

Reader's Digest

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THE BIG IDEA

Dorry Segev
(left) and
Sommer
Gentry



The Right Match

AT ANY TIME, 60,000 people in the United States need a kidney transplant. Relatives usually make the best donors but, for a variety of reasons, aren't always compatible. In such cases, patients can wait

years for a cadaver kidney, and some end up dying before a healthy organ arrives.

Hoping to shorten those waiting times, Johns Hopkins University surgeon Dorry Segev teamed with his wife, U.S. Naval Academy mathematician Sommer Gentry, to marry math and medicine in an important new way.

Segev and Gentry concocted an algorithm that, simply put, expands the universe of potential organ donors for patients without a compatible family member. Call it a lifesaving match game. Patients and donors who *don't* match are linked to those in similar straits who *do*—courtesy of modern mathematics.

The couple's formula was published in April 2005 in the *Journal of the American Medical Association*. If used nationally, it could lead to as many as 2,500 more transplants a year. And that adds up to good news for kidney patients.