**Interventions**

*Articles testing the applied science and implementation of mindfulness-based interventions*


**Associations**

*Articles examining the correlation and mechanism between mindfulness and other variables*

facets onto dimensions of anxiety and depression. *Behav Ther.* [link]


**METHODS**

*Articles developing empirical procedures to advance the measurement and methodology of mindfulness*


Worsfold, K. E. (2013). *Embodied reflection in mindfulness-based cognitive therapy for...*
depression. Human Psycholog., 41(1), 54-69. [link]

__Reviews__

Articles reviewing content areas of mindfulness or conducting meta-analyses of published research


Carlson, E. N. (2013). Overcoming the barriers to self-knowledge: Mindfulness as a path to seeing yourself as you really are. Perspect Psychol Sci., 8(2), 173-86. [link]


Lang, A. J. (2013). What mindfulness brings to psychotherapy for anxiety and depression. Depression and Anxiety. [link]


__Trials__

Research trials on mindfulness newly registered (Feb 2013) at Clinicaltrials.gov

Department of Veterans Affairs (K. L. Saban, PI). Mindful hearts study. Trial# NCT01784796. [link]

HealthPartners Institute for Education and Research (R. Whitebird, PI). Managing diabetes mindfully study. Trial# NCT01796834. [link]

The Cleveland Clinic (A. Bernstein, PI). Stress free now for nurses. Trial# NCT01796054. [link]
Highlights

A summary of select studies from the issue, providing a snapshot of some of the latest research findings

In this issue, two studies follow up on anomalous findings, one in the realm of mindfulness and brain function, the other in the realm of mindfulness and immune function.

Keune et al. [Biol Psychol] studied the effects of mindfulness meditation on frontal EEG alpha wave asymmetry. It is generally held that relatively higher left frontal alpha power is associated with depression and avoidance motivation, whereas relatively higher right frontal alpha power is associated with approach motivation. While studies agree that mindfulness enhances relative right frontal alpha in healthy adults, the data for depressed adults is contradictory.

To clarify this, the authors measured frontal alpha asymmetry in 57 women with a history of recurrent depressive disorder. They recorded EEGs at baseline, after the induction of a sad mood, and after twenty minutes of either mindfulness meditation or a rumination challenge. In both the conditions, participants were told to focus on their breath, but one group received additional mindfulness instructions, while the other heard distracting instructions to ruminate, which they were told to try to ignore. Participants received no prior training in meditation.

In accord with previous studies, greater baseline left alpha power correlated with depressive symptoms, and greater baseline right alpha power correlated with positive mood. More importantly, mindfulness meditation shifted alpha activation toward the right and reduced negative affect, while there was no similar effect for the rumination challenge. The results support the theory that mindfulness shifts frontal asymmetry, promoting approach motivation and thereby facilitating mood regulation. The study was limited by nonrandom assignment to conditions.

Gallegos et al. [J Altern Complement Med] performed new, more detailed analyses of the results of a prior, unpublished, study.1 That study of 100 older MBSR participants (ages 65+) showed an unexpected decrease in antibody response to an immune challenge when compared with a wait list control. Conversely, previous studies with younger adults showed that MBSR had improved their immunity. The current study explored the relative contributions of separate MBSR components (yoga, sitting meditation, informal meditation, body scan, and perceived social support) to a variety of biological and psychological measures, including insulin-like growth factor (IGF-1), which is associated with increased longevity, an interleukin (IL-6) associated with inflammation, two antibodies (IgM and IgG) associated with immune response, and self-ratings of positive affect. The researchers provoked an immune response by injecting participants with keyhole limpet hemocyanin (KLH), a carrier protein used in vaccinations.

Yoga and sitting meditation both increased IGF-1 levels, while perceived social support lowered IL-6 levels. Yoga had a significant beneficial effect on positive affect. The body scan and yoga both contributed to the decreased antibody response to KLH immunization. Can MBSR impair immunity in older adults? More research is needed for it is possible, for example, that the observed antibody decrease was offset by increases in macrophages and lymphocytes.

Both of these studies significantly contribute to our understanding of the biology of mindfulness, quantifying objective measures at the level of the brain and body.

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Image: Surface of the human brain
**ANNOUNCEMENTS**

Submit your announcements online at [www.mindfulexperience.org/announcements.php](http://www.mindfulexperience.org/announcements.php)

Categories: Books & Media, Events & Conferences, Jobs & Volunteer, and Research & Education

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**Events & Conferences**

**South Burlington WRP Spring Seminar**

"Mindfulness that Matters" This daylong seminar focuses on bringing mindfulness-based strategies to your classroom, school or district. Spend a day with us, observe our teachers and students implementing practices in their classrooms, learn about the neuroscience of mindfulness, the evolution of our program and let us help you action plan. Our nationally recognized PreK-12 Wellness and Resilience Program has trained over 140 teachers in the past five years in bringing mindfulness practice to the personal and professional and to the lives of their students. Date: Mar 22, 2013 and May 3, 2013 Cost: $199 (includes lunch).

INFO: Contact srand@sbschools.net for housing, more information, and to register.

**Mindfulness That Matters**

South Burlington School District South Burlington, Vermont Wellness and Resilience Program Spring Seminar: March 22 or May 3 This daylong seminar focuses on bringing mindfulness-based practices to your classroom, school or district. Spend a day with us; observe our teachers and students implementing practices in their classrooms; learn about the neuro-science of mindfulness; the evolution of our program, and let us help you develop an action plan. Our PreK-12 program has trained over 140 staff and teachers in the last five years and we want to share it with you.

INFO: Contact srand@sbschools.net

**Meditation and Imagery Training**

Our 30th year of training health professionals in the clinical uses of meditation and imagery. INFO: Visit [www.huntingtonmeditation.com](http://www.huntingtonmeditation.com) or write to Richard Schaub, PhD at drichardschaub@gmail.com

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**Mindfulness Training for Professionals**

Mindfulness is becoming increasingly recognized as an important, positive factor in the healing and helping relationship between professionals and their clients. Research offers compelling evidence that a mindfulness practice is connected to improvement in health care professionals’ well-being, psychological distress, burnout, and capacity for relating to patients. This training offers professionals of any background skills and experience to bring mindfulness forward in their professional lives and work. Date: May 1-4, 2013.

INFO: Contact dukeimprograms@duke.edu [www.dukeintegrativemedicine.org](http://www.dukeintegrativemedicine.org)

**Deepening our Practice**


INFO: Register at [www.mindfulnessandmore.com](http://www.mindfulnessandmore.com)

**11th Annual International Scientific Conference**

The 11th Annual International Scientific Conference will be held in Norwood, Ma April 17 - 21, 2013 Gathering together an international community of renowned scientists, scholars, teachers and students participating in keynote addresses, concurrent breakout sessions, pre and post conference institutes, workshops, posters presentations and mindfulness practice sessions.

INFO: Contact mindfulness@umassmed.edu [www.umassmed.edu/cfm/conference](http://www.umassmed.edu/cfm/conference)

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**Research & Education**

**Mindfulness-Based Diabetes Management (MBDM)**

April 4- May 23, 2013. New MBI for people living with diabetes of all types. $495.00 for eight weekly sessions plus Saturday retreat. 20% discount for MBI instructors and researchers. Seeking expert feedback as we refine course, as well as possible research collaborators.

INFO: Contact Steven Alper, L.C.S.W. stevenalperlcsw@gmail.com (619)463-6387

**Online UCLA Mindfulness Class**

UCLA Mindful Awareness Research Center (MARC) offers 6-week online class: Mindful Awareness Practices for Daily Living. This class is an excellent introduction to mindfulness. You will learn meditation practices including sitting meditation, walking meditation and how to work with difficult thoughts and emotions. The pre-recorded course can be accessed from anywhere at your own pace. Includes weekly live text chats with instructors and other participants. Advanced classes available.

INFO: Enroll at [http://marc.ucla.edu](http://marc.ucla.edu)

**Books & Media**

**Mindfulness Practices For Cancer**

BEING WELL (even when you're sick): Mindfulness Practices for People Living with Cancer and other Serious Illness, by Elana Rosenbaum, senior MBSR teacher, cancer survivor and psychotherapist. Forward by Jon Kabat-Zinn, a Shambhala Publication now available. Jack Kornfield says “Simple, deep, helpful, comforting, and wise.”

INFO: Learn more at [www.mindfuliving.com](http://www.mindfuliving.com)