



Synopsis of “Our Cells, Our Selves”

In *Our Cells, Our Selves—Eating and Being from the Depths of the Ocean to Inside the Human Body*, you are invited to a science bedtime story with 7-year-old Sylvie to discover the wonders of the immune system and what it means to be diabetic.

Diabetes is a common disease of the immune system that affects old and young people around the world, a condition that modern medicine can help but cannot cure. The human immune system is not one organ with a simple function. It is made of special cells and tissues that must continuously work together on the hard task of patrolling the entire body, distinguishing cells and particles that may be harmful from those that belong to the body. Juvenile diabetes is a rare mistake wherein the body attacks its insulin-producing cells, thinking that they pose a threat. Regenerative medicine studies the biology of the body and its stem cells to search for a cure to diabetes by replacing the destroyed cells with new cells from the body of the patient.

The story takes us back millions of years to the primitive ocean, to explore early life and discover its most basic needs: the need for food or energy, and the need for protection from the environment. These needs give rise to the most fundamental processes in our bodies: metabolism and the immune system.

Take a journey with a few familiar—and some very unfamiliar—organisms to learn how these mechanisms evolved side by side and how more complex beings like the human species came into existence. Then, travel through the human body to learn how the same principles are at work in the human immune system and how regenerative medicine works with the body’s natural processes.