RESEARCH HIGHLIGHTS

In the news

THE AWARDS SEASON

This autumn saw recognition of the crucial contributions that basic research makes to human health, with the announcements of the 2010 Albert Lasker Basic Medical Research Award and Nobel Prize in Physiology or Medicine.

Douglas Coleman (The Jackson Laboratory, Bar Harbor, Maine, USA) and Jeffrey Friedman (The Rockefeller University, New York, USA) share the Lasker award for their discovery of the leptin hormone as a key regulator of appetite and body weight. Coleman's studies in the 1960s characterized mutant mice that were no longer able to regulate appetite and provided the initial concept that blood-borne signals are important for weight control. Friedman's work in the 1990s then led to the identification of the genes responsible and of direct roles for leptin and its receptor in the control of appetite. Together, these studies "fostered an explosion in our knowledge about how the body manages hunger and weight control", wrote Evelyn Strauss (The Lasker Foundation). They also provided the foundations of molecular research into obesity, a key risk factor for diabetes.

The Lasker award has often preceded recognition by the Nobel Foundation. Indeed, this year, the Nobel Prize in Physiology or Medicine has been awarded to the British scientist Robert G. Edwards (University of Cambridge, UK) for the development of in vitro fertilization (IVF), for which he also received the Lasker award in 2001. His work from the 1950s onwards showed that human eggs can be fertilized by sperm outside the body and, together with Patrick Steptoe (deceased), he refined this technique to ultimately allow the birth of the world's first 'test-tube baby', Louise Brown, in 1978. "The pair faced numerous challenges in their quest, including opposition from churches and governments, as well as scepticism from scientific colleagues", wrote Michelle Roberts (BBC News, 4 Oct 2010). It was their perseverance that allowed IVF to become a reality. Alison Schuldt