

# ***Becoming a Resilient Scientist***

## **SERIES**

---

---

# **Workbook I:**

# **An Introduction to**

# **Resilience & Wellness**

---

---

**Dr. Sharon L. Milgram**  
Director NIH OITE  
Bethesda, MD

This workbook is intended to accompany the  
*Becoming A Resilient Scientist Series: An Introduction to Resilience and Wellness.*  
It is most effective when it is used after attending/watching the workshop lecture.

✉ OITE@mail.nih.gov

🐦 @sharonmilgram & @NIH\_OITE



# RESILIENCE: AN OVERVIEW

## WHAT IS RESILIENCE?<sup>1</sup>

The ability to:

- Adapt and grow through **adversity**
- Navigate **difficult challenges** with awareness, attention, and skill
- Find a constructive way forward through **challenging times**

It is a set of **attitudes and behaviors** that can be **learned and developed** through education, self-reflection, and practice.



**RESILIENCE = PEOPLE + PROCESS + PREPARATION<sup>2</sup>**

## IMPORTANT FOUNDATIONAL SKILLS OF RESILIENCE:

- Developing **self-awareness**
- A willingness to **change**
- Having **realistic expectations**
- **Perseverance** and a willingness to **let go**
- Wanting the best and **accepting "what is"**
- Accessing **positive emotions** while acknowledging and feeling the **negative ones**
- Setting personal **boundaries**

<sup>1</sup> <http://www.apa.org/helpcenter/road-resilience.aspx>

<sup>2</sup> <http://www.psychologytoday.com/blog/design-your-path/201305/10-traits-emotionally-resilient-people>

# RESILIENCE: AN OVERVIEW

## FOUR POWERFUL TOOLS TO INCREASE RESILIENCE:



### JOURNALING

[\*What's All This About Journaling?\*](#) (New York Times article)

[\*How to Journal\*](#)



### MINDFULNESS

To learn more:

<https://www.mindful.org/meditation/mindfulness-getting-started/>

Other useful resources

<https://www.tenpercent.com/>

<https://www.tarabrach.com/>

<https://insighttimer.com/>



### COMMUNITY

Small groups for this series

[\*The Importance of Community and How to Find Community\*](#)



### THERAPY

Helpful resources (beyond your campus)

<https://www.justdavia.com/blog/directories-for-therapists-of-color>

<https://www.goodtherapy.org/>

<https://support.therapytribe.com/>

<https://www.inclusivetherapists.com/>

## REFLECTING ON YOUR RESILIENCE EXPERIENCE

Think about a time when you were resilient in the past: When you faced a **difficult challenge**, worked to get through it, and **came out stronger** from the experience. What **behaviors and attitudes** were helpful to you? Which ones were not helpful and how did you avoid/minimize them?

*Don't worry about grammar or writing style – just write what comes to mind!*

Now, think about a time when you faced a **significant challenge**, and you were **not as resilient** as you had hoped. What **behaviors and attitudes** do you think got in the way of your resilience? What do you think made it hard for you to access elements of your resilience toolkit?

## WHO IS IN YOUR SUPPORT GROUP?

To become resilient, we have to build **strong positive relationships** with our **peers and mentors**. Social connectedness and support can enhance our resiliency to stressful situations and help maintain **good physical and mental health**.

Who are the people in your life that you turn to in **difficult times**?

- Write about why these people are so important to you and give specific examples of **when and how** they have supported you.
- Spend some time reflecting on and writing about how you could **engage with them** during this difficult time.
- Are there people you have met who you sense could be people to turn to **in the future**? How might you turn to them now?



*Do you want to have fun, make someone's day AND build your resilience?  
Use this journal prompt and answers as the starting point for a gratitude letter/email!*

## USING RESOURCES

Make a list of **important resources** and what they are **potentially helpful for**; expand and add to your list by talking with **mentors, peers**, and conducting additional **research**.

CURRENT RESOURCES	POTENTIALLY HELPFUL FOR

NEW RESOURCES	POTENTIALLY HELPFUL FOR

## JACKAL OR GIRAFFE?



BLAMING  
CRITICIZING  
JUDGING  
DEMANDING

OBSERVING  
CONNECTING  
FEELING  
REQUESTING



Are you a **jackal** or a **giraffe**? Time for self-reflection and honesty.  
To become resilient, we need to be **thoughtful** about how we **approach setback**  
and **engage with our distorted self-talk** (both our inner critic and inner champion).

Do you talk to **yourself** like a jackal or a giraffe?  
And... what about to **others**? What happens for you when someone **jackals** on you?

## SEEKING HELP

To become resilient, we need to **ask for help** when we need it.

Question your **beliefs** around seeking help, using resources, and receiving feedback:

What beliefs do you **currently have** regarding seeking help?

Where do you think these beliefs **come from**?

Do you think these beliefs are **helping** or **hurting**?

**REMEMBER:** Asking for help is nearly always hard – and nearly always part of the solution.



## REFLECTING ON GROWTH VS. FIXED MINDSET

To become resilient, we need to develop a **growth mindset** and engage in the **“Power of Yet”**<sup>1</sup> in domains that really matter to us.

Thinking about your **school/work experience** and **other areas** of your life, where can you see a **growth mindset**? Where can you see a **fixed mindset**?

Why do you think you get **caught up** in your fixed mindset?  
What **strategies** work to help you hold onto your growth mindset?



<sup>1</sup>Dweck, C. S. (2008). *Mindset: The new psychology of success*. Random House Digital, Inc.

# WELLNESS ASSESSMENT

To build resilience, we need to develop a **stress management & wellness practice**.

To **do well**, we have to **be well**.

Take the assessments by checking the boxes below to see how you score on wellness.

	NEVER	SOMETIMES	ALWAYS		
<b>ASSESSMENT I – BODY</b>	1	2	3	4	5
I am getting enough sleep (7-9 hours per night)					
I am eating balanced, nutritious meals					
I avoid excessive use of caffeine					
I avoid excessive use of alcohol & other drugs of abuse					
I am getting regular exercise (at least 3x per week)					
I am getting regular health care for myself					
I take care of myself when I'm sick, need rest, or just need a break					

	NEVER	SOMETIMES	ALWAYS		
<b>ASSESSMENT II – MIND</b>	1	2	3	4	5
I avoid getting caught up in perfectionism					
I focus on the present vs. rehashing the past or worrying about the future					
I avoid negative or deceptive self-talk					
I practice self-affirmations and positive self-talk					
I avoid judging myself compared to others					
I give myself time to explore and learn about new things					
I am open to counseling as a tool to maintain and improve my health & wellbeing					

# WELLNESS ASSESSMENT

NEVER      SOMETIMES      ALWAYS

## ASSESSMENT III – HEART

1

2

3

4

5

I am in touch with myself and let myself feel all of my emotions

I reach out to others for support when I need it

I communicate my needs and feelings directly and honestly

I make time to spend with my friends and family

I engage in activities that are fun and relaxing

I avoid extreme use of my phone as a coping tool/avoidance strategy

I demonstrate compassion for myself and others

NEVER      SOMETIMES      ALWAYS

## ASSESSMENT IV – SPIRIT

1

2

3

4

5

I feel connected to something that is bigger than me – however I define that

I seek out resources (practices, activities, people, places) that nurture me spiritually

I reflect on and invest in what is meaningful to me

I read writings or watch media that are inspirational to me

I think of and care about the lives of others who are different than me

I allow time to just be (human **being** vs human **doing**)

I engage in activities that support my life's purpose

## TO DO WELL, WE HAVE TO BE WELL

What is my current **wellness/self-care practice**?

Where am I **doing well**?

Where would I **like to improve**?

What is something **I can do now** to improve my wellness/self-care practice?

**REMEMBER:** This is not a one-time thing!  
Re-take this assessment and see how you are doing every few months.

# WELLNESS COLLAGE

To gain resilience, we need to do things that **bring meaning** to our lives.

What brings you meaning to your **day, week, or month**?

Making a **wellness collage** is a way to identify and talk about things that **bring happiness and meaning** into our lives.

Create a collage below (or on a separate sheet).

While working on the collage, remember:

Never under-estimate the things in your life that **bring you happiness and meaning**

Never under-estimate the power of **doing for others**



Feel free to share what makes you happy and/or brings you meaning! Post a picture from your wellness collage or of your entire collage on **Twitter** and tag **@NIH\_OITE** or **@SharonMilgram**

#OITEWELLNESSCHALLENGE



### OITE MENTAL HEALTH SEMINAR SERIES\* (2020–2021)

#### ***Mental Health and Wellbeing of Biomedical Researchers***

(Nov. 2, 2020–July 12, 2021)

Series of webinars and small group discussions focused on providing participants with tools to cope with stress, as well as discuss ways institutions can develop programs that support wellness and resilience within scientific careers. Open to trainees at all educational levels and administrative staff, faculty, and other research supervisors at universities, the NIH, and other research institutions.

For more information, visit:

[https://www.training.nih.gov/new\\_seminar\\_series\\_mental\\_health\\_and\\_well-being](https://www.training.nih.gov/new_seminar_series_mental_health_and_well-being)

***\*These and other previous wellness presentations are posted on the OITE YouTube channel:***

[https://www.youtube.com/channel/UCQQHo\\_QnuBxdfcsRy4INGGw](https://www.youtube.com/channel/UCQQHo_QnuBxdfcsRy4INGGw)

---

### NIH WELLNESS RESOURCES

#### ***NIH “Wellness Toolkits”***

Online resources related to physical, emotional, interpersonal, and environmental wellness and disease prevention.

<https://www.nih.gov/health-information/your-healthiest-self-wellness-toolkits>



## HELPFUL WEBSITES

### ***The Greater Good Science Center at the University of California, Berkeley.***

*Evidence-based articles and videos on a wide range of wellness topics.*

<https://greatergood.berkeley.edu/>

### ***Stanford Well for Life at Stanford Prevention Research Center, Stanford University.***

*Resources for wellness strategies and interventions, including opportunity to participate in global study.*

<http://med.stanford.edu/wellforlife.html>

### ***Purdue University Global Resource Center.***

*Listing of links to 25 top 2020 health and wellness blogs.*

<https://www.purdueglobal.edu/blog/student-life/valuable-health-wellness-blogs/>

### ***Dr. Kristen Neff's website on self-compassion.***

*Research articles, videos, practices, and other resources on mindful self-compassion.*

<https://self-compassion.org/>

### ***Global Wellness Institute.***

*Provides research, information about roundtables and initiatives, and evidence regarding a wide range of wellness strategies.*

<https://globalwellnessinstitute.org/>



## HELPFUL PUBLICATIONS

**Behan C. The benefits of meditation and mindfulness practices during times of crisis such as COVID-19.** Ir J Psychol Med. 2020 May 14;1-3. doi: 10.1017/ipm.2020.38. Epub ahead of print. PMID: 32406348; PMCID: PMC7287297.  
<https://pubmed.ncbi.nlm.nih.gov/32406348/>

**Butze, O. How researchers, instructors, and students can practice wellbeing during the COVID-19 pandemic.** Social Science Space. 2020 Apr.  
<https://www.socialsciencespace.com/2020/04/how-researchers-instructors-and-students-can-practice-well-being-during-the-covid-19-pandemic/>

**Heemstra JM. Self-care is not the enemy of performance.** ChemBioChem. 2019 Sep 2;20(17):2203-2206. doi: 10.1002/cbic.201900285. Epub 2019 Jun 28. PMID: 31211892.  
<https://chemistry-europe.onlinelibrary.wiley.com/doi/abs/10.1002/cbic.201900285>

**Killgore WDS, Taylor EC, Cloonan SA, Dailey NS. Psychological resilience during the COVID-19 lockdown.** Psychiatry Res. 2020 Sep;291:113216. doi: 10.1016/j.psychres.2020.113216. Epub 2020 Jun 9. PMID: 32544705; PMCID: PMC7280133.  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7280133/>

**Nagy GA, Fang CM, Hish AJ, et al. Burnout and mental health problems in biomedical doctoral students.** CBE Life Sci Educ. 2019;18(2):ar27. doi:10.1187/cbe.18-09-0198. PMID: 31150319  
<https://pubmed.ncbi.nlm.nih.gov/31150319/>

**Riddell T., Nassif J., Hategan A., Jarecki J. (2020) Healthy habits: Positive psychology, journaling, meditation, and nature therapy.** In: Hategan A., Saperson K., Harms S., Waters H. (eds) Humanism and resilience in residency training. Springer, Cham.  
[https://link-springer-com.ezproxy.nihlibrary.nih.gov/chapter/10.1007%2F978-3-030-45627-6\\_14](https://link-springer-com.ezproxy.nihlibrary.nih.gov/chapter/10.1007%2F978-3-030-45627-6_14)





## HELPFUL PUBLICATIONS (CONTINUED)

**Saeed SA, Cunningham K, Bloch RM. Depression and anxiety disorders: Benefits of exercise, yoga, and meditation.** Am Fam Physician. 2019 May 15;99(10):620-627. PMID: 31083878.

<https://pubmed.ncbi.nlm.nih.gov/31083878/>

**Sharp M, Burkart KM. Trainee wellness: Why it matters, and how to promote it.** Ann Am Thorac Soc. 2017 Apr;14(4):505-512. doi: 10.1513/AnnalsATS.201612-1006PS. PMID: 28165295.

<https://pubmed.ncbi.nlm.nih.gov/28165295/>

**Wald, HS. Optimizing resilience and wellbeing for healthcare professions trainees and healthcare professionals during public health crises:** Practical tips for an integrative resilience' approach. Journal of Med Teach. 2020 Jul; 42(7):744-755. doi.org/10.1080/0142159X.2020.1768230. Epub 2020 May 25. PMID:32449867.

<https://pubmed.ncbi.nlm.nih.gov/32449867/>

**Wieneke KC, Egginton JS, Jenkins SM, et al. Well-being champion impact on employee engagement, staff satisfaction, and employee well-being.** Mayo Clin Proc Innov Qual Outcomes. 2019 May 27;3(2):106-115. doi: 10.1016/j.mayocpiqo.2019.04.001. PMID: 31193868; PMCID: PMC6543277.

<https://pubmed.ncbi.nlm.nih.gov/31193868/>

