

---

# Becoming a Resilient Scientist

**Dr. Sharon L. Milgram, Director NIH OITE**  
**[milgrams@od.nih.gov](mailto:milgrams@od.nih.gov)**  
**[www.training.nih.gov](http://www.training.nih.gov)**  
**On Twitter @NIH\_OITE**





# The Stages of Learning

	Enthusiastic beginner	Disillusioned learner	Cautious performer	High Achiever
Competence	Low/None	Some	Moderate	High
Confidence	High	Low	Variable	High



What do you do? What don't you do?



# What is Resilience?

- The ability to:
  - adapt and grow through adversity
  - navigate difficult challenges with awareness, intention, and skill
  - find a constructive way forward during challenging time
- A set of attitudes and behaviors that can be **learned and developed** through education, self-reflection, and practice



# Take-Aways

Resilience = People + Process

Those who are resilient prepare to be  
resilient

<http://www.psychologytoday.com/blog/design-your-path/201305/10-traits-emotionally-resilient-people>



# To Be Resilient We Have To

- Learn from previous experiences, both good and bad
- Build strong positive relationships with peers and mentors
- Be proactive and use resources to thrive



# To Be Resilient We Have To

- Learn from previous experiences, both good and bad
- Build strong positive relationships with peers and mentors
- Be proactive and use resources to thrive
- Be thoughtful about how we approach setback and engage with our negative self-talk (our inner critic)



# The ABCs



The stories we tell ourselves

- <http://www.mindtools.com/pages/article/abc.htm>



# Some Philosophy To Start



From the work Marshall Rosenberg and colleagues,  
Nonviolent Communication; [www.cnvc.org](http://www.cnvc.org)





So.....

Do you want to be a jackal or a giraffe?  
When you talk to yourself?  
When you talk to others?



# Some Generalizations About the Stories We Tell

- They are often:
  - more negative than the situation warrants
  - delivered in jackal language
  - often making them demotivating and self-defeating



# Two Areas to Consider

- Cognitive distortions.... leading to pessimistic attitudes and feelings of hopelessness
- Imposter fears..... leading us to feel like we don't belong
  
- With one key take away:
  - HATS



# An Acronym To Help - HATS

**H**ear your negative self-talk

**A**ppreciate you have a choice

**T**alk back – giraffe language

**S**eek help and access resources



# Cognitive Distortions (Automatic Negative Thoughts)

Characteristic ways that our mind convinces us of something that is really not true to reinforce negative thinking or emotions. Generally serve to keep us feeling bad about ourselves and can lead us to feel very anxious and pessimistic.

**NOTE:** Our brain has a built-in negativity bias



# Some ANT Examples (and a vote)

- **All-or-nothing thinking:** Your performance is either perfect or it is a complete failure
- **Catastrophizing:** You exaggerate the implications of a setback or mistake
- **Mind reading:** You make assumptions about what someone else is thinking
- **Fortune telling:** You predict the outcome of an event before it happens
- **Over-generalization:** You take one negative event and see other similar events through that failure
- **Minimizing:** You downplay the importance of your accomplishments or positive qualities



# Imposter Fears

The feeling of phoniness in people who believe that they are not intelligent, capable or creative despite evidence of high achievement





# More on Imposter Fears

## ■ Four flavors:

- ❑ Feeling like a fake
- ❑ Attributing success to luck
- ❑ Discounting your successes
- ❑ Assuming you had to work hard and that the equivalent accomplishment was easy for everyone else

## ■ Causes:

- ❑ Being a student
- ❑ Being in an environment that feels foreign to you
- ❑ Organizational culture and messaging
- ❑ Messages from family and childhood
- ❑ Stereotype threat
- ❑ Working in a creative field

<http://paulineroseclance.com/>





# Important Message

**YOU ARE NOT ALONE!** 70+% of individuals experience imposter fears at some point in their educational and work journey.



# Impacts of Cognitive Distortions and Imposter Fears

- In small doses and put into perspective?
  - They can make us use resources and work hard
- Unchecked and unquestioned? We
  - experience chronic stress, potentially leading to poor performance
  - second guess ourselves (in class, on exams, in our research group)
  - hesitate to ask for help
  - don't volunteer for assignments or apply for competitive positions
  - maintain a low profile in the group
  - engage in self-sabotaging behavior



# Taming Imposter Fears/ANTS

- Explore your imposter fears and negative self-talk; recognize your patterns and reflect on how they impact you
  - Use journaling for self-reflection and discovery
  - Talk about them with mentors and peers
  - Really getting in the way? Find a counselor, explore why and learn skills for dealing with them
- Be mindful and recognize them when they happen
  - First -- take a deep breath, pause and stretch
  - Acknowledge them and talk back using giraffe language
  - Appreciate that these “stories” are a part of the human experience, the student experience, and the life-long learner experience
  - Use your science voice to question them
  - Find inspiration..... from a positive affirmation, a phrase, an image that makes you feel strong



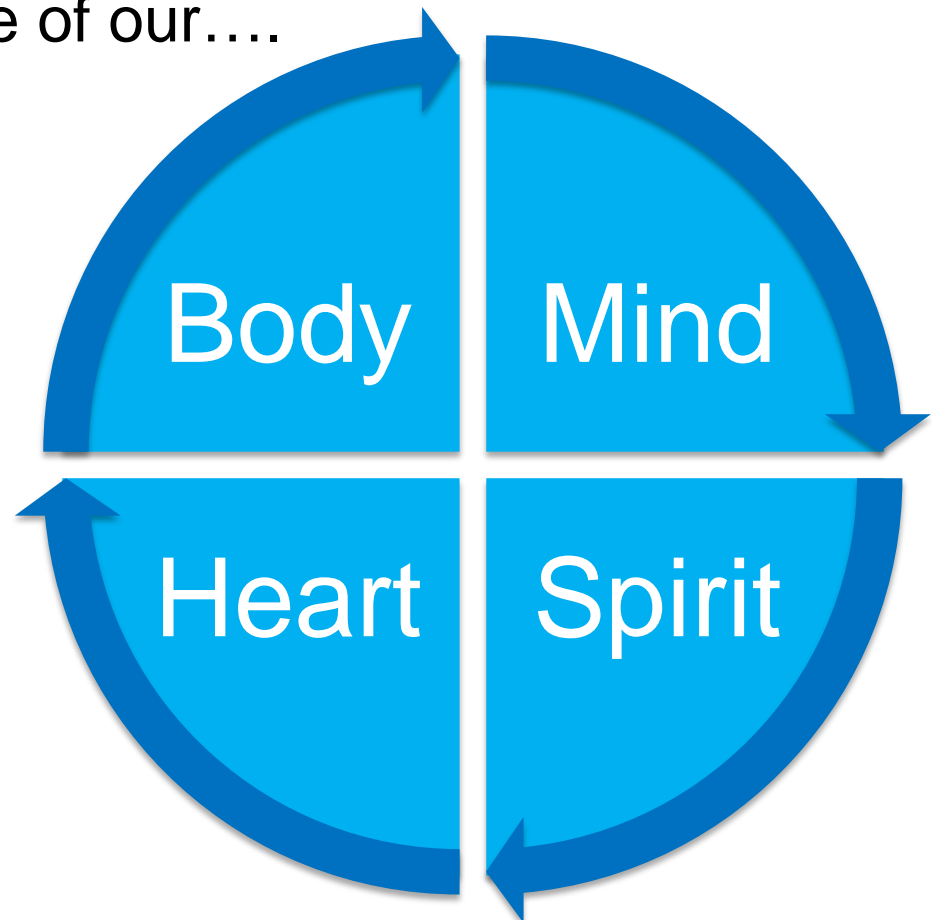
# Most Important Take Home Message

To do well, we have to be well



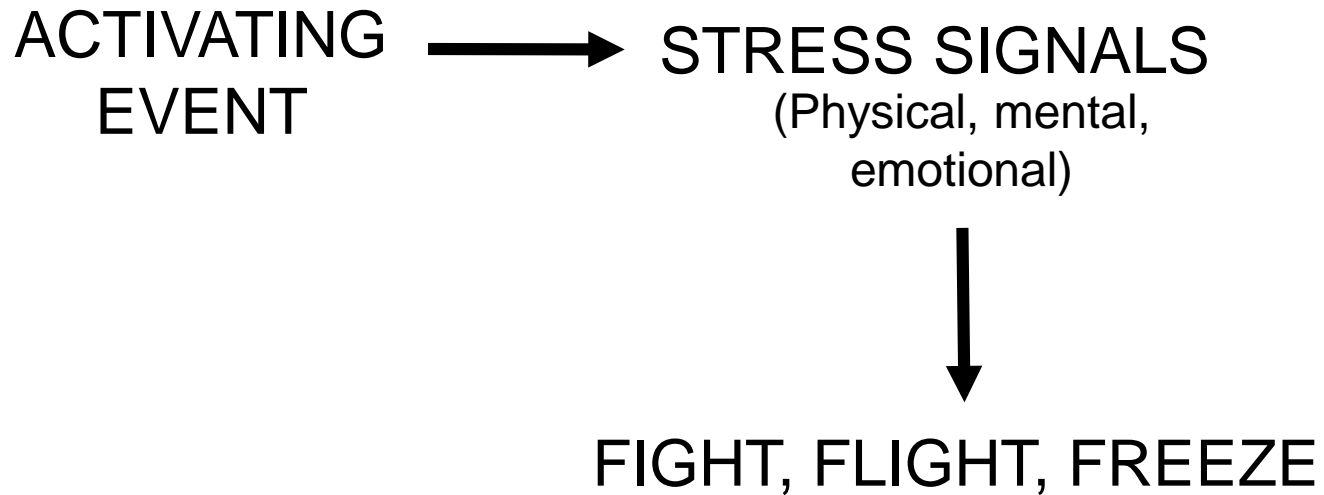
# Holistic Self-Care

What we do and what we don't do to take care of our....





# A Choice – To REACT or RESPOND





# A Choice – To REACT or RESPOND

EXTERNAL INPUT → STRESS SIGNALS  
(Physical, mental, emotional)

FIGHT, FLIGHT, FREEZE

MALADAPTIVE  
COPING

ADAPTIVE  
COPING

mindful pause &  
reframing; comes from  
our wellness practice



# Wellness Assessment - BODY

**NEVER.....SOMETIMES.....ALWAYS**

- I am getting enough sleep (7-9 hours)
- I am eating balanced, nutritious meals
- I avoid excessive use of caffeine
- I avoid excessive use of alcohol and other drugs of abuse
- I am getting regular exercise (3+ times per week)
- I am getting regular health care for myself
- I take care of myself when I am sick, tired or just need a break





# Wellness Assessment - MIND

**NEVER.....SOMETIMES.....ALWAYS**

- I get caught up in perfectionism
- I focus on the present rather than rehashing the past or worrying about the future
- I engage in negative or deceptive self-talk
- I practice self-affirmations and positive self-talk
- I frequently compare myself to others
- I give myself time to explore and learn new things
- I am open to counseling as a tool to maintain and improve my health and well-being



# Wellness Assessment - HEART

**NEVER.....SOMETIMES.....ALWAYS**

- I'm in touch with and let myself feel all of my emotions
- I reach out to others for support when I need it
- I communicate my needs and feelings directly and honestly
- I make time to spend with my friends and family
- I engage in activities that are fun and relaxing for me
- I avoid extreme use of my phone as a coping tool/avoidance strategy
- I demonstrate compassion for myself and others



# Wellness Assessment - SPIRIT

**NEVER.....SOMETIMES.....ALWAYS**

- I feel connected to something bigger than me – however I define that
- I seek out resources (practices, activities, people and places) that nurture my spirit
- I reflect on and invest in what is meaningful to me
- I read writings or watch media that are inspirational to me
- I allow time to just be (human *being* vs. human *doing*)
- I engage in activities that support my life's purpose



# For Discussion

- What are you pleased about?
- What are you not so pleased about?
  
- Pick ONE new habit you would like to develop or one current habit you would like to soften/break... what will you do to make that happen?



# Now Let's Talk About the.....

## Elephant(s) in the room





# How Do We Change Culture

- Work collectively within and across groups
- Don't be swayed by the naysayers and skeptics
- Start with low hanging fruit
- Find good partners on your campus
- Question anti-wellness messages we sometimes send
- Catalyze change by inviting an outside speaker and hosting a wellness day for your program/department

Q FOR THE GROUP? What are some things that you would like to try on your campus?



# To Be Resilient We Have To

- Learn from previous experiences, both good and bad
- Build strong positive relationships with peers and mentors
- Be proactive and use resources to thrive
- Be thoughtful about how we approach setback and engage with our negative self-talk
- Do things that bring meaning to our day, week, month....

**Q for U – what brings meaning to your day, week, month?**



# The Wellness Collage

- A way to identify and talk about things that bring meaning to your life





# Let's Talk About Your Wellness Collage

- Grab your phone
- Show some pictures and share a few things that are meaningful to you.
- Finish your wellness collage when you get home. Hang it up over your desk/bench/sink and use it as a reminder to tune in and take care.



# Take Home Message

**WHERE WE ARE  
NOW**

**OUR OWN  
INTERNAL  
LANDSCAPE**

**MENTORS &  
LEARNING  
COMMUNITIES**



**WHERE WE WANT  
TO GO**



# Powerful Tools for Change

- Community
- Journaling
- Meditation and other mindfulness practices
- Counseling





# Questions?