A landmark year

This is our 20th year as Northwestern University’s integrative medicine program. Back in 1997 when the Osher Center for Integrative Medicine opened its doors, it was an innovator, one of the nation’s first academic health centers to respond to the growing awareness of “alternative” medicine by providing holistic care in a safe, evidence-informed environment.

Today, we remain a leader, breaking down barriers between conventional Western medicine and other healing techniques through:

• A thoughtful approach to integrative clinical care
• Robust research to build supporting data and expand understanding
• Education efforts to ensure that current and future health professionals are prepared to serve patients from a place of salutogenesis — supporting health rather than merely treating disease

This year also marks my 10th anniversary as the Center’s director. I feel extremely grateful to be part of an institution where our academic and medical leaders support our work, and like-minded, passionate colleagues care deeply about our mission.

This annual report allows us the opportunity to share with you highlights from the past year, including information about:

• A growing research program with a successful inaugural research symposium
• The launch of our American Board of Integrative Medicine (ABIM) approved integrative medicine fellowship
• Expansion of access to integrative medicine in underserved communities
• Government grant awards
• Collaborations with new departments ranging from preventive medicine/epigenetics to pediatric transplant

The year ahead will be one of fruition, with the seeds we planted over the past year manifesting in new research and new offerings. We look forward to celebrating and envisioning our future with our advisory board, patients and community members at our next fundraiser!

Melinda Ring, MD, FACP
Executive Director
Osher Center for Integrative Medicine at Northwestern University
Drs. Pat and Carl Greer Distinguished Physician in Integrative Medicine and Clinical Associate Professor of Medicine and Medical Social Sciences, Northwestern University Feinberg School of Medicine

Letter From the Director
Expanding our understanding and evidence base

We have three overarching goals for the research program at the Osher Center: consolidate Northwestern Medicine integrative medicine research, foster transdisciplinary collaboration and support integrative medicine investigators.

In FY17, we had success in all three of these areas:

To consolidate the wide range of integrative medicine research being carried out across Northwestern Medicine, we hosted the inaugural Osher Center Research Conference in January 2017. Northwestern Medicine and Northwestern University scientists presented on research ranging from acupuncture in cardiovascular disease to yoga and mindfulness. The next research conference will be held in the Fall of 2018.

In Spring 2017, to foster transdisciplinary collaborations, we unveiled an interactive, searchable map that lists integrative medicine research published by Northwestern Medicine investigators and illustrates the collaborations among researchers across areas of integrative medicine. The map appears on the Osher Center website at www.feinberg.northwestern.edu/sites/ocim/im-network/index.html.

To support investigators conducting rigorous science that will grow the empirical evidence base for integrative approaches to health, we began offering small grants to investigators at Northwestern Medicine. The new IM AWARE Research Pilot Grant Program is intended to support 12- to 15-month pilot studies for investigators who wish to pursue externally funded integrative medicine research.

We have selected three proposals to support with this grant program, one from each of our core research areas.

ROSE – Resilience Intervention for Pre-Operation Stress and Emotion
Principal Investigators: Elfriede Pahl, MD
Examining the Effects of Juicing Fastling on Epigenetics
Principal Investigators: Li-Jiang Hou, MD, PhD; Melinda Ring, MD; Brian Joyce, PhD
Traditional Chinese Medicine for Polycystic Ovarian Syndrome (PCOS)
Principal Investigators: Christina Boots, MD; Melinda Ring, MD

Research Fellow Seeks to Reduce Burnout
Elaine Cheung, PhD, is the first post-doctoral research fellow at Northwestern Medicine Osher Center for Integrative Medicine. Dr. Cheung’s research is focused on examining factors that promote empathy, resilience and psychological well-being in the context of stress.

In July 2017, Dr. Cheung was awarded the National Science Foundation’s Post-doctoral Research Fellowship in Social, Behavioral and Economic Sciences to conduct research that addresses empathy decline and burnout in medicine. The project will examine whether cultivating a diverse emotional repertoire, termed emodiversity, may promote a more balanced and flexible approach to coping with stress, and will explore whether an intervention aimed at increasing emodiversity — LAVENDER: Leveraging Affect and Valuing Empathy for Nurturing Doctors’ Emotional Resilience — may help to protect against empathy decline and burnout in medical training.

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A searchable, interactive map on the Osher Center website illustrates collaboration and publications involving Northwestern Medicine integrative medicine investigators.
Clinical Care

Growing services to meet patients’ needs

In FY17, we expanded access to a full range of services for our youngest patients, including clinical care from a pediatrician, naturopathic doctor and pediatric massage therapist.

We also expanded the availability of integrative medicine at Federally Qualified Health Centers through a variety of educational offerings for clinicians. This partnership is important as we seek to bring integrative medicine to at-risk populations beyond our walls.

Patients benefit from integrative medicine

Preliminary data from an ongoing study involving Northwestern Medicine Osher Center of Integrative Medicine and 17 additional integrative medicine centers support the hypothesis that our patients are receiving tangible benefits from the care they receive.

Patients Receiving Integrative Medicine Interventions Effectiveness Registry (PRIMIER) is a study that is collecting practice-based data from our center and 17 other integrative medicine clinics across the country. We have been a leader in recruitment, with more than 600 patients enrolled.

Some interesting data are beginning to emerge from this study:

Most patients who visit integrative medicine clinics tend to come in for integrative medicine physician consults and wellness visits.

Across all 18 sites, patients who visited integrative medicine clinics showed improved psychological adjustment over time (reduced levels of stress, anxiety, depression, sleep disturbance and fatigue).

Relative to the other sites, patients who visited our Center showed unique improvements in physical outcomes such as improved sleep quality, reduced pain interference and intensity, and improved physical functioning.

Patients who visited Northwestern Medicine Osher Center of Integrative Medicine showed marked improvement in their confidence and ability to take a proactive role in managing their own health and healthcare.
Education

Building a team of integrative medicine ambassadors

What is integrative medicine, and how can I incorporate it into Western medical practice? That’s a question we hope every pre-medical student, medical student and physician is asking. It’s a question we’re answering.

For undergraduates, we have created a summer internship that provides students with an opportunity to explore the field of integrative medicine. Through this internship, students can gain clinical exposure by shadowing physicians and complementary medicine providers and work with faculty to gain hands-on experience in methodologies, theoretical approaches and scientific applications to integrative medicine studies.

For medical school students, we offer a variety of ways to incorporate integrative medicine into their current studies:

• Area of Scholarly Concentration (AOSC) in Integrative Medicine allows Northwestern University Feinberg School of Medicine (FSM) students to develop a research project in collaboration with our research faculty.

• Two hands-on electives offered to FSM students offer a deeper understanding of integrative medicine principles that they can use in their own lives as well as in clinical settings: Mind-Body Skills and Cooking Up Health.

• An integrative medicine elective provides FSM students the opportunity to participate in a two-week rotation that consists of ambulatory patient care and experiential learning. A two-week independent study may also be pursued before or after the rotation.

For students, healthcare providers and staff members, we offer one-hour Grand Rounds presentations on the FSM campus. These sessions provide an opportunity to learn more about topics in integrative medicine. In the past year, we co-sponsored four sessions covering the role of nutrition and research in an era of obesity and diabetes, biological age and health outcomes, mindfulness interventions in underserved communities, and pediatric integrative medicine.

For clinicians, we offer several clinical fellowships. Our first Integrative Pediatric Fellow, Rupa Mahadevan, MD, completed her fellowship in FY17. This fellowship allowed us to expand pediatric services at the center, and ultimately brought us a new member of the staff, as Dr. Mahadevan has been named associate education director. In her new role, Dr. Mahadevan will enhance our ability to offer educational programs while overseeing two new family medicine fellows at our center: Sreela Namboodiri, MD, who is currently seeing patients; and Anna Balabanova, MD, who will join us in 2018.

For faculty, the Faculty Scholars Program in Integrative Healthcare (FSP) prepares participants to incorporate theoretical, scientific and clinical information related to integrative medicine into their respective fields. FSP participants study complementary, alternative and integrative healthcare research, teaching and practice in order to become champions of integrative health care.

Participant feedback inspires us to continue this unique Faculty Scholars Program:

“Rejuvenated my love of medicine.”

“I have opened my eyes to an entirely new area of medicine.”

“One of the most significant personal and professional experiences of my life.”

Sreela Namboodiri, MD: Family Medicine Fellow

Sreela Namboodiri, MD, currently sees patients at the Osher Center. Dr. Namboodiri desires to understand the wholeness of a person’s life and address root causes of illness in order to better promote health and wellness, and she is particularly interested in the intersection of social justice and medicine.

She pursued a Family Care Track and research experiences in medical school that deepened her understanding of how social, environmental and economic factors impact health. She was co-awarded an Arnold P. Gold Foundation Student Service Fellowship for research related to food insecurity in pregnant women and the food environment in Baltimore. Through these experiences and her family medicine residency, Dr. Namboodiri realized that looking at the full context of a person’s life not only includes social and economic factors, but also their mental, emotional, and spiritual well-being.
Leadership

A national voice

At the Osher Center for Integrative Medicine, we are committed to improving the health and well-being of people across the country. Our representatives are filling leadership positions and nurturing the growth of integrative medicine from coast to coast.

Melinda Ring, MD
Elected member of the board of the American Board of Integrative Medicine, a new credentialing examination that further elevates the field of integrative medicine and serves as a marker of excellence in integrative medicine healthcare

Co-editor of the June 2017 special issue on integrative medicine in the medical journal Primary Care: Clinics in Office Practice, with articles authored by Dr. Ring, Dr. Victorson, Dr. Mahadevan and several members of the international Osher Collaborative

Judith T. Moskowitz, PhD, MPH
Elected member of the Academy of Behavioral Medicine Research, the honorary senior scientist society for those whose research exists at the interface of behavior and medicine, with membership reserved for those with national and international behavioral medicine research excellence

President-elect of the International Positive Psychology Association (IPPA)

Recipient of the prestigious Contributions to Positive Health Award at the Fifth World Congress on Positive Psychology held in Montreal, addressing Dr. Moskowitz for her "innovative, sustained and valuable contributions to positive health psychology.”

David Victorson, PhD
Chair of the Working Group for the Academic Consortium for Integrative Medicine (www.imconsortium.org), an organization with which we continue to be actively involved.

Researcher of mindfulness meditation through his lab, Consciousness in Health

Founder and executive director of a nonprofit organization called True North Treks (www.truenorthtreks.org), which provides free, week-long, mindfulness backpacking and canoeing trips for young adults with cancer

National advocate and lobbyist for increased cancer-related appropriations

As one of six members of the international Osher Collaborative for Integrative Medicine (www.oshercollaborative.com), we continue to partner with our fellow Osher Centers on initiatives to advance integrative medicine across the globe.

Community Engagement

Serving our community

The Osher Center for Integrative Medicine is located in downtown Chicago, a city teeming with ethnic and financial diversity. We believe all people deserve excellent health and are committed to reaching out to underserved populations in our community.

Greer Seed Grants

With generous Greer Seed Grants through the Greer Foundation (www.greercharities.com), we are involved in two unique programs that are making a difference in the lives of nearly 300 Chicago residents.

• Through research and funding, we helped ALAS-WINGS, a 501(c)(3) non-for-profit organization, offer yoga classes for Latina women who have survived breast cancer and for their friends and family members. Preliminary data show the program has a positive effect on the lives of participants, with reports of weight loss, increased energy, significant decrease in blood pressure and reduced depression. In just the first four months of the two-year program, more than 100 people have participated.

• The Mindfulness-Based Depression Intervention program, led by Osher investigator Inger Burnett-Zeigler, PhD, implements a mindfulness-based intervention for depression for disadvantaged women in a Federally Qualified Health Center (FQHC). The project aims to provide care for 160 adult depressed women over 24 months.

Nutrition education in grade schools

We offer Cooking Up Health, a culinary medicine elective for medical students at Northwestern University Feinberg School of Medicine. The course is designed to increase students’ confidence regarding nutrition and cooking for themselves as well as enhance their ability to provide counseling in these areas in the clinical setting. A unique aspect of this course is the service component that brings medical students into local grade schools. The FSM students deliver a prepared curriculum to at-risk grade school students in Chicago Public Schools to increase their knowledge and understanding of nutrition. Through this course, about 60 Chicago schoolchildren learned about the importance of healthy eating.

Good Food Is Good Medicine conference

Approximately 150 community members attended this successful conference held at Northwestern Memorial Hospital that centered on the importance of nutrition and perceptions of food to heal the body.
Financial Overview

Expenditures: Total
- 71% Operations
- 9% Research Grants
- 21% Philanthropy

Expenditures: Non-Operations
- 0% Education
- 28% Leadership
- 64% Research
- 0% National and Community Outreach
- Other

Revenue Sources
- 18% Operations
- 2% Philanthropy
- 8% Research Grants

Faculty & Staff

**Executive Director**
Melinda Ring, MD

**Director, Program Development**
Nancy Hayop, LCSW

**Director, Operations**
Ava Reitneris

**Director, Research**
Judy Moskowitz, PhD, MPH

**Associate Director of Education**
Rupa Mahadevan, MD

**Practice Manager**
Briana Rader

**Resource Coordinator**
Jill Stains, CPT-AFAA

**Development**
Executive Director, Foundation Relations and Corporate Engagement
Sarah Ford

**Vice President, Northwestern Memorial Foundation**
Dave Sack

**Associate Dean for Development**
Terri Ollon

**Clinical Team**
- Mindy Cramer, DC
- Maggie Crowley, PsyD
- Candice Doreke-Hochberg, LMT
- Charles Falzon, MD, MBA
- Howard Feldman, PhD
- Judy Fuso, ND
- Ania Grinstein, LAc
- Mamoon Kaplan, MD
- Fang Lin, LAc
- Rupa Mahadevan, MD
- Mary Anne Meyer, CNP
- Jane Pockish, MD
- Melanie Morey, PsyD
- Sreela Namboodiri, MD
- Melanie Ring, MD
- Dianna Sapelli-Russ, LMT
- Tatjana Saffran, LAc
- Jill Stains, CPT-AFAA
- Carly Treager, RD
- Sharon Vacino, MD
- Chris Wilson, LMT

**Research Team**
- Elizabeth Addington, PhD
- Danny Bega, MD
- Inger Burnett-Jeager, PhD
- Elaine Cheung, PhD
- Ken Feingold, PhD
- James Griffin, PhD
- Suasa Massey, MD
- Patty Moreno, PhD
- Jaison Ng, PhD
- David Victorson, PhD
- Li Liu, PhD
- Betina Yanez, PhD

**Group Program Instructors**
- James Atkinson
- Regina Cadenhead
- Jamie Klausing
- Tara Parker
- Tonia Reinhold

**Philanthropic Advisory Council**

**Council President**
Jin Karas

**Members**
- Fabrice Braunrot
- Carey Cooper
- Eric Cooper
- Tara DeMarzo
- Laura Elsaden
- Laura Flynn
- Marc Friedman
- Sheila Gutman
- Paul Heitkam
- Eileen Jannotta
- Lori Lyman
- Karen Mixon
- Colette May
- Diane Meagher
- Molly O’Neil
- Chuck Peruchini
- Elizabeth Pruett
- Brett Rentmeister
- Sue Shattock
- Avanti Singh
- Kausar Singh
- Tina Todt
- Aaron Underwood
- Molly Vaile
- Tracy Ward
- Meredith Woolf-Prince
Looking Ahead

Changing the world

Every day, the Osher Center for Integrative Medicine at Northwestern University is working toward helping people experience the healing effects of integrative medicine for enhanced health and well-being. While our FY17 activities continue to make an impact across the world, the coming year is bringing new opportunities and expansion.

Research

David Victorson, PhD, was awarded a five-year, $3.7 million R01 grant in July 2017 for his study, Creating and Optimizing Mindfulness Measures to Enhance and Normalize Clinical Evaluation, which seeks to apply innovative instrument development methods to create a standardized measurement system of mindfulness.

Several studies made possible with grant money in FY17 will begin data collection and reporting in the coming year, expanding the evidence base for integrative medicine.

Osher Center researchers are waiting for decisions on about 40 grant proposals to federal agencies and private foundations. We are optimistic that despite the current challenging funding climate, some of these will be awarded and Osher researchers will be able to turn our attention to conducting those studies.

We plan to host and encourage several networking and research collaboration events. Northwestern Medicine hosted the Integrative Medicine for the Underserved (IM4US) conference in August 2017 and will host the Society for Integrative Oncology in November 2017. In addition to presenting the work of Osher Center researchers, these conferences offer the opportunity to form new collaborations with other integrative medicine researchers, thereby strengthening our research program.

We plan to form interest groups and host meet and greet events to encourage research, particularly in specific research areas that we are targeting.

Clinical care

The integrative group visits made possible with HRSA and Greer grant money will offer patients a new and innovative way to receive care for conditions ranging from chronic pain to obesity.

The addition of new family medicine fellows will deepen and expand our ability to offer whole family care.

Education

Our new associate education director, Dr. Mahadevan, will enhance the breadth and depth of opportunities we offer to expand knowledge of integrative medicine.

We have invested in additional faculty training to facilitate the Mind-Body Medicine course, and sessions will be offered to FSM faculty in addition to students.

The Faculty Scholars Program will enhance the practice and teachings of 12 more physicians in the coming year. Further, seeding the academic community with projects, ideas and collaborations.

Leadership

Our leadership roles within national organizations will further shape the future of integrative medicine.

Our support of, and partnership with, fellow members of the Osher Collaborative will enhance research and education initiatives both within our Center and worldwide.

Community engagement

In addition to the culinary medicine elective, the ALAS-WINGS yoga class and the MBSR intervention, we will actively seek ways to bring integrative medicine into the surrounding community and underserved populations.

Through conferences, workshops and classes, we will educate community members regarding integrative medicine and its impact on health and well-being.

A special thank you

On behalf of our faculty, staff, patients and the integrative medicine community, we would like to thank the many donors who have invested time, money and resources that allow the Osher Center for Integrative Medicine to continue to thrive. As a non-profit organization, we depend on the generosity of our supporters, and we are grateful for their partnership as we grow the field of integrative medicine and improve the health and well-being of people across the globe.

Our philanthropic advisory council, IMAWARE (Integrative Medicine: Advising with Awareness, Resources and Education) has been instrumental in our success. For more information about IMAWARE, visit imaware.org.

We also express deep appreciation for the generous, multi-year financial support we’ve received from the Bernard Osher Foundation, The Greer Foundation and the Malkin Family.