Jennifer A. Doudna. Photo: UC Berkeley

Virginijus Šikšnys. Photo: Vilnius University

Emmanuelle Charpentier: Photo: Hallbauer & Fioretti (Braunschweig, Germany)

Figure captions

Figure 1: A schematic representation of the CRISPR-Cas9 system. The Cas9 enzyme (orange) cuts the DNA (blue) in the location selected by the RNA (red). Image courtesy of CARLOS CLARIVAN/SCIENCE PHOTO LIBRARY/NTB Scanpix

Figure 2: Change in appearance of a butterfly due to gene mutation induced by CRISPR-Cas9. The left panel shows the wild type, while the mutated version is on the right. From *PNAS* 114, 10701–10706 (2017).

Figure 3: Effect of two gene mutations induced by CRISPR-Cas9 on tomatoes. The left panel shows the wild type with only two locules; the centre and right panels show the results of two different gene mutations, producing 6 and 12 locules respectively. From *Nature Genetics* **47**, 784–792 (2015). Image courtesy of Macmillan Publishers Ltd