

# Public Private Partnerships (PPP) Require an Overarching Framework to Establish our Working Space and \*DEIA Climate, then “Level-Up” on to Innovation.

\*Diversity, Equity, Inclusion, and Accessibility (DEIA)

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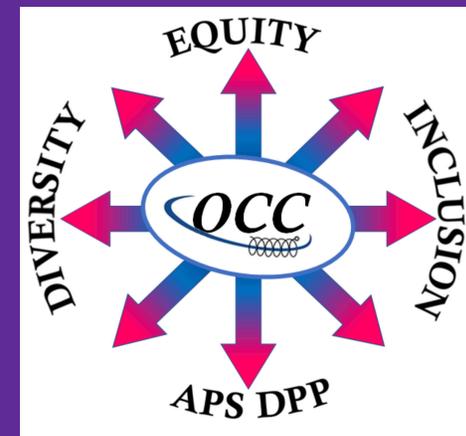
*Chief Diversity Officer*

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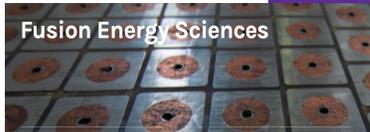
# Our PPP Approach Must Eliminate Barriers to Collaboration and Innovation

## Fusion Policy and Research Coordination

- United States Department of Energy, Fusion Energy Sciences
- DOE Office of Science
- United States Department of Energy (DOE)
- ITPA
- Fusion Power Associates
- University Fusion Association
- The FIRE place (US and world fusion news)

## U.S. Laboratories

- Argonne National Laboratory
- General Atomics
- Idaho National Laboratory
- LLNL National Ignition Facility (NIF)
- Los Alamos National Laboratory
- MIT Plasma Fusion Center
- Oak Ridge National Laboratory
- Pacific Northwest National Laboratory
- Princeton Plasma Physics Laboratory
- Sandia National Laboratory



## U.S. Universities

- Auburn University
- California Institute of Technology
- Columbia University
- Cornell University
- Dartmouth College
- Dickinson College
- Georgia Institute of Technology
- Johns Hopkins University
- Lehigh University
- Massachusetts Institute of Technology
- Princeton University
- University of California at Berkeley
- University of California at Irvine
- University of California at Los Angeles
- University of California at San Diego
- University of Colorado
- University of Illinois
- University of Maryland
- University of Michigan
- University of Missouri-Rolla
- University of Montana
- University of Rochester
- University of Texas
- University of Tennessee Knoxville
- University of Washington
- University of Wisconsin-Madison
- West Virginia University
- William & Mary

Supporting University Research into Fusion Energy and Plasma Science



Company Name	Type	Technology	Location	Image
Type One Energy	Private Company	Stellarator	Seattle, Washington, USA	
Avalanche Energy	Private Company			
CTFusion	Private Company	HIT-SILV	Seheromak	
Zao Energy Inc.	Private Company		Zao	
Helion Energy	Private Company	Ventil FEP (Fusion Engine Prototype) IFA (Inductive Plasma Accelerator)	Elizabethton, Tennessee, USA	
Anni Fusion Energy	Private Company		ΔC	
Breakthrough Fusion International	Private Company		PJMIE (Plasma Jet Magneto Inertial Fusion)	
Hyperjet Fusion	Private Company	BLX-a		
Proton Scientific Technologies	Private Company			
Compact Fusion Systems	Private Company	Compact Fusion Systems Prototype	1 Inertial Liner Experiment	
Princeton Fusion Systems	Private Company	PFRC-2 PFRC-1 PFRC-3	Santa Fe, New Mexico	
LPP Fusion	Private Company		Dense Plasma Focus	
Commonwealth Fusion Systems	Private Company	SPARC	Middlesex, New Jersey	
Horne Technologies	Private Company	ICarus	Hybrid Inertial Electrostatic/Magnetic Confinement	
Imovion Energy	Private Company			
MIETI	Private Company	Staged Z-pinch on Zebra Driver		
General Atomics	Private Company	DIII-D Octobolite	Tokamak	
TAE Technologies	Private Company	C-2W (Norman) C-2U CBER-SPS (Colliding Beam Fusion Reactor Space Propulsion System) A B C-1	Field Reversed Config	
Helicity Space	Private Company		Merging Plasma B	
Lockheed Martin Skunk Works	Public Company	CFR (Compact Fusion Reactor) IS		
EMC2	Private Company	The Polwell	Polwell	

Public Partners

Community Partners

Private Partners



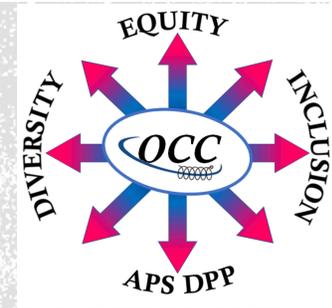
Prof. Sharon Zelmanowitz, Dean Engineering USCGA



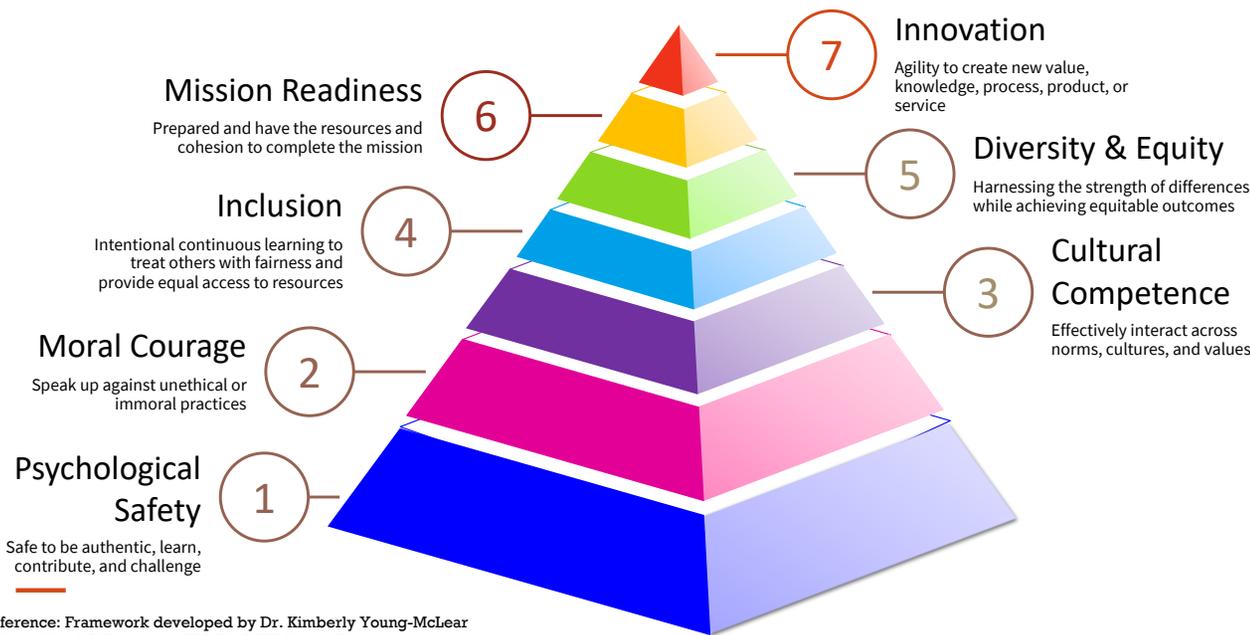
Dr. Kim Young-McLear, CDR USCG  
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-Visiting Faculty



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AFIT CDO/ENP  
-Visiting Faculty



# 'HEALTHY TO INNOVATIVE' FRAMEWORK



Reference: Framework developed by Dr. Kimberly Young-McLear  
Adopted by CG Spectrum, USCGA ASEE Dean's Diversity Initiative and others

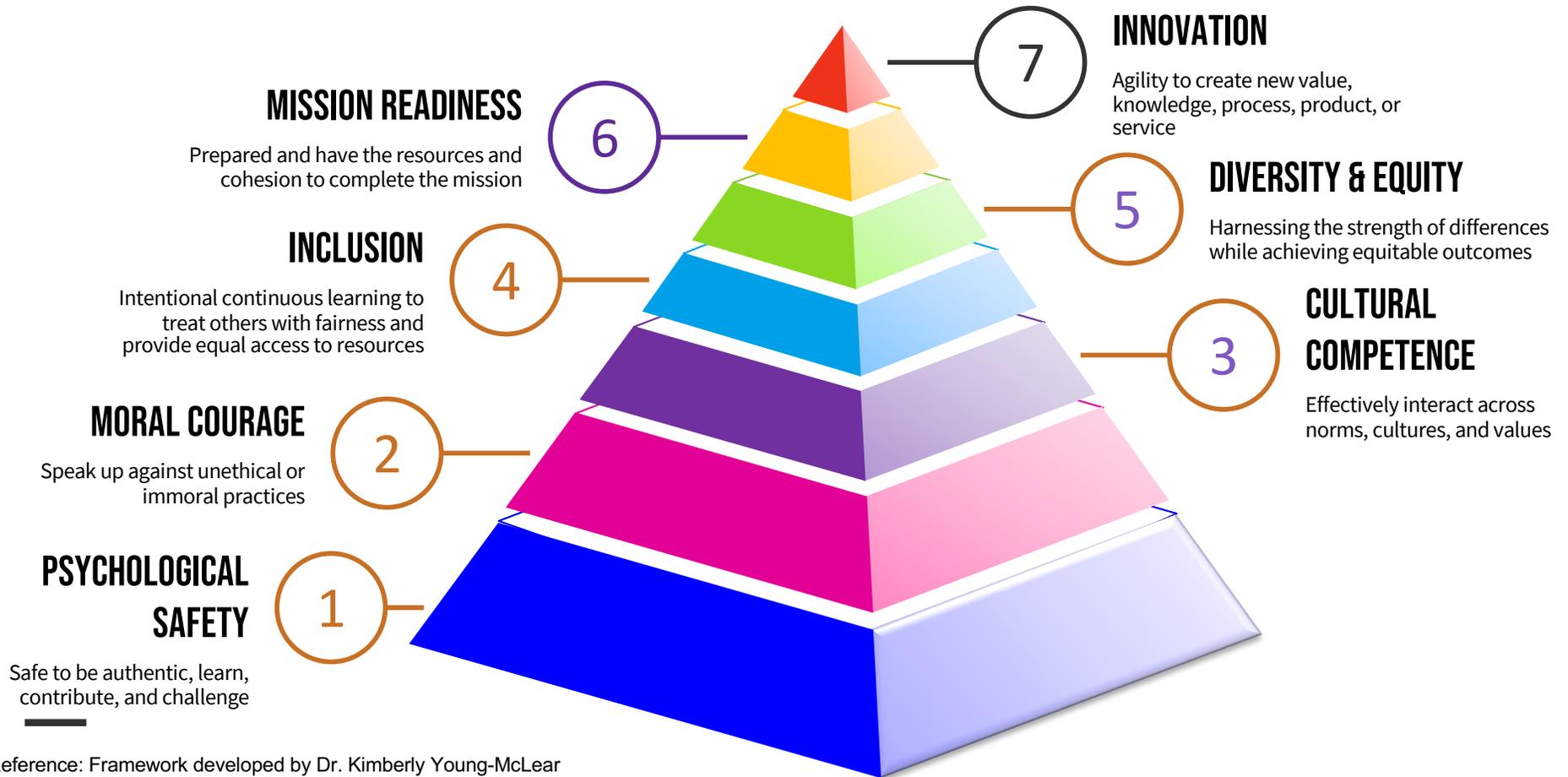
“Beyond Buzzwords and Bystanders: A Framework for Systematically Developing a Diverse, Mission Ready, and Innovative Coast Guard Workforce”

Authors: (2019) K. Young-McLear, S. Zelmanowitz, R. James, D. Brunswick, T. DeNucci

- However steps in the pyramid can not be skipped.
- Primarily individual and institutional psychological safety MUST be established and maintained.

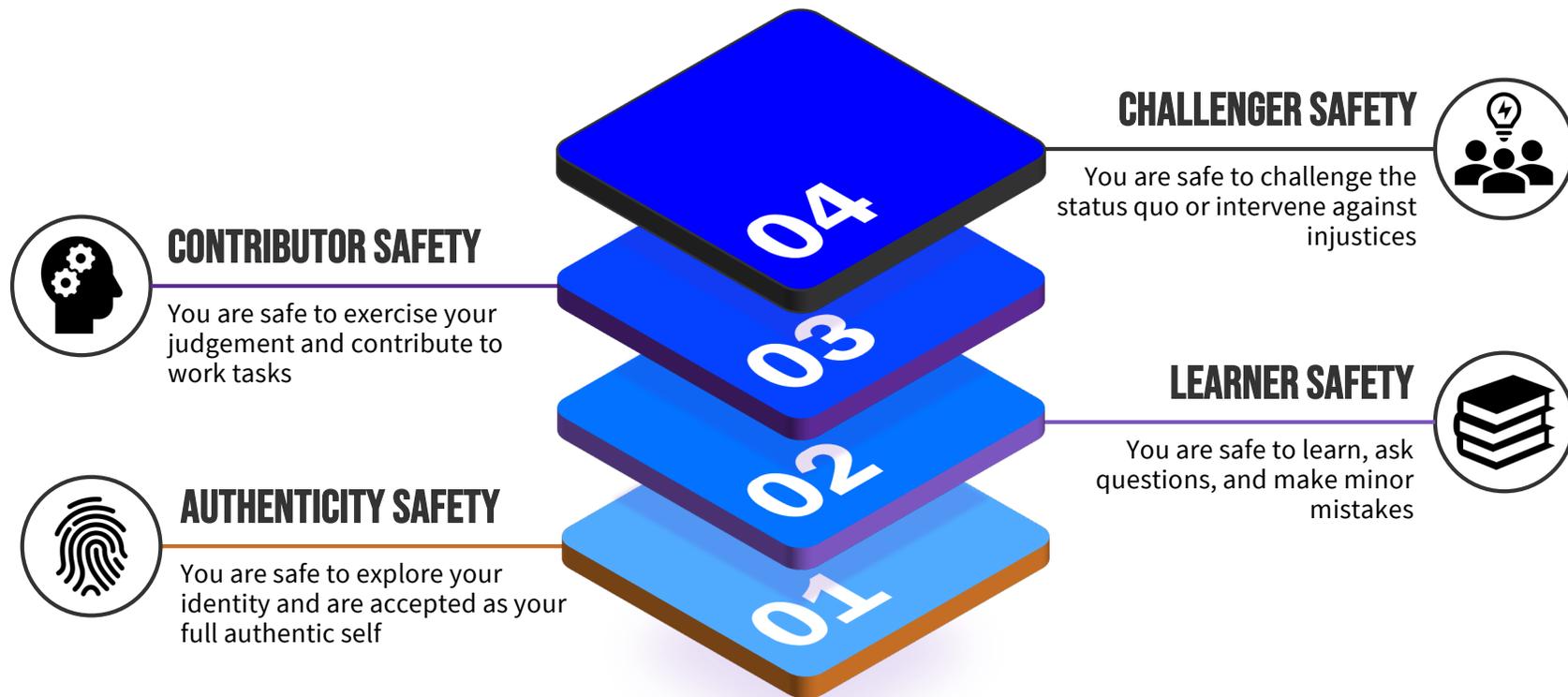


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# FOUR STAGES OF PSYCHOLOGICAL SAFETY



# Community Agreements

Take Space, Make Space

Ouch Oops

Respect the pronouns of others

Lean into discomfort

No Quick Fixes

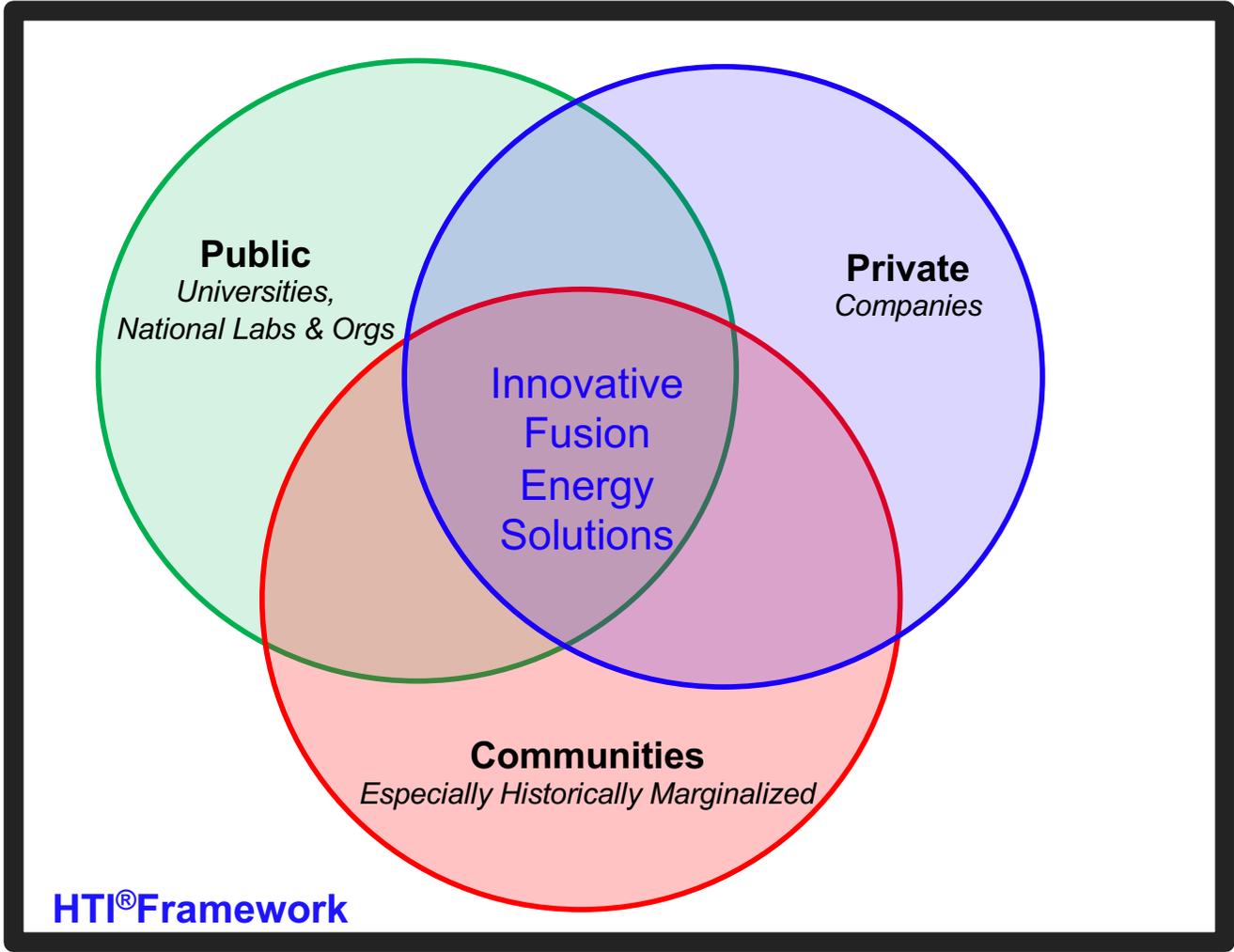
Recognize that Intent  $\neq$  Impact

Address the Problem not the Person

Consensus is not Community

Community-Care is Revolutionary

Private thoughts, public meeting



**Community Partnerships must be built at formation & begins or ends with our process**

**'HEALTHY TO INNOVATIVE' FRAMEWORK**

