

ANNOUNCEMENTS

Anesthesia Grand Rounds
Wednesday mornings 7-8 a.m. via Zoom

Feb.2 Educational Overview of Cardiac Anesthesia Division
Ruma Bose, MD, MBBS
BIDMC, Department of Anesthesia

Feb. 9 Advanced Heart Failure and Mechanical Circulatory Support
Arthur Garan, MD
BIDMC, Department of Medicine

Feb. 16 Active Learning in Anesthesiology Education
Susan Marshall, MD
University of North Carolina

Feb. 23 RCA Presentations

2022 Lunar New Year Celebration
BIDMC will celebrate the Year of the Tiger with a virtual celebration on Thursday, Feb. 10, at 1 p.m. The event will include a speaking program, traditional cultural entertainment, and a prize drawing!
<https://portal.bidmc.org/Utility/Events-Calendar/2022/Febuary/LunarNewYear>

Staff born in the **Year of the Tiger** (in 1938, 1950, 1962, 1974, 1986, and 1998) are invited to submit their photo to be part of a slideshow at the virtual event and be featured on Jan. 31.

National Wear Red Day
Friday, Feb. 4, is National Wear Red Day! Let's come together to fight for the end of heart disease and stroke by wearing red! Take a photo of yourself and/or your loved one and it may be featured on our social media channels! Send your photos to us at socialmedia@bidmc.org on Feb. 4. Be sure to include your name, email, department and hospital.

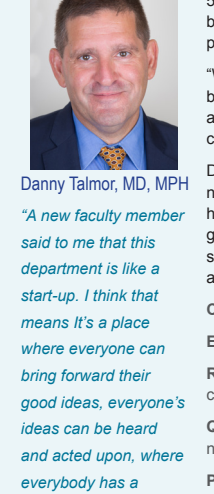
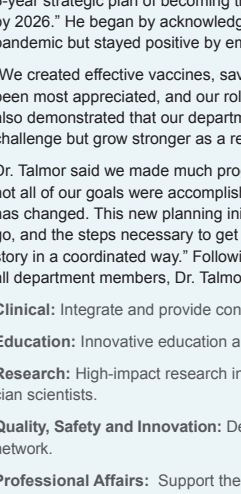
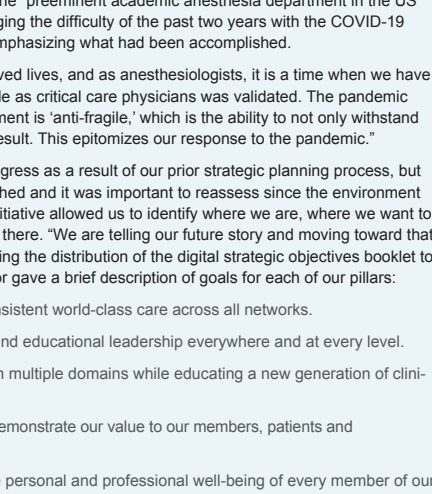
Voluntary Testing for Asymptomatic BIDMC Staff
BIDMC's COVID-19 testing program for asymptomatic staff is underway. The program is open to all BIDMC employees and physicians who do not have COVID-19 symptoms. It is free, 100% voluntary and results are usually available within 24-36 hours.

You must schedule an appointment to be tested by clicking [here](#). The program now requires users to create accounts; you will need to provide your name and email and create a password. Once you have created an account, you can manage your appointment. Please cancel your appointment if you are unable to make it.

Martin Luther King, Jr. Celebration Video
BIDMC recently honored the legacy of Martin Luther King, Jr. with a virtual event. This year's theme was "Striving and Healing Together." Click [here](#) to watch a video of the event.

WELCOME
We are delighted to introduce several colleagues to our anesthesia family!

 Chen Meng, MD, PhD Postdoctoral Fellow Center for Inflammation Research MD: Anesthesiology PHD: Huazhong University of Science and Technology Residency in Anesthesia: Taihe Hospital in China	 Abeer Santarisi, MD, SPC, M.Sc Research Fellow, CARE MD, SPC: Jordanian Board of Emergency medicine (J.B.E) M.Sc: In Emergency Medicine and Intensity, University of Jordan	 Julia Mosaddeghi, MS Clinical Research Coordinator, CARE BA: Boston University, in Cell/Molecular Biology and Genetics MS: Biomedical Research Technologies with a focus on flow cytometry	 Jiwoo Kim Research Aide Center for Inflammation Research BS candidate in Biology at Caltech, Pasadena, CA
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 Isabella Bhatia Anesthesia Technician NEU Student Intern	 Haun Lee Anesthesia Technician NEU Student Intern	 Emily Zhang Anesthesia Technician NEU Student Intern
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PROMOTIONS

New Floor Managers

Part of our department's success is the quality of our clinical leaders and our ability to develop young leadership talent. Vice Chair for Clinical Affairs Dr. Michael Harkin has announced three new floor managers to help guide our clinical operations on the East and West Campuses. Dr. Victor Polinin, Dr. Sapna Govindan, and Mark Robitaille. Congratulations to these talented clinicians who will help lead our fast-paced clinical operations into the future.

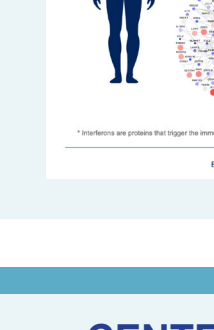
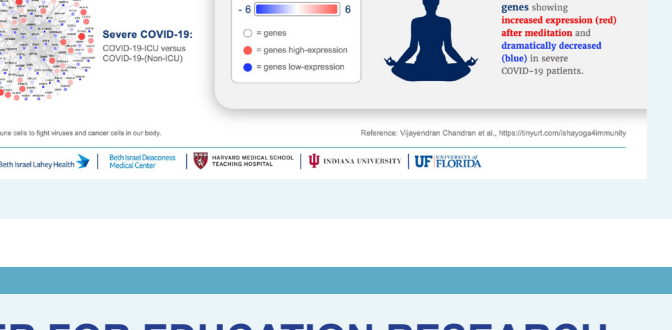
		
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Congratulations to Ibrahim Quraishi who has been promoted to Clinical Research Coordinator, Ibrahim, who joined the department in April, 2021, works with Dr. Robina Mataly's team in the Vahm Research Group, and is currently working on a study to evaluate the role of purinergic signaling and neuropeptides in the angiogenic response to ischemia reperfusion injury, among multiple other research projects.

STA ANNUAL MEETING

Drs. John Pawlowski and David Feinstein gave a presentation at the Annual Meeting of the Society for Technology in Anesthesia on January 13th entitled "Challenges and Opportunities in Developing Anesthesia Products (For Industry)." The meeting was virtual this year but Dr. Feinstein said it was an interesting and successful meeting nonetheless and provided us with a link to the syllabus that you can check out below. BIDMC has always had a strong presence in this Organization.

http://www.stahq.org/users/files/cfiles/files/STA_22AM_Syllabus.pdf

	
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GRAND ROUNDS

Dr. Talmor discusses strategic plan to achieve ultimate excellence

Department Chair Dr. Daniel Talmor gave our January 19th grand rounds and unveiled the 5-year strategic plan of becoming the "preeminent academic anesthesia department in the US by 2026." He began by acknowledging the difficulty of the past two years with the COVID-19 pandemic but stayed positive by emphasizing what had been accomplished.

"We created effective vaccines, saved lives, and as anesthesiologists, it is a time when we have been most appreciated, and our role as critical care physicians was validated. The pandemic also demonstrated that our department is 'anti-fragile,' which is the ability to not only withstand challenge but grow stronger as a result. This inspires our response to the pandemic."

Dr. Talmor said we made much progress as a result of our prior strategic planning process, but not all of our goals were accomplished and it was important to reassess since the environment has changed. This new planning initiative allowed us to identify where we are, where we want to go, and the steps necessary to get there. "We are telling our future story and moving toward that story in a coordinated way." Following the distribution of the digital strategic objectives booklet to all department members, Dr. Talmor gave a brief description of goals for each of our pillars:

- Educational:** Integrate and provide consistent world-class care across all networks.
 - Clinical:** Innovative education and educational leadership everywhere and at every level.
 - Research:** High-impact research in multiple domains while educating a new generation of clinical scientists.
 - Quality, Safety and Innovation:** Demonstrate our value to our members, patients and networks.
 - Professional Affairs:** Support the personal and professional well-being of every member of our department.
 - Administration:** Accelerate the department's mission.
- Dr. Talmor emphasized that achieving our goal will not be easy but that it is a team effort and we can do it unless we all work together. "He believes the current shortage of anesthesia providers will make it crucial that we become highly desirable as an employer in light of the fierce competition. We need to be the provider of choice for anesthesiologists and CRNAs and provide added value in addition to money, in the form of professional development and a collegial environment."
- While the bar is high across all our pillars, Dr. Talmor is confident that we are optimally positioned with our superb leadership team and an administration team which is up to the task of driving us toward ultimate success. "They are excellent, highly competent and willing to help us achieve our goals."
- Dr. Talmor stressed that this talk was an introduction and promised regular and continuing communication from leadership to keep all staff informed of our progress and the future steps needed to reach our goals.

GLOBAL HEALTH

Lifebox conducts Grand Rounds presentation for Boston-Africa Anesthesia Collaborative

The Boston-Africa Anesthesia Collaborative that helps support a self-sustaining CRNA program at Phebe Hospital in Liberia had a virtual grand rounds on January 19th. Reducing Surgical Site Infections in Liberia: The Lifebox Clean Cut Program. Dr. Eileen Stuart-Scott from our PAT Division was so impressed with the rounds she wanted to share them with the rest of the department.

"Many thanks to the Lifebox and C.B. Dunbar team for an outstanding presentation today. We are grateful for your time, expertise and clear presentation, and also for stable internet connections! Clean Cut is a wonderful project and your outcomes are inspiring. I particularly enjoyed the emphasis on 'rethinking your practice' in ways that contribute to quality improvement. Approximately 50 individuals in four countries who provide anesthesia/peroperative care were on the call today so your information was widely disseminated and appreciated."

To see this presentation click [here](#).

RESEARCH HIGHLIGHTS

Meditation intervention linked to stimulation of immune system response

Can the peaceful state of mind induced by meditation improve your immunity? A group of scientists recently used state-of-the-art biological, genomic, and bioinformatics tools to determine physiological changes in a group of meditators after a sustained period of practice. The resulting article, co-authored by Dr. Bala Subramaniam, the Director of the Sadhguru Center for a Conscious Planet at BIDMC, and his colleagues was published in a recent issue of *PNAS (Proceedings of the National Academy of Science)*. The research found that this intensive meditation retreat intervention was linked to robust activation of the immune system without activating the inflammatory pathways. This innovative study presents further indication of positive impacts of the advanced Inner Engineering meditation program on the immune system, and offers the potential for behavioral interventions for conditions related to a weakened immune system.

The multi-center study took blood samples from participants in an 8-day Inner Engineering meditation retreat prior to and after the retreat, and analyzed these samples using advanced genomic and bioinformatics approaches. The study found that the samples of the meditators were linked to activation of 220 genes, 68 of them related to interferon signaling. This is significant, as these changes impact downstream signaling perturbed in conditions associated with excessive or persistent inflammation such as multiple sclerosis and severe COVID-19 disease.

Previous similar studies have offered tentative indications for meditation-related benefits to immune response. These observations include modulation of surrogate markers, e.g., decreases in the transcription factor NF- κ B and the inflammatory marker CRP or increases in CD4+ T cell counts of individuals (with HIV). There has also been limited evidence for meditation influencing changes in antibody and interferon levels. Some work has suggested meditation-mediated immunomodulation might occur through changes in intercellular gamma levels, but this association is confounded by the simultaneous practices of yoga, altered sleep patterns and vegan diets.

There remains plenty of work to be done. While the data presented in this study are correlative and not causal, the associations show potential for low-cost, high-impact modification of disease states using behavioral interventions like meditation. The authors plan further work involving multi-center, randomized studies, and controls for prerequisite practices to further examine links between meditation and benefits in human disease.

To see the study abstract, follow the link here: <https://www.pnas.org/content/118/5/e211045118>

This work was conducted by Drs. Vijayendran Chandran and Senthilkumar Sathasivam in a multicenter study including Bala Subramaniam and colleagues from the Sadhguru Center at BIDMC, University of Florida, and Indiana University among others.

"This article is a prime example of how spirituality can inform science and vice-versa. One aspect of the holistic benefits of meditation, i.e. a better immune system with meditation has been shown in this study. Kudos to the entire team and to Sadhguru for offering this incredible advanced meditation retreat." - Bala Subramaniam

Dr. Vijayendran Chandran will be sharing more about this study and answering questions at Sadhguru Center's Speaker Series event on March 23rd. For more info, please email sadhgurucenter@bidmc.harvard.edu

SADHGURU CENTER FOR A CONSCIOUS PLANET
Enhancing Consciousness, Cognition, and Compassion

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SARS-CoV-2, MERS-CoV, and Influenza A Virus: Immune Interferon Genes

MERS-CoV-19: Immune Interferon Genes

Severe COVID-19: Immune Interferon Genes

COVID-19: Immune Interferon Genes

ISHA Yoga Practices
Enhances the Immune System

Advanced Inner Engineering meditation program (8 days/retreat)

2-SCORE

Immune Interferon gene expression (red)

Immune Interferon gene expression (blue)

Immune Interferon gene expression (green)

Immune Interferon gene expression (yellow)

Immune Interferon gene expression (purple)

Immune Interferon gene expression (orange)

Immune Interferon gene expression (pink)

Immune Interferon gene expression (brown)

Immune Interferon gene expression (grey)

Immune Interferon gene expression (black)

CENTER FOR EDUCATION RESEARCH, TECHNOLOGY AND INNOVATION

New CERTAIN papers evaluate motion metrics and evaluate effectiveness of ultrasound course for combat medics

The Center for Education Research, Technology and Innovation team (CERTAIN), led by Center Director Dr. John Mitchell, published several new papers that demonstrate how the group is expanding knowledge in medical education and assisting our military operations with medical training.

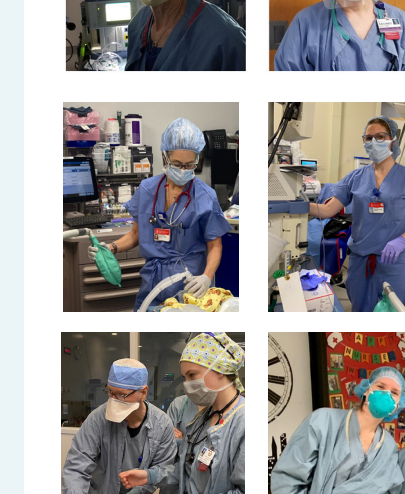
In the first paper, "Comprehensive Ultrasound Course for Special Operations Combat and Tactical Medics," in the December 2021 *Journal of Special Operations*, they evaluated the recent course conducted by CERTAIN in ultrasound technology for combat medics, a skill often used on the battlefield by non-physician providers. By testing knowledge and manual skills pre and post course, they found that these skills had significantly improved after the course. The CERTAIN team had led several successful trainings and plans to continue to refine this course, which serves the vital need of imparting ultrasound training to non-physician military providers so they can save lives.

For abstract and full list of authors, go to: <https://pubmed.ncbi.nlm.nih.gov/34569127/>


The second paper, "Motion-Tracking Machines and Sensors: Advancing Education Technology," in the January 2022 *Journal of Cardiothoracic Vascular Anesthesia*, reviews how "motion metrics" are used to assess proficiency and the technologies related to this method of assessing competency. The authors believe motion metrics may improve educational standards of learning, simplify the feedback process, and reduce the number of instructors required to conduct practice sessions. Once they are validated and standardized, they may also be used to evaluate technical competency as part of the certification process.


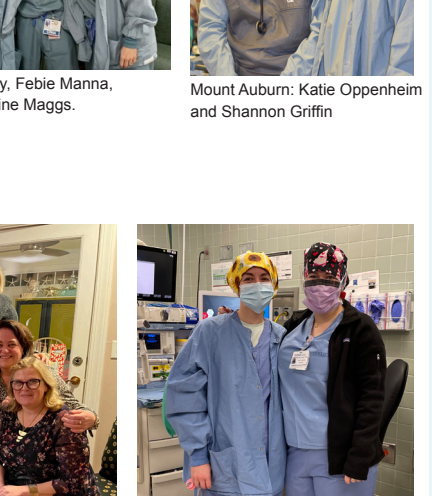
For abstract and full list of authors, go to: <https://pubmed.ncbi.nlm.nih.gov/34551885/>

Average Ratings of Manual Skills



Average Scores on Knowledge Exam



CONSCIOUS PLANET CORNER

When the doctor becomes the patient: A transformative experience

Dr. Bala Subramaniam, Director of the Sadhguru Center for a Conscious Planet, shared an article on the anniversary of his near-fatal incident at Harvard Publications online. You can read it [here](#).

SADHGURU CENTER'S MONTHLY SPEAKER SERIES

Impacts of Inner Engineering Practices on Mental Health of Professionals & Students

February 23rd 4-5pm ET

Please join us for our February Speaker Series. Register to attend here: <https://www.bidmc.org/sadhguru-center/speakerseries>

SADHGURU CENTER FOR A CONSCIOUS PLANET
Enhancing Consciousness, Cognition, and Compassion

Sadhguru Center Speaker Series

Sadhguru Center for a Conscious Planet presents virtual lectures and discussions highlighting the research and explorations of our multidisciplinary community of scientists, global experts, and thought leaders.

Impacts of Inner Engineering Practices on Mental Health of Professionals & Students
Wednesday, February 23rd, 4pm-5pm ET
Register: www.bidmc.org/sadhguru-center/speakerseries

Tracy Chang, PhD, MBA
Associate Professor
School of Management and Labor Relations
Rutgers University

Beth Israel Deaconess Medical Center
HARVARD MEDICAL SCHOOL
TEACHING HOSPITAL
Beth Israel Lahey Health

Dr. Chang will present these study findings on the effects of Inner Engineering practices on wellbeing and mental health of professionals and students. This includes Upa Yoga and Inner Engineering online (IEO) – a comprehensive 7-module self-transformation program.

She will also share the effects of IEO on positive and negative emotions, and how they can be used in future directions of these studies.

VIRTUAL PERSONAL WELLNESS PROGRAM

In response to the ongoing mental health pandemic, Sadhguru Center debuted its virtual Personalized Wellness Programs for leaders & professionals in healthcare and science. Learn evidence-informed yoga and wellness tools in 1:1 sessions to enhance your mental and physical well-being. [Program Interest Form](#)

About the Sadhguru Center: The Sadhguru Center is focused on understanding the relationship between human consciousness, cognition and compassion. The Center aims to support and enhance the mental and physical health of the community through research on comprehensive interventions, building collaborative partnerships, and offering techniques of well-being.

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We welcome your ideas for how we can better support you. Connect with us at info@sadhgurucenter.bidmc.harvard.edu. Learn more about our programs. [Learn more about our programs.](#)

Consciousness being the fundamental intelligence that controls both body and mind, it is the key to resolving all our issues with wisdom. - Sadhguru

SELECTED PUBLICATIONS
October – December, 2021

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