



Online Ethics Center  
FOR ENGINEERING AND SCIENCE

# Unit 2 - Genomics and Synthetic Biology/Microorganisms/Biofuels

## Author(s)

Claire Palmer  
Penny Riggs  
T.J. Kasperbauer  
Jeremy Johnson  
Lauren Cifuentes  
Seung Won Park  
Jamie McQueen

## Description

This is the second unit in an extensive [Course on Genomics, Ethics and Society](#). This unit (2) deals specifically with ethical issues raised by genomics in the context of synthetic biology and microorganisms. Units 1-7 each last approximately 2 weeks, and Unit 8 contains the final case study.

## Body

## Table of Contents

1. [Unit Navigation and Essential Question](#)
2. [Background](#)
3. [Selected Issues in Depth - Genomics and Synthetic Biology/Microorganisms/Biofuels](#)
4. [Readings](#)
5. [Undergrad Student Discussion - Synthetic Biology](#)

6. [Graduate Student Discussion - Synthetic Biology](#)
7. [Case Analysis and Instructions](#)
8. [Case - Artemisinin](#)
9. [Recommended Readings and Online Resources](#)
10. [Resources](#)

## **Notes**

Authors: Clare Palmer, Penny Riggs, T.J.Kasperbauer, Jeremy Johnson at Texas A&M University, College Station and Lauren Cifuentes, Seung Won Park and Jaime McQueen at Texas A&M University - Corpus Christi.

## **Rights**

Use of Materials on the OEC

## **Resource Type**

Educational Activity Description

Instructor Materials

## **Parent Collection**

Genomics, Ethics and Society Course

## **Topics**

Animal Use

Controversies

Dual Use Research

Emerging Technologies

Environmental Justice

Governance

Lab and Workplace Safety

Privacy and Surveillance

Public Health and Safety

Responsible Innovation

Risk

Safety

Security

Social Justice

Social Responsibility

Sustainability

**Discipline(s)**

Genetics and Genomics

Life and Environmental Sciences

Synthetic Biology