Brain Computer Interfaces in Medicine

**Questions**

1. What is the main purpose of the output device used in brain computer interfaces ?
2. What is the role of a computer in a brain computer interface ?
3. When did human investigations with brain computer interfaces begin ?
4. What is the P300 ?
5. In which year did Farwell and Donchin found the way to spell words on a computer screen using the P300 speller ?
6. What are the pros and cons of a scalp EEG ?
7. What are the pros and cons of small intracortical microarrays ?
8. What are the pros and cons of ECoG-based BCIs ?
9. What do we need to consider in order to choose appropriately the signal we want to acquire ?
10. What are the 4 sequential components of a BCI ?
11. What is the controller of these components ?
12. Which kind of signal do the P300 speller use ?
13. Which domains of sciences are required in order to move the research from laboratories to patients homes ?
14. Why headsets with scalp sensors on the market are not actual BCIs ?
15. What is IntendiX ?
16. What are the problems that researchers will be confronted to in the future ?