

College of Veterinary Medicine

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Professor

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EDUCATION/TRAINING

Institution and Location	Degree	Graduation Year	Major
Baghdad University, Iraq	DVM	1987	Veterinary Medicine
Kansas State University	MS	1993	Equine Medicine and Surgery
Purdue University	Training	1995	Equine Medicine and Surgery
University of Illinois at Urbana Champaign	Training	1997	Equine Medicine and Surgery
Washington State University	PhD	2000	Neuroscience

TEACHING

- Equine Anatomy
- Gastrointestinal Physiology

RESEARCH INTERESTS

Control of Food Intake

His research focuses on localizing the peripheral site(s) of action for gastrin releasing peptide (GRP) and cholecystokinin (CCK), which evoke reduction of meal size and prolongation of the intermeal interval, by delivering the peptides into specific regions in the gastrointestinal tract through (1) utilizing a microsurgical, intra-arterial catheterization technique, (2) analyzing the min-to-min behaviors that lead to feeding to determine meal sizes, intermeal interval and satiety ratio, (3) using a BioDAQ feeding system to record and analyze the feeding behavior of the rats in a freely-fed, undisturbed environment. In addition, we use immunohistochemical detection of neuronal markers and various surgical techniques e.g. vagotomy, sympathectomy and myotomy / myectomy to determine the possible neuronal pathways by which these peptide reduce meal size and prolong the intermeal interval. The work is funded by the NIH and various pharmaceutical companies.

RECENT PUBLICATIONS

- Washington MC, Mhalhal TR, and **Sayegh AI**. The BB2 receptor antagonist BW2258U89 attenuates the feeding responses evoked by exogenous gastrin releasing peptide-29. *Hormones and behavior* 85: 1-4, 2016.
- Washington MC, Mhalhal TR, and **Sayegh AI**. Cholecystokinin-33, but not cholecystokinin-8 shows gastrointestinal site specificity in regulating feeding behaviors in male rats. *Hormones and behavior* 85: 36-42, 2016.
- Washington MC, Williams K, and **Sayegh AI**. The feeding responses evoked by endogenous cholecystokinin are regulated by different gastrointestinal sites. *Hormones and behavior* 78: 79-85, 2016.
- Williams KE, Washington MC, Johnson-Rouse T, Johnson RE, Freeman C, Reed C, Heath J, and **Sayegh AI**. Exogenous glucagon-like peptide-1 acts in sites supplied by the cranial mesenteric artery to reduce meal size and prolong the intermeal interval in rats. *Appetite* 96: 254-259, 2016.

SERVICE ACTIVITIES

Professor