CULTURE OF CARE: BUILDING BRIDGES BETWEEN RESEARCH GOALS AND ETHICAL PRACTICE

- Animal research programs thrive when their practices balance scientific rigor with ethical stewardship. The Institutional Animal Care and Use Committee (IACUC) plays a vital role in building a bridge between scientific objectives and ethical responsibilities, helping organizations align research practices with humane care standards while fostering innovation.
- A thoughtful assessment of strengths, weaknesses, opportunities, and threats (SWOT) can provide organizations with a roadmap for continuous improvement. Strengths, such as the pivotal contributions of animal models to scientific advancements, must be leveraged alongside opportunities to advance the 3Rs (Replacement, Reduction, Refinement). Weaknesses, including challenges like reproducibility and translatability, and threats such as resource limitations or misinformation, must be addressed through strategic, evidence-based interventions. IACUCs help organizations bridge gaps in these areas by providing guidance and accountability, ensuring operational goals align with ethical imperatives while supporting scientific excellence.
- Equally important is the ability to meet people where they are, bridging differences in roles and perspectives to create cohesive teams. By fostering trust and collaboration among animal care staff, researchers, and administrators, IACUCs can help organizations build stronger connections and shared ownership of ethical practices. Tools for building compassion resilience—such as professional development resources, emotional support initiatives, and strategies to prevent compassion fatigue—serve as critical supports in maintaining this bridge. These tools help sustain the well-being of teams, improve morale, and ensure the quality and consistency of scientific outcomes.
- This session underscores that the IACUC is not merely a compliance body but a vital bridge connecting science and humanity. Attendees will leave with practical strategies to reinforce this connection, ensuring research programs not only meet ethical standards but also thrive in innovation, trust, and care.

CULTURE OF CARE: BUILDING BRIDGES BETWEEN RESEARCH GOALS AND ETHICAL PRACTICE

SALLY THOMPSON-IRITANI, DVM/PHD | AVP, ANIMAL CARE, OUTREACH, &3RS

IACUC 101 2025 | APRIL 2, 2025 | VIRTUAL

REAL OR PERCEIVED CONFLICT OF INTEREST:

- Employer: University of Washington
- Non-monetary: serve on the Board of 3RsC, SCAW, WSVMA, & FCSNP, on the Steering Committee for USARO, BAHSCR roundtable Chair, alternate delegate to AVMA HOD (ASLAP), and member of the AVMA SCHAI Working Group on the Psychological Impact of Humane Endings.

DISCLAIMER: The views expressed are my own with review and consultation with colleagues.

LAND ACKNOWLEDGEMENT

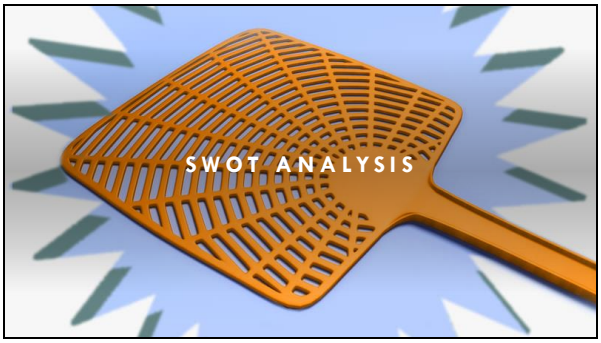
- We acknowledge that we are on the ancestral lands of the Coast Salish peoples, including the Duwamish, Suquamish, Muckleshoot, Snoqualmie and other tribes who have stewarded this land since time immemorial. We honor their ongoing relationship with this land and recognize their resilience and contributions to the region.

I, WE, IACUC MEMBERS,….

Want the best science possible.

Want to ensure the optimal care and well-being for animals when they are necessary for science.

IS THERE A PROBLEM?



Sally Thompson-Iritani

www.acc3rs.uwe.edu

S W O T

Research Involving Animals

Table Of Contents

01 Introduction
02 Strengths
03 Weaknesses
04 Opportunities
05 Threats
06 Strategic Implications
07 Action Plan

01 Introduction

This analysis aims to review the current state of Research Involving Animals and how we can move towards an improved understanding and appreciation of the importance and the limitations of this practice.

Currently animal models are used to support multiple facets of scientific advances:

Fundamental Basic Research
Translational Research
Safety Evaluation

02 Strengths

Nobel Prizes

~~ ~~ of the ~~227 award recipients in the Nobel Prize in Physiology or Medicine category~~, 190 used animal models in their research.

Biomedical Advancements

Research involving animals has helped people and animals live longer and healthier lives.

Safe & Efficacious Therapies

Most of the medicines that we rely on today were tested for safety in animals.

FOUNDATION FOR BIOMEDICAL RESEARCH

Understanding Animal Research

03 Weaknesses

Translatability

There is not always direct translation from the animal model to the human or animal condition that it is modeling.

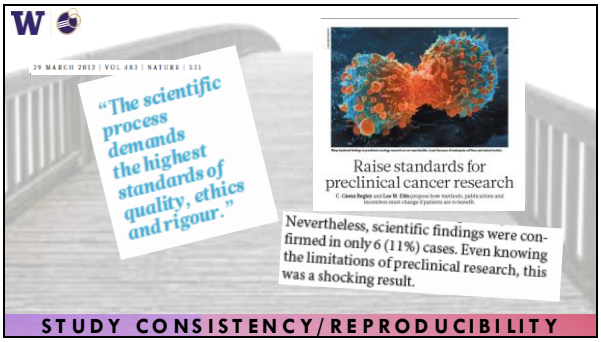
Rigor & Reproducibility

There has been concern expressed about the reproducibility of experiments. (of note: this is not necessarily specific to research involving animals.)

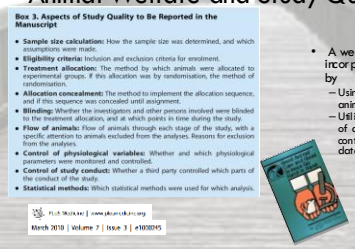
Ethical Dilemmas

Our relationship with animals is changing and our understanding of their needs in relation to our own is evolving.

One of the other considerations that needs to be addressed is that there are adverse events that happen.
How we process, recognize, and handle this is critical to understanding and deciding how research involving animals fits into our scientific paradigm going forward.



Animal Welfare and Study Quality



Box 3. Aspects of Study Quality to Be Reported in the Manuscript

- **Sample size calculation:** How the sample size was determined, and which assumptions were made.
- **Eligibility criteria:** Inclusion and exclusion criteria for enrolment.
- **Treatment allocation:** The method by which animals were allocated to experimental groups. If this allocation was by randomisation, the method of randomisation.
- **Allocation concealment:** The method to implement the allocation sequence, and if this sequence was concealed until assignment.
- **Blinding:** Whether the investigators and other persons involved were blinded to the treatment allocation, and at which points in time during the study.
- **Flow of animals:** Flow of animals through each stage of the study, with a specific attention to animals excluded from the analyses. Reasons for exclusion from the analyses.
- **Control of physiological variables:** Whether and which physiological parameters were monitored and controlled.
- **Control of study conduct:** Whether a third party controlled which parts of the conduct of the study.
- **Statistical methods:** Which statistical methods were used for which analysis.

March 2010 | Volume 7 | Issue 3 | e1000245

- A well-designed study will incorporate animal welfare by
  - Using best practices for animal care and use
  - Utilizing the correct number of animals and proper controls to ensure that the data is meaningful

04 Opportunities

Reduction

When possible, reduce our reliance on animal models. Optimize the study design and 'right-size' experiments.

Replacement

Replace animal models, when possible, with Non-animal models.

Refinement

Refine studies and improve housing and care for animals.

Openness

Improve communication and provide honest and accurate information about research involving animals.

05 Threats

Misinformation

There is a lot of misinformation about research involving animals. Both the challenges and the benefits.

Trust in Science

Overall, there is a broad mistrust in science globally.

Non-compliances

Non-compliances and retractions do happen and impact credibility.

Resources

Resources need to be invested in all 3 of the Rs – to move forward we need to dedicate resources to improvements.

06 Strategic Implications

How can STRENGTHS be leveraged to capitalize OPPORTUNITIES?

Science works!

History has proven that research involving animals leads to improvements in the health of both people and animals.

Clarify the role when animals are necessary and ensure that we are optimizing utilization of the 3Rs. **Culture of Care!**

Hold ourselves accountable for evaluating when and what is working. **Culture of Challenge!**

Strategies to address WEAKNESSES and mitigate potential THREATS

07

Action Plan

Actions to leverage strengths and opportunities

Maximize communications to all stakeholders - scientists, politicians, public, media, and specific opposition groups.

Understand the role of individuals in the process.

Continue to recognize strengths and ensure that they are well understood.

Steps to address weaknesses and counteract threats

Invest resources in all 3Rs! And Culture of Care.

Ensure access to information on improvements and path forward.

Invest in collaboration between research involving animals and research involving NAMs.

07

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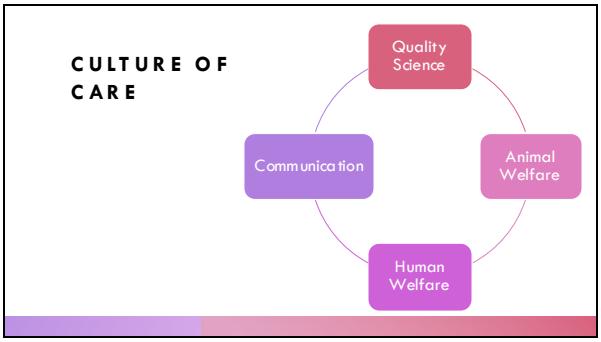
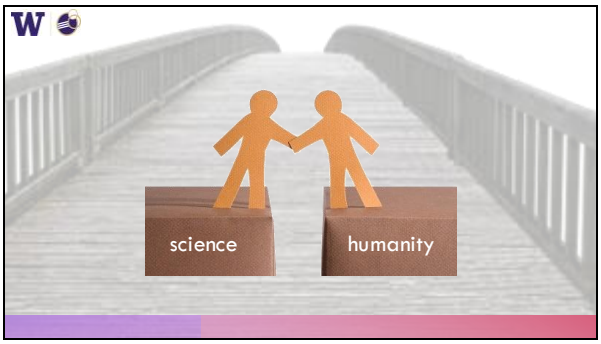
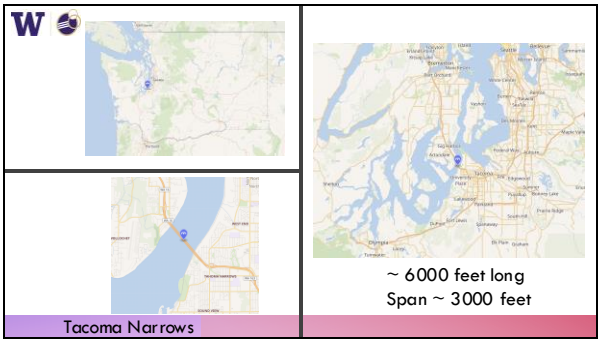
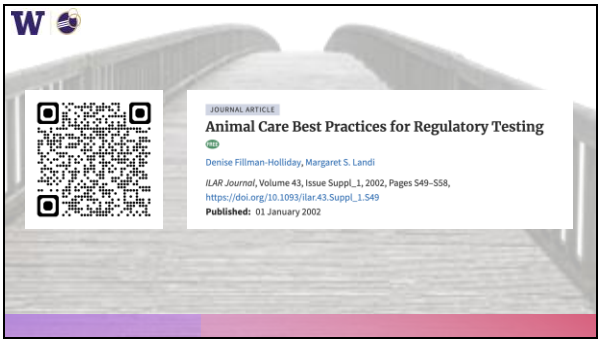

CULTURE OF CARE
Quality Science
Animal Welfare
Human Welfare
Communication

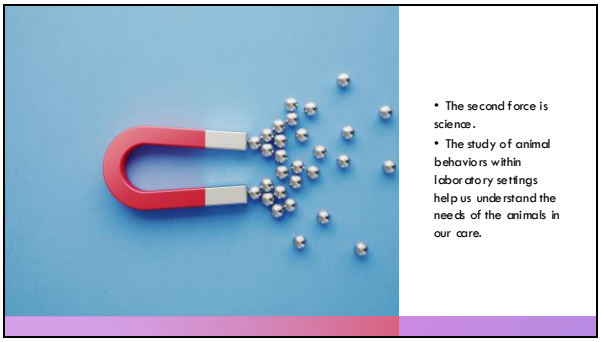

science
humanity

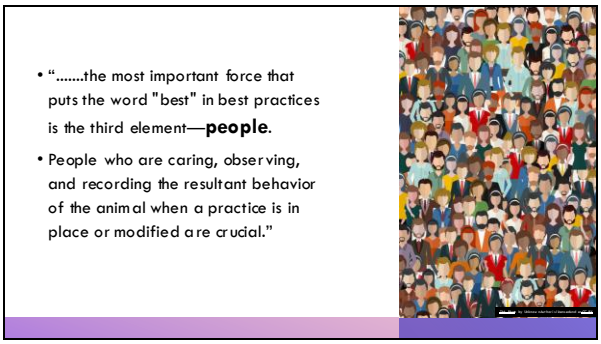

~ 6000 feet long
Span ~ 3000 feet
Tacoma Narrows


~ 6000 feet long
Span ~ 3000 feet


JOURNAL ARTICLE
Animal Care Best Practices for Regulatory Testing
Denise Fillman-Holliday, Margaret S. Landi
ILAR Journal, Volume 43, Issue Suppl_1, 2002, Pages S49–S58,
https://doi.org/10.1093/ilar.43.Suppl_1.S49
Published: 01 January 2002


The three fundamental forces for best practices are
(1) the policies of a particular country,
(2) the science known about a specific practice,
(3) and the people involved with the animals.


• The second force is science.
• The study of animal behaviors within laboratory settings help us understand the needs of the animals in our care.


• "…….the most important force that puts the word "best" in best practices is the third element—**people**.
• People who are caring, observing, and recording the resultant behavior of the animal when a practice is in place or modified are crucial."

In an ideal setting, people working with animals observe and study animal behavior as influenced by different housing and handling paradigms.

Components include

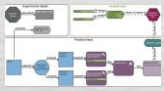
study design | housing | social contact | diet/feed | enrichment devices | human interaction

5/6 are animal care!

Rigor & Reproducibility

study design

PREPARE (norecopa.no)

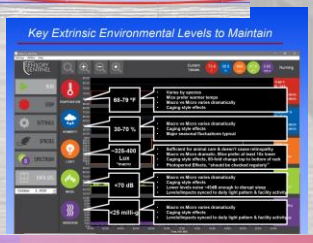


The Experimental Design Assistant - EDA | NC3Rs

The ARRIVE guidelines 2.0 | ARRIVE Guidelines

You should know about these tools to support your study preparation and publishing.

housing | social contact | diet/feed | enrichment devices



Turner Scientific, Tradeline Presentation 2024

Lights, Vibration, and More: How Extrinsic Factor Affect the Animals in the Research Facility

Debra L. Hickman, DVM, DACLAM, DACAW

INTERSECTION OF FACILITIES, ANIMAL CARE, AND PEOPLE CARE.

Building Bridge: Human attitudes, behavior, & interactions

The Elephant in the Room: Recognition and Documentation of Personnel Practices That Confound Reproducibility

… ….Approaches to and training in animal handling can influence both animal welfare and data and may contribute to unexplained variation in research findings and reproducibility in certain mouse strains and between sexes. The method of grasping the tail base to restrain and move mice continues to be used routinely, despite evidence that it induces stress;… …..

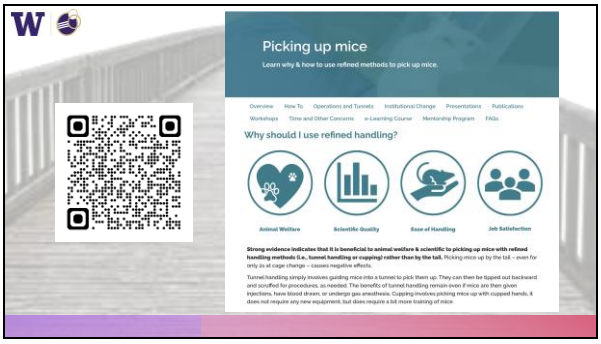
Novak J, Jaric I, Rosso M, Rufener R, Touma C, Würbel H. 2022. Handling method affects measures of anxiety, but not chronic stress in mice. Sci Rep 12:20938. https://doi.org/10.1038/s41598-022-25090-9.

Henderson LJ, Dani B, Serrano EMN, Smulders TV, Roughan JV. 2020. Benefits of tunnel handing persist after repeated restraint, injection and anaesthesia. Sci Rep 10:14562. https://doi.org/10.1038/s41598-020-71476-y.

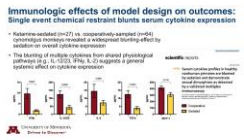
Refined Mouse Handling with Workshop Attendee Feedback

Center for
Laboratory Animal
Training Resources
UNIVERSITY of WASHINGTON

Link for videos on Refined Handling



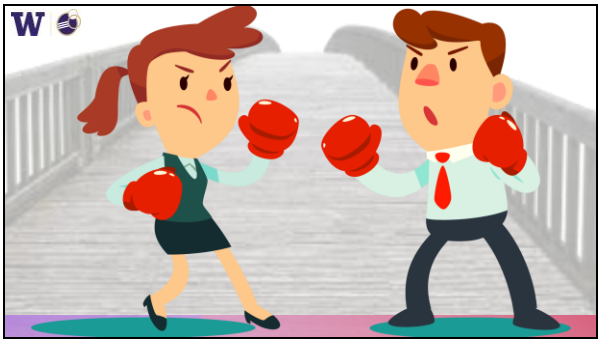
COOPERATIVE SAMPLING = BETTER SCIENCE

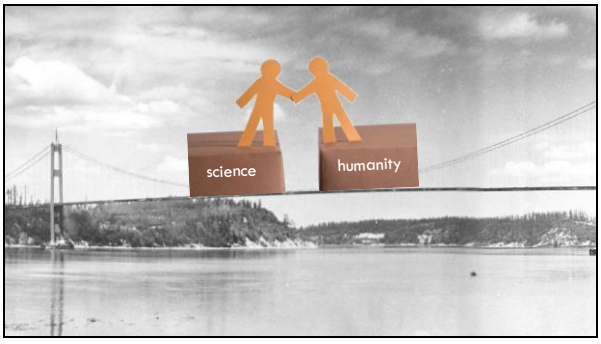


- Sedation blunted serum cytokine expression when compared with cooperative work with non-human primates.

https://www.comeseeourworld.org/gallery/?group=primates


Change fatigue
Change
Change
Change
Change
Change
Change
Change
Change
Change




science
humanity

- Galloping Gertie

Galloping Gertie http://youtu.be/Xg gxeuFDcdURs?t=xyxp YTzxQ A5 FHPIu

1940 – right before bridge opening:

May Completion of steel floor system (girders, beams and stringers); completion rate was 200 feet per day. About this time, riveters and other workmen notice the "bounce," or "galloping" of the bridge. Some chew on lemons to combat nausea.

Four hydraulic jacks are installed to act as shock absorbers, as engineers hope to take the "bounce" out of the bridge. They have no effect.

AEROELASTIC FLUTTER

Key Takeaways:

- The Tacoma Narrows Bridge collapse taught engineers the importance of considering environmental factors and interdisciplinary collaboration in bridge design to prevent catastrophic failures.
- The event highlighted the need for ongoing maintenance, wind tunnel testing, and computer simulations to ensure the safety and stability of bridges.

1938

May Tacoma Field is deeded to the U.S. government by Pierce County and becomes McChord Field. Construction project of $5 million to improve the air base begins in late summer and employs some 2,000 men.

WSTBA submits an amended application to the federal PWA and applies to the RFC for a loan. The revised application includes a preliminary layout design by Clark Eldridge for the suspension bridge.

June Public Works Administration grants funds for the first Tacoma Narrows Bridge, marking the culmination of over 14 years of community efforts. PWA award is conditional on the WSTBA hiring outside consultants for the bridge design. Consultant for the superstructure is Leon Moisseiff of New York; consultants for the substructure are Moran & Proctor of New York.

Aug. Leon Moisseiff completes revision of drawings for 1940 Narrows Bridge.

Sept. Construction bids are opened. Low bid for building the Tacoma Narrows Bridge is by the Pacific Bridge Co. in the amount of $5,594,730.40. Associate contractor supplying steel was the Bethlehem Steel Co. Wire is supplied by John A. Roebling Sons Co. of New York.

Nov. Start of construction on first Narrows Bridge. Official "start date" according to the construction contract is two days later

Official contract start date to build the Narrows Bridge.

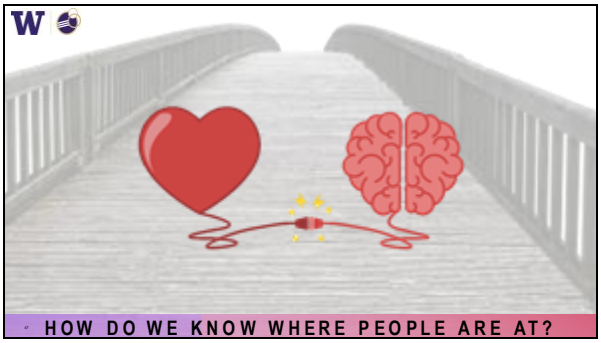
Dec. Start of construction for west pier (pier 4)

Don't be this!!

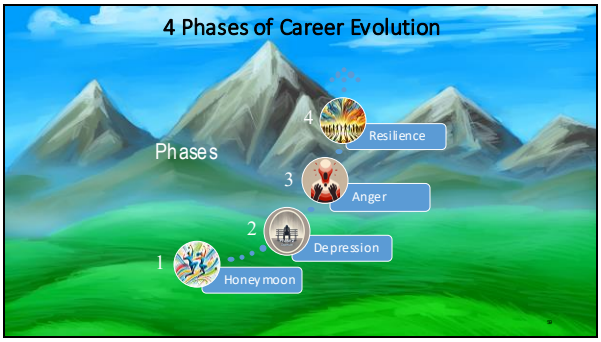
PAY ATTENTION!

CONTINUALLY CHECK-IN. IS ANYONE EATING LEMONS?

IF YOU HAVE A GALLOPING GERTIE – STOP!




Career Trajectory
Ways of Appreciation
Window of Tolerance


4 Phases of Career Evolution
Phases
4
Resilience
3
Anger
2
Depression
1
Honeymoon


Red hot and raring to go, we are out to change the world. We are high on life. We know we can make a difference.
Our enthusiasm overflows, our capacity for challenges is limitless.
We think we understand the problem and we know we can fix it if only people would get out of our way.
PHASE 1: HONEYMOON

Our enthusiasm has turned sour.

We've lost the boundless energy.

We no longer wish to talk about work — don't even want to admit where we work.

We seem powerless to affect change.

Somehow, we're to blame for our failure.

Our wall of isolation gets thicker.

Every now and then we get a spark of Phase 1 energy.

PHASE 2: DEPRESSION

Our Phase 2 depression has turned outward, and we're mad as hell.

Hopelessness turns to rage.

Everyone is a target for our anger and derision.

We have lost our perspective and our effectiveness.

We're unable to connect with life.

Even the animals we come in contact with seem somehow distant and unreal.

PHASE 3: ANGER

New determination and understanding of what our mission really is.

It is big picture time.

We realize that we have been effective — we have made a difference.

We realize that work is not our whole world.

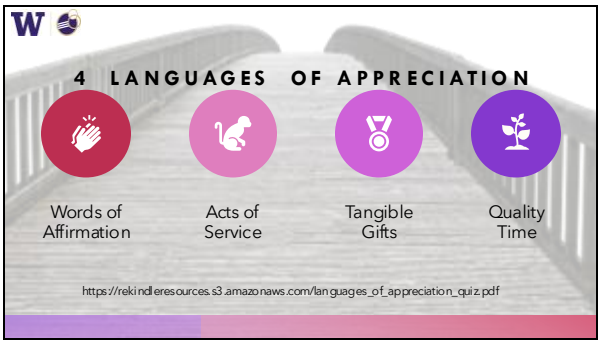
We reconnect with the animals.

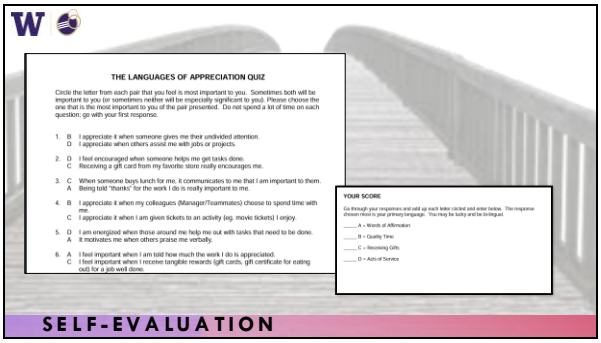
We understand that sadness and pain are a part of our job.

PHASE 4: RESILIENCE

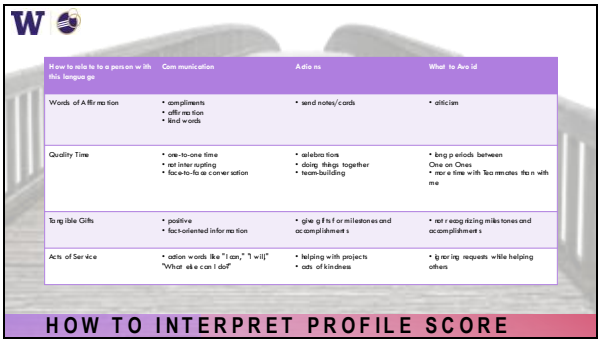

4 Phases of Career Evolution
Phase 4:Resilience
Phase 3:Anger
Phase 2:Depression
Phase 1
Honeymoon
Commonly go back and forth between these states.


4 LANGUAGES OF APPRECIATION

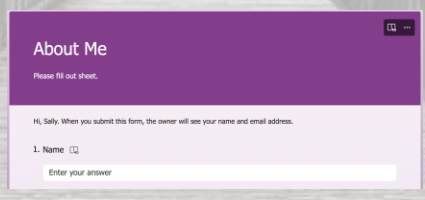

4 LANGUAGES OF APPRECIATION
Words of Affirmation
Acts of Service
Tangible Gifts
Quality Time
https://rekindleresources.s3.amazonaws.com/languages_of_appreciation_quiz.pdf


THE LANGUAGES OF APPRECIATION QUIZ
Circle the letter from each pair that you feel is most important to you. Sometimes both will be important to you (or sometimes neither will be especially significant to you). Please choose the one that is the most important to you of the pair presented. Do not spend a lot of time on each question; go with your first response.
1. B I appreciate it when someone gives me their undivided attention.
D I appreciate when others assist me with jobs or projects.
2. D I feel encouraged when someone helps me get tasks done.
C Receiving a gift card from my favorite store really encourages me.
3. C When someone buys lunch for me, it communicates to me that I am important to them.
A Being told "thanks" for the work I do is really important to me.
4. B I appreciate it when my colleagues (Manager/Teammates) choose to spend time with me.
C I appreciate it when I am given tickets to an activity (eg. movie tickets) I enjoy.
5. D I am energized when those around me help me out with tasks that need to be done.
A It motivates me when others praise me verbally.
6. A I feel important when I am told how much the work I do is appreciated.
C I feel important when I receive tangible rewards (gift cards, gift certificate for eating out) for a job well done.
YOUR SCORE
Go through your responses and add up each letter circled and enter below. The response chosen most is your primary language. You may be lucky and be bilingual.
____ A = Words of Affirmation
____ B = Quality Time
____ C = Receiving Gifts
____ D = Acts of Service
SELF-EVALUATION


Affirmation
work
Service
Quality Time
gift card
Gifts
EXAMPLE:


How to relate to a person with this language
Communication
Actions
What to Avoid
Words of Affirmation
• compliments
• affirmation
• kind words
• send notes/cards
• criticism
Quality Time
• one-to-one time
• not interrupting
• face-to-face conversation
• celebrations
• doing things together
• team-building
• long periods between One on Ones
• more time with Teammates than with me
Tangible Gifts
• positive
• fact-oriented information
• give gifts for milestones and accomplishments
• not recognizing milestones and accomplishments
Acts of Service
• action words like "I can," "I will" "What else can I do?"
• helping with projects
• acts of kindness
• ignoring requests while helping others
HOW TO INTERPRET PROFILE SCORE

Supervisors have staff fill out form and it can be used as a way to personalize appreciation.



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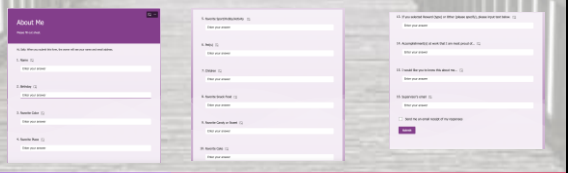
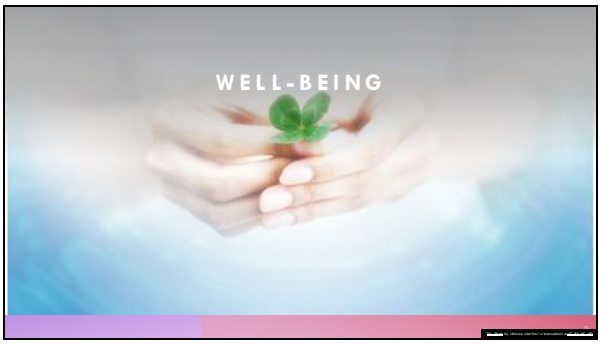
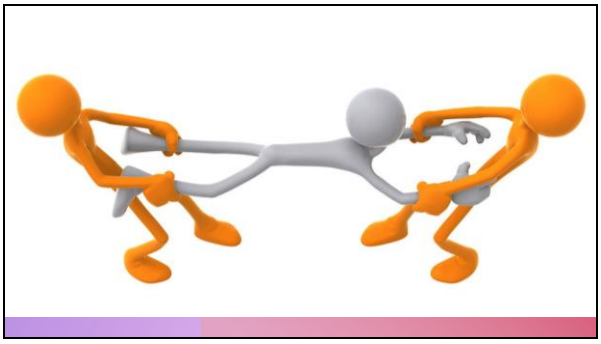
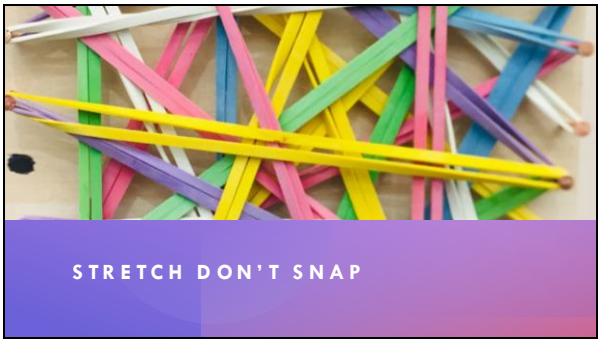
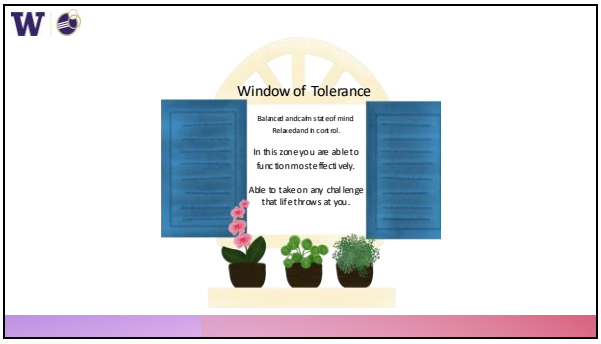






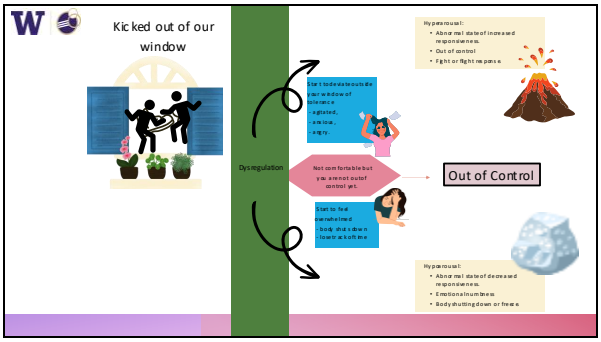

STRETCH DON'T SNAP

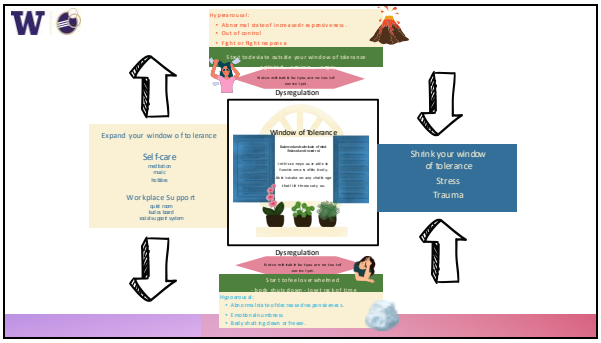

Window of Tolerance
Balanced and calm state of mind
Relaxed and in control.
In this zone you are able to function most effectively.
Able to take on any challenge that life throws at you.

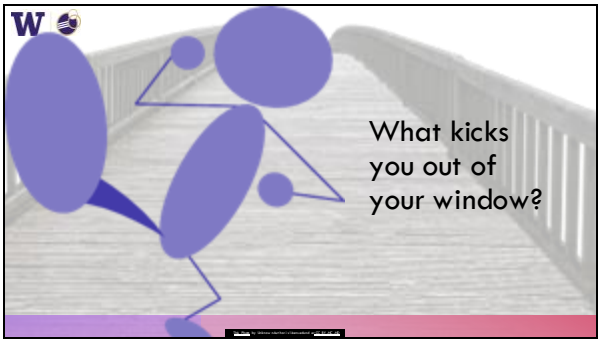

Expand your window of tolerance
Self-care
meditation
music
hobbies
Workplace Support
quiet room
kudos board
social support system

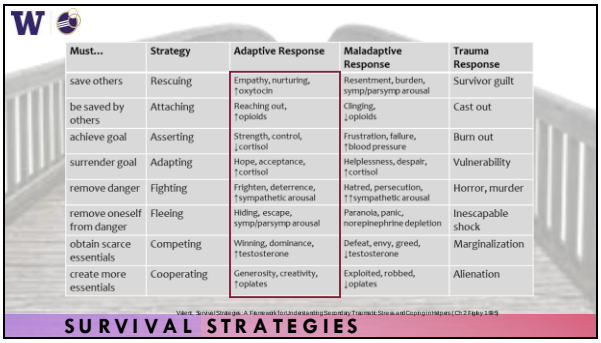

Shrink your window of tolerance
Stress
Trauma


Window of Tolerance


Kicked out of our window
Dysregulation
Out of Control
Hyperarousal:
• Abnormal state of increased responsiveness.
• Out of control
• Fight or flight responses
Hyperarousal:
• Abnormal state of decreased responsiveness.
• Emotional numbness
• Body shutting down or freeze


Hyperarousal:
• Abnormal state of increased responsiveness.
• Out of control
• Fight or flight responses
Dysregulation
Window of Tolerance
Expand your window of tolerance
Self-care
Workplace Support
Shrink your window of tolerance
Stress
Trauma
Dysregulation
Hyperarousal:
• Abnormal state of decreased responsiveness.
• Emotional numbness
• Body shutting down or freeze

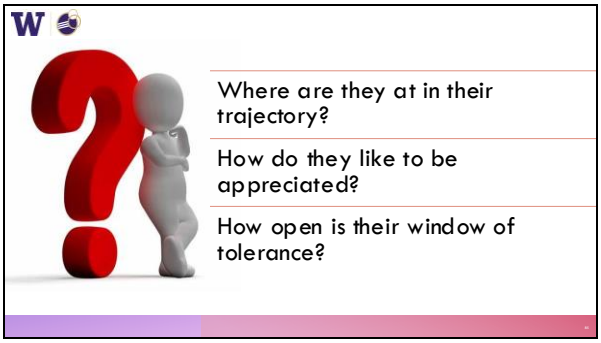




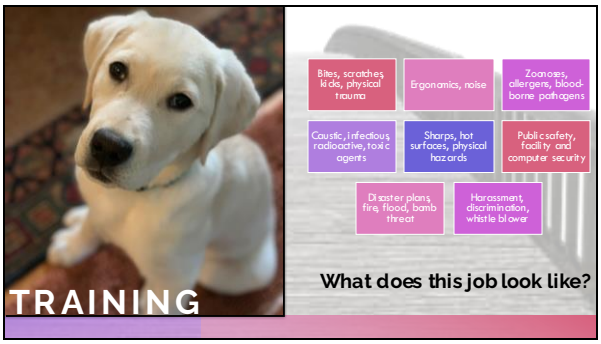
Must...	Strategy	Adaptive Response	Maladaptive Response	Trauma Response
save others	Rescuing	Empathy, nurturing, ↑oxytocin	Resentment, burden, symp/parsymp arousal	Survivor guilt
be saved by others	Attaching	Reaching out, ↑opioids	Clinging, ↓opioids	Cast out
achieve goal	Asserting	Strength, control, ↓cortisol	Frustration, failure, ↑blood pressure	Burn out
surrender goal	Adapting	Hope, acceptance, ↑cortisol	Helplessness, despair, ↑cortisol	Vulnerability
remove danger	Fighting	Frighten, deterrence, ↑sympathetic arousal	Hatred, persecution, ↑↑sympathetic arousal	Horror, murder
remove oneself from danger	Fleeing	Hiding, escape, symp/parsymp arousal	Paranoia, panic, norepinephrine depletion	Inescapable shock
obtain scarce essentials	Competing	Winning, dominance, ↑testosterone	Defeat, envy, greed, ↓testosterone	Marginalization
create more essentials	Cooperating	Generosity, creativity, ↑opiates	Exploited, robbed, ↓opiates	Alienation

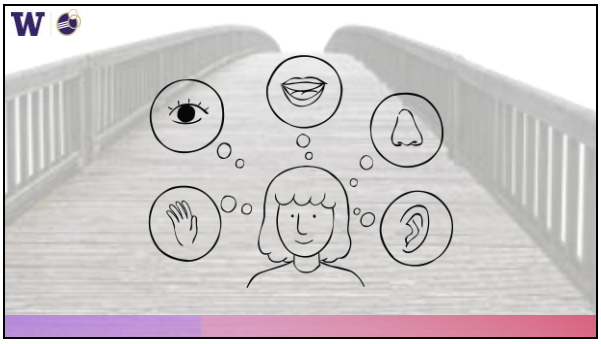
Ward, Survival Strategies: A Framework for Understanding Secondary Traumatic Stress and Coping in Helpers (Ch 2 Epley 1 IRS)

SURVIVAL STRATEGIES


Where are they at in their trajectory?
How do they like to be appreciated?
How open is their window of tolerance?


ARE PERSONNEL PROPERLY TRAINED TO ENTER THE ANIMAL CARE WORKFORCE?


TRAINING
Bites, scratches, falls, physical trauma
Ergonomics, noise
Zoonoses, allergens, blood-borne pathogens
Caustic, infectious, radioactive, toxic agents
Sharps, hot surfaces, physical hazards
Public safety, facility and computer security
Disaster plans, fire, flood, bomb threat
Harassment, discrimination, whistle blower
What does this job look like?



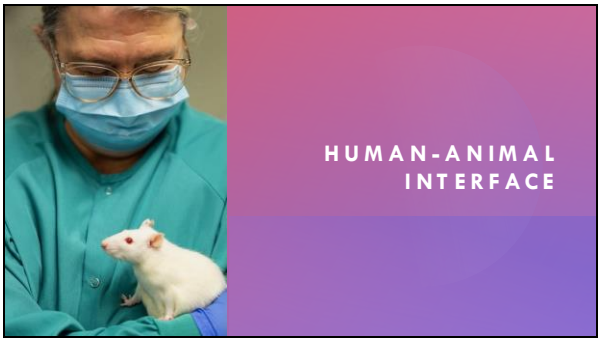

5
TIPS
for achieving
100% Staffing
in the vivarium
KATHLEEN Y. HOFFMAN, BS, CVT, RLATG

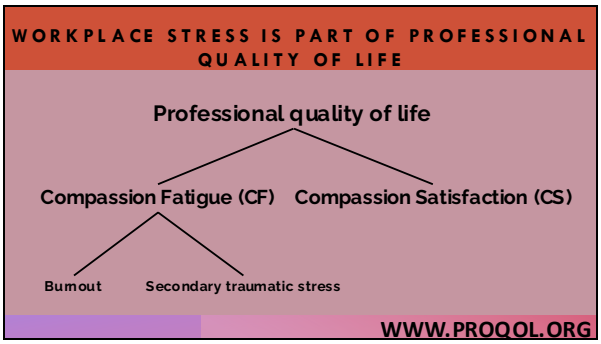

REACHING OUT TO THE COMMUNITY TO DO PRE-REQUISITE TRAINING FOR LAB ANIMAL TRAINING AND CERTIFICATION.

Openness

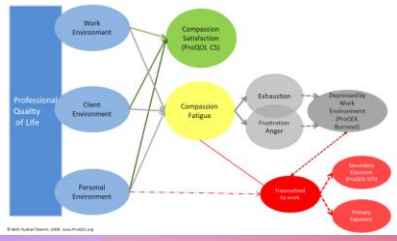
QUICK RECAP OF COMPASSION RESILIENCE


Bites, scratches, kicks, physical trauma
Ergonomics, noise
Zoonoses, allergens, blood-borne pathogens
Caustic, infectious, radioactive, toxic agents
Sharps, hot surfaces, physical hazards
Public safety, facility and computer security
Disaster plans, fire, flood, bomb threat
Harassment, discrimination, whistle blower
TRAINING
Emotional Involvement?


HUMAN-ANIMAL INTERFACE


WORKPLACE STRESS IS PART OF PROFESSIONAL QUALITY OF LIFE
Professional quality of life
Compassion Fatigue (CF)
Compassion Satisfaction (CS)
Burnout
Secondary traumatic stress
WWW.PROQOL.ORG

Complex Relationships



SYMPTOMS OF COMPASSION SATISFACTION

- Feeling positive about your colleagues and those you care for
- A feeling of contributing to the work setting or the greater good
- Look forward to going to work
- Spending time with people that are important to you.
- Self-care
- Work-life balance
- And workplace care watch out for others.
- And taking care of the animals and people.

SYMPTOMS OF COMPASSION FATIGUE


Sleep
Connect with nature
Clear work boundaries
Relaxation techniques
Personal self-care
Healthy diet
Professional support
Exercise
Connect with friends & family
Self-care
What works for you?
Take regular short breaks
Take leave when it's due
Have coffee/lunch with friends
Reconnect with your purpose
Professional self-care
Advocate for your needs
Find a mentor
Acknowledge what went well
Recognise what I can and can't control


MAKE A PROMISE TO YOURSELF
AND KEEP IT


I STARTED A NEW EXERCISE ROUTINE.
EVERY DAY I DO DIDDLY-SQUATS.

INSTITUTIONAL SYMPTOMS

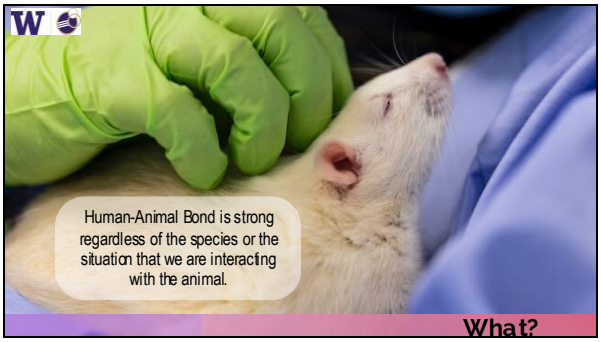
- Absenteeism
- Changes in relationships
- Poor teamwork
- Rule breaking
- Aggressive outbreaks
- Inability to complete tasks
- Lack of flexibility
- Negativity towards management
- Reluctance to change
- Pessimism
- Lack of a vision

- Absenteeism
- Changes in relationships
- Poor teamwork
- Rule breaking
- Aggressive outbreaks
- Inability to complete tasks
- Lack of flexibility
- Negativity towards management
- Reluctance to change
- Pessimism
- Lack of a vision

Quality of the Science?

INSTITUTIONAL SYMPTOMS

- How to balance these feelings and promote resiliency to handle feelings that may at times overwhelm us.

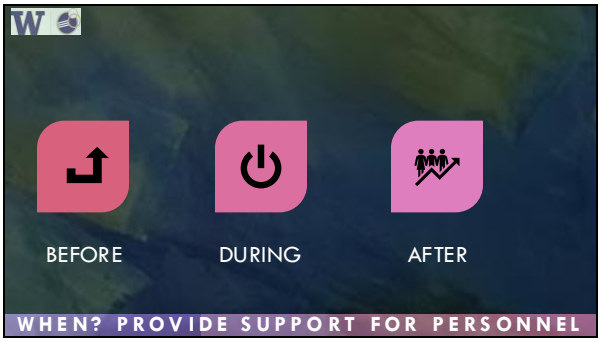


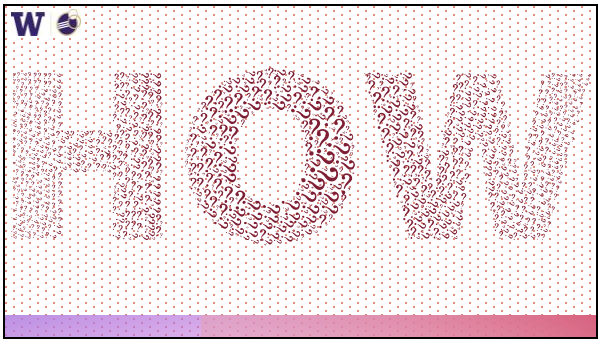
WHO?

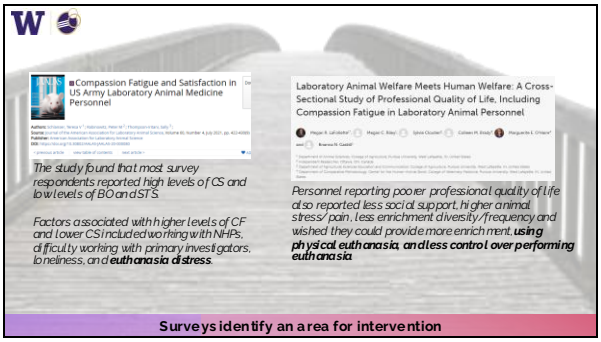
- All personnel that interact with the animals in a research setting.
- Veterinary staff,
- daily care staff,
- researchers,
- janitorial staff,
- facilities staff,
- IACUC members,
- etc…

WHY?

- Personnel are working with animals to conduct important scientific studies.
- There are still many diseases that are not fully understood and without effective treatments available.
- Many of these animal studies are conducted with the goal of developing therapies to help combat diseases in both humans and animals.

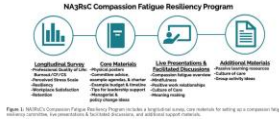



COVID

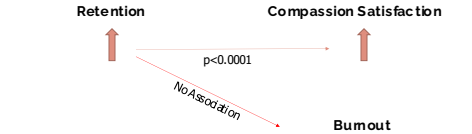

Compassion Fatigue and Satisfaction in US Army Laboratory Animal Medicine Personnel
The study found that most survey respondents reported high levels of CS and low levels of BO and STS.
Factors associated with higher levels of CF and lower CS included working with NHPs, difficulty working with primary investigators, loneliness, and euthanasia distress.
Laboratory Animal Welfare Meets Human Welfare: A Cross-Sectional Study of Professional Quality of Life, Including Compassion Fatigue in Laboratory Animal Personnel
Personnel reporting poorer professional quality of life also reported less social support, higher animal stress/pain, less enrichment diversity/frequency and wished they could provide more enrichment, using physical euthanasia, and less control over performing euthanasia.
Surveys identify an area for intervention


I left the lab animal profession. This survey is about 10 years too late.

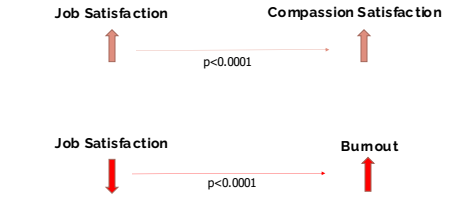
Longitudinal Study to Evaluate Intervention Success of Compassion Fatigue Resiliency



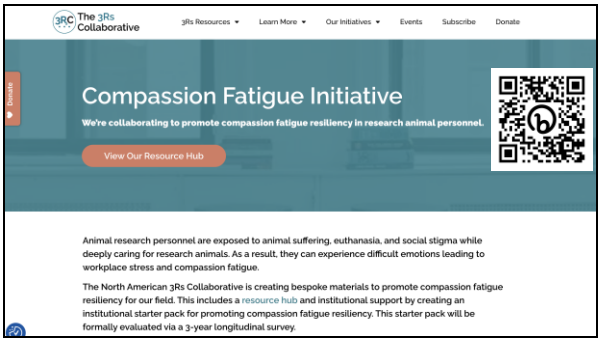
LAS Pro May/Jun 2022

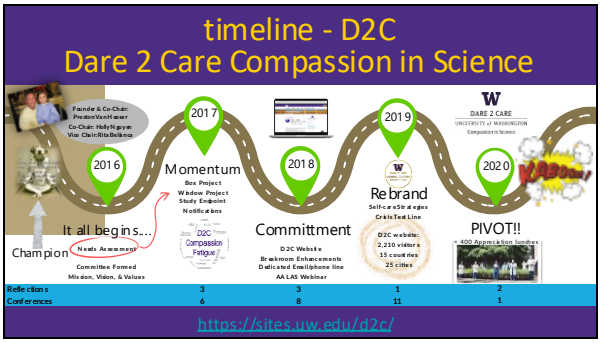


This seems to indicate that promoting compassion satisfaction could be key to employee retention.



Employee Retention





Animal Use Training (Online)

Employee/ Occupational Health Screening

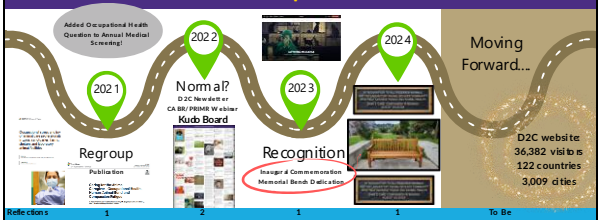
- Annual Health Assessment administered by UW Employee Health
- One of the first institutions to implement CF assessment as part of the annual health screening for Laboratory Animal Professionals

VI. ADDITIONAL HEALTH CONCERNS

☐ Yes I have health or workplace concerns not covered by the questionnaire **(e.g. Compassion Fatigue)** that I feel may affect my occupational health and would like to discuss with the Employee Health provider.

INVOLVING EMPLOYEE/OCCUPATIONAL HEALTH

timeline - D2C
Dare 2 Care Compassion in Science



https://sites.uw.edu/d2c/

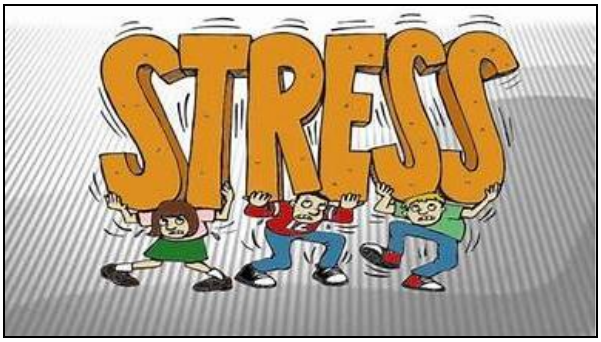
- Inaugural Commemoration- Aug 2023
- Acknowledge contributions to biomedical research and animal welfare
- Compassionate Keynote Speakers

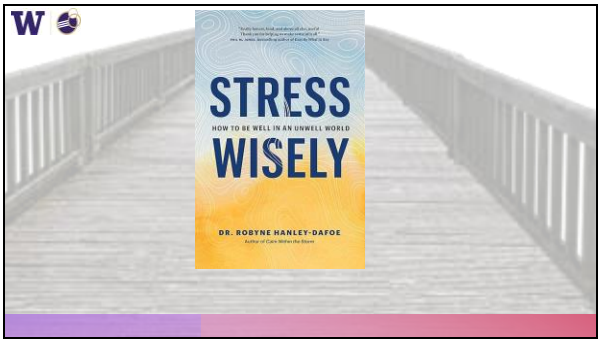
Dedication Area

- Physical tribute
- Peaceful retreat
- Place for reflection
- In Honor of Animals, Animal Care, Research

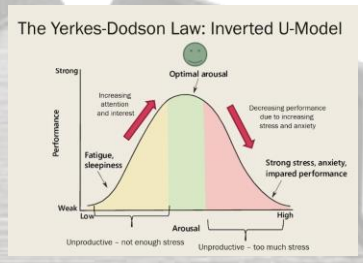
ANNUAL COMMEMORATION


ANNUAL
ANNUAL COMMEMORATION


STRESS


STRESS
HOW TO BE WELL IN AN UNWELL WORLD
WISELY
DR. ROBYNE HANLEY-DAFOE

OPTIMAL STRESS LEVELS

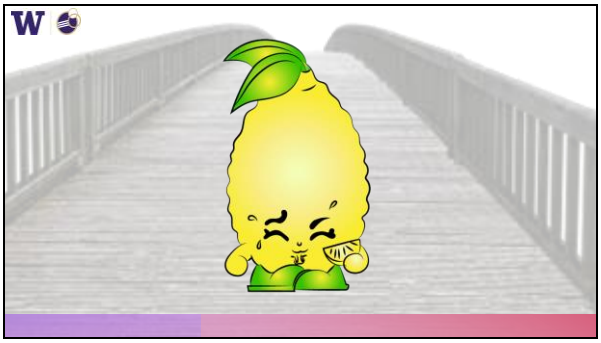


CULTURE OF CHALLENGE

"THIS IS ABOUT LOOKING FOR THE ACCEPTABLE, RATHER THAN CHOOSING THE ACCEPTED."

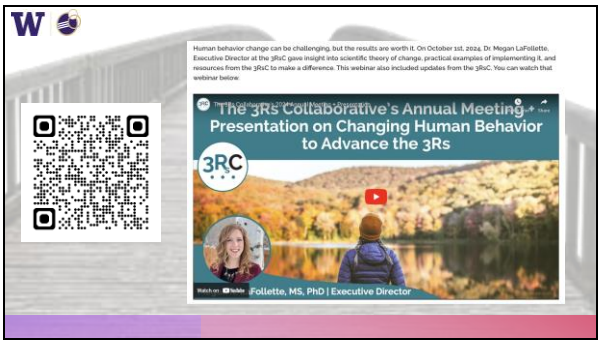
THE EXPRESSION……

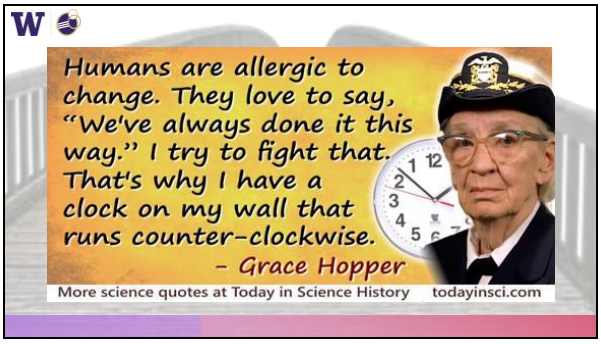
- "BECAUSE WE'VE ALWAYS DONE IT THAT WAY"……
- SHOULD IMMEDIATELY TRIGGER A (DIPLOMATIC) RESPONSE TO EVALUATE WHETHER THERE MAY BE BETTER WAYS OF PERFORMING THE TASK IN QUESTION.




WHEN
life
GIVES YOU
lemons
MAKE
lemonade


"If you get tired,
learn to rest,
not to quit."
- Banksy


Human behavior change can be challenging, but the results are worth it. On October 1st, 2024, Dr. Megan LaFollette, Executive Director at the 3RsC gave insight into scientific theory of change, practical examples of implementing it, and resources from the 3RsC to make a difference. This webinar also included updates from the 3RsC. You can watch that webinar below:
The 3Rs Collaborative's Annual Meeting - Presentation on Changing Human Behavior to Advance the 3Rs
3RC
Follette, MS, PhD | Executive Director


Humans are allergic to change. They love to say, "We've always done it this way." I try to fight that. That's why I have a clock on my wall that runs counter-clockwise.
- Grace Hopper
More science quotes at Today in Science History
todayinsci.com


Good News!


15,000 TUNNELS ARRIVED IN JANUARY

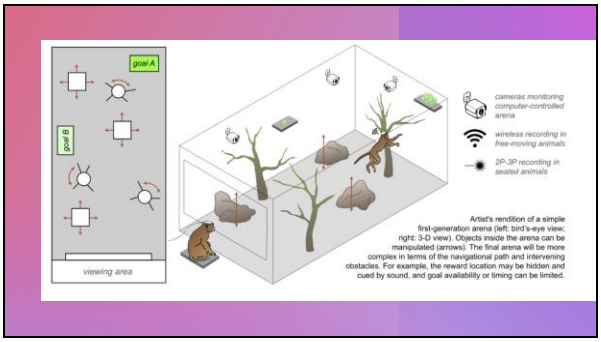
POSITIVE REINFORCEMENT TRAINING

Then

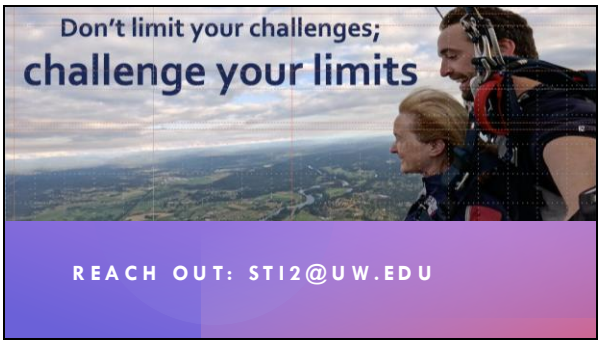
- Single trainer for 2 facilities in 2 states with over 800 animals.
- Teaching PRT in group classes
- Consults with lab staff
- Request based training priorities
- Education of IACUC, Researchers, Veterinary, and Husbandry Staff

Now

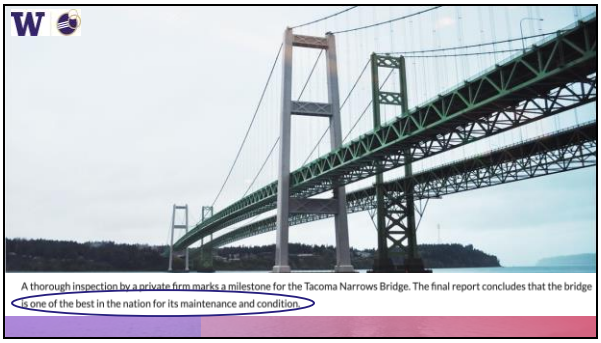
- 4 Professional trainers – 3 Seattle; 1 AZ
- **15 distinct behaviors** trained for Research, Veterinary, and Husbandry
- **72 staff** who can train at least one of those behaviors
- Training done proactively, longer study lead times
- Group classes followed by individual instruction on target training for every person in the animal areas
- Training program "Graduates" who can teach others
- Shared international collaborations for training and welfare



Artist's rendition of a simple first-generation arena (left: bird's-eye view; right: 3-D view). Objects inside the arena can be manipulated (arrows). The final arena will be more complex in terms of the navigational path and intervening obstacles. For example, the reward location may be hidden and cued by sound, and goal availability or timing can be limited.



REACH OUT: STI2@UW.EDU



ACKNOWLEDGEMENTS

- IACUC 101
- The 3Rs team, Outreach team, and D2C
- University of Washington Leadership, VPR and Provost
- OAW, DCM, WaNPRC, AV, CLATR
- 3RsC
  - Megan LaFollette
  - Lauren Young

RESOURCES AND LINKS

1. Russell, W. M. S., & Burch, R. L. (1959). The Principles of Humane Experimental Technique.
   - This foundational text introduces the 3Rs and sets the ethical framework for humane animal research.

2. Tannenbaum, J., & Bennett, B. T. (2015). Russell and Burch's 3Rs Then and Now: The Need for Clarity in Definition and Purpose. Journal of the American Association for Laboratory Animal Science, 54 (2), 120-132.
   - This paper discusses the historical context of the 3Rs and their application in modern research.

3. Franco, N. H., & Olsson, I. A. S. (2014). Scientists and the 3Rs: Attitudes to Animal Use in Biomedical Research and the Effect of Mandatory Training in Laboratory Animal Science*. *Laboratory Animals, 48 (1), 50-60.
   - A study on the attitudes of scientists toward the 3Rs and the impact of training on these attitudes.

4. Fenwick, N., Griffin, G., & Gauthier, C. (2009). The Welfare of Animals Used in Science: How the "Three Rs" Ethic Guides Improvements. Canadian Veterinary Journal, 50 (5), 523-530.
   - This paper reviews how the 3Rs have contributed to the improvement of animal welfare in scientific research.

5. Prescott, M. J., & Lidster, K. (2017). Improving Quality of Science Through Better Animal Welfare: The NC3Rs Strategy. Lab Animal, 46 (6), 152-156.
   - Discusses the strategy of the UK's National Centre for the 3Rs (NC3Rs) in promoting better science through improved animal welfare.

RESOURCES AND LINKS CONTINUED

6. Reinhardt, V. (2002). Social Enrichment for Laboratory Primates: A Critical Review. Lab Animal, 31 (5), 42-51.
   - Focuses on refinement strategies, particularly social enrichment for primates in laboratory settings.

7. Graham, M. L., & Prescott, M. J. (2015). The Role of Animal Models in Drug Development. Nature Reviews Drug Discovery, 14 (9), 684-701.
   - This paper reviews the use of animal models in drug development, touching on the concepts of replacement and reduction.

8. Festing, M. F. W., & Wilkinson, M. (2007). The Use of Animals in Regulatory Toxicity Testing: A Critique of the UK Government's Response to the Boyd Group Report. ATLA: Alternatives to Laboratory Animals, 35 (2), 207-211.
   - Critiques the use of animals in regulatory testing and discusses alternative methods in line with the 3Rs.

9. Hendriksen, C. F. M., & Morton, D. B. (Eds.). (1999). The Humane Use of Animals in Scientific Research: The 3Rs Principle. ATLA: Alternatives to Laboratory Animals, 27 (6), 827-846.
   - A collection of essays exploring different aspects of the 3Rs in scientific research.

10. Bayne, K. A. L., & Würbel, H. (2014). The Impact of Environmental Enrichment on the Outcome Variability and Scientific Reproducibility of Laboratory Animal Studies. Laboratory Animals, 48 (1), 68-79.
    - Reviews the influence of environmental enrichment as a refinement strategy on the quality of scientific data.

RESOURCES AND LINKS CONTINUED

11. Hubrecht RC, Carter E. The 3Rs and Humane Experimental Technique: Implementing Change. Animals (Basel). 2019 Sep 30;9(10):754. doi: 10.3390/ani9100754. PMID: 31575048; PMCID: PMC6826930.

12. Christopher I. Petkov, Paul Flecknell, Kathy Murphy, Michele A. Basso, Anna S. Mitchell, Renee Hartig, Sally Thompson-Iritani. Unified ethical principles and an animal research 'Helsinki' declaration as foundations for international collaboration, Current Research in Neurobiology, Volume 3, 2022, 100060, ISSN 2665-945X.

13. Smith AJ, Hawkins P. Good Science, Good Sense and Good Sensibilities: The Three Ss of Carol Newton. Animals (Basel). 2016 Nov 11;6(11):70. doi: 10.3390/ani6110070. PMID: 27845707; PMCID: PMC5126772.

14. Hocum Stone L, Oppler SH, Nugent JL, Gresch S, Hering BJ, Murtaugh MP, Hegstad-Davies RL, Ramachandran S, Graham ML. Serum cytokine profiles in healthy nonhuman primates are blunted by sedation and demonstrate sexual dimorphism as detected by a validated multiplex immunoassay. Sci Rep. 2021 Jan 27;11(1):2340. doi: 10.1038/s41598-021-81953-7. PMID: 33504894; PMCID: PMC7840937.

15. Iritani, R., Belloir, T., Griggs, D. J., Ip, Z., Anderson, Z., Yazdan-Shahmorad, A. A Neural Implant Design Toolbox for Nonhuman Primates. J. Vis. Exp. (204), e66167, doi:10.3791/66167 (2024).

RESOURCES AND LINKS CONTINUED

16. Graham JC, Wong L, Adedeji AO, Kusi A, Lee B, Lee D, Dybdal N. Fostering Animal Welfare and Advancing 3Rs Principles through the Establishment of a 3Rs Advisory Group. Animals (Basel). 2023 Dec 15;13(24):3863. doi: 10.3390/ani13243863. PMID: 38136900; PMCID: PMC10740783.

17. Brink, C.B.; Lewis, D.I. The 12 Rs Framework as a Comprehensive, Unifying Construct for Principles Guiding Animal Research Ethics. Animals 2023, 13, 1128. https://doi.org/10.3390/ani13071128

18. Hankenson FC. The Elephant in the Room: Recognition and Documentation of Personnel Practices That Confound Reproducibility. J Am Assoc Lab Anim Sci. 2024 May 1;63(3):232-237. doi: 10.30802/AALAS-JAALAS-24-000002. Epub 2024 Mar 19. PMID: 38503489; PMCID: PMC11193430.

Culture of Care – Norecopa site

WEBSITES

- Animal Care, Outreach, and 3Rs Program at the UW (ACO3Rs) - https://www.washington.edu/aco3rs/
- The 3Rs Collaborative - https://3rc.org/
- National Centre for the 3Rs (NC3Rs) - https://nc3rs.org.uk/
  - Experimental Design Assistant (EDA) - https://eda.nc3rs.org.uk/
  - ARRIVE (Animal Research: Reporting of In Vivo Experiments) Guidelines - https://arriveguidelines.org/
- Norecopa PREPARE (Planning Research and Experimental Procedures on Animals: Recommendations for Excellence) Guidelines - https://norecopa.no/prepare
- Future Topical Updates to the "Guide for the Care and Use of Laboratory Animals" – A Workshop (National Academies) - https://www.nationalacademies.org/event/49214_04-2024_future-topical-updates-to-the-guide-for-the-care-and-use-of-laboratory-animals-workshop#1-three-columns-ef0ea7f7-a46f-41cd-90e2-fe58e139b4245

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