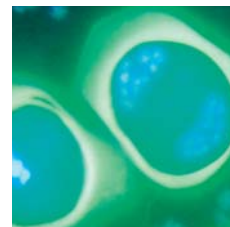


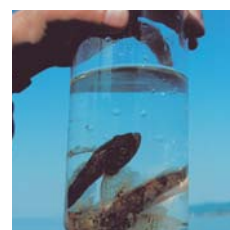
In 1797, Edward Jenner, English doctor, invented vaccination against the natural smallpox



In 1865, Gregor Mendel, Austrian abbot, formulated the basic laws of heredity



In 1906, William Bateson, English geneticist, named the science of heredity and variability "genetics"



## .01

### HYPOTHESES AND FACTS

#### The Origin and Evolution of Life on Earth

- 6 **V. Vlassov, A. Vlassov**  
Life Began with RNA
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The Diversity of Crustacea in Baikal

In 1927, Nikolay Koltsov, Russian geneticist, formulated the hypothesis on the chromosome molecular structure and reproduction



In 1953 Francis Crick and James Watson decoded the DNA (deoxyribonucleic acid) structure



1983 – scientific teams from different countries obtained the first transgenic plants

1992 – pest-resistant transgenic tobacco plants were grown under commercial conditions in China

1993–94 – agricultural products containing transgenic vegetative components have been permitted for sale

## .04

### LIBRARY Golden Shelf

- 114 **Georg Wilhelm Steller**  
Description of the City of Irkutsk and its Suburbs.  
*Translated and published by A. Elert*
- 124 **A. Panfilov**  
Moving beyond the Horizon, or a Prayer for Overcoming
- 134 **V. Hintzsche**  
The Second Kamchatka Expedition is a Heroic Scientific Act of the 18<sup>th</sup> Century

## .05

### ENCYCLOPEDIA OF EXPEDITIONS

- 136 **K. Bannikov, E. Kuznetsova**  
In the Infinity of Unrealized Senses

## .06

### CHILDREN'S PAGE

- 150 **I. Zakharov**  
This Betrayed, but Faithful, Companion of Man

1995 – the first candidate vaccine against B hepatitis based on transgenic potato plants was produced

2003 – agricultural areas occupied by genetically modified plants are up to 67 million hectares