

**MEMORIAL RESOLUTION**  
**JOHN M. COOPER**  
**(February 6, 1912 – September 19, 2010)**

John M. Cooper, Ed.D, Professor Emeritus in the School of Health, Physical Education and Recreation, died peacefully September 18 at 5:30 p.m., in Studio City, California at the age of 98. The oldest and last surviving of six siblings, Cooper was born in Smith Mills, Kentucky in 1912, and graduated from high school in Hopkinsville. His father, Clay Calhoun Cooper, was a cattleman and his mother a homemaker until she became owner/operator of a boarding house in Columbia, Missouri to help put her children through college at the University of Missouri in the years following the Great Depression.

John Cooper's vast contributions to the study of kinesiology and sport biomechanics are grounded in his own personal development and background in athletics. In his high school years, practice facilities were rough, and his indoor option was a smoke house with a low ceiling and support posts. The posts were used to hone his basketball dribbling and screening skills, while the low ceiling required him to utilize either a flat shot or a small jump in the air to improve the angle. He began to jump almost every time he shot the ball, and he led his high school team in scoring. During some games, he singlehandedly scored almost all of the team's points.

Cooper was recruited by many college coaches, including Kentucky's young coach Adolph Rupp, but chose to stay near his family at the University of Missouri. He joined the freshman basketball team, but there was one problem. Cooper had developed a habit of using his jumping ability to get the ball over taller players that were guarding him. When Cooper tried this "jump shot" at Missouri, he was sent to the bench and reprimanded by the coach: "Son, here at the University of Missouri we shoot with both hands on the ball and both feet on the floor." However, the success of the shot and the acclaim from teammates led his coach to put him back on the court.

History shows that Cooper continued to develop his "jump hook" by today's definition, and by his sophomore year, he led the conference in scoring—an almost unheard of fourteen points per game. This background gained him the reputation among most basketball historians as the first person to successfully employ the jump shot in college basketball. The NBA would come along several years later.

John Cooper was very successful with the jump shot, particularly near the basket after several seconds of faking and pivoting with the ball, which often left his opponent confused enough to let his guard down. This caused a rival coach to propose a rule change to stop him. Allen Fieldhouse at the University of Kansas is named after Phog Allen, who persuaded the NCAA

rules committee to enact a new rule to move Cooper further away from the basket and make the jump shot less effective. He proposed a time limit for Cooper to remain under the basket, and this became the modern “three seconds in the lane” rule. Thus, John Cooper not only developed a new shooting technique that revolutionized the game of basketball, but his technique resulted in a new rule which served to make basketball a much faster and exciting game that we enjoy today. While in college, he also joined the track team and his sub-fifty second 440 yard time helped his team to Conference and Duke Relay titles.

His success as an athlete helped direct his career interests toward studying human movement to see if athletic performances could be improved through science. It led to a career in academia including faculty positions at the University of Southern California, and ultimately, at Indiana University. His interests and knowledge in mathematics and physics led him to quantify athletic performance and he studied filmmaking to enhance scientific observation. Analyzing slow motion film has since become a staple in the study of Kinesiology and Biomechanics.

Following his service in the Army Air Forces during World War II, Cooper completed his doctoral work at the University of Missouri. Upon the completion of his doctorate, he began writing about human movement, and this eventually led to co-authorship (with Ruth Glassow) of *Kinesiology*, the most popular kinesiology textbook of all time. This textbook was studied by almost every college physical education student of the 1960s and 1970s. He later added another popular textbook, *Biomechanics of Human Movement*, co-authored with Marlene Adrian. This book helped change the name of the field of study from Kinesiology to Biomechanics. As a result of Cooper’s efforts to conduct more research, he directed the School to purchase the very first computer in the School of HPER to be available for student research. In recent years, the graduate programs in the Department of Kinesiology have been named for John Cooper in recognition of his efforts to guide graduate students into academics, research, and coaching careers.

As a part of John Cooper’s interest in studying elite athletics and determining what enables them to perform at the highest levels, he looked for research opportunities in athletic competitions. For instance, in 1978 the United States Olympic Committee established the first National Sports Festival, which later was called the U.S. Olympic Festival. John Cooper volunteered to transport and supervise a group of graduate students and faculty to Colorado Springs, Colorado for the first festival. He and his students utilized modern high speed film cameras to record the performances of some of America’s best athletes in the long jump, triple jump, and hurdle. These included Carl Lewis, Jacky Joyner-Kersey, Al Joyner, Edwin Moses, and Greg Foster—all Olympic gold medalists and world record holders. By analyzing these films, the group was able to provide detailed descriptions of the velocities, joint angles, and other movement data to the USOC scientists and coaches to help improve the performances of the

U.S. Olympic teams. This effort represented a beginning of what the USOC now call the “High Performance Division” devoted to the improvement of performances in all Olympic sports. This is one more example of John Cooper’s foresight and innovations in the area of human performance.

Through the years John Cooper served professionally among his peers, including his role as President of the American Association for Health, Physical Education and Recreation. He also received such awards as the Hetherington Award and the Luther Halsey Gulick Medal.

John Cooper was a kind and gentlemanly scholar. His thoughtful, considerate and sensitive style served students and faculty alike with dedicated and determined fashion. This resolution is a permanent part of the minutes of the Bloomington Faculty Council, and copies should be sent to his son Jack and daughter Johanna Cooper Adang.

Phillip Henson

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