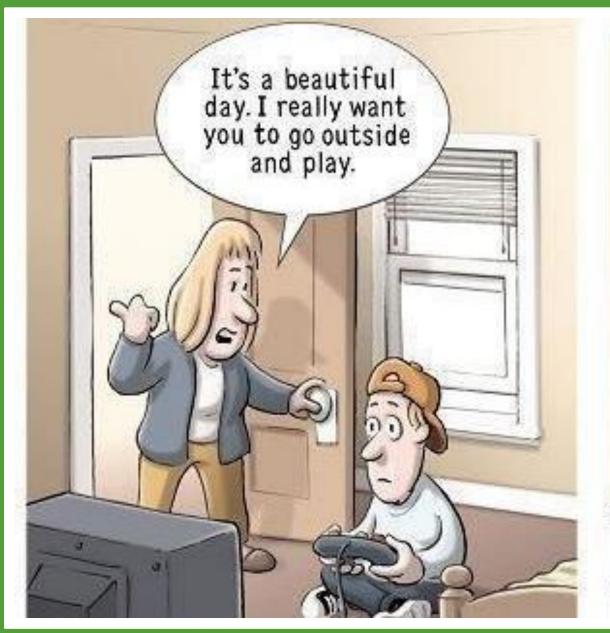
Virtual Nature for the Soul

Carolyn Parsey, PhD
Assistant Professor, Dept of Neurology
University of Washington School of Medicine



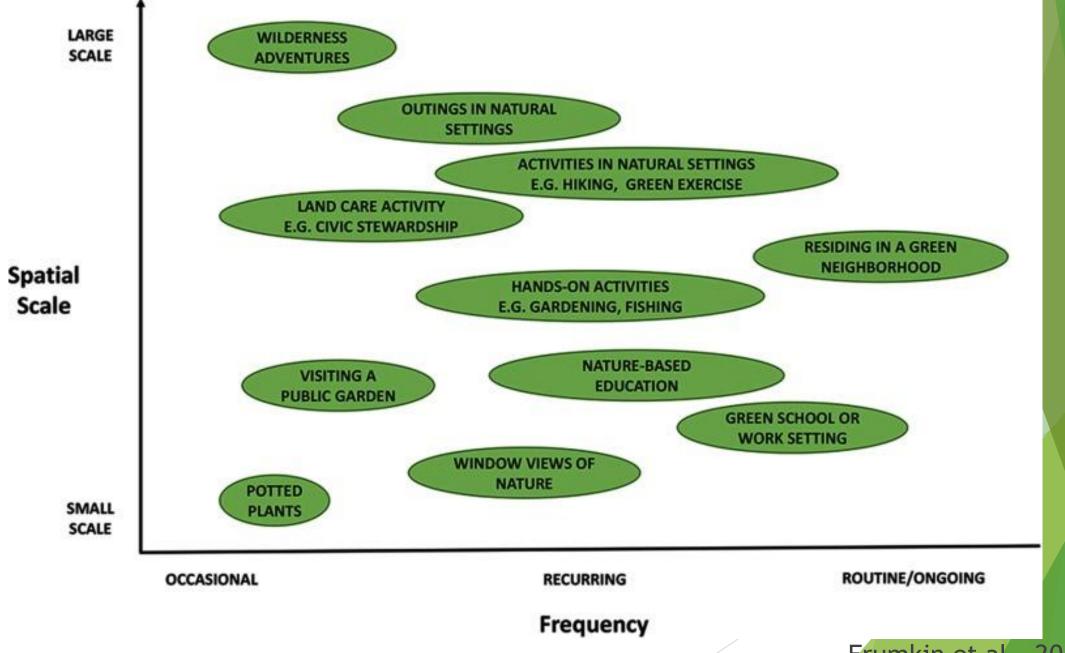










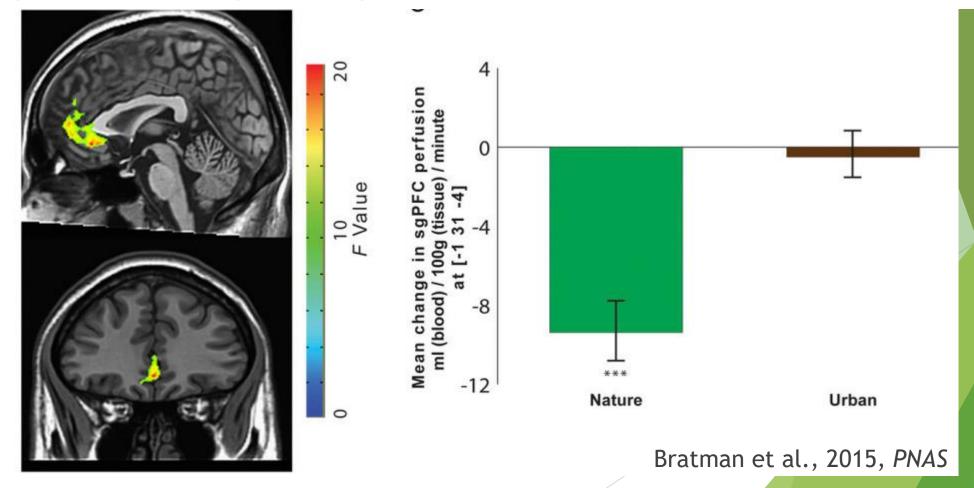


Frumkin et al., 2017, EHP

# Nature experience reduces rumination and subgenual prefrontal cortex activation

Gregory N. Bratman<sup>a,1</sup>, J. Paul Hamilton<sup>b</sup>, Kevin S. Hahn<sup>c</sup>, Gretchen C. Daily<sup>d,e,1</sup>, and James J. Gross<sup>c</sup>

<sup>a</sup>Emmett Interdisciplinary Program in Environment and Resources, Stanford University, Stanford, CA 94305; <sup>b</sup>Laureate Institute for Brain Research, School of Community Medicine, Tulsa, OK 74136; <sup>c</sup>Department of Psychology, Stanford University, Stanford, CA 94305; <sup>d</sup>Center for Conservation Biology, Department of Biology, and Woods Institute, Stanford University, Stanford, CA 94305; and <sup>e</sup>Global Economic Dynamics and the Biosphere, Royal Swedish Academy of Sciences, and Stockholm Resilience Centre, Stockholm 114 18, Sweden



#### Outdoor Recreation Programs

- ► Living *well* with memory loss
- ▶ Garden Walks
  - ► Reductions in agitation in advanced dementia (Whear et al., 2014)
  - ► Increased positive affect and life satisfaction (Capaldi et al., 2014)
- ► UW MBWC "Garden Discovery Walks"
  - ▶ Videos now available!
- Seattle Parks and Rec: Dementia-Friendly Recreation Programs





### SOAR: Shared Outdoor Adventures for Resilience

- Outdoor activities for people with memory loss and their loved ones
- ► Two "challenge course" events in 2019
- ► This year...
  - Guided hikes
  - ► Group cycling
  - ▶ Boating
- More information on the MBWC Community Programs website

► Live streaming from zoos and aquariums





► Virtual tours of National Parks





- ► Nature books
  - ► Memoirs, non-fiction
- Nature puzzles
- ▶ Nature Podcasts
  - **▶**BBC Earth
  - ► The Field Guides
- ► Nature-inspired music
  - ► Example playlist



- Nature Apps
  - ► Merlin Bird ID from Cornell Lab of Ornithology
  - ▶ StarWalk
  - ▶ iNaturalist citizen science





iNaturalist is a joint initiative of the California Academy of Sciences and the National Geographic Society.

#### How It Works









# Gardening

- Small indoor gardens for herbs
- Backyard gardens or P-patches
- Spring cleaning in the yard
- Go for a walk in a garden
  - ► Community gardens of Seattle
  - ► <u>Virtual garden walks</u>









# Art from Natural Materials

► More ideas for inspiration





VR "Field Trips"

- Is there a benefit of 'real' nature over VR?
- Socialization and stress reduction?
- Caregiver respite?

