

INTERCOUNTRY LECTURESHIP QUESTIONNAIRE 2008

NAME: Dr. Lee Waite, PE, PhD

GRANT PERIOD: 7/15/2008 – 5/15/2009

EMAIL ADDRESS: lee.waite@rose-hulman.edu

BORN: Missouri, USA

PRESENT POSITION US: Professor and Head,
Applied Biology & Biomedical Engineering,
Rose-Hulman Institute of Technology, Terre Haute, Indiana

LANGUAGES: English, German

GERMAN HOST INSTITUTION

Ruprecht-Karls University of Heidelberg

Website in German - <http://www.uni-heidelberg.de/>

Website in English - http://www.uni-heidelberg.de/index_e.html

ACADEMIC DISCIPLINE

biomedical engineering

AREAS OF RESEARCH

Biomedical fluid mechanics – modeling of blood flow through the mitral valve. Surgeons would like to have a non-invasive tool to help better understand the physiology and pathology of the mitral valve. A validated computer model of the pressures, flow velocities and flows through the valve will be a very valuable instrument in the hand of the surgeon.

POSSIBLE LECTURE TOPICS

biomedical fluid mechanics, prosthetic heart valves, respiration at high altitude, climbing Kilimanjaro, Atsina Charity Medical Clinic in Accra, Ghana

ACADEMIC TRAINING AND DEGREES

Iowa State University	Biomedical Engineering	1987	PhD
Iowa State University	Biomedical Engineering	1985	MS
Iowa State University	Mechanical Engineering	1980	BS

PUBLICATIONS (selected)

Waite, L. and Fine, J., *Applied Biofluid Mechanics*. (2007) McGraw-Hill.

Waite, L., and Waite, G. (Co-Eds.), *Applied Cell and Molecular Biology for Engineers*. (2007) McGraw-Hill.

Waite, L. (2006) "Biomedical fluid mechanics education in US biomedical engineering program." Poster presentation at the annual meeting of the Biomedical Engineering Society, Chicago, IL, October 11-14, 2006.

Waite, L. *Biofluid Mechanics in Cardiovascular Systems*. First edition. McGraw-Hill, December 2005.

Szabo, G., Soans, D., Graf, A., Beller, C., Waite, L., Hagl, S., A new computer model of mitral valve hemodynamics during ventricular filling, 2004, *European Journal of Cardiothoracic Surgery*, Surgery 26 (2004) 239–247.
