



# PHP UPDATE

## NEWS FROM THE PENNSYLVANIA PHYSICIANS' HEALTH PROGRAM

### A LIFE CHANGED: JON LEPLEY, DO

*"A life changed," a new regular feature in PHP Update, highlights the work of a PHP participant and shares how the program has impacted their life. If you're interested in sharing your story for a future issue of PHP Update, please email Cassandra Davis at [cdavis@pamedsoc.org](mailto:cdavis@pamedsoc.org).*

In 2012, I took an extended absence from working as an addiction medicine physician. During that time, I reconnected with the Physicians' Health Program to address health problems and burnout.

Later that year, I took a job as a physician working at a women's jail in Philadelphia. Working in a jail was a good place to reconnect with practicing medicine while allowing for a healthy work-life balance, though the setting was not where I envisioned spending my career as a doctor.

The Philadelphia jail system is among the largest in the country. I imagined I would not really get to know any of my patients in a system so large. However, I quickly found that practicing medicine in a large city jail was not much different than any other setting. The average inmate in the Philadelphia jail is there many times over. I got to know my patients well, just as I did in any other setting.

At the women's jail, many of my patients were addicted to heroin. Their inability to stop using heroin was the reason they landed back in the jail. These women would come to the medical department often, usually complaining of some combination of pain and anxiety and sleeplessness. These patients became particularly well known to me.

Over the course of 2013 and 2014, I began hearing stories of so many of these women dying within days, even hours, of leaving the jail. It was not unusual for me to arrive at work, and have an officer or staff member



Jon Lepley, DO  
Photo credit: Nina Feldman, WHYY

*... "Seeing so many patients dying of addiction, and being powerless to do anything about it, had a profound effect."*

mention that a patient who just left the jail had died of a drug overdose the very next day. This occurred with increasing frequency as the years went by. Seeing so many patients of mine dying of addiction, and being powerless to do anything about it, had a profound effect.

I went on to work in the much larger men's jail in 2015. Over the years that followed, I came to understand the correctional system very well and I came to understand the practice of correctional medicine very well. I began to think of myself as a correctional medicine physician, and my background in addiction medicine provided little more than to help inform discussions with patients who suffered from the disease of addiction.

In late 2017, the epidemic of opioid overdose deaths in Philadelphia finally gave rise to a political will to initiate medication-assisted treatment in the Philadelphia jail system. With my background, I became a person who was in the right place at the right time to bring this about. The years I spent working and understanding the

strengths and limitations of a very large correctional system were invaluable toward developing a program to provide medication to individuals with an untreated opioid-use disorder.

So, after months of planning, I found myself practicing addiction medicine once again when we launched our medication-assisted treatment pilot program in February 2018. I took great pride in returning

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# PHP UPDATE

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**PHP UPDATE**

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# EXECUTIVE DIRECTOR MESSAGE

## The life preserver in the flood

By Heather A. Wilson, MSW, CFRE

I recently watched a video where a volunteer firefighter and a Good Samaritan stepped in quickly to save an elderly woman from a flash flood that occurred as a small town in Pennsylvania was deluged with 10 inches of rain in a very short period of time. I wondered, "How did she get there? Didn't she listen to the warnings?" Then I felt thankful for the rescuers who were in the right place at the right time. Their heroic efforts helped to save a life.

And so it is with our work at the Physicians' Health Program (PHP). I'm often asked, "How could a physician let this happen in their life? Don't they learn about addiction in medical school?" For some, addiction hits like a flash flood – you think you have everything under control and then it hits you like a devastating wave. For others, it is the multitude of raindrops, consistently falling. Before you know it, life is flooded with a feeling of being overpowered by substance use. Some folks have the power to signal for help, while others need to be rescued with a life preserver thrown by a colleague, family member, or friend.

The same goes for burnout. Outsiders often ask, "What do physicians have to be burned out about? Don't they make a lot of money and have a lot of people who work for them?" The outsider doesn't see the countless hours peering through electronic medical records, or the mother who missed her child's ballet recital, or the human toll it takes on any individual to be first-hand witness to a repeated cycle of life and, ultimately, death. Patients, this author included, aren't always the easiest to care for and sometimes we forget that physicians are not superheroes or m-deities in white capes – they are real people that have limits like the rest of us.

Whatever the circumstance that brings the flood, there is a crew of highly skilled professionals and peer-monitoring volunteers who are ready and able to help you get to a place of sobriety and wellness in your life. Undergirding our dedicated professionals and volunteers is a mighty army of committed donors, many who are grateful recipients of the life preserver that came their way during their time of need.

Like the elderly woman trapped in the flash flood, it really doesn't matter how you got to your point of crisis. What matters is how you get to a place of safety and wellness. If you or a colleague are having a moment of crisis, know that the PHP team is ready and equipped to respond. All you have to do is grab the life preserver that we will throw toward you.



Heather A. Wilson, MSW, CFRE

*"Patients, this author included, aren't always the easiest to care for and sometimes we forget that physicians are not superheroes or m-deities in white capes – they are real people that have limits like the rest of us."*

Be well,

Heather A. Wilson, MSW, CFRE  
Executive Director, The Foundation;  
Deputy Executive Vice President,  
Pennsylvania Medical Society

## OUR MISSION

The Foundation of the Pennsylvania Medical Society provides programs and services for individual physicians and others that improve the well-being of Pennsylvanians and sustain the future of medicine.

# PHYSICIANS' HEALTH PROGRAM DIRECTOR MESSAGE

By Kendra E. Parry, MS, CADC, CIP, CCSM

In July, I celebrated my fifth anniversary as an employee at the Physicians' Health Program at the Foundation of the Pennsylvania Medical Society. It's hard to articulate what these five years have meant to me. I've learned a lot. I've grown both personally and professionally.

The PHP brings me a great sense of pride. I am proud of the work we do at the PHP and I am proud of our participants who find their way into a life of recovery. I believe the work that I do is meaningful and I believe the PHP makes a difference.

For me, being a part of an organization that is committed to helping others is essential. I have a sense of fulfillment knowing the work I do matters. It's an honor to be a part of someone's journey of recovery – to help them face obstacles and celebrate victories.

While so much has changed in the last five years, so much has also remained the same. The heart of the PHP continues to be the work we do advocating for our participants and making sure they can safely return to their chosen profession.

So far this year, the PHP has written more than 300 letters on behalf of our participants. That doesn't include the countless

phone calls made and received every day. Being an advocate for our participants is my favorite part of my job.

Finally, I am thankful for my coworkers who have become my friends. I have said good-bye to staff as they have retired and welcomed new faces into the PHP family. As a staff, we have celebrated milestones, mourned losses, and developed a strong team that works incredibly hard on behalf of those we serve.

I am constantly amazed at the commitment of my coworkers. Everyone gives 100 percent every day to ensure the PHP is the best program it can be. Starting in this issue of the *PHP Update*, you will see a staff member highlighted in our new regular feature, "Working for you." I hope you take time to read this section and get to know our staff that truly cares about each and every participant of the PHP.



Kendra Parry, MS, CADC, CIP, CCSM

## A LIFE CHANGED

*Continued from page 1*

to the women's jail to start this program. In our first six months, we evaluated and treated 528 women who entered the jail with an untreated heroin addiction. Of those women, 363 have been released back in to the community after receiving treatment during the entire length of their jail stay.

Some of these 363 women went on to continue treatment in the community. Some went back to using heroin, but survived the experience and found themselves back in jail. (These women were offered treatment again when they returned.) I know of at least two people who left the jail after receiving treatment, went back to using heroin for a few weeks, then presented to a treatment center and cited the experience of receiving treatment at the jail as a reason for wanting treatment again. Through all of these varied results, I believe many lives were saved.

Our medication-assisted treatment program expanded to the much larger male population on August 13. Today, every individual with an untreated opioid addiction who enters the Philadelphia jail system is being offered evidence-based treatment.

I would not have been able to develop this program which has touched so many lives if not for the PHP. I first entered the PHP in 2005 and, much like many of my patients I treat now, the prospect of living a life free of opioids and alcohol seemed hopeless and unimaginable. I remember feeling a great sense of relief during that first visit to the PHP, knowing that I was not alone as a physician suffering from addiction.

Through my years spent in the PHP, I learned the importance of taking care of myself foremost. I eventually came

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*"I would not have been able to develop this program which has touched so many lives if not for the PHP."*

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to see that the obligations stipulated in the early monitoring agreements, which felt intrusive and overwhelming at times, were ultimately for my benefit. Many of the commitments I made in those early monitoring contracts are still things that I continue to this day as forms of self-care.

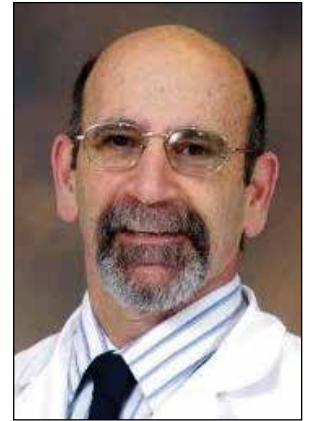
Like many PHP participants, I did not come to this conclusion quickly. I wavered at times and I spent a few years outside of the PHP slowly losing my way. When life had become unmanageable during those years, the PHP was there to once again provide support and advocacy, and help reveal a path back to sound physical, mental, and spiritual health. I now choose to stay in a long-term monitoring agreement and I give back to the PHP by serving on an Advisory Committee and providing financial donations when I can. I give back so that the program is here for other physicians who feel hopeless, isolated, and have lost their way in life

All physicians and allied health professionals need to learn how to care for themselves before they can truly care for others. The PHP provides a model for doing this and by extension the Foundation provides a great service to the public health at large. I am a proud vessel for this mission as I work day after day to provide hope to thousands of still-suffering addicted individuals drifting in and out of the Philadelphia jail system.

# PHP MEDICAL DIRECTOR MESSAGE

## Sticks and stones

By Jon A. Shapiro, MD, DABAM, MRO



Jon A. Shapiro, MD,  
DABAM, MRO

The old adage about sticks and stones is wrong. The words we use can wound others deeply and indelibly. This is never more true than when dealing with marginalized groups such as racial minorities and people who use substances.

Negative attitudes toward people with substance use disorder can lead to discrimination in housing and employment. Worse yet is the prevalence of derogatory opinions of addicts among health care providers. This can lead to barriers to treatment and inferior outcomes.

An August newsletter from the American Society of Addiction Medicine features a research paper by Dr. Robert Ashford from the University of Pennsylvania that examined implicit and explicit bias associated with words related to addiction. The paper, titled, "Substance use, recovery, and linguistics: The impact of word choice on explicit and implicit bias" was originally published in Elsevier's Drug and Alcohol Dependence. It explores how words such as "addict," "alcoholic," and "substance abuser" elicit strong negative bias.

It has long been appreciated that there is a great deal of prejudice against drug addicts. The science of addiction medicine tells us that substance use disorder is a chronic disease like many others, but the existing bias against individuals with this illness runs very deep. Despite our attempts to become educated, the word addict still may conjure up a crazed junkie breaking into our house.

Many of the terms that we use in managing persons in recovery are tainted with negative connotations. We speak of "dirty" urines when we describe a positive test. In fact, the words clean and dirty are applied also to individuals to describe whether someone is in active recovery or still using.

The word "abuse" has a negative implication. It brings to mind domestic violence and other unappealing and irrelevant images. Drug abuse as a disorder is best described using the diagnostic and statistical method terminology of "substance use disorder."

When we describe someone with a recurrence of substance use, we label it a "relapse." This sounds accusatory and would never be applied to a recurrence of high blood sugar. Nor would we ever accuse a person with cancer of having a relapse. Inherent in the terminology is an implicit suggestion of willfulness and failure.

It is beneficial to separate the person from the disease. Rather than labeling someone an addict or substance abuser, we should call them a person with substance use disorder or a person in recovery.

The term "replacement therapy" is applied to opiate agonist therapy. This terminology suggests that we are merely swapping one illicit drug for another. The fact is that agonist therapy is associated with myriad improvements in physical health including reduced conversion to hepatitis C and HIV. Methadone and buprenorphine use has also resulted in better employment and lessened criminal behavior.

It is important to remember that the words we choose do make a difference. We can contribute to the ongoing education of the public about substance use disorders and reduce stigma. We can stop calling patients "addicts" and instead use the more accurate and benign "person with a substance use disorder."

Listed below are some common phrases and some suggested low-stigma alternatives:

*"It is beneficial to separate the person from the disease. Rather than labeling someone an addict or substance abuser, we should call them a person with substance use disorder or a person in recovery."*



COMMON PHRASE	SUGGESTED ALTERNATIVE
Addict/alcoholic/junkie	Person with substance use disorder
Dirty urine	Positive drug test
Relapse	Recurrence
Clean person	Person in recovery
Dirty person	Person currently using
Replacement therapy	Opiate agonist therapy

# Tax-Free Giving Using Retirement Assets



Lori M. Storm  
Manager of Philanthropy & Hospital  
Relations

Consider making a gift to the Foundation using your retirement plan assets. Congress has once again made charitable giving from retirement assets an attractive option.

If you are aged 70 1/2 or older, and are looking for the most tax-efficient ways to make your charitable gifts, you can:

- Give directly from a traditional or Roth IRA completely free of federal income tax.
- Make tax-free gifts of all or a portion of any IRA withdrawals you make this year up to \$100,000.
- Give directly from your IRA without increasing your adjusted gross income and possibly subjecting your Social Security income to a higher level of taxation.
- Offset your Minimum Required Distribution and avoid taxes on the extra income.
- Make a generous gift that might not be possible using other assets.

Contact Lori Storm, at [lstorm@pamedsoc.org](mailto:lstorm@pamedsoc.org) or (717) 558-7861 to discuss your planned giving options.

Last year, PHP staff engaged in more than **25,000** phone calls.



## WORKING FOR YOU

This new regular feature in PHP Update introduces staff members from the Physicians' Health Program at the Foundation of the Pennsylvania Medical Society.

**Name** Wendie Dunkin

**Title** Compliance Assistant

**Number of years with the PHP** 20

**What do you do at the PHP?** I am a behind-the-scenes worker. On a normal day, I am filing, finalizing agreements, processing payments, and mailing letters.

**Why do you think the work being done at the PHP is so important?**  
Simple – it helps transform lives.

**Personal "fun fact"** I enjoy beach glass hunting in Erie trying to find the rare red and yellow glass, transforming paper into boxes and animals, but most of all, spending the day in Gettysburg exploring with my husband.

Contact Wendie Dunkin at [wdunkin@pamedsoc.org](mailto:wdunkin@pamedsoc.org). or (717) 558-7819.



Do you have a special interest in assisting physicians on their journey to recovery? Do you have extensive knowledge of substance use disorders? Do you feel a calling to give back to a community that has helped you?

The PHP Advisory Committee is seeking candidates for appointment. The PHP Advisory Committee serves in an advisory manner, providing policy and procedure direction to the program and medical director. Candidates for appointment do not need to be in recovery themselves, but should support the spectrum of methods to recovery, including but not limited to, peer support, counseling, and MAT.

For more information or to submit a candidate for appointment, please contact Kendra Parry, director of the Physicians' Health Program, at [kparry@pamedsoc.org](mailto:kparry@pamedsoc.org) or call (717) 558-7819.



Raymond C. Truex Jr., MD, FAANS, FACS

# PHP MEDICAL DIRECTOR

## What the heck is MBSR?

By Raymond C. Truex, Jr., MD, FAANS, FACS

Obviously, MBSR is an acronym of some sort. Let me say from the outset that I'm becoming increasingly disillusioned by the overuse of acronyms, because they're everywhere. In fact, they are so omnipresent and overused

that they are now overlapping: for example, PHP can stand for Physicians' Health Program, or it can stand for Partial Hospitalization Program, or People Helping People, or 25 other meanings which can be found by Googling "PHP."

Pharmaceutical companies invent new acronyms for known diseases to accompany each new drug that they market, such as in Wellbutrin for RLS, or restless leg syndrome. How can any of us remember all those acronyms? It's information overload! (Also known as IO.) But I digress, maybe because of my default mode (more on that later).

I came across the acronym MBSR in preparing a lecture on physician burnout, and found that it stands for *mindfulness-based stress reduction*, often also referred to as *mindfulness meditation*. At the same time, I realized that I knew very little about mindfulness, despite it being a recommended therapy for stress, among other human ailments, including substance use disorder, fibromyalgia and other pain syndromes, eating disorders, depression and distress caused by chronic illness. This article is a brief summary of my investigation into mindfulness meditation.

Burnout is caused by stress. Physicians are particularly susceptible to burnout, by virtue of their individual personality characteristics, coupled with the ethos of medical education and the corporatization of health care systems. So obviously, the antidotes to burnout must come from behavioral changes in the individual, and modifications in the systems in which physicians labor.

Burnout is a real syndrome, and can be reliably tested for and diagnosed using the Maslach Burnout Inventory<sup>1</sup>. And in the individual physician, prevention or treatment of burnout requires that doctor to achieve balance between their work and the rest of their life. This is termed work-life balance, as defined by Shanafelt<sup>2</sup>.

One of the early proponents of a balanced life was William Danforth, founder and CEO of the Ralston-Purina Cereal Company. He was a religious man who exercised daily, and was dedicated to his family, as well as a success in business. He proposed the Danforth Square, which advocates for equal

importance of one's work, spiritual life, physical activity, and relationships<sup>3,4</sup>.

It became increasingly clear to me through my reading that spirituality is essential to work-life balance. I have personally experienced a deep emotional response to a religious event, often with sacred music involved, and my scientific assumption was that there had been a dopamine release in my limbic system somewhere. But these church experiences were intermittent, and led to further consideration. Could they be replicated more frequently as a part of a daily routine? Is spirituality the same as religion? Is meditation analogous to prayer?

I was first exposed to mindful meditation at the Caron Foundation last year, when I was updating my knowledge about addiction medicine. And at the PHP, we do mindful meditation as a group. I have begun to practice it personally at home, although I'm not too proficient yet.

Mindful meditation is derived from the Buddhist religion, but has evolved to become entirely secular. It has been popularized through the work of Jon Kabat-Zinn, professor emeritus at the University of Massachusetts Medical Center. Mindful meditation's popularity started in the 1970s and is now widely used throughout the United States. There is a formal, eight-week workshop that teaches an individual how to properly do mindful meditation, but short

of that, there are many phone apps and books that help one to learn the techniques.

The program, in short, teaches one to develop a non-judgmental focus on what is happening in the moment, shutting out extraneous thoughts or ruminations, and concentrating on one's breathing, or a part of one's body, or ambient sounds. So what is the benefit of doing that?

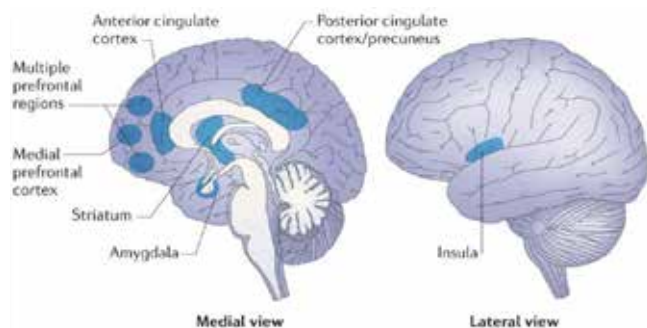
The default mode network<sup>5</sup> is a neural network of interacting brain regions which becomes active when a person daydreams or ruminates, or when the brain is not focused on a specific task or external stimulus. The anatomic locations are diffuse, and include the posterior cingulate cortex, medial prefrontal cortex, angular gyrus, hippocampus, and portions of the temporal and parietal lobes.

The default mode network is viewed psychologically in a negative context, because it facilitates unreasonable worries, resentments, and negative recollections. Dreaming during REM sleep is a manifestation of the default mode network, which is always active, even during sleep. When one focuses on a specific task, however, the default mode network snaps off, to allow an

*"Burnout is caused by stress. Physicians are particularly susceptible to burnout, by virtue of their individual personality characteristics, coupled with the ethos of medical education and the corporatization of health care systems."*

individual to attend to the task at hand. Therefore, the focus involved in mindful meditation deactivates the default mode network and its negative psychological effects.

The portions of the brain involved in task orientation, or focus, comprise the attention control network, and include the anterior cingulate, amygdala, superior temporal gyrus, and corpus striatum as defined by fMRI. These areas, activated by meditation, are shown in figure 1<sup>6</sup>:



A growing body of literature has demonstrated that neural systems are modifiable networks, and changes in neural structure can occur in adults as the result of training<sup>7</sup>. This is termed neuroplasticity.

The amygdala, a nucleus in the medial temporal lobe, is a part of the limbic system, which is involved in the expression of emotion, including anger and anxiety. The amygdala responds to stress by mediating release of stress hormones, elevating blood pressure, and activating the sympathetic nervous system.

Hölzel et al<sup>8</sup> studied the effects of mindful meditation on the amygdala using MRI imaging. They found that after an eight-week mindfulness training, a study group demonstrated improved stress scale scores compared to baseline, and also demonstrated MRI findings of decreased gray matter density within the right amygdala (the more important side) compared to baseline, demonstrating that neuroplastic changes are associated with improvement in the psychological state variable.

In another study, 35 stressed adults were exposed to either mindful meditation or a relaxation retreat program for an intensive, three-day course. Blood samples were drawn before and after the meditation and relaxation. The mindful meditation group selectively had decreases in blood Interleukin-6 levels. Interleukin-6 is a mediator of inflammation and is thus a stress hormone, and was reduced by mindful meditation, but not by relaxation alone<sup>9</sup>.

The neurobiological effects of mindful meditation can be seen in structural alterations in gray and white matter, particularly in areas related to attention, memory, and autoregulation (including control of stress and emotion). On the molecular level, dopamine and melatonin are found to increase, serotonin activity is modulated, and cortisol and norepinephrine have been proven to decrease<sup>10</sup>.

I could go on – there is more neurobiological evidence that mindful meditation affects neuroplastic brain changes and alters the brain neurotransmitters and stress hormones. But by now I believe I have made my point, that meditation does affect one's brain in a positive way, both subjectively and objectively.

If meditation is a form of spirituality, is religion the same as spirituality? As noted above, mindful meditation is not a form of religious worship.

The spiritual realm deals with the perceived eternal realities regarding man's ultimate nature, in contrast to what is temporal or worldly. Spirituality involves as its central tenet a connection to something greater than oneself, which includes an emotional experience of religious awe and reverence.

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*"...I believe I have made my point, that meditation does affect one's brain in a positive way, both subjectively and objectively."*

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Spirituality is therefore an individual's experience of and relationship with a fundamental, nonmaterial aspect of the universe that may be referred to in many ways – God, Higher Power, the Force, Mystery and the Transcendent and forms the way by which an individual finds meaning and relates to life, the universe and everything<sup>11</sup>.

So it seems to me that spirituality is essentially the same as religion, minus the denominational formalities, doctrinal variations, and sacramental trappings. Spirituality underlies religion in its most basic form. My brain should respond in a similar neuroplastic manner to each, and the subjective "high" derived from a religious experience can be achieved on a daily basis through mindful meditation.

#### FOOTNOTES

- 1 Maslach, C., Jackson, S., & Leiter, M. (2017). *Maslach Burnout Inventory Manual* (4th ed.). Menlo Park, CA: Mind Garden, Inc.
- 2 Shanafelt, T. D., Hasan, O., Dyrbye, L. N., Sinsky, C., Satele, D., Sloan, J., & West, C. P. (2015). Changes in burnout and satisfaction with work-life balance in physicians and the general US working population between 2011 and 2014. *Mayo Clinic Proceedings*, 90(12), 1600-1613.
- 3 Danforth, W. (1954). *I Dare You* (16th ed.). St. Louis, MO: Privately printed.
- 4 Maroon, J., & Kennedy, C. (2017). *Square One: A Simple Guide to a Balanced Life*. Bridgeport, OH: Pythia Publishing.
- 5 Buckner, R. L., Andrews-Hanna, J. R., & Schacter, D. L. (2008). The brain's default network: anatomy, function, and relevance to disease. *Annals of the New York Academy of Sciences*, 1124(1), 1-38.
- 6 Tang, Y., Hölzel, B. K., Posner, M. I. (2015). The neuroscience of mindfulness meditation. *Nature Reviews Neuroscience*, 16, 213-225.
- 7 Hölzel, B. K., Carmody, J., Vangel, M., Congleton, C., Yerramsetti, S. M., Gard, T., & Lazar, S. W. (2011). Mindfulness practice leads to increases in regional brain gray matter density. *Psychiatry Research*, 191(1), 36-43.
- 8 Hölzel, B. K., Carmody, J., Evans, K. C., Hoge, E. A., Dusek, J. A., Morgan, L., Pitman, R. K., & Lazar, S. W. (2010) Stress reduction correlates with structural changes in the amygdala. *Social Cognitive and Affective Neuroscience*, 5(1), 11-17.
- 9 Creswell, J. D., Taren, A. A., Lindsay, E. K., Greco, C. M., Gianaros, P. J., Fairgrieve, A., ... Ferris, J. L. (2016). Alterations in resting-state functional connectivity link mindfulness meditation with reduced interleukin-6: a randomized controlled trial. *Biological Psychiatry*, 80(1), 53-61.
- 10 Esch, T., Winkler, J., Auwärter, V., Gnann, H., Huber, R., & Schmidt, S. (2017) Neurobiological aspects of mindfulness in pain autoregulation: unexpected results from a randomized-controlled trial and possible implications for meditation research. *Frontiers in Human Neuroscience*, 10, 674.
- 11 Mohandes, E. (2008) Neurobiology of spirituality. *Mens Sana Monographs*, 8(1), 63-80.



# Physicians' HEALTH Program

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## The Foundation of the Pennsylvania Medical Society Physicians' Health Program (PHP)

seeks health care centers to serve as collection sites for physicians and other eligible health care professionals in monitoring.

Through our physician-driven mission, we provide services to help physicians and other eligible health care professionals who struggle with addiction, mental health or behavioral challenges obtain the necessary resources allowing them to safely work in their chosen profession. Participants of the PHP need safe, convenient drug testing sites.

**Are you a rural practice interested in supporting the work of your physician community? The PHP needs your help to act as a confidential drug testing site for fellow health care providers who are involved in our program. Confidentiality is crucial.**

The PHP continually strives to increase its capacity to serve its participants through identifying resources in a participant's local community. The generosity of service, time, and financial support from the physician community enables the PHP to expand outreach efforts and ensure that those we serve have the support they need.

### Kits provided!

Please contact us at  
(717) 558-7819 or  
[php-foundation@pamedsoc.org](mailto:php-foundation@pamedsoc.org)



## Physicians' HEALTH Program

The Foundation of the Pennsylvania Medical Society