Baby 81

he tsunami of December 26, 2004, struck the coastal town of Kalmunai, Sri Lanka, with such force that 4-monthold Abilass Jeyarajah was torn from his mother's arms and swept away. Hours later, while his parents desperately searched the devastated town, their tiny son washed up on the beach a kilometer away, alive. A local schoolteacher found him and brought him to the hospital: he was the eighty-first patient admitted that day. The hospital was overwhelmed with 1 000 bodies, many of them children. Since Abilass was alive and healthy, he was dubbed «Baby 81, the miracle baby» and became an instant celebrity among the staff as they went about their grim duties.

Meanwhile, the parents kept looking. Two days later, they met the schoolteacher, who told them about the baby he had found. Rushing to the hospital, the Jeyarajahs were elated to find their son but were in for a rude shock. Eight other couples who had also lost infants were claiming Baby 81 as theirs. The baby remained in the hospital while the case went to court.

Judge M. P. Mohaideen faced a situation not unlike King Solomon, who 3 000 years ago was asked to decide which of two women was the mother of an infant. Solomon's method of determining parentage is told in a famous biblical passage (I *Kings* 3:16–28). The Sri Lankan judge had a different method: he called in molecular biologists.

With 6 billion base pairs of DNA packaged in 46 chromosomes, each one of us is unique. Although our proteincoding sequences are similar (after all, our phenotypes are similar), only a few percent of the total base pairs in the human genome actually code for genes. The eukaryotic genome contains many repeated sequences, and between individuals the repeat frequency may differ, offering one way to differentiate individuals. Differences in a single base pair due to DNA replication errors or

After the tsunami In December of 2004, a

tsunami originating in the

broad region that encom-

Southeast Asia. The result

passed many nations in

was an unprecedented humanitarian disaster that

left almost a guarter of a

million people dead and

many more homeless.

Indian Ocean struck over a

<image>

The miracle baby Abilass Jeyarajah survived the tsunami and was reunited with his parents by court order after DNA testing proved that he is indeed their son.



random mutations also distinguish individuals from one another, and these differences are inherited.

It is now possible to analyze these differences in DNA (amplified by PCR) to identify people. When DNA from the nine sets of contesting parents was analyzed and compared with that of Baby 81, the only parents whose sequences were consistent with being passed on to the baby were the Jeyarajahs. On February 14, 2005, the judge ruled that the Jeyarajahs are the true parents, and Baby 81 got his real name and parents back.

Answer the questions.

- Why is DNA useful to identify people?
- In the end, who were Baby 81's true parents?

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