

**Roger Alan Brumback, MD, Selected as  
2001 Alumni Fellow of the Pennsylvania State  
University College of Medicine**

On September 14, 2001, at the annual Convocation and Awards Ceremony of the Pennsylvania State University College of Medicine, Dr Roger A. Brumback was named the 2001 Alumni Fellow (Figures 1, 2, and 3). The Alumni Fellow award is the most prestigious honor given by the Penn State Alumni Association and is awarded to selected alumni who, as leaders in their professional fields, are nominated by the president of the Pennsylvania State University to return to the campus to share their expertise with students, faculty, and administrators. The title of Alumni Fellow of the Pennsylvania State University is permanent and lifelong.

Roger had his first encounter with Pennsylvania State University in June 1965, when he entered the College of Science at University Park, Pennsylvania, fresh from graduation from the Gateway Senior High School in the Monroeville suburb of Pittsburgh, Pennsylvania. Attending college year round, taking an overloaded schedule of courses, and receiving advanced placement credit allowed Roger to graduate with a BS in pre-medicine after just 2 years. In fall 1967, he became part of the Pioneer Class of the (then new) Pennsylvania State University College of Medicine at the Milton S. Hershey Medical Center, entering under the banner of “handbags and hearts.” Initially, Roger dreamed of becoming a family practitioner and practicing in rural Pennsylvania, but a required problem-solving (research) project at the end of his first year of medical



Figure 1. Roger Alan Brumback, MD.  
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Figure 2. Alumni Fellow medallion designed in 1986 by world-famous artist John Cook (Emeritus Professor of Art at Pennsylvania State University). It depicts one of the relief capitals found on the rear façade of the Old Main building. This medallion was presented to Dr Roger A. Brumback on September 14, 2001.

school changed all that. While searching for a project mentor among the few faculty in the school at the time, Roger fell under the spell of an anatomy instructor, R. Dennis Staton, whose interests were in comparative neuroanatomy and primate evolution. At the time, mammalian chromosome studies were the newest of the genetic techniques, and Staton’s theoretical evolutionary schema contained a gap: the chromosome number of the South American owl monkey (genus *Aotus*) was unknown. Roger’s project was simple: “just” karyotype a male animal and a female animal. The chairman of the Department of Comparative Medicine, Dr C. Max

THE PENNSYLVANIA STATE UNIVERSITY AND THE PENN STATE ALUMNI ASSOCIATION

WITH SINCERE APPRECIATION, CONFER UPON

*Roger A. Brumback, M.D.*

THE PERMANENT TITLE OF

*Alumni fellow*

FOR EXCEPTIONAL CONTRIBUTION AND PERSONAL INTEREST  
IN THE UNIVERSITY’S ACADEMIC COMMUNITY.

*Graham Spani*  
President,  
The Pennsylvania State University

*Diana Repa*  
Executive Director,  
Penn State Alumni Association



Figure 3. Illustration of the Alumni Fellow certificate presented by the Pennsylvania State University and the Penn State Alumni Association to Dr Roger A. Brumback.

Lang, along with one of his faculty members in charge of the new animal facilities, Dr S.A. Benjamin, agreed to help with this project by acquiring the needed animals. Roger produced a karyotype from each of the animals, but then things became very complicated, necessitating studies of many more animals, with Roger traveling all over the Northeast to obtain samples from zoos and animal importers. Culturing these samples also became more complicated, but Dr John W. Kreider (a researcher in the Department of Pathology) agreed to help, and the project expanded to fill all of Roger's free time during the rest of medical school. Roger also spent 9 months of his clinical years on rotations at the Boston Children's Hospital, working for several months in the cytogenetics laboratory of Dr Park S. Gerald. This research experience molded Roger's interest in pediatrics and pathology and set his course for an academic career. His articles on the cytogenetics of the owl monkey showed that, instead of just one species in the genus *Aotus*, there were multiple species.<sup>1-3</sup> Subsequently, the noted primatologist Philip Hershkovitz in his reclassification of New World monkeys named one of the species *Aotus brumbacki*.<sup>4</sup>

After graduating from the College of Medicine in 1971, Roger pursued pediatric training on the Harriet Lane Service of the Johns Hopkins Hospital. He also received a military deferment through the US Public Health Service CORP program, matching to the National Institutes of Health (NIH) in the Medical Neurology Branch, but this required him to obtain training in neurology. He was accepted in the Washington University (St. Louis) neurology residency program at Barnes Hospital and St. Louis Children's Hospital. While there, he came under the influence of Dr Warren Weinberg, a pediatric behavioral neurologist, and together they defined criteria for the diagnosis of mania in children<sup>5</sup> and showed the effectiveness of lithium in treating this condition.<sup>6</sup> Their collaboration has continued over the years and has led to a better understanding of many learning and behavior problems affecting children, including a recent book on the topic.<sup>7</sup> In 1975, Roger moved to his position in the Medical Neurology Branch at NIH, where he honed his expertise in neuromuscular disease and began work in developing animal models of human muscle disease. He also began a collaboration with Dr Jay Robbins of the Dermatology Branch in studying the neurologic features of rare disorders (such as Cockayne's syndrome and xeroderma pigmentosum) characterized by defective cellular DNA repair mechanisms.<sup>8</sup>

After a short venture into private practice neurology in Pittsburgh, Pennsylvania, Roger took a position as chief of the Neurology Service at the Fargo, North Dakota VA Medical Center and faculty member of the University of North Dakota School of Medicine Department of Neuroscience. His research helped to define the pathophysiologic basis of contractures and rhabdomyolysis in McArdle's disease and related disorders of muscle energy metabolism.<sup>9</sup> He also continued his studies in the field of neuropsychiatry, defining neurologic signs associated with childhood depression<sup>10</sup> and identifying electrophysiologic characteristics of the seizures induced by electroconvulsive therapy (ECT).<sup>11</sup>

In a shift of career direction in 1982, Roger decided to pursue his earlier interest in pathology and moved to the University of Rochester Medical Center to join the residency training program in anatomic and neuropathology. He became involved in Alzheimer's disease research while still a resident, and on completion of his residency was recruited by Dr Richard W. Leech to the University of Okla-

homa College of Medicine Department of Pathology as director of the Neuropathology Section, where he built an Alzheimer's disease clinical and research program. For his achievements, the Oklahoma Alzheimer's Association named the annual "Brumback Award for Outstanding Achievement in Alzheimer's Research" in his honor, with the first winner of this award in 1998 being Dr Peter S. Spencer of the Center for Research on Occupational and Environmental Toxicology of the Oregon Health & Science University. While at the University of Oklahoma in 1997, Roger was named a David Ross Boyd Professor of Pathology for his outstanding teaching ability.<sup>12</sup> In January 2001, Roger assumed his current position of professor and chairman of the Department of Pathology at the Creighton University School of Medicine in Omaha, Nebraska.

Roger has authored more than 130 articles in peer-reviewed journals and authored or edited 13 books, including the comprehensive *Textbook of Pediatric Neuropsychiatry*<sup>13</sup> (which has been called a "landmark" in the field by a reviewer in *The New England Journal of Medicine*)<sup>13</sup> and two books on clinical and basic neuroscience in the popular "Oklahoma Notes" series. In 1986, Roger founded the *Journal of Child Neurology* as editor-in-chief, shepherding this publication along until it has become the premier scientific journal in the field, with more than 2000 subscribers receiving monthly issues. For several years, he authored a weekly column "Ask Dr. B. - the Medical Adviser" in the "seniors" section of *The Norman (Oklahoma) Transcript* newspaper. He is an active member of a number of scientific organizations and has served in the presidency of two societies: the Society for Experimental Neuropathology and the Behavioral Neurology Society. In his spare time, Roger is a ham radio operator with the appropriate call sign of KC5ILL.

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