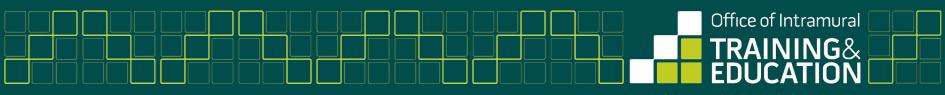
Sharpening Your Mentoring Skills

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NATIONAL INSTITUTES OF HEALTH



You Want To Do What?

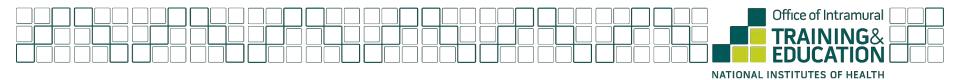
- Scenarios IA/IB
- For discussion after a bit of time to read and reflect:
 - □ How would you handle the conversation with the student?
 - What issues impact your decision about whether to allow the student to complete the internship?
 - What, if anything, might you have done differently with this student?



Some Facts

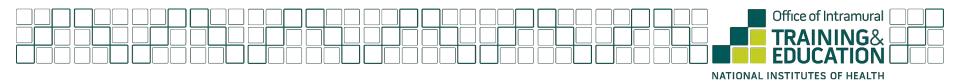
- "The proportion of PhDs that move into tenured or tenure-track faculty positions has declined from ~34% in 1993 to ~25% now."
- "The percentages of biomedical PhDs in industry and government have remained relatively constant. The categories that have seen growth are science-related occupations that do not involve the conduct of research"
- "Despite these changes, graduate training continues to be aimed almost exclusively at preparing people for academic research positions."

Full report at http://acd.od.nih.gov/bwf.htm



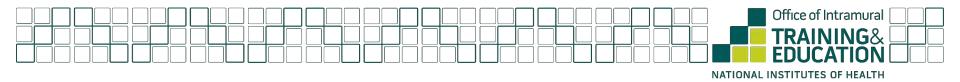
Why So Much Angst Among Our Trainees

- A changing career landscape
- Competitive nature of science/STEM careers
- Concerns regarding work-life integration
- Stress in workplace relationships



Faculty Are Stressed Too

- Explosion of rules, stresses, distractions, and paperwork
- Lack of training in management in an environment that requires complex and rapidly-changing team
- Some trainees lack the background, experience, passion and/or work ethic needed to make immediate research contributions
- Some Pls may lack enthusiasm to mentor, especially towards non-research oriented careers (or lack knowledge even if there is enthusiasm)



Acknowledging these stresses on the system, how do we do good science while mentoring effectively and preparing our trainees for the breadth of careers they will end up pursuing?

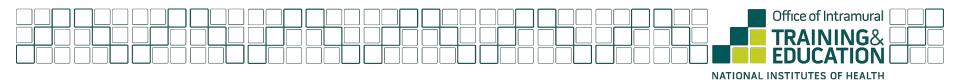


We Wear Many Hats

- Supervisor: responsible for making sure work gets done
- Coach: teach individuals specific skills important for advancing our work and their career
- Mentor: responsible for broadly developing and supporting the personal and professional development of an individual
- Advocate: speaks up on behalf of an individual's career advancement

http://www.management-mentors.com/resources/coaching-mentoring-differences/

http://www.nytimes.com/2013/04/14/jobs/sponsors-seen-as-crucial-for-womens-career-advancement.html? r=0



In research environments, one's supervisor typically also serves as a mentor/sponsor/coach. What are the benefits of this approach; what are the risks?



Role Tension

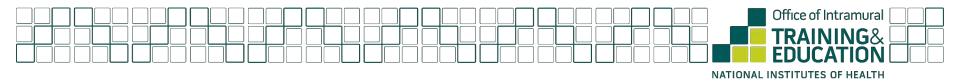
- Trainees do not always feel safe disclosing to "the boss"
- Time constraints limit quality of mentoring interactions and science usually comes first
- Your needs and your mentee's needs are often not fully aligned
- You may lack (or your mentees think you lack) expertise in an area relevant to her/him
 - Trainee interested in industry or non-bench job
 - Trainee working in a research area, or using approaches, you are not an expert in

KEY POINT: It is the job of **both** the mentor and student to understand these risks and to work to mitigate them

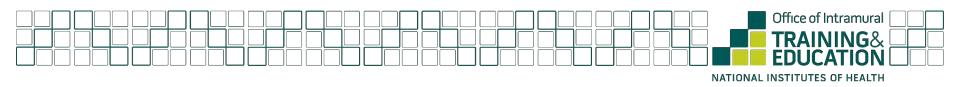


General Strategies

- Discuss expectations, goals and progress early and often
- Help students cultivate relationships with other mentors outside of your research group
 - □ With a focus on **both** science, career, and personal mentorship
- Use, and encourage your students to use, resources on (and beyond) your campus
- Develop skill in giving/receiving feedback and navigating difficult conversations (this is a learned skill)
- Understand that there will be imperfect fits and disappointments; deal with them with compassion
- Learn more about psychosocial elements impacting student learning and identity formation



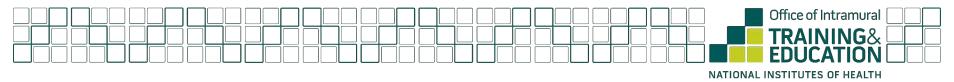
SETTING EXPECTATIONS



Students Want (and Need) Many Things

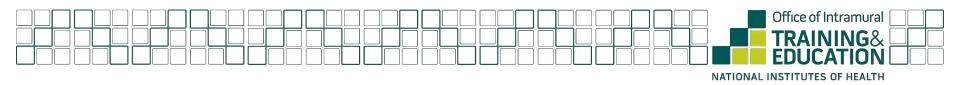
- Guidance
- Support
- Insight (science and personal)
- To be challenged
- To learn the secrets
- To learn new things
- Brainstorming partner
- To learn English
- Oral presentation skills
- Opportunities to present
- Help writing papers
- Introductions to others
- Grant writing skills
- Collaboration skills

- Teaching skills
- Supervisory skills
- Non-research skills
- Leadership/committee work
- To be directed
- To be left alone
- Time to do informational interviews
- To do an internship/shadow or volunteer during the day
- Time to take care of themselves
- Help with finding a postdoc or job
- Help with complex visa issues
- Help with personal issues



Setting Expectations – What Students Say

Some of the struggles I experienced were trying to figure out what exactly the expectations were of me and what should encompass my graduate training. Was it ok for me to be outside of the lab doing outreach or serving on committees? Would my PI be upset about this even though I was technically building up my scientific communication and mentoring skills? Would my PI be upset with me for going to workshops, even though it contributed to me creating better presentations? Was it OK to go to career workshops or tell her I might not want to be a PI? How could I get help with things? Was it ok for me to reading papers during lab hours? Was only research expected of me during the day and I had to fit everything else outside of these hours? What about time off for family events? Or if I am sick or need to go to counseling? How much time should I spend on classes vs. rotations? What exactly encompassed a well-rounded graduate education? I dealt with an immense amount of stress and guilt navigating this process and wish I had had this type of "expectations" conversation with my PI after joining the lab.



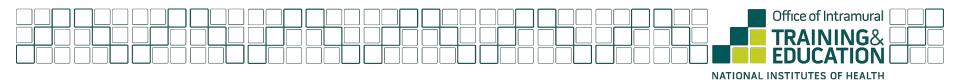
Establishing Expectations

- Explicit and evolving
- Flexible but not a free-for-all
- Focused on both rules and culture
- Periodically discussed by the entire group
- Put it in writing (consider a welcome to my lab letter) and also requires discussion
- Not as helpful if you do not also ask about and discuss their expectations of YOU!



Self-Reflection and Discussion

- What are your expectations of [students] in your lab?
- Are your expectations reasonable?
- How do you make sure everyone understands them?
- What expectations can students have of you?
- Do you honor the commitments you make to them?
- How do you handle situations where students do not meet your expectations? What about when you don't meet their expectations?



Setting the Stage for Success (I)

- Take time to get to know a bit about each other
- Show them around and make them comfortable
- Introduce them to colleagues
- Establish clear expectations around
 - work and meeting schedules (individual and group)
 - rules and regulations
 - how to handle late arrivals, leave requests, and last minute schedule changes
 - required training
 - cultural norms in your group
 - program obligations and requirements
 - other UCSF opportunities
 - Notebooks, ethics and growth as a responsible scientists



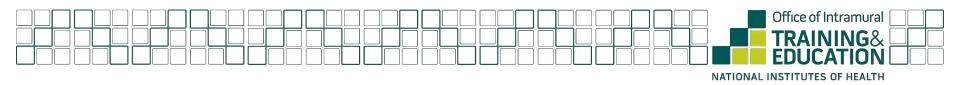
Setting the Stage for Success (II)

- Discuss the overall context of your research group and their project (the first of many times)
- Give them important readings and set clear expectations about them
- Focus more directly research ethics, their notebook and record keeping, in general and within the context of their project
- Give them time to reflect, ask questions and talk some more
- Consider putting all of this in writing!



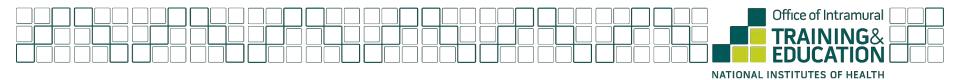
Student Learning Depends Upon.....

- Their natural abilities
- The background they have in specific topics
- Their personality, communication, conflict and learning styles
- Their resilience, growth mindset and ability to grow through setback
- How they feel about themselves, their place in science, at UCSF, and in your group



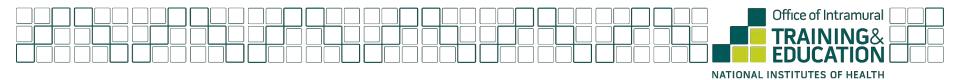
And Can Be Undermined By

- A lack of self-confidence and the impact of imposter fears and stereotype threat
- Vulnerabilities unrelated to the workplace that impact the workplace
- How difficult it can be to receive feedback (even when delivered well)
- A lack of focus on wellness and their personal needs
- The messages we (and/or the group) deliver that impact their sense of belonging and safety in the group
 - Overtly demeaning behavior (especially when we are stressed or angry)
 - Micro-aggressions we may not even be aware of



Our Goal

- To promote LEARNING......
- Which means we have to promote a sense of SAFETY so our trainees can:
 - ask questions
 - ask for help
 - make mistakes
 - learn from mistakes, on their own and with our input
 - tell us what they are thinking, feeling and worrying about
 - take risks, etc.



What We Mostly Do

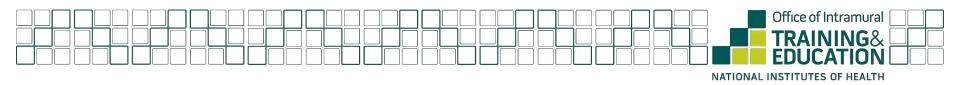
- Teach and help our interns learn specific concepts
- Model the attitudes and behaviors we want to see
- Give feedback to elicit more of the same and to influence change
 - Goal of feedback is to promote learning
- Step back and allow them to learn on their own
 - And especially through their mistakes



Helping Students Learn Through Mistakes

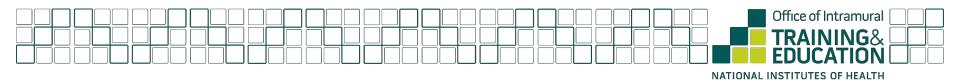
- Rethinking and reframing our view of mistakes as opportunities for learning (cultivating a growth mindset)
 - For us
 - For them
- Acknowledging the process and not only the outcome
- Acknowledging the emotions that go along with it

See the work of Dr. Carol Dweck, Mindset Matters



Guiding Principles

- People are motivated by a desire to belong and grow best in a positive environment built on mutual respect
- While we can influence behavior, we actually cannot make anyone do something they do not want to do
- Growth requires the courage to be imperfect and to make mistakes
- Many of our students are still developing their sense of self (emerging adults) and all are developing their sense of self as a scientist (emerging scientists)
 - executive function skills develops into the late 20s
 - The impacts of trauma can greatly impact identity formation



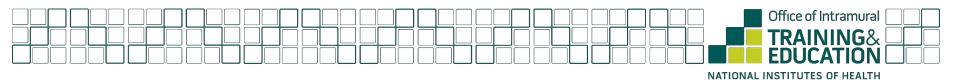
SEEN, HEARD, VALUED and CARED FOR



We All Have Many Identities.....

- that we are proud (all or some of the time)
- that we struggle with (all or some of the time)
- That we are worried about disclosing (or having people find out about).....
- That we worry others might judge us about.....
- We carry them around, some days more than others, and in some contexts more than others

WHAT ARE SOME OF THESE IDENTITIES?



Identities Our Students Sometimes Worry About

- First generation college students
- First generation (aspiring) scientist
- Immigrant or the Child of Immigrant(s)
- Gender/gender identity and gender expression
- Race and Ethnicity
- Sexual Orientation
- Socioeconomic Status
- Religion
- Disability
- Family structure
- Body Type
- Political Affiliation



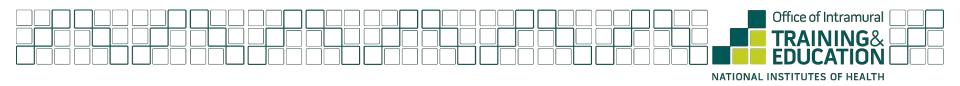
Potential to Impact....

- Me as a [single] parent "depending on my boss and colleagues"
- My race/ethnicity "try feeling you were just hired to check a box every day; the pressure to perform is unbelievable"
- My sexual orientation "I want to be out at work and am really stressed about that"
- My gender identity "if people here knew I plan to transition....."
- **My gender** "it is very hard to be a female mathematician"; "what is the problem with a male nurse?"
- My immigration status "I always worry about my visa so I don't/can't/won't speak up"
- **My hidden disability** "what will you think when you learn about my depression?"; " I have a reading disability that I don't dare share"
- My weight "I am not low energy and I am not unhealthy and I have a lot of impulse control"
- **My religion** "Can you *please* look beyond the hijab";" we have off for your holidays but I have to feel bad about asking off for mine"



In Looking At Others Through Our Own Lens...

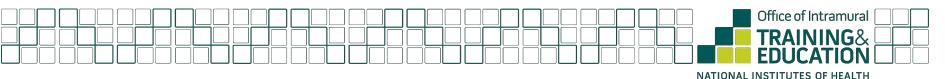
- In-group: A social category or group with which we identify strongly and/or have substantial experience
- Out-group: A social category or group with which we do not identify and/or have substantial experience
- Leading to:
 - Unconscious bias (Visit https://implicit.harvard.edu to learn more and take some assessments)
 - Unconscious favoritism
- And modified (even without our consent) by family and cultural messaging throughout our lifetime



To Be Human Is To Have Biases

Much of what enters our consciousness, of course, comes from the culture around us. And like the culture, it seems that our minds are split on the subjects of race, gender, class, sexual orientation. "We not only mirror the ambivalence we see in society, but also mirror it in precisely the same way," says Dovidio. Our society talks out loud about justice, equality, and egalitarianism, and most Americans accept these values as their own. At the same time, such equality exists only as an ideal, and that fact is not lost on our unconscious. Images of women as sex objects, footage of African-American criminals on the six o'clock news,—"this is knowledge we cannot escape," explains Banaji. "We didn't choose to know it, but it still affects our behavior."

Mahzarin Banaji, in https://www.psychologytoday.com/articles/199805/where-bias-begins-the-truth-about-stereotypes



Examples

Your IAT results are reported below:

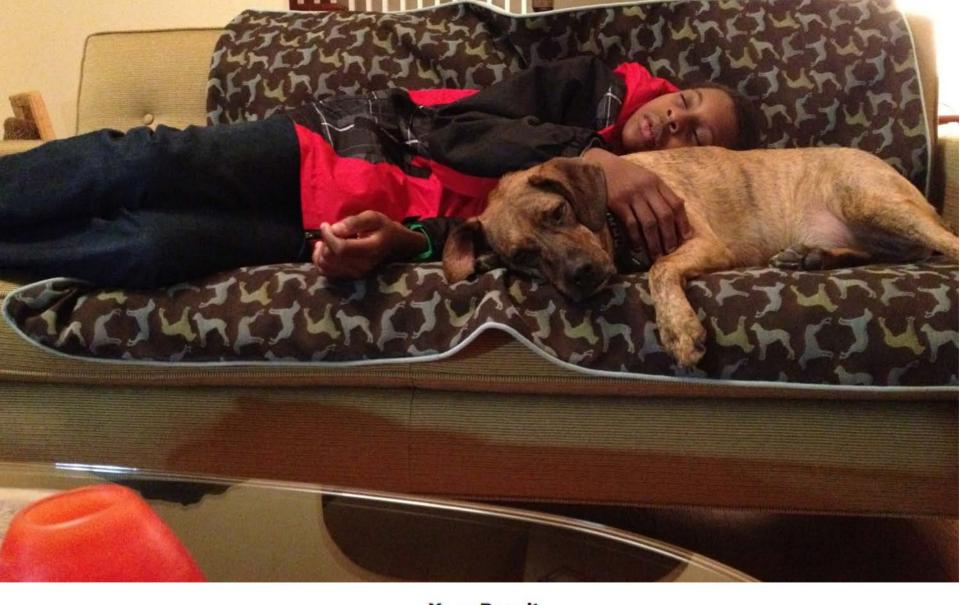
Your data suggest a strong automatic association between Male and Science.

Your data suggest a moderate automatic association between Jonathan and Science.

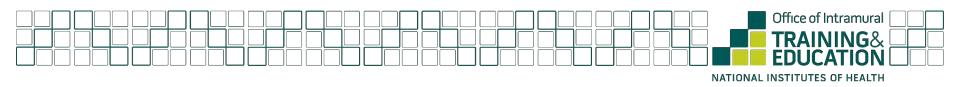
You have completed the Gay - Straight IAT.

Your Result

Your data suggest a slight automatic preference for Straight People compared to Gay People.



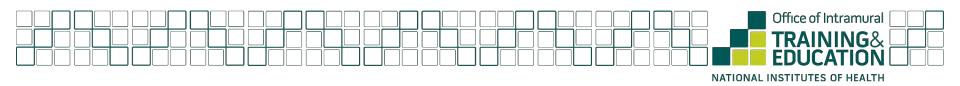
Your Result
Your data suggest a moderate automatic preference for European American compared to African American.



Potential Impacts of Unconscious Bias

- Fail to look for, or select, the best person for a position
- Modify expectations
- Judge behaviors differently
- Ask individuals to speak on behalf of their group
- Hold back on honest feedback
- Give best assignments to others
- Neglect to promote for the best positions
- Focus on different things in recommendation letters

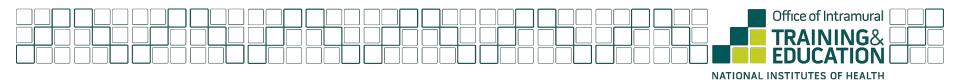
SEE: https://www.npr.org/2014/04/22/305814367/evidence-of-racial-gender-biases-found-in-faculty-mentoring



Key Concept – Message Matters

Micro-aggressions: "Apparently small acts which convey an unwelcoming message to people who are perceived to be 'different'. These are often unintentional but serve to highlight the difference and make the individual feel less welcomed.

EXAMPLES?



It's Cumulative

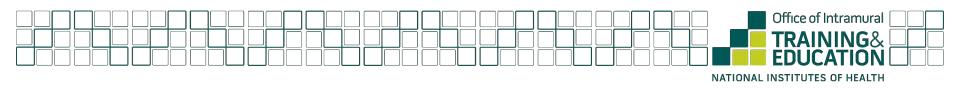
Scenario II

- □ What issues are at play here?
- How do you handle the conversation with your student?
- □ If you choose to talk with the postdoc, how do you handle that conversation?
- □ What, if anything, might you have done differently in the situation?



Self-Reflection

- What are your blind-spots and how might they impact the way you manage your group?
- What assumptions do you make based on generalizations and stereotypes that you wish to bring your awareness to?
- What do you do (or not do) in the workplace that may [inadvertently] exclude others?
- How do we work to expand who we view in our in-group?



Understanding Stereotype Threat

https://www.youtube.com/watch?v=W2bAIUKtvMk



CLAUDE M. STEELE

"This is an intellectual odyssey of the first order—a true tour de force."

—WILLIAM G. BOWEN



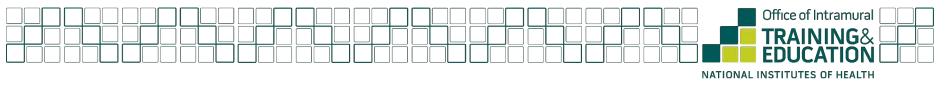
Stereotypes and Stereotype Threat

Stereotypes

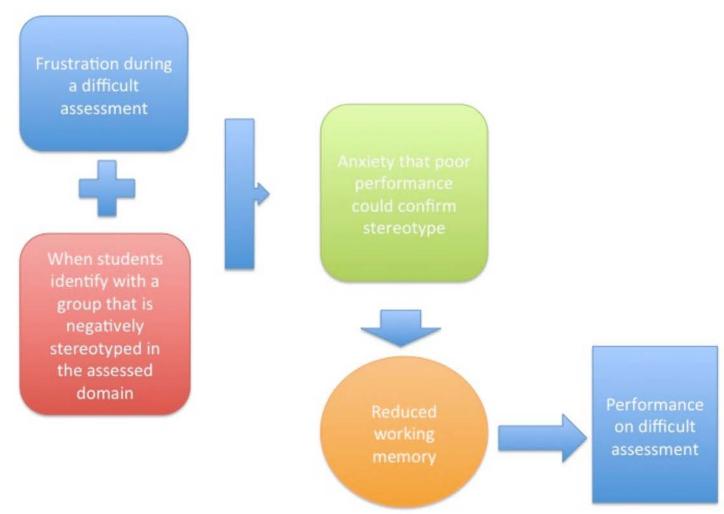
- A common generalization (mental imagine) about the "typical" characteristics of members of an identity group
 - □ ____ is a ____, so (s)he is probably...
- Distort our perception and impact judgments we make about individuals; even positive stereotypes can have negative consequences

Stereotype threat

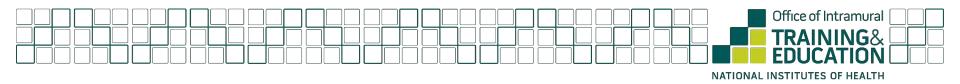
A decrease in student performance as a result of their concerns about confirming negative stereotypes about their racial, ethnic, gender, or cultural group.



Stereotype Threat

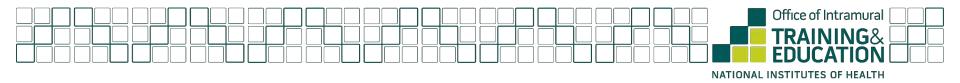


http://www.reducingstereotypethreat.org/definition.html



Group Discussion

How might stereotype threat impact the interaction between a mentor and mentee in research environments?



Imposter Fears

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

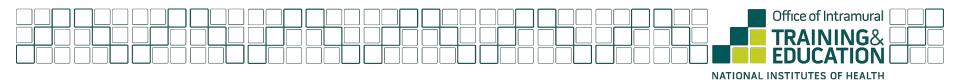




More on Imposter Fears

- 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
- Often a result of:
 - Fear of failure
 - Perfectionist tendencies
 - The tendency to compare ourselves to others

http://paulineroseclance.com/



Causes of Imposter Fears

- Being a student
- Being in an environment that feels foreign
- Organizational culture and messaging
- Stereotype threat
- Messages from family and childhood



Important Piece of Data

- 70% of all people experience imposter fears at some point in their educational and work journey
- Therefore, we may:
 - experience imposter fears ourselves
 - love someone (or many someones) who experience imposter fears
 - train and teach someone (or many someones) who experience imposter fears



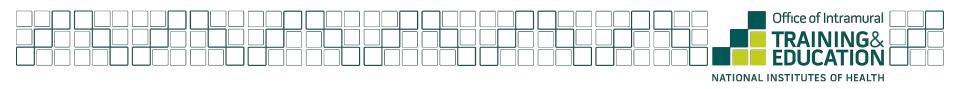
Impacts of Imposter Fears

- Decreased confidence and increased stress
- Second guessing yourself
- Unwillingness to ask for help
- "Holding back" maintaining a low profile in a group; decreased likelihood of volunteering for assignments or applying for competitive positions
- Sensitivity to feedback
- Engaging in self-sabotaging behavior



Minimizing Imposter Fears

- Validate their place in your group verbally and through your behavior (micro-affirmations)
- Normalize the "new learner" experience
- Focus on process and not exclusively on outcomes
- Take a growth mindset approach (Carol Dweck)
- Help them develop skills in low stress environments
- Don't make them the "standard bearer"
- Avoid comparisons to other students
- Encourage them to participate in the trainee community
- Really an issue encourage them to talk with someone



Micro-Affirmations

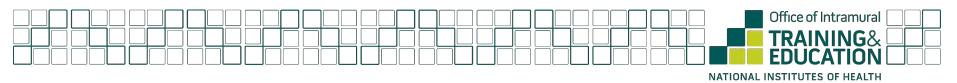
Small acts to foster inclusion, comfort, and support for people who may feel unwelcome or invisible in an environment (Rowe 2008)

"Student success is the product of thousands of small gestures extended on a daily basis by caring, supportive educators sprinkled throughout the institution who enact a talent development philosophy" (Kuh, 2012)



Talent Development Requires That We...

- Learn to respond and not to react to the mistakes and setbacks of our students (self-management)
- Use active listening to show respect, increase understanding and promote learning
- Keep the focus on learning by...
 - empowering our students to take ownership of their experience, not by enabling them*
 - being encouraging, not discouraging, when we provide input and feedback*
 - Helping our students focus on wellness so they maximize their potential to learn and contribute
- Remember that our communication and meta-communication both matter



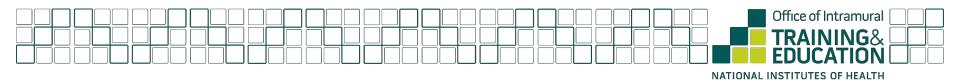
Techniques for Being Empowering and Encouraging

- Take a strengths-based approach
 - What went well today/this week/during your presentation?; What are you proud of in relation to your poster?
- Affirm feelings
 - □ I know this is frustrating [and would like to discuss strategies..]; I understand that you feel embarrassed about this and want to assure you that it is OK to ...
- Recognize and validate their agency in processing educational experiences
 - Why do you think that happened? What lead to this decision? What might you do differently moving forward? Are there resources that you could be using?
- Reinforce and reward positive attitudes and behaviors and the use of resources
 - You stayed positive even though we hit a few bumps in the experiment; I am glad you reached out to OITE to work on your talk your effort paid off.



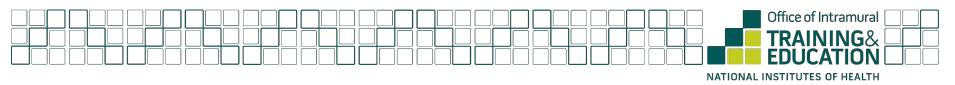
Active Listening

- Concentrating fully on what is being said rather than preparing to speak as soon as the opportunity allows
- Suspending judgement and using empathy to try and understand the speaker's experience, feelings and view.
- Using questions and "soft interpretations" to increase understanding
- Key elements:
 - Encourage: Invite the speaker to share
 - Clarify: Ask questions to confirm you understand
 - □ **Restate**: Repeat in your own words what you have heard (be tentative)
 - Reflect: Explain what you think the person is experiencing
 - Summarize: Reiterate ideas, themes, and feelings expressed
 - Validate: Show appreciation for the person's effort to communicate



Types of Feedback

- Appreciation
- Coaching Feedback (Here is a better way to do this....)
- Evaluation Feedback
- Positive feedback
 - Used to reinforce good performance so it happens again
- Developmental feedback
 - Used to improve future performance



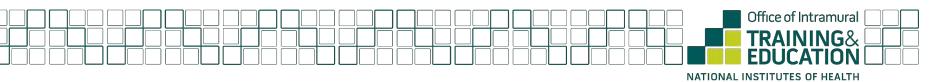
Why Feedback is Difficult

To receive:

- Tension between two human needs: to grow and develop as an individual AND to be accepted for who we are
- May trigger painful memories/experiences from the past
- Many of us tend to catastrophize and generalize when faced with bad news (http://psychcentral.com/lib/what-is-catastrophizing/0001276)
- □ Fears brought on as a result of stereotype threat (<u>http://www.reducingstereotypethreat.org/</u>)

To give:

- We fear resistance or an emotional response
- We worry that it will be perceived as personal
- We don't get enough practice and may not have had the best role models
- Cultural, racial, gender, or other differences may add an additional dimension of stress



Developing a Feedback Culture

- Inoculate against feedback being something to fear by:
 - Looking for reasons to give positive feedback (not general praise!)
 - Giving feedback often, especially at the outset
 - Keeping it timely
 - Asking your trainee for feedback so it is clear that it is used as a tool for growth

And:

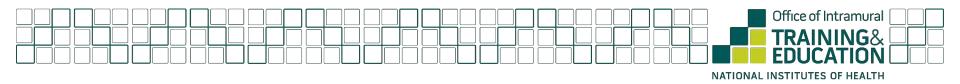
- Not when you are angry or emotional (when you can respond and not react)
- Only in private unless absolutely unavoidable



There WILL Be Bumps Along the Way

	Enthusiastic beginner	Disillusioned learner	Cautious performer	High Achiever
Competence	Low	Some	Moderate	High
Confidence	High	Low	Variable	High
Needs	Direction	Support	Support	Independence

Adapted from Ken Blanchard, Self Leadership and the One Minute Manager

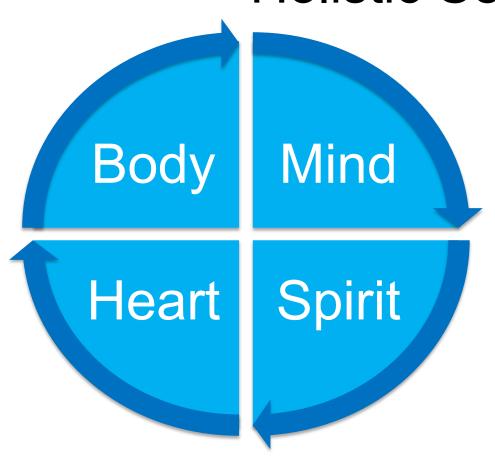


Helping Students Develop Resilience and Stress Management Tools

- A pre-requisite for their success (and yours too)
- A group is only as resilient as the individuals that make up that group and it starts at the top
- Elements of resilience include:
 - Finding community; engaging colleagues and mentors
 - Finding purpose day-to-day and beyond
 - Understanding and acknowledging negative emotions
 - Having strategies for dealing with negative self-talk
 - Developing optimism and changing our view of mistakes and setback
 - Practicing holistic self-care

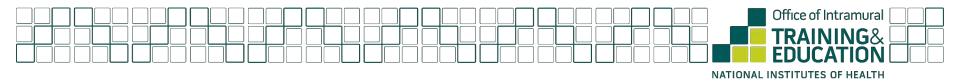


Holistic Self-Care



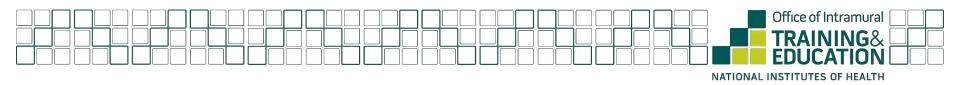
All the things we do, and don't do, to maintain, our physical, mental, emotional and spiritual health

There are common elements but we all have a unique way to "tune in and take care"



Tips for Mentors

- Learn to recognize the signs of distress
- Talk directly with your students about their health and well-being (while remembering appropriate boundaries)
- Seek appropriate advice (early and often)
- Be proactive!
 - Model appropriate attitudes and behaviors for your students
 - Encourage the use of wellness resources, provide information and then follow up



Not What I Was Expecting to Hear

Scenario III

- What issues impact your decision about how to proceed?
- What do you say to the graduate student?
- What are next steps after the conversation(s)?
- What, if anything, might you have done differently in the situation?



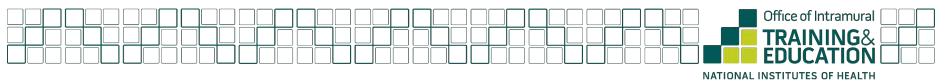
We Need to Evolve

- From a single, long-term hierarchical relationship
- To models of mentorship that include multiple, short and long-term relationships, that comprise a developmental network
- Focused on science functions, career functions, and psychosocial functions
- And remembering our own growth so we can help others grow



Some Challenging Food For Thought

- What do you do that could seem unwelcoming to students?
- What would you like to change about the way you direct your group?
- What attitudes and biases (implicit or explicit) might be driving some of the behaviors students find challenging?
- What do you need to learn to be a more effective mentor and manager?
- What resources and information do you need to make helpful change?



Some Books/TED Talks I Like

- TypeTalk at Work: How the 16 Personality Types Determine Your Success on the Job; Otto Kroeger, Janet Thuesen, and Hile Rutledge
- People Styles and Work....and Beyond; Dorothy Bolton and Robert Bolton
- The Culture Code, Daniel Coyle
- The Talent Code: Greatness Isn't Born, It's Grown, Daniel Coyle
- Emotional Intelligence: Why It Can Matter More Than IQ; Dan Goleman
- Primal Leadership: Learning to Lead with Emotional Intelligence, Daniel Goleman, Richard Boyatzis, and Annie McKee
- Mindset: The New Psychology of Success, Carol Dweck
- Learned Optimism: How to Change Your Mind and Your Life; Martin Seligman
- Everyday Bias: Identifying and Navigating Unconscious Judgments in Our Daily Lives, Howard Ross
- Becoming a Conflict Competent Leader, Craig Runde and Tim Flanagan
- Whistling Vivaldi, Claude Steele
- Beyond Imposter Syndrome, Margaret Collins
- Thanks for the Feedback, Douglas Stone and Sheila Heen
- Clash!: How to Thrive in a Multicultural World, Hazel Rose Marcus and Alana Conner
- Blindspot: Hidden Biases of Good People, Mahzarin Banaji and Anthony Greenwald





Brené Brown

The power of vulnerability

Brené Brown studies human connection — our ability to empathize, belong, love. In a poignant, funny talk, she shares a deep insight from her research, one that sent her on a personal quest to know herself as well as to understand humanity. A talk to share.



Amy Cuddy

Your body language shapes who you are

Body language affects how others see us, but it may also change how we see ourselves. Social psychologist Amy Cuddy shows how "power posing" — standing in a posture of confidence, even when we don't feel confident — can affect testosterone and cortisol levels in the brain, and might even have an impact on our chances for success.



Susan Cain

The power of introverts

In a culture where being social and outgoing are prized above all else, it can be difficult, even shameful, to be an introvert. But, as Susan Cain argues in this passionate talk, introverts bring extraordinary talents and abilities to the world, and should be encouraged and celebrated.





Shawn Achor

The happy secret to better work

We believe we should work hard in order to be happy, but could we be thinking about things backwards? In this fast-moving and very funny talk, psychologist Shawn Achor argues that, actually, happiness inspires us to be more productive.

(Watch later · 723 comments >



Guy Winch

Why we all need to practice emotional first aid

We'll go to the doctor when we feel flu-ish or a nagging pain. So why don't we see a health professional when we feel emotional pain: guilt, loss, loneliness? Too many of us deal with common psychological-health issues on our own, says Guy Winch. But we don't have to. He makes a compelling case to practice emotional hygiene — taking care of our emotions, our minds, with the same diligence we take care of our bodies.



Dan Pink

The puzzle of motivation

Career analyst Dan Pink examines the puzzle of motivation, starting with a fact that social scientists know but most managers don't: Traditional rewards aren't always as effective as we think. Listen for illuminating stories — and maybe, a way forward.