



Dr. Lamiaa Ahmed Elnady Shaala

Email: lshalla@kau.edu.sa

KFMRC Position: Assistant Professor
Coordinator - Natural Products Unit
NMR Service Unit Supervisor

Specialty: Pharmaceutical Sciences

Degree: B Pharm, Sc, MSc, PhD (Natural Products Chemistry & Pharmacology)

Brief Bio:

Dr. Lamiaa Shaala is an Assistant Professor of Natural Products Chemistry. She received her educational training at Suez Canal University, Egypt where she earned a Bachelor of Pharmaceutical Sciences in 1998. In 2001 she received a scholarship for her Master work at the Suez Canal University, Egypt. In her thesis, she investigated selected Red Sea Sponges to explore the chemical and biomedical potentials of these sponges. In 2005, she received her MSc degree. In the same year she joined the Department of Pharmacognosy at University of Alexandria as PhD scholar, where she performed more detailed studies on Red Sea Verongid sponges and has received her PhD degree in 2008. In 2009 she spent one year in Dr. Youssef's laboratory as postdoctoral fellow. In her stay she participated in several research projects as vice principal investigator. Dr. Shaala joined King Fahd Medical Research Center (KFMRC) in 2011. Currently, she is the coordinator of the Natural Products Unit and supervise the NMR Service Unit at KFMRC. Dr. Shaala has published thirteen papers in reputable international journals. Major research interests of her include marine biotechnology, marine natural products and drug discovery from marine, microbial and plant sources. Current research support at KAU focuses on the discovery of anti-proliferative agents from Red Sea Verongid sponges.

Area(s) of Research:

A major focus is the discovery and identification of new drugs/drug leads for the treatment of human diseases. The current research support at KAU focuses on the exploitation of the Saudi terrestrial plants and marine organisms from the Saudi Red Sea coast as a possible source for drug discovery with special emphasis on marine sponges, tunicates, cyanobacteria, actinomycetes and fungi.

Publications:

1. Youssef DTA, **Shaala LA**, Emara S. Antimycobacterial scalarane-based sesterterpenes from the Red Sea sponge *Hyrtios erecta*. *J. Nat. Prod.* **2005**, *68*, 1782-1784.
2. Abou-Shoer MI, **Shaala LA**, Youssef DTA, Badr JM, Habib AM. Bioactive brominated metabolites from the Red Sea sponge *Suberea mollis*. *J. Nat. Prod.* **2008**, *71*, 1464-1467.
3. Badr JM, **Shaala LA**, Abou-Shoer MI, Tawfik MA, Habib AM. Bioactive brominated Metabolites from the Red Sea Sponge *Pseudoceratina arabica*. *J. Nat. Prod.* **2008**, *71*, 1472-1474.
4. **Shaala LA**, Khalifa SI, Mesbah MK, van Soest RWM, Youssef DTA. Subereaphenol A, a new cytotoxic and antimicrobial dibrominated phenol from the Red Sea sponge *Suberea mollis*. *Nat. Prod. Commun.* **2008**, *3*, 219-222.
5. Jain S, Abraham I, Carvalho P, Kuang Y, **Shaala LA**, Youssef DTA, Avery MA, Chen Z, El Sayed KA. Sipholane triterpenoids: Chemistry, reversal of ABCB1/P-glycoprotein-mediated multidrug resistance, and pharmacophore modeling. *J. Nat. Prod.* **2009**, *72*, 1291-1298.
6. Hassan HM, Khanfar MA, Elnagar AY, Mohammed R, **Shaala LA**, Youssef DT, Hifnawy MS, El Sayed KA. Pachycladins A-E, prostate cancer invasion and migration inhibitory Eunicellin-based diterpenoids from the red sea soft coral *Cladiella pachyclados*. *J. Nat. Prod.* **2010**, *73*, 848-853.

7. **Shaala LA**, Bamane FH, Badr JM, Youssef DTA. Brominated arginine-derived alkaloids from the Red Sea sponge *Suberea mollis*. *J. Nat. Prod.* **2011**, 74, 1517-1520.
8. Hassan HM, Elnagar AY, Khanfar MA, Salam AA, Mohammed R, **Shaala LA**, Youssef DTA, Hifnawy MS, El Sayed KA. Design and semisynthesis analogues and 3D-QSAR study of eunicellin-based diterpenoids as prostate cancer migration and invasion inhibitors. *Eur. J. Med. Chem.* **2011**, 46, 1122-1130.
9. Thornburg CC, Thimmaiah M, **Shaala LA**, Hau AM, Malmo JM, Ishmael JE, Youssef DT, McPhail KL. Cyclic depsipeptides, grassypeptolides D and E and ibuprofen-like epidepsipeptide, from a Red Sea *Leptolyngbya* cyanobacterium. *J. Nat. Prod.* **2011**, 74, 1677-1685.
10. **Shaala LA**, Youssef DTA, Sulaiman M, Behery FA, Foudah AI, El Sayed KA. Subereamolline A as a potent breast cancer migration, invasion and proliferation inhibitor and bioactive dibrominated alkaloids from the Red Sea sponge *Pseudoceratina arabica*. *Marine Drugs* **2012**, 10, 2509-2518.
11. Ibrahim SRM, Mohamed GA, **Shaala LA**, Banuls LMY, Van Goietsenoven G, Robert R, Youssef DTA. New ursane-type triterpenes from the root bark of *Calotropis procera*. *Phytochemistry Lett.* **2012**, 5, 490-495.
12. **Shaala LA**, Youssef DTA, Sulaiman M, Behery FA, Foudah AI, El Sayed KA. Subereamolline A as a Potent Breast Cancer Migration, Invasion and Proliferation Inhibitor and Bioactive Dibrominated Alkaloids from the Red Sea Sponge *Pseudoceratina arabica*. *Marine Drugs*. 2012 10, 2492-2508.
13. Badr JM, **Shaala LA**, Youssef DTA. Loranthin; A new polyhydroxylated flavanocoumarin from *Plicosepalus acacia* with significant free radical scavenging and antimicrobial activity. *Phytochemistry Lett.* **2012**. In Press.
14. **Shaala LA**, Youssef DTA, McPhail KL, Elbandy M. Malynamide 4, a new lipopeptide from the Red Sea marine Cyanobacterium *Moorea producens* (formerly *Lyngbya majuscula*). *Phytochemistry Lett.* **2012**, Submitted.