Defining death involves a complex set of factors. While one might intuitively connect the two controversies, the source of the dispute stems from very different questions. Everyone agrees that one can use a dead body to save a person's life. In the case of willing a body to science, the decisors debate whether the potential long-term scientific benefit of dissecting the body qualifies as a life-saving action. In the case of organ donation, however, the dispute surrounds whether the allegedly deceased donor is actually dead. At stake in this case is the very definition of death. While defining death might seem like a purely scientific issue, it in fact involves a complex set of moral, religious and legal factors. Scientists delineate the process of death by quantifying the increasing dysfunction of an organism. They can describe how the cerebellum that controls muscle functions stops operating, when a damaged cerebrum causes memory loss, how respiration ceases when the nerves in the brain stem cease functioning or when the heart irreversibly stops beating. Science, however, cannot decide which form of dysfunction defines an organism as "dead." This is ultimately a cultural decision that demands a legal criterion with an ethical justification. Historically, this was not a major issue, since the different signs of dysfunction, including cessation of respiratory and cardiac activity, happened within a very short time period. Modern medical advances, however, prevent a domino effect that causes an entire body to stop functioning. In particular, artificial respirators can provide oxygen to the heart, even if the lungs have stopped spontaneously functioning. In 1968, a Harvard Medical School committee advocated "brain-stem death" as the proper definition of death. According to this criterion, we define someone as dead when his lungs no longer function spontaneously because of irreversible neurological damage in the brain stem, even if his heart continues to function through artificial respiration. It is important to note that "brain-stem death" greatly differs physiologically from a patient in a coma or a persistent vegetative state, and that there are no documented cases of a "brain-dead" patient recuperating. The Harvard criterion made way for transplants, since doctors could remove organs from a "brain-dead" patient whose organs continued to receive blood from an artificially supported heart. While this definition has received almost universal endorsement, Jewish legalists continue to debate whether Halacha recognizes this criterion. The sages (Yoma 85a) state that to verify if a person is living or dead, we must examine his nostrils for signs of breathing. Respiration is a sign of life, they claim, since God created Adam by "breathing into his nostrils the breath of life" (Genesis 2:7). Based on this passage, the 19th-century Hungarian decisor Rabbi Moses Sofer ruled that the cessation of breathing represents the halachic criterion for death (YD 2:338). Many European doctors at that time were concerned that scientists could not accurately determine death, and many governments demanded that people delay burial for two or three days to ensure the "corpse" was really deceased. Sofer, however, ruled that there was no need for such doubts, since cessation of respiration clearly indicated death. Based on this ruling, Rabbi Moshe Feinstein (Igrot Moshe YD III:132) ruled in 1976 that "brain-stem death" fulfills the halachic criterion of death, even if the heart continues to beat from artificial respiration. Feinstein compared this to a mishna that deems a decapitated animal as dead, even though it continues to spasm (Oholot 1:6). With insufficient neurological functioning, "brain-stem death" equals physiological decapitation. The Chief Rabbinate of Israel (1987) subsequently endorsed this position, and like Feinstein, called standard and
non-experimental organ transplants a great mitzva. The Conservative and Reform movements also encourage organ donation. A large number of decisors, including Rabbi Shmuel Wosner (Shevet Halevi 8:86) and Rabbi Eliezer Waldenburg (Tzitz Eliezer 10:25), however, oppose the "brain-stem death" criterion. They contend that the Gemara used respiration as the criterion for death only in cases when there were no other signs of life. Yet if the heart continues to function, the person is halachically alive, and removing his organs constitutes nothing less than murder. They further cited a responsum of Rabbi Shalom Schwardon (Poland, 1835-1911), who asserted that any signs of life override the cessation of respiration (Maharsham 6:124). One should settle in advance matters regarding life-and-death decisions, including signing an organ donor card, in careful consultation with family members and competent rabbinic authorities. While I myself am a strong advocate of the "brain-stem death" criteria and organ donation, I encourage everyone to find out more information about this sensitive and important topic. One good resource is the Halachic Organ Donor Society, www.hods.org. The writer, editor of TraditionOnline.org, teaches at Yeshivat Hakotel and is pursuing a doctorate in Jewish philosophy at the Hebrew University.