

Simulating High Altitudes to Help Patients with Heart Failure

Patients with chronic heart failure, in which the heart weakens and cannot pump enough blood to the rest of the body, often find it difficult to exercise and stay physically active. Simon Maybaum, MD, Medical Director of the Montefiore-Einstein Center for Advanced Cardiac Therapy and Associate Professor of Clinical Medicine at Albert Einstein College of Medicine, is adapting a novel strategy used by athletes to help improve exercise performance in these patients.

In a pilot study Dr. Maybaum and his colleagues completed over the past year, 12 patients with chronic heart failure sat in a sealed tent where the amount of oxygen in the air was gradually lowered to simulate high altitude conditions. Dr. Maybaum launched his study because he wanted to find out if these physiological changes could also benefit heart failure patients.

Over a period of 22 days, patients sat in the tent for 10 sessions lasting four hours

each. They started at a simulated altitude level equivalent to 1,500 meters and spent the last five sessions at a level equivalent to 2,700 meters. Dr. Maybaum explained that athletes use these tents for a strategy known as “sleep high, train low.” “They sleep in a tent with a low-oxygen content to simulate a high altitude, but they train at a normal altitude,” he said. “The rationale is that when your body acclimatizes to a low-oxygen environment, your blood becomes much more efficient at releasing oxygen to your muscles. Athletes can take advantage of these changes when they train in a normal oxygen environment and become stronger and gain endurance.”

Patients in the study tolerated the high altitude conditions well and their exercise performance significantly improved after they completed 10 altitude sessions. They also gained muscle strength and reported improvements in their quality of life.

“Dr. Maybaum’s is a landmark study because it provides a new mechanism to improve exercise capacity in a patient population that has limited quality of life,” said Mario J. Garcia, MD, Co-Director of the Montefiore Einstein Center for Heart and Vascular Care, and Chief of the Division of Cardiology. “Current heart failure treatments only go so far, and a heart transplant is not available to all patients who could benefit, and so we are constantly looking for new therapies.”

Recently, Dr. Maybaum and his colleagues presented this research at the annual meeting of the International Society for Heart & Lung Transplantation. The team is now planning a randomized, controlled trial in which some heart failure patients receive the altitude treatment and some do not. “Most likely, we’d put all the patients in this larger study on an exercise training program. To get the most benefit from the altitude treatment, you’d want to combine it with exercise training,” Dr. Maybaum said.

A Prescription for Literacy

Eric Stevenson, a New York State Assembly member representing the Bronx, read to children at Montefiore Medical Group’s (MMG) Comprehensive Health Care Center (CHCC) on August 11. The reading was held during Reach Out and Read of Greater New York’s annual Early Literacy Awareness Week, which encourages families to read aloud to their children to foster a love of reading and prepare them for success in school.

Reach Out and Read, a nonprofit organization, partners with pediatricians at CHCC and several other Montefiore locations to provide free books to local children and literacy guidance to their parents in both English and Spanish. Research shows that children who are read to develop good vocabularies and language skills.

Assemblyman Stevenson’s reading also coincided with National Health Center Week, during which community health centers across the country raised awareness about the important work they do.



Assemblyman Eric Stevenson reads to children at the Comprehensive Health Care Center, located at 305 East 161st Street.

MMG provides primary and specialty services at nearly two dozen locations in the Bronx and Westchester, serving patients of all ages. Benefits include convenient opening hours, same-day sick appointments, translation services and on-site laboratory services. Most insurance plans are accepted. For more information, call 1-800-MD-MONTE.

Dr. Safyer Among “Most Influential” in Healthcare

Steven Safyer, MD, Montefiore’s President and CEO, has been named as one of the “100 Most Influential People in Healthcare” by the publication *Modern Healthcare*. Readers and *Modern Healthcare* editors vote to determine who makes this annual list. Visit [eMontefiore](#) to see the magazine’s full list of high-profile influencers.

News

Clinical Research Lecture Series

This lecture series, titled “Clinical Research 101: Fundamentals of Clinical Research Methods,” is sponsored by the Einstein-Montefiore Institute for Clinical and Translational Research. Classes are held on Tuesdays, September 6 through November 15, from 5:30 - 7:00 pm at Albert Einstein College of Medicine. Classes are open to eligible students, residents, fellows and faculty. The application deadline is August 31. For pricing and additional information, contact Connie Foglia at 718-430-2080 or connie.foglia@einstein.yu.edu.

Medical Interpreter Program

Montefiore’s 56-hour Medical Interpreting Certification Program program is open to associates who are fluent in both English and another language (including sign language), and have approval from their managers. Associates can choose to take classes on seven consecutive Saturdays or on alternate Tuesday and Thursday evenings. No prior qualifications are needed, but associates are required to pass two language-proficiency entrance exams—one in English and another in their target language. The next semester starts in mid-September. There is no cost to the student. Graduates interpret for patients in their department as needed. For more information, call the Customer Service Department at 718-920-4943.

Get Inspired!

If you haven’t yet received your copy of *Inspired*, Montefiore’s newest publication for associates, you soon will. The inaugural issue is being mailed directly to associates’ homes. You can also visit www.montefiore.org/inspiredassociates to flip through the online version. Be sure to check back for future issues as well as new videos and other updates.

This quarterly magazine provides an in-depth look at what is happening across our growing and dynamic organization. We hope it will begin a conversation in which we can share ideas, thoughts and feedback about what makes working at Montefiore such a special experience. On that note, we want to hear from you! Email getinspired@montefiore.org and tell us what you find inspirational about working at Montefiore. Your stories could appear in an upcoming issue of *Inspired*.

Events

Psychiatry Grand Rounds

**Thursday, September 8 | 10:30 am–noon
Cherkasky Auditorium, Moses Division**

Philip R. Muskin, MD, Columbia University Medical Center, will be the guest speaker. His talk is titled “A Day in the Life of a Practitioner of Psychosomatic Medicine: An Analyst Who Wears a White Coat.”

7th Annual Ivan Kahn Symposium

**Thursday, September 8 | 5:00 pm
Cherkasky Auditorium, Moses Division**

The symposium is titled “Being a Leader in Patient Safety.” James Bagian, MD, PE,

astronaut, surgeon and patient safety expert, will be the guest speaker. Refreshments begin at 4:15 pm. For more information, contact Chinyere Mba-Jonas at 718-920-5026 or cmbajon@montefiore.org. This activity has been approved for AMA PRA Category 1 Credit.

Free Admission to the Bronx Zoo

**Saturday, September 17 | 10:00 am–5:30 pm
Sunday, September 18 | 10:00 am–5:30 pm
2300 Southern Boulevard**

Associates can show their Montefiore ID badge for free admission for themselves and up to three guests during Montefiore’s Corporate Weekend. There is also a 10 percent discount in the gift shop. For more information, call the Bronx Zoo at 718-220-5100 or visit www.bronxzoo.com.

Global Diabetes Symposium: Finding the Way to Global Action

**Sunday, September 18 | 2:00–8:00 pm
Geraldine Schottenstein Cultural Center
239 East 34th Street, Manhattan**

Albert Einstein College of Medicine’s Global Health Center and the International Diabetes Federation are sponsoring a global diabetes symposium. The event precedes the United Nations Summit on Non-communicable Diseases. Attendance is free but seating is limited. Register at www.einstein.yu.edu/gds. For more information, email global@einstein.yu.edu.

The “Dos” and “Don’ts” of Using Portable Devices

Portable electronic devices, including smartphones, USB drives, laptops, text pagers and iPads, are everywhere. Although these devices improve care by making it easier for us to access, store and share protected health information (PHI), their portability also makes it easier for the PHI of our patients to be lost, stolen or improperly accessed. In fact, the leading cause of HIPAA breaches is lost or stolen portable devices, primarily laptops. Visit the “Did You Know” section on [eMontefiore](#) to read the eight important “dos” and “don’ts” when using portable devices at Montefiore.

Published by the Department of Marketing and Communications. Please share story ideas with: James Fergusson, Editor, jferguss@montefiore.org / 718-920-2317. *Update* is produced for Montefiore associates to keep them up-to-date with Montefiore news, events, clinical innovations, research and recognitions.