

Presentations about GMOs

Questions :

- 1) Where does the transgene come from ?
- 2) What's the transgene's function ?
- 3) In which organism is the transgene inserted ? Why was this organism chosen ?
- 4) What's the purpose of creating this GMO ?
- 5) Are there living organisms remaining in the final product ?
- 6) Pros and cons of this GMO ?

Subjects :

Agriculture :

- 1) Bt corn
- 2) Transgenic papaya resistant to the PRSV virus (Papaya ringspot virus)
<https://www.nature.com/news/2008/080423/full/news.2008.772.html>
- 3) Transgenic rice resistant to drought expressing *GolS2*
<https://www.sciencedaily.com/releases/2017/04/170404084436.htm>
- 4) Glyphosate-resistant corn
<http://sitn.hms.harvard.edu/flash/2015/roundup-ready-crops/>
- 5) Golden rice

Health :

- 6) Making a recombinant hepatitis B virus vaccine using microorganisms
- 7) Insulin production by bacteria or yeast
- 8) Riboflavin (vitamin B2) production by *Bacillus subtilis*
<https://patents.google.com/patent/EP1426450A1>
- 9) Human blood proteins produced by rice plants
<https://www.popsci.com/science/article/2011-11/genetically-modified-rice-yields-efficient-quantities-human-blood-protein/>
- 10) Genetically modified mosquitoes that can't transmit human diseases (malaria, zika...)
<https://medicalxpress.com/news/2018-08-genetically-mosquitoes-weapon-curbing-disease.html>

Research :

- 11) Use of transgenic mice expressing GFP in research
- 12) Optogenetics : mice expressing channelrhodopsin