# Evaluate barriers to access and improve the undergraduate research experience for disabled students and faculty using UDL.

Maria T. Timberlake (she/her),
Associate Professor and Chair,
Foundations and Social Advocacy Department;
Director, Undergraduate Research Council

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Re-thinking NORMAL is foundational to today's session

▶ What do normal people do?

▶ That's just not normal!
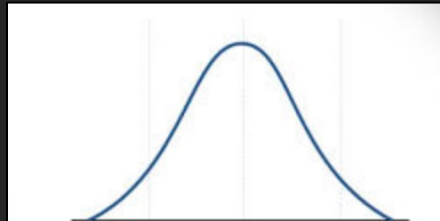
Normal is an overarching, culturally ingrained, ubiquitous concept within which we all live. When we introduce the word *disability* or *diversity* of *difference*….no matter how respectful and well intentioned, they represent a comparison – from something called "normal".

Underlying paradigms about disability matter because...

- We can be bringing a narrow definition of competency to undergraduate research programs without realizing it.

- Opportunities for student participation that appear fair, merit-based and equally available to all if they have the skills and motivation... may not be as accessible as they seem.

- Processes for faculty to obtain undergraduate research funding and successfully mentor students can block the very thing they are designed to support.

- When what is accepted as normal is challenged, heated discussions can occur!

How you define the problem determines where you look to find the solution.

The issue can be in the materials, the environment, the schedule, the type of accommodations and supports...there are many places the 'problem' can exist besides within the person.

UDL helps us focus on the point where a person and an inflexible situation intersect.

Demands of our research programs that could be altered with UDL

- ▸ Academic
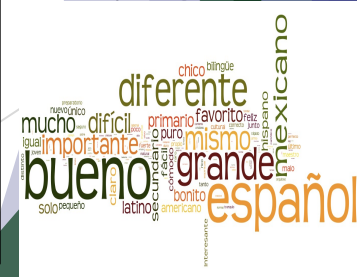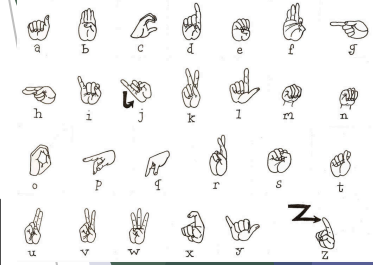- ▸ Social
- ▸ Sensory
- ▸ Physical

Interpreting the UDL framework for undergraduate research programs

MMR = (comprehension, language and symbols, perception).

MMX = (physical action, executive function, communication).

MME = (interest, effort & persistence, self-regulation).

More specifically…

Representation

- captioned video accompanying directions.
- forms that allow text to speech and screen readers.
- icons to clarify meaning.
- organizational layouts.

Action & Expression

- Scaffolds and mastery-oriented feedback in prep.
- personal and professional goal setting.
- End reports: paper, web, presentations.

Engagement-

- increasing relevancy to self and life experience.
- autonomy and community.
- Who benefits? (Impact on the world)

Using UDL to analyze my undergraduate research program

Item	Barriers	UDL principle	Solutions
Application forms	Text Organization	Representation	Screenreader-friendly Multiple versions
Lab, library and field sites	Seating travel	Expression	Rating
Student fellowships ($$$)	Academics Previous experience	Expression & engagement	Tier 1 & 2 (see handouts)
Housing	Gender neutral	Engagement	Private Community building