

12

Samuel Kountz: Transplantation pioneer who provided access to life-saving renal replacement therapy



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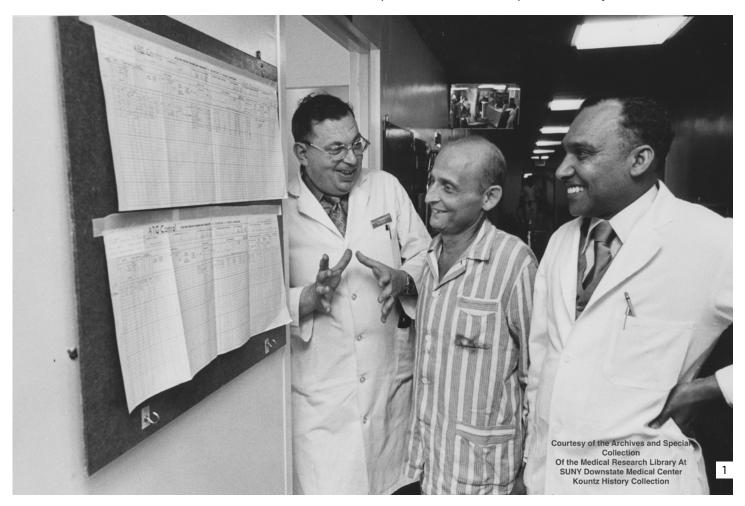
CORRESPONDING AUTHOR **Erin Chang,** MD 450 Clarkson Ave. Brooklyn, NY 11203 718-270-1421 erin.chang@downstate.edu Samuel Kountz, MD, had spectacular professional career in renal transplantation in a life tragically cut short by a debilitating illness and early death at age 51 (Figures 1 and 2). He performed groundbreaking research in organ preservation and the management of graft rejection. As chair of surgery at Downstate Medical Center in Brooklyn he created a leading transplant center in an inner city hospital. He supported nationwide reforms to assure that minority and underserved populations had access to renal replacement therapy and transplantation.¹

Early life and education

Born in Lexa, Arkansas, on October 20, 1930, Kountz was one of two blacks to graduate from the University of Arkansas School of Medicine in 1958. During his residency at Stanford University in 1961, he participated in the first non-identical twin renal transplant in the United States with Roy Cohn.² Inspired to enter the field he received the Giannini Fellowship Award to conduct research in transplantation and immunology at Hammersmith Hospital in London.³

Revolutionizing renal transplantation

Kountz was appointed Assistant Professor of Surgery at Stanford after residency training. Under an appointment as a Fulbright Scholar he performed Egypt's first kidney transplant in 1965.³ Folkert Belzer recruited him across town to the University of California, San Francisco (UCSF) to serve as his associate and assist in the development of a renal transplantation team that performed more than 200 renal transplants, researched tissue typing, and developed standard procedures to prevent and treat graft rejection. Their most enduring contributions were in the area of organ preservation. Their work led to preservation solutions and perfusion devices that are standard procedures in renal transplantation today.⁴





Leader in surgery and transplantation

Kountz earned an international reputation in academic surgery and transplantation. He published 154 peer-reviewed articles, with key research in nearly every area important to clinical renal transplantation: Use of methylprednisolone to prevent acute renal allograft rejection,⁵ measurement of GFR and creatinine in monitoring for allograft rejection,⁶ donor tissue typing,⁴ and preservation of deceased donor kidneys.⁷

He was named president of the Society of University Surgeons and received honorary doctorates from the University of Arkansas and UCSF. In 1972, he was named chair of surgery at Downstate Medical Center in Brooklyn. He transformed an inner city facility into a leading transplant center.³ With Kountz as its chief of surgery, the hospital, at the time thought to be the busiest center in the nation, performed more than 500 transplantations.⁸

In an era where the high cost of transplantation made it unavailable to the urban poor, especially the black community, Kountz used his fame to support federal funding for the treatment of end-stage renal disease, including kidney transplantation.⁹ As part of his campaign to increase awareness of the need for living donors in renal transplantation, Kountz performed a living donor renal transplant on NBC's Today television show in 1976. After its airing some 20,000 offered to serve as living donors nationwide.³

A Lasting Legacy

Kountz died in 1981 after a debilitating illness contacted during a visiting professorship in South Africa in 1977.⁸ Remembered by colleagues long after his death, his legacy continues in schools, scholarships and awards named in his honor. The National Association for the Advancement of Colored People presents an Afro-Academic, Technological and Scientific Olympic program award annually in his memory.³

Acknowledgements

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Legends

- 1 Samuel Kountz (right) making rounds. Courtesy Archives and Special Collections of the Medical Research Library at SUNY Downstate Medical Center.
- 2 Kountz at surgery.