

PSYCHIATRIC NEWS

PSYCHNEWS.ORG

ISSN 0033-2704



David Hathcox

SEE STORY BELOW RIGHT

Kimberly Gordon, M.D., president of APA's Caucus of Black Psychiatrists, fields questions from Howard University students interested in a health professions career. The group visited APA last month to learn more about psychiatry.

APA Receives \$14.2 Million Grant To Expand Care to SMI Population

The multi-year grant will support an effort to leverage assets APA can uniquely provide—expert clinical wisdom, high-quality educational tools, and digital technology—to expand and improve care of people with serious mental illness. BY MARK MORAN

APA was awarded a five-year, \$14.2 million grant from the Substance Abuse and Mental Health Services Administration (SAMHSA) to establish a national clinical support center for clinicians treating patients with severe mental illness (SMI).

The program, known as the Clinical Support System for Serious Mental Illness (CSS-SMI), will use education and consultation to expand the base of clinicians—including physicians, nurses, recovery specialists, peer-to-peer specialists, and others—able to provide evidence-based care to individuals with

SMI. SMI typically includes schizophrenia, bipolar disorder, and major depressive disorder.

Consultations to clinicians will be provided by a “core team” of individuals with clinical and systems-change expertise, including two part-time psychiatrists, a psychologist, a nurse, and experts in patient and family engagement, recovery, instructional design, technology, and marketing. Experts hail from UCLA, the University of Texas, Stanford, Mental Health America, the National Alliance on Mental Illness, and Charge Ahead Marketing.

A major component of the program is the incorporation of health care technology. APA will build web and smartphone platforms that will allow virtual consultations with experts and disseminate educational content.

Educational content will be developed by 15 individuals and organizations with expertise in SMI, and an

see **Grant** on page 6

APA Program Aims to Build Minority Pipeline For Psychiatry

APA hosts 50 Howard University students to introduce them to psychiatry and encourage them to consider a career in the field. BY LINDA M. RICHMOND

Even as a very young child, psychiatrist Chad Lennon, M.D., had a profound curiosity in how the human mind works and a yearning to deeply understand people. As a teenager, having friends who experienced ADHD, bipolar disorder, and depression helped draw him toward a career in psychiatry.

But while other people take for granted working and studying with people who look like them, said Lennon, who is black, he encountered just one other black man in all four years of his residency. Lennon was among

see **Pipeline** on page 20

PERIODICALS: TIME SENSITIVE MATERIALS

Psychiatric News, ISSN 0033-2704, is published biweekly on the first and third Friday of each month by the American Psychiatric Association. Periodicals postage paid in Washington, D.C., and additional mailing offices. Postmaster: send address changes to *Psychiatric News*, APA, Suite 900, 800 Maine Avenue, S.W., Washington, D.C. 20024. Online version: ISSN 1559-1255.

SUBSCRIPTIONS
U.S.: individual, \$151. International: APA member, \$205; nonmember, \$227. Single issues: U.S., \$26; international, \$45. Institutional subscriptions are tier priced. For site licensing and pricing information, call (800) 368-5777 or email institutions@psych.org.

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FROM THE PRESIDENT

Current Events Demand That We Address Health Equity Issues

BY ALTHA STEWART, M.D.

Due to the current social and political environment, the time has come for our organization to strategize more ways to increase access to high-quality mental health care to all patients—especially individuals who are members of marginalized groups.

I am well aware both as APA president and in the work that I do on a daily basis that the current social and political environment in this country is causing traumatic reactions in many of our communities. Federal policies that harm immigrant children and their families, police brutality toward minority youth, and proposed regulations to ban transgender people from serving in the military are just some of the actions that are heightening individuals' feelings of anxiety and fear. It is APA's responsibility to help ensure that all APA members are prepared to provide the best—and most culturally sensitive—mental health services to patients needing our expertise.

This year, APA's fall meeting, IPS: The Mental Health Services Conference, will be held in Chicago from October 4 to 7 on the theme "Reimagining Psychiatry's Impact on Health Equity." The purpose of the meeting is to highlight educational programs and innovations in clinical services designed to ensure equal access to high-quality mental health care—that is, health equity—to all populations regardless of race/ethnicity, age, religion, nationality, sexual orientation, gender identity, socioeconomic status, or geographical background.

Health equity must be addressed at multiple levels including practice settings, educational activities (including those for trainees as well as practicing psychiatrists), and organizations and institutions. This year's IPS will be a highly diverse interactive program to address issues and solutions for these different levels with engaging topics. Some session highlights:



- Dismantling Stigma in Communities of Color
- Black Mental Health in the 21st Century
- From Cultural to Structural Competency—Training Psychiatry Residents to Act on Social Determinants of Health and Institutional Racism
- Addressing Social Determinants and Health Disparities Using Technology
- Trans People in the Military: Mental Health Concerns for Active Duty and Veterans and the Impact of Being Allowed to Serve Openly
- Do Organized Minority/Underrepresented Groups Make a Difference in Promoting Health Equity and Diversity in Leadership?

You'll also find a number of other topics that have helped make this the go-to meeting to interact with experts on the latest clinical information. Among the meeting's clinical tracks are addiction psychiatry, psychopharmacology, collaborative care, technology (including telepsychiatry and mental

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Chicago Awaits You!

Register now for APA's fall meeting, IPS: The Mental Health Services Conference. This year's meeting will be held October 4 to 7 in Chicago. For more information, see page 8.



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From left: Michael Ingram, M.D., immediate past president of the BPA; APA CEO and Medical Director Saul Levin, M.D., M.P.A.; Donna M. Christensen, M.D., former congresswoman from the U.S. Virgin Islands; BPA President Samuel Okpaku, M.D., Ph.D.; APA President Altha Stewart, M.D.; and Patricia Newton, M.D., M.P.H., M.A., CEO of the BPA and chair of this year's forum.

David Hathcox

Black Psychiatrists of America Leads Briefing On Capitol Hill on Sexual Harassment

APA President Altha Stewart, M.D., reminded attendees that it was an African-American activist, Tarana Burke, who started the Me Too movement.

Leaders of the Black Psychiatrists of America (BPA) and APA convened last month for the BPA's annual "Mental Health Status of Black America: Capitol Hill Forum" at the Rayburn House Office Building in Washington, D.C.

A highlight of the forum was the presentation of the BPA's 2018 James Ralph, M.D., Memorial Award for Outstanding Public Service to Donna M. Christensen, M.D., former congresswoman from the U.S. Virgin Islands. She retired from the U.S. House of Representatives in 2015 after nine terms representing the U.S. Virgin Islands. A family physician who

completed her residency at Howard University Medical Center, she began her medical career in the Virgin Islands in 1975 as an emergency room physician and was later appointed commissioner of health in the Virgin Islands. While in Congress she served on the Committee on Energy and Commerce and on the Subcommittee on Health. For 16 years she chaired the Congressional Black Caucus "Health Braintrust."

This year's Capitol Hill Forum focused on sexual harassment. In opening remarks, Stewart noted that it was an African-American woman, New York-based activist Tarana Burke, who started using the phrase "Me Too" as early as 2006 to raise awareness about the pervasiveness of sexual abuse—more than a decade before it caught on as a viral hashtag on social media. Stewart said the growth of the Me Too movement has shown that attitudes can change.

"This is a problem we can do something about," she said.

Nkechi Taifa, advocacy director for criminal justice at the Open Society Policy Center, a Washington, D.C.-based advocacy center, delivered a plenary address about the legacy of sexual abuse—and enforced silence about abuse—of African-American women dating back to the time of slavery.

Linda Fuller, D.O., M.P.H., a psychiatrist at Walter Reed's National Intrepid Naval Center of Excellence for Traumatic Brain Injury, led a panel discussion about sexual harassment and abuse in the military. Joining her were Cathy Bennet-Santos, Ph.D., founder of the National Alliance of Women Veterans Inc.; Marcell Barnes, founder

and CEO of Pink Hard Hats Construction; Keronica Richardson, assistant director for Women and Minority Outreach at the American Legion; and retired Lt. Col. Diane Butts.

Forum Honorary Chair Rep. Elijah Cummings (D-Md.) of Maryland's seventh district concluded the forum with a fiery exhortation to commitment in a time of partisan division. He spoke of the importance of mental health—of being in one's "right mind"—in order to fight for things that matter.

"I spent some time in the hospital during the last year with an infection in my knee," he said. "Spending six months in the hospital, I thought I would lose my mind at times. ... While I was in the hospital, my mother of 92 years died. I was already in physical pain, but the mental pain was very different and very difficult. There were moments when I could understand why people come to the point of saying, 'Let God take me home.' I thought about how blessed I have been to have an education, to have a job that pays me to do what feeds my soul."

Referring to political battles on Capitol Hill, Cummings also said he felt blessed to still "be able to throw a punch."

He added, "It's one thing to talk about problems; it's another thing to do something. How can I be the most effective and efficient where I am planted? ... We are at a point where every single person who can lift us up needs to be doing so." **PN**

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David Hathcox



Rep. Elijah Cummings (D-Md.) tells attendees at the Capitol Hill forum, "Everything that has happened to you—good, bad, and indifferent—has prepared you for this moment."

Texas Court Rules Moore Can Be Executed, Is Not Intellectually Disabled

The June ruling by the Court of Criminal Appeals is the latest in a long string of court rulings involving the criteria for determining if an individual is intellectually disabled for the purposes of claiming an exemption from capital punishment and how to apply that criteria. BY MARK MORAN

The nearly 40-year old case of Bobbie James Moore, incarcerated for a murder he committed in 1980, took another—possibly final—turn when the Texas Court of Criminal Appeals upheld the death penalty for Moore. The court ruled that he did not meet the standard for a determination of “intellectual disability.”

The decision is the latest in a long string of court rulings involving the criteria for determining when an individual is “intellectually disabled” for the purposes of claiming an exemption from capital punishment and how to apply that criteria.

Moore has been on death row in Texas since 1980. In 2002, he claimed he could not be executed for the crime because he was intellectually disabled, citing the landmark case *Atkins v. Virginia* of that same year in which the U.S. Supreme Court held that the execution of intellectually disabled individuals violates the Eighth Amendment.

However, in an interview last year with *Psychiatric News*, Past APA President Paul Appelbaum, M.D., a member of the Committee on Judicial Action and a corresponding member of the Council on Psychiatry and the Law, explained, that in *Atkins*, the Court declined to specify the criteria or procedures by which determinations of intellectual disability would be made for the purposes of capital cases. “So the question remained—how do we know when someone is intellectually disabled and therefore warrants an exemption from the death penalty? What process should states follow to make that determination?”

Two years later, a Texas court of appeals adopted its own idiosyncratic

standards (known as “Briseno factors,” for the case *Ex parte Briseno*) for determining intellectual disability that were regarded by APA and other professional groups as wholly unrelated to clinically accepted standards (*Psychiatric News*, January 3, 2017). The *Briseno* decision was appealed to the Supreme Court.

In *Atkins*, the court left open the question of how to determine when someone is intellectually disabled.

—Paul Appelbaum, M.D.



In an amicus brief submitted to the Supreme Court in 2015, APA and other interested organizations stated: “In assessing whether an individual meets the clinical definition of intellectual disability, this Court should recognize the unanimous consensus among the mental health professions that accurate diagnosis requires clinical judgment based on a comprehensive assessment of three criteria: general intellectual functioning; adaptive functioning in conceptual, social, and practical domains; and onset during the developmental period. Failure to follow a diagnostic approach guided by these principles would violate applicable professional standards and create an unacceptable and significant risk that individuals with intellectual disability may be executed in violation of the Eighth Amendment” and the Supreme Court’s ruling in *Atkins*.

In the 2017 case, the Supreme Court agreed with APA and vacated the court of appeals’ judgment, stating that adjudications of intellectual disability should be “informed by the views of medical experts.” Moreover, the court said that the several factors set out in *Briseno* as indicators of intellectual disability are “an invention of the [court of appeals] untied to any acknowledged source.”

The court remanded the case back to the court of appeals, and last October APA submitted another brief reiterating its position on how to do appropriate assessments and identifying new standardized instruments for assessing adaptive functioning.

This time, the Texas court applied the framework in *DSM-5* for determining intellectual disability, but still found Moore did not meet the criteria

for intellectual disability. The court cited evidence of some adaptive learning the defendant has demonstrated during his time in jail.

“Having received guidance from the Supreme Court on the appropriate framework for assessing claims of intellectual disability, we now adopt the framework set forth in the *DSM-5*,” wrote Presiding Judge Sharon Keller. “[I]t remains true under our newly adopted framework that a vast array of evidence in this record is inconsistent with a finding of intellectual disability.

Reviewing Applicant’s claims under the *DSM-5* framework, we conclude that he has failed to demonstrate adaptive deficits sufficient to support a diagnosis of intellectual disability.”

Judge Elsa Alcalá, joined by two others, penned a vigorous 67-page dissent, saying the majority judges had incorrectly applied the criteria in numerous ways, especially in the court’s reliance on evidence of adaptive

skills acquired in a controlled environment (that is, prison).

“In contrast to the majority opinion’s flawed approach, I would set forth a comprehensive standard for evaluating intellectual disability in a manner that fully comports with current medical standards,” Alcalá wrote. “Specifically, with respect to the adaptive functioning inquiry that is at issue in this case, I would hold that that inquiry may not place undue emphasis on a person’s adaptive strengths as a basis for offsetting clear evidence of his deficits; it may not place undue weight on a person’s behavior while incarcerated; and it may not impose a heightened burden for establishing adaptive deficits that essentially operates to permit the execution of mildly intellectually disabled people.”

An online report in the *Texas Tribune* (<https://www.texastribune.org/2018/06/06/texas-court-criminal-appeals-death-sentence-bobby-moore/>) noted that the Supreme Court decision—in the initial 2002 *Atkins* case and in the subsequent decisions knocking down the *Briseno* factors—has had repercussions throughout Texas. At least two men on death row have had their sentences changed to life in prison, and the Texas Court of Criminal Appeals halted an execution set for June 21 because of the Moore case, according to the *Tribune*.

Moore’s fate now is uncertain. The *Tribune* notes that execution dates in Texas are set typically by the district attorney of the convicting county court. Harris County district attorney Kim Ogg, a Democrat elected in 2016, see *Texas* on page 11

Massachusetts, Other States Ratchet Up Legal Action Against Opioid Manufacturers

Groups across the nation are targeting Purdue Pharma and other companies with lawsuits alleging misleading claims about the safety of opioid painkillers. BY NICK ZAGORSKI

Over the past year, opioid manufacturers have faced a growing barrage of lawsuits from states and municipalities over the role the companies played in the opioid crisis.

Massachusetts in June filed a lawsuit against Purdue Pharma, maker of OxyContin, as well as 16 current and former executives at the company.

As with the numerous other cases of opioid litigation, the basis for Massachusetts’ suit is that Purdue and its executives deceptively promoted opioid-based pain medications (particularly OxyContin) despite knowing

about the risks associated with long-term use of the medication.

“We found that Purdue engaged in a multibillion-dollar enterprise to mislead us about their drugs,” Massachusetts Attorney General Maura Healey said at a news conference announcing the suit. “Purdue pushed prescribers to give higher doses to keep patients on drugs for longer periods of time, without regard to the very real risks of addiction, overdose, and death.”

The Massachusetts suit came one month after six other states (Florida, Nevada, North Carolina, North Dakota, Tennessee, and Texas) filed suits against Purdue. In total, Purdue now faces lawsuits by 24 states and the territory of Puerto Rico.

Similarly, more than 1,000 additional lawsuits from cities, counties, and Native American tribes have been

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From the President

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health apps), and physician wellness.

I look forward to welcoming you to Chicago and getting an opportunity to meet you. I know you’ll want to join me in learning the latest about what each of us can do to ensure mental health equity among all our patients.

I would like to thank Dr. Glenda Wrenn, chair of the IPS Scientific Program Committee, for her assistance in writing this article. More information on this year’s IPS appears begins on page 8. PN

FDA Updates Guidance for Developing Antidepressant Medications

Recommendations in the FDA's first antidepressant guidance update in over 40 years include specifics on conducting clinical trials with rapid-acting antidepressants such as ketamine. BY NICK ZAGORSKI

For the first time in over 40 years, the Food and Drug Administration (FDA) is proposing updates and revisions to its guidance on how industries should develop and clinically test drugs intended to treat major depressive disorder (MDD). This new guidance finally reflects the many antidepressant advances made since 1977, such as finding new rapid mechanisms of action and gaining a better understanding of depression relapse.

Perhaps the most noticeable updates are the new recommendations for clinical trials involving fast-acting antidepressants such as ketamine. Whereas short-term efficacy studies of traditional antidepressants typically need six to eight weeks to demonstrate an effect, the new guidance states that efficacy of rapid-acting drugs should be demonstrated within one week. However, clinical trials of rapid-acting drugs should be continued after this period so that the durability of rapid-acting antidepressants can be determined.

The FDA also highlighted that rapid-acting drugs have their own specific set of safety concerns. NMDA receptor-targeting drugs like ketamine, for

example, can cause Olney lesions—fluid-filled vesicles in the brain that sometimes precede permanent neuronal injury or death. Therefore, for all NMDA receptor drugs, investigators should complete preclinical studies testing for acute neurotoxic effects before conducting any human studies, according to the FDA.

These are among other notable recommendations in the new guidance:

- Given the high placebo response increasingly seen in clinical antidepressant studies, noninferiority trials that compare two active drugs are not practical, and thus all trials of new antidepressant agents should include a placebo group.
- Studies for maintenance treatment should last at least six months; long-term safety and tolerability measurements should also be incorporated into the design of all maintenance trials. The FDA also noted that it was interested in maintenance studies that explored the effects of lower drug doses; the results of these studies could be included in drug labeling.

- Even for antidepressants already approved for adult MDD, at least two adequately sized and well-controlled efficacy trials should be conducted in relevant pediatric patients (along with pharmacology and safety studies) before an approved drug can be given a pediatric indication. For pediatric MDD, children aged 7 through 12 and adolescents aged 13 through 17 are considered unique populations with their own needs.


- Clinical trial sponsors are encouraged to enroll demographically broad populations in studies whenever possible. This includes special populations such as elderly patients or individuals with medical problems such as renal insufficiency, cardiac disease, HIV, or hepatitis C. In addition, patients with a history of substance abuse and/or a history of suicidal ideation should not be automatically excluded from trials.

- Related to the above, the FDA

made no comments on enrollment restrictions typically applied to pregnant women. However, the guidance did suggest that drug sponsors should collect and register safety data from women who become pregnant during a trial and become inadvertently exposed to an antidepressant or pregnant women who use approved antidepressants in a postmarketing study.

As with the existing industry guidance, the FDA noted these updates reflect the agency's current thinking on MDD and represent recommendations and not requirements. The draft guidance is intended to stimulate continued discussions among the Division of Psychiatry Products, pharmaceutical companies, the academic community, and the public.

The FDA will accept public comments and suggestions on the new draft guidance until August 20, at which point it will finalize the document. **PN**

 The draft document, "Major Depressive Disorder: Developing Drugs for Treatment. Guidance for Industry," is posted at <https://www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/UCM611259.pdf>. Comments may be submitted at <https://www.regulations.gov>.

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brought against companies that make or distribute opioid medications. Besides Purdue, companies such as Janssen Pharmaceuticals (makers of Duragesic), Endo Health Solutions Inc. (makers of Percocet), and Teva Pharmaceutical Industries (makers of Actiq) have been named in lawsuits.

To expedite the proceedings, over 400 of these lawsuits were combined by the Judicial Panel on Multidistrict Litigation (MDL) in December 2017 and handed over to the federal court for the Northern District of Ohio. The MDL panel chose this district in part because this region has been heavily affected by the opioid crisis.

The presiding judge, Dan Polster, scheduled the first trial—for the governments of the city of Cleveland and Ohio's Cuyahoga and Summit counties against 11 opioid manufacturers/distributors—for March 18, 2019. In the meantime, he ordered both sides to begin settlement talks.

This forthcoming trial is not the first time Purdue has been in the legal crosshairs. Following years of legal battles

with many states, Purdue eventually reached a settlement in 2007 and pled guilty to charges of misleading the public about the drug's risks. Purdue and executives paid \$634 million in fines, which were distributed to federal and state agencies, as well as individuals who had sued the company.

During the plea, company executives noted that since 2002—when Florida became the first state to probe Purdue's marketing practices—they had implemented new training, monitoring, and compliance procedures to ensure that its employees would not misrepresent any drugs in the future. The recent lawsuits from Massachusetts and other states contend otherwise, stating that Purdue and other drug companies have continued to place profits over public health.

"We are disappointed that after months of good faith negotiations working toward a meaningful resolution to help these states address the opioid crisis, this group of attorneys general have unilaterally decided to pursue a costly and protracted litigation process," the company said in the statement. **PN**

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Depression Calculator Tallies Business Costs Of Employees' Mental Illness

A new online resource from the APA Foundation's Center for Workplace Mental Health offers employers strategies to improve employees' mental health while reducing associated costs.

BY REBECCA GREENBERG

People with depression may experience significant impairment in daily functioning, including their performance at work. How much that impairment costs employers is something they can now estimate using a new online tool developed by the APA Foundation's Center for Workplace Mental Health.

An estimated 6 to 7 percent of full-time workers in the United States live with major depression, according to data from the Center for Workplace Mental Health (formerly the Partnership for Workplace Mental Health). In addition, data indicate that employees with depression miss an average of 31.4 workdays each year and lose another 27.9 workdays to unproductivity—or presenteeism—which costs employers an estimated \$44 billion annually.

While at work, people who are depressed have difficulty concentrating, making decisions, managing their time, communicating with coworkers, and



meeting output expectations, among other challenges, according to the Center for Workplace Mental Health.

The center, renamed in 2017, was created by the APA Foundation to partner with employers to eliminate stigma, reduce barriers to care, raise broader mental health awareness, improve and implement mental health programs, and design benefits that improve employee mental health. It consists of a network of more than 10,000 employers.

The new tool—the Depression Calculator—was launched in May. Its goal is twofold: add up the costs of depression for each employer and then provide resources for intervention, such as health insurance that supports collaborative care and workplace mental health programs. (Two other calculators are also on the site for assessing the business costs associated with alcohol and substance use disorders.)

“The resource can be used by businesses large and small, which is what

sets it apart,” said Ewurua Darley, M.S., associate director of the center. She added that human resources professionals, as well as CEOs and other stakeholders, can use the calculator to demonstrate the value of employee health care plans that support mental health.

An algorithm based on peer-reviewed research generates the results. Links to all related studies are listed in the “About the Calculator” section of the website.

Employers enter the company's size, type of industry, location, and employee age/gender data—which can be manually modified for accuracy.

According to the information employers provide, the calculator estimates the daily wages and benefits of employees likely to be affected by depression. It calculates low, average, and high ranges for lost workdays due to absenteeism and presenteeism and the associated costs. The tool then assesses potential cost-savings if depressed employees receive quality treatment—up to 80 percent show improvement, according to the center. Finally, all estimates are summarized in an individualized report that delineates ways to cut costs.

Noting that many employees receive mental health treatment from primary care providers, the report endorses health

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advisory board will include broad representation from across the mental health community and include patients and family members. In total, 30 organizations are part of this initiative.

APA Deputy Medical Director Tristan Gorrindo, M.D., and the Division of Education will lead the initiative for APA in collaboration with the Division of Policy, Programs, and Partnerships.

“This effort leverages assets that APA can uniquely provide—expert clinical wisdom, the highest-quality educational tools, and cutting-edge digital technology—to achieve goals to which APA is committed, namely improving the care of the seriously mentally ill,” Gorrindo told *Psychiatric News*. “It's a multi-year effort involving a lot of moving parts, but its goal is to significantly improve access to care for the millions of individuals with schizophrenia, bipolar disorder, and major depression who are not currently receiving adequate treatment.”

Here's how the system will work:

Visiting the CSS-SMI website or app, clinicians will be able to submit consultation questions to the core team of

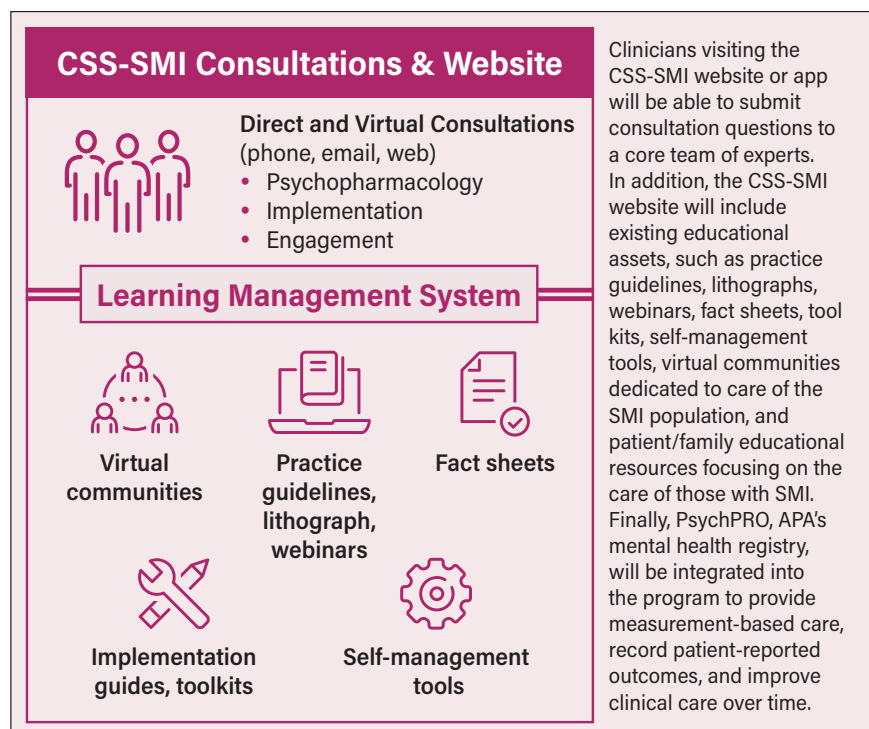
experts. An automated “answer engine” driven by items already in the CSS-SMI education library will attempt to answer the question automatically. If the question is not answered by the answer engine, it will be referred to one of the members of the core CSS-SMI team for a direct response. The direct

response will be sent via email, and responses will be added to the answer engine for future questions that are similar in nature. In this manner, the CSS-SMI website is a self-learning platform that will become more efficient in answering consultation questions as time goes on.

In addition, the CSS-SMI website will include existing educational assets, such as practice guidelines, lithographs, webinars, fact sheets, tool kits, self-management tools, virtual communities dedicated to care of the SMI population, and patient/family educational resources focusing on the care of those with SMI. Content experts will develop a national curriculum within the system on assisted outpatient treatment and a Clozapine Center of Excellence.

The CSS-SMI team will use a number of outreach efforts to make clinicians aware of this resource, including the use of Google ads, social media, and Google analytics. This effort will supplement outreach by APA at its Annual Meeting and through its own communication venues, including *Psychiatric News*. The clinical expertise team will also identify “communities of highest need” and work directly with them in the implementation of evidence-based treatment. Additionally, PsychPRO, APA's mental health registry, will be integrated into the program to provide measurement-based care, record patient-reported outcomes, and improve clinical care over time. If a clinician in PsychPRO is shown to need

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plans that support collaborative care models that cover mental health screening, care management, and psychiatric care. Collaborative care can reduce workplace absenteeism by 39 percent (compared with 21 percent for basic medical care), according to the center.

In addition, employers are urged to audit health plans for compliance with the Mental Health Parity and Addiction Equity Act, which mandates parity between medical and mental health insurance benefits.

The center recommends that employers build a culture that embraces emotional and mental health. As a general measure, workplace programs (many are listed on the site) reduce stigma and raise awareness, which increases the numbers of employees who seek help for depression.

Not only does this protect the employer's bottom line, but also it improves the quality of life for employees with depression, Darley said.

"Treatment works and is cost-effective," she added. "When employees receive effective treatment for mental health conditions, the result is lower total medical costs, increased productivity, lower absenteeism, and decreased disability costs." **PN**

➤ More information about the APA Foundation Center for Workplace Mental Health is posted at <http://www.workplacementalhealth.org/>. The calculators can be accessed at <http://www.workplacementalhealth.org/Employer-Resources/Mental-Health-Calculators>.

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improvement in this area, he or she will automatically receive electronically suggested educational resources.

Once fully launched, the CSS-SMI initiative anticipates 150,000 website visits a year and 26,450 consults and/or educational interactions per year.

"This is a truly innovative and groundbreaking project, that will extend APA's expertise to fill gaps in care for people with serious mental illness," said APA CEO and Medical Director Saul Levin, M.D., M.P.A. "This project will bring customized, evidence-based information to those caring for patients with SMI using state-of-the-art technology."

APA President Altha Stewart, M.D., said CSS-SMI is an example of APA's commitment to serving the most seriously mentally ill. "We are grateful to SAMHSA for funding this initiative and for recognizing the need for creative solutions to meet the treatment needs of our patients with schizophrenia, bipolar disorder, and major depressive disorder—especially multiracial/multi-ethnic individuals, non-Hispanic whites, women, sexual minorities, and young adults with serious mental illness." **PN**

Study Exposes Mental Health Effects Of Police Shootings on Black Communities

The adverse mental health effects were not observed among white respondents and resulted only from police killings of unarmed black Americans.

BY MARK MORAN

Police shootings of unarmed black Americans have adverse effects on the mental health of other black Americans in the general population, according to a study published in the *Lancet* in June.

Exposure to one or more police killings within a three-month period was associated with a 0.35-day increase in poor mental health days, according to the report, which combined data on police shootings with individual-level data from a nationally representative self-report survey on health. Adverse mental health effects were not observed among white respondents and resulted only from police killings of unarmed black Americans (not unarmed white Americans or armed black Americans).

"The observed adverse mental health spillover effects of police killings of unarmed black Americans could result from heightened perceptions of threat and vulnerability, lack of fairness, lower social status, lower beliefs about one's own worth, activation of prior traumas, and identification with the deceased," Jacob Bor, Sc.D., of Boston University School of Public Health and colleagues wrote.

The report was released just two days after a police officer shot and killed Antwon Rose, an unarmed black teen who was fleeing a traffic stop in Pittsburgh.

Bor and colleagues used self-reported race to identify black American respondents to the U.S. Behavioral Risk Factor Surveillance System (BRFSS), a nationally representative telephone survey that collects health data from U.S. adults. Information collected from the 2013-2015 BRFSS was combined with available data on the timing of police killings as reported in the Mapping Police Violence database. This database has tracked police killings in the United States since 2013.

The primary exposure was the number of police killings of unarmed black Americans occurring in the three months prior to the BRFSS interview within the same state. The primary outcome was the number of days in the previous month in which respondents to the survey reported that their mental health was "not good."

A total of 38,993 of the 103,710 black American respondents (49 percent) were exposed to one or more police killings of unarmed black Americans in their



istock/Linda_Moon



Rahn Bailey, M.D., is writing a book about police shootings in the African-American community.

state of residence in the months prior to the survey. Each additional police killing of an unarmed black American in the respondent's state of residence in the months prior to interview was associated with a 0.14-day increase in the number of poor mental health days.

"Specifically, our estimates imply that police killings of unarmed black Americans could contribute 1.7 additional poor mental health days per person per year, or 55 million excess poor mental health days per year among black American adults in the [United States]," Bor and colleagues wrote. "Interventions are needed to reduce the prevalence of these killings and to support the mental health of communities affected when they do occur."

Rahn Bailey, M.D., the APA Assembly representative for the Caucus of Black Psychiatrists, told *Psychiatric News* he believes the study confirms what he and other black psychiatrists have observed anecdotally, both professionally and personally. He is writing a book

about the subject of police killings of African Americans.

"So many African Americans have the experience of hearing about these incidents that it inevitably starts to color how one thinks about law enforcement," Bailey said. "The *Lancet* study is timely and convincing and has real-world impact."

Kimberly Gordon, M.D., president of APA's Caucus of Black Psychiatrists, said she was only a child when a death from police brutality affected her extended family. "A lot of our patients may have this history of trauma related to vicarious exposure to police brutality," she said.

In an accompanying editorial, Rhea Boyd, M.D., of the Palo Alto Medical Foundation said the findings challenge the notion that health inequities among African Americans are only the delayed products of chronic exposures. Instead, Boyd wrote, Bor and colleagues demonstrate that a single exposure to news about a police killing can have a nearly immediate effect on health.

"Their work to acknowledge and address the clinical impact of police killing black Americans sits within a broader clinical imperative to rigorously define and intervene in the relationship between structural racism and clinical outcomes," she wrote. "This evidence should ignite inquiry into the broader health impacts of police violence and advance the challenge to confront racial health inequities as products of racism." **PN**

➤ "Police Killings and Their Spillover Effects on the Mental Health of Black Americans: A Quasi-Experimental Study" is posted at [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(18\)31130-9/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)31130-9/fulltext). The commentary "Police Violence and the Built Harm of Structural Racism" is posted at [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(18\)31374-6/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)31374-6/fulltext).

Mental Health Advocate Strives to Make 'Black Girls Smile'

African-American women face many obstacles that prevent them from getting the mental health care they need. One woman is clearing a path.

BY REBECCA GREENBERG

"Seeking assistance or help for mental health is not a weakness. It is a sign of strength." This is the message mental health advocate Lauren Carson wants to instill in African-American girls. Carson will be leading the session "Road to Wellness: An African-American Female's Journey" at APA's 2018 IPS: The Mental Health Services Conference, which is being held October 4 to 7 in Chicago.

Carson grew up in Atlanta. Even though she felt fortunate in many ways, from an early age Carson was withdrawn and suffered from extreme



sadness and hopelessness. At 15, she was diagnosed with depression, and while this came as a relief, she was overwhelmed by feelings of shame.

"Depression is not something that we talk about or feel comfortable discussing in my community. It's seen as

a shameful thing, and it's pervasive that you should pray and take your problems to the church because mental illness and depression aren't real issues," she told *Esperanza*, a magazine that focuses on topics related to anxiety and depression.

So for the next few years, Carson hid her struggle with mental illness as she focused on academic achievement. She was accepted at the University of Virginia (UVA) and set her sights on a career on Wall Street. Nonetheless, her battle with depression came to a head during her freshman year. While at home over spring break, Carson attempted suicide and was hospitalized. After she was discharged, she tried to end her life a second time. At this point, Carson realized she needed to stop hiding. She began sharing her story with the hope that she could help others in crisis.

Carson graduated from UVA in 2010 with a degree in psychology. In 2012 she founded Black Girls Smile Inc. to address what she saw as a gap in mental health outreach to female adolescents. The nonprofit provides mental

continued on next page

Register Now!

Advance registration rates are now in effect for IPS: The Mental Health Services Conference. Register online at psychiatry.org/IPS, where you will also find information about housing and the full scientific program.



CHICAGO: Take Time Out for Self-Care

Eat, drink, and be merry while you are in Chicago for the IPS. But don't stop there—also take time to visit museums, shop, and take in a show. BY CHANDAN KHANDAI, M.D.

Chicago looks forward to welcoming you this October to APA's fall meeting—IPS: The Mental Health Services Conference—at the historic Palmer House in the Loop! But in between or after attending scientific sessions geared toward taking care of your community, take time to enjoy our city and treat yourself! As every psychiatrist has said, "Self-care is important."

• **Treat yourself to a scenic walk:** A city of steel, Chicago is

also a city of well-tended parks and public spaces. Walk a block over to Millennium Park, home of Cloudgate (aka the Bean) and many other stunning installations; next door are equally intriguing Grant Park and Maggie Daley Park. Walk a few blocks north to the scenic Riverwalk, a project over a century in the making, or go kayaking or biking. For longer walks, there are over 18 miles of



Chandan Khandai, M.D., is a PGY-5 consultation-liaison psychiatry fellow at the University of Washington in Seattle. He is a Chicago native and did his residency at Northwestern.

beautiful lakefront trail along nearby Lake Michigan.

• **Treat yourself to amazing architecture:** When walking around, look up—Chicagoans are proud of our iconic skyline and our long history as a laboratory for architectural innovation. The interiors are equally beautiful; my personal

favorites are the Chicago Cultural Center with its mosaics and the Rookery with its famous Instagrammable staircase. Get a bird's eye view of Lake Michigan and neighboring states from the observation decks of the Willis (formerly Sears) Tower and the John Hancock Building. But of course, every Chicagoan knows the best way to admire our architecture is by boat, via the Chicago Architecture Boat Tour.

• **Treat yourself to art and culture:** Chicago has some of the best museums in the world. You can spend hours at the Art Institute (of Ferris Bueller fame), only a block away from the Palmer House. Take a little longer walk and you're on the lakeshore's Museum District with its Field Museum of Natural History, Shedd Aquarium, and Adler Planetarium. A short ride to the South Side gets you to my favorite museum as a kid (and adult), the Museum of Science and Industry. And there are dozens more for all tastes.

• **Treat yourself to a show:** Chicago has a vibrant theater scene—including our own running production of "Hamilton" and dramatic fare at the Steppenwolf and Goodman. Dress up for a concert at the Chicago Symphony Center or Lyric Opera. For lighthearted fare, check out the Chicago comedy scene, where many "Saturday Night Live" alumni got their start—including

see Chicago on page 10

continued from previous page

health resources, education, and support geared toward young African-American females. Its website features blogs on mental health topics, as well as ways to engage in mental health awareness through volunteering and on social media.

Carson described Black Girls Smile in *STAT*, a health-oriented news service.

“We don’t focus on treatment or diagnosis. We really want to increase mental health literacy, coping skills, and self-care methods. Especially in the African-American community, many people are not even seeking assistance to be diagnosed. Most of our programs are focused around African-American girls between the ages of 13 and 19. We really want to catch them early. We want to educate them on their emotions.”

Carson, who lives in Atlanta, is a contributing blogger for the *Huffington Post*, regularly volunteers at Children of Bellevue, serves on the New York Women’s Foundation Grant Advisory Committee, and was selected for the Gillibrand Women’s Mentoring Initiative. Additionally, she is certified in Youth Mental Health First Aid and participates in a Georgia Peer Specialist training program.

At the IPS, Carson will share her story and explore mental health risks facing African-American women and ways clinicians can better serve these patients. The session will be held Saturday, October 6, from 10 a.m. to 11:30 a.m. **PN**

 More information on Black Girls Smile Inc. is posted at <http://www.blackgirlssmile.org/blog/author/Lauren-Carson>.

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Chicago

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in such venues as Second City and Annoyance Theatre. Try the Improvised Shakespeare Company if you prefer your laughs in iambic pentameter.

- **Treat yourself to some retail therapy:** From flagship stores to

boutiques, Chicago is a shopping haven. Stroll up and down State Street right outside the Palmer House or walk farther up Michigan Avenue to the Magnificent Mile's famed shopping boulevard and beyond that the international couture of Oak Street. Historic Jewelers Row in the Loop is also worth a visit, as is the nearby French

Market in West Loop. For more local and seasonal fare, check out the farmers' markets, including the Daley Plaza Farmers Market on Thursdays.

- **Treat yourself to a nice meal (or a drink):** Everyone knows about Chicago's deep dish pizza, and the main staples—Giordano's, Lou Malnati's, Gino's East,

Uno's—all have locations downtown. But Chicago has so much more, from high-end eateries to high-concept food halls such as Revival in downtown and thriving ethnic culinary enclaves—Indian, Greek, Filipino are just a few. Many eateries offering delectable fare are in the Loop itself; many more are just across the river in the River

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North and West Loop neighborhoods. And to top it off, Chicago is one of the few cities that does beer, wine, and spirits equally well, from dive bars to gastro-pubs. My recommendation, weather permitting? Enjoy a drink with a view at Cindy's Rooftop at the Chicago Athletic Association one block over or the rooftop patio of LondonHouse

overlooking the Chicago River.

Chicago combines the best of Midwestern hospitality and kindness with cosmopolitan glamour. And if you can't find what you like downtown, we have many other neighborhoods that might tickle your fancy. We welcome you to learn how to take care of your communities, but also take care of yourself too. **PN**

Texas

continued from page 4
had asked the court to change Moore's sentence to life in prison last November, agreeing that he was intellectually disabled. The *Tribune* notes that it is unlikely Moore will get an execution date as long as Oog is in office. **PN**

 The amicus brief is posted at <http://apapsy.ch/Moore>. The Court of Criminal Appeals' decision is posted at <http://search.txcourts.gov/SearchMedia.aspx?MediaVersionID=3db1c6a0-2d77-42e3-8d7e-cf8b21d56f07&coa=coscca&DT=OPINION&MediaID=4f58472d-eb50-4342-b4ac-5738635ac619>. The dissenting opinion is posted at <http://search.txcourts.gov/SearchMedia.aspx?MediaVersionID=64438ea3-475d-46bb-8ccb-eb95c3084b2f&coa=coscca&DT=OPINION&MediaID=3b33ff53-d892-4874-a565-3638aca01bf7>.

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Placenta Implicated in Schizophrenia Risk

A large genetic analysis shows that stressed placentae overexpress many schizophrenia risk genes, providing an explanation for why complicated pregnancies are associated with schizophrenia.
BY NICK ZAGORSKI

Though symptoms of schizophrenia tend to emerge in individuals in their late teens and early 20s, this disorder is now recognized as one with significant roots in human development. “Stressors in the prenatal period are known to increase the child’s risk for

later schizophrenia,” said Robert Freedman, M.D., a professor of psychiatry at the University of Colorado Anschutz School of Medicine. Freedman has studied schizophrenia biology for many years. “The placenta itself may be the site that conveys the mother’s stress to her unborn child.”

Freedman was referring to the findings of a new multi-institute study led by investigators at the Lieber Institute for Brain Development in Baltimore. Making use of a large collection of human placenta samples, the researchers demonstrated that this fetal organ

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overexpresses many genes associated with schizophrenia risk.

“The placenta is the convergence zone between the experiences of the mother and the fetus,” Daniel Weinberger, M.D., director and CEO of the Lieber Institute, told *Psychiatric News*.

Weinberger and his team first conducted a comprehensive analysis of DNA samples from both individuals with schizophrenia and healthy controls.

They found that people with schizophrenia who were born following severe birthing complications, such as preeclampsia or intrauterine growth restriction (IUGR), had significantly more genetic variants associated with risk for schizophrenia than both controls and people with schizophrenia who had non-stressful births. The researchers confirmed this association in five independent samples spanning over

2,800 individuals in Europe, Japan, and the United States.

Next, they analyzed genetic profiles of hundreds of placentae, including many from women who had experienced either preeclampsia or IUGR during pregnancy. The investigators found that genes associated with schizophrenia risk were highly activated in placental tissue from women who had experienced either

complication; these genes were not turned on in placentae from women who had other problems during pregnancy, such as hepatitis, gastritis, or dilated cardiomyopathy. According to the authors, the findings suggest these risk-associated genes are not turned on in response to general stress, but stress that specifically impacts the placenta and uterine environment.

see **Placenta** on page 18

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Allergies Linked to Increased Risk of Psychiatric Disorders

Allergic diseases can lead to a higher risk of psychiatric disorders such as hyperactivity and depression. **BY CAROL SORGEN**

Individuals with allergic diseases such as asthma, allergic rhinitis, and atopic dermatitis are at higher risk for developing psychiatric disorders, according to a study published last

spring in *Frontiers in Psychiatry*. The study was led by Nian-Sheng Tzeng, M.D., an assistant professor of psychiatry at Tri-Service General Hospital in Taipei, Taiwan.

The subjects were selected from the database of the Taiwan National Health Insurance Program. They included 186,588 patients who had allergic diseases and 139,941 controls matched for sex and age; 5,038 (10.8 percent) of the allergy group developed psychiatric disorders compared with 9,376 (6.7

percent) in the control group. The researchers found that patients with atopic dermatitis alone and allergic rhinitis plus atopic dermatitis showed a lower risk of psychiatric disorders, but the other four groups studied—bronchial asthma alone, allergic rhinitis alone, bronchial asthma plus allergic rhinitis, and bronchial asthma plus atopic dermatitis—and the combination of all these allergic diseases were associated with a higher risk of psychiatric disorders.

Results from the Taiwan study echo the findings of similar research that demonstrates a link between allergic diseases and the increased risk of psychiatric disorders. In the October 14, 2016, issue of *BMJ Open*, for example, lead author Lene Hammer-Helmich, Ph.D., Real World Evidence Lead for Depression for Copenhagen-based Lundbeck Pharmaceuticals, reports that Danish children with these conditions had more emotional, conduct, and hyperactivity problems than children without symptoms of these diseases.

In an interview with *Psychiatric News*, Alex Dimitriu, M.D., a sleep medicine specialist and founder of Menlo Park Psychiatry and Sleep Medicine, pointed out that allergies can indeed impact mental health, at the very least because of the effect they have on sleep.

“Nasal congestion can often lead to mouth breathing and possibly bring on or worsen sleep apnea, and can result in significant next-day fatigue,” he explained. “Furthermore, many allergy medications can cause fatigue and drowsiness.” Certain allergy medications, such as leukotriene inhibitors and oral beta-blockers, can also increase the risk for depression and suicidal tendencies.

“There is a very fine line between depression and fatigue,” Dimitriu continued. “The two share so many common features—such as low energy, low motivation, and decreased ability for enjoyment—and one is often confused for the other.”

Dimitriu said that the feeling of breathlessness or not getting enough air often experienced by asthma sufferers can also mimic anxiety or panic disorder because the symptoms can resemble each other.

A developing field of research is exploring the link between inflammatory conditions such as allergies and psychiatric disorders. In the *Nordic Journal of Psychiatry*, published online November 6, 2017, study authors led by Jeanette Brun Larsen of the Department of Mental Health at the Norwegian University of Science and Technology, report in “Association of Psychosis, Affective Disorders, and Diseases Affecting the Immune

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System,” that research has shown indications of altered immune activity in depressed and psychotic patients compared with healthy controls.

A study published in the December 2016 issue of *The Journal of Clinical Psychiatry* supports these findings. The study, led by M. Soledad Cepeda, M.D., Ph.D., director of epidemiology at Janssen Research & Development, found that people with depressive symptoms had, after adjustment, C-reactive protein levels that were 31 percent higher than subjects with no depressive symptoms. **PN**

➤ **“Increased Risk of Psychiatric Disorders in Allergic Diseases: A Nationwide, Population-Based, Cohort Study”** is posted at <https://www.frontiersin.org/articles/10.3389/fpsy.2018.00133/full>. **“Mental Health Associations With Eczema, Asthma, and Hay Fever in Children: A Cross-Sectional Survey”** is posted at <http://bmjopen.bmj.com/content/6/10/e012637>. **“Association of Psychosis, Affective Disorders, and Diseases Affecting the Immune System”** is posted at <https://www.tandfonline.com/doi/abs/10.1080/08039488.2017.1402952?journalCode=ipsc20>. **“Depression Is Associated With High Levels of C-Reactive Protein and Low Levels of Fractional Exhaled Nitric Oxide: Results From the 2007-2012 National Health and Nutrition Examination Surveys”** is posted at <http://www.psychiatrist.com/JCP/article/Pages/2016/v77n12/v77n1221.aspx>.

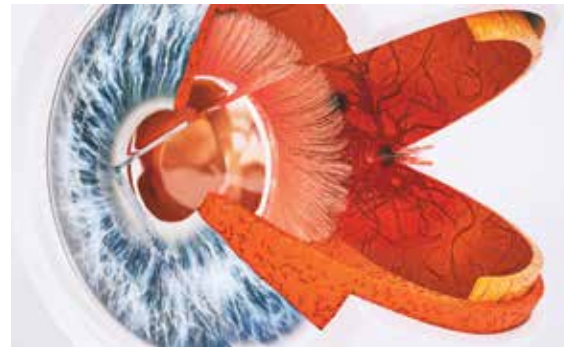
Retinal Thickness May Be A Cognitive Biomarker

Two longitudinal studies have provided some of the first evidence that people with thinner retinal nerve fibers have higher risks of future cognitive problems and dementia. BY NICK ZAGORSKI

While an old proverb posits that eyes are windows to the soul, eyes are more technically windows to the brain. The retina—the rear portion of the eye—is a direct extension of the optic nerve, which is a component of the central nervous system.

Numerous studies over the past decades have suggested that declines in vision and memory, both common with age, may be linked. Most recently, a study published in June in *JAMA Ophthalmology* concluded that worsening vision and declining cognitive function appear to change over time together. Vision problems had a stronger influence on future memory problems than the other way around, though, suggesting vision loss might predict future cognitive loss. Can information within the eyes be used by researchers and clinicians to predict those most likely to experience cognitive decline?

Two studies published in June in *JAMA Neurology* suggest the answer to



The thickness of the retina's outer layer of nerve fibers might indicate future risk of cognitive problems. That this region can be easily imaged with current tools suggests a possible biomarker for early detection of Alzheimer's and other dementias.

this question may be yes. Both studies pointed to retinal thickness as a potential biomarker for future cognitive decline, including Alzheimer's disease.

Both studies involved the use of a tool known as optical coherence tomography (OCT), which is widely used by clinicians to diagnose eye disorders such as glaucoma or

macular degeneration. OCT uses light energy to reconstruct a 3-D model of the inner eye (similar to how an ultrasound works).

In one of the studies, researchers at Erasmus University in the Netherlands looked directly at retinal changes and dementia. They assessed data from the Rotterdam Study, a large population-level aging study that has been monitoring older adults in the Rotterdam suburb of Ommoord since 1990. The participants received periodic eye exams and cognitive exams, allowing for a prospective analysis.

The investigators identified about 3,300 adults who had taken an OCT and were free of any eye diseases at baseline. Over about 4.5 years, 86 of these adults developed some clinical dementia, including 68 who developed Al-

zheimer's disease. The investigators found that the adults who had thinner retinas at baseline—specifically the layer of nerve fibers where retina and optic nerve meet—were more likely to subsequently develop dementia. When participants were divided into four groups based on retinal thickness, for

see **Biomarker** on page 17

FROM THE EXPERTS

Neutralize Doctor Stress Naturally

BY PATRICIA GERBARG, M.D., AND RICHARD P. BROWN, M.D.

From the first day of medical school until the last day of professional practice, physicians work under intense stress. The high rates of burnout, depression, suicide, and diseases of aging that affect medical students and physicians also impact the care given to patients. Efforts to improve doctors' health have highlighted lifestyle, diet, exercise, and rest, but many find that financial and career pressures preclude time for regular exercise, healthy meals, or a good night's sleep, particularly during training. The same stressors and lack of time erode relationships and take a toll on physician families.

Natural treatments requiring very little time can support health under stressful conditions. Safe, accessible, and inexpensive, the following evidence-based complementary and integrative approaches reduce adverse effects of stress on the mind and body.

Best Picks for Busy Docs

- **Herbs:** Adaptogenic herbs contain bioactive compounds that



Patricia Gerbarg, M.D., is an assistant clinical professor of psychiatry at New York Medical College. Richard P. Brown, M.D., is an associate clinical professor of psychiatry at Columbia Presbyterian College of Physicians and Surgeons. They are the editors, along with Philip R. Muskin, M.D., M.P.A., of *Complementary and Integrative Treatments in Psychiatric Practice* from APA Publishing. APA members may purchase the book at a discount at https://www.appi.org/Complementary_and_Integrative_Treatments_in_Psychiatric_Practice. Muskin is a professor of psychiatry at Columbia University Medical Center, APA secretary, and editor of *PsychoPharm*.

help organisms adapt to multiple stressors. Among this elite class of phytomedicines, *Rhodiola rosea* best supports a physician's needs for physical and mental energy,

endurance, alertness, and focus. For example, *R. rosea* markedly reduced errors over 12 hours of repeated stressful cognitive testing in a study of Russian college students. Unlike synthetic stimulants, *R. rosea* causes neither addiction nor withdrawal. By improving cellular production of high-energy molecules, this herb sustains functioning over time and fuels cellular repair systems, thus counteracting adverse effects of damage from free radicals, toxins, chemotherapy, and radiation exposure.

- **Nutrients:** S-adenosylmethionine (SAME) is a natural metabolite that donates methyl groups for DNA methylation and for production of crucial molecules (for example, neurotransmitters, phospholipids, and amino acids). A literature review by members of the APA Council on Research and the APA Caucus on Complementary and Integrative Medicine in Psychiatry confirmed previous findings of efficacy for depression, lack of common side effects (weight gain and sexual dysfunction), and growing evidence of cognitive improvement in age-related decline and dementia

when combined with other nutrients. Anecdotally, in clinical practice, we found the 1-4 butanedisulfonate SAME formula to be the most effective.

- **Mind-Body Medicine:** Mind-body practices—yoga, qigong, tai chi—are ideal activities for physical and emotional health, but who has the time? Below are some ways to quickly nourish the mind, body, and spirit without losing time from work or study.

When you feel sluggish or unfocused, a few minutes of shaking and vigorous tapping, especially with upbeat music, can wake up the mind and body.

Breathing slowly and gently through the nose with eyes closed for a few minutes, particularly coherent breathing at four to six breaths a minute with equal time for inhalation and exhalation, reduces acute stress, worry, frustration, anger, and rumination. Practicing coherent breathing for 20 minutes five days a week balances and strengthens the stress response system, lowers blood pressure, and may reduce inflammation. Breath-pacing tracks or apps can be downloaded. In addition

see **Stress** on page 21

Many Commonly Used Drugs May Raise Risk Of Developing Depression

Physicians need to increase their vigilance of assessing patients for depression. **BY RICHARD KAREL**

More than a third of U.S. adults use medications whose labeling lists depression as a possible adverse effect, and the greater the number of such drugs used within the last 30 days, the greater the probability that these individuals will be diagnosed with depression, according to a study published June 12 in *JAMA*.

The cross-sectional study, which analyzed data from the National Health and Nutrition Examination Survey from 2005 to 2014, found that prevalence of depression was 15 percent for those using three or more medications with depression listed as an adverse effect but fewer than 5 percent for those not using any such medications. The pattern persisted among adults treated with antidepressants or experiencing hypertension after excluding users of other psychotropic drugs.

The study looked at more than 200 commonly prescribed drugs and included a total sample of more than 26,000 people of which 23,000 qualified for assessment. Depression was assessed using the Patient Health Questionnaire 9 (PHQ-9). Adverse-effect descriptions for each drug were drawn from the Micromedex.

Principal investigator Mark Olfson, M.D., M.P.H., discussed the findings with *Psychiatric News*. He is a professor of psychiatry at Columbia University Irving Medical Center and co-director of the Agency for Healthcare Research and Quality Center for Education on Research on Mental Health Therapeutics.

The study showed correlation, but not causation, Olfson stressed. "The most important limitation in this study is that it was cross-sectional. If we really wanted to make a causal statement, what we would want to know is [whether] people who took these medications over time were at increased risk of depression." This was not possible to determine based on the design of the current study.

Another qualifier is that it was not known whether people already had depression when they started taking these medications.

Among the commonly used drugs most correlated with depression in this study were antihypertensives, hormonal contraceptives, anticonvulsants, and proton pump inhibitors (PPIs), including the PPI omeprazole, now available over the counter.

Michael Thase, M.D., a professor of psychiatry at the University of Pennsylvania Perelman School of Medicine,

observed that mood and anxiety disorders are often associated with gastrointestinal issues, which would at least partially account for the association between depression and PPIs.

"We just don't know if it's the patient who is having the symptoms who pro-

nonpsychiatric conditions. Further, said Thase, the data indicate that the effect is additive.

"Clinicians must consider the possibility that when people experience the onset of depression, the illness is being provoked by treatment of another

"Clinicians often underestimate the behavioral side effects of medications commonly prescribed for nonpsychiatric conditions."

—Michael Thase, M.D.



voles the prescription or what percentage of the time the prescription may provoke the depression," he said.

The key take-home message, said Thase, is that clinicians often underestimate the behavioral side effects of medications commonly prescribed for

illness," he commented. "And if that's the case, then the proper intervention might be revising the provocative treatment—not starting an antidepressant."

The study should alert clinicians, particularly primary care and other nonpsychiatric health care providers,

of the need for more consistent assessment of patients for depression, commented Gregory E. Simon, M.D., a research professor in the Department of Psychiatry and Behavioral Sciences at the University of Washington and senior investigator for the Kaiser Permanente Washington Health Research Institute. "While we would hope that a physician prescribing an antidepressant would be monitoring the patient for depression, a doctor treating hypertension is less likely to be doing so."

Given that depression is associated with a wide range of chronic health conditions, it is difficult to know if various medications may be worsening or triggering depression, Simon noted. While further study is needed, this question must be answered on a case-by-case basis, he concluded.

The study was funded in part by the Robert Wood Johnson Foundation as part of the Clinical Scholars Leadership program. **PN**

➤ "Prevalence of Prescription Medications With Depression as a Potential Adverse Effect Among Adults in the United States" is posted at <https://jamanetwork.com/journals/jama/article-abstract/2684607>

Can Self-Directed Care Be a Successful Path to Recovery?

Patients with serious mental illness who participated in a Florida program which allowed them to use a portion of their mental health care funds on nontraditional expenses showed modest improvements in employment and housing independence. **BY NICK ZAGORSKI**

Self-direction, a therapeutic recovery program in which participants can use a small portion of their health care funds for other goals, can help people with serious mental illness (SMI) find and maintain jobs and housing. This finding, published in the July issue of *Psychiatric Services*, offers some of the first evidence that this strategy can pay dividends in an SMI population.

The concept of self-direction dates to the 1990s after Medicaid expanded the scope of services it would cover beyond basic medical care. Many states began offering "cash and counseling" programs in which people with long-term needs would work with their caregivers or other coaches to budget some of their Medicaid money around a personal set of goals. These goals typically encompass employment (using the money to buy a car to get to work), housing (buying furniture so guests can come over), and personal health (such as dental care) as part of a person's recovery mission.

The amount of money provided can vary from program to program, but it is modest, maybe a couple of hundred dollars a month or so. The belief is having some financial control, no matter

how modest, can help the patients achieve their independence.

"For those of us interested in recovery models and person-oriented care, these programs offer a creative approach to helping patients," said Bevin Croft, Ph.D., a research associate at the Human Services Research Institute in Cambridge, Massachusetts, and lead author on this study. "They put choice back into the hands of the people who use the services."

The cash and counseling programs were initially developed for older disabled adults or young adults with developmental disabilities such as autism. In 2002, Florida began implementing a self-directed program for patients recovering from schizophrenia or other serious mental illness in the northeastern part of the state. A second program in Florida (in the southwestern region) and pilot programs in a handful of other states have slowly sprung up since then; the most recent analysis conducted in 2013 suggested about 700 patients with SMI were participating in self-directed care.

Croft and colleagues collected administrative data on 271 participants in the two Florida self-directed care programs that spanned a period of

roughly four years. They compared the housing and employment trajectories of these people with 1,099 matched Florida residents with a diagnosed SMI who were not enrolled in self-directed care.

They found that over time, the participants in the self-directed care programs had greater improvements in employment status (as measured by the number of paid working days in the past month) and housing independence (time spent away from assisted living, a group home, supported housing, living with family as a dependent, an inpatient hospital, or being homeless).

As noted in the article, the improvements were modest; the data suggested that 18 people would need to be enrolled in self-directed care to ensure one person achieved an increase in paid working days; 16 people would need to be enrolled to ensure one person would transition to independent living. "But, were these results modest because self-directed care only offers modest benefits, or because our data were limited?" Croft asked.

As Croft explained, self-directed care programs try to be personalized, but at the administrative level, states have different rules regarding how much money is allocated and how it can be spent. Even the two Florida self-directed care programs, as an example, operate slightly differently. As such it can be difficult to get data

see **Self-Directed Care** on page 18

Treating Symptoms of Dementia Requires Trial and Error, Judicious Use of Medication

A model of patient-centered care and evidence-based prescribing practices helps manage geriatric patients with dementia. BY LINDA M. RICHMOND

There are no FDA-approved medications to manage the behavioral and psychological symptoms of dementia (BPSD), which include anxiety, apathy, depression, delusions/hallucinations, and more. Left untreated such symptoms can pose great risks to the patient and increase caregiver burden.

A treatment algorithm developed by Rajesh R. Tampi, M.D., chief of geriatric psychiatry and director of the residency program at Case Western Reserve University's MetroHealth Program, helps clinicians manage BPSD and limit side effects, he explained at APA's 2018 Annual Meeting. The algorithm is based on meta-analyses, research reviews, and studies conducted by Tampi's team.

MetroHealth clinicians use a model of patient-centric care and involve families early in treatment plan discussions.

"Recognition [of BPSD] is the first and most important step. Many times, patients and their families don't realize their loved one has dementia," Tampi said. Clinicians begin by obtaining a complete history; performing a thorough physical examination, including urinalysis and bloodwork; and checking vitamin B12 and folate levels. Next, the severity of the patient's dementia is quantified with formal assessments, including the Montreal Cognitive Assessment (MoCA), Pittsburgh Agitation Scale, and Functional Assessment Screening Tool (FAST), which are free and quick to administer, explained Juan J. Young, M.D., a co-chief resident in psychiatry at Case Western Reserve University MetroHealth.

Understanding the etiology of BPSD is important because the treatments differ depending on whether a symptom is caused by exacerbation of a pre-existing neuropsychiatric disorder or by progression of dementia, Tampi said. Medical issues, particularly pneumonia, pain, constipation, and urinary tract infections (UTI), can also be the cause of the problem. He asks all patients if they are taking any new medications or if they have any new physical symptoms, including pain, frequent urination, or burning when urinating.

In several meta-analyses and systematic reviews, nonpharmacological interventions for BPSD, such as



Rajesh R. Tampi, M.D. explained an algorithm developed to help manage the behavioral and psychological symptoms of dementia in geriatric patients at APA's 2018 Annual Meeting.

psychoeducation, caregiver training, and cognitive stimulation therapy, have been found as effective as pharmacological interventions, so clinicians at MetroHealth try these first, Tampi said. One exception to this approach is if the patient is experiencing "emergent behaviors," such as aggression, violence, or extreme paranoia, which warrants immediate pharmacological intervention.

Tampi's other recommendations include the following:

- **Cognitive enhancers:** For mild to moderate dementia, the algorithm calls for starting the patient on acetylcholinesterase inhibitors (AChEIs) and for moderately severe to severe dementia, AChEIs plus memantine. These are well tolerated by patients and can slow cognitive decline and the onset of new

symptoms, Tampi said. However, for patients already experiencing severe dementia and a poor quality of life, he recommends having a discussion around ethics with the families first.

- **SSRIs:** Although psychosis caused by dementia appears similar to schizophrenia, its etiology is very different. Because of this, antidepressants have the most evidence of efficacy for BPSD. Tampi said he typically tries escitalopram, mirtazapine, or sertraline first.

- **Benzodiazepines:** Tampi cautions that benzodiazepines should be avoided with geriatric patients because they worsen cognition and can overly sedate patients, increasing the risk of falls.

- **Atypical antipsychotics:** Research reviews have found atypical antipsychotics give only a modest advantage when compared with placebo in patients with BPSD, but have significant side effects, including worsening cognition. When such medications are needed—for treatment-resistant aggression, delirium, and hallucinations—low doses of aripiprazole, olanzapine, quetiapine, or risperidone can be tried, Tampi said. Haloperidol is best for patients with delirium, he added.

When prescribing medication to patients with BPSD, Tampi said it is important to "start low (dose) and go slow, and don't keep on going," he said.

After a geriatric patient's symptoms have been stable for four to six months, Tampi advises trying to taper them off the new medication, whenever possible. He reassesses for toxicity regularly, every eight to 12 weeks, and cautions against the use of polypharmacy, unless the patient fails to respond to all monotherapies.

"If you're waiting for all the behaviors to subside before discharging a patient, it's never going to happen," Tampi said. He encourages caregivers to call him if a concern arises once a patient has been discharged so he can give advice on other suggestions to try. "This simple education technique can reduce the length of stay and reduce the readmission rates," he said. **PN**

Tampi may be reached at rajesh.tampi@yale.edu.

Biomarker

continued from page 15

example, those in the lowest quartile were more than two and a half times as likely to develop dementia as those in the highest quartile.

For the other study, researchers at University College London analyzed the retinal nerve layer thickness and changes in cognitive performance in a group of adults aged 40 to 69, irrespective of cognitive disease. As with the Dutch group, the investigators made use of data available from a large aging study known as UK Biobank. The researchers examined clinical data from over 30,000 individuals who were both given an OCT scan and took multiple cognitive tests to measure their memory, reaction time, and reasoning skills every three years.

The U.K. investigators stratified the participants into five groups (quintiles)

based on retinal thickness. They found that compared with participants in the highest retinal quintile at baseline, participants in the second and third quintiles were about 1.5 times as likely to perform worse on at least one cognitive test after three years. Participants in the lowest two quintiles were about twice as likely to perform worse on follow-up cognitive tests.

"Our study strengthens the argument of an association between neurodegenerative processes that affect the brain and the eye and indicates that OCT measurement of the [retinal nerve fiber layer] is a potential noninvasive, relatively low-cost, and time-efficient screening test for early cognitive changes," wrote lead author Paul Foster, Ph.D., and colleagues.

"However, one must be careful in [OCT] interpretation so as to avoid an unnecessary psychological burden for people who may not ultimately

experience cognitive decline," the authors continued. "Further, attempting to risk-stratify people would be most appropriate if there is a viable treatment or preventative measure available. Additional research is required to define a possible role for these observations in health policies and to determine the relevance at an individual level." **PN**

"Association of Retinal Nerve Fiber Layer Thinning With Current and Future Cognitive Decline" is posted at <https://jamanetwork.com/journals/jamaneurology/fullarticle/2685869>. "Association of Retinal Neurodegeneration on Optical Coherence Tomography With Dementia" is posted at <https://jamanetwork.com/journals/jamaneurology/fullarticle/2685868>. "Longitudinal Associations Between Visual Impairment and Cognitive Functioning: The Salisbury Eye Evaluation Study" is posted at <https://jamanetwork.com/journals/jamaophthalmology/article-abstract/2686117>.

Placenta

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Weinberger said that these findings might help explain why schizophrenia occurs more frequently in men than women. “We’re not exactly sure of the mechanisms, but animal studies have demonstrated that male fetuses are more at risk for pregnancy complications,” he said. “These genes could be

responsible.” The team went back to their whole collection of placental samples and found that male placentae did indeed have slightly higher expression levels of schizophrenia risk genes.

As for the clinical implications, Weinberger said this study reinforces the importance of proper prenatal care to minimize the chances of a complicated birth. “Admittedly, we still have limited insight into prevention

strategies for pregnancy complications,” he said.

Weinberger told *Psychiatric News* that one of the other groups at the Lieber Institute has been developing a method to make placentae out of stem cells. Using these cultured placentae, the researchers will examine how the placenta develops under various conditions to try and identify how and when placenta integrity might get compromised.

This study was published in *Nature Medicine* and was supported by grants from the National Institutes of Health, the Brain and Behavior Research Foundation, Max Planck Society, and others. **PN**

An abstract of “Convergence of Placenta Biology and Genetic Risk for Schizophrenia” is posted at <https://www.nature.com/articles/s41591-018-0021-y>.

Self-Directed Care

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from multiple programs that is truly comparable.

“Given the limitations, the take away message is that these results are promising enough to consider these programs viable,” she said.

Croft told *Psychiatric News* that this recent paper represents just one part of a large project that is assessing the outcomes of participation in six states currently using self-directed programs for behavioral health (Florida, Michigan, New York, Pennsylvania, Texas, and Utah).

Once information for all the programs is available, it may help identify what works best in terms of implementing these programs, such as how to set a realistic budget or recruit participants.

Jennifer Spaulding-Givens, Ph.D., M.S.W., an associate professor at the University of North Florida in Jacksonville and former operations director for the northeast Florida Self-Directed Care program, hopes this new data will encourage more states to give mental health self-direction a try. Several factors, including limited financial resources and difficulty integrating self-direction into established managed care bureaucracies have restricted the expansion of these programs, she noted. Having more published evidence that these programs work might convince agencies to explore new funding and contracting strategies.

“To be frank, though, I’m skeptical that self-direction or other client-centered, recovery-oriented services will be widely available until a major paradigm shift occurs,” said Spaulding-Givens, who was not involved in the current study.

“In my mind, the greatest barrier is the prevailing paradigm among bureaucrats and mental health providers that individuals diagnosed with a mental illness are believed to lack insight and the ability to manage their affairs,” she continued.

This study was funded by the Robert Wood Johnson Foundation, with additional support from the National Institute on Alcohol Abuse and Alcoholism. **PN**

“Housing and Employment Outcomes for Mental Health Self-Direction Participants” is posted at <https://ps.psychiatryonline.org/doi/10.1176/appi.ps.201700057>.

Advertisement



MED CHECK

BY NICK ZAGORSKI

FDA Panel Rejects Abuse-Deterrent Oxycodone Formulation

Participants in a joint meeting of the Food and Drug Administration's Anesthetic and Analgesic Drug Products Advisory Committee and its Drug Safety and Risk Management Advisory Committee in June voted 14-3 not to recommend the approval of **Remoxy ER** (*oxycodone extended-release capsules*) for the management of severe pain.

Remoxy ER, made by Pain Therapeutics Inc., is a high-viscosity gel formulation designed to keep people from being able to cut, grate, or inject the drug. Some committee members suggested that data presented on the efficacy, safety, and risk-benefit profile of Remoxy ER did not support approval of its application, especially regarding claims of abuse deterrence.

Sage Announces Expedited Development Plan for Depression Medication

Sage Therapeutics in June announced its expedited development plan for its lead compound **SAGE-217** following a meeting with the FDA. SAGE-217, a drug that targets the GABA-A receptor, received FDA breakthrough status in February for the treatment of major depressive disorder (MDD).

The new plan includes expedited approval pathways for SAGE-217 for both MDD and postpartum depression (PPD). An ongoing phase 2 study comparing depressive symptoms in women with PPD who receive either 30 mg SAGE-217 or placebo for two weeks was confirmed as appropriate to support registration for PPD, the company noted. The FDA also requested an additional phase 3 trial for MDD. The trial will compare outcomes in 450 patients who take SAGE-217 (20 mg or 30 mg) or placebo for two weeks.

Sage will also begin a one-year open-label study of patients with major depression to acquire additional safety data and evaluate the long-term effectiveness of two weeks of SAGE-217 for recurrent major depressive episodes.

Saladax Signs Agreement To License Blood Tests For Antipsychotic Levels

In June, the diagnostics company Saladax Biomedical Inc. signed a license agreement with Janssen Pharmaceutical NV—one of the Janssen Pharmaceutical companies—to acquire

exclusive patent rights for diagnostic blood tests that can determine drug levels in patients undergoing treatment with antipsychotic medications.

"This intellectual property, along with the existing patents that Saladax already owns, places Saladax in a predominant position in the field of antipsychotic drug testing," according to a press release by the company.

Saladax in March received approval to sell two of its diagnostic tests on the European market: the MyCare Total Risperidone Assay Kit and MyCare Paliperidone Assay Kit. The company has four additional tests for aripiprazole, clozapine, olanzapine, and quetiapine that it expects will receive European clearance later this year. Saladax stated the company will soon seek FDA clearance for these tests as well.



JOURNAL DIGEST

BY NICK ZAGORSKI



Early Life Stressors Speed Up Adolescent Brain Pruning

Stressful life events in early childhood accelerate the maturation of certain brain regions during adolescence, reports a study appearing in *Scientific Reports*.

These findings came from a nearly 20-year longitudinal study of children conducted by researchers at Radboud University in the Netherlands. The researchers compared brain maturation, defined as changes in gray matter volume, in 37 children who had MRI scans taken at ages 14 and 17.

During adolescence, neural connections in the brain undergo pruning, resulting in less gray matter.

Adolescents who experienced more negative events such as serious illness or parent divorce during early childhood (defined as up to age 5 years) displayed faster gray matter volume (GMV) reduction in multiple brain regions between ages 14 and 17. In contrast, negative life events between 14 to 17 were not associated with reductions in GMV.

The researchers also found that experiencing a negative social environment (the overall quality of home and school interactions) between 14 and 17 appeared to slow down brain maturation in the

Guidelines Released For Use of Ketamine To Treat Acute Pain

The American Society of Regional Anesthesia and Pain Medicine, American Academy of Pain Medicine, and American Society of Anesthesiologists recently joined together to develop consensus guidelines on the use of intravenous **ketamine** to treat both chronic and acute pain.

These guidelines, published in the journal *Regional Anesthesia and Pain Medicine* in June, cover a range of scenarios, but broadly state that moderate evidence supports the use of ketamine for acute pain management following painful surgeries, including in people who are opioid dependent. There is also

moderate evidence that ketamine works for chronic spinal pain and complex regional pain syndrome. There is limited evidence to support ketamine for other types of chronic or acute pain.

The guidelines noted that ketamine should be avoided in people with poorly controlled cardiovascular disease, those with active psychosis, and pregnant women. **PN**

Schwenk, ES et al. Consensus Guidelines on the Use of Intravenous Ketamine Infusions for Acute Pain Management From the American Society of Regional Anesthesia and Pain Medicine, the American Academy of Pain Medicine, and the American Society of Anesthesiologists. *Reg Anesth Pain Med.* 2018;43(5):456-466. https://journals.lww.com/rapm/Fulltext/2018/07000/Consensus_Guidelines_on_the_Use_of_Intravenous.2.aspx

anterior cingulate cortex. They noted this has significant implications as the anterior cingulate is associated with impulse control and emotional regulation and a slower maturation increases the risk of antisocial behaviors.

Tyborowska A, Volman I, Niermann H et al. Early-life and Pubertal Stress Differentially Modulate Grey Matter Development in Human Adolescents. *Sci Rep.* 2018; 8(1): 9201. <https://www.nature.com/articles/s41598-018-27439-5>



Estradiol May Worsen Anxiety Following Methamphetamine Withdrawal

A study published in *Neuroscience Letters* provides an explanation for why women may have more difficulty than men with methamphetamine withdrawal. The study, conducted by researchers at Dickinson College, suggests that the sex hormone estradiol worsens anxiety-like behaviors during drug withdrawal, which may increase the risk of relapse.

The researchers replaced ovaries in female mice with capsules that released either sesame oil or estradiol. The researchers let the mice play in an open place for three hours; then injected them with either low-, medium-, or high-dose methamphetamine; and placed the animals back

in the open area for five more hours.

Both groups of mice behaved the same prior to the methamphetamine injections and during the first hour following the injection. Afterwards, as the drug started clearing their system, the mice with estradiol capsules who received high-dose methamphetamine were less active and spent more time on the perimeter of the open space compared with mice with sesame oil capsules. This effect was not seen for the low or medium doses of the drug.

The authors suggested that estradiol may exacerbate anxiety by activating the hypothalamic-pituitary-adrenal (HPA) axis in response to stress, though future studies are needed to confirm this.

Rauhut AS, Curran-Rauhut MA. 7 β -Estradiol Exacerbates Methamphetamine-Induced Anxiety-like Behavior in Female Mice. *Neurosci Lett.* 2018; 681:44-49. <https://www.sciencedirect.com/science/article/pii/S0304394018303604?via%3Dihub>



Electrical Reward Signals May Predict Treatment Response

Depression and anxiety are associated with decreases in reward positivity, the electrical signal produced by neurons following a

see *Journal Digest* on page 21



David Hathcox

APA hosts Howard University's Health Careers Opportunities Program students along with its Pre-Health Scholars Summer Enrichment Program participants so they can learn about careers in psychiatry.

Pipeline

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those who participated in a presentation for 50 black students from Howard University whom APA hosted at its headquarters in Washington, D.C., last month to encourage them to consider a career in psychiatry.

The group included incoming college freshmen who are taking part in Howard University's Health Careers Opportunities Program (HCOP), which is aimed at creating a more diverse health care workforce. Blacks and Hispanics are underrepresented in medicine today: just 6 percent of U.S. physicians and surgeons are black or African American, and 6 percent are Hispanic, according to the Bureau of Labor Statistics. However, these groups comprise 13 percent and 18 percent of the U.S. population, respectively.

The HCOP targets economically or educationally disadvantaged students and helps prepare them for careers in health professions with summer academic enrichment activities for incoming college freshmen as well as science activities for students in grades K to 12.

Also in attendance were Howard University upperclassmen from its Pre-Health Scholars Summer Enrichment Program, who receive weekly advising sessions and special workshops to help them prepare for applying to health professions schools.

Lennon advised the students to ultimately pursue employment in a place with racial and ethnic diversity and inclusion, as well as "a mechanism for addressing issues in a way that maintains safety."

After the program, Lennon told *Psychiatric News* that he wants to "be a part of the students' journey. It feels validating and it feels powerful to see someone who looks like you succeeding in the craft that you want to succeed in."

Kimberly Gordon, M.D., vice chair of APA's Council on Children, Adolescents, and Their Families, president of APA's Caucus of Black Psychiatrists, and medical director of Hope Health Systems Inc., told the group that she remembers from her years growing up in the Bible Belt of Louisiana that if someone in her community had psychological problems, they were told "to



David Hathcox

Incoming Howard University freshman Jayla Wade will be the first member of her family to be a college graduate and aspires to "save lives" as a physician.

just pray and it will go away." She thought about becoming a registered nurse like her mother, but because of Gordon's obvious aptitude, her mother encouraged her to become a physician. But having limited access to mentors who looked like her left her feeling isolated and even like an imposter as she studied her way through medical school and residency.

As a black woman psychiatrist, Gordon has dealt with racial microaggressions, including being questioned about whether she is "supposed to be in the room" when other doctors are meeting, she said. But some of that goes away "once people recognize you are a leader and can articulate patients' needs." Ultimately, she is proud of her work as a psychiatrist rehabilitating at-risk youth enmeshed in the juvenile justice system.

"I think psychiatrists are the real holistic doctors," she told the group. "If a patient has a problem that can't be solved by any other doctor, you consult with a psychiatrist. A psychiatrist understands the social conditions of a community and best appreciates the social determinants of health."

Justice Crawford from Atlanta was one HCOP participant and incoming Howard freshman who aspires to become a psychiatrist one day. He was inspired after seeing that therapy helped a close friend work through his issues after he was suspended from school for getting into fights. Crawford's father is a physician specializing in internal medicine.

HCOP participant Jayla Wade, who recently graduated from high school in Greensboro, N.C., is the oldest girl in her family and also intends to become a physician, most likely a surgeon, she said. She will be the first person in her family to graduate from a four-year college.

"I want to save lives and change medicine," she told *Psychiatric News*. "I hope to continue to put myself in situations like this, to network and be inspired. To be in a building like this, so close to such inspiring people—it's surreal." **PN**



David Hathcox

Chad Lennon, M.D., advises students to meet with their managers after a month or two on a job to discuss career goals and ask what assets are most valued.

2 To learn more about the national HCOP program, which is funded in part by the Health Resources and Services Administration, visit <https://bhwh.hrsa.gov/fundingopportunities/?id=7ac73271-d9de-49f3-b196-be1444208c90>.

Journal Digest

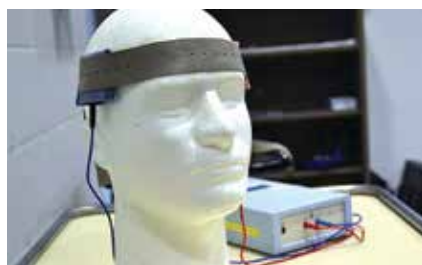
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rewarding experience. A study published in *Journal of Clinical Psychiatry* has demonstrated that measuring reward positivity using electroencephalography (EEG) might be able to identify if a person with depression will respond better to an antidepressant or cognitive-behavioral therapy (CBT).

A team led by researchers at the University of Illinois at Chicago enrolled 63 volunteers with a diagnosis of anxiety or depression and 25 healthy controls. The participants first completed a short monetary-based computer game while wearing EEG caps to measure reward positivity. Afterwards, the people with depression or anxiety were randomized to receive 12 weeks of selective serotonin reuptake inhibitor (SSRI) therapy or CBT, after which point all participants conducted a second round of monetary games.

At baseline, higher depressive symptom scores were associated with lower reward positivity. After 12 weeks, there was a correlation between the degree in symptom improvement and improvement in reward positivity signals, regardless of treatment. The researchers also found that participants with a blunted positivity response before starting treatment experienced a greater reduction in depressive symptoms following treatment with SSRIs, but not CBT.

█ Burkhouse KL, Gorka SM, Klumpp H, et al. Neural Responsiveness to Reward as an Index of Depressive Symptom Change Following Cognitive-Behavioral Therapy and SSRI Treatment. *J Clin Psychiatry*. 2018; 79(4): 17m11836. <http://www.psychiatrist.com/JCP/article/Pages/2018/v79/17m11836.aspx>



Abigail Graham, University of Pennsylvania

Transcranial Direct-Current Stimulation May Reduce Violent Impulses

A study in the *Journal of Neuroscience* suggests that transcranial direct-current stimulation (tDCS) to the prefrontal cortex may reduce the desire to commit violent acts.

Investigators at the University of Pennsylvania and Singapore's Nanyang Technological University conducted a randomized, controlled trial of 81 healthy adults who received

Stress

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to eyes-closed practice, coherent breathing can be done inconspicuously with eyes open while waiting, walking, writing, or riding a bus or train. We recommend coherent breathing to relieve anxiety before, during, and after exams because it induces a state of calmness with enhanced mental focus and cognitive functioning.

- **Technology:** Despite feeling exhausted, doctors often find it difficult to quiet their minds enough to sleep. Mild cranial electrotherapy stimulators (CES), no bigger than a smartphone, help reduce anxiety and insomnia. CES can be combined with coherent breathing for even better effects.

Stay Smart Naturally After Age 50

Maintaining cognitive and memory performance is crucial for patient care as well as for keeping up with the onslaught of new information and new technologies. Most physicians become aware of gradual age-related declines in memory and cognitive function before the age of 60. Cerebrovascular disease, dementia, and

either 20 minutes of tDCS to the prefrontal cortex or a sham stimulation prior to participating in a behavioral task. The prefrontal cortex (specifically the dorsolateral prefrontal cortex) was chosen since it has been documented that antisocial individuals have deficits in this brain region that regulate complex thoughts and behavior.

After the stimulation, the participants were asked to rate the likelihood they might participate in two hypothetical scenarios, one related to physical assault and the other to sexual assault. They were also asked to rate how morally wrong each scenario was.

The participants receiving tDCS were 47 percent and 70 percent less likely than the sham group to report desires to participate in the physical and sexual assault, respectively. Based on the differences reported in the morality assessments, the researchers estimated 31 percent of the total effect of tDCS at reducing violent intentions was due to an increased perception of greater moral wrongfulness regarding the violent acts. **PN**

█ Choy O, Raine A, Hamilton RH. Stimulation of the Prefrontal Cortex Reduces Intentions to Commit Aggression: A Randomized, Double-Blind, Placebo-Controlled, Stratified, Parallel-Group Trial. *J Neurosci*. July 2, 2018. [Epub ahead of print] <http://www.jneurosci.org/content/early/2018/07/02/JNEUROSCI.3317-17.2018>

other conditions that accelerate brain aging may threaten a physician's fitness to practice. In addition to the well-known preventatives—vitamins, omega-3 fatty acids, polyphenols, healthy diet, and exercise—certain herbs and nootropics (brain enhancers) can improve and prolong optimal functioning.

Best results can be achieved by strategic combinations of nutrients; adaptogens, such as *R. rosea*, *Schizandra chinensis*, *Eleutherococcus senticosus* (*Acanthopanax*), *Panax ginseng*, *Withania somnifera* (Ashwaganda); and other herbs, including *Ginkgo biloba*, *Lepidium meyenii* (Maca), and *Bacopa monniera*.

Reduced perfusion due to cerebral vascular disease after age 60 is a common MRI finding. Insufficient blood flow contributes to neuronal senescence and a decline in performance, particularly under stress. Picamilon, a cerebrovascular dilator synthesized from gamma-aminobutyric acid and niacin (B6), can improve alertness, mood, and cognitive function.

Centrophenoxine, an ester of dimethyl-aminoethanol and p-chlorophenoxyacetic acid, protects cell membranes from oxidative damage. In aging rats (16 and 24 months old) it

significantly increased multiple unit activity in hippocampal CA3 while decreasing lipofuscin concentration and lipid peroxidation. Low in side effects, centrophenoxine complements the benefits of other cognitive enhancers and may provide neuroprotection as the brain ages.

Stress Resilience Naturally

Complementary and integrative medicine (CAIM) can promote physician health, stress resilience, and professional performance. These approaches are particularly suited to the needs of physicians because they tend to be low in side effects and, therefore, unlikely to interfere with professional duties. Also, they do not require prescriptions. Physicians who incorporate CAIM into self-care and patient care may access APA courses, publications, and the APA CAIM Caucus for evidence-based information and treatment guidelines. **PN**

█ Author disclosure: Gerbarg and Brown receive no financial remuneration from any companies that manufacture or market herbs, nutrients, nootropics, or brain stimulators. They teach mind-body courses that include coherent breathing. Brown holds a patent with Humanetics for the use of 7-keto DHEA for PTSD.

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