

**MEMORIAL RESOLUTION OF THE FACULTY
OF THE UNIVERSITY OF WISCONSIN-MADISON**

ON THE DEATH OF PROFESSOR ANTHONY B. BLEECKER

Anthony B. Bleecker, age 54, passed away on Sunday, January 30, 2005. Tony was a professor of botany and genetics at the University of Wisconsin-Madison. He was a world-class scientist with expertise in the molecules and genes that control plant development, especially those responsible for the action of a gaseous hormone called ethylene. Tony's considerable contributions to plant science will serve long into the future as examples of originality, elegance, and impact.

Born on July 22, 1950 and raised in suburban Detroit, Tony began his post-secondary education at Oakland College in Michigan before transferring to the University of South Florida where he completed a Bachelor of Science degree in 1979 and a Master's degree in the field of natural products chemistry in 1983. In 1982, Tony moved to the Plant Research Laboratory at Michigan State University and began to work as doctoral student under the tutelage of Professor Hans Kende. During the ensuing four years, Tony applied his characteristic clear thinking along with the techniques of biochemistry and genetics to make seminal discoveries about how plants produce and sense ethylene. A result that can truly be considered a breakthrough was the isolation of a mutant *Arabidopsis thaliana* seedling that was insensitive to ethylene. This and other results of creative experimentation pinpointed molecules that mediate processes such as seedling development, petal drop, and fruit ripening. The biotechnology sector has converted these advances in basic science into agricultural and horticultural products and practices.

After postdoctoral work at MSU with Kende and at Caltech with Elliot Meyerowitz, Tony began an assistant professorship in the Department of Botany at the University of Wisconsin in 1989. He taught introductory biology and plant physiology to undergraduates, and plant genetics, growth and development to graduate students. He used a loose Socratic style and was far more concerned that students grasped the broader concepts than stored away factual details. No doubt there are citizens who think more clearly now than had they not been taught by Tony Bleecker.

Tony had a particularly large impact on this campus through the research program he developed. Although several other professors in different departments across campus were working with *Arabidopsis* during the years it was earning status as 'fruit fly of the plant' world, Tony was the first true *Arabidopsis* geneticist to join the campus. A group including Tony started a federally-funded program for training graduate students and postdoctoral associates in *Arabidopsis* research. The success of this extended project raised Madison to the high point on the landscape of basic plant biology research that it enjoys today. Tony Bleecker played a pivotal scientific and leadership role during this time and thereby had a major impact on the direction of plant biology research on this campus. It was a time, not coincidentally, that Tony's own research group made its most groundbreaking discoveries. In a series of exemplary experiments published between 1995 and 1999 in *Science* and *The Journal of Biological Chemistry*, Tony and his colleagues showed that the ethylene-insensitive *Arabidopsis* mutation resided in a gene that encoded the ethylene receptor protein. Digging deeper, they showed that ethylene bound to a portion of this protein that spanned the cell membrane and contained a copper atom. This was the first hormone receptor identified in plants, and added a rare degree of detail to a description of how plants sense and respond to hormones that control growth and development. This work resulted in the International Plant Growth Substances Association conferring on Tony its highest award, the Silver Medal. A separate line of research in Tony's lab explores the role of receptor-like protein kinases in plant development. This ongoing work has the same pioneering quality as the ethylene work, though its finish will be without Tony's mark.

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At a university, everyone in a field benefits from the extraordinary success of an individual and this is perfectly true in the case of Tony Bleecker. His international prominence helped Madison attract the attention of the plant science community, recruit top tier graduate students, and procure federal funding. Tony is responsible for more than his share of the Department of Botany's solid reputation. In 1999 his professorship was broadened to include an appointment in Department of Genetics in the College of Agricultural and Life Sciences. The impact of his loss is acute to the Botany Department and broad to the university.

Anyone who interacted to a substantial degree with Tony could not help but be impressed with the sharpness of his intellect and his clarity of thought. He loved to think about and discuss things that mattered, while letting mundane tasks slide with little compunction. Any colleague who fell into a situation where Tony had time and cup of coffee would, sooner or later if they were being honest, say to themselves, "Why didn't I think of that?" The Botany Department was fortunate to have Tony apply his clear thinking to departmental affairs as its chair beginning in 2001 and through the ensuing tough budgetary times. When poor health caused by stomach cancer forced him to step down in late 2004, the department was stronger than ever, though bracing for a terrible loss.

Fortunately, Tony took time to enjoy himself outside of his professional life. He made time to relax with his wife Sara at their rural property in Richland County. On some weekends, the farmhouse and swimming pool would be full of fun and laughter as Tony and Sara were happiest when they could share their happiness. In recent years Tony became an ardent sailor, plying his sloop around Lake Mendota while dreaming of and training for bigger waters and bigger boats. We hope he has found interesting waters where people like to discuss and where there are important problems to solve.

Tony is survived by his wife, Sara Patterson, also a faculty member in the Department of Horticulture, by three daughters, a son, and two grandchildren.

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