



LALEVE & MATHER

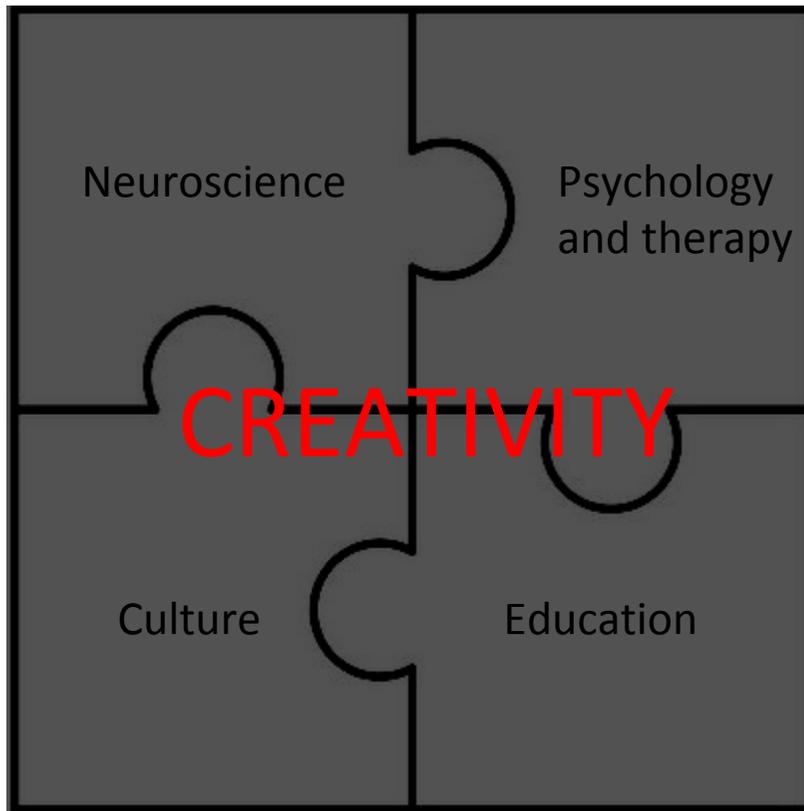
# Opening the door to your creativity

Learning about your creativity through experience

FIG Webinar hosted by RPC  
10 September 2020 Marion Laleve/Amanda Mather

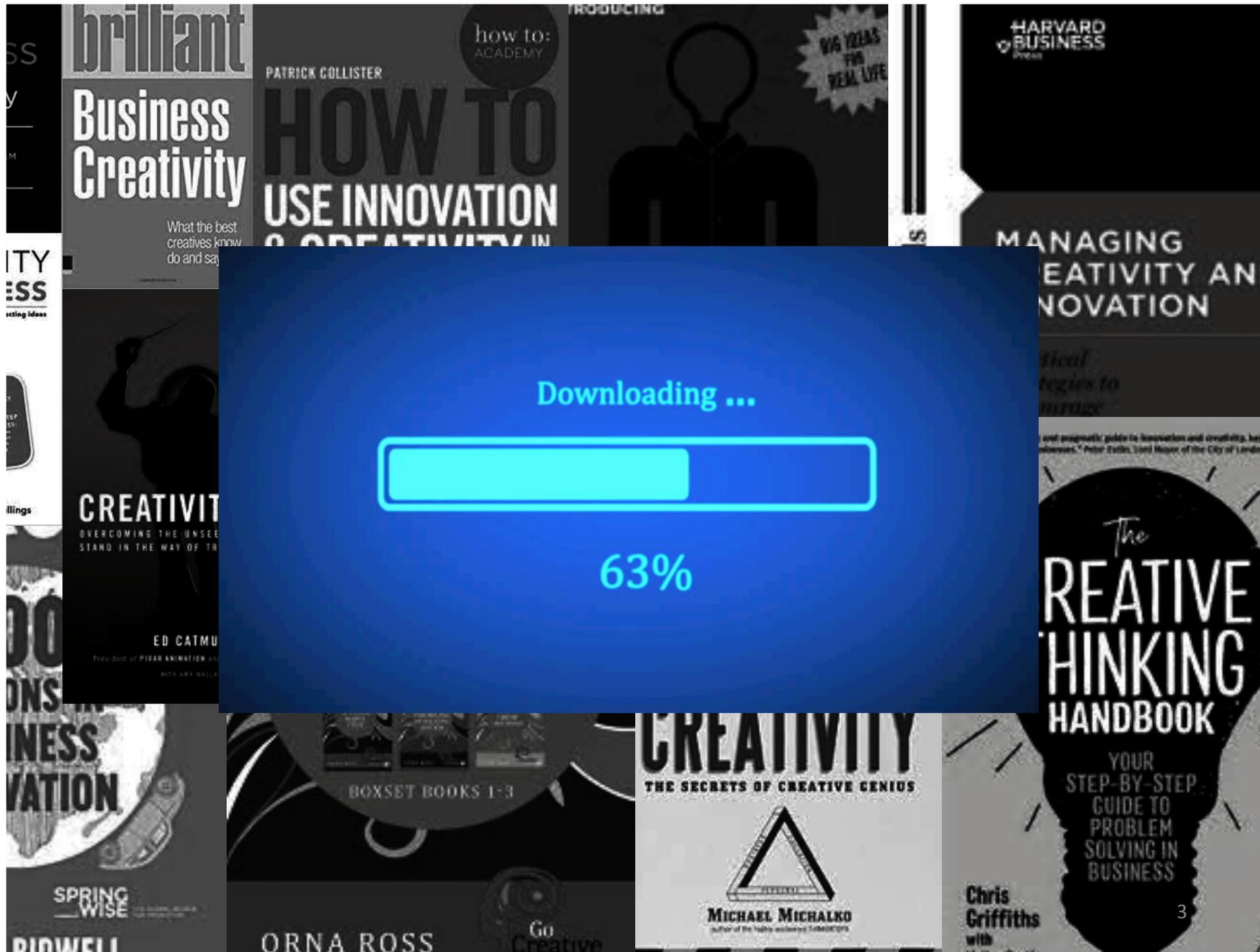
'Everyday creativity covers the myriad acts by which we build our lives. Observing, reflecting, solving problems and applying our imagination'.

Darren Henley, Chief Executive of Arts Council England



We design and facilitate coaching sessions, programmes and workshops to develop personal creativity and support innovation.

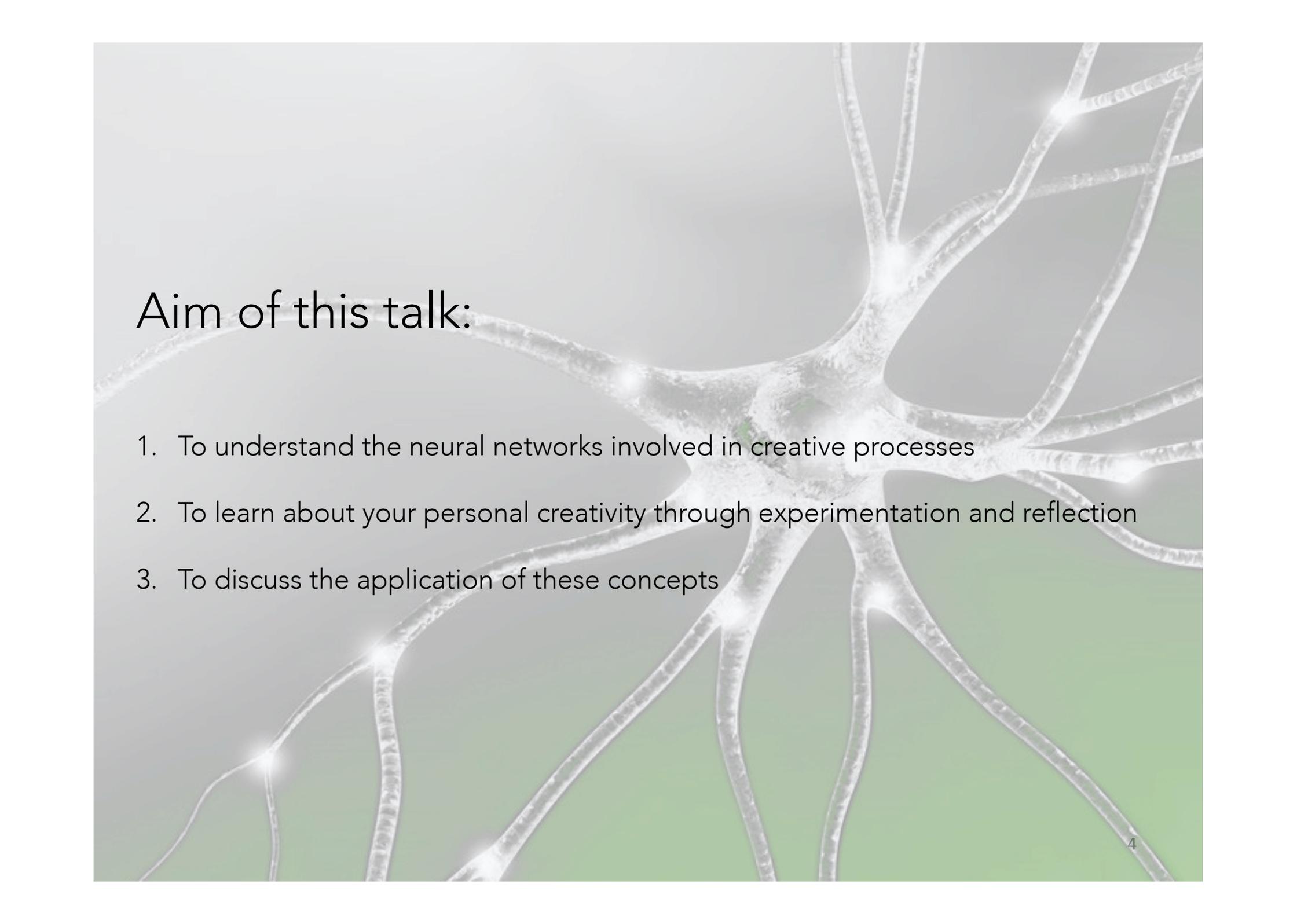




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## Aim of this talk:

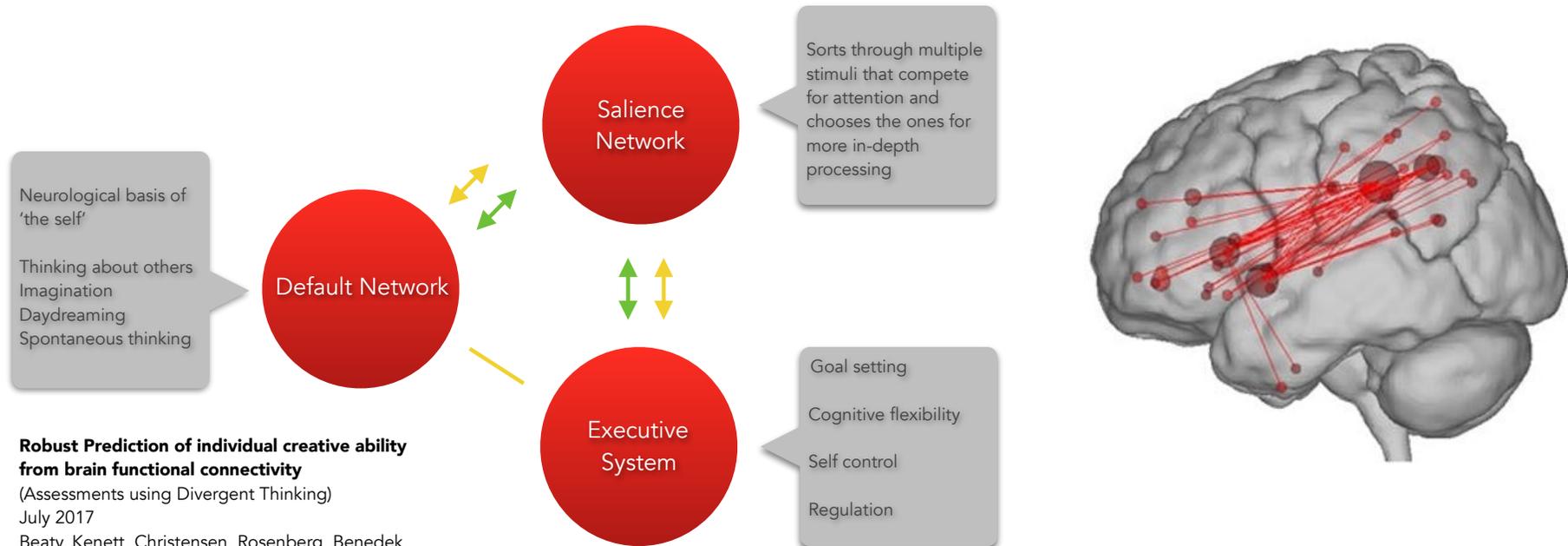
1. To understand the neural networks involved in creative processes
2. To learn about your personal creativity through experimentation and reflection
3. To discuss the application of these concepts



How do you feel about doing something creative?

## What the science tells us...

1. Everyone is creative
2. It is all about brain connectivity



### Robust Prediction of individual creative ability from brain functional connectivity

(Assessments using Divergent Thinking)

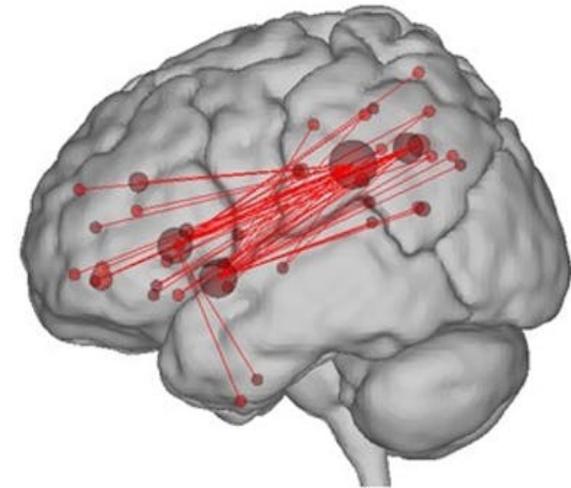
July 2017

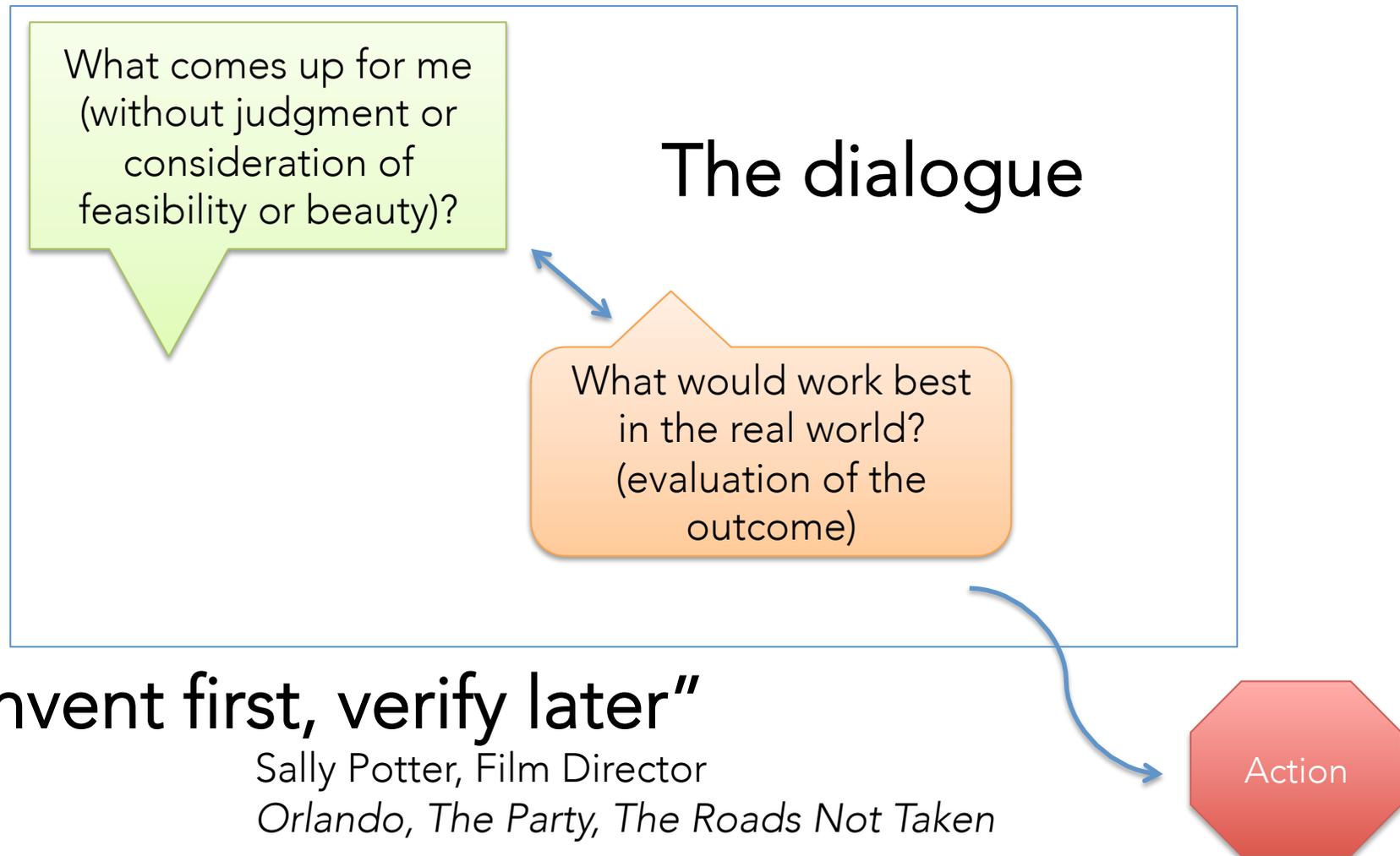
Beaty, Kenett, Christensen, Rosenberg, Benedek, Chen, Fink, Qiu, Kwapil, Kane, Silvia

### Network neuroscience of creative cognition: mapping cognitive mechanisms and individual differences in the creative brain

Beaty, Seli, Schacter

September 2018





**"Invent first, verify later"**

Sally Potter, Film Director

*Orlando, The Party, The Roads Not Taken*

How do we innovate?

How do we process information?

The creative decision-making process is a dialogue between processes

# The dialogue

What comes up for me  
(without judgment or  
consideration of  
feasibility or beauty)?

What would work best  
in the real world?  
(evaluation of the  
outcome)

## **Divergent Thinking** **Default Network and Salience Network:** **(connectivity of different parts of the brain)**

- Imagining the future
- Thinking of others and their intentions
- Imagination and re-imagination
- Memories
- Sensorimotor
- Arts, Images, Metaphors, Free association
- Dreamlike state, spontaneous, non-linear
- Delight, playful, joyous
- Non-judgmental/non-evaluative/uncensored
- Seat of the self

## **Convergent Thinking** **Executive system – Pre-** **frontal cortex:**

- Evaluative
- Analytical
- Focussed
- Emotional regulation
- Preparing for action

# Greater odds of winning the Nobel Prize if you have a creative hobby

*Research by Michigan State University on  
Noble Prize Winning Scientists between  
1901 and 2005*

## Artistic Hobby:

Music: odds 2x greater

playing an instrument,  
composing, conducting

Arts: odds 7x greater

drawing, painting,  
printmaking, sculpting

Crafts: odds 7.5x greater

woodwork, mechanics,  
electronics, glass-blowing

Writing: odds 12x greater

poetry, plays, novels,  
short stories, essays, popular books

Performing arts: odds 22x greater

amateur actor, dancing, magician



Warm up exercise: using your non dominant hand, draw shapes or whatever comes to mind. Notice how that feels.



# Reflection via Chat



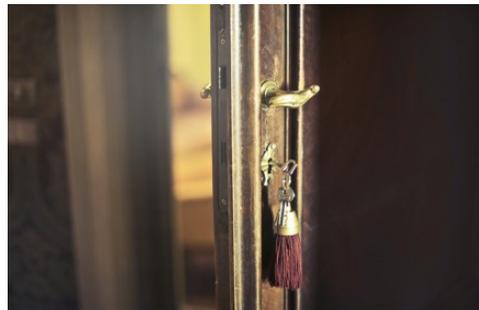
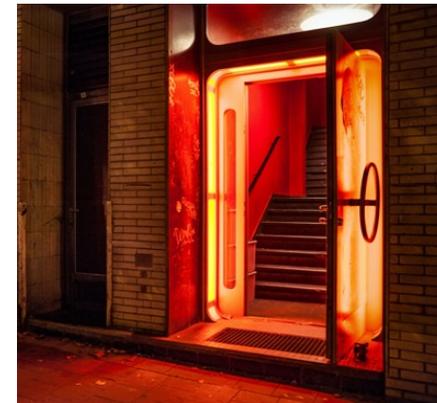
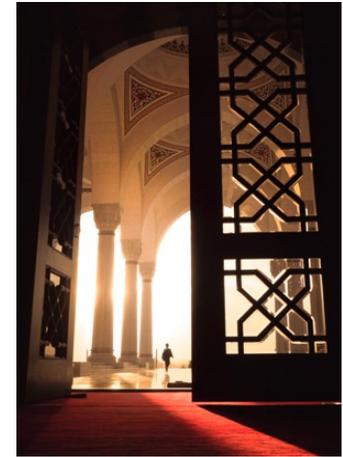
Experiment: imagine this is the door to your creativity, what do you see written and/or drawn on the wall or door just before you enter?



Experiment: how does the door look like?



# Reflection via Chat



Deepening of the Experiment:  
what is behind the door?



# Reflection via Chat

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## Going forward



Q&A

What have you learnt about your creative process?  
How to practice/exercise creativity?

