PROMOTION RECOMMENDATION UNIVERSITY OF MICHIGAN MEDICAL SCHOOL

DEPARTMENT OF PEDIATRICS AND COMMUNICABLE DISEASES

<u>David E. Sandberg, Ph.D.</u>, associate professor of pediatrics and communicable diseases, with tenure, Department of Pediatrics and Communicable Diseases, Medical School, is recommended for promotion to professor of pediatrics and communicable diseases, with tenure, Department of Pediatrics and Communicable Diseases, Medical School.

Academic Degrees:

Ph.D.	1982	Concordia University, Montreal, Canada
M.A.	1977	Bar-Ilan University, Israel
B.A.	1975	Bar-Ilan University, Israel

Professional Record:

2006-present	Associate Professor of Pediatrics and Communicable
	Diseases, University of Michigan
2000-2006	Adjunct Associate Professor of Psychology, University at
	Buffalo, The State University of New York
1997-2006	Associate Professor of Psychiatry and Pediatrics,
	University at Buffalo, The State University of New York
1993-1997	Assistant Professor of Psychiatry and Pediatrics, University
	at Buffalo, The State University of New York
1990-1993	Clinical Assistant Professor of Psychiatry and Pediatrics,
	State University of New York at Buffalo
1988-1990	Assistant Professor of Psychology in Psychiatry and
	Pediatrics, Cornell University Medical College

Summary of Evaluation:

<u>Teaching</u>: Dr. Sandberg's core teaching activities involve regular lectures on psychoendocrine topics to pediatric residents and medical students participating in the developmental-behavioral pediatrics rotation offered through the Division of Child Behavioral Health. His lectures highlight psychosocial aspects of a variety of endocrine disorders and their management as well as identifying assumptions and stereotypes that drive healthcare practices in the absence of (or at variance with) empirical evidence. With funding from the OVPR Initiative on Rare Diseases, he organized a symposium at the University of Michigan (*Disorders of Sex Development: Research Framework for the Study and Enhancement of Health-Related Quality of Life Outcomes*) which brought together a wide range of stakeholders from the U.S. and Canada, including the director of the Office for Rare Diseases Research at the National Institutes of Health. The symposium was conceived to formulate a vision for research on caring for persons with DSD and their

families that would guide recommendations for an interdisciplinary research and collaborative learning agenda. Dr. Sandberg is frequently invited to deliver grand rounds and serve as visiting professor at U.S. and international medical centers. Dr. Sandberg currently serves as primary mentor and on the mentoring teams of several junior faculty in Pediatrics and Communicable Diseases. He contributes expertise in the behavioral sciences, research design and methodology, and assessment of psychosocial and quality of life outcomes in pediatric populations with chronic illness and their families. His teaching will expand to include the development of psychoeducational curricula for healthcare providers caring for children and adolescents with disorders of sex development and their families.

Research: Dr. Sandberg's research activities are closely linked to his clinical service to children with a variety of endocrine-based disorders. Research activities include the study of psychosocial aspects of growth failure and short stature and the psychosocial care of individuals born with disorders of sex development (DSD i.e., congenital conditions with atypical development of chromosomal, gonadal, or anatomic sex) and families. He recently served as coinvestigator of an (NICHD-sponsored) interdisciplinary research network concerned with biological and socialization factors in sexual differentiation (R21HD044398); is developing a psychoeducational treatment manual for clinicians caring for newborns with congenital adrenal hyperplasia identified by newborn screen (under subcontract to the National Newborn Screening and Genetics Resource Center); is involved in the creation of a decision aid for parents considering genital surgery for newborns with DSD (pilot grant funded by MICHR); and one year into his tenure at the University of Michigan, Dr. Sandberg was awarded as PI on a grant to design health-related quality of life (HRQoL) measures that focus on issues specific to, and shared by young patients with DSD and their families, which are not otherwise covered by generic HRQoL measures. Dr. Sandberg was also recently invited to serve as a consultant on a Doris Duke Distinguished Clinical Scientist Award. Although his pace of publication has been affected by his relocation to the University of Michigan, since his arrival in 2006, Dr. Sandberg has co-authored six papers in peer-reviewed journals, 27 editorial commentaries, two invited articles/commentaries, four book chapters, 12 (published and unpublished) conference abstracts, and two book reviews in peer-reviewed journals. Going forward, a major emphasis of Dr. Sandberg's research will involve creating a multi-site infrastructure necessary to perform hypothesis-based research on the mechanisms of sex development and evidence-based care for patients and families affected by DSD. In collaboration with colleagues in genetics, urology, endocrinology, and health systems management, he is seeking funding to develop a registrybased network to support research on DSD. The data to be included in the registry will include genetic (sequence, copy number variants), phenotypic (anatomy and function) and reproductive health (i.e., endocrine and fertility data) information, as well as medical and behavioral healthcare services and outcomes data (hospital systems and medical record data, diagnostic labs, patient and parent self-reports, etc.). The network will standardize diagnosis and treatment decision-making and develop tools necessary to translate diagnostic and treatment protocols into clinical practice.

Recent and Significant Publications:

Brütt, AL, Sandberg DE, Chaplin J, Wollmann H, Noeker M, Kołtowska-Häggström M, Bullinger, M: Assessment of health-related quality of life and patient satisfaction in children and adolescents with growth hormone deficiency or idiopathic short stature—Part 1: A critical evaluation of available tools. *Hormone Research* 72:65–73, 2009.

Cohen P, Rogol AD, Deal CL, Saenger P, Reiter EO, Ross JL, Chernausek SD, Savage MO, Wit JM on behalf of the 2007 ISS Consensus Workshop participants (incl. <u>Sandberg DE</u>): Consensus statement on the diagnosis and treatment of children with idiopathic short stature: A summary of the Growth Hormone Research Society, the Lawson Wilkins Pediatric Endocrine Society and the European Society for Paediatric Endocrinology & Metabolism 93:4210-4217, 2008.

Lee PA, Houk CP, Ahmed F, Hughes IA in collaboration with the participants in the International Consensus Conference on Intersex (incl. Sandberg DE) organized by the Lawson Wilkins Pediatric Endocrine Society and the European Society for Paediatric Endocrinology. *Pediatrics* 118:e488-e500, 2006 (and print version summary *Pediatrics* 118: 753-757, 2006. Also published in *Archives of Diseases in Childhood, Journal of Pædiatric Urology and Clinical Pædiatric Endocrinology*.

Sandberg DE, Bukowski WM, Fung CM*, Noll RB: Height and social adjustment: Are extremes a cause for concern and action? *Pediatrics* 114:744–750, 2004.

Sandberg DE, Vena JE, Weiner J, Beehler GP, Swanson M, Meyer-Bahlburg HFL: Hormonally active agents in the environment and children's behavior: assessing effects on children's gender-dimorphic outcomes. *Epidemiology* 14:148-155, 2003.

Service: Dr. Sandberg has served as director of the Division of Child Behavioral Health (CBH) since his recruitment in 2006. Under his leadership, five faculty have been recruited to expand the division's clinical and research portfolio. He has been actively involved in the development of new clinical programs (Pediatric Comprehensive Weight Management Center and interdisciplinary services for patients with DSD and their families) and serves as co-chair on a committee charged with identifying current and future needs for psychosocial/behavioral health services at C.S. Mott Children's Hospital. In 2009, CBH was accredited through the ACGME for a new fellowship in developmental pediatrics. Dr. Sandberg serves on the editorial board of the Journal of Pediatric Psychology and is a member of committees of the Lawson Wilkins Pediatric Endocrine Society (LWPES). He has also served as one of the few behavioral experts invited by the LWPES to contribute to consensus statements in the areas of management of disorders of sex development and growth hormone therapy for idiopathic short stature. Finally, Dr. Sandberg serves on the medical/scientific advisory boards of the CARES Foundation, the Turner Syndrome Society, and Accord Alliance and regularly participates in educational events at the annual convention of the MAGIC Foundation, a family and patient support organization for persons affected by pediatric endocrine disorders. Dr. Sandberg's clinical service focuses on the psychosocial and educational sequelae of a variety of endocrine disorders (other than diabetes). He is one of very few

psychologists, internationally, who has specialized in this area. Dr. Sandberg's service provides an assessment of the stressors commonly related to variations in physical growth and development as well as an evaluation of the child or adolescent's global psychosocial adaptation (behavioral and emotional). Dr. Sandberg has collaborated with faculty and staff in endocrinology, genetics, urology, surgery, gynecology, and social work to provide integrated interdisciplinary healthcare services (including behavioral health) to patients with DSD. He has recently developed a collaboration with the Newborn Screening Program of the Michigan Department of Community Health to provide training to providers around the State (pediatric endocrinologists, nurses, and clinical social workers) in the psychosocial management of patients with congenital adrenal hyperplasia.

External Review:

Reviewer A: "...both the quantity of his published work as well as the quality of his work suggest that Dr. Sandberg has been a productive scholar and at the same time has addressed important questions related to his research in the area of psychosocial endocrinology. The research has had a significant impact on the field of psychosocial endocrinology."

Reviewer B: "He has made very substantial contributions to the field of psychological issues in pediatric endocrinology, particularly for short stature and intersexuality. He has clearly established himself as one of the leading experts in the country and indeed internationally, regarding the psychosocial and behavioral aspects of short stature and intersexuality."

Reviewer C: "The work Dr. Sandberg has done to develop a truly multi-disciplinary, patient-centered team approach for DSD at the University of Michigan is widely recognized as setting a new standard in the field. It is impossible to overestimate the importance of that advancement in terms of care of families dealing with sex anamolies. I am expecting that the University of Michigan will very soon be recognized...as the place where the standard of care is set."

Reviewer D: "His studies on the psychological health of children with short stature were the first to approach this field in a true scientific way...His studies on the psychological wellbeing of children that are born with ambiguous genitalia has made him one of the world experts in the field, witnessed by the many invitations to join groups that work out guidelines for management of such problems."

Reviewer E: "His research is remarkably original, rigorous and honest and has had a major impact among pediatric endocrinologists and other specialists involved in the care of these patients."

Reviewer F: "He has made seminal contributions in the areas of short stature and disorders of sex development. His work in the area of short stature has been excellent, with a very strong record of empirical work that has examined its effects on psychosocial development and functioning."

Summary of Recommendation:

Dr. Sandberg is a nationally and internationally recognized expert on the management of psychological issues surrounding growth failure and disorders of sexual development. Based upon this recognition and his outstanding research and educational contributions, I am pleased to support his nomination for promotion to professor.

James D. Woolliscroft, M.D.

Dean

Lyle C. Roll Professor of Medicine

May 2010