IN MEMORIAM

Jay McKay McDonald, M.D., 1943–2019

Academic pathology recently lost one of its greatest champions in Dr. Jay M. McDonald (Figure 1) who dedicated over 30 years of his life to the profession.

The Early Years

Jay was born and raised on the plains of southeastern Minnesota in the small company town of Rochester. He was the second son of the famed surgical pathologist, Dr. John R. McDonald. Jay attended medical school and received his M.D. with distinction in 1969 from Wayne State University. Following his graduation, Jay became an intern in Medicine at the University of Oregon before returning to Wayne State to complete a combined Anatomic Pathology and Clinical Pathology (AP/CP) residency.

The Washington University Years

Following his residency Jay was a postdoctoral fellow at Washington University, St. Louis, in Dr. Leonard Jarrett's laboratory and joined its faculty in 1976. Board certified by the American Board of Pathology Inc. in both AP and CP, he rose to the rank of Director of the Division of Laboratory Medicine in the Departments of Pathology and Medicine at Washington University where he remained until 1990 before taking on the role of Chairman of Pathology at the University of Alabama at Birmingham (UAB).

When Jay chose to leave his leadership position at one of the best departments of pathology in the country for a UAB department (then) in disarray, with minimal research activity and a skeleton crew of anatomic pathologists, he was discouraged by his fellow faculty members at Washington University. However, Jay was convinced about the potential of UAB Pathology, and excited about his vision of what it could become.

The UAB Years

Jay embraced the UAB challenge. He recruited several talented colleagues from Washington University in St. Louis to Birmingham. The careers of these academic pathologists blossomed at UAB; in addition to the authors, some of these

Figure 1 Dr. Jay McDonald. Image courtesy of UAB University Relations.

pathologists include Casey Weaver, Steve Carroll, Robin Lorenz, Pat Bucy, Steve Moser, and Moon Nahm.

Jay was Chairman of the UAB Department of Pathology from 1990 to 2008 along with serving as the Director of its NIH-funded Center for Metabolic Bone Disease from 1996 to 2010. He additionally had multiple biomedical science (graduate school) affiliations ranging from cancer biology to pathobiology and molecular medicine. He was also a member of the Comprehensive Cancer Center, the Center for AIDS Research, the Center for Aging, the Gene Therapy Center, and the Center for Health Promotion at UAB.

Research Focus

Jay's research focused for many years on diabetes and signal transduction pathways, especially those related to

calcium, calmodulin, and related protein kinases and phosphatases. At UAB he made important discoveries on AIDS pathogenesis, metabolic bone diseases, and tumorigenesis. Jay had an adventurous approach to science and he was not afraid to delve into new research areas which frequently resulted in successful grant funding. Creative examples included working on zero gravity cultures thereby being able to dissect osteoblast differentiation pathways in space. His investigation of Fas binding to calmodulin directed him not only to AIDS research but grant funded studies of cholangiocarcinoma therapy.

Lifetime Contributions

Jay was a well-recognized advocate in establishing clinical pathology as both a clinical enterprise and basic research discipline.

During his time as Director of Laboratory Medicine at Washington University, Jay created a Lab Medicine Seminar Series that earned the dubious name of “Shark Tank” for its rigor. The presentations in this seminar series inculcated confidence in the participating graduates and empowered them to achieve success. He transferred that training experience with him when he departed for Alabama.

Jay’s passion for research and creativity led him to establish the Division of Cellular and Molecular Pathology that was critical in developing UAB as an international powerhouse in experimental pathology research. Through his efforts, he took UAB’s Department of Pathology from an afterthought in the NIH funding rankings to, at one point, sixth in the nation for NIH grant support to a department of pathology. Jay’s establishment of a solid scientific foundation for its Department of Pathology has resulted in it being ranked in the top 20 for over 20 straight years.

Jay published approximately 250 papers in his career, which were cited over 8000 times. He was also an editor of Ruben’s Pathology, one of the standard textbooks for medical students in this country.

Jay was a longtime member of The American Society for Investigative Pathology (ASIP, initially joined in 1977) and served as the Editor-in-Chief of their flagship journal, *The American Journal of Pathology*, from 2003 to 2008. Under his leadership, the *Journal* created and instituted both the Scientific Integrity Policy and the position of Scientific Editor. Both of these endeavors sought to add rigor and and clarity to the peer review and production processes.

Awards and Recognitions

Throughout his career, Jay was recognized by his colleagues and numerous organizations for his scientific and academic accomplishments. In 2011, Jay was the recipient of ASIP’s most prestigious Gold Headed Cane Award, which recognizes long-term contributions to the field of pathology,

including meritorious research, outstanding teaching, general excellence in the field, and leadership in pathology. In 2010, he received the Outstanding Lifetime Achievement Award in Clinical Chemistry and Laboratory Medicine. He also won the Mary Jane Krueger Award from the Juvenile Diabetes Association, the Evans Award from Academy of Clinical Laboratory Physicians and Scientists (ACLPS), and the Ward Burdick Award for Distinguished Service from the American Society for Clinical Pathology (ASCP). He was also a past President of the ACLPS.

In 2005 UAB honored his teaching abilities with the Distinguished Lecturer Award, the highest award it can bestow on a member of the faculty. True to his style, his lecture was not on calcium signal transduction pathways but rather on “Survival on the Mission to Mars.”

Jay served on the prestigious National Academy of Medicine’s (then the Institute of Medicine) Medical Committee on Creating a Vision for Space Medicine and served on the NASA Research Partnership Subcommittee.

Passions

Jay effortlessly engaged with individuals of disparate backgrounds while passionately recruiting the best available talent and guided their paths by insisting on one-on-one meetings. He fostered a feeling of family in the Department by promoting multiple informal social events. He was very generous with his time and followed an open door policy. He always delivered on his promises. He enjoyed fishing, playing handball, and golf, and strongly supported athletics at UAB.

The Retirement Years

Following his full-time retirement from UAB, Jay became Professor Emeritus in the Department of Pathology. With his wife Sarah, he endowed both the Jay M. MacDonald Endowed Professorship in Bone Pathobiology and the Jay M. MacDonald Endowed Professorship in Laboratory Medicine. Last year, he and his wife recommitted to provide funds to raise the Professorship to a Chair.

Final Reflections

Jay was a strong proponent of making active decisions. He was a force and he grasped ideas/strategy/missions with great gusto. He was never afraid of difficult conversations or expressing contrary opinions. He constantly inspired his colleagues to challenge themselves to not only realize their true potential but also to succeed and excel in every endeavor.

Jay’s dedication to UAB was remarkable. He was liberal with his time and resources for the advancement of the institution as well as its members, even after his retirement. He was a sounding board for the subsequent Chairs and enabled them to lead UAB towards success.

Besides being a remarkable clinician, scientist, editor, and administrator, Jay was a great leader with high standards who led by example, and a visionary with the perseverance to make his visions a reality. He was a remarkable figure in academic pathology that positively influenced the lives of many students, trainees, faculty members, and colleagues.

Jay will be deeply remembered and missed.

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