

iGEM Trivia Night Answers!

Round 1

1. The optimal temperature for growing E.Coli is 25°C [F -> 37]
2. Waterloo iGEM originally was a joint team with UofT in 2005 [T]
3. The human body has more human cells than microbes [F -> **other way around**]
4. The length of E.Coli is 0.5 - 2 microns [T]
5. George Church is known as the "Father of Synthetic Biology" [T]
6. The first iGEM competition was held at Harvard University in 2004 [F -> **MIT**]
7. It is illegal in Canada to perform any procedure that would identify the sex of an in vitro embryo except to prevent, diagnose or treat a sex-linked disorder or disease [T]
8. iGEM stands for the International Genetically Engineered Machine [T]
9. The first patent filed for a human-made microorganism was in April of 1963 [F -> **June 1980**]
10. E.Coli was the first living organism to have its entire genome sequenced. [F -> **Haemophilus influenzae**]

Round 2

1. Twist -> **c) company using silicon-based DNA synthesis techniques**
2. Transformation -> **n) inserting DNA into an organism**
3. Hyasynth Bio -> **k) Company using yeast to produce cannabinoids**
4. Southern blot -> **l) procedure for identifying specific sequences of DNA**
5. Miniprep -> **m) plasmid extraction**
6. Polymerase Chain Reaction -> **j) amplifying DNA through use of thermocycling and primers**
7. Monsanto -> **e) a modern agriculture company that recent joined with Bayer**
8. Sequencing -> **b) reading DNA**
9. SynBioBeta -> **h) an innovation network for people to connect in the synbio universes**
10. Nebula Genomics -> **a) company that sequences your DNA and allows you to share your information for money.**

Round 3

1. Rhizobia are bacteria known for fixing what type of gas? -> **a) Nitrogen**
2. The Biological Weapons Convention (BWC) is the first multilateral disarmament treaty initiated by which organization? -> **c) United Nations**
3. In 2017, Josiah Zayner ran into trouble with the FDA when he started selling kits that let people make what? -> **a) Glow-in-the-dark beer**
4. This term describes a string of DNA designed to be pieced together in synbio applications. -> **d) BioBricks**
5. Which of the following artificial sweeteners was developed using synthetic biology? -> **b) Steviva**
6. Which country is not an active party to the Cartagena Protocol on Biosafety? -> **a) USA**
7. The Human Genome Project was an international research project with what aim? -> **c) To determine the sequence of the entirety of human DNA**

8. What is the name of the crop that was genetically modified to contain more Vitamin A? -> **b) Golden Rice**
9. What organization claimed to have created the first fully synthetic organism? **d) J. Craig Venter Institute**
10. What California-based synthetic biology company recently secured \$400M in funding? -> **b) Zymergen**

Round 4

1. The technique used to join two strands of DNA is called ligation
2. Yeast is the common name of *Sacchromyces cerevisiae*
3. The very first national Canadian Synthetic Biology conference was held in the year **2018**
4. A microbe that can cause disease is known as a pathogen
5. Everyday person performing experiments on themselves with biological materials is known as a biohacker
6. Species from whom GFP was isolated -> **Aequorea victoria**
7. Word used to describe purified DNA as well as snow -> **sparkly, glistening**
8. Direction used to describe the RNA blot -> **Northern**
9. The first ever commercially available GM animal was the GloFish
10. The use of microbes or their enzymes for increasing efficiency of industrial processes is called biocatalysis