DEAR FRIENDS,

When my family gathered for the winter holidays, I had the joy of observing my two sons taking on new, life-changing roles. David is about to become a doctor and Aaron has just become a father. These transformational events have led me to wonder: How will my sons’ journeys in medicine and parenthood be different because of the work we do at the Institute? Instead of reaching for a prescription pad, will David recommend his patients take cooking classes or daily nature walks? Will Aaron model healthy eating for his daughter and teach her to meditate? I hope so! These imagined family snapshots reflect the Institute’s vision for a bold, new approach to health care—both an improved medical system for those who are sick and a redoubled emphasis on keeping individuals and communities healthy in the first place. The Institute’s activities during 2017, as described in this report, form a vibrant mosaic of how we’re working towards this vision.

On the one hand, we are supporting integrative, holistic care that brings modalities like music, acupuncture, and visualization to the hospital bedside and beyond, so patients can overcome stress and pain with the least medication necessary.

On the other hand, through our Mission Thrive and Vet Arts Connect initiatives, we are working with students, schools, neighborhoods, wounded service members, and veterans, helping them lead healthier lives and heal from trauma through nutrition, mindfulness, the arts, and spending time in nature. Going a step further, we empower participants to develop skills, become community leaders, take charge of the programs we’ve created, and build upon them.

While promoting integrative health approaches at the institutional and community levels, we are also pushing the frontiers of scientific understanding and health innovation. The unparalleled work of our Scholars and Fellows leads to paradigm-shifting answers about the determinants of health and the equally complex process of healing from illness and trauma.

The Institute’s journey to build healthy communities and make our nation’s health care system truly about health is made possible only by you, our fellow travelers and supporters. I thank all of you for your belief in this vision and the resources to help us pursue it.

Among our plans for 2018 are the debut of a culinary health and medicine program in a freshly renovated teaching kitchen, and an expanded initiative using arts as a catalyst for healing. It features an exhibition by Devin Allen, a young social justice photographer from Baltimore, whose powerful work will provide a springboard for community dialogue.

We hope you enjoy learning about the Institute’s recent accomplishments and invite you to join us in creating the future of health. Please follow us on social media, sign up for classes and volunteer groups, and donate to our many initiatives.

TO YOUR GOOD HEALTH!

Brian Berman, MD
Founder and President
OUR MISSION

• Catalyze new ideas in health
• Understand the complex network of factors that influence health
• Promote the well-being of individuals and communities
THE CHALLENGE

Our nation is at the forefront of medical innovation, with state-of-the-art health care facilities and talented, well-trained professionals. Why then, do we have alarming rates of chronic disease and rising health care costs? The reasons are complex. A major contributor is our country’s emphasis on managing illness, rather than promoting wellness. **Health care accounts for just 10 percent of an individual’s health status**—yet it consumes more than 90 percent of the U.S. health budget.
HOW WE’RE CREATING THE FUTURE OF HEALTH

The Institute for Integrative Health pursues bold ideas that will help people achieve optimal wellness throughout their lives and advance whole-person care, especially for those who are sick. Challenging the status quo, we bring together the brightest minds across institutions and fields to catalyze game-changing solutions and insights that will help ignite an epidemic of health.

WHAT DETERMINES YOUR HEALTH?

GENES

BEHAVIOR

The Institute develops and measures the impact of programs that empower people to create healthy lifestyles. | PAGES 12-17; 19

ENVIRONMENT

We support research that examines how environmental factors, such as exposure to nature and art, shape health. | PAGES 18-20

HEALTH CARE

We advance model healing environments and provide opportunities for professionals to learn about healing approaches. | PAGES 16-18; 20

Socio-economic factors

We convene forums and support projects to shed light on the socio-economic circumstances underlying health disparities. We collaborate on strategies to reduce them. | PAGES 10-11

PUBLIC POLICY

We enable projects that improve policymakers’ knowledge of community health issues and how integrative strategies can address them. | PAGES 11

SCIENTIFIC EVIDENCE

We support pioneering projects that bear evidence about the nature of health and healing, and produce novel methods for scientific discovery. | PAGES 8-11; 18-20
2017 HIGHLIGHTS

- MAPPING THE HEALING JOURNEY PAGE 20
- GOING GLOBAL WITH THE GREEN ROAD PAGE 18
- HEALING COMMUNITY TRAUMA PAGE 10
- CELEBRATING FIVE YEARS PAGE 12
- A MODEL FOR COMMUNITY WELL-BEING PAGE 9
- EXPLORING ART’S IMPACT ON SICK CHILDREN PAGE 19
CATALYZING BOLD IDEAS

THE FUTURE OF HEALTH is built upon discoveries and innovations that spring from multidisciplinary dialogue. Such cross-pollination of ideas is a key aim of the Institute’s Scholars and Fellows Program, which assembles a diverse international network of accomplished and emerging visionaries. In addition to fostering their collaborations, the Institute provides Scholars and Fellows with the freedom and resources to take their work in new, pioneering directions.

RESTORING WELL-BEING
Institute Scholars and Fellows are leading efforts to understand how individuals and communities can recover from trauma and move towards a sense of hope and well-being.

PAUL DIEPPE, MD
“HOW ARE YOU HEALING?” EXHIBIT

While the medical field focuses on cures, there is little discussion or understanding about the healing experience. As part of his Institute-supported work, Scholar Paul Dieppe, MD, explored the myriad of ways people experience healing. In the process, he collected materials, primarily created by the public in response to the question: “What does healing mean to you?” Drawing from these, Dieppe developed an exhibit that debuted last spring at Musgrove Park Hospital in Somerset, England, offering respite and inspiration for patients, visitors, and staff. In August, it went to Wales for the 2017 Green Man Festival, where it was part of Einstein’s Garden, an area featuring stimulating encounters with science and nature. The exhibit will come to the United States in 2018.

Dr. Dieppe (middle) with his collaborators on the research and exhibit: (from left) Sarah Goldingay, Ph.D., Sara Warber, MD, Elizabeth Dieppe, and Emmylou Rahtz, Ph.D.
Community well-being is broadly understood as a holistic, positively framed assessment of the overall health of a community. It comprises multiple domains, such as physical health, mental health, financial security, availability of social and emotional support, sense of meaning and purpose, and feeling of belonging to the community. Institute Fellow Carley Riley, MD, MHS, MPH is being funded by the Institute to develop a comprehensive actionable model demonstrating how policies, programs, and cultural factors influence the collective well-being of a community. The development of an integrated model will inform how to create resilient communities.
HEALING TRAUMA IN OUR COMMUNITIES

PANEL DIALOGUE

The Institute hosted a rich dialogue on healing trauma in our communities to examine trauma’s impact and the needs of Baltimore City residents and military veterans. Hearing from a panel of experts, participants gained a deeper understanding of the interconnectedness of traumatic experiences across populations and lifespan. This knowledge is vital to informing our next generation of programming for youth, families, and military veterans.

Institute Scholars and Fellows were joined by panelists Andrew Masters, M.Ed, Youth Health & Wellness Coordinator, Baltimore City Health Department; Christina Bethell, PhD, MPH, MBA, Director of the Child & Adolescent Health Measurement Initiative and Professor at the Bloomberg School of Public Health at Johns Hopkins University; and Kenneth Falke, MPP, U.S. Navy (RET), Chairman and Founder of Boulder Crest Retreat for Military and Veteran Wellness and the EOD Warrior Foundation.

LOOKING AHEAD TO CATALYZE BOLD IDEAS, THE INSTITUTE PLANS TO:

• Display the “How are You Healing?” exhibit, created by Scholar Paul Dieppe, at the International Congress for Integrative Medicine and Health in May 2018 in Baltimore.
• Develop a citywide initiative—Creating Well-being: Healing Ourselves, Healing Our City—using art and other creative endeavors in collaborative activities to inspire healing in individuals and communities.
GEORGE KAPLAN, PHD
BOOK ON COMPLEX SYSTEMS & POPULATION HEALTH

New tools and modeling methods are essential to help policy makers know what works to support health in our communities. Institute Scholar George Kaplan, PhD, published the book, *Growing Inequality: Bridging Complex Systems, Population Health and Health Disparities*. The culmination of over five years of work by experts from more than a dozen disciplines, this book represents a bold step forward in identifying why some populations are healthy and others are not.

*Growing Inequality* builds upon Kaplan’s research as an Institute Scholar in which he applied a complex systems approach, using computer simulations to uncover insights about the interaction of factors that shape population health. Describing a series of studies, including Kaplan’s, that apply the techniques of systems science, the new book shows how these tools can be used to increase our understanding of the individual, group, and institutional factors that generate a wide range of health and social problems.

ANDREW AHN, MD, MPH
XPRIZE

Do-it-yourself health screening kits are growing in popularity, with a global market projected to exceed 70 billion dollars a year by 2022. These kits currently screen for one condition at a time, but imagine what it would be like to have a device at home capable of diagnosing multiple ailments, from strep throat to melanoma. Institute Fellow Andrew Ahn, MD, MPH, has been working towards that future. Last spring his team, Dynamical Biomarkers Group, was named the second-place winner of the Qualcomm Tricorder XPRIZE competition, a global contest to create a consumer-friendly device—weighing no more than five pounds—that can diagnose at least 13 medical conditions.
EMPOWERING PEOPLE FOR HEALTHY LIVES

MISSION THRIVE

The Institute’s Mission Thrive program platform empowers Baltimore communities with education and tools for taking charge of their health and well-being.

INSPIRING COMMUNITY LEADERS

Employing 30 Baltimore youth in 2017, our Mission Thrive Summer program completed its fifth year of cultivating young health advocates to catalyze positive changes in their communities. Participants from Baltimore high schools spent five weeks at Real Food Farm developing life skills, such as growing and harvesting food, cooking nutritious meals, and learning to manage stress through mindfulness.

To help build tomorrow’s integrative health workforce, the Institute offers participants opportunities for growth even after they finish Mission Thrive Summer. Some are hired as program staff in future years, and last fall, three alumni assisted a professional chef, Chef Egg, with a cooking workshop series at the Baltimore Farmers’ Market.

Mission Thrive Summer participants educated over 250 members of the community at its youth-led health expo and Family Feast Night.
As a Mission Thrive Summer crew leader last year, 20-year-old Tykiera Simmons held one of the program’s key leadership positions. For her, it was an important milestone on a journey of self-discovery that began in 2013, when she was one of the first participants in the program.

Then a high school freshman, Tykiera was very shy and kept to herself recalls Brandin Bowden, the Institute’s director of community programs. But by the end of the summer, Bowden saw her step out of her comfort zone at the program’s youth-led health expo. The young woman, who had been so reserved weeks before, confidently educated members of the community about nutrition.

She returned to Mission Thrive Summer the following year and continued to blossom as an entry-level member of the program staff. “Tykiera demonstrated tremendous growth and really lit up as a promoter of health and well-being,” said Bowden.

That passion and poise served her well last summer when, as a Mission Thrive Summer crew leader, she mentored a crew of eight students. Educating them about healthy lifestyle choices and encouraging them to try new things—just as she had been encouraged—were her favorite parts of the job.

Tykiera plans to make a career out of inspiring people to lead healthy lives and is currently pursuing a degree in nursing with a focus on human services. “Not too many people have access to healthy options, so I want to make it better and educational for them,” she said.
CULTIVATING COOKING COACHES

Five Times a Feast, our community-based cooking program, grew substantially in 2017, adding eight new partner sites. To stimulate this growth, we launched a cooking coach training course in which Five Times a Feast “graduates” became qualified to lead the six-week program in their communities. The Institute provided trainees with 35 hours of hands-on instruction as well as seed funding for ingredients and cooking equipment. As a result, exponentially more Baltimore residents are now learning how to prepare healthy, affordable home-cooked meals.

HOW TO GET TEENS TO EAT MORE VEGETABLES

Getting kids to eat more vegetables is a challenge facing the U.S. Department of Agriculture’s National School Lunch program (and parents everywhere). The results of our two-year study, completed in 2017, suggest that a dash of spices and herbs may be a solution. Conducted at Cristo Rey Jesuit High School in Baltimore, in partnership with the University of Maryland Center for Integrative Medicine and the McCormick Science Institute, the study found that adding spices and herbs increased students’ consumption of vegetables by 20 percent.
FOSTERING TEACHERS’ WELL-BEING

At least 30 percent of teachers leave the profession within five years, and high stress is one of the reasons. In partnership with Cristo Rey Jesuit High School, the Institute examined the feasibility of a staff wellness program featuring stress reduction activities. Classes in qigong, mindfulness, and yoga were well received, and findings of the exploratory program will inform the roll-out of an expanded initiative.

LOOKING AHEAD TO EMPOWER PEOPLE FOR HEALTHY LIVES, THE INSTITUTE PLANS TO:

- Launch an online learning platform to expand the reach of our educational programs.
- Present a series of events and workshops focused on healing and the arts, including an exhibition of work by world-renowned Baltimore-based photographer Devin Allen.
- In conjunction with the exhibition, present programming to raise awareness of art as a tool for healing and the supporting scientific evidence.
- Implement and evaluate an expanded mind-body program, aimed at helping staff of a Baltimore City high school manage stress.
- Refine Mission Thrive program models and tool kits to prepare them for copyright and distribution.
Nearly 400 people attended this inaugural event featuring over 55 local artisans, retailers, and speakers. A VIP breakfast with Dr. Alessio Fasano was followed by demonstrations and wellness talks on flu prevention, Ayurveda, gluten-free cooking, reiki, qigong, and more.

The Institute’s headquarters was an active hub for integrative health education, attracting more than 700 health care practitioners and consumers to participate in more than 20 workshops, events, and trainings throughout 2017.

A panel of experts shared evidence-based tips and research on the impact of nutrition, environment, mindfulness, and exercise on metabolism and weight.
Participants gained strategies for restoring and protecting their digestive health and learned how to prepare fermented foods.

Dieticians, nutritionists, and consumers gained knowledge and tools for making educated choices and recommendations for vitamins, probiotics, herbs, and more.
ADVANCING INTEGRATIVE HEALTH CARE

NATURE & THE ARTS: TOOLS FOR WELL-BEING

Encounters with nature and the creative arts offer significant therapeutic benefits but are under-utilized as tools for treatment and self-care. In 2017, the Institute worked to raise awareness of their positive health effects, expand the base of scientific evidence, and provide communities in need with greater access to arts and nature experiences.

GOING GLOBAL WITH THE GREEN ROAD

Our Green Road project, a two-acre woodland oasis created to support service members’ recovery at Walter Reed National Military Medical Center, gained international attention as a model for healing environments. Institute Scholar Fred Foote, MD, a retired Navy captain, and other members of the Green Road team inspired thousands of leaders around the world by delivering presentations at prestigious forums, such as the Culture of Health and Wellbeing International Conference in Bristol, England; the Council of Educators in Landscape Architecture in Beijing, China; Planetree in Baltimore; and the Republic of Korea Armed Forces Medical Command in Seoul.

MINING INSIGHT FROM JOURNALS

The Green Road is one of more than 130 natural sites in the Baltimore-Washington-Annapolis region made possible by the TKF Foundation’s Nature Sacred initiative. Visitors to these green spaces are invited to share reflections in waterproof journals. In partnership with TKF, the Institute selected two fellows who will analyze visitors’ journal entries to gain insights into the mental and emotional impact of spending time in nature.
CONNECTING VETERANS WITH ARTS & NATURE EXPERIENCES

Engaging with nature and the creative arts can enhance the well-being of military veterans and ease symptoms of post-traumatic stress, traumatic brain injury, and depression. In 2017, our new Vet Arts Connect initiative forged partnerships to create more of these opportunities for Maryland veterans. We collaborated with PsychArmor Institute to establish a free online training site for our program partners, and began a research study, to be completed in 2020, evaluating the impact of arts and nature activities on veterans. Here are some program highlights:

OLIVE BRANCH AND LAUREL CROWN
Veterans explored themes of peace and war in the Bard’s plays and delivered a moving performance in this acting workshop with Chesapeake Shakespeare Company.

VETERANS HIKE ACROSS MARYLAND
We teamed with the Mid-Atlantic Hiking Group to launch a series of five hikes totaling 41 miles on the Appalachian trail.

IMPROV 101 FOR VETERANS
Veterans learned the foundations of improvisational theater from Baltimore Improv Group in an eight-week class culminating in a public performance.

EXPRESSING EMPATHY WITH BESPOKE ART

While most artwork in hospitals isn’t produced with a particular person or goal in mind, artists are now leading a movement to create custom-tailored art that promotes specific health outcomes, such as reduced stress or pain. In 2017, Scholar Judy Rollins, RN, PhD, led Institute-funded research on the impact of bespoke art created for hospitalized children. In the study, contemporary artists created personalized artwork to reflect children’s feelings about their illness or hospitalization. Rollins’ findings have the potential to influence the development of art programs at hospitals across the country and beyond.

Shown above right are details of works created for the study by artists Lori Boocks (top) and Terry Sitz.
EXPLORING HEALING ENVIRONMENTS

A person's environment can profoundly impact their sense of well-being and, in some cases, how well they heal. The Institute convened a panel of experts to envision future clinical spaces designed for optimal healing. The discussion focused on advances in lighting to enhance neurological rehabilitation and novel hospital designs to support rest and recovery. With more people living longer, innovative ideas in health care design are vital to the future of medicine.

Panelists were (top left circle) Mohammed Gharipour, PhD, Associate Professor, School of Architecture and Planning at Morgan State University; (clockwise) David B. Morris, PhD, author of “Eros & Illness” and Emeritus Professor of Literature, University of Virginia; Institute Scholar George Brainard, PhD, Professor of Neurology and Director of the Light Research Program at Thomas Jefferson University; and Rebecca S. Etz, PhD, Associate Professor, Department of Family Medicine and Population Health at Virginia Commonwealth University.

MAPPING THE HEALING JOURNEY

Few studies have explored patients’ experience of healing and how it can be nurtured outside the medical system. To help fill that gap, a landmark paper presenting a model for the “healing journey” was published by Institute Scholars Kurt Stange, MD, PhD; Paul Dieppe, MD; and David Jones, MD, along with John Scott, MD and Sara Warber, MD. The authors are hopeful that greater understanding of patients’ healing journeys will positively influence the way practitioners, caregivers, and communities support those who are ill.
SUPPORTING INTEGRATIVE PAIN MANAGEMENT

The Institute continues to support the use of integrative approaches to treat patients’ pain and improve their well-being at the University of Maryland Medical Center and R Adams Cowley Shock Trauma Center. A team from the University of Maryland Center for Integrative Medicine delivers therapies—such as reiki, therapeutic touch, and acupressure—at bedsides.

LEADING ON THE INTERNATIONAL STAGE

Recognized internationally for their expertise, the Institute’s leaders and Scholars serve as advisors on emerging issues and innovations in medicine. At the 2017 World Congress for Integrative Medicine and Health in Berlin, Brian Berman, MD, co-chaired a plenary session on integrative clinical care. Institute Scholar Judy Rollins, RN, PhD, served on the new Arts in Medicine Program committee and chaired a symposium on the role of the arts in hospitals. Scholar Claudia Witt, MD, MBA, co-chaired the research programming committee and led three symposia on: mind-body medicine, comparative effectiveness research, and integrative oncology.

LOOKING AHEAD TO ADVANCE AN INTEGRATIVE APPROACH TO HEALTH CARE, THE INSTITUTE PLANS TO:

- Use advanced metrics to evaluate the healing impact of the Green Road on service members’ traumatic injuries.
- Distribute two videos to heighten awareness of the Green Road and related research.
- Form new partnerships to expand the number of arts and nature experiences for veterans.
- Develop an online therapeutic arts training module for Vet Arts Connect partners.
- Exhibit paintings created for hospitalized children—part of Scholar Judy Rollins’ research study—at Georgetown Hospital in Washington, DC.
STATEMENT OF ACTIVITIES

SUPPORT AND OTHER REVENUES:

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<th>Source</th>
<th>2017 Unaudited</th>
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EXPENSES:

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<tr>
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CHANGE IN NET ASSETS:

$3,193,000

2017 EXPENSES BY CATEGORY

- Leadership & Administrative Operations: 17%
- Development: 8%
- Integrative Clinical Programs: 9%
- Green Road & Veterans Programs: 13%
- Education Programs & Forums: 22%
- Community - Mission Thrive: 15%
- Scholars & Fellows: 16%

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$1,000,000+
Anonymous (Foundation)

$100,000-$999,000
The Mental Insight Foundation
France-Merrick Foundation

$10,000-$50,000
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The Harry and Jeanette Weinberg Foundation
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$2,500-$5,000
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Under $1,000
Ashley Addiction Treatment
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