

Biotechnology Research Seminar



In groups of 2-3, you will be researching a particular type of reproductive technology, and presenting your topic to your peers in the class.

To be produced and evaluated:

- display board, containing important information
- typed summary of the information on your board; to be submitted through TurnItIn.com
- presentation (8-10 minutes)
- reference list (4+ sources; APA citation style - attach to the back of your board)

On seminar day, you will take the role of both presenter, and audience member.

As a Presenter:

- ❖ A list of possible topics can be found at the back of this page. Only one group can present each topic.
- ❖ Summarize the main details of this technology. Information to address:

Overview of biotechnology: Describe what this biotech is all about!

- Discuss the methods that are employed in this form of biotechnology
- Describe some famous, notable, or common uses of this technology.
- What type of individual benefits from this form of biotechnology?

Pros/Cons

- What is the success rate? Quantify this, if possible.
- Discuss the pros and cons of this type of biotechnology

Ethics

- What is the Catholic Church's viewpoint on this form of biotech (if applicable)?
 - Check the *Catechism of the Catholic Church* as your primary resource!

Opinions/Predictions

- Offer your personal opinion on this form of biotechnology: do you think its benefits outweigh its costs and/or ethical implications?
- What are some potential future applications or extensions of this form of technology?

- ❖ You will present your topic twice, to two different groups of your peers. During these presentations, your peers will evaluate your presentation skills, and general knowledge.
- ❖ Following the presentation, you will receive copies of the evaluation sheets.
- ❖ Your teacher will also be evaluating your knowledge of content.

As an Audience Member:

- ❖ You will be listening to two seminars during your time as an audience member. After the presentation, you will fill out an evaluation sheet, which will be returned to the presenter (your name will be removed).
- ❖ Please be as honest as possible during your evaluation, and provide specific constructive criticism, where possible.

Date of presentation: _____

Topics

- pre-natal genetic screening
- genetic screening (non pre-natal)
- recombinant DNA technology (i.e., transgenic organisms)
- gene therapy
- in vitro fertilization
- therapeutic cloning (tissues)
- reproductive cloning (whole organisms)
- artificial insemination
- controlled (selective) breeding
- stem cell research
- designer babies
- the Human Genome Project
- cryopreservation of sperm, eggs, embryos

Suggested Resources: Use a variety of credible sources. Below are some good places to start.

- your textbook
- Scitable, by NatureEducation: <http://www.nature.com/scitable>
- Catechism of the Catholic Church

**Marking Scheme:
Presentation**

Group members: _____

Presentation	
- voice is clear and audible	0 1 2
- eye contact, minimal reading	0 1 2
- stayed within time limits	0 1 2
- all partners contributed equally	0 1 2
Display board	
- visually-appealing; good balance of text and figures	0 1 2
- presenters integrate board with presentation	0 1
Planning	
- logical sequence to presentation	0 1 2 3
Overall impression	
Poise; composure; evidence of preparation and understanding	0 1 2 3

**Marking Scheme:
Display Board**

Group members: _____

Topic: _____

Thorough overview of the technique	0	1	2	3	4	5	6
Opinions/predictions	0	1	2				
Evidence of research, preparation, understanding	0	1	2				
Easy to read; visually-appealing	0	1					
Grammar, spelling	0	1					
APA Citation	0	1	2				