

GOMA News & UpdatesVolume 36, September 2022

Bill Craver, DO, Named Head of Osteopathic Educators



PCOM South Georgia's Dean and Chief Academic Officer is adding another title to his name. H. William Craver, III, DO, FACOS, now serves as the chair of the Board of Deans for the American Association of Colleges of Osteopathic Medicine (AACOM). Dr. Craver served as dean and chief academic officer of PCOM Georgia for 10 years, later being named vice provost. Since 2020, he has taken the helm at PCOM South Georgia. In mid-July, after being named the chair of the Board of Deans for AACOM, Dr. Craver said, "Osteopathic medical education has

been growing and attracting new students at unprecedented rates. Our graduates practice in every specialty and in every community. Despite this growth, there are challenges facing us and I look forward to working with my colleagues, with AACOM and with our medical profession peers to ensure the continued success of our schools and our students." Read more about his new position.

Read about Dr. Craver's professional history and family life.

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Paula Gregory, DO, Named Inaugural Dean of the Meritus School of Osteopathic Medicine

On July 11, an announcement in western Maryland created excitement in Georgia. Hagerstown, MD, will be the site of the newest osteopathic medical school. Meritus President and CEO Maulik Joshi, DrPH announced that Paula Gregory, DO, will be the inaugural dean of the Meritus School of Osteopathic Medicine when it opens in 2025. Dr. Gregory previously served as an assistant dean and chair of clinical education at PCOM Georgia. She was President of GOMA 2010-2011, and currently practices at VIPcare in The Villages, Florida. Dr. Gregory is a 1988 graduate of the West Virginia College of Osteopathic Medicine and completed her family practice residency at Northlake Regional Medical Center in Tucker, GA. Read about the new school and Dr. Gregory's appointment here.

Michele Melamed, DO, has Covid-19 Complication Case Report Published

Michele Melamed, DO, MPH and coauthor Jake Gigliotti had a case report published in the September 2022 issue of *Journal of Osteopathic Medicine* entitled "Atraumatic Spontaneous Splenic Rupture in a Female COVID-19 Patient." The authors present the case of a 30-year-old woman with no significant medical history presented to the emergency department in October 2020 with sudden onset of severe left upper and lower abdominal pain. The purpose of this case report is to illustrate and make other clinicians aware of unusual potential complications and clinical presentations of COVID-19. Dr. Melamed is an emergency physician at Northside Gwinnett Medical Center in Lawrenceville, GA as well as a healthcare consultant at www.melamedicine.com.

www.melamedicine.com Read the case report.

Robby Bowers, DO has Review Article on Elbow Impingement Published

Robby Bowers, DO, and coauthors Gary Lourie, MD, and Tim Griffith, MD, had a review article published on August 25 in *Current Reviews in Musculoskeletal Medicine* as part of the "Injuries in the Overhead Athletes Collection." The article "Diagnosis and Treatment of Posteromedial Elbow Impingement in the Throwing Athlete" is summarized with, "In addition to a thorough history and physical exam, MRI, MR arthrogram, CT and dynamic ultrasound imaging modalities are useful in the assessment of a presumed diagnosis of posteromedial impingement. Arthroscopic decompression with posteromedial osteophyte removal provides effective clinical results and return to play. The surgeon should be careful to avoid of creating medial ulnar collateral instability by means of over-resection of

the posteromedial olecranon." Dr. Bowers is a sports and musculoskeletal medicine physician at Emory University School of Medicine and is a team physician for the Atlanta Braves and Georgia Tech Yellow Jackets baseball team.

Emily Kiernan, DO, Answers Questions about Vaping



Emily Kiernan, DO, is currently work clinically in the Emergency Department at Grady Memorial Hospital in Atlanta, GA. Additionally, she is an Assistant Professor of Emergency Medicine and Medical Toxicology at Emory University School of Medicine as well as being on the faculty at the Georgia Poison Center and faculty at the Grady Medication Assisted Opioid Treatment program.

Dr. Kiernan graduated with a DO degree in 2014 from PCOM Philadelphia. She completed a four year residency in emergency medicine at Lehigh Valley Health Network Emergency Medicine Residency, and became a Board Certified emergency physician in 2019. Dr. Kiernan went on to a fellowship in toxicology at Emory University School of Medicine/Georgia Poison Center/Centers for Disease Control and Prevention Fellowship program (2018-2020) and achieved Board certification in toxicology in 2020.

We knew Dr. Kiernan was a great source for questions about the vaping in America. She agreed to answer some questions by email about this major health risk. Her responses have references in brackets alluding to the footnotes linked at the bottom of the article.

Vaping has been known to cause pneumonia. Historically, it was described as a mystery. What do we know now about vaping-induced pneumonia?

EK: Various lung injury patterns have been described in association with vaping including e-cigarette, or vaping, product use-associated lung injury (EVALI), lipoid pneumonia, and necrotizing pneumonia. However, specific to the outbreak of EVALI in 2019, THC and/or vitamin E acetate were implicated as the likely causative agents in the majority of affected patients, either by history or confirmed by toxicology (1). EVALI remains a diagnosis of exclusion because, at present, no specific test or marker exists for its diagnosis, and evaluation should be guided by clinical judgment (2). Because patients with EVALI can appear clinically indistinct to those with other respiratory infections (e.g., fever, cough, headache, myalgias, or fatigue), it might be difficult to differentiate EVALI from COVID-19, influenza, or other causes of community-acquired pneumonia on initial assessment.

It has been written that 10 million Americans are vape users, but that 3 million of them are ex-smokers. Smokers are showing preference to stop smoking by using e-cigarettes rather than gums or patches. Is this a good development?

EK: Nicotine is a difficult habit to quit and different interventions will be necessary to assist individuals with tobacco use disorder. If a complete switch from traditional cigarettes to e-cigarettes has led to sustained remission, then the patient's healthcare team should continue to encourage their efforts. However, e-cigarettes are constantly evolving and make up a heterogeneous group of products. Therefore, it is difficult to generalize about efficacy for cessation based on clinical trials involving a particular e-cigarette, and there is presently inadequate evidence

to conclude that e-cigarettes, in general, increase smoking cessation. According to the CDC, there is evidence suggestive of e-cigarettes containing nicotine associated with increased smoking cessation compared with the use of e-cigarettes not containing nicotine, and evidence suggestive (but not sufficient) of more frequent use of e-cigarettes is associated with increased smoking cessation compared with less frequent use of e-cigarettes. Unfortunately, about half of adults engage in "dual use," the use e-cigarettes with regular cigarettes (3). Currently, there are no-FDA approved e-cigarettes for smoking cessation. Additional research is needed to better understand the role of e-cigarettes in cigarette cessation and the health effects of e-cigarettes (4). Patients should work with their healthcare professional if they need help quitting any tobacco containing products.

Juul has been accused of bad marketing by buying ad space on websites of Cartoon Network & Seventeen Magazine. Additionally, flavored vaping was appealing to teenagers. Both have been made illegal. Are the numbers of teens using e-cigarettes decreasing now?

EK: Every year, the CDC, and FDA analyze nationally representative data from the 2021 National Youth Tobacco Survey (NYTS), a school-based, cross-sectional, self-administered survey of U.S. middle school (grades 6-8) and high school (grades 9–12) students. However, given the ongoing pandemic during the most recent reporting period, it is difficult, as with many population-based or social studies during the same time frame, to compare data to previous years given. With that being said, the report estimated that approximately 2.06 million youths were current e-cigarette users in 2021 (5). However, findings from the most recent data from the National Institute on Drug Abuse (NIDA) Monitoring the Future (MTF) survey of substance use behaviors and related attitudes among teens in the United States indicate that levels of nicotine and marijuana vaping did not increase from 2019 to early 2020, although they remain high. Regarding JUUL products, the survey showed that reported use of JUUL vaping devices that contain nicotine (previously the most popular brand among teens), significantly decreased from 2019 to 2020 among students in 10th and 12th grades (NIDA. 2020, December 15. Study: Surge of teen vaping levels off but remains high as of early 2020. (6). Regardless of data trends, use of tobacco products by youths in any form, including e-cigarettes, is unsafe.

Juul has been made illegal by the federal government recently. And yet other manufacturers are still legal. What is the rationale here?

EK: To my knowledge, this is an ongoing investigation concerning the toxicological profile of JUUL products. The FDA issued marketing denial orders (MDOs) to JUUL Labs Inc. for all their products currently marketed in the United States. As a result, the company must stop selling and distributing these products. On July 5, 2022, FDA administratively stayed the marketing denial order. The FDA cited scientific issues, unique to the JUUL application, that warrant additional review (7). As the investigation continues, more information will likely be made available. However, I believe the FDA is working hard to ensure that any product available on the US market is safe for use by the public.

What are the other clinical adverse effects of vaping that is being seen besides the pneumonia?

EK: This is a complex question given the significant heterogeneity amongst available over-the-counter products, homemade products, and products containing alternative or illicit drugs.

Like traditional cigarettes, nicotine-containing e-cigarettes carry health risks. Nicotine is highly addictive and exposure in-utero and during infancy and adolescence may adversely affect the developing brain resulting in long-term health effects.

Inadvertent pediatric exposures to concentrated nicotine solutions have also resulted in significant toxicity, including death (8), although, most exposures produce mild signs and symptoms of nicotine poisoning (9).

Adulterated products can produce a variety of health effects. Reports of synthetic cannabinoids in liquids labeled to contain cannabidiol have resulted in seizures and delirium (10).

Although vaporization devices do not produce combustion products, some of the ingredients in vaping liquid and the aerosol could also be harmful to the lungs in the long-term. Concentrations of carbonyls, including the carcinogen formaldehyde, increase with the power of the device (11). Additionally, some flavoring chemicals in vaporization liquids have been identified as potentially harmful. Diacetyl, a chemical implicated in the development of bronchiolitis obliterans, has been detected in some flavored vape liquids (12). Finally, although uncommon, vape fires and explosions can occur with vaping product (13).

There was an opinion piece in *Slate Magazine* (online) from 6/23/2022 by Jacob Grier in which he contends that public health in England as well as the Royal College of Physicians have stated that vaping may carry 5% or less of the risk of smoking since it doesn't have the tar. What is your thought on this contention?

EK: The issue of health effects related to vaping is a complex topic for which we do not have sufficient long-term data. While it is true that vaping does not produce combustion products, or "tar," seen in traditional tobacco cigarettes, vaping liquids can still pose a health hazard. Users must be informed and aware of the potential adverse effects. Vaping liquids have been found to contain known carcinogenic substances, such as acetaldehyde and formaldehyde, acrolein, diacetyl, cadmium, benzene, and heavy metals such as nickel, tin, and lead (14). Flavoring chemicals in vaporization liquids have been identified as potentially harmful including diacetyl, a chemical implicated in the development of bronchiolitis obliterans, sometimes referred to as popcorn lung.

While a person may decrease the amount of "tar" or combustion products that they are exposed to (if they are not a dual user),

many other health effects need to be considered, as stated above. Additionally, nicotine-containing e-cigarettes does not address the ongoing and the development of nicotine use disorders.

Can you discuss additives in the black market vape products?

EK: We could spend hours discussing the known, the potential, and the yet to be seen additives to vape liquids and products. Before the addition of vitamin E acetate to THC-containing vape liquid, no one had seen or considered this possibility before. This of course is now believed to be the causative agent in the development of EVALI. People who use vaping products need to be aware that if they are using product that are unregulated, especially those bought on the "black market," the contents of the product can be unpredictable. I can refer you to the National Academies of Science Reports (14) for discussion of the current known additives.

Click here for Article References

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FDA Authorizes Reformulated Boosters Targeting Omicron Subvariants

On August 31, the Food and Drug Administration authorized the omicrontargeting coronavirus booster shots. This move is designed to improve protection against severe illness and death during a potential rise in Covid-19 cases this fall and winter. The boosters, reformulated to take aim at the BA.4 and BA.5 omicron subvariants are scheduled to be reviewed by the CDC and may be available starting Labor Day weekend. The newest crop of shots which are free to the public have been criticized by some as being too quick.

Read More on the controversy



Hint Health Article Features Dr. Wade's Transition into Direct Primary Care

Jonathan Wade, DO, FAAFP, a family

physician who owns Orchard Health DPC, a direct primary care practice with 2 locations in Nashville, GA, and Valdosta, GA. Dr. Jonathan Wade gives us insight into his intriguing DPC journey. Orchard Health DPC has grown with HintOS as Dr. Wade decided to run his practice leveraging the platform early on.

Read More



PCOM Georgia Hopes to Continue Streak

For multiple years in a row, PCOM Georgia has been nominated as one of Gwinnett Magazine's "Best of Gwinnett" for Colleges & Specialized Training. The school has been honored to be considered for such a title and attribute its excellent standing to all of its hardworking students, faculty, and staff. You can vote for PCOM Georgia in the 2022 "Best of Gwinnett" Colleges & Specialized Training category.

South GA Students Zamani, Vand Der Horn & Meawad Publish Research







Shahrzad Zamani (DO '25)

Tamryn Van Sara Meawad Der Horn (DO '25) (DO '25)

In addition to their full load of medical curriculum, three PCOM South Georgia students recently conducted research that was published in the Journal of the Federation of American Sciences for Experimental Biology.

Check out the research of Shahrzad Zamani (DO '25), Tamryn Van Der Horn (DO '25) and Sara Meawad (DO '25) that focuses on the prevalence of the bifid xiphoid process.



DO Students Savor the Culinary Medicine Elective Course at PCOM Georgia

Over the summer, second-year Doctor of Osteopathic Medicine (DO) students at GA-PCOM created a colorful array of healthy dishes during their culinary medicine elective course. Students brushed up on their culinary skills while acquiring nutritional knowledge and learning about diets that can

prevent and control chronic diseases like Type 2 Diabetes, Cancer, Obesity, Hypertension and Heart Disease.

In Other Words

"Illnesses do not come upon us out of the blue. They are developed from small daily sins against Nature."

- Hippocrates