# **Mindfulness and Health**

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# What is mindfulness?

"The awareness that emerges through paying attention on purpose, in the present moment, and non-judgmentally to the unfolding of experience moment to moment."

(Kabat-Zinn, 2003)

# Mindfulness Based Stress Reduction (MBSR)

- Stress reduction clinic at Umass founded in 1979 by Jon Kabat-Zinn
- 8 weekly 2 ½ hour classes and a single 6 hour retreat
- Classroom format with guided practice and group discussion

## **Mindfulness practices**



# How is mindfulness different than relaxation techniques?

• Not trying to produce a special state

Greater awareness of the mind as it is in the present moment

• Applicable to any situation

# **Health benefits**

- Increased awareness:
  - Mind and body
  - Thoughts as passing events and conditioned
  - Relationship between thoughts and emotions
- Leads to decreased:
  - Automatic reactions
  - Stress

# **Clinical research**

- MBSR effective for chronic pain, anxiety, depression, and other complaints
- Reduced psychological stress, increased well-being
- Reduced physiologic response to stress

# Mindfulness-based approach to wellness

- Holistic physical, mental and spiritual
- Strength-based vast potential of inner resources to promote one's own well-being
- Supports a "culture of wellness" for all stakeholders involved in the person-centered planning partnership

## MINDFULNESS-INDUCED NEUROPLASTICITY

# MBSR increases left-sided cortical activation



Davidson, et al. Alterations in brain and immune function produced by mindfulness meditation Psychosomatic Medicine 65(4):564-70, 2003 Jul-Aug

## Increased immune response



Davidson, et al. Alterations in brain and immune function produced by mindfulness meditation Psychosomatic Medicine 65(4):564-70, 2003 Jul-Aug

# Immune changes correlate with shift in prefrontal activation



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### **CHANGES IN NEURAL CIRCUITRY**

# Limbic system



## Amygdala connectivity correlates with mindfulness



## **MBSR changes** amygdala connectivity



0 CC 1 PostMBSR

# Collaborators

#### • fMRI

- Umass: Nanyin Zhang, Jean King, Ali Bourisly
- Suffolk: David Gansler & Matt Jerram
- Mindfulness
  - Fernando de Torrijos, Doug Ziedonis, Saki Santorelli
- Students
  - Umass: Rashad Hardaway, Liz Apkin
  - Suffolk: Athene Lee

## Mindfulness as Wellness in Psychiatry A Clinical Experience

### **Mindfulness:**

"Lifejacket of emotional intelligence"



## **Helping overcome**

## emotional distress

Mindfulness in Psychiatry A Clinical Experience

## The "MIND" healing the "mind"

## or bringing our attention from

## the "head" to the "HEART"

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## A taste of harmony



## in the midst of chaos

The story -- personal The grounding -- physical The silencing -- integral Mindfulness in Psychiatry A Clinical Experience

## **The Bloom of the Present Moment**



### **Mindfulness and Acceptance**

"Lost in the middle of the dark woods of my life"

I am lost

A situation:

An invitation:

embracing wellness (taking care of myself)

(an opportunity to find myself)

A practice:

the cultivation of mindfulness (taking responsibility for my own life)

#### Lost

Stand still. The trees ahead and bushes beside you are not lost. Wherever you are is called Here. And you must treat it as a powerful stranger, must ask permission to know it and be known. The forest breathes. Listen. It answers, I have made this place around you, if you leave it you may come back again, saying Here. No two trees are the same to Raven. No two branches are the same to Wren. If what a tree or a bush does is lost on you, you are surely lost. Stand still. The forest knows where you are. You must let it find you.

> -David Wagoner (from the words of a Native American elder)

#### "Only that day dawn to which we are awake"



H. Thoreau

#### UMassMemorial Medical Center