Research animal professionals ultimately want to help people & animals.

Intrinsic drive
Difficult separating work & life
But they must design, approve, perform, or view stressful or painful procedures.

“Caring-harming paradox”

Perpetration-induced traumatic stress
This can lead to **moral stress**.
Most bonds with research animals are broken.

Disenfranchised Grief
Lack of empathy
Lack of organizational support
Disrespect
(Palotta, 2019 & Marton et al. 2019)
Professionals may not feel supported or valued by family, friends, or society in their work.

(LaFollette et al. 2020, Goñi-Balentziaga et al. 2021, Schlanser et al. 2021)
This can lead to **workplace stress**
The North American 3Rs Collaborative is a non-profit that works to **advance high-quality science & research animal welfare.**

Refine.  
Reduce.  
Replace.
NA3RsC’s strategy is to identify initiatives with:

- Strong Evidence
- Big Impact
- Real-World Practicality
We received a small pilot grant in Occupational Health & Safety

Professional Training Opportunities Program (PTOP) in Occupational Health & Safety
Our team = 29 individuals from 22 institutions

Alison Hayward, MIT
Beth Greenhough, Keble College, Oxford
Crystal Johnson, Georgetown University
Elizabeth Clemmons, Southwest NPRC
Emily Pearson, Cornell University
Fabienne Ferrara, Consultant
Francesca Perrotta, University of Washington
Heather Hersh, Thrive Well-Being
Jennifer McMillan, Emory University
Lace Lively, Texas Biomedical Research Institute
Lauren Healy, Bristol Myers Squib
Lauren Young, University of Guelph
Lisa Kelly, University of Georgia
Lisa Stanislawczyk, Bristol Myers Squib
Liv Brancato-Buentello, Colorado State University
Megan LaFollette, NA3RsC
Pat Frost, Texas Biomedical Research Institute
Preston Van Hooser, University of Washington
Raphael Malbrue, Nationwide Children's Hospital
and The Ohio State University
Rhonda MacAllister, Oregon NPRC
Rita Bellanca, University of Washington
Sally Robinson, AstraZeneca
Sally Thompson-Iritani, University of Washington
Sarah Thurston, Charles River Laboratories
Tara Martin, University of Michigan
Taylor Carroll, Mass General
Temeri Wilder-Kofie, NIH/NIAID/CMB
Theresa Martin, University of Guelph
Vanessa Lee, Emory
Our objectives are (1) to develop compassion fatigue resiliency resources for animal research institutions and (2) pilot this program, assessing its quality/effectiveness.
We built a comprehensive compassion fatigue resiliency program

- Longitudinal Survey
- Starter Pack & Resources
- Interactive Webinars
- Poster
We replicated questionnaires from validated instruments where possible.

1. PROQOL: Burnout, STS, & Compassion Satisfaction
2. Perceived Stress Scale
3. Resiliency
4. Job Satisfaction Scale
5. Modified Nurse Retention Index
6. Qualitative
Caring for Our People. Caring for Our Animals.

Working with research animals can lead to compassion fatigue.

We know you care deeply for our research animals and advancing science. Your work can come with challenges:

- Euthanasia of animals
- Potential animal pain/distress
- Difficulty talking about your work publicly
- Difficulty connecting with others
- Feeling undervalued by society

All of this and more can lead to feeling stressed and burnt out.

NA3RC

Together we can support resiliency.

- Compassion fatigue awareness
- Culture of care
- Work/life balance
- Connections between staff
- The 3Rs & animal welfare
- Self-care including mindfulness & more

na3rsc.org/cf
We facilitated & recorded 5 months of targeted webinars:

- Intro to Compassion Fatigue Resiliency
- Mindfulness for Everyday Life
- Culture of Care: Interactive Stories
- Great Work Relationships
- Making Meaning: Compassion Satisfaction
We created extensive support materials

Core Components Packet:

• Timeline
• Guidance on Forming & Maintaining a CF Resiliency Committee
  • Committee membership
  • Example agendas & charter
  • What to expectations
• Sample Budget
• Leadership Buy-in Advice
  • Companion editable slide deck
• A Manager’s Role in a Wellness Program
We created extensive support materials

• Learning Resource Packet:
  • Overview of CF
  • Self-Care
  • Handling Emotions
  • Gratitude
• Culture of Care Packet
• Activity Idea Packet
We’ve created an in-depth evidence-based resource hub.

Compassion Fatigue Resiliency
Caring for our People. Caring for our Animals.

Working with research animals can be challenging, leading to workplace stress, burnout, and compassion fatigue. But together we can support resiliency. We have a range of resources designed to promote resiliency for both individuals & institutions.

na3rsc.org/cf

Background

Professionals working with research animals want to help both people and animals. They care deeply for both the research animals and advancing science, but their work can come with many challenges. For example, most of their bonds with animals are broken at the end of the study. And during studies they may view animals in unavoidable distress. Furthermore, they may experience moral & emotional stress when internally held values or emotions conflict with those that are expressed. They also may not feel supported by society or even friends and family in our work since animal research can have social stigma and be undervalued.
Today, I will share a few results from baseline & especially the qualitative data

<table>
<thead>
<tr>
<th>Timing</th>
<th>Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>PROQOL: Burnout, STS, &amp; Compassion Satisfaction</td>
</tr>
<tr>
<td>6 months</td>
<td>Perceived Stress Scale</td>
</tr>
<tr>
<td>1 year</td>
<td>Resiliency</td>
</tr>
<tr>
<td>2 years</td>
<td>Job Satisfaction</td>
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<tr>
<td></td>
<td>Retention Index</td>
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<tr>
<td></td>
<td>Qualitative</td>
</tr>
</tbody>
</table>
We engaged 7 institutions in US & Canada

- 2 Academic (e.g., Georgetown University)
- 1 Hospital
- 4 industry (e.g., Neuralink & AstraZeneca)
199 individuals replied with enough data for us to analyze

<table>
<thead>
<tr>
<th>Role</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caretakers</td>
<td>30%</td>
</tr>
<tr>
<td>Researchers</td>
<td>30%</td>
</tr>
<tr>
<td>Managers</td>
<td>9%</td>
</tr>
<tr>
<td>Research Techs</td>
<td>8%</td>
</tr>
<tr>
<td>Vets</td>
<td>5%</td>
</tr>
<tr>
<td>Vet Techs</td>
<td>5%</td>
</tr>
<tr>
<td>IACUC</td>
<td>5%</td>
</tr>
<tr>
<td>Other</td>
<td>8%</td>
</tr>
</tbody>
</table>
We see a range of levels of burnout & secondary traumatic stress which allows us to explore associations.
Higher burnout was associated with several factors.

- Perceived Stress Scale: $p < 0.0001$
- Resiliency: $p = 0.0044$
- Job Satisfaction: $p < 0.0001$
Higher burnout was associated with several factors.

- Younger Age
- More Years
- More Hours
- Animal Stress/Pain
- Hands-on
For you personally, what, if anything makes compassion fatigue occur or become worse?

Credit to Lauren Young, U. of Guelph
Responses fell into 3 major categories

- Organizational Culture: 45%
- Research Animals: 43%
- General Mental Health: 21%

(n = 159 participants)
Responses fell into 3 major categories:

- "Feeling undervalued" (45%)
- "Difficulties with other staff" (43%)
- "Work-life Balance" (21%)

(n = 159 participants)
Responses fell into 3 major categories

Organizational Culture: 45%
Research Animals: 43%
General Mental Health: 21%

“Euthanasia”
“3Rs”
“Translation”
“Human animal bond”
“Research procedures”
“Openness”

(n = 159 participants)
What, if anything, do you feel would be the most beneficial aspect of an institutional compassion fatigue resiliency program?

Credit to Lauren Young, U. of Guelph
Responses fell into 3 major categories

- Organizational Culture
- General Mental Health
- Compassion Fatigue

(n = 107 participants)
Across sites, participants believed organizational change would be the most beneficial

- "Better work-life balance"
- "Hiring more staff"
- "Higher pay"
- "Required training"
- "More communication"
- "Effective leaders"
- "Transparency with the public"
Across sites, participants believed organizational change would be the most beneficial.

- **Organizational Culture**: 33%
- **General Mental Health**: 33%
- **Compassion Fatigue**: 33%

“Counseling”
“Coping strategies”
“Supportive Community”
Across sites, participants believed organizational change would be the most beneficial.
Compassion fatigue is affected by more than unique work with research animals. Organizational culture & general mental health support are key in promoting resiliency.