24.
- **Regeai, S.O.**, Dolan, K.M., Fitzpatrick, D.A., Browne, J.A., Jones, J.T. and Burnell A.M. (2009). Novel primers for the amplification of nuclear DNA introns in the entomopathogenic nematode *Heterorhabditis bacteriophora* and their cross-amplification in seven other *Heterorhabditis* species. *Molecular Ecology Resources*, 9: 421-424.
- **Regeai, Sassia O.** and Elansari, O. (2000). Prevalence and abnormal hemoglobins in the western coast of Libya. *Journal of Basic and Applied Science*, 8: 41-47.
- **Regeai, Sassia O.** and Elansari, O. (2000). The incidence of abnormal hemoglobins in Gadames and Sebha. *Journal of Basic and Applied Science*, 8: 78-84.

Conferences:

- **Regeai, S.O.** The 6th International conference on thalassemia and hemoglobinopathies held in Malta (April 5-10/1997). Poster titled: the incidence of hemoglobinopathies in Tripoli, Western and Southern regions of Libya.
- **Regeai, S.O.** The XXVII European Society of Nematologists International Symposium, Rome, Italy, June 2004. Poster titled: Intra strain genetic polymorphisms in the entomopathogenic nematode *Heterorhabditis bacteriophora*.
- **Regeai, S.O.** The EU COST 850 “Biocontrol Symbiosis” Workshops, Salzau, Germany, 1-6 June 2006. Poster titled: Novel mitochondrial gene arrangement among some species of the genus *Heterorhabditis*.

References:

Professor Othman Al Ansari (Ph.D). *Department of Zoology, Faculty of Science, University of Tripoli, Tripoli - Libya.*

Professor Kayria Al Faghi (Ph.D). *Department of Microbiology, Faculty of Medicine, University of Tripoli, Tripoli - Libya.*

Professor Ann Burnell (Ph.D). *Department of Biology, Faculty of Science, National University of Ireland Maynooth (NUI Maynooth), Maynooth - Ireland.*