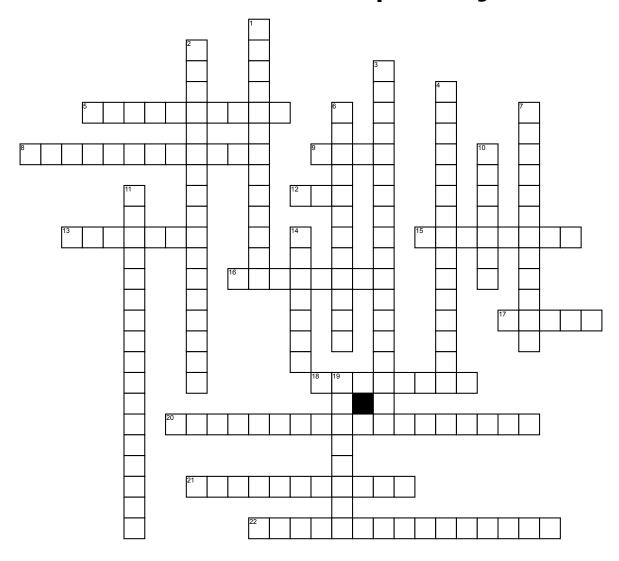
## BIOCHEM 100 | Project 5



## **Across**

- **5.** mass of cells formed in the early development of mammals, eventually forms the embryo and placenta
- **8.** exchange of genetic material between non-sister chromatids resulting in new allele combinations
- **9.** small genetic variations of a single DNA base that help scientists locate genes of concern
- **12.** process of amplifying a copy of a specific segment of DNA
- **13.** circular piece of double stranded DNA
- **15.** a gene that has the potential to cause cancer
- **16.** fragment of DNA which can be radioactively labeled to detect nucleotide sequences complementary to it

- 17. term used to describe the FBI's program to exchange and compare DNA profiles electronically in order to link crimes to each other and to known offenders
- **18.** process of removing introns from mRNAs and piecing together the remaining exons
- **20.** international research project with the goal of sequencing the entirety of the human DNA sequence
- **21.** process of reading mRNA to produce a specific amino acid chain **22.** a gene that protects a cell from

## becoming cancerous **Down**

- **1.** process of copying DNA into RNA with RNA polymerase
- 2. one copy of an affected gene must be present for traits to develop

- **3.** two copies of an affected gene must be present for traits to develop
- **4.** process where a cell changes from one type to another, more specialized type
- **6.** "DNA makes RNA and RNA makes protein"
- 7. process of inserting plasmids into bacterium
- **10.** small pieces of information on mRNA that tell how to assemble the final processed mRNA
- **11.** cleaves DNA into fragments at specific, recognizable sites
- **14.** the type of bond that link amino acids together
- **19.** region of DNA that initiates transcription of a particular gene