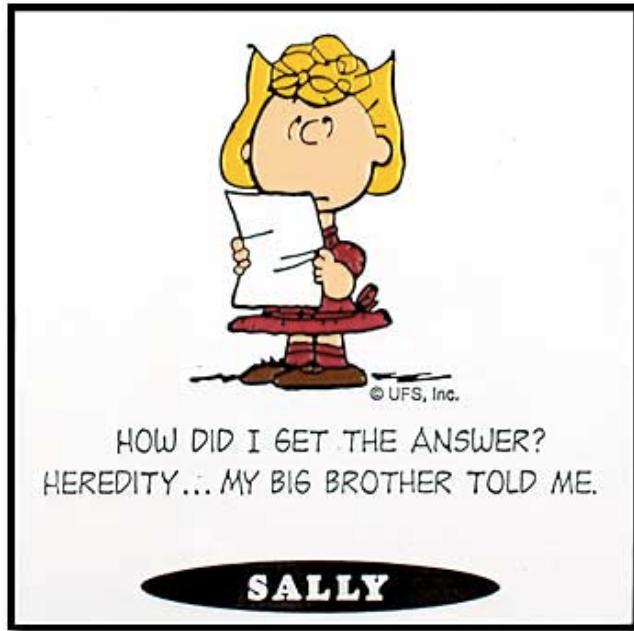


# Course Evaluations

What will you remember most  
from BE100?

# Final Exam Overview and Logistics



# Six parts

- Code of ethics final draft (10pts)
- Case Study 1 (5pts)
- Case Study 2 (5pts)
- Final Reflection (5pts)
- Self-assigned grade (5pts)
- Code of ethics 2<sup>nd</sup> draft (0pts, -5pt if missing)

# Instructions

- YOU MUST USE TEMPLATE.
- Resave the file with your SID in the file name.
- The final submission must be ONE pdf file.
- This SAME file must submitted THREE times, one time each into the three duplicate final exam assignments on bCourses.
- Do not change the order of the various components of the exam.
- Enter your SID ONLY into the header. NO names.

*Submissions that do not follow the instructions will have an automatic 5 point deduction!!!*

Final Exam is due  
Sunday, December 11, 11:59pm!

# \*How to study for your other finals

- Practice testing
  - Take practice tests from textbooks, etc...
  - Self-testing (retrieval practice)
- Distributed practice
  - Do studying at intervals
    - Can be within the same study session
    - Can be across multiple study sessions

# Retrieval Practice

- Most effective way to learn!!
  - Review material
  - Put materials away, take out a blank paper
  - Practice retrieval: recall and write down as much as possible
  - Review material, what was missing or incorrect?
  - Practice retrieval
  - Repeat

# Code of Ethics Final Draft Guidelines

Which examples are the most descriptive, detailed, and interesting?

# #1: BE SPECIFIC in your intro

People, memories or experiences, places, books,  
cultures

Don't just name them but HOW did they impact  
your code?

# Intro: good but needs specifics

There are countless people in my life who have helped to shape my perspective of the world. Growing up, my school teachers taught me about the rules of orderly classroom conduct, respect, and communication. My peers and friends taught me about trust and compassion. My parents taught me right from wrong, and how to protect myself in the world. Colleagues and mentors throughout college have opened my eyes to the workings of the academic world, and have strongly influenced my ethical values within the sciences. Every day I learn more about the world, and with each discussion I have with my family, peers, or mentors, I'm changing the way that I value and see the world. As I go through life every day, I will take my new experiences and add onto my code of ethics and make modifications as needed.

# Intro: good but I want even more

My parents brought me and my sister to this country with the intentions of giving us a better future. They gave up the comfort of their mother land, proximity to family and their community, and a generally easier life to equip the two of us with the skills to be successful. Consequently, they both worked extremely hard to give us a good life. They instilled upon us the importance of a good education and the idea that in order to achieve anything you need to work for it.

In my 21 years of life I have somehow managed to make it to my senior year of college at UC Berkeley. At UC Berkeley, I was able to reinforce the lessons I've learned from my family and look outwardly to learn about the world and issues in social justice. I was made aware of different identities and how they intersect as well the impact of my actions.

# Intro: great! Specific people, memories

The origin for my belief came from my father when I was a child. My father is an Electronic Engineer and I used to enjoy helping him creating all those amazing and dedicated mechanic devices. And that's what made me determined to choose Engineer as my career. But not only that, he also taught me a lot other than how to build those devices. I can remember him telling me that the most important thing for an Engineer is not to create something that has amazing performance but to is build something safe. He also told me a lot about how to become an ethical Engineer and to become a righteous person in my life. After I came to college and I have taken some courses. I learnt that technology is so powerful that it could do so many good to mankind but could also be very dangerous if not handled with care. That's what made up my mind to learn more about ethnic codes and develop my own code of Ethics so I could become a better engineer and a better person

## #2: BE SPECIFIC in your canons

Still lots of #lifegoals out there, I know it's hard but reframe them as ethical statements or dilemmas.

# Canon – needs more specificity

- “Respect”
- “I will help others in times of need.”

# Canon – good specificity

- “I will direct my research towards the promotion of the greater good, even at the expense of others”
- “I will be open-minded and listen to other’s viewpoints, even if I disagree with them so they may retain their individual autonomies and beliefs.”
- “I will live life with my hand facing downwards, not upwards, to contribute to the greater good of society.”



## #3: BE SPECIFIC in your examples

There's great stuff in your codes, but many are either missing examples, have very 'easy' examples, or have impersonal examples.

# Explanation – good, includes example, but very general

- Always remember that there are people better than you. Never forget this when you feel like talking down to others. An example this would be relevant to would be when searching for a job and finally getting the job: no matter how prestigious or selective your job/internship is, there will always be people with a better and worse job. Even your friends will have better or worse ones than you.

# Explanation – good, has personal example but not nuanced

It is important to treat others how you wish to be treated. By treating all people fair and equally, they will in turn treat you likewise. Being a team player includes actions such as listening to others and being open-minded to any opinions that they have. This also includes not taking advantage of others. For example, if everyone on the same team as me has a certain opinion and would like me to change, I would try and understand their point of view instead of being stubborn about maintaining my opinion

# Explanation – good, has example but not a personal dilemma

As I move through college and begin considering my career goals, one of my priorities should be finding a company or industry that has widespread positive impact. I strongly believe that professional satisfaction is highly correlated with knowing that my job can make a difference in people's daily lives. Therefore, instead of searching only for high pay or a respected position, I should search for ethical fulfillment and corporate transparency.

For example, though artificial intelligence projects and medical research can be highly controversial, I believe that it is ethical to help make progress in these fields because they can save lives and enable people to accomplish more. Companies that are cognizant of their environmental and economic impacts on the communities around them, such as gentrification, can also be considered ethical.

# Explanation – good, has examples including a personal one

"I believe everyone has the right to choose which decision they should make. Although I respect my parents, friends and others' opinions, I will never be what they want me to be or do what they think I should do, unless I want it myself. I always follow the teaching of Confucius: "I want you to be everything that's you, deep at the center of your being." That's why I will not always follow the majority's opinion if I myself don't agree with it. We do know that the majority's opinion is not always necessarily true. Furthermore, I also respect others' decisions because I can't force other to follow me. But I expect everyone is responsible for their own decisions, as well as consider the maximum benefits they could make with their decisions for public, not just for their own.

For example, if I am a doctor and there is a patient who is suffering greatly day by day because of some terminal illness request the discontinuance of receiving treatments to come back home even though the patient may die sooner, I will respect his/her decision and do as he/she wishes."

# Review

Bioengineering 100  
Fall 2016

# Goals for this class

**"I WANT TO LEARN HOW TO BE BOTH ETHICAL AND SUCCESSFUL. IN CERTAIN WAYS, I BELIEVE THAT THESE TWO ARE CONTRADICTORY AND I WOULD LIKE TO FIND OUT IF THEY ARE AND HOW I CAN ACHIEVE BOTH."**

**"I ALSO WANT TO DEVELOP ARGUMENTATIVE SKILLS AND GAIN THE ABILITY TO DISCUSS TOPICS WITH PEOPLE WHO HAVE DIFFERING OPINIONS."**

**"BY TAKING THIS COURSE, I REALLY HOPE TO DEVELOP MY OWN, CONCRETE MORAL STANDARDS THAT I KNOW DEFINE MY PERSONALITY AS WELL AS LIVE BY."**

# Final Reflection

Re-read your reflections from the class, especially your initial course goals from your very first reflection. Did you meet your goals? Did they change over the semester?

**"I FELT LIKE I WAS BEING  
CHEATED AND THAT IT WAS VERY  
UNFAIR."**



**"I WAS NOT FULLY MOTIVATED IN BUILDING THE MOBILE BUT AFTER I REALIZED WE ARE PRIVILEGED, I SUDDENLY FELT LUCKY AND APPRECIATE THE OPPORTUNITY I GOT.**

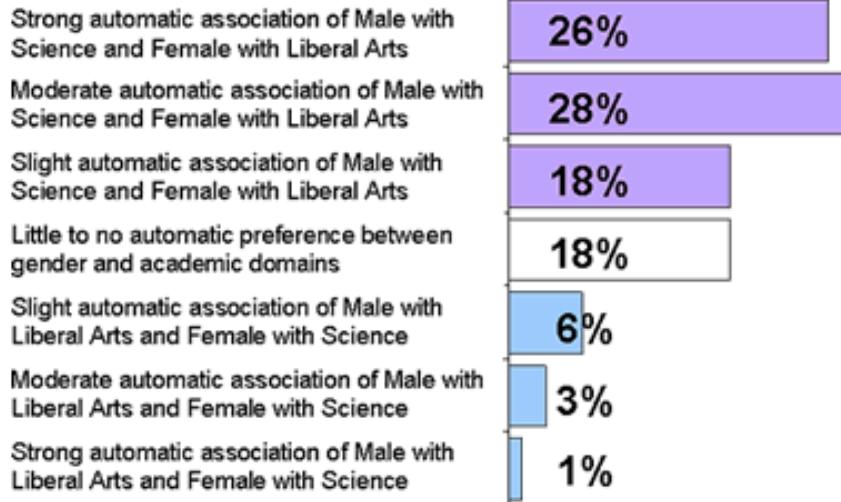
# UCB Code of Conduct

**“I WAS SURPRISED BY THE PART  
ABOUT DISTURBING THE PEACE  
BECAUSE BERKELEY IS NOTORIOUS  
FOR ITS LOUD AND  
DEMONSTRATIVE PROTESTS.”**

**“I AM DEFINITELY SURPRISED AT  
HOW IN DEPTH THE CODE OF  
CONDUCT GOES INTO”**

# Gender-Science IAT

Percent of web respondents with each score



[Click for detailed summary](#)

**“IT MADE ME FEEL SAD THAT I HAVE IMPLICIT BIASES. I WASN’T SURPRISED BY THE COLLECTIVE DISTRIBUTION AT ALL, AND MY RESULT FELL IN THE MOST POPULAR BUCKET OF THE DISTRIBUTION.”**

**“I TOOK THE GENDER-SCIENCE BIAS, AND MY RESULT WAS NO PREFERENCE. SINCE I AM A FEMALE IN A STEM MAJOR, I WAS RELIEVED THAT I HAD NO IMPLICIT BIAS IN THIS REGARD”**

# Implicit bias

There is a very specific reason why  
only SIDs are included on your final  
exam!!!!

# Organ Donation

**“I WOULD DEFINITELY DONATE A KIDNEY OR A PART OF MY LIVER IN EXCHANGE FOR MONEY BECAUSE I NEED TO PAY FOR COLLEGE TUITION SOMEHOW.”**

**“I HAVE A SLIGHT FEAR THAT IF I WERE IN A DIRE SITUATION AND I AM LISTED AS AN ORGAN DONOR THEN DOCTORS WOULD NOT TRY AS HARD TO KEEP ME ALIVE.”**

**“WHO AM I TO SELL THE BODY PARTS THAT WERE CREATED BY THE HOLY GOD?”**

# **“Tell Me I’m Fat”**

**“I CERTAINLY GOT A LOT MORE ATTENTION AFTER I LOST THE WEIGHT, BUT FELT THAT THIS ATTENTION WAS COMING FOR THE WRONG REASONS.”**

**“ALTHOUGH IT MIGHT BE DIFFERENT FOR DIFFERENT PEOPLE, I STILL BELIEVE THAT OBESITY CAN BE CONTROLLED THROUGH INDIVIDUALS’ OWN EFFORTS AND SELF-CONTROLS.”**

**“BEING FAT IS NOT A PERMANENT STATE OF BEING; IT IS IN MY OPINION A PERMANENT STATE OF THINKING. IF YOU ARE HEALTHY, THEN BEING FAT IS OF NO RELEVANCE.”**

# GM Mosquitos

**“AT THE END OF THE DAY, I AM IN FAVOR OF ERADICATING EVERY SINGLE MOSQUITO ON THE FACE OF MY PLANET.”**

**“I BELIEVE USING GM MOSQUITOS HAS A BIG REWARD FOR A LITTLE COST.”**

**“IF I LIVED IN MONROE COUNTY, FLORIDA, I'D MOVE.”**

**"[T]HE ONLY THING I HATE MORE THAN BEING BITTEN BY MOSQUITOES IS BEING FATALLY INFECTED BY GENETICALLY MODIFIED ONES."**

# **hESC and iPS research**

**"...THE BOUNDARIES WILL CHANGE  
OVER TIME, AND THAT THE  
BOUNDARIES WILL ALWAYS HAVE  
BLURRINESS ON THE EDGE."**

**"I DON'T THINK THE GOVERNMENT  
HAS THE CREDENTIALS TO DEAL  
WITH SUCH TOPICS."**

**"IT IS SAD AS A MEMBER OF THE SCIENTIFIC  
COMMUNITY TO SEE SO MANY OF MY PEERS NOT  
CARE. I UNDERSTAND IT'S IMPORTANT TO THINK  
ABOUT CLASSES AND YOUR RESEARCH BECAUSE  
WE CAN GAIN THE MOST AS A NATION THROUGH A  
PROPER EDUCATION. BUT IT WOULD BE STUPID TO  
THINK THAT THIS POLITICS WON'T AFFECT YOU."**

# Surrogacy

**“I BELIEVE THAT BOTH COMMERCIAL AND ALTRUISTIC SURROGACY ARE ETHICAL IF AND ONLY IF THE CONSENT OF ALL PARTIES ARE GIVEN.”**

**“I DO NOT THINK SURROGACY IS A FORM OF EXPLOITATION, AND IT IS AN ACCEPTABLE PATH TO FINANCIAL SOLVENCY FOR THE SURROGATE. POVERTY IN THOSE COUNTRIES IS A MAJOR PROBLEM. SURROGACY IS ESSENTIALLY A TYPE OF OCCUPATION...”**

**“I FEEL THAT SURROGACY IS AN EXPLOITATION OF THE WOMEN’S BODY. TO THEM, THEY FEEL EMPOWERED TO MAKE THEIR OWN DECISIONS AND SEEK A BETTER, MORE PROSPEROUS FUTURE FOR THEIR FAMILIES.”**

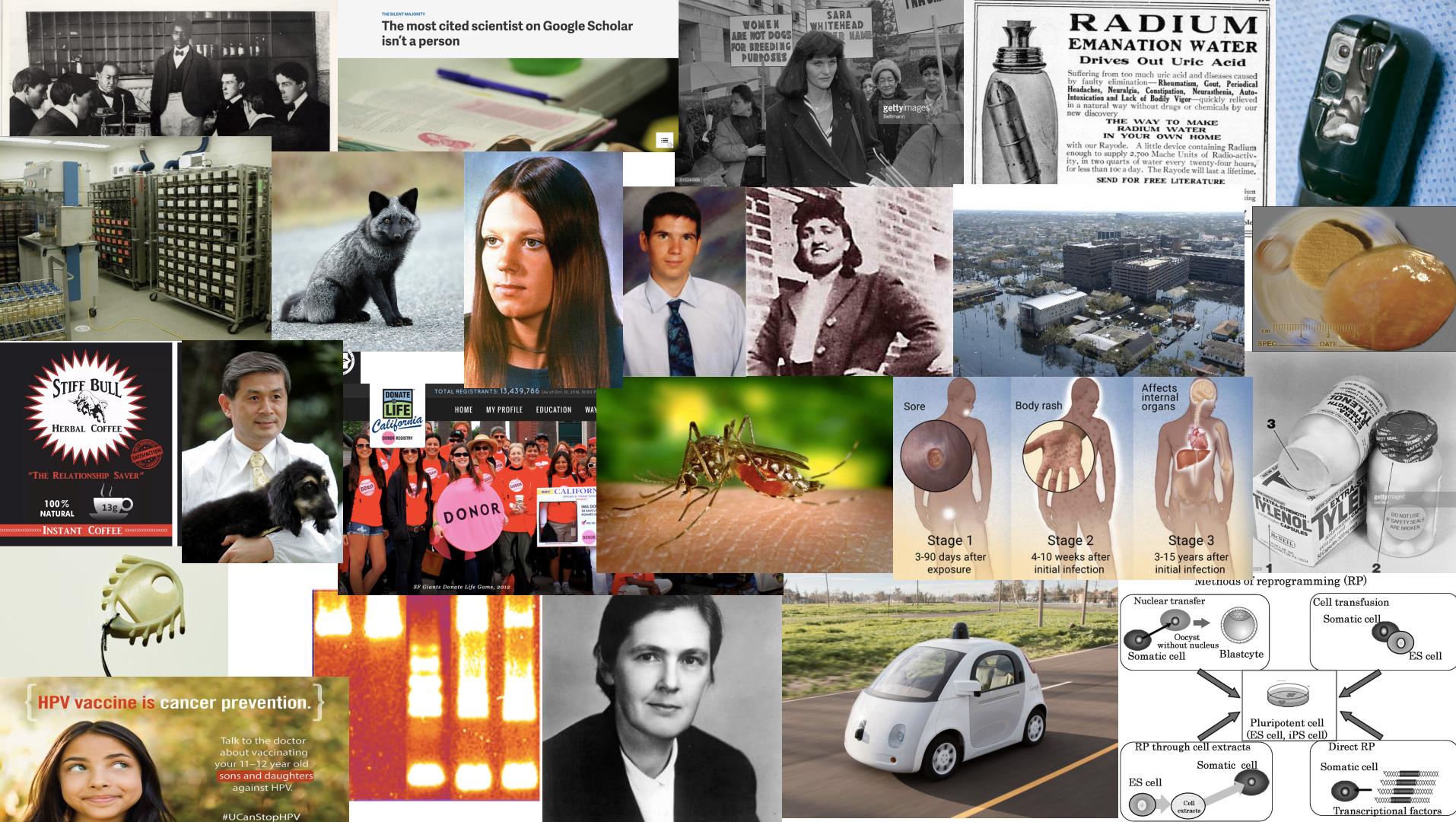
# End of Life

**“I THINK WE SHOULD NOT EXTEND LIFE FOR THE SAKE OF SOMEONE’S BEING ALIVE, BUT FOR THEIR LIVING.”**

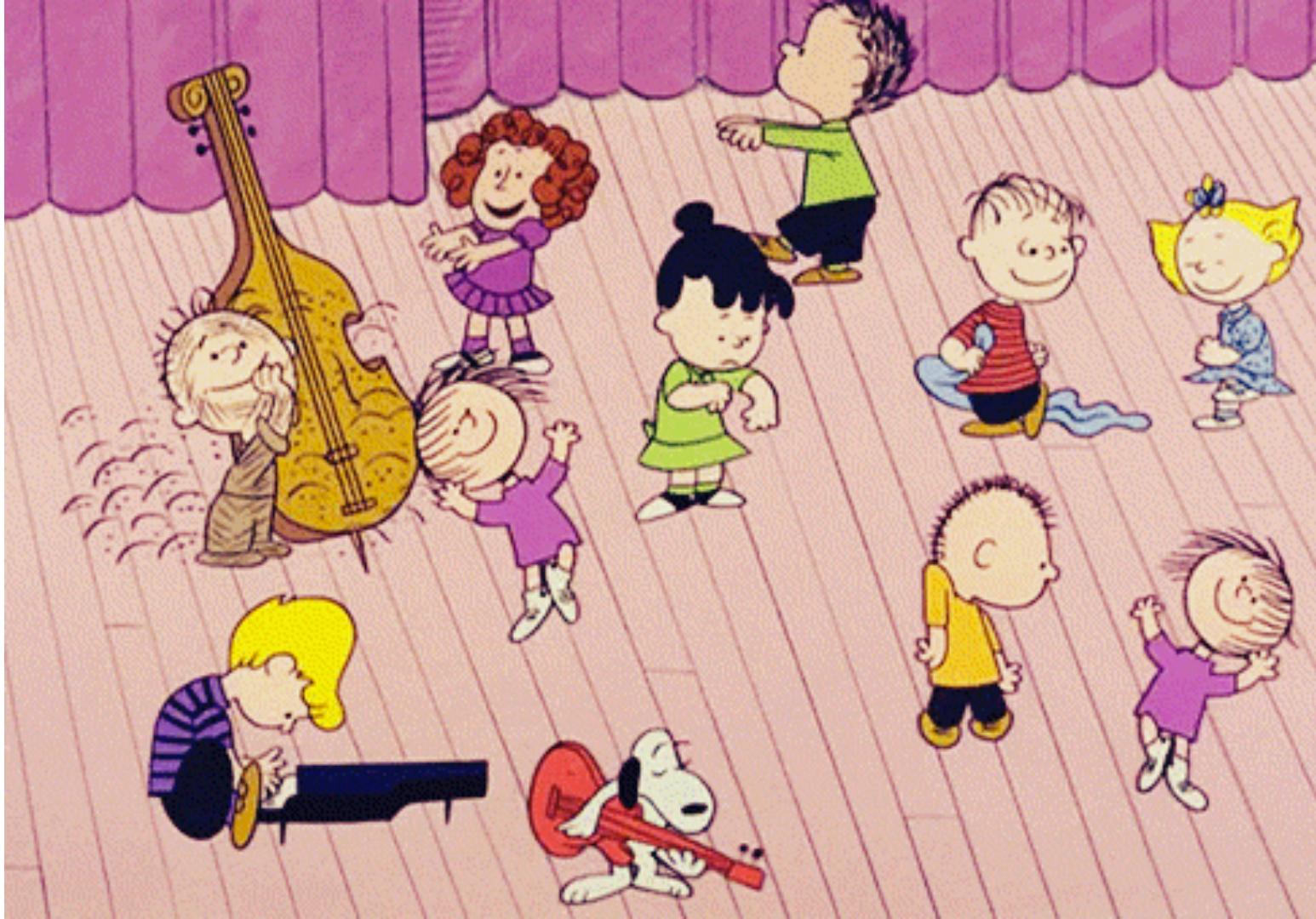
**“WE APPROACH DEATH WITH SUCH DOOM AND GLOOM; PERHAPS WE SHOULD BE MORE HONEST AND HOPEFUL ABOUT IT, AS DIFFICULT AS THAT SEEMS.”**

**“FOR ME, DEATH JUST STRESSES THE IMPORTANCE OF LIFE, AND THE PREMATURE DEATH OF MY FRIEND MAKES ME VALUE LIFE THAT MUCH MORE.”**

Do we have time for pictionary?



THANK  
YOU for  
an  
awesome  
semester!  
!!





# UC Berkeley Principles of Community

These principles of community for the University of California, Berkeley, are rooted in our mission of teaching, research and public service. They reflect our passion for critical inquiry, debate, discovery and innovation, and our deep commitment to contributing to a better world. Every member of the UC Berkeley community has a role in sustaining a safe, caring and humane environment in which these values can thrive.

- We place honesty and integrity in our teaching, learning, research and administration at the highest level.
- We recognize the intrinsic relationship between diversity and excellence in all our endeavors.
- We affirm the dignity of all individuals and strive to uphold a just community in which discrimination and hate are not tolerated.
- We are committed to ensuring freedom of expression and dialogue that elicits the full spectrum of views held by our varied communities.
- We respect the differences as well as the commonalities that bring us together and call for civility and respect in our personal interactions.
- We believe that active participation and leadership in addressing the most pressing issues facing our local and global communities are central to our educational mission.
- We embrace open and equitable access to opportunities for learning and development as our obligation and goal.

*UC Berkeley's "Principles of Community" statement was developed collaboratively by students, faculty, staff, and alumni, and issued by the Chancellor. Its intent is to serve as an affirmation of the intrinsic and unique value of each member of the UC Berkeley community and as a guide for our personal and collective behavior, both on campus and as we serve society.*

# 'Domesticating' humans

"To fully appreciate the idea, I think we need to step down from our perch atop the animal kingdom and truly appreciate the fact that we are still animalistic in nature and that natural selection works on us as well as it might any other species."

" I would argue the opposite, and that natural selection has favored us to be more aggressive and violent than docile, as this fervent determination to acquire power is prevalent in many people"