

# BAYLOR

## UNIVERSITY

August 28, 2010

Tenure and Promotion Committee  
Abilene Christian University  
Abilene, Texas 79699

Dear Tenure and Promotion Committee:

I have examined Dr. John E. Ehrke's vitae in regard to Abilene Christian University's consideration of him for tenure. Let me state at the outset that I was Dr. Ehrke's advisor through his doctoral studies, and in addition, I served for many years on the Visiting Committee for the ACU Department of Mathematics.

I am familiar with several publications listed on his vita, and I will first provide some details about a few of his publications. First, the paper, "Positive solutions of a left focal ...", *Communications on Applied Nonlinear Analysis* **14** (2007), 57-65, provides criteria in terms of growth conditions on nonlinearities for which positive solutions exist for certain nonlinear boundary value problems. Dr. Ehrke's main tools entail interesting applications of fixed point theorems related to the Guo-Krasnosel'skii and Leggett-Williams fixed point theorems. In the paper, "Boundary data smoothness ...", *Journal of Mathematical Analysis and Applications* **333** (2007), 191-203, Dr. Ehrke establishes that solutions of nonlocal boundary value problems have the same order of smoothness with respect to boundary data as the order of smoothness in the nonlinearities involved. It is a quite nice paper involving variational methods in conjunction with linear algebra properties. The paper, "Positive solutions of a second order...", *Electronic Journal of Qualitative Theory of Differential Equations* **55** (2009), 1-8, is a substantial work that goes beyond some of Dr. Ehrke's dissertation work. His use of functional compression-expansion methods is somewhat pioneering. I also feel compelled to add that his article in the *MAA Focus* is impressive (it is extremely difficult to get an article accepted for publication in *Focus*), and his publication in the *Electronic Proceedings...Technology in College Mathematics* indicates that his work in that area is recognized by a very large audience.

It is key to note that many other researchers in the area of boundary value problems know Dr. Ehrke's work well, and that he is publishing in good journals. I have published with him and can attest to his ability to work well with others.

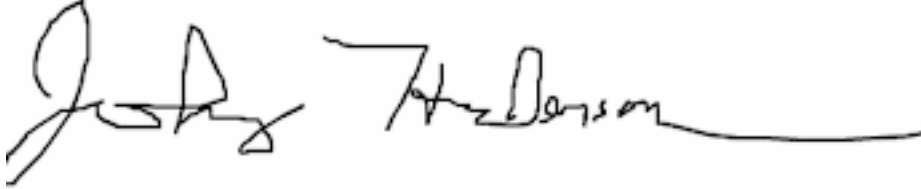
In my opinion, Dr. Ehrke's vitae reflects balance and depth in contributions to each of teaching, research and service. I am sure that his teaching and service contributions to ACU will be addressed by his colleagues at ACU, and so let me embellish this statement concerning his service to the mathematical community in a subsequent paragraph.

Dr. Ehrke has established a record of referee service. He has already been called upon by 2 different journals to referee papers. While, he is somewhat new to the research community, this

is recognition that he has a strong place in the research community. Finally, he is active in conference participation and he has received invitations to speak during major conferences.

In my opinion, Dr. Ehrke is maintaining a track whose direction will result in tenure. Dr. Ehrke is precisely the type of colleague that departments, such as the Department of Mathematics at Abilene Christian University, should endeavor to tenure.

Sincerely,

A handwritten signature in black ink, reading "Johnny Henderson". The signature is written in a cursive style with a long horizontal flourish extending to the right.

Johnny Henderson  
Distinguished Professor of Mathematics

