

Resilience for Scientists

This workshop is inspired by many discussions with scientists and resilience trainers. Two of the biggest influences for this workshop are Ella Amann from the Resilienzforum in Berlin and Dr. Manfred Nelting from the Gezeitenhaus in Bonn.

9:00 – 10:30 – Understanding resilience, resources and applied improvisation

- Welcome Talk
 - Expectation and Resilience tool box (Instrumental, Cognitive, Regenerative changes)
 - Resilience work helps you manage yourself better and teaches you how to deal with stress
 - Through applied improvisation we create experiences, which you'll remember better in real-life situations

- Resource interview
 - Find out the name, a fun fact and a strength about a person
 - Introduce your partner to the group as if they were an important person to you
 - Throughout the course ask yourself three questions:
 - What were new things that I've learned?
 - What is something that I want to commit to trying?
 - What challenge do I anticipate in trying it and how will I overcome those?

The idea of resources

- Handshake and name exchange
 - We often experience conflicting impulses in life. Active listening and conscious decision making will increase our ability to assess the situation and find the correct resource
 - We can all be a resource for ourselves and for someone else
 - What can we do to win the game?
 - Thinking fast and slow
 - We have a harder time losing than winning
 - Change takes thinking differently, which takes effort
 - Effort can become flow, if we learn the skills to meet the challenge (Mihaly Csikszentmihaly)

- 3 ways to build resilience
 - Instrumental changes
 - Work on the stressors
 - Time-management (Pareto), Power of Questions, Delegate, Realistic Optimism, Prioritize, Communicate, Reposition, Network
 - Cognitive changes
 - Work on experience, expectations, motives, values, beliefs, drivers
 - Empathy, Patience, Courage, Know your drivers and triggers



- Regenerative changes
 - Work on relaxation and regeneration
 - Strengthen your parasympathetic nervous system, Resource shower, Mindfulness, Sleep
- Applied Improvisation
 - Uses techniques from improvised theater to face challenges and solve problems in life
 - Condensed and presented life
 - Doing and experiencing // Speaking and reflecting
 - 1st idea is Yes AND // 2nd is Let your partner shine // 3rd is Fail and be happy
- Emmy Werner's story and research on Kauai
 - Connection, Self-confidence, humor and optimism
 - Stress resistance vs resilience
 - Tree vs. Bamboo exercise
- Theory of Team-Work (Högl and Gemünden, 2001)
 - Communication
 - Coordination
 - Balance of Member Contribution
 - Mutual Support
 - Effort + Cohesion
- Measurement of Resilience (Prepared Sheet before break)
 - Personal measurement on a scenario of your choice
 - Something that worries you and that you'd like to focus on
 - Topic such as health, work, balance

10:45 – 12:00 – Working on Instrumental Changes and Measuring Resilience

Instrumental Changes

- Research of the mind – Macquarie University // Celia Harris / Dr. Quiroga – Forgetting Machine
 - New Information (recalling a name)
 - Richer, more vivid descriptions
 - Painting events in a new light e.g. perspective
- Do you remember
 - Do you remember when? – Yes AND
 - Mindset of creating a story together
 - Your brain can't distinguish between real and fake memories very well. We can trick our brain into forging stronger bonds with people through communication
- Epigenetic connection between resilience and the brain
 - Genes for Serotonin are affected
 - Orchid vs. Daffodil personalities



- The environment and people in it are more important for orchid personalities that are highly affected epigenetically
- Create an environment that you can thrive in (people, room and inside of yourself)
- The Power of Questions
 - Story of our honeymoon
 - When you ask
 - Observe and see if the other person is ready
 - Be specific
 - Be quiet afterwards
 - Ask for something today/ this week – it's a muscle
 - Asking practice PI and student
 - 3 Questions in a circle to also train your short-term memory
 - Answer the third question when you hear the first one
- Practice asking for something
 - Pitch a project to another person // are they in?
 - How do you deal with questions?
 - What are convincing arguments?

13:00 – 14:30 – Working on Cognitive Changes and Role Play

Cognitive Changes

- The Four Tendencies
 - How do you react to inner and outer expectations?
 - You can change your language
- Four tendency Exercise
 - Test speaking to each of the tendencies
 - How can you change your language towards an upholder, questioner, obliher or rebel?
 - How will you put your team together as a leader?



- Strategies for resilience
 - Face reality
 - Resilience measurement
 - Positivity Currency (diversify portfolio / keep track, manage and increase)
 - Find Meaning
 - Inner Values
 - Improvise Solutions
 - Yes AND
 - Find lessons in criticism
 - What's your go to response / tendency
 - Ask Questions & Access resources
 - Know your resources & the power of questions
 - Use humor and change perspective
 - Brake expectation, exaggerate
 - Be comfortable with your inner psychological space
 - Inner Team / Inner Drivers

- Inner Driver test and drama
 - We all have inner drivers that can go into overdrive
 - Be perfect
 - Please others
 - Do something
 - Be strong
 - Hurry up
 - When the drivers become manipulators, they have negative influence on our performance
 - You can make them your friend, throw them out or use them to your advantage
 - Practice with the drivers in the audience // What are your strategies?

14:45 – 16:00 – Working on Regenerative Changes and Closing

Regenerative Changes

- Brainguard
 - A scene with a strong driver with time outs to realize and understand patterns
 - We can take a time-out from a driver and decide to run the story

- The upside of stress
 - What is stress?
 - How do you deal with stress? (Story, State, Strategy)
 - What is good about stress?
 - Stephen Porges → Play Sympathetic + Parasympathetic nervous system

- Martin Seligman and his research about optimism and positive psychology
 - 3 Ps: personal, permanent, pervasive
 - Is it internal or external?
 - Is it stable or unstable?
 - Is it global or specific?



Tools that you can use to build resilience:

1. Resource shower – record it or ask a friend to do it once in a while
2. Building your committee – add a postdoc to your committee or have someone to go on a coffee break with
3. Keep a gratitude journal and write down what you are grateful for
4. Eat that frog and do the most challenging task first (book by Brian Tracy)
5. Use your inner drivers as motivators. If one is in overdrive accept it, increase the positive, decrease the negative or be with what is
6. Use the tendency frame-work to improve conversations and motivate your fellow communicators
7. Build your passion and perseverance by writing down and learning what excites you and what challenges you
8. Honor the struggle – accept what went wrong and look for the good or humorous in it
9. Learn Mindfulness – Listening attentively to your breath once in a while with your eyes closed trains your power over your attention
10. Give your brain space to wonder for about 5 min every 25 min during intense work to indulge in your System I

Literature:

The upside of stress – Kelly McGonigal

Grit – Angela Duckworth

Resilience (series on emotional intelligence) – Harvard Business Review

Study on resilience among PhD students - Levrecque et al. (2017) // attached

The forgetting machine – Dr. Quiroga

Resilienz – Dr. Christina Berndt (German)

Eat that Frog – Brian Tracy

The Pomodoro Technique – Adam Forbes

Immunity to Change – Lisa Laslow and Robert Kegan

Test:

<https://quiz.gretchenrubin.com/four-tendencies-quiz/>



