PROMOTION RECOMMENDATION THE UNIVERSITY OF MICHIGAN MEDICAL SCHOOL

DEPARTMENT OF CARDIAC SURGERY DEPARTMENT OF PEDIATRICS AND COMMUNICABLE DISEASES

Jennifer C. Hirsch-Romano, M.D., assistant professor of cardiac surgery, Department of Cardiac Surgery, and assistant professor of pediatrics and communicable diseases, Department of Pediatrics and Communicable Diseases, Medical School, is recommended for promotion to associate professor of cardiac surgery, with tenure, Department of Cardiac Surgery, and associate professor of pediatrics and communicable diseases, without tenure, Department of Pediatrics and Communicable Diseases, Medical School.

Academic Degrees:

M.S.	2007	University of Michigan
M.D.	1996	Harvard Medical School
B.S.	1991	University of Michigan

Professional Record:

2009-present 2009-present	Assistant Professor of Cardiac Surgery, University of Michigan Assistant Professor of Pediatrics and Communicable Diseases,	
4	University of Michigan	
2005 - 2009	Clinical Lecturer, Section of Cardiac Surgery, Department of	
	Surgery, University of Michigan	

Summary of Evaluation:

<u>Teaching</u>: Dr. Hirsch-Romano's teaching efforts are excellent. In addition to teaching in the operating room and on patient rounds with the residents and fellows, Dr. Hirsch-Romano has been actively involved in the teaching of high school, undergraduate, and medical students. For the last seven years she has served as faculty mentor for the Undergraduate Research Opportunity Program (UROP) and Summer Biomedical Research Program (SBRP) and several other campus organizations. She lectures regularly in the Thoracic Residency Didactic and Pediatric Cardiothoracic Intensive Care Unit lecture series as well as the Pediatric Cardiology teaching conferences. Her resident teaching evaluations are superior, averaging 8.75 [on a nine-point scale] for the last five years. Dr. Hirsch-Romano has been an invited lecturer at major society meetings both nationally and internationally. These invitations are reflective of the national stature Dr. Hirsch-Romano has achieved in the field of congenital heart disease.

Research: Dr. Hirsch-Romano's academic productivity has resulted in 54 peer-reviewed publications, eight book chapters, and eight abstracts since her appointment as assistant professor. These articles cover a wide range of topics within the field of congenital heart

disease, including surgical techniques, surgical intensive care, measuring and improving outcomes, extracorporeal life support, and the use of clinical registries.

Recent and Significant Publications:

Hirsch JC, Charpie JR, Ohye RG, Gurney JG: Near Infrared Spectroscopy (NIRS) should not be the standard of care for postoperative management. *Semin Thorac Cardiovasc Surg Pediatr Card Surg Annu* 13:51-54, 2010.

Gaies MG, Gurney JG, Yen AH, Napoli M, Gajarski RJ, Ohye RG, Charpie JR, Hirsch JC: Vasoactive-inotropic score as a predictor of morbidity and mortality in infants after cardiopulmonary bypass. *PCCM* 11:234-238, 2010.

Hirsch JC, Copeland G, Donohue JE, Kirby RS, Grigorescu V, Gurney JG. Population Based Analysis of Survival for Hypoplastic Left Heart Syndrome. *J Pediatr* 159:57-63, 2011.

Hirsch JC, Jacobs ML, Andropoulos D, Austin EH, Jacobs JP, Licht DJ, Pigula F, Tweddell JS, Gaynor JW: Protecting the infant brain during cardiac surgery: a systematic review. *Ann Thorac Surg* 94:1365-1373, 2012.

Friedland-Little JM, Aiyagari R, Yu S, Donohoe JE, Hirsch-Romano JC: Survival through palliation: fate of infants supported by extracorporeal membrane oxygenation after the Norwood operation. *Ann Thorac Surg* 97:659-665, 2014.

Service: Internally, Dr. Hirsch-Romano serves on the Leadership, Joint Practice, and the Collaborative Research Committees for the Pediatric Cardiothoracic Unit. She is surgical director of the Pediatric Cardiothoracic Intensive Care Unit and co-director of the Pediatric Cardiac Extracorporeal Life Support program. Externally, Dr. Hirsch-Romano serves on six committees of the Society of Thoracic Surgeons and committees of the Pediatric Heart Network and the Congenital Heart Surgeons Society. In addition, Dr. Hirsch-Romano has been honored at an early stage of her career in her appointment as an associate editor for the *Annals of Thoracic Surgery* and the *World Journal for Pediatric & Congenital Heart Surgery*. Dr. Hirsch-Romano is also an ad hoc reviewer for seven professional journals. Dr. Hirsch-Romano has an active clinical practice, attracting patients from throughout the State of Michigan, across the continental United States, and abroad. Her surgical outcomes on even the most difficult cases have been excellent.

External Reviewers:

Reviewer A: "Dr. Hirsch-Romano is a known entity in the field of pediatric cardiac surgery...Her main research focus recently has been on quality and outcomes research in pediatric cardiac surgery, and she is certainly considered an expert in the field....I would rank her in the top 10% of all pediatric cardiac surgeons in the U.S. and Canada."

Reviewer B: "Jennifer has made a number of important advances to our field which includes the use of near-infrared spectroscopy to monitor cerebra perfusion during and following pediatric

cardiac surgery. She correlated the outcomes of complex congenital surgery with the institutional volumes of congenital heart surgery. She has developed a vasoactive/inotropic score for infants undergoing complex congenital cardiac repairs. She is an expert in the surgical and postoperative management of infants born with hypoplastic left heart syndrome."

Reviewer C: "Without doubt, Dr. Romano is a rising star in pediatric/congenital heart surgery. She is highly respected by our peers as a thoughtful investigator and has made important contributions to the body of knowledge of our ongoing understanding of neuro-development risk in children with congenital heart disease...I also know Dr. Romano to be a mentor and role model for aspiring cardiac surgeons. She has been very influential in the academic lives of a number of young women pursuing a career in cardiac surgery. Our specialty owes Dr. Romano a debt of gratitude for her positive and exemplary career trajectory."

Reviewer D: "Dr. Hirsch-Romano is nationally and internationally known as an outstanding pediatric technical surgeon and scientist. Through the years, she has made significant contributions that have influenced the surgical management of patients with complex congenital heart disease."

Reviewer E: "Dr. Romano occupies a unique niche in the field of cardiothoracic surgery. She is one of the few nationally and internationally recognized women in the field of cardiothoracic surgery. She has contributed significantly to the training of medical students and residents at the University of Michigan..."

Reviewer F: "She is exceptional and is rapidly evolving as a leader in our field."

Summary of Recommendation:

Dr. Hirsch-Romano has clearly established herself as a national expert in the field of surgical treatment of congenital heart disease. Her academic, clinical, and research activities are outstanding. Her accomplishments in research and teaching are highly regarded by her peers here and nationally. It is my pleasure to recommend Jennifer Hirsch-Romano, M.D. for promotion to associate professor of cardiac surgery, with tenure, Department of Cardiac Surgery, and associate professor of pediatrics and communicable diseases, without tenure, Department of Pediatrics and Communicable Diseases, Medical School.

James O. Woolliscroft, M.D.

Dean

Lyle C. Roll Professor of Medicine