Author's response to reviews

Title: An Overlooked Connection: Serotonergic Mediation of Estrogen-Related Physiology and Pathology

Authors:

Leszek A Rybaczyk (rybaczyk.1@osu.edu)
Meredith J Bashaw (mbashaw@alumni.duke.edu)
Dorothy R Pathak (pathak@msu.edu)
Scott M Moody (moody@ohio.edu)
Roger M Gilders (gilders@ohio.edu)
Donald L Holzschu (holzschu@ohio.edu)

Version: 2 Date: 21 October 2005

Author's response to reviews: see over
20 October 2005

Editor, BMC Women’s Health
RE: MS # 1696392487431583

To the Editor:

Enclosed is a revised version of the above referenced manuscript: An Overlooked Connection: Serotonergic Mediation of Estrogen-Related Physiology and Pathology. We have made the following changes to our manuscript:

- We acknowledge that our manuscript presents a hypothesis that has not yet been directly tested. We plan to continue research in this area and hope to be able to publish more explicit tests in the future. To make the nature of our manuscript clearer, we have added an explicit acknowledgement that we are presenting a hypothesis in the statement of the central thesis of the paper, line 118.
- We have included additional data from ER and SERT knockout mice in the central nervous system (lines 180-1), the skeletal system (200-6), the vascular system (241-6), and the immune system (lines 283-5). Unfortunately, no relevant data are available on 5HT$_{1A}$ or 2A receptor knockouts, so we have been unable to add that information. We hope to work with 5HT$_{2A}$ receptor null mice as part of our continued study of this topic.
- Although we acknowledged that the intent of our paper was not to discuss systems in which serotonergic mediation could not be used to explain estrogen effects, we have added a brief list of sample systems in which we suspect estrogen and serotonin work independently (lines 113-7).
- We agree that our proposed mediation does not adequately explain bone loss in women prior to menopause (or in men in their 30s). We have changed the end of the paragraph on osteoporosis to precisely indicate the effects we feel serotonergic mediation can explain and to acknowledge our inability to account for the data on early bone loss (lines 199-208).

We appreciate the prompt, thorough, and professional review of the manuscript and feel that we have modified the text in accordance with the reviewer suggestions, which has greatly strengthened our argument. We hope the paper will now be acceptable for publication. Thank you very much for your consideration. We look forward to hearing from you!

Sincerely,

Leszek A. Rybaczyk