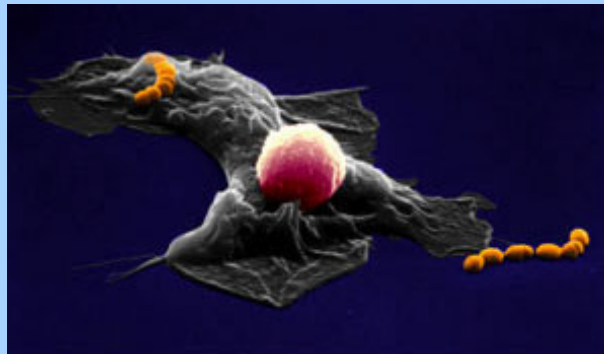


# SimGerm 1.1

*A conceptual captology design by  
John Wong*



## Design Challenge

**To take an existing product, SimGerm 1.0, and improve it by persuading novice biology students to go through the immune system help pages.**

***Time limit: 180 minutes***

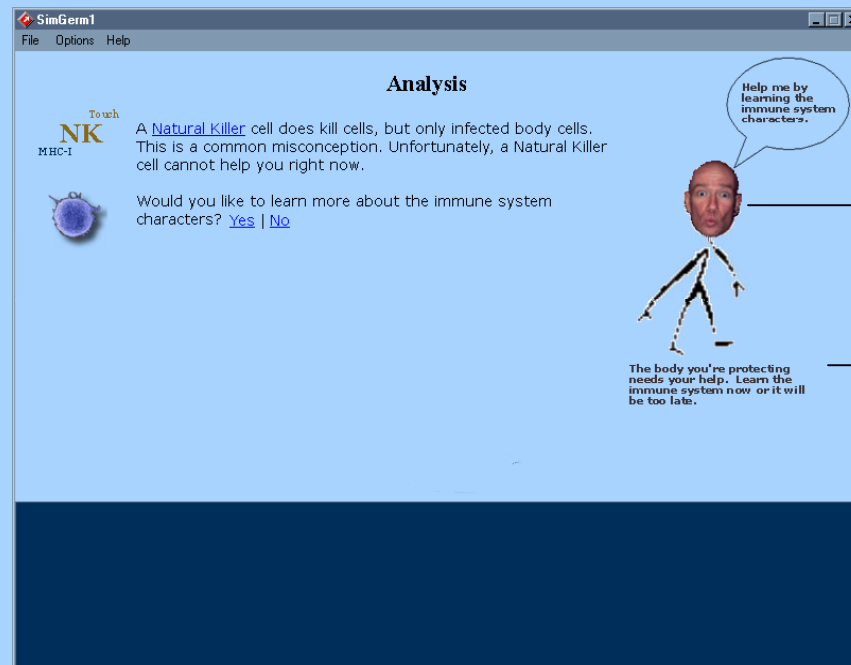


# SimGerm 1.1

## Persuasive Purpose

To motivate novice biology students to go through the immune system help pages.

## Industrial Design



→ A plea for help to instill altruism.

→ An image uploaded by the player to give him/her more control and to personalize the game.

→ A second plea for help to instill altruism.



# User Description

- High school biology students
- Having some difficulty learning the immune system
- One of their friends has already graduated from another high school.
- All going to a four-year university in different parts of the country.
- Uses the computer frequently.
- Enjoy games.



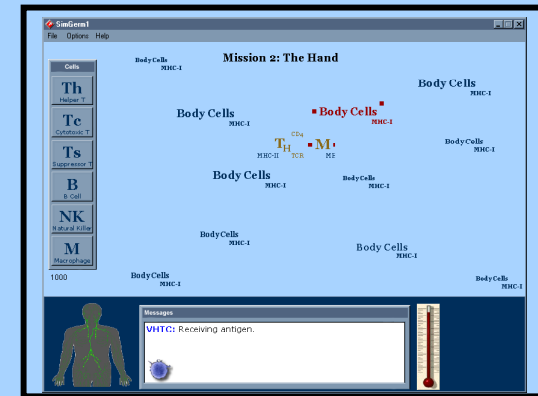
# A Novice Learns



The program asks Jill to upload an image of either a friend, family member, herself, or a famous person she idolizes. She decides to upload her boyfriend's picture. The program also requests her name and the name of the person's image. She types in Jill and Bob.



Jill begins using SimGerm 1.0. After completing the first mission, which was really easy, she quickly realizes that her memory of the immune system has deteriorated.



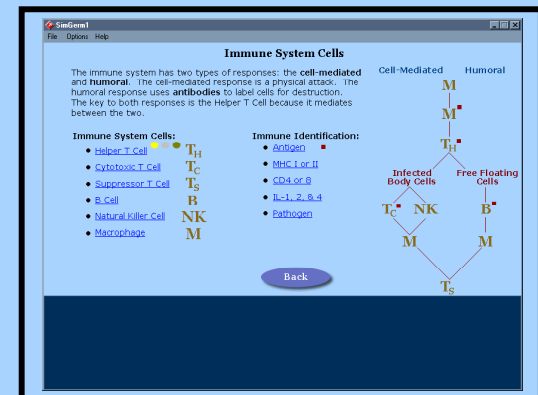
Mission 2 proves to be much harder and she continually chooses the wrong cell. Finally, the program takes her to an analysis page.



The program has analyzed that she's been making the same mistake over and over. As a result, she's been taken to an analysis page detailing her mistake and tries to persuade her to go through the help pages. Jill inspects more closely.



The image of Bob, her boyfriend, has asked her for her help by going through the immune system help pages because his health depends on it. Jill wants to help her sweetheart.

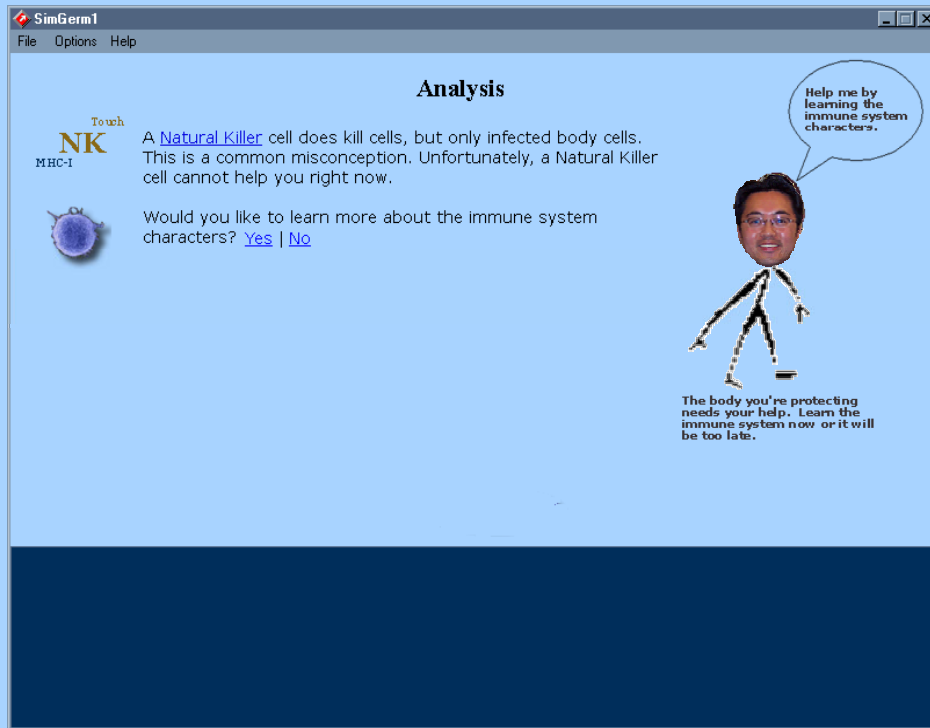


She goes through the immune system help pages and as she goes through them and answers questions correctly, she collects coins. These coins can be used to purchase strategies, new pieces of information, and mystery items for the game.



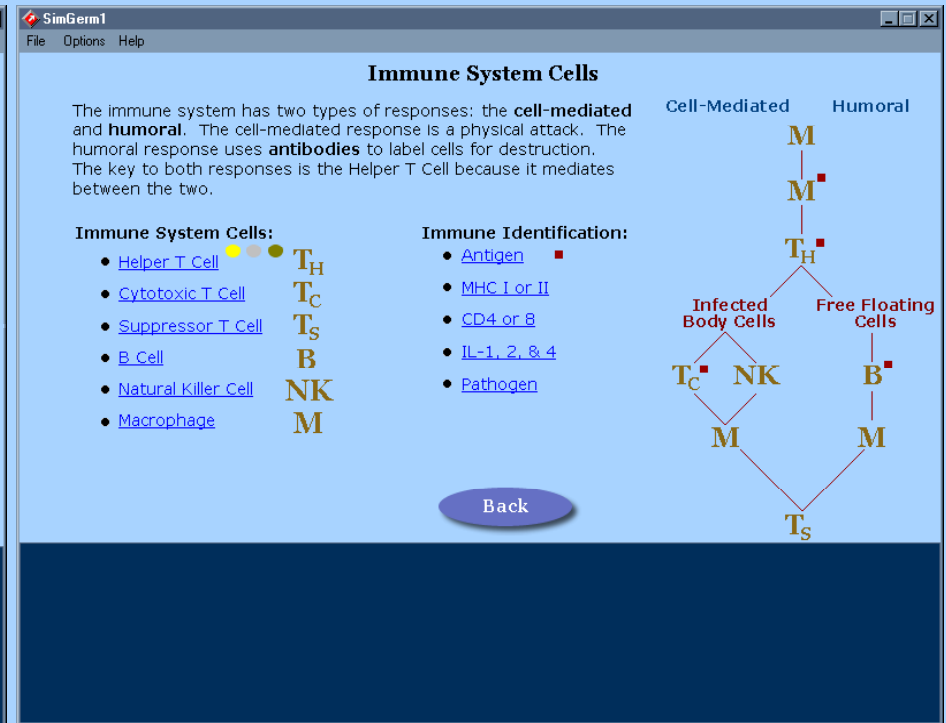
# Prototype of SimGerm 1.1

## Personalized Image



- The player is given control of what image to upload.
- This provides more personalization.
- A plea for help from a person you know will increase the compliance likelihood.

## Collecting Coins



- The player receives rewards in the form of coins.
- There are three coins that specialize in certain areas:
  - Game Tips
  - Immune System Facts
  - Mystery
- Players receive more Immune System Fact coins.
- The Mystery is either Game Tips, Immune System Facts, or both.



# Features/Functionality

## Personalized Images

- Player uploads facial images of themselves, family members, friends, famous people, or others.
- The uploaded image will plea for help if needed and request that the player go through the help pages.
- Allows the player to control what image is used.

## Collecting Coins

- The player is rewarded by collecting coins. The player can save up and purchase game tips, immune system facts, or mystery items.
- The player receives more immune system coins so that he/she can purchase more tips more frequently.



# Theoretical Justifications

- Altruism, or helping another person increases the likelihood that a person will comply.
- Coupled with a person you like and these two compliance strategies (altruism and liking) become more powerful.
- Malone and Lepper argue that “games give their players a powerful sense of control.” Having the ability to control who you’re helping adds a persuasive element.
- The uploaded image can personalize and strengthen the emotional bond between the player and the simulation. Especially because the player is supposed to protect the person’s body.
- Rewards are provided in the form of coins.



# Shortcomings of Design

- Players may be more engaged with the upload feature than the simulation.
- The image may not have the authority or personal connection to warrant help from the player. For example, the player wants the person to suffer.
- Too many things happening (simulation, help pages, etc.)
- Collecting coins is out of place with an immune system simulation.
- The tips that players receive must be good or they will not continue with their coin collecting.
- Players may be more engaged with collecting coins and not with the simulation.





# Expansion - What else is possible?

- **Other form factors or ID possibilities**

- Instead of uploaded image, it could use the existing Helper T Cell Agent.
- Digital Pet – As the person goes through the immune system help pages it takes care of the Pet.
- Instead of coins, it could be keys that unlock certain chests. If a chest is unique and requires a special key then it becomes more valuable (Cialdini's scarcity rule).
- Moreover, certain coins can be rare adding to their value.

- **Other features and interactions**

- The player chooses the type of coin he or she wants.
- The player is rewarded just by going through the help pages, regardless of coins.



# Next Steps in Design Process

- User test the concept with high school students.
- Investigate what motivates high school students in general. This could be done via observations, interviews, and/or focus groups.
- Take the data and user test specific strategies independently or together to identify the most powerful strategies.
- Modify concept based on feedback and create prototype.

