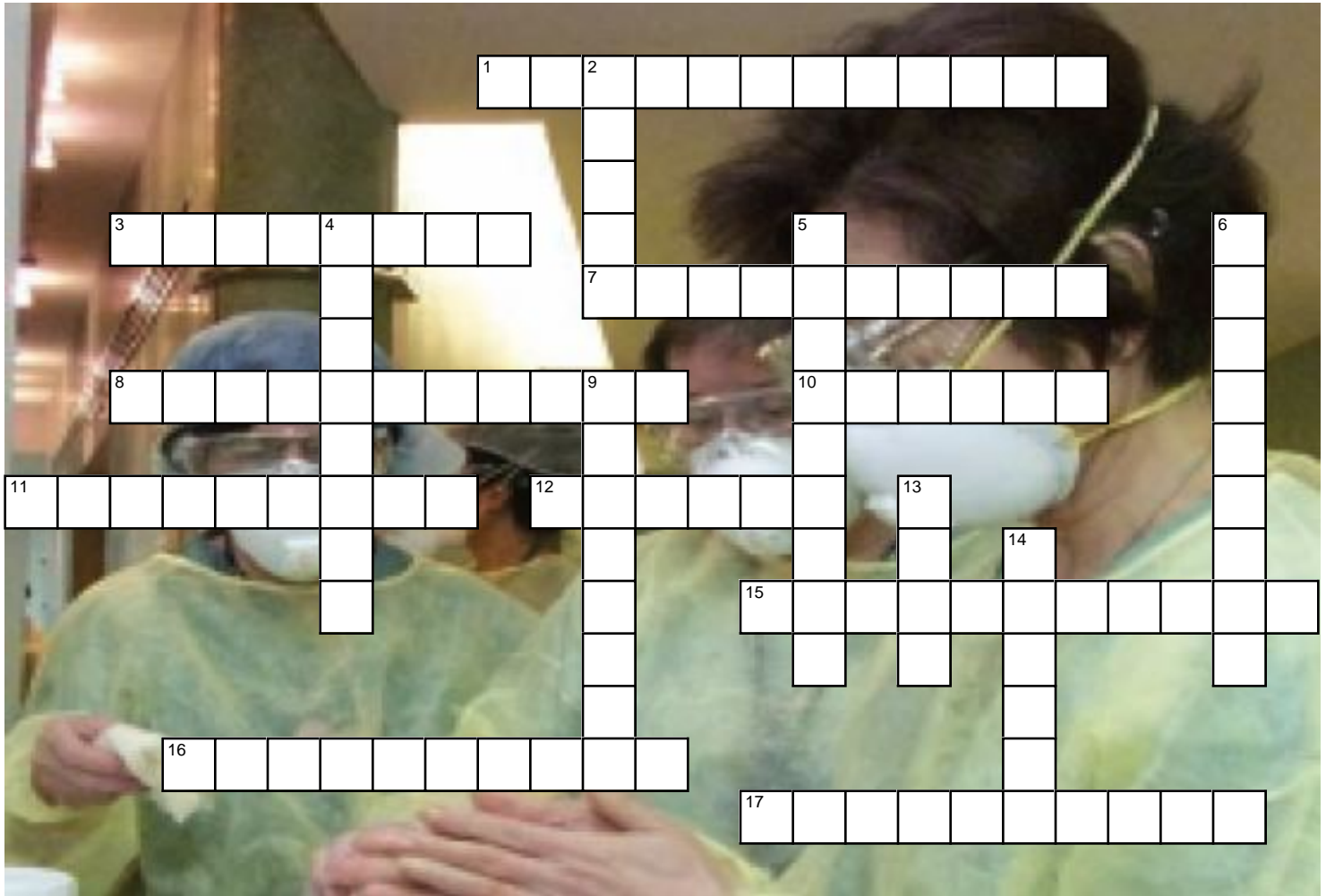


3.3 The Impact of Research in Cell Biology



Across

1. Cell biologists continue to work to solve key problems relating to _____ the cells in spinal tissue that transmit nerve impulses.
3. Some people feel that research testing on live animals is _____ and should be stopped.
7. Damage that severs the _____ results in a loss of both information from the senses and the means of instructing the muscles to move.
8. Cell biologists have changed plants to increase their _____ value.
10. _____ cells are continually reproducing but are otherwise nonfunctional.
11. Human cells are not the most plentiful cells in your body, _____ cells are.
12. _____ is a disease related to the uncontrolled and rapid reproduction of cells through cell division.
15. As early as the 1500s, public officials tried to stop the spread of infectious disease through the use of _____, which are publicly enforced periods of isolation of individuals who had or might have had certain illnesses.
16. Improved understanding of cellular processes requires improved _____ for studying cells.
17. Researchers have found ways to modify plant cells in order to improve an organism's _____ to insects and the chemicals that are used to kill weeds, rodents and bugs.

Down

2. The bobtail squid _____ because a living colony of a special type of bacteria have nestled in its light organ.
4. Some countries have banned the import of grains and other foods that have been _____ scientifically.
5. Staphylococcus aureus is a common _____ that lives in many places including on human skin and in nostrils. It can cause serious infection if it enters the body.
6. If the spinal cord is severed in the neck area all four limbs can be _____.
9. The challenge for researchers in cell biology and in related fields is to know how bacteria and viruses are _____ to create new infectious diseases.
13. Once the transmission of the respiratory disease _____ was understood, staff treating these patients were given a variety of protective gear (seen in the puzzle background photograph) and they adopted practices in order to prevent the spread of the disease.
14. Researchers have recently solved some of the mysteries related to diseases such as West Nile virus and Lyme disease, which are transmitted to humans through _____ bites.