



Developing Resilience in our FHTs through an Innovative Program in Mindfulness Training

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Presenter Disclosure

- **Presenter:** Ken Burgess
- **Relationships with commercial interests:**
 - **Grants/Research Support:** None
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 - **Consulting Fees:** None
 - **Other:** Self employed, member of the Hamilton Family Health Team
 - Active staff Hamilton Health Science Corporation
 - Courtesy staff St. Joseph's Healthcare

Introductions

- What FHT am I from?
- What do I do?
- Do I have any knowledge or experience in mindfulness?
- Why did I come to this workshop?
- What do I hope to take away?

Workshop outline:

- *Definition of mindfulness*
- *Review some of the evidence of the effectiveness of mindfulness programs for health care providers, teams and patients*
- *How does mindfulness work?*
- *What have we been up to in Hamilton with respect to Mindfulness programs?*
- *Questions, discussion, networking*



What is Mindfulness?

- *Mindfulness is neither a belief, an ideology or a philosophy. Rather it is a coherent phenomenological description of the nature of mind, emotion, and suffering...*
- *Mindfulness involves practices aimed at systematically training and cultivating various aspects of mind and heart via the faculty of mindful attention.*
- *It is the awareness that emerges through paying attention, on purpose, in the present moment, and non-judgmentally to the unfolding of experience moment by moment.*

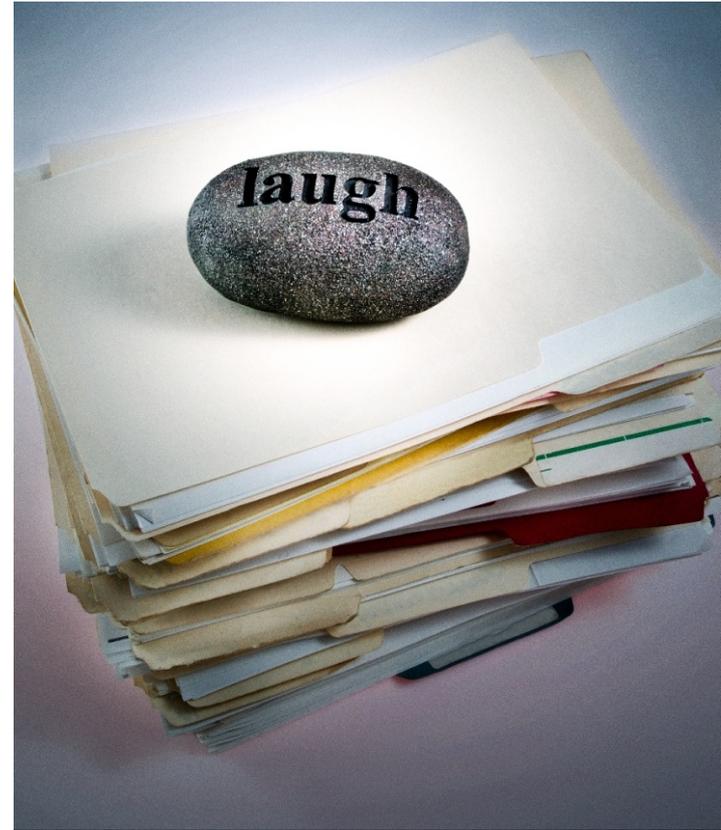
Mindfulness is bringing your full awareness to something on purpose.

- Mindfulness invites us to be open, curious, accepting and non-judgmental.
- Being in the moment. Falling awake

(Jon Kabat-Zinn, U Mass Medical School)

Mindfulness Practices

- Setting intentions
- Cessation of multi-tasking
- Mindful walking or “walking meditation”
- Mindful eating
- Mindful communication & narrative competence
- Body Scan
- Formal sitting meditation





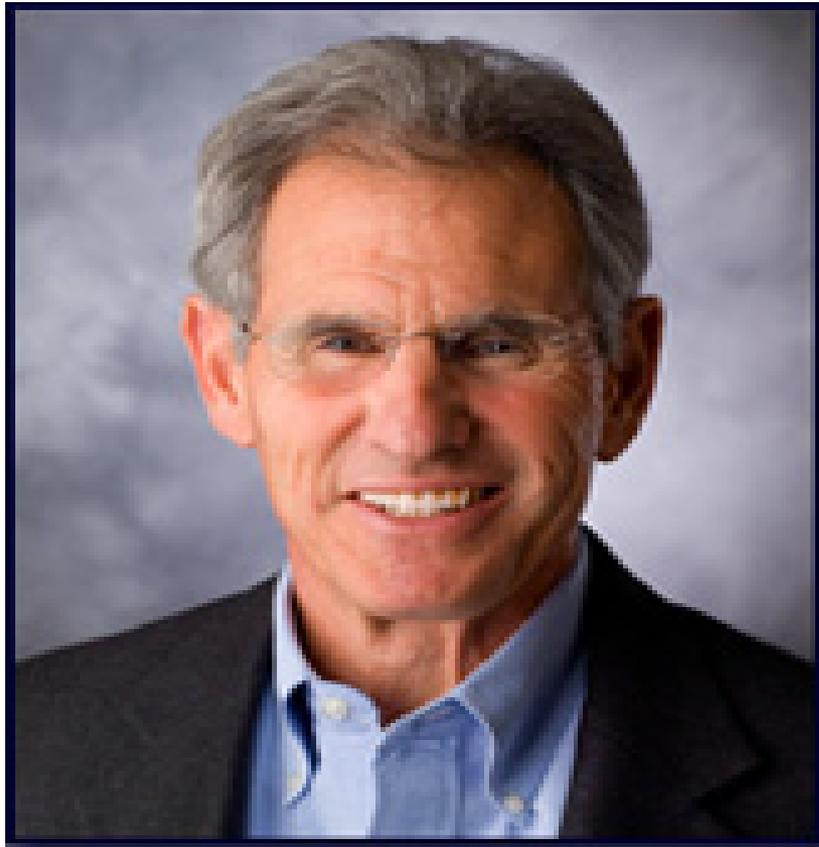
A minute of practice:

- Please put down your pens/papers/devices/bags
- Put your hands on your lap
- Close your eyes if that is ok with you
- Be here in the present
- Leave behind everything that led you to this place
- Pay attention to your breath

Meditation has been a part of contemplative traditions: 2500+ years

- Hindu
- Suffi
- Christian
- Islamic
- Jewish
- Buddhist
- Secular: 70's-

Jon Kabat-Zinn



Benefits

- Improved psychological well being , mental health, physical health
- Improvements in relationships
- Improvement re distress, anxiety, depression, sense of control, spirituality, burnout

Health Care provider examples:

- Medical and premedical students: improved anxiety and depression, empathy, spiritual experience
- Psychology students: improved stress, negative moods, anxiety self compassion
- 33 RN leaders: improved stress
- DVA health care workers: improved burnout scores, relaxation, self care, relationships at work and at home
- MDs: Improved personal well-being, burnout, mood, empathy and psychosocial beliefs

Pop-History \$0.00 \$1.000 \$4 \$400 \$100 \$100

The Medical Pos

VOLUME 46 NO. 1 \$82 year

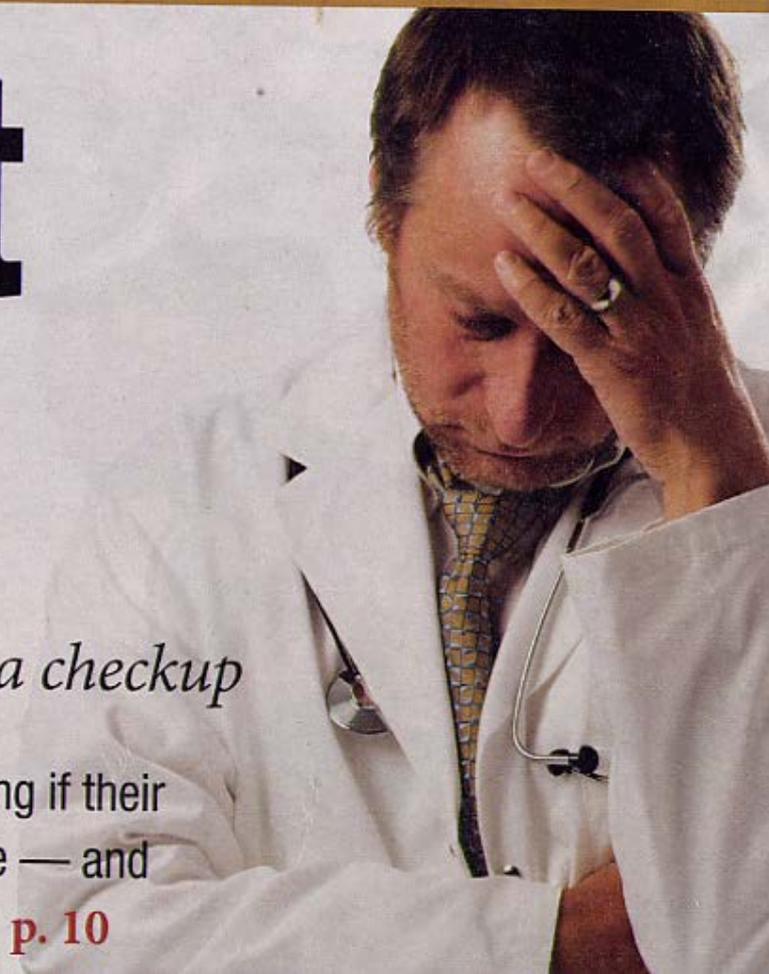
THE ROGERS NEWSPAPER FOR CANADA'S DOCTORS | CANADIANHEALTHCARENETWORK.CA

JAN

Burnout nation?

It's time for physician health to get a checkup

- More and more Canadian doctors are wondering if their level of 'work' without more 'life' is sustainable — and what the stress is doing to their ability to care **p. 10**



Healthcare: mindfulness programs are effective for

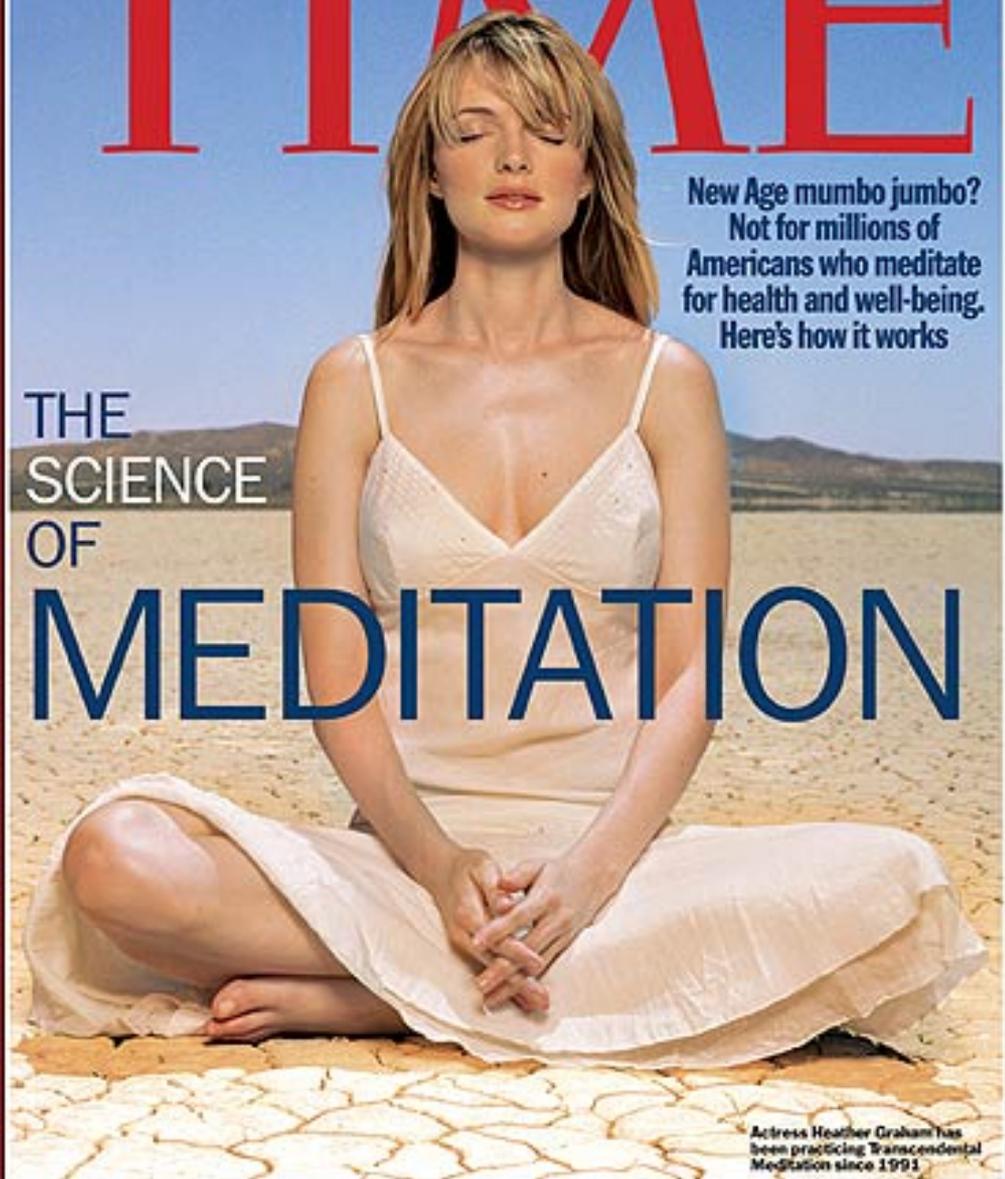
- Depression
- Depression relapse prevention
- ADHD
- Bipolar disorder
- Social anxiety disorder
- Generalized anxiety disorder
- Binge-eating disorder
- Insomnia
- Chronic pain
- Fibromyalgia
- Addictions
- Personality disorder
- Cancer
- Rheumatoid arthritis
- Diabetes
- MS

TIME

New Age mumbo jumbo?
Not for millions of
Americans who meditate
for health and well-being.
Here's how it works

THE
SCIENCE
OF

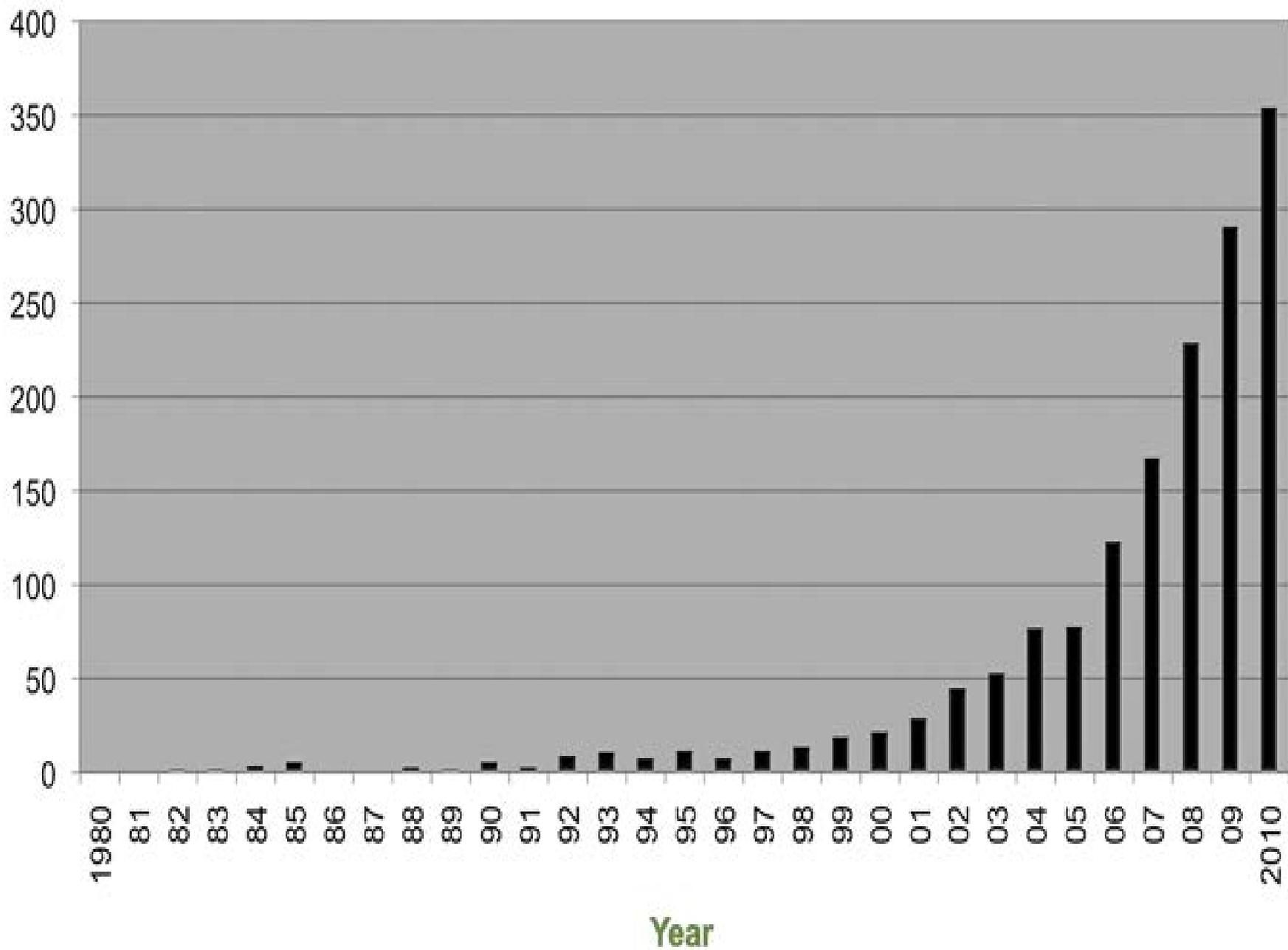
MEDITATION



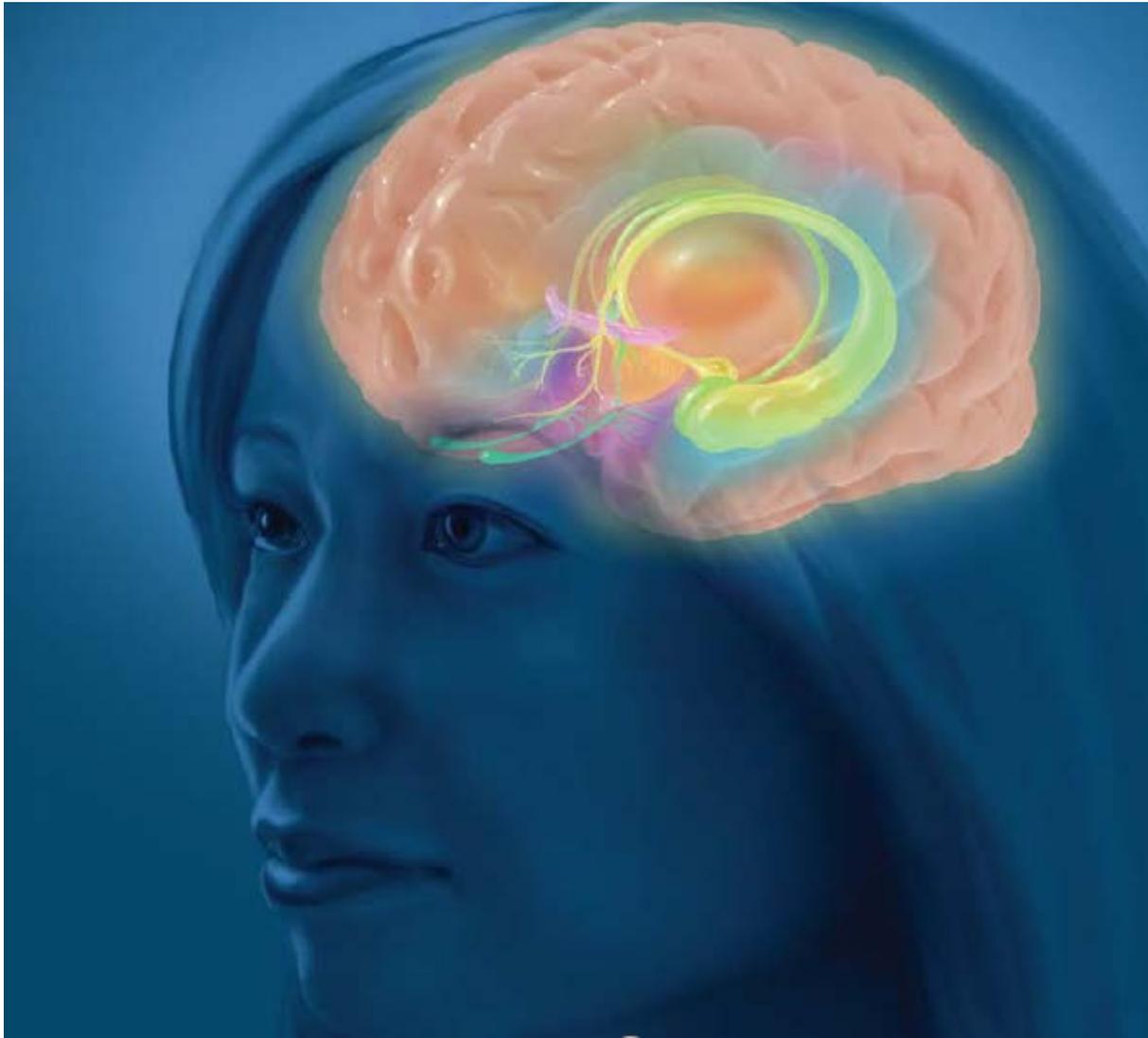
Actress Heather Graham has been practicing Transcendental Meditation since 1991



Number of Publications



Neuroscience: how and why does Mindfulness work?



FRONT

Anterior Cingulate
(motivation)

MOTOR

BACK

SENSORY

FRONTAL LOBE
(planning)

CORTEX

PARIETAL LOBE
(movement)

Dorsolateral Prefrontal
(executive & logical)

Corpus Callosum

OCCIPITAL LOBE
(vision)

Olfactory Bulb

TEMPORAL LOBE
(language)

Lateral Orbitofrontal
(appropriate social/
emotional response)

Hypothalamus

CEREBELLUM
(coordinate
movement)

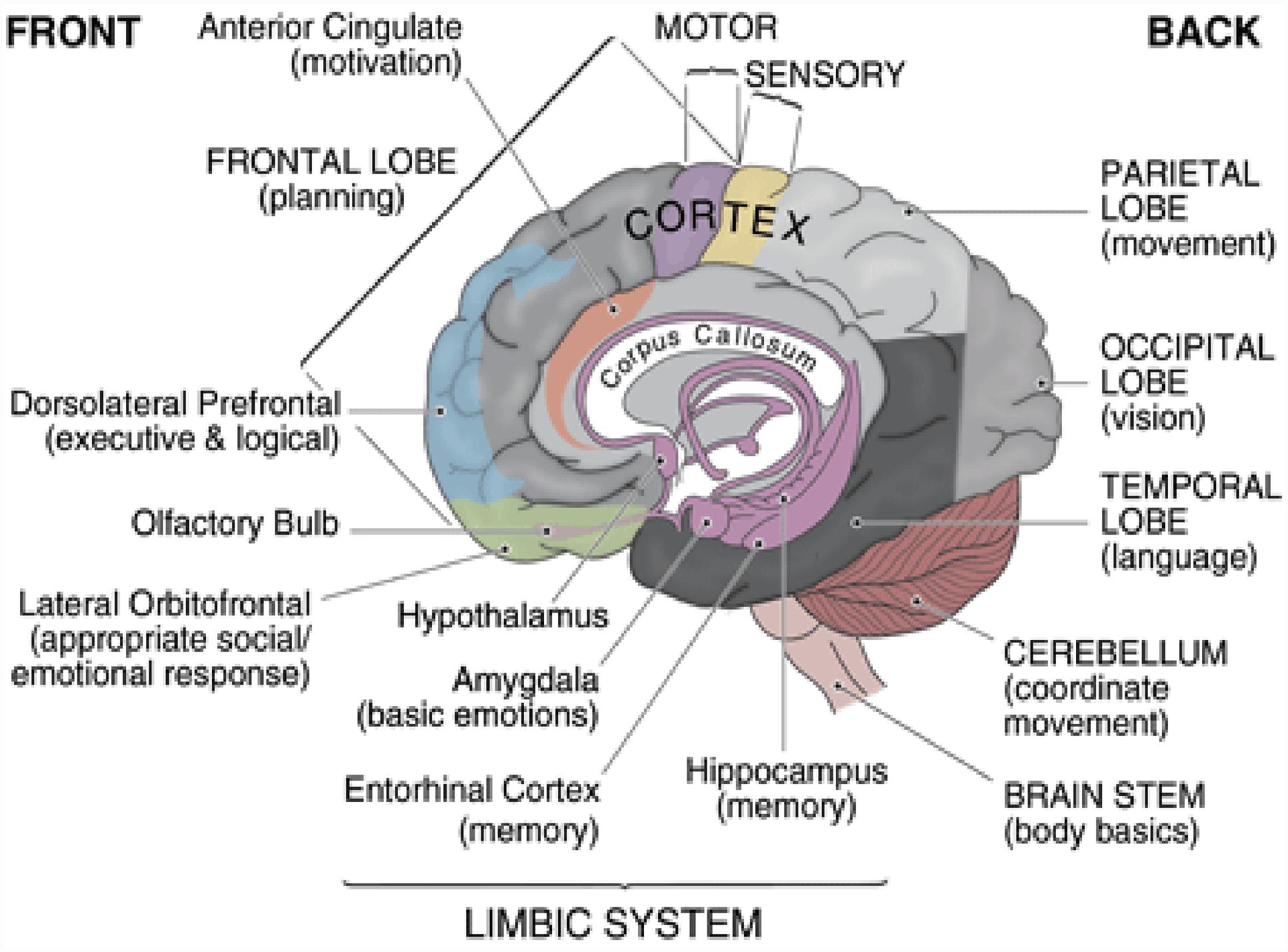
Amygdala
(basic emotions)

Entorhinal Cortex
(memory)

Hippocampus
(memory)

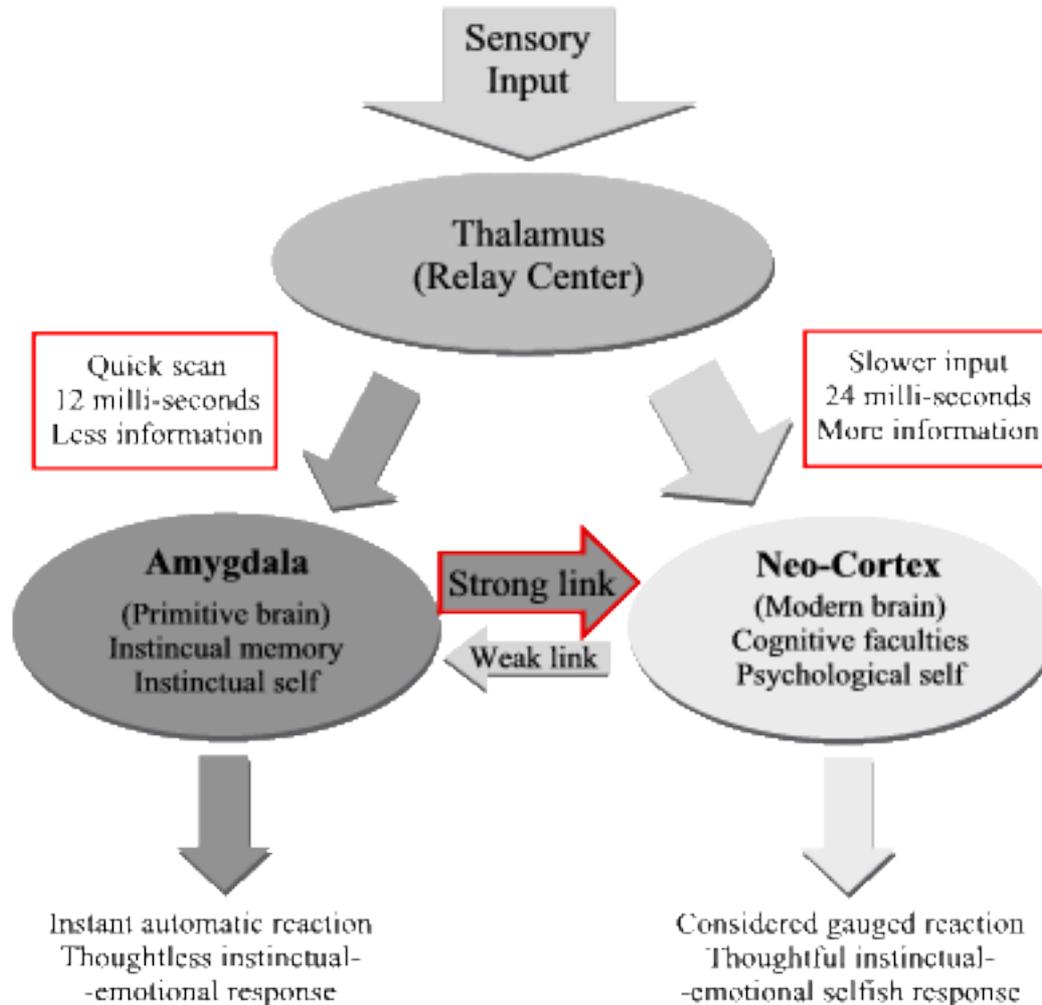
BRAIN STEM
(body basics)

LIMBIC SYSTEM



LOW ROAD & HIGH ROAD

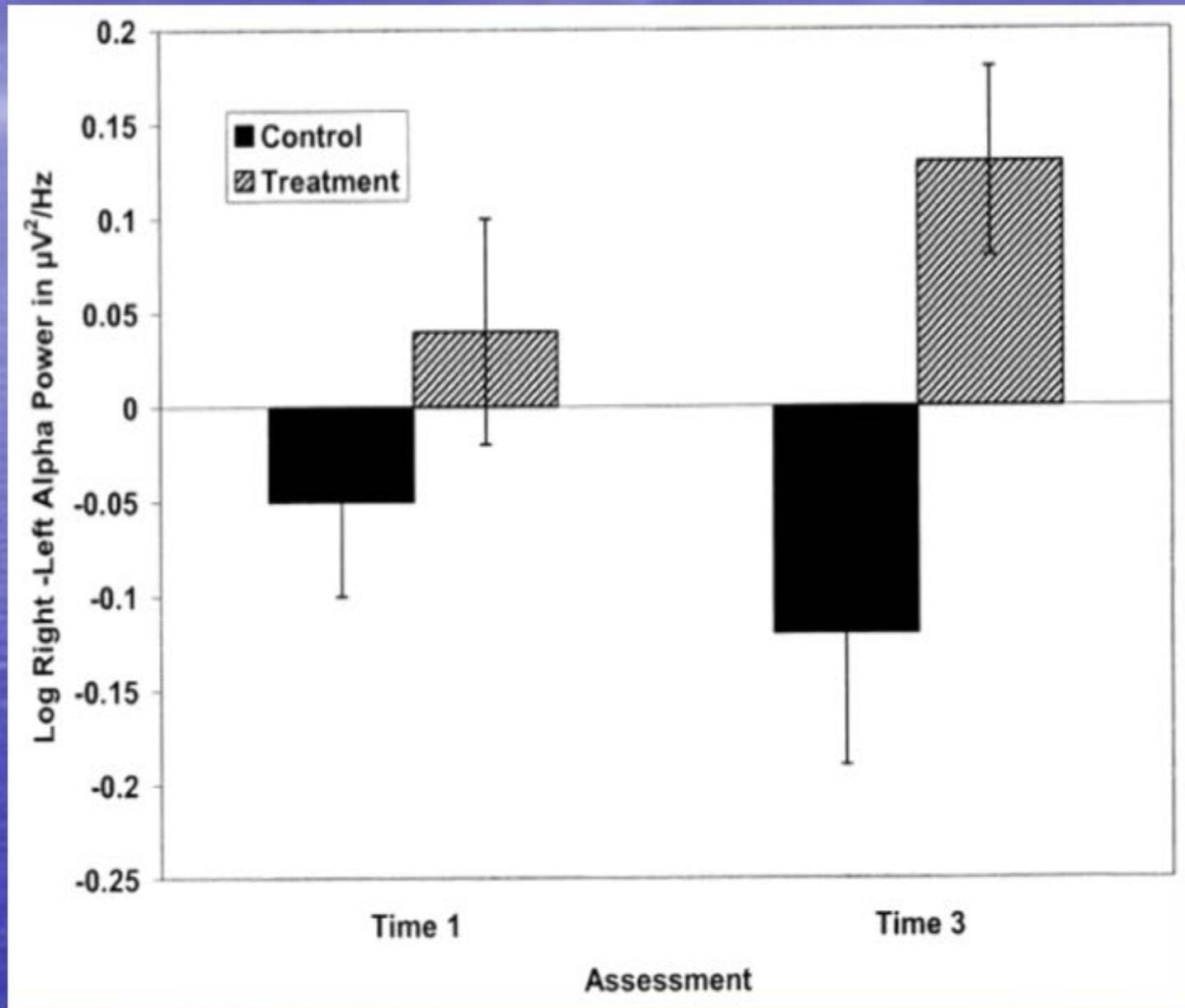
Simplified Schematic View of the Brain's Circuitry



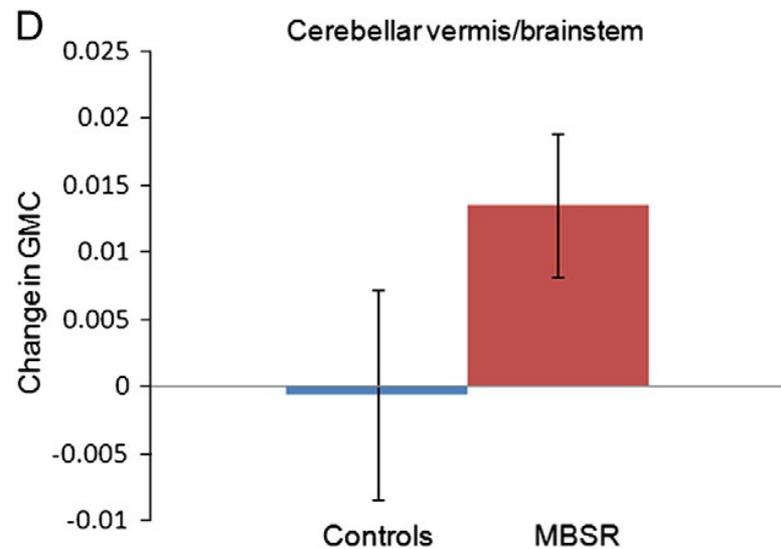
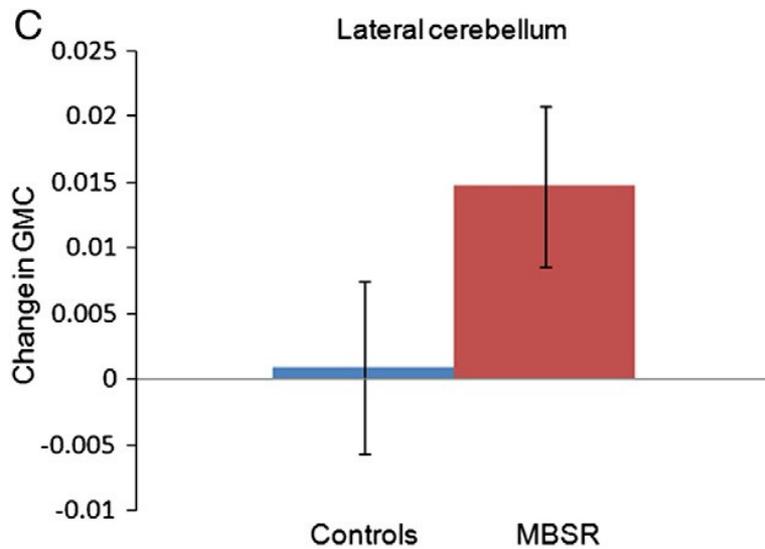
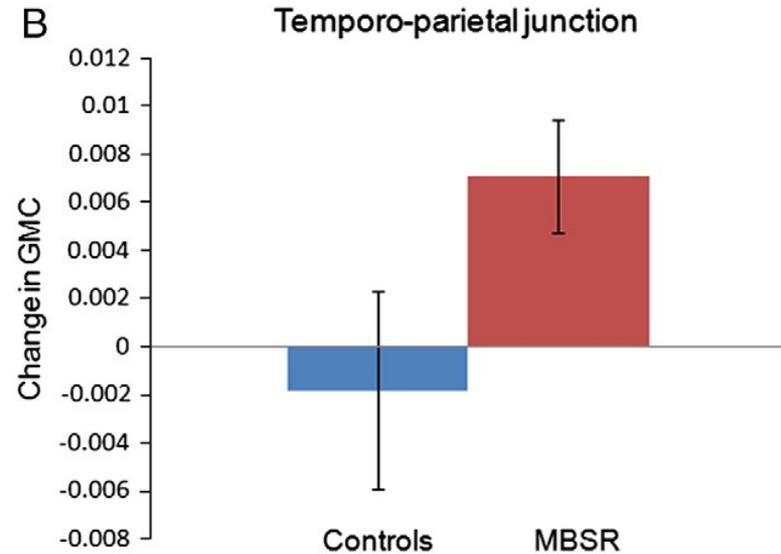
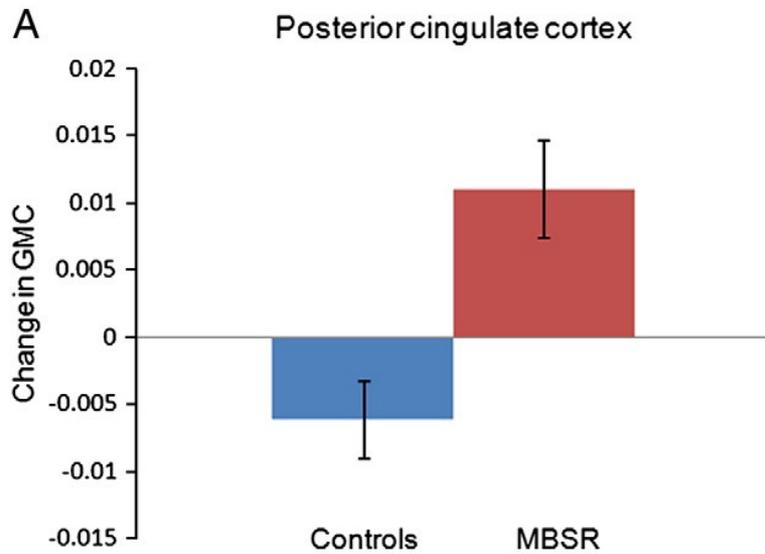


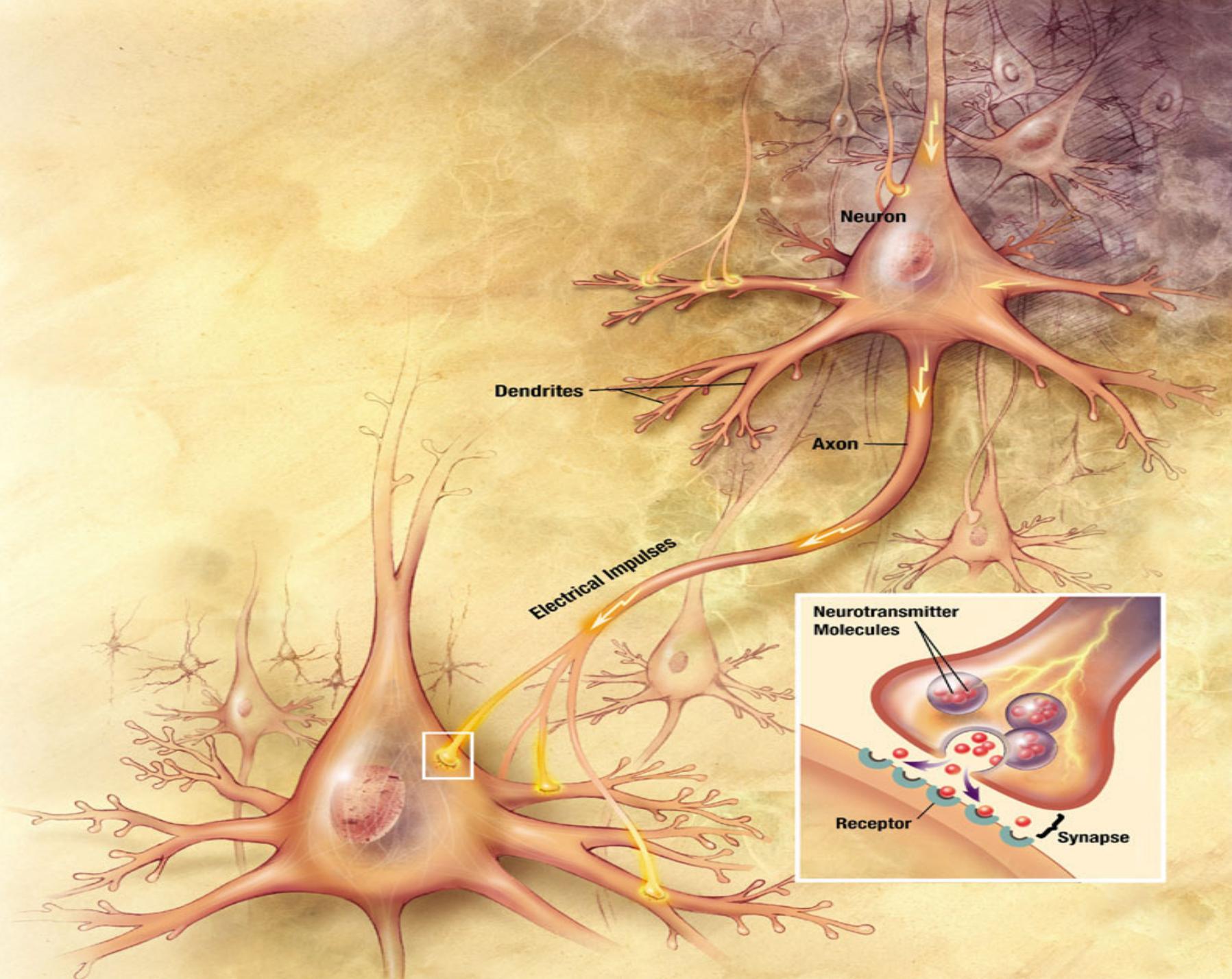
<i>Domain</i>	<i>Instructions</i>	<i>Measured improvements</i>	<i>Responsible brain areas</i>
1.Attention regulation	Sustaining attention on the chosen object; whenever distracted, returning attention to the object	Enhanced performance: executive attention (Attention Network Test and Stroop interference) orienting, alerting, diminished attentional blink effect	Anterior cingulate cortex
2. Body awareness	Focus is usually an object of internal experience: sensory experiences of breathing, emotions, or other body sensations	Increased scores on the Observe subscale of the Five Facet Mindfulness Questionnaire; narrative self-reports of enhanced body awareness	Insula, temporo-parietal junction
3. Emotion regulation: reappraisal	Approaching ongoing emotional reactions in a different way (non-judgmentally, with acceptance)	Increases in positive reappraisal (Cognitive Emotion Regulation Questionnaire)	(Dorsal) prefrontal cortex (PFC)
4.Emotion regulation: exposure, extinction, and reconsolidation	Exposing oneself to whatever is present in the field of awareness; letting oneself be affected by it; refraining from internal reactivity	Increases in non-reactivity to inner experiences (Five Facet Mindfulness Questionnaire)	Ventro-medial PFC, hippocampus, amygdala
5. Change in perspective on the self	Detachment from identification with a static sense of self	Self-reported changes in self-concept (Tennessee Self-Concept Scale, Temperament and Character Inventory)	Medial PFC, posterior cingulate cortex, insula, temporo-parietal junction

Asymmetrical PFC Activation



Gray matter concentration increases in MBSR group





Neuroplasticity: what are the mechanisms?

- Dendrites sprout and form new synapses with other nerve cells “neurons that fire together wire together”
- Networks are constantly adapting to experience
- Well used networks also develop increased myelination therefore faster more efficient function
- In at least one area (hippocampus) new neurons can be created

What is the Hamilton Story?



- *How did we find and engage those interested?*
- *How did we develop a leadership core group?*
- *How did we chose and develop appropriate courses, develop faculty, and provide oversight and quality control?*
- *How did we develop links with partnering organizations?*
- *How did we go about obtaining a MOHLTC workplace wellness grant?*
- *Existing and emerging mindfulness programs for patients and the public*
- *Experiences to date from primary care in promoting these as an effective alternative preventive and treatment option*
- *Development of a Mindfulness Hamilton supporting mindfulness activities in health care, education and leadership.*

How did we engage those interested?

- Palliative care MDs SWs
- Associate Dean for Faculty Development a palliative care MD
- Clinical Ethicist at Hamilton Health Sciences
- What can I do for you?
- Palliative care connection to U of T Michelle Chaban and mindfulness certificate course at U of T
- Hospital/Community wellness MBSR teachers

Leadership group, mindfulness courses

- Those interested came together and made a plan
- Attracted FHT and hospital and community MDs and IHPs
- First courses 2011 DRAM (Discovering Resilience through Mindfulness Meditation) (U of T's course) and MBSR

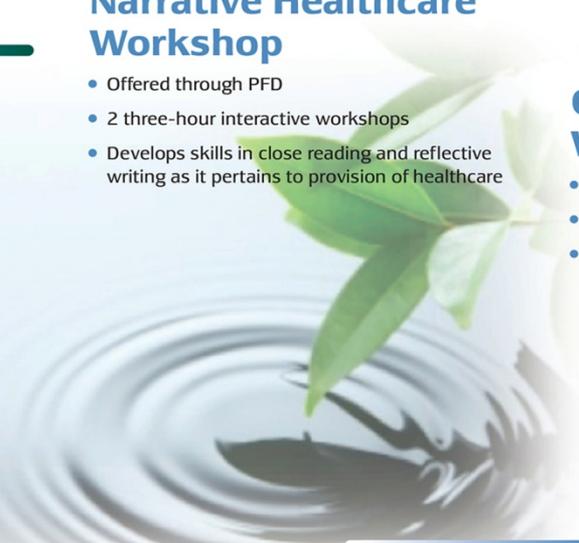
Participants

Includes front-line health care workers (Chaplains, Dieticians, MD, Nursing, OT, PT, SLP, SW); managers/administrators; and GFT faculty.

	DRAM	MBSR	Narrative Healthcare	Compassion Fatigue	Mindful Communication	
2011	14	17	8	20	N/A	
2012	43	22	8	8	N/A	
2013	70	220*	10	10	25	
TOTAL	127	259	26	38	25	
GRAND TOTAL						475

Discovering Resilience

COURSE DESCRIPTIONS



Mindful Communication

- Offered through PFD
- Phase 1 (Intensive): 8 two-and-a-half hour weekly sessions
- Phase 2 (Continuation): 10 two-and-a-half hour monthly meetings
- Each class involves didactic presentation, group discussion, experiential practice
- Focus on mindfulness, appreciative inquiry, narrative medicine
- Home practice

Narrative Healthcare Workshop

- Offered through PFD
- 2 three-hour interactive workshops
- Develops skills in close reading and reflective writing as it pertains to provision of healthcare

Compassion Fatigue Workshop

- Offered through PFD
- 3 hour interactive workshop
- Develops care plans to minimize effects of compassion fatigue and improve work-life balance

Developing Resilience through Applied Mindfulness (DRAM)

- Offered through PFD
- 4 two-day workshops
 - Foundations of Mindfulness
 - Neurosciences & the Application of Mindfulness in Education and Healthcare
 - Integrating Mindfulness into Practice
 - Well-being, Resilience, and Compassion through Mindfulness
- Each workshop involves didactic presentation, group discussion, experiential practice
- Home practice

Mindfulness Based Stress Reduction (MBSR)

- Offered through PFD, HHS and SJHH
- 8 or 9 weekly classes
- Classes each 2 or 2.5 hours
- Experiential practice and group discussions
- Home practice required (up to 30 min per day)
- One-day silent retreat

Table 2. Changes from Pre to Post Intervention

	MBSR mean change	DRAM mean change	Pre vs. Post Intervention F-value	MBSR vs. DRAM F-value
Five Facet Mindfulness Questionnaire	18.68	16.51	108.37*	0.41
Depression Anxiety & Stress Scale				
DASS Anxiety	-2.20	-3.15	19.42*	0.56
DASS Depression	-4.36	-3.96	30.93*	0.72
DASS Stress	-7.14	-7.59	103.59*	0.10
Cohen's Perceived Stress Scale	-6.52	-5.72	114.61*	0.49
Interpersonal Reactivity Index	5.58	3.19	23.54*	1.76
Social Adjustment Scale- Self Report	-10.54	-8.28	58.35*	0.85
Maslach Burnout Inventory (MBI)				
MBI Professional Efficacy	0.33	0.31	25.88*	0.03
MBI Exhaustion	-0.53	-0.67	51.71*	0.58
MBI Cynicism	-0.35	-0.49	22.26*	0.61
Lam Employment Absence & Productivity				
LEAP ratings	-2.56	-2.71	52.17*	0.04
LEAP time missed, past 2 wks (in hrs)	-1.30	-0.84	2.01	0.93

Interpreting Table 2: The average change of the scale total is presented in the columns marked 'MBSR mean change' and 'DRAM mean change'. Values that are * in the 'Pre vs. Post intervention' column indicate that there was a statistically significant change from pre- to post-intervention (* $p < .001$) and larger values reflect a larger effect. None of the values in the 'MBSR vs. DRAM' column are * because there were no statistically significant differences between the effects of the interventions.

Results summary

- MBSR and DRAM interventions resulted in improvements:
- Psychological well-being
- Empathy for others
- Perceived stress
- Social functioning
- Perceived work functioning/productivity
- Work-related burnout

Qualitative Results

- *I notice my bodily reactions before opening my mouth in response to an upsetting behavior.*
- *I am less stressed and more mindful of my actions.*
- *I have improved attention and awareness of self.*
- *I am more able to speak my mind and am less nervous when discussing concerns with others.*
- *I am more positive at work and less stressed.*
- *I am doing one task at a time so I am more productive. I have better focus. I feel more in control.*
- *I have a more positive outlook and can better accept others' opinions. I am less judgmental.*

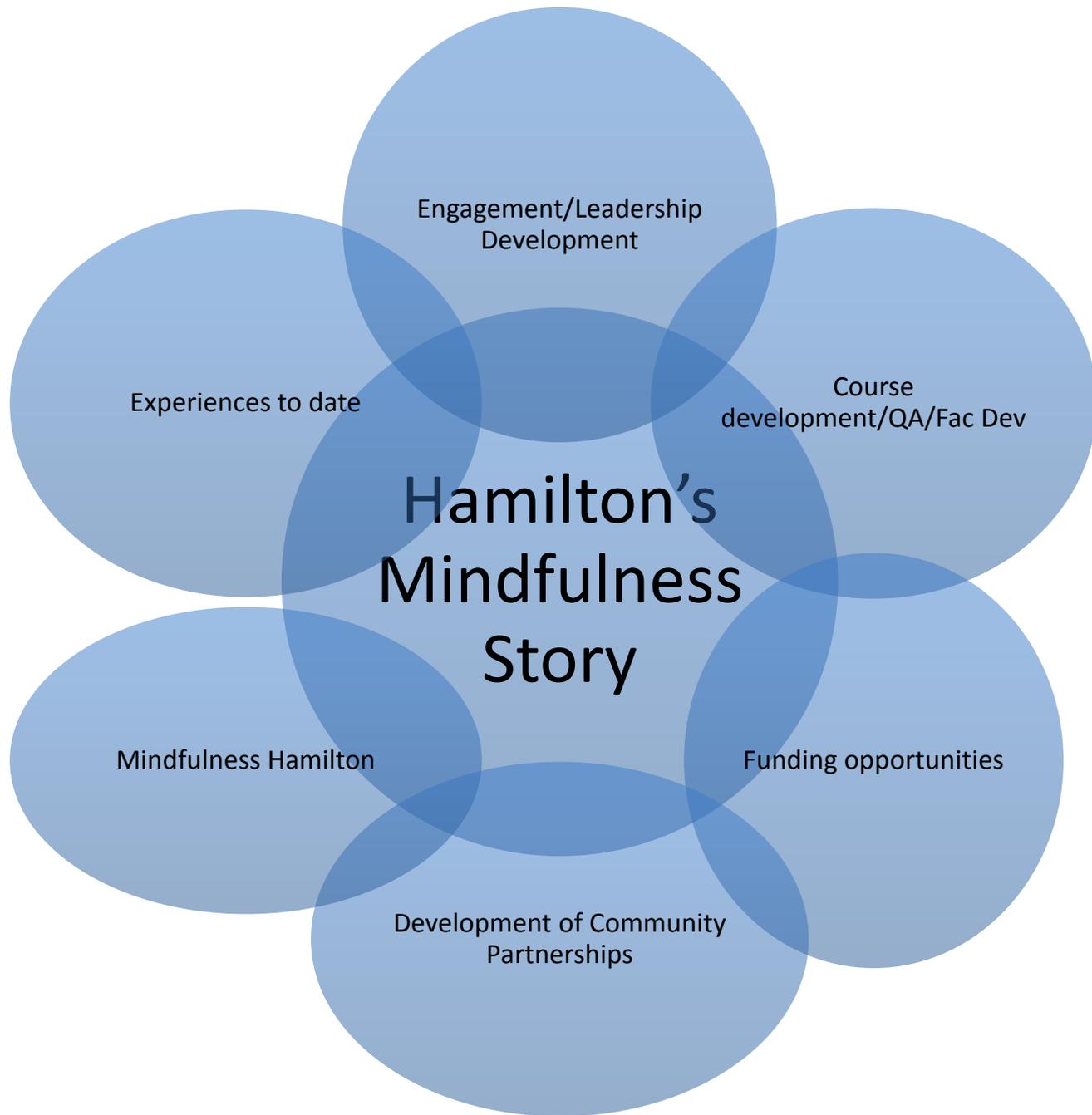
Teaching:

- This is not see one, do one, teach one
- MBSR teacher training
- Mindfulness Teacher criteria document in evolution
- You need a meditation practice and teaching training and experience to be effective
- Our philosophy has been to go with our most experienced and trained teachers

Partnerships

- Program for Faculty Development (Discovering Resilience leadership Team)
- Hamilton Health Sciences
- St Joseph's Healthcare
- Hamilton Family Health Team
- McMaster Family Health Team
- 2013: memo of understanding: Partnering organizations contribute to tuition for courses





Hamilton's Mindfulness Story

Engagement/Leadership
Development

Course
development/QA/Fac Dev

Funding opportunities

Development of Community
Partnerships

Mindfulness Hamilton

Experiences to date

MOH Grant

- 2012/13 Healthy Work Environments Partnership and Innovation
- \$225 K
- HHS SJH
- DRAM 77 participants
- MBSR for health professionals courses X 6 105 participants
- Research pre and post intervention

Hospital based programs

- MBCT (Mindfulness Based Cognitive Therapy) inn psychiatric outpatients
- DBT (Dialectical Behaviour Therapy) groups
- Mindfulness groups at adult inpatient psychiatry wards!
- Mindfulness programs in Pediatric inpatient and outpatient groups
- Professional sangha's at all hospitals (1/2 noon break)

Primary care

- MBSR-like groups run by Mental Health Workers
- Mindfulness programs for women in a practice
- Introduction to mindfulness by individual clinicians
- Referral to mindfulness programs **prevention and treatment option**
- HFHT: Mindful leadership initiative

De Groote (McMaster) Health Sciences

- MD students: elective program 8 week MBSR-like
- Follow up monthly meetings
- MD professional competencies program: mindfulness lecture
- RN program: mindfulness program (with a different name) being introduced

Sustainability

- City wide and workplace communities of practice
- Hamilton Mindfulness in Healthcare Steering Group
- Mindfulness research group
- Another MOU and finding a “home” for the offerings
- Further developing links in McMaster Faculty of Health Sciences, neurosciences program **fMRI**
- Regional, provincial, national, international networking
- **MindfulnessHamilton.ca** for mindfulness in healthcare, education, leadership

Summary

- If you are interested: find like minded people
- There will be many you did not know were involved once you get started
- Network locally and regionally
- Have a speaker, show a film, run a course, people will come
- Many have had a taste of mindfulness but may get on board once they witness the changes in themselves
- FHT staff will benefit re: sustainability, health
- FHT patients will benefit: quality of care and cultivation of their own resources
- The community will benefit....health care, education, leadership

Questions, discussion



Contact:

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