# Executive Performance Training Program



"If you just sit and observe, you will see how restless your mind is... if you try to calm it, it only makes it worse, but over time it does calm, and when it does, there's room to hear more subtle things – that's when your intuition starts to blossom and you start to see things more clearly and be in the present more. Your mind just slows down, and you see a tremendous expanse in the moment. You see so much more than you could see before. It's a discipline; you have to practice it."

Steve Jobs, co-founder Apple Inc.

"The main business case for meditation is that if you're fully present on the job, you will be more effective as a leader. You will make better decisions. I tend to live a very busy life. This [practice] keeps me focused on what's important."

William George, Harvard Business School professor, former CEO of Medtronic

"My old coping strategy—the bourbon and cheeseburger method—wasn't working"

Google's meditation program director and former engineer, Bill Duane



## About the program

The Serenityworks Executive Performance
Training Program™ provides busy executives with
safe, easy to apply mind-management skills to enhance
performance through a systematic reduction in stress,
and simultaneous improvement in mental faculties.
Recent neurological research provides a compelling
evidence base to support the view that the regular
application of the techniques introduced in this
program will yield noticeable results for most people
within a relatively short period of time.

Longer term practice is believed to produce sustained changes in brain structure and chemistry associated with higher states of wellbeing, memory, concentration and focus. The core meditative practices of mindfulness and transcendence are integrated in our unique and proven program to open exciting new dimensions in the way we perceive, process and respond to information and situations, making us more effective at what we do while increasing our wellbeing.

Welcome to the Serenityworks program.

### About the founder

For 35 years, Peter Coroneos has trained in, practiced, refined and applied the techniques that will be introduced in this program. Qualified in science, education and law, he rose to leadership in 1997 as CEO of Australia's then newly established Internet Industry Association, a position he held for nearly 14 years. An acknowledged international expert in cyber policy, Peter led the development of groundbreaking programs in areas ranging from child protection, broadband policy and cybersecurity. He pioneered the development of the icode scheme, now a model of international best practice in cyber threat mitigation.

Balancing the competing demands of a high pressure, high profile, politically charged career, he credits his capacity to maintain high levels of energy, creativity and enthusiasm on his ability to tap into deeper parts of mind, accessing rejuvenation and inspiration.

Inspired by recent medical and scientific research, Peter is dedicated to sharing his knowledge to help others begin to unlock to their full potential. He is an outstanding teacher and communicator who brings a clear, first hand understanding of ancient techniques which he has consistently applied in his own career. The program has been designed for corporate executives whose day-to-day pressures are fully understood.



## Building a calm and powerful mind

Once the training is completed, you should start to experience **mindfulness**, or being fully aware of the present moment, during each practice session. You may also experience periods of **transcendence**: a powerful state of higher consciousness in which there is awareness without thoughts. Harnessing the subtle shift from mindfulness to transcendence is a core feature of our training.

Having no thoughts may seem unnatural until you recall that's typically what happens for a moment just prior to sleep or after waking from deep sleep. It is in fact a very natural state. It is in these deeper states of transcendence that we believe the most profound and positive changes to the human nervous system take place. The techniques will help to reliably achieve and maintain this state.

The unique mindfulness/transcendence dynamic we teach brings effects that are powerful and sustained. 15 minutes of daily practice will introduce a greater sense of stillness and calm into your day. The effects of deep rest for the nervous system will begin to spill over into everyday activity and health. Sleep quality typically improves as you carry less mental activity to bed each night. Dissolving decades of stored stress will leave you feeling more energised and focussed, with perception, memory, insight and inspiration all enhanced and with more mental clarity to sharpen and accelerate your decision making abilities.

### Neuroplasticity: the brain changes

While meditators have long been aware of the subjective benefits of their practice, modern science is bringing new insights into the mechanism by which these changes occur. Growing evidence shows changes in brain function and structure. This provides a scientific basis to support the view that meditation unlocks more of your brain potential.

While it has long been known that neural connections form under the influence of learning stimuli, it was thought that the actual structures of the brain were fixed from birth, declining as we get older. 1990s studies using functional magnetic resonance imaging (fMRI) to map brain zones and measure changes to specific brain areas first started to see repair and development of the adult brain under certain stimuli. This remarkable new phenomenon was named *neuroplasticity*.

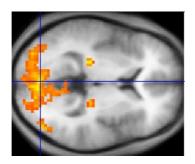


Figure 1: Functional MRI brain scan showing brain activity during mindfulness practice. Note the near perfect symmetry of active areas.

#### Cortical changes

In a groundbreaking 2005 study, Lazar et al were able to show that brain regions associated with attention, 'interoception' and sensory processing were *thicker* in meditation participants than matched controls, including the prefrontal cortex and a region known as the right anterior insula. Differences in prefrontal cortical thickness were most pronounced in older participants, suggesting that meditation

might also offset age-related cortical thinning (progressive degeneration of grey matter). This study provided the first structural evidence for experience-dependent brain plasticity associated with meditation practice.

In addition, mindfulness practices are now thought to increase the *number of neurons and neuronal connections* in sections of the cortex. Those sections are: the right frontal cortex, related to *concentration*; the right insula, related to *emotions*; and the right parietal and temporal lobes related to *touch and sound*.

 $Source: \ http://jonlieffmd.com/blog/neuroplasticity-and-meditation-self-directed-neuroplasticity-new-default-mode$ 

A 2010 study by Hölzel et al at Massachusetts General Hospital, also showed that after only eight weeks practice there was a reduction in the volume of the amygdala, related to anxiety and our stress response to events and negative thoughts, and an increase in the number of neurons in the hippocampus, related to learning and memory. This provides a physical basis for the calmness and simultaneous improved cognitive function experienced by meditators.

In 2011, a remarkable study by Harvard-affiliated researchers at *Massachusetts General Hospital* found that after just 8 weeks of meditation, MRI scans of test subjects showed an increase in the density of grey matter in the hippocampus, a part of the cortex known to be important for *learning and memory*, *emotion regulation*, and in structures associated with *self-awareness*, *compassion*, and *perspective taking*.

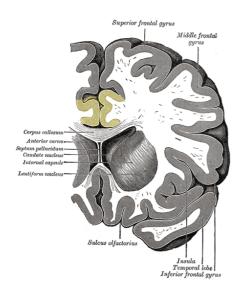


Figure 2: Functional MRI brain scan showing increased folding (centre right area) of the cortex in meditators giving rise to greater surface area of the grey matter.

In 2012, neuroscientists at the UCLA Laboratory of Neuro Imaging found that long-term meditators have larger amounts of gyrification (folding) of the cortex increasing the surface area of the cerebral cortex (Fig. 2) which may allow the brain to process information faster than people who do not meditate. Further, a direct correlation was found between the amount of gyrification and the number of meditation years, suggesting further evidence of the brain's neuroplasticity. This area of the brain is also involved in decision making, memory formation, and attention.

The relatively recent functional MRI research complements earlier studies measuring electroencephalogram (EEG) or 'brain wave' activity and chemical changes in the brain due to meditative techniques. These studies indicate that long-term meditation practice is associated with altered resting EEG patterns, suggestive of long lasting changes in brain activity.

#### Improved Alpha Brain-Wave Modulation

Alpha waves play a key role in brain activity related to *concentration*; which things should you pay attention to and which should you ignore. Neuroscientists have discovered that mindfulness meditation increases our brain's ability to regulate alpha waves. By improving modulation of these alpha rhythms, meditators learn to better control which body sensations and signals they pay attention to and how to regulate attention so they are less distracted by thoughts and external stimuli. The result is improved *concentration* and *control of distracting thoughts*. These effects also carry over into regular activity forming a 'new normal'.

Appendix 1 references additional scientific evidence. The studies cited suggest brain changes corresponding to enhanced cognitive, behavioural and emotional states arising from the regular practice of techniques like those presented in the Serenityworks Executive Performance program.

### Health Benefits

As well as the brain changes noted, physical, emotional and psychological conditions are shown by research to be favourably influenced by meditation techniques, including:

- Anxiety
- · Chronic pain
- · Depression
- · Headaches
- · High blood pressure
- · Insomnia
- Migraines
- · Stress
- · Sleep irregularity
- · Recovery from accident or illness

The direct benefits of meditation can include:

- · Improved physical, emotional and mental health
- · Focused and clear thinking
- · Improved memory
- · Enhanced sense of self and personal presence
- · Increased emotional balance and improved mood
- · Greater relaxation and ease
- · More equanimity in the face of challenges
- · Greater satisfaction in life.

Source: Government of Victoria, Australia: Better Health Channel www.betterhealth.vic.gov.au

### Summary and conclusions

Mindfulness is a precursor to deeper states of stillness, as well as being a practice in its own right. While it takes some effort to begin with, it gradually becomes established as the new default mode. Your sense of awareness of the present moment and all the sensory dimensions that encompasses becomes heightened and increasingly sustained. Along with this comes better focus, insight and mental clarity.

We postulate that the neurological changes which accompany these practices both underpin their continued development, but *also arise as a result* of it. They are mutually reinforcing, a 'virtuous circle'.

According to published research, some of which is referenced in this booklet, the transformation begins within weeks of practice. It is important to appreciate that the specific techniques provided in this program are designed to bring to our notice (rather than to manufacture) existing states of transcendence.

The foundation of the program relies entirely on the proposition that a state of quietude and watchfulness is in inherent in us all. Unfortunately, this very natural and continuous state is usually masked by our relentless stream of thoughts, compounded by emotional states such as stress, anxiety, frustration etc. As we peel away and ultimately dissolve these layers of extraneous thought, we reveal what has always been there. The experience is both profound and uplifting.

The research points to neurophysiological shifts accompanying what we might call these 'heightened states of awareness'. The subjective experience however is one of simultaneous relaxation, rejuvenation and increased mental clarity, together with feelings of wellbeing.

With regular practice, we are able to reset our default mode so that this experience gradually permeates into daily activity, becoming the norm. In the process, not only does accumulated stress dissolve, but we become more resilient to new stresses.

The practices themselves are not difficult to do and take little time. The unique sequencing of the components in our program allow most people to access the state of mindfulness relatively quickly, with a significant proportion also able to achieve the state of transcendence within the first one or two sessions.

People also report an improvement in short term memory, better sleep patterns and a greater sense of wellbeing within the first few weeks of regular practice as stored stresses in the system dissipate.

It may be your experience that a stressed mind is more forgetful. It seems harder to focus when you feel pressured by multiple demands or suffering information overload. Time pressure adds to this creating an almost crisis state. Stress hormones such as cortisol are elevated triggered by our 'flight or fight' mechanism. We are not well adapted as a species to tolerate sustained stress. Health issues result, such as high blood pressure which is a precursor to stroke and heart disease, and some cancers – collectively the three biggest killers in modern society. Medication can help but often has side effects. Logically, drug free solutions which you can practice any time are the preferable alternative.

The human potential and positive health factors underpin the burgeoning interest in meditative practices for a raft of international corporations and countless professionals worldwide. They see strategic and personal advantage in investing in our most valuable, and indispensible tool, our mind.

We are seeing the start of a new phase in human development with far reaching consequences for both the individual and society. Welcome to the revolution.

### Appendix 1: Scientific studies supporting brain changes

This is a non exhaustive list of recent research supporting the benefits, and explaining the mechanisms of meditative practices from a neurological and human development standpoint:

Baerentsen, K. B., Stodkilde-Jorgensen, H., Sommerlund, B., Hartmann, T., Damsgaard-Madsen, J., Fosnaes, M., and Green, A. C. (2010). An investigation of brain processes supporting meditation. *Cogn. Process* 11, 57–84.

Brown, D., Forte, M., and Dysart, M. (1984a). Differences in visual sensitivity among mindfulness meditators and non-meditators. *Percept. Mot. Skills* 58, 727–733.

Brown, D., Forte, M., and Dysart, M. (1984b). Visual sensitivity and mindfulness meditation. *Percept. Mot. Skills* 58, 775–784.

Davidson, Richard J.; Kabat-Zinn J, Schumacher J, Rosenkranz M, Muller D, Santorelli SF, Urbanowski F, Harrington A, Bonus K, Sheridan JF. (July-August 2003). "Alterations in brain and immune function produced by mindfulness meditation". *Psychosomatic Medicine* 65 (4): 564–570.

Farb, N. A., Segal, Z. V., Mayberg, H., Bean, J., McKeon, D., Fatima, Z., and Anderson, A. K. (2007). Attending to the present: mindfulness meditation reveals distinct neural modes of self reference. *Soc. Cogn. Affect. Neurosci.* 2, 313–322.

Gaser, C., Luders, E., Thompson, P. M., Lee, A. D., Dutton, R. A., Geaga, J. A., Hayashi, K. M., Bellugi, U., Galaburda, A. M., Korenberg, J. R., Mills, D. L., Toga, A. W., and Reiss, A. L. (2006). Increased local gyrification mapped in Williams syndrome. *Neuroimage* 33, 46–54.

Grant, J. A., Courtemanche, J., Duerden, E. G., Duncan, G. H., and Rainville, P. (2010). Cortical thickness and pain sensitivity in Zen meditators. *Emotion* 10, 43–53.

Hodgins, H. S., and Adair, K. C. (2010). Attentional processes and meditation. *Conscious. Cogn.* 19, 872-878.

Hofmann, S. G., Grossman, P., and Hinton, D. E. (2011). Loving kindness and compassion meditation: potential for psychological interventions. *Clin. Psychol. Rev.* 31, 1126–1132.

Hölzel, B. K., Carmody, J., Evans, K. C., Hoge, E. A., Dusek, J. A., Morgan, L., Pitman, R. K., and Lazar, S. W. (2010). Stress reduction correlates with structural changes in the amygdala. *Soc. Cogn. Affect. Neurosci.* 5, 11–17.

Hölzel, B. K., Carmody, J., Vangel, M., Congleton, C., Yerramsetti, S. M., Gard, T., and Lazar, S. W. (2011). Mindfulness practice leads to increases in regional brain gray matter density. *Psychiatry Res.* 191, 36-43.

Hölzel, B. K., Ott, U., Gard, T., Hempel, H., Weygandt, M., Morgen, K., and Vaitl, D. (2008). Investigation of mindfulness meditation practitioners with voxel-based morphometry. *Soc. Cogn. Affect. Neurosci.* 3, 55–61.

Jha, A. P., Krompinger, J., and Baime, M. J. (2007). Mindfulness training modifies subsystems of attention. *Cogn. Affect. Behav. Neurosci.* 7, 109–119.

Kozhevnikov, M., Louchakova, O., Josipovic, Z., and Motes, M. A. (2009). The enhancement of visuospatial processing efficiency through Buddhist Deity meditation. *Psychol. Sci.* 20, 645–653.

Lazar, S. W., Kerr, C. E., Wasserman, R. H., Gray, J. R., Greve, D. N., Treadway, M. T., McGarvey, M., Quinn, B. T., Dusek, J. A., Benson, H., Rauch, S. L., Moore, C. I., and Fischl, B. (2005). Meditation experience is associated with increased cortical thickness. *Neuroreport* 16, 1893–1897.

Luders, E., Clark, K., Narr, K. L., and Toga, A. W. (2011a). Enhanced brain connectivity in long-term meditation practitioners. *Neuroimage* 57, 1308–1316.

Luders, E., Phillips, O., Clark, K., Kurth, F., Toga, A., and Narr, K. (2011b). Bridging the hemispheres in meditation: thicker callosal regions and enhanced fractional anisotropy (FA) in long-term practitioners. *Neuroimage*.

Luders, E., Toga, A. W., Lepore, N., and Gaser, C. (2009). The underlying anatomical correlates of long-term meditation: larger hippocampal and frontal volumes of gray matter. *Neuroimage* 45, 672–678.

Lutz, A., Brefczynski-Lewis, J., Johnstone, T., and Davidson, R. J. (2008). Regulation of the neural circuitry of emotion by compassion meditation: effects of meditative expertise. *PLoS ONE* 3, e1897. doi:10.1371/journal.pone.0001897

Mason,M.F.,Norton,M.I.,VanHorn,J. D., Wegner, D. M., Grafton, S. T., and Macrae, C. N. (2007). Wandering minds: the default network and stimulus-independent thought. *Science* 315, 393–395.

Pagnoni, G., and Cekic, M. (2007). Age effects on gray matter volume and attentional performance in Zen meditation. *Neurobiol. Aging* 28, 1623–1627.

Pagnoni, G., Cekic, M., and Guo, Y. (2008). "Thinking about notthinking": neural correlates of conceptual processing during Zen meditation. *PLoS ONE* 3:e3083. doi:10.1371/journal.pone.0003083

Prashant Kaul, Jason Passafiume, R C Sargent and Bruce F O'Hara. Meditation acutely improves psychomotor vigilance, and may decrease sleep need. Behavioral and Brain Functions 2010, 6:47

Tang, Y. Y., Lu, Q., Geng, X., Stein, E. A., Yang, Y., and Posner, M. I. (2010). Short-term meditation induces white matter changes in the anterior cingulate. *Proc. Natl. Acad. Sci. U.S.A.* 107, 15649–15652.

Tloczynski, J., Santucci, A., and AstorStetson, E. (2000). Perception of visual illusions by novice and longerterm meditators. *Percept. Mot. Skills* 91, 1021–1026.

Vestergaard-Poulsen, P., van, B. M., Skewes, J., Bjarkam, C. R., Stubberup, M., Bertelsen, J., and Roepstorff, A. (2008). Long-term meditation is associated with increased gray matter density in the brain stem. *Neuroreport* 20, 170–174.

This reference list is also available at serenityworks.com.au. Please check the site for new and updated resources including short video commentaries, Course participants also have access to exclusive additional resources to support their continued practice.

lotes	

