Integrative Medicine and Rehabilitation: The Spaulding Story

Compiled by Eric (Rick) Leskowitz MD
Founder and Co-Director
Integrative Medicine Task Force
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What’s in a name?

- **Holistic** Medicine – the oldest term, still widely used by lay people; the American Holistic Medical Association was formed in 1978.
- **Unconventional** Medicine – the original federal NIH term; very stigmatizing.
- **Alternative** Medicine – “either/or”, rather than “both/and”
- **Complementary** Medicine – often mistaken for “complimentary” (it’s not free!)
- **CAM** – Congressional compromise (Complementary and Alternative Medicine)
- **Placebo** Medicine - a finalist when HMS chose an official name in 2010 (really!)
- **Integrative** Medicine – the winner and most widely accepted nationally

Many terms have been used over the past 50 years to describe this evolving field. These are some of the most prominent ones, with “Integrative Medicine” now used nationally. SRN has adopted the newer term “Integrative Health”, to highlight our focus on wellness rather than illness.
The full range of IM options is shown in this list. Human beings are multi-dimensional, and their healthcare options should be as well. Spaulding has been fortunate to have conventionally trained clinicians who have also gained certification in all of these IM modalities.
The first true IM program at SRH began in the 1970s with the Functional Restoration Program (FRP). This 4-week inpatient program taught chronic pain patients a variety of non-medication strategies for self-management. A group format was used, and there was regular practice of such mind/body techniques as meditation (above) and biofeedback. Opioids are not the key to pain management!
The FRP gained national prominence with this front page story in the *Boston Globe*. Clinical director Eve Kennedy-Spaien OTR/L has been the prime mover of this program for nearly 20 years, and also presented material on the FRP at the 2018 national meeting of the American Congress of Rehabilitation Medicine, along with colleague Jennifer Jackson DPT.
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Teamwork is an important feature of rehabilitation medicine, and of integrative medicine. The Pain Management Team knows that it is important to be able to have fun while doing this work, and good team chemistry goes a long way in helping staff to cope with a steady stream of clinical challenges. Here is how the FRP (plus other members of the Medford Satellite Clinic) celebrated Halloween in 2016.
The Integrative Medicine Task Force

Monthly meetings of the IMTF at the main hospital include a wide range of attendees. This session from 2015 includes representatives from (L-R): Research (Dr. Quezada-Morales), Development (Steven Patrick), satellite clinics (Medford – Dr. Chin; Cambridge – Emese Bod), nurse clinicians (Elise Loiselle and Judith Frazier), Lifestyle Medicine (Dr. Frates), OT Administration (Deb Margolis), Inpatient Administration (Bob McCall), and outside visitors (the IM coordinator from Cambridge Hospital).
A penny for my thoughts?! Fortunately, insurance company reimbursement for IM services has improved since this check was issued in 1993, with many plans now covering acupuncture and massage. However, access to IM care is still denied for many interested patients because of the coverage gaps and out-of-pocket costs. Studies have shown IM to be very cost effective, but old ways change slowly.
Federal funding to support IM research has grown substantially since the first NIH outlay of $2 million in 1992. Current levels have held steady at about $150 million annually.

Chapman EH¹, Weintraub RJ, Milburn MA, Pirozzi TO, Woo E. J Head Trauma Rehabil. 1999 Dec;14(6):521-42.

BACKGROUND:
Mild traumatic brain injury (MTBI) affects 750,000 persons in the United States annually. Five to fifteen percent have persistent dysfunction and disability. No effective, standard pharmacological treatment exists specifically for this problem. We designed a pilot research project to study the clinical effectiveness of homeopathic medicine in the treatment of persistent MTBI.

CONCLUSIONS:
This study suggests that homeopathy may have a role in treating persistent MTBI. Our findings require large-scale, independent replication.

In 1992, Spaulding received one of the NIH’s first seed grants for IM, to study the use of homeopathy to treat the symptoms of mild TBI. The hospital was proud to receive its first-ever NIH grant, but a bit embarrassed by the focus on a generally frowned-upon modality. The study results showed positive benefits to homeopathy that could not be explained by placebo effects.
This memo from 1996 illustrates how hesitant Spaulding’s administration was to explore these new approaches. The IMTF persisted, despite the warning that “We cannot be the leader in non-traditional medicine”.

4. However, I would like to be sure that we do not develop, promote, or implement other nontraditional treatments. These were described by Dr. Leskowitz. They include any nonverbal communications such as hands therapy that do not touch the patient. They also include any reference to the magnetism of the body. We want to exclude any hint of mental telepathy or any variation on mental telepathy.

5. We should retreat if the modality is criticized by the Department of Public Health, Medicare, or the media. We cannot be the leader in non-traditional medicine.

6. We should avoid metaphors. The use of metaphors in science has a long and unfavorable history.
Vision Statement

Spaulding Rehabilitation Network (SRN) is a place for healing the body, mind and spirit.

We are committed to blending ancient wisdom with evidence-based advances to create an optimal healing environment that is both mindful and compassionate.

An important step in IM’s acceptance at Spaulding was the creation of our vision statement. By recognizing the multi-dimensional nature of human beings, the IMTF demonstrated its alignment with the vision of SRH as well.
Our Mission at SRH

- **Outstanding Clinical Care** to enable people to achieve their highest level of function, independence and performance.
- **Research** to contribute new knowledge and treatment approaches to the field of rehabilitation.
- **Education and Training** of current and future rehabilitation specialists

These 3 areas have continued to be the main focus of IM work at Spaulding
IM and rehab both focus on:

• Body, mind and spirit
• Patient empowerment
• Multi-disciplinary teamwork
• Functional outcome measures
• Quality of life

“IM and Rehab are Natural Partners”: the title of our invited Plenary Lecture at the 2017 Annual Conference of the American College of Rehabilitation Medicine (ACRM), the first time IM had been a specific focus for ACRM.
In the pre-digital era, hospital-wide offerings were announced on the bulletin boards by the elevators. This was a particularly busy IM week in 2001.
Use of IM in clinical care (30+ years)

• Biofeedback-based movement retraining
• Meditation/relaxation training
• Yoga and T'ai Chi exercise programs
• Specialized yoga – aquatic, SCI, TBI, amputee, neuro.
• Acupuncture and acupressure (Energy Psychology)
• Craniosacral therapy, myofascial release, osteopathy and other manual therapies
• Energy medicine – EFT, Reiki, Therapeutic Touch
• Functional medicine – herbs, supplements, diet
Some random numbers

- Reiki volunteer sessions: 2681 in 4 years; 10 volunteers at present
- Staff trained in Reiki: 109 in 5 years, including 6 MDs
- Acupuncture treatments: >1500/year by Dr. Chen; 2 MD providers in Network, 1 LAc.
- Total grant funding: $335,000 (4 separate sources) over 25 years.
- Size of IMTF email list (opt-in): 105
- Different yoga options: 8 (adaptive, Kripalu, yin, aquatic, amputee, neuro, SCI, community)
Studies Conducted by SRH Staff
(partial list)

- Homeopathy for TBI - 1st NIH study (1999)
- T'ai Chi for balance and cardio fitness - with BHI
- Acupuncture for carpal tunnel syndrome - with MGH
- Acupuncture for TBI (brain injury), CVA (stroke)
- Yoga, osteopathy for low back pain
- Energy Psychology for phantom limb pain
- Neurofeedback for TBI
- Neuromodulation for phantom pain

The next 7 slides will show the abstracts of several such studies.
Dr. Agatha Colbert, a pain physiatrist, was the first Spaulding physician to use acupuncture, in the mid-1990’s. She also did research into the electrophysiology of acupuncture points, and on the use of magnets to treat fibromyalgia.
This Invited Commentary illustrates how Spaulding can bring an integrative medicine perspective to the often-overlooked world of rehab medicine. And with rising awareness of concussion and brain injury in the world of NFL football, the need for this IM expertise continues to grow.
Spatio-temporal mapping cortical neuroplasticity in carpal tunnel syndrome

Rupali P. Dhond, Emily Ruzich, Thomas Witzel, Yumi Maeda, Cristina Malatesta, Leslie R. Morse, Joseph Audette, Matti Hämäläinen, Norman Kettner, and Vitaly Napadow

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Spaulding collaborated with MGH’s Martinos Imaging Lab to study the effect of acupuncture on the brain by using functional MRI. SRH Medford’s Dr. Joseph Audette was a Co-Principal Investigator in this study, joined by Drs. Leslie Morse and Cristina Malatesta.
A Randomized Exploratory Study to Evaluate Two Acupuncture Methods for the Treatment of Headaches Associated with Traumatic Brain Injury

Wayne B. Jonas, MD, Dawn M. Bellanti, MSN, CRNP, Charmagne F. Paat, BS, Courtney C. Boyd, MA, Alaine Duncan, MAC, LAc, DiplAc, Ashley Price, BS, Weimin Zhang, PhD, Louis M. French, PhD, and Heechin Chae, MD

ABSTRACT

Background: Headaches are prevalent among Service members with traumatic brain injury (TBI); 80% report chronic or recurrent headache. Evidence for nonpharmacologic treatments, such as acupuncture, are needed. Objective: The aim of this research was to determine if two types of acupuncture (auricular acupuncture [AA]...
This study from Spaulding’s Neuromodulation Lab was led by Dr. Leon Morales-Quezada. He is the lab’s liaison with the IMTF and is an expert in the use of electromagnetic stimulation to modify brain function. He was clearly not aware of the 1996 SRH memo that advised against any mention of “the magnetism of the body” (Slide 11).
This article proposed a new explanation for the mysterious post-amputation sensation of phantom limbs: it is generated by the human biofield (a detectable magnetic field surrounding the body) rather than by the brain. Clinical and research data can be combined in this way to bring new conceptual models and effective new treatments into the world of rehabilitation medicine.
The Chair of SRH’s Department of PM&R (Ross Zafonte DO) worked with his former TBI Fellow (Maulik Purohit MD) to document the wide use of IM therapies by patients suffering neuropsychiatric symptoms from disorders like TBI.
The first textbook on integrative approaches to rehabilitation was edited by the IMTF’s founder in 2002.
A now-standard text in the field of pain management was Co-Edited by two Spaulding physiatrists, Drs. Joseph Audette and Allison Bailey, in 2008.
INNOVATIONS IN INTEGRATIVE HEALTHCARE EDUCATION:

SPAUDDLING REHABILITATION HOSPITAL—THE INTEGRATIVE MEDICINE PROJECT

Victor S. Sierpina, MD, Mary Jo Kreitzer, RN, PhD, and Eric Leskowitz, MD

Content on integrative healthcare and complementary and alternative medicine is being taught in hundreds of educational programs across the country. Nursing, medical, osteopathic, chiropractic, acupuncture, naturopathic, and other programs are finding creative and innovative ways to include these approaches in new models of education and practice. This column spotlights such innovations in integrative healthcare and CAM education and presents readers with specific educational interventions they can adapt into new or ongoing educational efforts at their institutions or programs.

We invite readers to submit brief descriptions of efforts in their institutions that reflect the creativity, diversity, and interdisciplinary nature of the field. Please submit to Dr. Sierpina at vssierpi@utmb.edu or Dr. Kreitzer at kreit003@umn.edu. Submissions should be no more than 700 to 800 words. Please include any Web site or other resource that is relevant, as well as contact information.

Exemplary integrative education requires a supportive environment in which teaching, clinical care, and research go hand in hand. Many of the programs described in this series have demonstrated such synergy. This issue’s program was submitted by Dr. Eric Leskowitz, describing a well-developed, well-integrated program at the Spaulding Rehabilitation Hospital in Boston. We thank Dr. Leskowitz for the following description and appreciate the vision and enthusiasm he and his entire team show in their commitment to providing integrative medicine (IM) to some of our most challenging patients, those whose needs require the services provided by a physical rehabilitation setting. We would hope more hospitals and academic centers would consider the model described here.

SPAUDDLING REHABILITATION HOSPITAL

Physical Medicine and Rehabilitation is an ideal specialty for the practice of IM—rehab medicine emphasizes patient empowerment and functional performance rather than symptom suppression and has long advocated the use of multidisciplinary treatment teams rather than hierarchical MD-directed pyramids of power. As the site for Harvard Medical School’s residency program in Physical Medicine and Rehabilitation, Spaulding Rehabilitation Hospital (SRH) began practicing IM long before the term was even coined. Building on a 30-year history of interdisciplinary treatment of chronic pain, starting with a biofeedback-oriented self-management–based philosophy inspired by Norm Shealy, MD, IM approaches at SRH have steadily spread to other inpatient and outpatient settings in recent years.

IM was initially pursued by a self-selected team of holistically oriented clinicians who worked in the pain management program, but these IM approaches finally “came out of the closet” in 1998, when SRH hosted the first IM-themed conference ever offered by the Partners Hospital Network (which includes the Massachusetts General Hospital and Brigham and Women’s Hospital). Since then, a hospital-wide culture that supports IM has been built through grassroots efforts among clinicians, as well as through top-down involvement of administration. Through a series of hands-on presentations and demonstrations to senior management and the Board of Overseers, IM has gained administrative support—at least psychologically if not financially (due to ongoing industry-wide constraints in Medicare and Medicaid reimbursements for rehabilitation medicine).

A 2003 grant from the Victoria and Jacob Langeloth Foundation enabled these disparate initiatives to coalesce under the direction of Eric (Rick) Leskowitz, MD, ABHM, a psychiatrist, writer, researcher, and practitioner in energy medicine. This outside funding provided key resources so that projects endorsed by administration could be pursued by a multidisciplinary team of clinicians without the financial burdens of internal resources.

This overview of Spaulding’s integrative medicine program appeared in a leading medical education journal in 2007, complete with our official IM logo - designed by our own clinicians!
Continuing Education

- 1998: First HMS CME Course for IM sponsored by a Partners hospital
- 2001 – 2008: “Caring for the Caregiver” Conferences
- Medical student and PM&R Resident rotations
- Numerous yearly presentations at medical, PT and OT Schools, national conferences and community organizations.
- Directed Harvard’s Physician Acupuncture course for >20 years
- Grand Rounds at Osher IM, MGH Pain, SRH, ACRM, etc.
- Special Grand Rounds - Central Park Jogger, Sidewalk Sam, Ram Dass

One of the core components of our mission has been education, both for professionals via CE courses, and for patients and community members. The three special Grand Rounds presenters each spent a day on-site with patients, family and staff (see slides 32-40 for details).
This 1998 offering was the first Harvard Med School CME course in IM presented by a Partners Hospital. Keynote speakers included David Eisenberg, Herbert Benson and Jon Kabat-Zinn.
This 1999 panel discussion on IM included such luminaries as the Editor of the *New England Journal of Medicine* (he was against IM!) and ABC News’ Medical Consultant, Dr. Tim Johnson. The event was videotaped, but could not be preserved for posterity and national broadcast due to equipment malfunction.
This is the poster for the first-ever public appearance by Trisha Meili, the TBI survivor now known nationwide as the Central Park Jogger.
The Central Park Jogger’s tragic story captured America’s attention in 1989. Trisha Meili came to Spaulding Rehabilitation Hospital on December 5, 2005 to describe her remarkable recovery. This 71-minute video includes:

In Trisha Meili’s interview with Dr. Eric Leskowitz, Director of the SRH Integrative Medicine Project, she described the role of support and prayer in her recovery. 7 min.

Trisha’s informal lunchtime Q&A with hospital staff and patients, was highlighted by her own guided mindfulness meditation session. 47 min.

Trisha’s keynote address to the Annual Spaulding Society Appreciation Dinner showcased her remarkable vitality and energy. 14 minutes

To order this video (DVD or VHS), or for more information on future Integrative Medicine Project events, email us at: SRHIntegMed@partners.org or call us at: 617-573-2622

After writing her best-selling book I Am the Central Park Jogger, Trisha took her inspiring message of hope and recovery to national audiences. She spent a memorable day at Spaulding in December of 2005, as recorded in this DVD.
In 2004, SRH was honored to host a visit by Ram Dass – a pioneer in East-West dialogue, and a native of Boston. His classic 1971 book ”Be Here Now” introduced millions of Americans to meditation and spirituality, and paved the way for the recent spread of yoga and mindfulness into American culture.
Ram Dass met with patients and staff, and described how his own spiritual background helped him adapt to his post-stroke limitations. His key point was that his identity encompasses more than his physical body, and so his true Self is not limited in any way.
Ram Dass was a shining light wherever he went at Spaulding. Here he is joined by two other beaming light-workers, Janice Wesley PT and Maureen Foye RN.
On September 18, 2006, well-known Boston cultural figure and spinal cord injury survivor Bob Guillemin ("Sidewalk Sam") spent a day at Spaulding Rehabilitation Hospital, where he inspired patients and staff with his infectious enthusiasm for the healing power of artistic expression. This 35 minute video includes:

- A review of Sidewalk Sam's "Chalk One Up!" day at Spaulding, where patients and staff reconnected with their long-lost Inner Artist. 10 min.
- Uplifting images of Sam's impact on patients and staff, with close-ups of a wide array of brilliantly colored chalk drawings.
- Sam’s conversation with Dr. Eric Leskowitz, Director of Spaulding's Integrative Medicine Project, which touches on Life, Art, Health and Rehabilitation 25 min.

To order this DVD, or for more information on future Integrative Medicine Project events, email us at: SRHIntegMed@partners.org or call us at: 617-573-2631

“Sidewalk Sam” was a well-known street artist in downtown Boston – he specialized in chalk sidewalk drawings because he could reach the ground’s “canvas” from his wheelchair. When he brought his chalk drawing format to Spaulding in September 2006, the Spaulding community’s “inner artists” emerged and flourished, at least for one day, under his inspirational guidance.
These Engineering staff members showed their hidden artistic talents when they joined dozens of other SRHers for a day of art on the outside patio: “Chalk It Up for Rehab”. The HMS Spaulding sailed proudly that day!
Sidewalk Sam encouraged us to post inspirational sayings on the hospital walls. When the IM team was having trouble getting the quotation stencils to stick onto the corridor wall, we were aided by a passing EMT and a custodian. The position of their helping hands unintentionally mirrored the Spaulding logo that shows teamwork in action - the logo literally came alive.
Local author Claire Sylvia came to SRH and recounted her very unusual story of recovery from surgery. She described how her personality changed after her heart transplant, when she developed many behaviors and attitudes shared by her heart donor (a much younger man whom she initially knew nothing about). A true mystery.
The Peace Art Gallery was another outgrowth of Sidewalk Sam’s visit, and features art by artists with disabilities. Its official opening in October 2010 was graced by harp music, and enjoyed by visitors young and old.
NYC-based artist Doug Auld has painted a series of hyper-realistic portraits of burns survivors. His “State of Grace” display and lecture in May 2007 was profoundly moving, and vividly showed how the human spirit can shine through the human form, no matter its outward appearance.
In September 2012, we hosted a visit by Matthew Sanford, a Minnesota-based yoga instructor whose practice is informed by his own spinal cord injury and waist-down paralysis. Scenes from his SRH visit are featured in his documentary film “Still Here”.

Our international outreach included this September 2016 site visit from Israeli physiatrist Efrat Suraqui MD (center), talking with Judith Frazier RN and Kathy Violick Boole SLP about how Reiki has been integrated into Spaulding’s clinical offerings. She will bring the Spaulding model to Hadassah Hospital in Jerusalem as a template for how to join IM with conventional rehabilitation care.
Baghdad-based psychologist Laith Mohammed al Azawe PsyD visited SRH in 2018. Here, he is describing to Emese Bod PT some of the innovative mind/body techniques he uses with Iraqi Olympic athletes.
Dr. Ariana Vora, Co-Director of the IMTF, brought Spaulding into partnership with India’s Ministry of Ayurvedic Medicine and Yoga (AYUSH).
Medford’s Functional Restoration Program presented this poster at the 2017 Harvard Osher Integrative Medicine Forum: “Combining integrative medicine and physical rehab for chronic pain”. (L-R): Rick Wong PT, Eve Kennedy-Spaien OTR/L, Deborah Rochman OTR/L and Jennifer Jackson PT
Spaulding’s Dr. Joseph Audette developed the Harvard-sponsored acupuncture-for-physicians course, which has trained over 1000 MDs in the use of this ancient healing technique.
A sign of the growing influence of integrative medicine: 3 of the 7 modalities pictured in this 2017 poster for the Harvard Pain Medicine course come from the domain of IM (herbs, acupuncture and meditation). In contrast, the 2000 conference devoted a total of one lecture to the topic of alternative therapies.
Bridget Chin MD’s acupuncture workshop proved so popular that acupuncture became a featured part of Harvard’s annual Pain Medicine training program.
In the aftermath of the tragic Marathon bombings in April 2013, the Spaulding Wellesley Clinic, under the direction of Carroll Noel-Moser and Angie Markoski, offered IM services to first responders, family members and clinicians. It was an important way to give back to the community in a time of crisis and healing.
Aquatic Yoga Class

Aquatic Yoga takes yoga principles and postures and adapts them to the warm water environment. The class will include a mindful practice of yoga postures, breathing techniques, and relaxation. This low impact class can be helpful for people with arthritis, lower extremity joint replacements, fibromyalgia and other pain conditions, balance challenges, difficulty standing, and anxiety.

WHY DO YOGA IN THE WARM WATER?
• Less strength needed to do standing postures
• Warmth and hydrostatic pressure promote pain relief
• Warm water is soothing and calming

OTHER BENEFITS:
• Improved core strength and flexibility
• Improved standing balance
• Improved breathing patterns
• Reduced stress

COST
$12 per class payable by credit card or check

TO REGISTER
Call 617.952.5153

For more information, call Spaulding’s Aquatic Center at 617.952.5153 or email: aquatics@partners.org

The new hospital in Charlestown offers some wonderful new treatment options for patients. This swimming pool is used for ongoing aquatic yoga classes directed by Rick Frank OT.
Over 50 staff participated in this 2005 half-day mindfulness retreat led by a senior instructor from UMass’s Center for Mindfulness in Medicine and Society. Many participants remarked that it was surprising and wonderful to feel so relaxed at work!
Mini treatment sessions have been made available for staff during lunch time for over 20 years. Dr. Jeff Schneider is receiving Reiki from Marie DeTomasi RN during this session, and is serving as a role model for colleagues who feel too busy to take time away from work to receive these treatments.
Reiki can also be combined with foot acupuncture (courtesy of Dr. Chin) and meditation (courtesy of Jonah Feldman PT) to make an effective and rapid rejuvenator, as demonstrated in this session in the SRH Meditation Room.
How IM benefits the hospital

• ↑ patient satisfaction (and referrals)
• Improved outcomes – QoL and objective measures
• ↑ staff satisfaction, morale and productivity
• ↓ staff burnout, absenteeism and turnover
• Good PR and fundraising opportunities
• Expanded community networking options
• Being on the leading edge of rehabilitation – IM
Take home points

“The times, they are a-changin’.”  Bob Dylan

“If you build it, they will come.”  Field of Dreams

“I did it my way.”  Frank Sinatra

“There’s more than one way to skin a cat.”  Aesop

“That’s just, like, your opinion, man.”  The Big Lebowski

Many pop-culture slogans accurately describe the relationship between Spaulding and IM: We’ve done it our way because there’s more than one way to skin a cat, and in our opinion this was how best to build an IM program that patients would come to – and they did!