

May 17, 2007

PROMOTION RECOMMENDATION
UNIVERSITY OF MICHIGAN MEDICAL SCHOOL
DEPARTMENT OF PEDIATRICS AND COMMUNICABLE DISEASES

Gail M. Annich, M.D., Assistant Professor of Pediatrics and Communicable Diseases, Department of Pediatrics and Communicable Diseases, Medical School, is recommended for promotion to Associate Professor of Pediatrics and Communicable Diseases, with tenure, Department of Pediatrics and Communicable Diseases, Medical School.

Academic Degrees:

M.S.	1997	University of Michigan School of Public Health
M.D.	1988	University of Alberta
B.M.S.	1986	University of Alberta

Professional Record:

2000-Present	Assistant Professor of Pediatrics and Communicable Diseases, University of Michigan
1997-2000	Lecturer, Department of Pediatrics and Communicable Diseases and Department of Surgery, University of Michigan

Summary of Evaluation:

Teaching: Dr. Annich has consistently received outstanding evaluations throughout her tenure as Assistant Professor from the medical students, residents, and Critical Care fellows whom she has taught. She has been among the "Top Teachers" within the Department of Pediatrics and Communicable Diseases. She has a passionate commitment towards assuring the PCCM (Pediatric Critical Care Medicine) training program and resident experience remains an outstanding environment for learning to readily identify the critically ill child and also attracting future pediatric intensivists. She has been frequently cited by housestaff for her commitment to teaching when on clinical service and has always been readily accessible to them. Because of this, she was the clear choice to serve as education liaison for her Division to the Pediatric Residency Program. Under her guidance, numerous changes to the monthly rotation in the PICU (Pediatric Intensive Care Unit) have been implemented with near uniformly positive evaluations. This rotation has rapidly become a well-scored and popular experience for housestaff and has resulted in attracting an increasing number of internal applicants to the PCCM Fellowship Training Program including the first UM resident to enter the fellowship in over fifteen years. Dr. Annich is extending this educational role further in being identified as the new leader for Mock Code education within the institution and aims to help utilize the simulation center as a powerful educational resource more broadly in light of anticipated leadership transition of this center.

Research: Dr. Annich has established a strong foundation of basic and translational research in Extracorporeal Support as it pertains to Pediatric Critical Care. Through her mentoring under

Dr. Bartlett, she has established a line of investigation whose primary interest relates to blood surface interactions and the development of non-thrombogenic surfaces for use in the clinical setting. This academic endeavor has resulted in some level of NIH funding as a co-investigator for the past seven years. Her research has resulted in important extra-departmental collaborations in the Department of Chemistry as well as with the Michigan Critical Care Consultants, where the identification of novel compounds capable of releasing nitric oxide to inhibit platelet aggregation has opened up new avenues for anti-coagulation approaches in ECMO. While she has steadily published her work during her most recent tenure, it has not been at the pace she has wished. Much of this can be traced to the challenges inherent to the Divisional staffing and clinical responsibilities prior to the recent change in Divisional leadership. At times when a significant percentage of her time was to be committed to research, Dr. Annich remained responsible for one-fourth of the PICU coverage—a daunting task for remaining productive in the laboratory. Since having had her clinical responsibilities reduced substantially over the past 15 months, she has responded with a burst of academic productivity more reflective of her capacity to publish her work. Since October 2005 she has three new senior-author publications. Additionally, she has four manuscripts either in press or accepted for publication. In further support of her achievement and expertise in this specific arena, she is currently the Director of the Thrombogenicity Laboratory within the Extracorporeal Lifesupport Laboratory. That Dr. Annich is recognized nationally, and even internationally, as a clinician investigator in pediatric ECMO is reflected by her numerous speaking invitations including engagements at the University of Guatemala Medical School in Guatemala City, the Interdisciplinary Winter School Progress in Anaesthesia and Intensive Care in Newborns at the Children's Memorial Health Institute in Warsaw, Poland and the recent Annual SEECMO Conference held in Ann Arbor. Further evidence of her reputation in this field is her invitation to be a Program Reviewer for Critical Care Expertise at the Primary Childrens Hospital, Salt Lake City, Utah.

Recent and Significant Publications:

Fleming GM, Remenapp RT, Bartlett RH, Annich GM: Hyperkalemia of the blood primed ECLS circuit does not result in post initiation hyperkalemia in infants <10 kg. *Perfusion* 21:173-177, 2006.

Skrzypchak AM, Miskulin J, Bartlett RH, Annich GM: The Development of a Small Animal Model of Extracorporeal Circulation. *ASAIO* 52(3):296-302, 2006.

Bhatt-Mehta V, Annich GM: Sedative Clearance During Extracorporeal Membrane Oxygenation. *Perfusion* 20(6):309-315, 2005.

Kolovos NS, Schuerer DJ, Moler FW, Bratton SL, Swaniker F, Bartlett RH, Custer JR, Annich GM: Extracorporeal Life Support for Pulmonary Hemorrhage in Children: A Case Series. *Crit Care Med* 30:577-580, 2002.

Annich GM, Meinhardt JP, Mowery KA, Ashton BA, Merz SI, Hirschl RB, Meyerhoff ME, and Bartlett RH: Reduced platelet activation and thrombosis in extracorporeal circuits coated with nitric oxide release polymers. *Crit Care Med* 28:915-920, 2000.

Service: Dr. Annich's clinical responsibility is as staff attending in the PICU. Her particular areas of expertise include: bronchoscopic assessment of patients with respiratory failure, medically-effective use of appropriate sedatives and paralytic agents, and use of extracorporeal support including ECMO, Continuous Renal Replacement Therapies (CRRT), and plasmapheresis. That her advice and assistance in these specific areas of clinical expertise are often sought out by her own colleagues within the Division emphasizes her value as a clinician to the PICU and C.S Mott Hospital broadly. She is an active member in a number of professional organizations including: American Academy of Pediatrics, Society of Critical Care Medicine, American Society of Artificial Internal Organs, and the American Thoracic Society.

External Review:

Reviewer A: "Dr. Annich is an eminent physician-scientist working in the field of pediatric intensive medicine. She has made landmark contributions to research on extracorporeal membrane oxygenation (EMCO)...This on-going research is likely to generate novel groundbreaking medical devices used in extracorporeal life support systems...she certainly ranks within the top 2% researchers working in this field."

Reviewer B: "...she has been an integral part of the extracorporeal life-support laboratory at Michigan during a period of growth in grants, productivity and national influence...Gail's leadership skills extend from the classroom to the community...She collaborates and cross fertilizes many disciplines including bioengineering, academic medicine and private industry."

Reviewer C: "Dr. Annich's scholarship has impacted upon her field and has resulted in several important advances that I believe will ultimately be of translational importance...She is a very good to excellent scholar and among her peers in paediatric critical care medicine is highly regarded indeed."

Reviewer D: "On a national level, Gail is known throughout the critical care community for her work in extracorporeal life support and thrombosis. She is called upon to help the rest of us make sense of the complicated world of blood clotting and anticoagulation...She will continue to be an asset for your institution and a valued member of our critical care world. I can recommend her without reservation for promotion and am convinced that she would receive such a promotion were we lucky enough to have her at my institution."

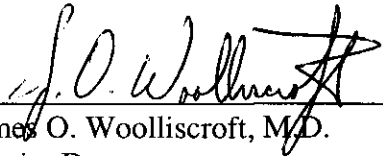
Reviewer E: "Dr. Annich exemplifies the sagacious academic physician, with professional activities that span research, teaching, patient care and university service...As a pediatric ECLS physician, Dr. Annich is recognized in the international ECLS community as being an expert in extracorporeal life support, and without a doubt is considered one of the leaders in the field...She is nationally recognized, and her contributions have influenced practice in pediatric critical care."

Reviewer F: "...I would describe Dr. Annich as above average in academic productivity as compared with her North American peers...In addition, Dr. Annich appears to have

maintained a very active role in the teaching and mentoring activities within the Dept. of Pediatrics.”

Summary of Recommendation:

Dr. Annich’s highly regarded expertise in the field of Extracorporeal Life Support as well as her dedication to all areas of academic medicine make her an ideal candidate for promotion to the rank of Associate Professor, with tenure, at the University of Michigan Medical School. I am pleased to recommend her for this promotion and tenure.

A handwritten signature in black ink, appearing to read "J. O. Woolliscroft", written over a horizontal line.

James O. Woolliscroft, M.D.
Interim Dean
Lyle C. Roll Professor of Medicine

May 2007