

Dr. Justin McArthur
Professor of Neurology and
Epidemiology
Interim Director,
Department of Neurology

Neurology
600 N. Wolfe Street / Meyer 6-109
Baltimore, MD 21287-7698
410-955-3630 T
410-955-0672 F
jm@jhmi.edu



February 20, 2007

Edward Miller, M.D.
Dean of the Medical Faculty
The Johns Hopkins University
School of Medicine
Administration 100

Re: **Michael A. Williams, M.D.**

Dear Dr. Miller:

We are writing to propose Dr. Michael Williams for promotion to the rank of Professor. Dr. Williams is currently an Associate Professor in the Department of Neurology with a secondary appointment in the Department of Neurosurgery.

Introduction

Dr. Michael A. Williams has been at the rank of Associate Professor since January, 2005 (see footnoted comments below)¹. He is a Core Faculty member of The Johns Hopkins University Bioethics Institute, an Associate Professor (Secondary Appointment) in The Johns Hopkins School of Nursing, and is Co-Chair of The Johns Hopkins Hospital Ethics Committee. Dr. Williams is proposed now for the rank of Professor of Neurology because of his evident accomplishments in the fields of adult hydrocephalus and other disorders of cerebrospinal fluid (CSF) circulation; and in clinical and organizational ethics, and end-of-life (EOL) care and organ donation.

Scholarship

Dr. Williams' research and his publications in hydrocephalus are novel and have advanced the field. They are representative of the systematic analysis of the specialized clinical care he provides through The Johns Hopkins Adult Hydrocephalus Program that he established in 2001. These include demonstration of the best methods for diagnosing normal pressure hydrocephalus (NPH) and evidence that there is significant recovery with treatment; descriptions of new syndromes; the use of physiologic monitoring to diagnose hydrocephalus and related disorders; and demonstration of the national economic impact of treating or not treating NPH. He co-chaired the first-ever NINDS Workshop on hydrocephalus in 2005, a mark of his recognition within the field. The JHH Adult Hydrocephalus Program is now the largest of its kind in the U.S., and the only one with significant multidisciplinary involvement of different specialists including neurologists, neurosurgeons, neuropsychologists and rehabilitation experts. The program receives referrals from physicians and also directly from patients from across the country. Dr. Williams leads nationally recognized educational programs in hydrocephalus. He is actively involved in patient advocacy with the Hydrocephalus Association and hosted their 2006 meeting in Baltimore. In short, there is no neurologist in the United States, and quite possibly in the world, with accomplishments in hydrocephalus research, clinical care, program building, education, and citizenship compared to those of Michael A. Williams.

In the field of clinical and organizational ethics, Dr. Williams has similar accomplishments in clinical care, program building and education. As Co-Chair of The Johns Hopkins Hospital Ethics Committee since

1999, he has transformed the Committee's reputation, role, scope, membership, and its effect on clinical practice. He has led the development or revision of important Hospital policies. He provides mentorship to committee members regarding ethics consultation, and is frequently contacted by physicians and administrators throughout the Hospital for advice on individual or organizational ethics issues. His national expertise was confirmed when he was appointed as Chair of the American Academy of Neurology Ethics, Law and Humanities Committee (ELHC) in 2003. He reinvigorated its membership, created its mission statement, and enhanced the visibility and effectiveness of ELHC work, policies, and educational offerings for AAN members. He is Associate Editor for Ethics for the journal *Continuum*, and on the editorial board of *Organizational Ethics: Healthcare, Business, and Policy*. He is frequently sought out by health writers and reporters from the national and medical media to comment on ethical issues in neurology. He leads nationally recognized education programs in ethics for neurologists, is frequently invited to participate in educational programs and panels, and has developed innovative methods of education for clinicians using simulated families. He has served on advisory committees for the IOM, U.S. Department of Health and Human Services, and the United Network for Organ Sharing. In summary, Dr. Williams' accomplishments place him among the top 3 or 4 neurologists in the United States in the field of clinical and organizational ethics.

Research Accomplishments

Adult Hydrocephalus

Dr. Williams' expertise in hydrocephalus and ICP began in the Neurosciences Critical Care Unit, where he worked for 13 years. He extended the use of ICU physiologic monitoring techniques to the ambulatory realm of adult hydrocephalus. His work in the last 6-7 years has focused on adult hydrocephalus by applying systematic observation and analysis of clinical presentation, neurological findings, and anatomic and physiologic evaluation to a long-overlooked set of disorders. He has collaborated with specialists in cognitive neurology, neurosurgery, and health services research, and is involved with a group of leading hydrocephalus researchers brought together by the Brainchild Foundation. Dr. Williams' research results challenge longstanding dogma about hydrocephalus. In doing so, he is changing the clinical approach to hydrocephalus nationally and internationally. Based on the observation that the neurological impairment in hydrocephalus, which is often present for months and years, can be reversed in weeks to months, he is raising translational and basic research questions about the injury and recovery mechanisms of the brain in hydrocephalus that, if answered, may give rise to new diagnostic or treatment methods. He has described the variety of presentations of hydrocephalus, differing etiologies, diagnostic techniques, complications of diagnostic and treatment modalities, treatment outcomes (not only the 85%+ rate of symptomatic improvement, but also the substantiation of significant cognitive recovery), and demonstration of the impact on national health care expenditures of treating or not treating NPH. He was the first to describe the 'syndrome of hydrocephalus in young and middle-aged adults' (*SHYMA*), and the first to demonstrate that physiologic monitoring can be used to diagnose idiopathic intracranial hypertension (IIH) without papilledema. He is currently training the first Hydrocephalus Fellow at Johns Hopkins, Robin K. Wilson, MD, PhD, whose first peer-reviewed research was published within 6 months of the start of her fellowship.

His CV lists 93 publications, with 51 being peer reviewed publications. His research funding has included awards from the Health Resources and Services Administration, the Niarchos Faculty Innovation Fund for the Johns Hopkins University Phoebe R. Berman Bioethics Institute, and the Emily Davie and Joseph F. Kornfeld Foundation.

Accomplishments in Program Building

Dr. Williams has a well established record of program building at Johns Hopkins and at the national level. At Johns Hopkins, he has been instrumental in the growth and development of the Adult Hydrocephalus Program and the Ethics Committee and Consultation Service. Nationally, he has successfully expanded the program and portfolio of the Ethics, Law and Humanities Committee of the American Academy of Neurology.

Adult Hydrocephalus Program

With Daniele Rigamonti, MD, of the Department of Neurosurgery, Dr. Williams developed the Adult Hydrocephalus Program, a cross-departmental clinical service that provides comprehensive inpatient and

outpatient diagnostic and therapeutic services for adults with hydrocephalus and other disorders of cerebrospinal fluid circulation, including pseudotumor cerebri. In establishing the Program, Dr. Williams made a mid-career shift from Neurosciences Critical Care, where he was already recognized for his clinical expertise. The Adult Hydrocephalus Program receives joint support from the Johns Hopkins Hospital and his program-building accomplishments include streamlining and guiding inpatient diagnostic evaluation with use of critical paths, and working with the Clinical Outcomes Management of the Hospital to identify errors in medical records coding that, when corrected, resulted in more than 50% increase in hospital revenue per patient. In fact, the revenue per patient for the Adult Hydrocephalus Program is among the highest in the entire institution, with over 285 discharges annually.

The Adult Hydrocephalus Program is the only such program in the United States that carries significant expertise in both Neurology and Neurosurgery. Since its formalization in FY02, the program and its volume have grown, and despite a goal of reducing patient waiting time for outpatient consultation to 30 days, the increased patient referrals have kept this waiting time at 60-90 days. There are now two faculty neurologists, one neurology fellow, and since the recent departure of one faculty member (Dr Paul Wang), one neurosurgeon in the program. The program has consistently met or exceeded its volume targets.

While a clinical service, the Adult Hydrocephalus Program has always been a platform for clinical research, as cited above, and has received funding from industry (Medtronic Corporation).

Ethics Committee and Consultation Service

Since becoming Co-Chair of the Johns Hopkins Ethics Committee in January 1999, Dr. Williams has been responsible for transforming the Committee's reputation, role, scope, membership, and effect on clinical practice. The Ethics Committee had been perceived as ineffective and unresponsive to the Hospital's needs. Dr. Williams and Co-Chair, Cynda Rushton, DNSc, RN, took the Committee through a constructive reorganization process that allowed its members to select the Committee's priorities and focus. As a result, the membership of the Committee enlarged and became more diverse, to include more nurses, social workers, hospital chaplains, house staff, and members of the community. The Committee has developed educational standards and consultation standards with a performance improvement process for its members.

The Ethics Committee is a clinical service. Its members all carry pagers, and are available for clinical consultation around-the-clock every day of the year. Consultations are often called on short notice, and consultations commonly require 3-4 hours to complete. As one of the Co-Chairs, Dr. Williams is called to participate in a substantial proportion of ethics consultations. His advice is frequently sought by physicians and administrators, including the Law Office and the highest levels of Hospital leadership. Membership on the Ethics Committee is voluntary, and its members do not generally receive credit or compensation for their clinical ethics duties, however Drs. Williams and Rushton successfully negotiated salary support from the hospital in light of their substantial effort and accomplishments. This established a precedent that has recently been followed by the Bayview Medical Center.

Under Dr. Williams' and Dr. Rushton's guidance, the Ethics Committee developed and expanded its role in organizational ethics and leadership for Johns Hopkins Hospital, and has particularly influenced the policy development and review process by the Administrative Committee of the Medical Board. Major contributions include the development of the Ethical Framework for the Patient Safety Programs; revision of the Hospital Futility Policy; review of the Hospital policy on pre-employment drug testing; an in-progress revision of the body of policies related to end-of-life care and DNR; contribution to the policy on Organ Donation After Cardiac Death; and ethical issues in hospital policies regarding involuntary discharge or notice of "non-payment", and most recently, a substantial revision of the Hospital Code of Ethics.

Ethics, Law and Humanities Committee of the American Academy of Neurology

While not considered program-building in the traditional sense, Dr. Williams' accomplishments since becoming Chair of the ELHC reflect his vision, organizational expertise, and ability to build programs that identify and address unmet needs. He took the committee through a constructive reorganization process to create its charter and establish priorities. The ELHC is now routinely consulted by other AAN

committees in the process of policy and program development, and Dr. Williams is in regular contact with AAN Senior Counsel in regard to ethical and legal issues that arise in the operations of the AAN. Dr. Williams has represented ethics interests in Task Forces resulting in AAN policies on Stem Cell Research, and AAN Guidelines for External Funding Sources (i.e. industry relationships). He led the revision of AAN guidelines for the physician expert witness (published in 2006), and is currently closely mentoring a junior faculty member (former JHU Greenwall Fellow, Dan Larriviere, now at the University of Virginia) on the ELHC to create a major evidence-based update on guidelines for the care of patients in persistent vegetative state. Seeing a segment of membership beyond the ELHC that was interested in ethics, Dr. Williams spurred the creation of the AAN Section on Ethics, which was established in 2005, and he then established a new "topic" of ethics for abstracts submitted to the Scientific portion of the annual meeting, for which Dr. Williams was the first Topic Chair in 2006. Again, mentoring a junior faculty member (former JHH trainee Tyler Reimschisel, now at St. Louis Children's Hospital), Dr. Williams is leading an effort to create an ethics teaching curriculum by working with the Education Committee and AAN staff. These efforts are expected to result in a published case book that will be a companion to the 3rd edition of James Bernat's internationally recognized text, *Ethical Issues in Neurology*, and that can be used by Neurology Training Program Directors to meet ACGME requirements, or by individual neurologists to meet ABPN Maintenance of Certification requirements.

Accomplishments in Education

Dr. Williams is an accomplished, committed, innovative, and recognized educator. At Johns Hopkins University, he has taught undergraduates, medical students, nursing students and advance practice nursing candidates, residents and fellows in Neurology and Neurosurgery, and fellows at the Bioethics Institute. He has successfully developed and directed CME programs at Johns Hopkins and at the American Academy of Neurology. He is skilled in a variety of teaching methods, including large group lecture, facilitated small group discussion, use of simulations with standardized patients, and clinical bedside teaching. He completed the 2002 offering of "Introduction to Teaching in Medicine: Principles, Practices and Issues" by the Johns Hopkins University School of Medicine and Professional Studies in Business and Education.

With funding from the Health Resources and Services Administration (HRSA), and working with the faculty and staff of the School of Medicine Clinical Education Center and an interdisciplinary team of co-investigators, he developed an innovative method of using simulated families (extending the standardized patient method) to train interdisciplinary groups of physicians, nurses, hospital chaplains, and transplantation coordinators from the Johns Hopkins Neurosciences Critical Care Unit and Pediatric Intensive Care Unit the skills for talking to families of severely brain injured patients about the injuries, brain death, and organ donation. He adapted this method to meet the educational needs of JHU undergraduate students in bioethics, and advance practice nursing candidates in end-of-life decision making and communication. At the request of the Vice-Dean for Education, he participated in the early stages of the development of The Johns Hopkins Simulation Center, now headed by Dr. Elizabeth Hunt.

In resident education, Dr. Williams conducts case conferences with the house staff to review and analyze ethical issues in difficult cases, using the "casuistry" approach. In 2001-2002, he mentored pediatric neurology resident, Tyler Reimschisel, who was selected as a participant in the first year of the AAN Resident Elective in Clinical Ethics. Tyler is a member of the AAN ELHC and is now responsible for directing the same Neurologist-in-Training Clerkship in Ethics. Dr. Williams was recently appointed to the AAN Residency Examination Subcommittee specifically to write the test questions on ethics and professionalism for the Residency In-service Training Examination (RITE) examination.

In medical student education, for many years Dr. Williams taught 3rd and 4th year students the clinical evaluation of unconscious patients, for which he received consistently favorable evaluations. Students still join him in his outpatient clinic, where he teaches about adult hydrocephalus and serves as a role model for physician and patient communication. He has received consistently high marks on student evaluations. From 2002-2004, Dr. Williams was a small group facilitator for 3rd and 4th year medical students in the Physician and Society course directed by Dr. Charles Cummings, and in 2004 was a faculty small group facilitator for 1st and 2nd year students for the new course, *'The Healer's Art'*, directed by Sarah Clever.

In the Johns Hopkins School of Nursing, Dr. Williams has regularly participated in Dr. Cynthia Rushton's course on the Ethics of Health Care, and has helped to teach small groups of advance practice nursing candidates critical communication skills using standardized patient techniques. He has also been an individual mentor for advance practice nursing candidates on clinical rotations in the Neurosciences Critical Care Unit.

He has successfully developed and directed CME programs in hydrocephalus and ethics at Johns Hopkins and the American Academy of Neurology, and helped organize a Maryland Health Care Ethics Committee Network conference on conscientious objection. The courses at the AAN are highly rated, and thus renewed, and Dr. Williams is one of very few faculty permitted to direct two courses at the same meeting. He has also presented a Medscape webcast on hydrocephalus that over two years, according to Medscape officials, significantly exceeded the "hit rate" expected for such a webcast, and which was renewed as a result. He is the Associate Editor for Ethics for *Continuum*, which is the AAN CME program in journal format.

In patient and family education, he is a frequently invited lecturer on hydrocephalus and has developed patient education booklets and "patient pages" for hydrocephalus and end-of-life decision making.

Dr. Williams is often invited to teach groups in other professions, including nurses, hospital chaplains, social workers, physician assistants, transplantation coordinators, attorneys, and representatives of the insurance industry on topics including palliative care, end-of-life decision making, and the ethics of organ donation and transplantation.

Clinical Accomplishments

For the first 13 years of his tenure, Dr. Williams was a member of the Neurosciences Critical Care Division, attending in the ICU 12-16 weeks per year. There, he was recognized for his clinical expertise in the management of intracranial pressure, intraventricular hemorrhage, the use of transcranial Doppler sonography, and end-of-life decision making and care. Due to his expanding roles and time commitments in adult hydrocephalus and ethics, Dr. Williams ceased attending in the ICU July 1, 2002.

As already described, Dr. Williams developed a unique expertise in adult hydrocephalus and related disorders. He receives referrals from neurologists, neurosurgeons, and primary care physicians locally, regionally, nationally and internationally. The diagnostic approach of assessing patient response to controlled CSF drainage that Dr. Williams has used since 1992 was identified as the most accurate method for determining prognosis with shunt surgery in the evidence-based Idiopathic Normal Pressure Hydrocephalus Consensus Guidelines (Neurosurgery 2005; 57:S2-17-S2-28). The newest population of patients for which he is offering clinical services and expertise are adults and young adults with congenital hydrocephalus who are no longer able to see the pediatric specialists who treated them in childhood. Dr. Williams serves on the Medical Advisory Board of the Hydrocephalus Association, the largest patient-advocacy group in the United States for people with hydrocephalus and their families, and receives referrals from them routinely.

Evidence of National and International Reputation

Whether in the field of hydrocephalus or ethics, Dr. Williams is a nationally and internationally recognized thought leader. He is a consistent, active participant in citizenship activities and organized medicine. He contributed to the development of national health policies and positions during his 8-year tenure on the American Medical Association's Council on Scientific Affairs, for which he was the youngest Chair ever from 2000 to 2001. He was instrumental in the development of AMA positions on boxing, bovine spongiform encephalopathy, the effects of sleep on drivers, and silicone elastomers in CSF shunt systems. He now chairs the AAN delegation to the AMA House of Delegates.

Dr. Williams is nationally and internationally recognized for these achievements. In the specialty of Neurology he is considered the foremost leader in adult hydrocephalus in the U.S., and one of the top 3 or 4 internationally. He was Co-Chair of the September 2005 NINDS Workshop, "*Hydrocephalus: Myths, New Facts, Clear Directions*", and is lead author of the white paper being produced from the conference,

and was a member of the International Advisory Board of the Hydrocephalus 2006 conference in Göteborg, Sweden.

His national reputation within the AAN, as already described, is evidenced by his leadership in ethics, the AMA delegation, and task forces.

In ethics and organ donation, his counsel is consistently sought. He led the development of AMA policy regarding the role of physicians in organ donation, serving as primary author of a report that was published in *Critical Care Medicine*. He was on the Institute of Medicine Committee on Non-Heart Beating Organ Transplantation II: The Scientific and Ethical Basis for Practice and Protocol in 1999; the U.S. Department of Health and Human Services Secretary's Advisory Committee on Organ Transplantation; and the United Network for Organ Sharing (UNOS) Primary Care Professional Advisory Council and the UNOS project on organ donation after cardiac death. He was recognized by the Transplant Resource Center of Maryland in 2000 with an award for "Commitment to Collaboration: Outstanding Contribution to the Field of Organ and Tissue Transplantation". He participated in the Institute of Medicine Exploratory Meeting on Disorders of Consciousness: Vegetative States and the Minimally Conscious State, and is working within the AAN to develop evidence based guidelines. He serves on the Editorial Board of *Organizational Ethics: Healthcare, Business, and Policy*.

Dr. William's citizenship and commitment to patients with hydrocephalus includes serving on the Medical Advisory Board of the Hydrocephalus Association, providing lectures and symposia at their biennial meetings since 2000, and hosting their meeting in Baltimore in 2006. He helped write two patient education booklets for normal pressure hydrocephalus and hydrocephalus in young and middle aged adults.

In summary, Dr Williams has distinguished himself in the area of normal pressure hydrocephalus through internationally recognized clinical scholarship, program building and mentoring. Furthermore, he has distinguished himself within another area ~ ethics ~ and is clearly an international authority in this field too. We are delighted to recommend him with the highest level of enthusiasm.

Sincerely,

Justin C. McArthur, M.B.B.S, M.P.H.
Professor and Interim Chair,
Department of Neurology

Henry Brem, M.D.
Harvey Cushing Professor of Neurosurgery
Director, Department of Neurosurgery