

## Biomanbio Interactive: Protein Race









## <u>Directions</u> – Before starting the Protein Race Interactive, complete the following:

- The tRNA molecules used in this activity are shown below. In the boxes provided under each tRNA anticodon, write what the corresponding mRNA codon.
- For the first 3 mRNA codons: Use the **mRNA codon chart** on the right to determine what amino acid the tRNA molecule would deliver to the ribosome during Translation. In the box provided, write the abbreviation (the 1<sup>st</sup> 3 letters) for the amino acid.
- For the two remaining tRNA molecules: Do the same as above but use the **mRNA codon wheel** given out with the notes.

## mRNA Codon Chart

	U	С	Α	G	
U	Phenylalanine Phenylalanine Leucine Leucine	Serine Serine Serine Serine	Tyrosine Tyrosine Stop Stop	Cysteine Cysteine <i>Stop</i> Tryptophan	U C A G
C	Leucine Leucine Leucine Leucine	Proline Proline Proline Proline	Histidine Histidine Glutamine Glutamine	Arginine Arginine Arginine Arginine	U C A G
A	Isoleucine Isoleucine Isoleucine Methionine	Threonine Threonine Threonine Threonine	Asparagine Asparagine Lysine Lysine	Serine Serine Arginine Arginine	U C A G
G	Valine Valine Valine Valine	Alanine Alanine Alanine Alanine	Aspartic acid Aspartic acid Glutamic acid Glutamic acid	Glycine Glycine Glycine Glycine	UCAG

