## Champions of Change in Lifestyle Medicine

The Lifestyle Medicine Education Collaborative (LMEd) showcased lifestyle medicine education programs in medical schools. The schools highlighted were at various stages of program development and implementation. School leaders shared information regarding courses, electives, activities, and programs to assist other schools as they develop their own programs. Read and learn. The following were all the programs highlighted until August 2019.

## A.T. STILL UNIVERSITY SCHOOL OF OSTEOPATHIC MEDICINE IN ARIZONA ATSU

school's community sites.

The mission of AT Still University - School of Osteopathic Medicine in Arizona (ATSU-SOMA) is to train physicians to practice in under-served communities. Students spend their first year of study at the main campus in Mesa, AZ, and their second through fourth years of medical school embedded in community health clinics-otherwise known as federally-qualified health centers-and their surrounding communities. Students are carefully selected for mission-fit, as well as long-term interest, in practicing within one of the

**Osteopathic foundation.** ATSU-SOMA has integrated the tenets of osteopathy and lifestyle medicine across all four years of instruction. Osteopathy naturally encompasses the practice of lifestyle medicine with its whole person approach to health. Students are taught to look at their patients from a mind-bodyspirit perspective and care for them at each of these levels. The emphasis on lifestyle medicine provides additional tools with which our graduates can meaningfully engage patients in positive health behaviors. *First patient.* We utilize the approach that students are their own first patient as a way to help them understand the power of lifestyle medicine, as well as the real challenges patients face in making changes. Students engage in culinary medicine, exercise activities, and behavior change workshops where they gain hands-on instruction on how to assist patients in making lasting changes, as well as improve their own health. Experiential activities help to cement the didactics presented in the first two years. During the clerkship years, concepts are reinforced via activities such as writing formal nutrition and exercise prescriptions for the students' patients.

**Burnout.** In addition, the curriculum seeks to reduce student/physician burnout via learning wellness skills. During their first week of school, students are asked to assess their own wellness and to create a plan for maintaining wellness during their training. Students are given guidance on how to create a plan and later evaluate their progress. In order to develop better coping mechanisms themselves, students are taught mindfulness and resilience skills throughout their first two years. Each class session starts with five minutes of mindfulness where different techniques are explored. Breath and mindfulness are incorporated utilizing modern technologies, allowing students to directly see the impact on physiological parameters. Finally, given that ATSU-SOMA has a mission to train students to work in underserved communities, our curriculum specifically targets topics pertinent to vulnerable populations such as identifying social

determinant barriers to optimal health, healthy eating on a budget, and looking at exercise from different perspectives.

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#### Institute for Human & Planetary Health at Doane University

The mission of the Institute for Human and Planetary Health (IHPH), founded in 2017 at Doane University, is to present the evidence that the dietary pattern that best preserves both human and planetary health is based on minimally processed, whole plant foods grown using sustainable and restorative agricultural practices. The IHPH also seeks to provide educational opportunities for those who want to restore human and planetary health, create resilient, healthy communities, and help transform current policy that favors high- cost medical care, industrial agricultural and food production systems over people and the environment. Doane University, through the Institute for Human and Planetary Health, launched two Lifestyle Medicine continuing medical education programs for current practitioners: 1) Certificate in Lifestyle Medicine

The first program launched, *Lifestyle Medicine: Improving the Future of Healthcare*, consists of four courses (Core Principles, Chronic Disease Treatment 1, Chronic Disease Treatment 2, and Health Coaching), offering 30 AMA Category 1 CMEs. This program assists practitioners in meeting the board eligibility requirements for the American Board of Lifestyle Medicine (ABLM) <u>certification</u>. The next certification exam is October 2019 in Orlando, FL. 2) Certified Lifestyle Medicine Executive (MicroMasters)

The *Certified Lifestyle Medicine Executive* series introduces learners to leadership frameworks and prepares learners to manage these complex issues in public health, healthcare systems, and related industries. Learners are introduced to the skills required to prevent and address human disease through the use of Lifestyle Medicine and population-based healthcare delivery models that engage the individual, community, and the larger society. Practitioners can earn up to 125 CMEs in the program and transfer nine graduate credits into the Doane University MBA program upon successful completion. In addition, an undergraduate, three credit *Introduction to Lifestyle Medicine* course is available. Students can take this course and transfer the college credit to any college or university of their choosing. All programs/courses are available on the edX platform under <u>DoaneX</u>.

**Summary**: The U.S. healthcare system is currently unsustainable with high (and rising) costs and poor outcomes. In order to change the prognosis, we must change both the type of care we deliver and the way in which we deliver it. Lifestyle medicine delivered at the population level is the cure. In order to achieve this transformation, however, a different type of education must be delivered at all levels...for current practitioners, medical students, and undergraduate pre-health professions students. At Doane, we are working to be part of that solution. Join us.

# East Carolina University's Brody School of Medicine

Since May of 2018, <u>East Carolina University's (ECU) Brody School of Medicine</u> has provided fourth-year medical students with instruction in Lifestyle Medicine, including instruction to help patients with chronic pain and help society address the opioid crisis.

Eastern North Carolina is an ideal training ground for Lifestyle Medicine because the region has significant health disparities. The incidence of diabetes, cardiovascular diseases, cancers, and obesity–and mortality rates from those diseases–are higher in this area than anywhere else in North Carolina.

The mission of Brody School of Medicine is to increase North Carolina's supply of primary care physicians while improving the health status of our state's residents, particularly those in rural and under-served areas. The school excels in preparing primary care physicians to complete residency training and to care for patients upon entering the workforce. Brody is consistently recognized as a national leader in producing family medicine physicians and views Lifestyle Medicine as another resource to help us meet our mission.

Our Lifestyle Medicine session teaches students how diet, exercise, and stress management choices can be effective tools in helping patients manage pain. In addition, another goal of the session is to show students that physicians who make healthy choices in their own lives have more compassion and energy to give their patients. While the one-hour single session is currently offered only to our fourth-year medical students, the faculty is working toward integrating Lifestyle Medicine as a longitudinal topic throughout all four years of undergraduate medical education.

East Carolina University is aware that actions speak louder than words. With that in mind, faculty members schedule "walking meetings" around the campus lake as opposed to holding sit-down meetings inside. We have found that our new approach sharpens our problem-solving skills and fosters a better working environment.

When faculty teach principles of Lifestyle Medicine, they emphasize the importance of meeting each patient wherever he or she is, then working with them to determine which components might be most effective in helping them reach their unique goals. Sometimes it is difficult to view life from others' perspectives, so the prerequisite for applying Lifestyle Medicine is a willingness to be open-minded.

Incorporating Lifestyle Medicine into the curriculum can be daunting. The healthcare delivery model most of us deal with does not thrive by prescribing exercise, diet, and stress management. Broccoli does not have a powerful industry lobby. But ECU's forward-thinking leadership team understands the importance of preparing future physicians for success in a value-based healthcare delivery system. As Lifestyle

Medicine gains steam nationally, we at ECU are excited to be counted among other top medical schools that are embracing the movement. It is the right thing to do for our patients. John Norbury, MD NORBURYJ@ECU.EDU

#### **College of Osteopathic Medicine of the Pacific Northwest**

Western University of Health Sciences, College of Osteopathic Medicine of the Pacific Northwest, offers a four-year extracurricular and experiential Lifestyle Medicine (LM) Longitudinal Track. The program sees future physician's knowledge in healthy living as the way to prevent, treat, and reverse chronic disease. The LM Track creates a new paradigm of medical education and practice. Future physicians develop a mindset of using lifestyle education during every patient encounter. The first two years of the LM track include culinary medicine, nutrition for health, exercise as medicine, weight loss, stress management, motivational interviewing, and smoking cessation. In year three and four, students complete at least one LM clinical rotation.

Community service is an important part of the education process and students learn that community service should be incorporated into their future practice of medicine. In other words, upstream thinking and education. Students are involved in community projects in a variety of organizations educating youth, adults, the elderly, and families providing information on healthy cooking, nutrition and eating, why exercise, strategies for stress management and smoking cessation, and the link between unhealthy lifestyles and diseases. In conjunction with Samaritan Health Services and Oregon State University Linus Pauling Institute, LM Track students conduct cooking classes in the community for under-served children and families. The community service project, part of a <u>HRSA grant</u>, is called <u>CHEF- Culinary Health</u> <u>Education and Fitness</u>. When medical students serve and educate in the community, they can observe individuals in community environments and better understand the challenges when working with future patients.

The LM program is successful because of collaboration with Oregon physicians committed to lifestyle medicine and educating the next generation of doctors. These physicians serve as clerkship preceptors and lecture throughout the LM Track. In addition, the program collaborates with national organizations including <u>CHIP</u> (Complete Health Improvement Program); <u>Tulane Culinary Medicine; Linn Benton</u> <u>Community College Culinary Program; Kaiser Permanente Motivational Interviewing Program; Lifestyle Medicine Educational Collaborative; American College of Lifestyle Medicine; and others. The keys to the success of this LM Track are the students putting their knowledge and skills into action through community service; committed Oregon physicians who pour their lifestyle medicine philosophy and practice into our students; and, collaboration and support from national lifestyle medicine organizations.</u>

Western University of Health Sciences, College of Osteopathic Medicine of the Pacific Northwest, believes in upstream thinking and practicing medicine aimed at the prevention of disease through lifestyle medicine.

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UNIVERSITY OF SOUTH CAROLINA School of Medicine Greenville

#### UNIVERSITY OF SOUTH CAROLINA SCHOOL OF MEDICINE GREENVILLE

The University of South Carolina School of Medicine Greenville requires all matriculating medical students to become educated in Lifestyle Medicine (called the "Core Program") to improve patient care for prevention and treatment of lifestyle-related noncommunicable chronic diseases (NCDs).

The M1-M2 years begin by learning the underlying basic science concepts, mechanisms, and root causes of NCDs and their association with lifestyle behaviors. Training is further emphasized in the M3-M4 years through clinical clerkships and fourth-year case sessions. To encourage future teamwork in interdisciplinary, patient-centered care, students are introduced to and educated by registered dietitians, clinical exercise physiologists, and wellness coaches. Lifestyle Medicine (LM) assessment is included in summative exams, reflections, clinical reasoning cases, skills acquisition assessment through Objective Standardized Clinical Examinations, and documentation in the electronic health record. The core program is delivered and mapped across all disciplines (longitudinal integration) and all years (vertical integration). USC SOM Greenville also offers the "Lifestyle Medicine Distinction Track (LMDT)": Competitive students who enter the LMDT train beyond the core program to become LM frontline advocates for healthy lifestyle behaviors in their patients and communities. Successful completion of the LMDT is noted in the student's Dean's Letter with a completion certificate awarded at graduation.

Finally, the importance of student health is modeled through faculty-supported extracurricular activities including running, cycling, yoga, soccer games, and year-round cultivation of the organic garden. This fosters a culture that encourages the physicians-in-training to maintain self-care and avoid burnout.

## **Stanford University Teaching Kitchen Elective for Medical Students**





STANFORD PREVENTION RESEARCH CENTER the science of healthy living

The Doctor is in (the Kitchen): Teaching Kitchen Elective for Medical Students has been offered to medical students at Stanford University School of Medicine since January 2017 and to physician assistant students

since April 2018. Each quarter, 12 students attend one, two-hour class a week for eight weeks. Sessions are taught by trained chef-MD's; the executive chef for Stanford Dining Services; and, assisted by guest facilitators—physicians, scientists, or chefs—interested in healthy food and nutrition. The course is based on a blended classroom model, where students are responsible for watching several short, on line videos and for reading class materials before the session. When students arrive in the kitchen for class, they start right in chopping, stirring, and simmering. Topics covered range from knife skills and basic cooking techniques to world flavors and food traditions as they apply to soups, salads, main dishes, and desserts. Dishes prepared in the class are largely plant-based including entirely vegetarian meals as well as those that highlight the "Protein Flip"—a term coined by the Culinary Institute of America that refers to moving meat off the center of the plate and instead have plant-based meals that include meat—limited to fish/seafood and poultry in this course—as a garnish or flavoring agent.

During the last 30 minutes of each class session, everyone gathers around a large table to share the dishes they have made and talk about what they have learned. This time is also used for students to role play motivational interviewing and patient counseling techniques around making healthy dietary behavior changes. By the time the eighth week arrives, the students are pros—even those who had never cooked a meal before taking the course. They use their newly learned skills to prepare a dish that means something to them—such as something they ate with their family while growing up—in a healthy and tasty way to share with the rest of the class during the final "exam" potluck. During the meal, they learned during the quarter, and think about how they will use these new skills to help both themselves and their patients eat healthier. As a graduation gift, students are given a cookbook of all course recipes and handouts including their final potluck recipes.

From the outset, this course has been extremely popular with students and quickly develops a wait list during each registration period. To study the effectiveness of the curriculum, the course was run as an interventional study with pre-test and post-test survey data on cooking and healthy eating attitudes, knowledge, and behaviors collected from both students and wait listed controls. Preliminary results show statistically significant improvements for the students in cooking techniques, knife skills, confidence in planning balanced meals, and eating five to nine servings of vegetables and fruits per day compared with wait listed controls. We hope to finish analyzing data from the first three quarters the course was offered and publish an academic paper with the results. After the results are published, the goal is to publish the curriculum to have it available for use at other medical and health professional training schools.

As one Stanford medical student said, "I now feel more comfortable making delicious, healthy, and easy food with the constraints of time, budget, and resources. I can use my personal experience to talk to patients about how they can similarly enjoy home-cooked healthy food and overcome whatever barriers they face."

Visit the following to learn more: <u>Course Trailer</u> <u>Brief course description/registration @ Stanford</u> <u>Chef in Medicine website</u>

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## BAYLOR COLLEGE OF MEDICINE PHYSICIAN ASSISTANT PROGRAM

Nestled in the heart of the Texas Medical Center in Houston, the Baylor College of Medicine Physician Assistant Program (BCM PA Program) is the educational home to 40 bright graduates each December. Applicants seek out the program for its location in one of the top medical centers in the country and for its community and primary care-oriented curriculum. These future PAs understand the value they have to offer as part of the healthcare team. As medicine shifts toward team-based and patient-centered care, PAs are well-suited to fulfill meaningful roles in a patient's journey toward health. Increasingly, that journey requires counseling and guidance in behavioral change and healthy lifestyles. In addition to the robust curriculum in disease-care common to most PA programs, the BCM PA Program boasts a health behavioral counseling course and a rigorous course in prevention and health promotion, as well as clerkship experiences in diverse communities offering opportunities for rich patient interaction. These courses and experiences provide strong scaffolding for the addition of lifestyle medicine across the entire curriculum.

I was aware of the need for this lifestyle medicine training after completing the BCM PA program myself just a few years before joining the faculty. While I felt more than well-trained to diagnose, treat, and prescribe for common medical conditions that I saw in practice daily as a PA in Family Medicine, I felt utterly unprepared to really help my patients with diabetes, hypertension, hyperlipidemia, and obesity truly grapple with lifestyle changes. My inability to answer the question, "What should I eat," felt unacceptable to me as a care-provider. I recognized that making lasting change to the medical system was going to come from somewhere closer to the heart of the profession. Thus, I chased my dream to join the world of academics and return to the program that trained me so well and offered the opportunity to revolutionize PA education.

In July 2017, the BCM PA Program received a grant award totaling \$464,563 over a five-year period from the U.S. Department of Health and Human Services under the title of Primary Care Medicine and Dentistry Clinician Educator Career Development Awards. The grant funds a five-year effort called the Lifestyle Medicine Development Project (LMDP). The LMDP is comprised of two aims. The first, and most important, is to integrate core lifestyle medicine topics–nutrition, physical activity, patient counseling–into the PA Program curriculum at BCM in a longitudinal fashion. Students will leave the curriculum with the knowledge and skills to incorporate lifestyle medicine into practice as clinicians. The curriculum is meant to shift the focus from disease and treatment toward health and wellness promotion and prevention. The second component of the LMDP is called the Career Development Plan. This plan allows Junior Faculty such as myself to participate in faculty development opportunities, i.e., the Master Teacher Fellowship at BCM and the inaugural Lifestyle Medicine Boards offered by the <u>American Board of Lifestyle Medicine</u>. These activities foster expertise in the field of lifestyle medicine and will result in the best delivery of lifestyle medicine content to PA students at BCM.

In the first year of grant funding, four lifestyle medicine modules were added to the prevention course followed by a small-group critical thinking session that allowed students to apply lifestyle medicine core competencies to a sample patient case. For example, the students were asked to perform a lifestyle

assessment based on the lifestyle "vital signs" endorsed by the Blue Ribbon Panel. They were also asked to write a nutrition, physical activity, or smoking cessation plan for the sample patient. Plans for the LMDP include the addition of active learning modalities to the lifestyle medicine modules; inclusion of lifestyle medicine topics and competencies in additional courses across the didactic curriculum; and, integration of the lifestyle assessment into projects during rotations where students can interact and counsel patients.

Mentorship has played the biggest role in helping me achieve my goals and career path. My career mentor, Carl Fasser, Program Director at the BCM PA program, and Mark Faries, Associate Professor and Texas A&M AgriLife Extension Service Specialist, introduced me to lifestyle medicine. Through them I have had the opportunity to collaborate on important research regarding lifestyle medicine in education; to participate in statewide and national efforts to bring lifestyle medicine to the forefront of healthcare and medical education; and, to hone my grant-writing skills. Many others have provided guidance, support, and encouragement throughout this effort and I will forever be in their debt. I consider my mentors an asset to my career development and to my efforts in integrating lifestyle medicine into medical education curriculum. Finally, students in the BCM PA Program are the most helpful and integral aspects to mine and the PA Program's development. They inspire and challenge me daily to find innovative teaching methods and to bring them the most valuable tools to help future patients, families, and communities.

Lifestyle medicine as a specialty would do well to continue to foster the atmosphere of inclusion of providers such as PAs. The <u>American College of Lifestyle Medicine</u> endorses a team-centered approach to patient care and PAs are a valuable member of that team! Thus, the inclusion of PA programs in the transformation of medical education is critical. This movement is the responsibility of the educators, the students, and the leadership of lifestyle medicine. Physician Assistant students are incredibly bright, tenacious, and hard-working. They, along with other students learning the craft of patient care, are inspired to help patients become healthy and make behavioral changes for the better. We support a legacy of REAL change in healthcare by fostering this desire in any student interested in interacting with patients.

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WEST VIRGINIA UNIVERSITY SCHOOL OF MEDICINE

The West Virginia University School of Medicine introduced a lifestyle medicine program five years ago when there was a call for grant proposals for curricula that focused on new and innovative topics for medical students. At that time, there was little in the school's curriculum on nutrition and physical activity and the role these areas played in promoting health, preventing disease, and in treating chronic diseases.

For several years, I, Mark Cucuzzella, have been involved in military public health and preparing Air Force members for physical fitness tests. I have learned a lot about nutrition and fitness along the way. Some of my learning was achieved due to personal circumstances as I became prediabetic following what the military was promoting as a "healthy warfighters diet." We taught low fat, count calories, with a focus on eating ample carbohydrates. My genetic predisposition to diabetes caught up with me, and even though I was running and winning marathons, I could not run away from a bad diet. For a year I spent my time reading almost everything I could about nutrition, as many Air Force members were failing their tests not because of lack of physical training but from obesity and poor diet. I realized that a lot of what I had learned in medical school about nutrition was not based on good science. Most of the information was either wrong, or certainly not helpful to my West Virginia population. Fortunately, excellent work in the research and clinical world was being conducted on the role of sugar and carbohydrates leading to insulin resistance—the root of many chronic diseases. Robert Lustig had just published a book entitled "Fat Chance" that challenged conventional wisdom. The school began to use this publication in the first medical school curriculum and have used it ever since. The book teaches students critical thinking, as well as the understanding of human metabolism in the real fast food world.

Through a partnership with a local culinary school, the School's lifestyle medicine program takes medical students into the teaching kitchen and conducts classes on food and healthy ingredients, while at the same time providing information on metabolic syndrome, a primary driver of chronic disease in the state of West Virginia. Instructors teach the preparation of healthy low carbohydrate meals and substitutes for simple sugar and starches to keep flavor. We share recipes which contain healthy natural fats and unprocessed and unrefined oils which we believe have vital roles in a sustainable healthy diet. In the lifestyle medicine program there are also sessions on physical activity and the powerful role that movement and exercise have in health, longevity, and disease. Along with healthy eating, exercise is the miracle pill. We have presented what our program at conferences around the country where we come away with more innovative ideas from other schools.

It is fun to see the students in action on the hospital floor giving lifestyle counseling and connecting with patients after discharge to ensure they are staying on track. I believe if a patient knows someone cares, that goes a long way to providing optimal care. What has been helpful to me is a group of supportive colleagues who, with me, are willing to challenge conventional wisdom, read the literature, and look at the individual responses of patients to different methods of lifestyle management. Our state is unfortunately the nation's lead in T2D and obesity. One of our main messages here is that there is not a "one size fits all" prescription. We want to give each patient simple ways to objectively measure how a lifestyle intervention is affecting them–a simple glucometer, the tape measure, and most importantly how one's brain, mood, and energy are doing. For example, simply testing blood glucose after a meal can tell an individual if that meal is above their carb threshold. These parameters tell you how your body is responding and if something is generating a good response for you as an individual. My hospital has accepted and implemented low carbohydrate menus and education for patients as well as creating a "Sugar Free Hospital" as of January 2018.

I would like to share that we all have a lot to learn in nutrition and lifestyle and how this applies to the U.S. population as it exists today where most people are obese and prediabetic. Recently a survey we

conducted of 1,500 people who have been on a low carbohydrate style of living (many for over two years) was accepted for <u>publication</u>. The results of the participants are nothing short of phenomenal, not just by their objective measures, but by the open-ended questions on how their lives are changed. We have dozens in my own local community, some hospital patients and some who have come to community meetings, who have lost and kept off 100 pounds without being hungry or depriving themselves. We place a big focus on the brain and the addictive properties of foods, and if we do not address this we cannot help people by giving them a script. There are some in the lifestyle medicine space who will state with "100% confidence" that a diet containing natural saturated fats and all animal products will lead to heart disease and diabetes, but if you read into the literature and observe the lives of healthy elderly this is not true. Now, if the fat comes along with a McDonald's meal and tons of processed foods and junk food, yes, that is a path to disaster. So, I want us all to be friends and collaborators in the field and open to each other's ideas as we learn and engage in good academic debate. That is why we are here. I am still searching for the truth, but probably will never find it in my lifetime. I believe the focus of attention and intervention at a societal level needs to be reducing and eliminating sugar-sweetened drinks and junk food. Personally, I love the Quantified Self approach also. I am still a competitive distance runner at age 50, and I have been the subject of multiple physiologic, cardiac, metabolic, continuous glucose monitoring, and telomere testing-pretty much every test you could throw at a person at my age to assess their general state of health and performance. Fortunately, despite the stress and sleep deprivation of my day jobs, the lifestyle choices I have made are working close to perfect for me. Each of us are an experiment of "one" and each must find ways to assess for themselves if their chosen path is optimal. Finally, engaging the community as partners is also critical in lifestyle medicine. Health lies in the community, and, to this end, I direct two running races a year and own a community running and walking center which focuses on education. Thank you for the opportunity to share!

#### TOOLS AND RESOURCES Mark Cucuzzella, MD, FAAFP

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### **MEDICAL UNIVERSITY OF WARSAW, POLAND**

The Medical University of Warsaw (MUW) officially introduced lifestyle medicine to the school in December 2016. It was then that the Medical University of Warsaw Lifestyle Medicine Scientific Club (LMIG) was founded and approved by the University as a student scientific club. The terminology "lifestyle medicine" then started to be commonly used at the University. From the beginning, the club has been managed by medical students under the supervision of the Third Department of Internal Medicine and Cardiology. As the impact of lifestyle on the onset of civilization diseases has been neglected for decades in Polish medical school curricula, student organizations have been undertaking numerous initiatives to make up for this unhealthy deficiency. Two years ago, the International Federation of Medical Students Associations IFMSA-Poland Local Committee in Warsaw, began two projects embracing lifestyle medicine elements, not yet calling the initiative by this name.

The Food Medicine Conference, the first project, is an annual conference and to date has been held twice, each time gathering students from different faculties at MUW as well as some from other universities and cities around Poland. The goal of the conference is to bring attention to faulty nutrition as a major risk factor for civilization diseases and to present dietary interventions for a doctor's practice.

The second project is "What's on your plate–smart choices for healthy living." These culinary medicine workshops, and an educational fan page presenting a selection of recipes, are a practical response to the aims of the Food Medicine Conference, as well as an attempt to promote daily healthy eating habits in every student's life proving the habits to be affordable and easy.

It was, however, the formation of the LMIG that marked a breakthrough in students' efforts to bring lifestyle medicine education to the public debate and create a space for interdisciplinary cooperation between different faculties, specialists, and students.

Between January and June 2017, the LMIG organized four meetings with a turnout of 60-100 participants for each event. The LMIG and IFMSA joined forces and worked together on the second Food Medicine Conference held in May 2017. The LMIG members prepared a student session entitled "Evidence-Based Lifestyle Medicine" as well as hosted a "Plant-Based MUW" campaign promoting a whole-food, plant-based diet among MUW students. The LMIG was also invited to prepare a culinary medicine workshop during the 13<sup>th</sup> Warsaw International Medical Congress for Young Scientists in May 2017. In June, the club supported a Non-Tobacco Campaign initiated by University authorities.

An important part of LMIG activity is a fan page now followed by more than 600 students with a post reach nearing 3,000 people. The number of students registered as LMIG members and newsletter recipients reached 100 people at the end of June. In August 2017 LMIG's President, Alicja Baska, was awarded the <u>Donald A. Pegg Student Leadership Award</u>. Plans for the upcoming 2017-2018 academic year include setting up a closer cooperation between LMIG and University authorities as well as hosting the National Congress of Lifestyle Medicine. <u>Click here</u> and learn more about the Medical University of Warsaw Lifestyle Medicine Scientific Club including a list of faculty, clinicians, and lifestyle medicine practitioners that have committed to giving a talk in the academic year 2017-2018, with a summary of the meetings organized during the second semester of the 2016-2017 academic year, and additional club activity.

#### Alicja Baska

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## SAN ANTONIO PARTNERSHIP WITH BAYLOR COLLEGE OF MEDICINE

The Culinary Health Education for Families, or "CHEF," program is part of the \$135 million renovation project that began in 2012 to transform the Children's Hospital of San Antonio's downtown campus into the city's first freestanding children's hospital. Through a partnership with Baylor College of Medicine, The Children's Hospital of San Antonio began attracting world-class talent from renowned children's hospitals across the country.

In 2015, a pediatric residency program was established and 10 new medical school graduates joined the hospital. Most residents admit that the opportunity to train in culinary medicine was a major factor in their decision to receive their pediatric training at The Children's Hospital. Those residents participated in their first culinary medicine class last fall. Dr. Julie La Barba, CHEF's medical director, tells the students that the Teaching Kitchen is one of the few places during their residency experience where it is safe to say, "I don't know." While in medical school, physicians typically are required to take 25 hours of nutrition education, yet only 27 percent meet the criteria. "It's estimated that 70 percent of chronic diseases are associated with preventable causes related to diet and exercise. That is a reason to get serious about having doctors include nutrition at the forefront of their practice," says La Barba.

During the first five years of life, a pediatrician will have as many as 20 encounters with a young patient and may be the only physician the family visits on a regular basis. Pediatricians have a unique opportunity to have an impact on an entire family's nutrition and eating habits, and lifestyle behaviors. "We are preparing a whole new generation of pediatricians to be equipped to help families recognize that food can be the best medicine of all," La Barba points out.

The Children's Hospital of San Antonio is a founding partner in an innovative community collaboration that is aimed at reducing childhood obesity. In Bexar County, one in three school-age children is either overweight or obese. Culinary Health Education for Families, or "CHEF," an innovative program that is rooted in the belief that "food is medicine," has a bold vision of motivating San Antonio families to adopt and sustain healthier eating habits by teaching basic nutrition and practical cooking skills to children and families. The program, conceived and funded by the Goldsbury Foundation, features a state-of-the-art Teaching Kitchen designed by the Culinary Institute of America–the first of its kind in the nation located in the heart of a children's hospital.

According to La Barba, "Research shows when people start cooking for themselves and eat at home, their health improves, but it also shows that many people lack that kitchen know-how, and they need help learning the basics. CHEF is a practical approach to teach families the basic kitchen skills they need to get

real food on the table-not just what is good for them, but that they can afford and that their families will want to eat."

Families receive a referral to the Teaching Kitchen from their physician who has identified their child as being at risk for developing serious conditions related to being overweight or obese. Another key component of the program is that children join in and help with the food preparation. They can help mom or dad in the kitchen by reading the recipe, measuring ingredients, and chopping vegetables. Once enrolled, families are encouraged to complete a series of six classes which link culinary concepts with nutrition education.

"We had one child tell us he would rather be in the kitchen than playing video games," La Barba says. "And that is exactly what we strive for, making the whole food preparation experience engaging for the whole family so they want to continue using their new skills at home." At the end of the class, families sit down at a long wooden table and enjoy the meal they have prepared. Sometimes, children and their parents are eating food they have never tried before such as fresh salmon, kale, or jicama.

The CHEF team at The Children's Hospital of San Antonio includes Dr. La Barba, as well as Program Director and Chef Maria Palma who was trained at the Culinary Institute of America; Celina Paras, Registered Dietitian & Nutrition Education Specialist; and, Rebecca Vance, Program Coordinator. The team is bi-lingual and currently offers classes in both English and Spanish. Thanks to the funding from the Goldsbury Foundation, CHEF classes are offered free of charge to physician-referred patients as the program gets established. In addition to the formal patient referral system, CHEF also partners with Child Life; conducts RD Lunch & Learns, which offer CE credits; Departmental Team Buildings; and, Pediatric Resident Training in Culinary Medicine.

Prior to the opening of the Teaching Kitchen, Palma and Paras worked together to develop the proprietary evidence-based Culinary Medicine curriculum that bridges the art of cooking and the science of nutrition in each class. The curriculum developed for the hospital setting was then modified so that it could be offered in non-clinical settings at the network of CHEF Community Teaching Kitchens around San Antonio including the YMCA, the Boys & Girls Club, and the San Antonio Botanical Garden.

"In the past, most approaches to reducing childhood and adult obesity in the United States have relied on providing individuals and families with recipes, handouts, booklets, and coupons. We take things a step further by helping parents understand the basics of grocery shopping, reading food labels, food preparation, and all the steps in between. That is how we hope to bring about lifelong behavioral changes that can affect a family's overall health and well-being," stresses La Barba. To learn more about the CHEF program and to download CHEF-approved recipes, visit www.chefsa.org.

#### Julie La Barba, MD, FAAP

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#### EMORY UNIVERSITY LIFESTYLE CLINIC

The Lifestyle Clinic at Emory University has been helping patients learn how to break the chains of unhealthy lifestyle behaviors since December 2013. I am the product of trailblazers at Emory University who challenged the status quo of how to effectively treat chronic, preventable diseases by laying the foundation of what is now the Lifestyle Clinic at Emory. As a Preventive Medicine resident in my second and final year of training, I currently serve in a leadership role to build lifestyle medicine among the trainees and faculty of the Department of Family and Preventive Medicine. I also facilitate shared medical appointments covering the topics of nutrition, physical activity, and mindfulness. Our program has recently been selected to receive the American College of Preventive Medicine Diabetes Prevention Program Demonstration Project grant award which allows us to implement the Diabetes Prevention Program at our lifestyle clinic. This project is directly in line with the lifestyle medicine exposure for residents, faculty, medical students, and physician assistant students. Through applied learning, learners actively engage with patients during shared medical appointments, practice motivational interviewing, and gain an appreciation for the impact lifestyle medicine has in treating or preventing chronic diseases within a primary care setting.

What has been most gratifying for me as a Preventive Medicine resident engaged in lifestyle medicine is having the opportunity to help develop our lifestyle medicine clinic through excellent mentorship; learn the basic tenets of lifestyle medicine; learn how to engage multiple stakeholders; learn how to create a patient curriculum; educate a diverse patient population; and, to apply my skills in epidemiology and quality improvement to begin developing the groundwork for program evaluation and outcomes research.

At the end of the day, sustainability of a lifestyle clinic in an academic setting depends on patients becoming empowered to increase healthy behaviors; health professionals developing a culture of change in medicine that values lifestyle medicine and the prevention of disease; and, the ability to present actionable data that leads to more investment of both human and financial resources. This is what I have learned so far in the brief time I have been involved at the Emory Lifestyle Clinic.

Visit the following to learn more:

1) http://www.fpm.emory.edu/patient\_care/services/lifestyle\_clinic.html

2) http://www.fpm.emory.edu

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## CITY UNIVERSITY OF NEW YORK (CUNY) SCHOOL OF MEDICINE

The CUNY School of Medicine is a seven-year BS/MD program receiving its preliminary LCME accreditation in 2015. The program is based on the success of the Sophie Davis School of Biomedical Education founded in 1973 specifically to address societal issues related to care of the underserved and the numbers of underrepresented minority physicians. The mission of the CUNY School of Medicine is to produce broadly-educated, highly-skilled medical practitioners to provide quality health services to communities historically underserved by primary care practitioners. The School recruits and educates a diverse, talented pool of students, expanding access to medical education to individuals with limited financial resources from underserved communities, and who are of racial/ethnic backgrounds historically underrepresented in the medical profession.

In 2015 the School launched a new curriculum which includes a year-long lifestyle medicine course taken in the second year of the program. The content of the lifestyle medicine course, known as Practice of Medicine 1 emphasizes the importance of lifestyle factors in health and covers topics such as sleep, healthy eating, physical activity, stress management, social connectedness, spirituality, tobacco and substance abuse avoidance. In lectures and small group sessions, students learn to conduct literature searches, critically assess medical literature, and appreciate the strong body of evidence supporting the associations between lifestyle behaviors and health. The last few sessions of the Practice of Medicine 1 course focus on behavior change methods, including the Stages of Change model and Brief Action Planning.

In a second year-long course, Practice of Medicine 2, students learn health coaching techniques and practice with standardized patients as they use the behavior change skills they have learned on cases with conditions related to smoking cessation, healthy eating, and physical activity. Practice of Medicine 2 continues to provide didactic sessions on health coaching (first semester) and introduces students to health systems science (second semester). The students then begin a longitudinal clinical experience that spans the next three years of their curriculum (final year of college and first two years of medical school).

At the CUNY School of Medicine, we hope to create a culture among the students of health consciousness and repeatedly stress the importance of physicians as role models. For example, we have purposely designed the environment to support healthy lifestyles. At student gatherings, we strive to provide healthy meals, snacks, and beverages. There are two fitness centers on campus, one adjacent to the School of Medicine and one in the dormitory. Both are free and students are encouraged to use them. The entire College campus is smoke-free. To increase student's self-awareness and to manage stress, mindfulness sessions are offered twice a week at various times each day. To encourage physical activity and to provide our students with an opportunity to interact with people in our community, we have started a *Walk with a Future Doc* (WWFD) program. One of the first of its kind in U.S. medicine schools, this program is affiliated with the national initiative known as <u>Walk with a Doc</u>. The mission is to encourage healthy physical activity in people of all ages to improve health and well-being across the country. *Walk with a Future Doc*has a similar mission with a focus on the local Harlem population. Led by the BS/MD students at Sophie Davis, *Walk with a Future Doc* provides guided walks, informational talks about various health related topics, and social support to encourage healthy lifestyles. Walk with a Future Doc has developed partnerships with the Harlem YMCA, local NYC police department precincts, and our own CCNY community, including staff from Public Safety, Social Media and Communications, and summer high school pipeline programs. Through participation in WWFD students enjoy walking their way to better health, while at the same time discovering how walking and talking can be a valuable opportunity to learn how to offer social support and develop relationships that will serve them well as future physicians.

This seven-year program gives us ample opportunity to introduce and reinforce the concept of lifestyle medicine. By weaving lifestyle medicine throughout the curriculum students develop expertise in health promotion while they are learning about disease and its prevention. We believe that by introducing important components of lifestyle medicine to college sophomores, these students will use the information for their own health benefits and thus learn to embrace the importance of promoting a healthy lifestyle to their patients when they begin to practice medicine. The course topics and curriculum that include motivational interviewing and behavior change strategies, in conjunction with the environmental supports we have in place, gives us optimism that our students will be well-informed and effective change agents developing the confidence required to include lifestyle medicine in their future practices.

#### Joan M. Dorn, PhD

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#### JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE TEACHING KITCHEN

At the Johns Hopkins University School of Medicine (JHUSOM), faculty and students joined forces with chefs and experts in clinical nutrition to establish the JHUSOM Teaching Kitchen in 2015. The objective of this Teaching Kitchen is to bridge the gap between learning about nutrition concepts in lectures and confidently applying food and diet related principles in practice.

The JHUSOM Teaching Kitchen is unique in that it was student-initiated and founded by first year medical students who recruited faculty mentors as well as registered dietitians and culinary experts. This multidisciplinary team with medical, nutrition, and culinary expertise have worked together to develop an engaging curriculum to convey essential nutrition knowledge and culinary skills that students can use to counsel patients on the impact of food and diet on their health. Students are also encouraged to personally embrace these practices in their own lives and serve as role models for their patients, family members, friends, and colleagues.

With support from the Johns Hopkins Social Innovation Lab, the leadership team of the JHUSOM Teaching Kitchen also formed the B'more Healthy Teaching Kitchen to promote healthy eating directly in the larger Baltimore community. Through these community outreach efforts, students lead events like health fairs and interactive workshops on cooking and nutrition, and at the same time, learn to better appreciate the socioeconomic barriers to healthy eating.

Transforming the kitchen into a classroom for clinical nutrition education has been well received by both students and faculty members. Students have commented that the hands-on approach to learning is enjoyable and fun. Through the Teaching Kitchen, students learn about nutrition by cooking, tasting the dishes they prepare, and discussing with the chefs, dietitians, and peers about how they can improve their own eating habits as well as those of their patients. Some faculty members in the School of Medicine have also participated in the Teaching Kitchen themselves. Although the JHUSOM Teaching Kitchen is currently a student organization, faculty members are working with the student leaders to explore potential ways to incorporate the Teaching Kitchen into the formal medical school curriculum to revolutionize nutrition medical education to equip future physicians with the knowledge and skills to help their patients live healthier lives.

Visit the following to learn more: https://youtu.be/T36SqlH5ni8 https://www.facebook.com/hopkinsnim/

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#### UNIVERSITY OF FLORIDA

Over the past two years, several individuals in the Department of Orthopaedics and Rehabilitation have been making teaching inroads into the medical school curriculum to include the American College of Sports Medicine <u>Exercise is Medicine (ACSM EIM)</u> principles. Per Dr. Heather Vincent, the group has been able to:

A) Develop and insert into the first-year pre-preceptorship an introductory lecture on the importance of discussing exercise with patients and using ACSM EIM materials such as the exercise prescription pads, benefits sheets, and information on exercise as a vital sign.

B) Provide second-year medical students an intensive lecture series entitled "Exercise is Medicine" where we discuss the benefits of exercise for low back pain, knee pain, neck and shoulder pain, and what specific exercise programs and modifications can be used to manage these common complaints. We have also included exercise programs for healthy aging, "Normal Musculoskeletal Aging".

C) Create an exercise testing hands-on session in the Clinical Elective "Advanced Physical Diagnosis and Clinical Reasoning" for fourth-year students. In this session, students perform an exercise gait study and a gait mat, and together we access patient history, movement patterns, and determine exercise therapies that can be used to correct problems and imbalances.

In addition, Dr. Vincent serves as a Faculty Mentor for a developing Special Interest Group in Exercise Medicine. To date two lecture series have been held and in the future an afternoon journal paper review will be conducted. The goal is to "keep building momentum and encouraging people to join!" The group will soon be hosting an ACSM certification to help develop a network of trained fitness professionals so that providers have access to resources and a referral system.

"I have been so grateful for the opportunity to talk with Dr. Jennifer Trilk, LMEd co-director, on the phone about activities and some "tricks of the trade" in getting a medical school thinking about incorporating exercise science into medical care. I also want to thank the EIM team for providing the fantastic resource tool box of articles, presentations and other supportive materials that any institution can use to teach, learn and grow! Without this, the process would have been so much more arduous and time consuming!", says Dr. Vincent. She continues, "I am energized by the excitement that is out there for exercise as medicine–many young people believe in this, and I hope that if we keep spreading the word and provide our doctors-in-training the evidence they need, we can start making a difference in national health outcomes."

#### Heather K. Vincent, PhD, FACSM

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# The University of Toledo College of Medicine and Life Sciences

The University of Toledo College of Medicine and Life Sciences has designed and implemented a Lifestyle Medicine Elective for preclinical medical students. The elective is conducted by Dr. Angele McGrady, Dalynn Badenhop, PhD, Professor of Medicine, and Kim Abbas, licensed dietician. To date, 63 students have enrolled in the elective. The program applied for and received Institutional Review Board (IRB)

approval to collect data on lifestyle habits of students. The elective consists of four group sessions during which information is presented and discussed involving the relationship among lifestyle factors, health and illness. Students complete screening tools to identify the area where their lifestyle may be unhealthy. They then set a SMART goal to address activity, nutrition, or stress management. Small groups in each area are conducted by healthcare professionals. Data is collected again at the end of elective. Two sessions are devoted to group work on patient cases where lifestyle is a factor in their chronic illness.

Data analysis shows that statistically significant improvements are achieved by students in increasing activity, reducing fat consumption, increasing fruit/vegetable intake, and decreasing anxiety. We believe that obtaining data showing that changes in lifestyle are possible during medical school, and positive evaluations are critical to the promotion of lifestyle medicine as a required curriculum topic.

Enrollment in the elective has increased from four students in spring 2015 to 27 in spring of 2017. Because of the success of this lifestyle medicine elective for first and second year medical students, the medical school curriculum committee has agreed to include "Lifestyle Medicine" as a thread in all years of the medical school curriculum starting in Fall 2017. <u>Click here</u> to learn more about this preclinical elective.

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