Research Relevance and Potential Impact

In this thesis, Dr. Al-Zadjali conducted a research project to characterize the effects of lead exposure on a diabetic rat model. The three studies presented in this thesis provide new insights and contribute to a better understanding regarding the short-term toxicity of lead exposure and thyroid function in health and diabetes. Furthermore, a new experimental thyroid model based on the use of hormones has been reported. The significance of the research has far-reaching clinical implications. The findings will contribute significantly to the understanding of the health effects of lead among diabetic populations. The United States Native American population, for example, has a high prevalence of diabetes and also lead exposure so this research has global relevance.

Relevant Publications

- Lead exposure causes thyroid abnormalities in diabetic rats. Zadjali SA, Nemmar A, Fahim MA, Azimullah S, Subramanian D, Yasin J, Amir N, Hasan MY, Adem A. Int J Clin Exp Med. 2015 May 15;8(5):7160-7.

- Short-term effects of lead exposure on the thyroids and systemic toxicity in rats. Zadjali SA, Nemmar A, Fahim MA, Azimullah S, Subramanian D, Yasin J, Amir N, Hasan MY, Adem A Submitted.

Career Aspirations

N/A