

**Northeastern University**  
College of Engineering



# Predeparture Meeting 2

## The Course Material

2cn2u.cl Biomedical Imaging in Chile

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# Tonight's Agenda

- A bit about culture
- A bit about Matlab
- Next Meeting: Final Details and Reminders  
Wed. 12 April 2023, 6:00-7:00pm in 302 Stearns
- Homework: Research how to get from Home to School
  - Google Maps is Useful
  - <https://www.red.cl/> (“red” means “network”)
- Send your flight information.

# What is Culture?

“A learned meaning system that consists of patterns of traditions, beliefs, values, norms, meanings and symbols that are passed on from one generation to the next and are shared to varying degrees by interacting members of a community. (Ting-Toomey and Chung)

<https://www.andrews.edu/tidwell/bsad560/Culture.html>

History influences culture

[Chile: Family life, Individual vs. community, religion, diversity, large/small business, economic equality, power equality. Influence of history. Cultural artifacts; art, music, literature, politics, economic system, infrastructure, social networking.]

# Some Thoughts on Learning Culture

- Cultural Competence
- Cultural Humility
- Generalizations
- Chile and the US
  - Diversity
  - Family, Friends, Independence
  - Economic Opportunities
  - Economic Equality
  - Cultural Appropriation

# Quick Chilean History

- Indigenous
- Spanish Conquest
- Independence
- Dictatorship
- Return to Democracy?
- Estallido Social Oct 2019
- New Constitution?

# Chile is an “Island”

- One of 2 Countries in SA not Bordering Brazil
- Surrounded by Water, Mountains, Desert
- Mostly Homogeneous Culture
- Unfamiliar with Foreigners. . .
- . . . but Curious and Interested
- Often Somewhat Shy
- Very Eager to Connect but Sometimes Slow to Do So
- Averse to Controversy

These are generalizations: There are lots of exceptions.

- This course: Principles of Biomedical Imaging (EE/Physics)
- Collecting the Image (eg. X-Ray technician)
- Image Processing (EE/Math and CE/CS)
- Reading the Image (eg. Radiologist)
- Making Decisions

- This Course
  - Analysis (eg. Depth of Imaging)
  - Simulation (eg. Synthetic Data)
- Image Processing (eg. MRI)
- Statistical Analysis

You can do a lot in one line of code.

For us, Matlab is a tool to learn about how imagers work.

You don't need to be an expert: We provide a lot of help.



# Matlab Tutorial

Eric