Donald Raymond Cherek (1941–2020)

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Don R. Cherek passed away April 5, 2020, in Bainbridge Island, WA. Don and his wife Joyce had recently moved from the Austin, TX, area to the greater Seattle area to be closer to children and grandchildren.

Don was born October 11, 1941, in Omaha, NE. He attended Creighton University, completing a B.S. with honors in Pharmacology in 1967. He attended graduate school at the University of Minnesota under the mentorship of Travis Thompson, Roy Pickens, and Gordon Heistad. He obtained his Ph.D. in Psychology and Pharmacology in 1972. This was a highly fertile time at the University of Minnesota program; Don's peers at the time included George Bigelow, Roland

Griffiths, H.A. Tilson, John Grabowski, Richard Meisch, Jim Smith, and Alice Young. Don's graduate work focused on psychopharmacology and disruptive behaviors, notably aggression. The study of aggression under laboratory conditions would come to be the defining feature of his scientific career. As part of his dissertation work, Don demonstrated that pigeons would engage in bouts of aggressive behavior as a function of increasing fixed-ratio response requirements, thus establishing a non-human model of aggression that could be brought under the control of operant contingencies (Cherek & Pickens, 1970). Subsequently, he showed that pigeons would work under operant conditioning schedules for the opportunity to engage in bouts of aggressive behavior, and these rates of aggressive responding could be modified by the acute administration of Δ -9-THC (Cherek, Thompson & Heistad, 1972). The study of the reinforcing features of aggressive behavior has inspired a new generation of aggression researchers (Fish et al. 2002; Covington et al. 2018; Golden et al. 2017).

After obtaining his Ph.D., Don completed post-doctoral training under an NIMH fellowship at the Kalamazoo State Hospital, Kalamazoo, MI, where he continued to study aggression with Ronald Hutchinson. He accepted his first academic position at the Louisiana State University Medical School in Shreveport, LA, serving from 1978 to 1987. There he rose to Associate Professor with Tenure. It was during this period that he developed and refined what would be his most important and lasting contribution to science: the Point Subtraction Aggression Paradigm (PSAP, Cherek, 1981). Along with the Taylor Aggression Paradigm (Taylor, 1967), the PSAP has been an influential laboratory model of human aggression over the past 40 years. Owing to his training in behavior analysis and psychopharmacology, Don constructed the PSAP around the principals of operant behavior, i.e., escape and avoidance from the aversive stimulus of a putative (fictitious) "other" person periodically and unpredictably subtracting money from the participant's accruing total, which was earned through arduous fixed-ratio responding. Unlike the Taylor paradigm, the PSAP was unique in arranging experimental contingencies and an interactive context such that

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repeated-measures designs were possible. Don's work exemplified the principles of exquisite experimental control that produced systematically and rigorously collected data. Completed experiments in Don's lab often used repeated-measures designs with 6–8 participants completing 4–6 h per day of testing, 2–3 days per week, for up to 6 consecutive weeks. This arrangement set the stage for a career of 20-plus years of continuous NIH funding where Don and many colleagues investigated the psychopharmacology of human aggression.

In 1987, Don moved to the Department of Psychiatry & Behavioral Sciences at the University of Texas Health Science Center in Houston, where he remained until his retirement in 2006. He became Professor with Tenure and Director of the Human Psychopharmacology Laboratory. During this time, his work expanded into the examination of high-risk populations, including individuals with a history of substance use disorders, conduct/antisocial personality disorder, and a history of arrest and criminal violence. This was difficult work on several levels, including recruitment, screening, and constant observation of data patterns and dosing conditions. Concurrently, he also became interested in impulsivity and its interaction with aggressive behavior.

Throughout his career, Don was a passionate methodologist. He and his colleagues studied many pharmacological compounds covering almost every major class of abused drugs and many potential pharmacotherapeutics. Commenting on Don's grant applications and research manuscripts, a former peer who often reviewed his work highlighted the "...rigorous, systematic, and careful nature of his work. Don took no short-cuts. He investigated every assumption and varied critical parameters in a thorough manner. Don's PSAP method continues to have withstood the test of time and is an essential part of the research tools in aggression". Another notable feature of Don's contribution to science was his sharing with other investigators the instructions for constructing the apparatus and running the PSAP. Indeed, despite Don's retirement in 2006, publications using the PSAP appear as recently as 2019. The PSAP has been employed in over 100 publications with authors from multiple countries and three continents.

Don mentored many post-docs and junior faculty, particularly in the apex of his career at the University of Texas Health Science Center. His mentoring style was pragmatic and directive, and he was always fiercely protective of those he

mentored and highly supportive of their career development and advancement. Don recognized the value of collaboration. He was fond of imparting lessons through quips and euphemisms. Trainees and colleagues may recall favorites such as "It is better to ask for forgiveness than permission" and "No one ever goes off the edge of a cliff if they ask for directions". Perhaps a sign of the scientific and professional culture in which he was trained, Don wore a jacket and tie to work every day until the final year of his career. With retirement squarely in sight in 2005–2006, he occasionally began to show up without a tie.

Don is survived by his wife, Joyce, and five very successful children, Steven, Daniel, Carrie, Christine, and Kevin, plus a host of grandchildren. He was unashamedly proud of his children and grandchildren and enjoyed deflecting the discussion away from his own activities toward those of his family.

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

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