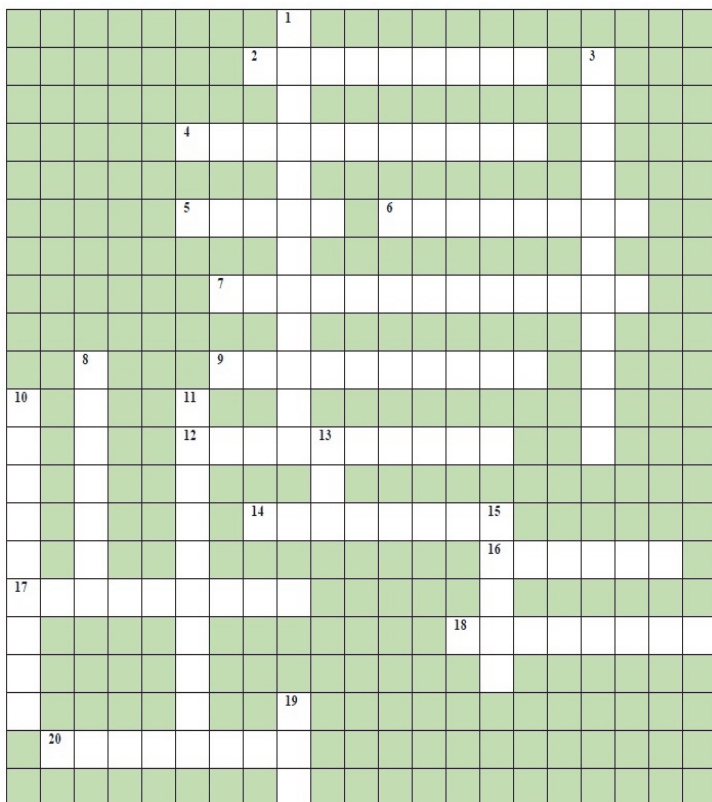


Crossword



The first part carries the answers to the crossword on cell that appeared in the October 2018 issue of *Resonance* while the second part contains a new crossword on nucleic acids.



Leena Thorat
DBT Bio-CARe Scientist
Department of Zoology
SP Pune University (formerly, the
University of Pune)
Pune 411 007, India.
Email: leenathorat@gmail.com

This crossword on Cell: The Basic Unit of Life! (answers on the following page) appeared in the October 2018 issue of *Resonance* (Vol.23, No.10, pp.1149–1150.



ANSWERS

ACROSS

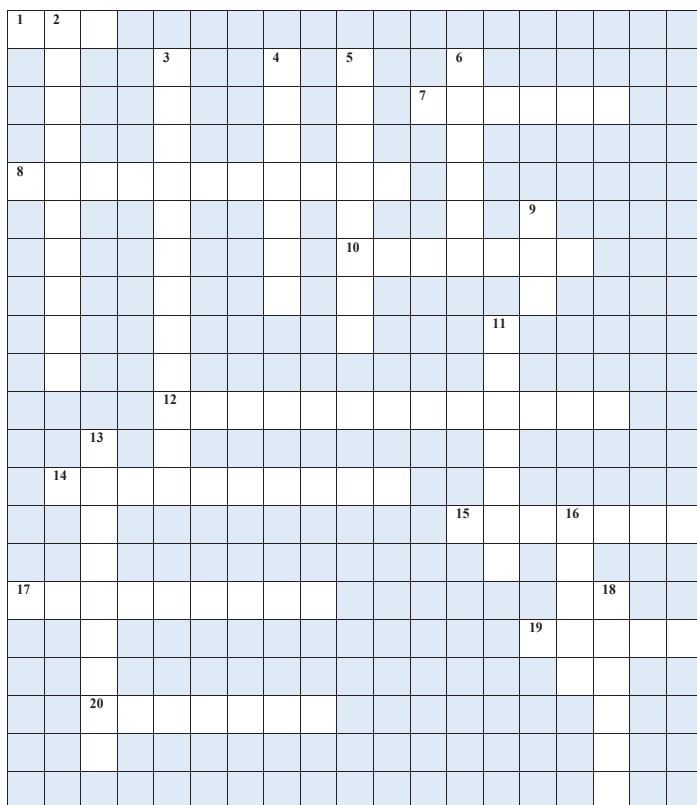
2. Ribosomes
4. Chloroplast
5. Eight
6. Nucleoid
7. Binary fission
9. Peroxisome
12. Eukaryotes
14. Flagella
16. Chitin
17. Lysosomes
18. Circular
20. Skeleton

DOWN

1. Mitochondria
3. Golgi bodies
8. Mitosis
10. Cytoplasm
11. Centrosome
13. RNA
15. Actin
19. DNA



Nucleic Acids: The Genetic Material!



Leena Thorat
DBT Bio-CARe Scientist
Department of Zoology
SP Pune University (formerly, the
University of Pune)
Pune 411 007, India.
Email: leenathorat@gmail.com

CLUES ACROSS

1. The genetic material in many viruses (3).
7. The nitrogen base that is absent in DNA but present in RNA. (6)
8. The process by which DNA can form copies of itself during cell division. (11)
10. Non-coding sequences that interrupt the coding sequences of most eukaryotic genes (7).
12. Short, newly synthesized DNA fragments called Okazaki fragments are formed during DNA replication on this (7, 6).
14. The basic unit of DNA packaging in eukaryotes, con-



sisting of a segment of DNA wound in sequence around eight histone protein cores (10).

15. The 5-carbon sugar in DNA and RNA (7).

17. Where prokaryotes (bacteria and archaea), unlike eukaryotes, store their DNA (9).

19. Unlike RNA, DNA contains this ribose sugar (5).

20. The site of replication in eukaryotes (7).

CLUES DOWN

2. A 5-carbon sugar, nitrogen base and phosphate group together form this (10).

3. The manner in which the two strands of DNA are oriented in a DNA double helix (12).

4. A chromatin protein that organizes DNA into a compact structure (7).

5. The nucleo-base with which guanine pairs in a double strand DNA molecule (8).

6. Unlike during DNA synthesis, this is not required when RNA synthesis is initiated by RNA polymerase (6).

9. A biomolecule that has a double helix shape (3).

11. Category under which adenine and guanine are grouped (7).

13. Caused by errors in DNA replication (9).

16. Number of hydrogen bonds that the GC pair is bound by (5).

18. Sets of three nucleotides on an mRNA molecule during protein synthesis (6).

Did you get them right? Watch out for the answers in the next issue!

