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A year ago today was a beautiful summer day. My aunt Paula eagerly hopped on to the back of her boyfriend's Harley. As they rode through Westport, my aunt blissfully took in the sun rays with no thought whatsoever that this would be the last time she would walk for months. On Reed Road, at approximately 2:00 p.m., a driver carelessly backed out of her driveway without stopping for my aunt and her boyfriend. Her boyfriend quickly veered the motorcycle to avoid a collision, and aunt Paula flew off. In an instant, her life was completely changed. Whether it was us, a loved one, or an acquaintance involved in an accident, we are all aware of the long-term effects that such incidents can have on one's mental and physical wellbeing. Thankfully, rapidly evolving technological and medical advancements have the potential to foster a society where accidents such as my aunts are avoidable and recoveries such as hers are accelerated.

Many new vehicles are equipped with safety features that have the potential to prevent injuries and fatalities in automobile accidents. The most crucial safety features include automatic emergency brakes, rearview cameras, and lane departure warnings. Some of these could be further developed to ensure the utmost safety when operating a vehicle. For example, I believe automatic emergency braking systems and rearview cameras could be collectively improved to include sensors and cameras that detect objects approaching from the sides of a vehicle. A braking system developed in this way could prove crucial in decreasing the number of accidents that occur at intersections and when backing or pulling out onto a street. Additionally, lane departure warning and lane centering assist could prevent many accidents, especially fatal head-on collisions and those that occur when shifting lanes at high speeds on a highway. Even simpler technological features, such as high-intensity discharge lights and tire pressure monitor sensors, can make a huge difference in terms of the safety of a vehicle. These technologies ensure better vision when driving at night and the detection of a flat tire before an accident or blowout occurs.

In the event that an accident cannot be prevented, it is imperative that medical advancements accelerate the recovery from injuries and alleviate the suffering of a victim. One of the most fascinating advancements that I believe holds great potential in the medical field is personalized medicine. With induced pluripotent stem cells from the skin or the blood, it is possible to develop cells from any germ layer, and thus whichever type of cell needs to be injected into a patient's injury site. These reprogrammed cells have the potential to do phenomenal things, from filling in bone lesions to repairing severe spinal cord injuries. Evidently, innovations in both technology and medicine offer a bright outlook on the future of accidents and injury recovery. Despite from the human element involved in accidents, such advancements will undoubtedly aid in the betterment of the well-being of individuals worldwide.