Philanthropy Drives Research in Geriatric Psychiatry

Like so often in philanthropy, the Rogers Family Foundation’s giving began with the personal and grew into something far-reaching and sustaining. The “personal” was the relationship the late Jacqueline Rogers, who suffered from dementia, developed years ago with her geriatric psychiatrist, Brent Forester, MD, MSc, who today is chief of McLean’s Center of Excellence in Geriatric Psychiatry. To honor this relationship, the foundation launched McLean’s geriatric mood disorders research program focused on older adults with bipolar disorder, depression and co-occurring cognitive problems that often impair quality of life and daily functioning, and has supported it for more than a decade.

“He was amazing with my mother — so compassionate — she loved him,” says foundation trustee Deborah Rogers Pratt. “We are so pleased with the research that Brent and others have done and how far the program has come.” Pratt’s cousin and fellow foundation trustee Amy Rogers Dittrich adds, “Alzheimer’s disease is the sixth leading cause of death and research is advancing at a gallop. But, the research dollars have not kept pace.”

FILLING A KNOWLEDGE GAP
McLean is home to some of the country’s most exciting research into brain diseases in the elderly, a population that has been largely overlooked. Dr. Forester and his collaborators are pursuing questions ranging from whether a long history of mental illness increases one’s risk of dementia to why depression expresses itself so differently in the elderly and how best to treat it. Research like this fills a longstanding gap that has stymied psychiatrists’ ability to optimally care for their geriatric patients, according to Dr. Forester.

With the Rogers Foundation’s support, Dr. Forester is investigating the use of low frequency magnetic stimulation to treat bipolar depression in older adults. The treatment was discovered serendipitously when a McLean research assistant observed that depressed patients undergoing magnetic resonance imaging felt their moods lift afterward.

“Alzheimer’s disease is the sixth leading cause of death and research is advancing at a gallop. But, the research dollars have not kept pace.”

Donor Amy Rogers Dittrich

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Donors Foster Connection between Spirituality and Mental Health

Dr. David H. Rosmarin’s mission is to treat the whole patient.

According to a 2011 Gallup Poll, 93% of Americans believe in God or a higher power and 50% indicate that religion is very important to them. Despite these statistics, few mental health clinicians receive training in assessing a patient’s spiritual beliefs and many are therefore uncomfortable initiating this discussion.

Recognizing the importance of addressing patients’ spiritual needs, Dr. Rosmarin has helped McLean launch a new Spirituality and Mental Health Program (SMHP). As its founding director, he is both intriguing colleagues and captivating donors with his innovative research and programming.

The program offers spiritually-integrated treatment groups and 1:1 consultations with patients and staff throughout the hospital. The hospital envisions a chaplaincy component — a service that is currently offered on a limited basis by a volunteer chaplain, but that is hoped will grow as funding permits.

Philanthropy has been critical to the development of this program, and its earliest supporter was the Reverend Dr. Barbara H. Nielsen. Reverend Nielsen is trained as a clinical psychologist and was one of the first women ordained as a minister in the Episcopal Church.

She understands uphill battles. Her dissertation research focused on female seminary students. She found that providing women with positive spiritual messages and a curriculum that included Women’s Studies led to noticeably increased self-esteem. This reinforced the Reverend’s belief that for many — regardless of faith — integrating spirituality into mental health treatment can be enormously beneficial.

“David’s work brings me such joy,” she says. “My hope is that he expands his program so that anyone who wants these services can access them.”

Dr. David H. Rosmarin

Catharine Cook
Senior Vice President and Chief Development Officer
RESEARCHING THE MISSING PIECE

Dr. Rosmarin has spent the past five years researching the clinical relevance of spirituality to mental health including the efficacy of spiritually-integrated interventions. He is frequently approached by patients wanting to engage with him about faith, which solidifies his sense that mental health treatment is missing a vital component.

“We encourage patients to talk about all sorts of private things — money, relationships, sexuality — but as professionals we are not equipped to deal with their need to talk about spirituality and we shy away from discussions about faith,” explains Dr. Rosmarin.

McLean welcomed Dr. Rosmarin’s work and readily provided a forum for his research. He has conducted studies in collaboration with several of McLean’s leading psychiatrists and authored more than 30 peer-reviewed papers. His work revealed that people are eager to talk about spirituality and the majority were interested in integrating spirituality into their treatment. He also found that belief in God was associated with better expectations for treatment and greater decreases in depression. Another study found that positive religious coping was associated with increased well-being, and decreased depression and anxiety among psychotic patients.

SUPPORTING PATIENTS’ SPIRITUAL NEEDS

David and Susan Fowler recently came forward with major support for the program. They are not religious people, according to Susan. They consider themselves more spiritual — but are not regular church-goers.

Their son Logan’s adolescence was marred by a devastating array of psychiatric diagnoses. After multiple hospitalizations, assorted medications and electroconvulsive therapy, nothing was helping. In fact the medication made things worse and Logan became agitated and started hearing voices. They had a desperate search for anything that would work. “You don’t give up on your child,” says Susan.

Logan found the positive messages of Joel Osteen, founder and pastor of Lakewood Church, a nondenominational charismatic Christian church located in Houston, Texas. Skeptical at first, his parents were bowled over by the difference that Osteen’s hopeful messages made on Logan’s sense of well-being. Logan says “Joel saved my life.”

Today, Logan lives free of medication. His daily affirmations are meditative and centering. When his life is interrupted by his illness, he knows how to get himself back on track.

“We understand that medication and traditional forms of treatment are life-savers for many,” says David Fowler. “But we hoped to encourage alternative avenues, and this program was something that we wanted to support.”

Dr. Rosmarin is clear that there is potential for both positive and negative effects from the union of spirituality and mental health, but he believes deeply that treating the whole person means learning to respond to any need to integrate spirituality into care for the many patients who want such an approach. Donor Esther Mulroy of the Tamarack Foundation agrees. She supports the program because “having permission to access spirituality is a critical aspect of being able to discover who you are and lead a full life,” she says.

“In essence, it’s a form of cultural sensitivity,” says Rosmarin. “So we owe it to our patients to attend to and address a domain that so many people draw upon to provide a sense of peace or purpose during extraordinarily difficult times.”
Brent P. Forester, MD, MSc, Chief of the Center of Excellence in Geriatric Psychiatry

With the August 2015 launch of the Center of Excellence in Geriatric Psychiatry, the hospital completed its strategic goal of fully integrating patient care, research and educational activities into seven programmatically based centers.

We sat down with the new Center’s chief, geriatric psychiatrist Brent Forester, MD, MSc, to talk about his goals for the future.

HORIZONS: What are some of the Center’s early accomplishments?

DR. FORESTER: Until now, the different components of the geriatric psychiatry program — clinical care, research and training — have been somewhat siloed. We are now coming together for monthly meetings to learn from each other. For example, the research program is often trying to recruit patients for clinical studies, but previously clinicians weren’t always aware of the opportunities to participate in our research. Clinicians will notice things about patients’ symptoms or how they’re responding to a specific treatment that can inform questions we address through research.

There’s still so much to learn about older people and mental illness. Our treatment decisions are guided by our clinical intuition and what we know from the literature. Yet, many of the studies we rely upon have not included older adults with complex medical issues similar to those we are actually treating. The depression we see in a 75-year-old man with diabetes and heart disease who has recently lost his spouse and is becoming increasingly confused is unlike the depression of a 35-year-old with different stressors. If clinicians and researchers aren’t talking with each other, we’ll miss opportunities to try out new ideas and study them in ways that yield better treatments for older people.

HORIZONS: Is there anything new on the horizon for the Center?

DR. FORESTER: We recently hired a medical director for our geriatric psychiatry outpatient programs. Ipsit Vahia, MD, is a young, nationally renowned geriatric psychiatrist from the University of California, San Diego, who will help us to integrate research more formally into our outpatient programs. Dr. Vahia’s research focuses on the use of mobile technology — like fitness tracking devices — to better learn about our patients during the many hours that they’re not with us. There is a lot of basic data we can collect about their behaviors, including activity level and sleep patterns, that can inform both diagnosis and treatment.

HORIZONS: Do you have ideas for other new initiatives?

DR. FORESTER: A new direction for us, which is very much in the gestational stages, is the area of healthy brain aging. Many baby boomers worry about their memory and risk of Alzheimer’s dementia. There’s a growing body of data around techniques to help reduce the risk of Alzheimer’s, many of which are nonmedical interventions such as exercise, brain stimulation or nutrition. Instead of waiting for people to come to us already sick, we would reach out to people while they’re still functioning well to help slow down or delay cognitive decline.

I’m also excited about new developments in our Memory Diagnostic Clinic, which specializes in the evaluation and treatment of individuals with mild to moderate memory impairment. Many of our patients also have complex medical issues that impact brain function. We coordinate...
with outside medical doctors, of course, but it’s not an integrated operation. We’ve recently hired a geriatrician, Dr. Lara Terry, who will join our Memory Diagnostic Clinic and evaluate patients with complex medical problems. She’ll help us determine how medical issues — including medications — may be contributing to any psychiatric or cognitive problems and collaborate with the rest of the team to deliver coordinated care.

We are also adding social work expertise to our team. In the past, when families had questions about things like legal matters, day treatment programs, long-term care or managing behavioral symptoms, we did not have a clinician to provide education and support to families or to coordinate referrals to community programs. Thanks to a generous grant from the George Frederick Jewett Foundation East, we will be piloting the use of geriatric care consultants to round out our services. They’ll meet with families, run support groups and connect them to community resources, including those available through our local chapter of the Alzheimer’s Association.

HORIZONS: What role has philanthropy played in the division?

DR. FORESTER: To put it simply, our research program exists because of philanthropy. For instance, generous support from the Merrill family through The Andrew P. Merrill Memorial Research Fellowship has enabled McLean junior faculty member Jennifer Gatchel, MD, PhD, to conduct novel research into brain circuitry. It means that promising researchers like Dr. Gatchel don’t have to abandon a career in clinical research because of a lack of funding. And we’ve also been able to leverage the research supported by philanthropy to attract more sources of funding from the National Institutes of Health and private industry.

Philanthropy also helps us build outpatient capacity — our new dementia care consultants are a good example of this — so we can keep people at home, relatively independent and delay or avoid transitions into long-term care settings. Health insurance doesn’t cover important aspects of coordinated treatment, so philanthropy is critical for such resources.

Technology may revolutionize the lives of older adults with psychiatric disorders, thanks to creative research ideas posed by Ipsit Vahia, MD, McLean’s new medical director for Geriatric Outpatient Services. Dr. Vahia is working closely with Dr. Brent Forester on a number of novel studies that explore the use of technology and smart devices to improve assessment of psychiatric symptoms, optimize medication management and increase opportunities for healthy aging in place.

Dr. Vahia found in a pilot study that using certain iPad apps led to a noticeable reduction in restlessness and agitation among nearly all participants (people with severe dementia). He intends to build on this initial study by testing specific apps as non-pharmacologic options for managing some of the behavioral problems associated with Alzheimer’s disease.

Dr. Vahia also plans to launch collaborative efforts with various partners to evaluate wearable and wireless devices for their efficacy in monitoring sleep, pain, medication response and fall risk.

“New technology is allowing us to monitor patients in ways that were impossible just five years ago. Data from these sensors can give us a more detailed picture of our patients’ lives and this information, in conjunction with data from traditional sources, will result in much more efficient psychiatric care,” says Dr. Vahia.

Dr. Vahia wants to reframe the discussion about geriatric psychiatry. Rather than trying to “fix” the brain, his vision is to enable this population to age in place with more independence and less reliance on medication and hospitalization.
Manton Foundation Funds State-of-the-Art MRI Scanner

Scott Lukas, PhD, director of the McLean Imaging Center (MIC), can barely contain his excitement when describing McLean’s new 3 Tesla Siemens PRISMA MRI scanner. An extraordinary $3.75M grant from the Manton Foundation funded this state-of-the-art acquisition. According to Lukas and fellow MIC Director Diego Pizzagalli, PhD, the new machine will enable McLean to take a huge leap forward in the effort to understand, treat and help cure brain disorders.

Neuroimaging technology allows scientists to see how a brain works in real time. For instance, when a person with a substance use disorder is shown an image of a drug, researchers can monitor what part of the brain “lights up.” Imaging is essential to our understanding of psychiatric disorders in children and adolescents. Being able to identify and track deviations in normal brain development during childhood is a critical step toward identifying new treatments and may even help measure the success of current therapies.

Imaging also aids research into diseases impacting the geriatric population. Early detection of slowly developing brain disorders like Alzheimer’s is possible by imaging the brains of high-risk, healthy 50- to 60-year-olds to establish a baseline and then repeating the scan at regular intervals. This strategy could help identify the need for intervention. Dr. Brent Forester (see pages 1 & 7) and his geriatric research team are particularly excited by the possibility of adding quality years to patients’ lives.

“The cutting-edge technology used in the PRISMA is tremendous,” says Dr. Lukas. It produces spectacular anatomical images and can measure brain chemicals, blood flow, brain activity/function and connections among different brain regions. The lack of radiation means there is no limit to the number of times a patient can be scanned. The PRISMA’s features make it more effective for use with fragile patients than its predecessor — it is quieter, takes less time to capture images and can handle the interference of movement, which is common with children or patients with tremors or anxiety disorders.

“The Foundation was beyond generous with their gift,” says Dr. Lukas. “They funded not only the magnet, but also the site preparation and support equipment, including a ‘mock’ scanner that acclimates patients to the MRI environment.”

The MIC has an older 3T Siemens magnet — a 3T TIM trio — which has been booked solid, with a waiting list of researchers clamoring for time. The PRISMA now doubles McLean’s 3T capacity for high-level research, opening time for clinical diagnostics, increasing McLean’s ability to train clinicians and allowing researchers from institutions across Boston and beyond to book time for their imaging needs.

The PRISMA also will allow McLean to participate in the Human Connectome Project, a National Institutes of Health (NIH) effort to map neural connections, effectively creating a “wiring diagram” that offers new insights into the workings of the human brain.

“The PRISMA 3T will help us take an enormous step toward understanding psychiatric diseases,” says Dr. Lukas. “The Manton Foundation understood the importance of the ground-breaking research possible, and we are enormously grateful for their forward-thinking generosity.”
Philanthropy & Geriatric Psychiatry Research  continued from cover

Dr. Forester’s research team also is conducting several studies that could yield the first disease modifying treatment for Alzheimer’s disease: amyloid-busting drugs. Although these medications have been deemed ineffective in patients who already exhibit more advanced symptoms of the disease, Dr. Forester believes they hold promise for patients who are not yet symptomatic or are in very early stages of illness. “These medications are like statins for the brain, but instead of lowering cholesterol, they reduce brain amyloid plaques, the hallmark of Alzheimer’s disease,” says Dr. Forester. “If you start a statin to reduce a cholesterol of 300 after suffering five heart attacks, it won’t help regain lost cardiac function. Similarly, the first studies of amyloid-busting drugs were done on people who already had signs of significant brain degeneration.”

Another important front of Alzheimer’s research is the treatment of agitation, aggression and other behavioral symptoms that directly reduce independence, increase Alzheimer’s related mortality and stress caregivers. The most widely used treatments — antipsychotic drugs — are only modestly helpful and can have serious side effects, including higher risks of strokes and death. McLean is conducting studies of several novel approaches, including lithium, synthetic THC (the active ingredient in medical marijuana) and electroconvulsive therapy.

OFF THE BEATEN TRACK

Psychologist David Harper, PhD, is the Center’s associate director for research and, along with Dr. Forester, is seeking to understand Alzheimer’s patients’ agitation as part of a study examining the interplay between depression, neurocognitive disorders like Alzheimer’s and inflammation.

“We are interested in the behavioral symptoms of dementia, like agitation, because they are why people are hospitalized, not because they’re a little forgetful,” says Dr. Harper. Inflammation may play a role in these behaviors and “if we can understand the mechanisms that trigger them, it opens the door to novel therapeutics,” he says.

Donors Greg and Kathy Spier, with the Spier Family Foundation, admired the novelty of Harper’s research, one criteria for their family’s philanthropy. “We try to fund studies that the National Institutes of Health won’t fund initially,” says Kathy. “We like research that is a little off the beaten track and we’re hoping our support will deliver preliminary results that will be a bridge to federal support and larger studies.”

Of the top 10 causes of death in the U.S., Alzheimer’s disease is the only one that currently cannot be prevented, slowed or cured. Research conducted in McLean laboratories may one day — in the not too distant future — change that. 

“We like research that is a little off the beaten track and we’re hoping our support will deliver preliminary results that will be a bridge to federal support and larger studies.”

Donor Kathy Spier
Supporting the Future

Betsy and Ralph Gordon have a list of reasons why they’ve included McLean in their estate plans. Throughout their marriage, they have watched elderly relatives and dear friends cope with Alzheimer’s, and they are optimistic about the breakthroughs being made in McLean’s geriatric research programs.

Professionally, Betsy has spent much of her life face-to-face with the damaging effects that mental illness has on children and families. As both a teacher and a 24-year veteran of her local school committee, she knows that stress, depression and anxiety are ongoing concerns in schools. For years, she has volunteered for the foster-care system and has seen the heartbreaking removal of children from families plagued by mental illness and substance use. As a former legislative aide, she remembers constituents living with mental illness who did not have the resources to get desperately needed treatment.

The Gordons believe that, while there is much talk today of the need for increased mental health treatment and research, funding remains insufficient. “It is time to focus resources on these illnesses, and if anyone can use them wisely, it will be McLean,” says Betsy. “By giving to McLean through our estate, we will have a greater impact than anything we could afford while living. We love to think that our gift will play a part in relieving the devastation caused by dementia, mental illness and substance use disorders.”

The Gordons are members of the John McLean Society which recognizes donors who have included McLean in their estate plans. For more information contact Julia Wills at jwills@partners.com or 617-855-3475.