THE GREEN HEALTH CARE PROGRAM

Good for People and the Environment

EXECUTIVE SUMMARY
THE TELEOSIS INSTITUTE
The Teleosis Institute is devoted to developing effective, sustainable health care provided by professionals who serve as environmental stewards. The Institute has three major goals:

- To educate health professionals about the principles and practices of Ecologically Sustainable Medicine
- To build a community-based network for professionals providing Green Health Care
- To provide access to high quality, cost-effective, sustainable medical services benefiting underserved populations and the environment in which we live

A not-for-profit organization, the Teleosis Institute was founded by Dr. Joel Kreisberg, DC, MA, a health care practitioner and environmental educator.

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THE RELATIONSHIP BETWEEN HEALTH AND THE ENVIRONMENT

The reality of widespread environmental degradation and the presence of environmental health hazards in many aspects of our day-to-day life pose a significant and increasing challenge to human health.

A recent report published by the World Health Organization\(^1\) reveals that approximately 60 percent of the benefits that the global ecosystem provides to support life on Earth (such as fresh water, clean air and a relatively stable climate) are being compromised or used unsustainably. Scientists warn that harmful consequences of this degradation to human health are already being felt and could grow significantly worse over the next 50 years.

A compromised ecosystem impacts human health in several ways. It threatens the “products” people obtain from the environment—food, fuel, fiber, fresh water and fresh air. Additionally, as the natural regulation of the global ecosystem is disrupted, people are increasingly impacted by poor air quality, diminishment of freshwater supplies, topsoil erosion, widespread climate change, and an explosion of environmental health-related diseases. At this point, poor environmental quality is stated to be directly responsible for about 25 percent of preventable ill-health worldwide\(^2\). Equally important to our wellbeing, a compromised environment impacts our spiritual, recreational, and aesthetic experiences.
Surprisingly, conventional medical practices have vastly contributed to the deterioration of the environment. In the early 1990s, it was estimated that 3.5 million tons of medical waste were being produced each year. The repercussions are widespread. For example, our rivers, lakes, and coastal waters have been found to contain approximately 100 pharmaceuticals. The Toxic Substances Hydrology Program at the U.S. Geological Survey (USGS) found that “nearly 50 percent of water samples collected across 30 different states in 1999 and 2000, [contained] at least one antibiotic…. The most frequently detected antibiotics were… [those] used to treat humans for pneumonias, ‘strep’ throat, middle ear, urinary tract, respiratory tract and HIV-opportunistic infections.”

An over-reliance on pharmaceutical and high-technology-based medicine generates significant amounts of pollution and solid waste, to the exclusion of medical treatments that are safe, effective, and sustainable. All of these practices vastly contribute to the degradation of the environment and human health.

Equally threatening, our day-to-day lifestyle has become extremely dependent on the use of chemicals and toxins with uncertain effects on human health. There are more than 75,000 industrial chemicals currently produced or imported into the United States—and for more than 70 percent of the top-volume chemicals in commercial use, there exist significant gaps in publicly available data for even the most basic testing. These ubiquitous chemicals exist in our air and water, our food, our consumer products, and our children’s toys. They are released from industrial facilities, building up in our environment, our communities and our bodies.

“The Green Health Care Program is a practical, effective way of implementing environmentally responsible actions in the medical environment. This program should be followed in every office, clinic, and hospital across the land.”

— Teleosis Advisory Board Member and author Larry Dossey, MD

Larry Dossey, M.D. is the author of nine books including the New York Times bestseller, Healing Words, and Prayer is Good Medicine. An authority on spiritual healing, he lectures throughout the country and is responsible for introducing innovations in spiritual care to many acclaimed institutions. He serves as the Executive Editor of Explore: The Journal of Science and Healing and co-established the Dallas Diagnostic Association—the largest group of internal medicine practitioners in that city. He earned his medical degrees from Southwestern Medical School in Dallas.
In fact, in the largest study of chemical exposure ever conducted on human beings, the U.S. Centers for Disease Control and Prevention reported in 2005 that most American children and adults were carrying in their bodies dozens of pesticides and toxic compounds used in consumer products, many of them linked to potential health threats.

Additionally, health care institutions often use many highly toxic chemicals (pesticides, cleaners and disinfectants) on their premises that contributed to poor indoor air quality and a host of health problems. Rarely does one find the physical health care workplace reflecting sustainability principles with respect to its infrastructure and use of resources.

The Hippocratic oath says “first do no harm.” We trust and value our health care providers and institutions as places to find healing and healthy environments as well as knowledge of environmental risks. It is thus ironic and unacceptable that the current system of conventional medicine, though at times highly effective, also poses a significant threat to human and environmental health. We can and we must do better.

“We are just waking up as a profession to the fact that hospitals and clinical practice protocols are not in tune with the environment. We have been taught that we live better with chemistry than with nature, and we are having to learn about balance, harmony and healing.”

— Teleosis Advisory Board Member Bhaswati Bhattacharya, MPH, MD, MA

Dr. Bhattacharya practices and teaches holistic medicine in New York City and serves as the Director of the Division of CAM at Wyckoff Heights Medical Center. Trained as a scientist, international public health specialist, and primary care clinician, she is Assistant Professor of Family Practice in Medicine at Weill-Cornell Medical College. She engages in public health projects internationally through her company GoodMedicine Works, and is an active proponent for bringing the environmentally-conscious science of ayurvedic medicine from India to the US.
GREEN HEALTH CARE: A MODEL OF IMPROVED ENVIRONMENTAL AND HUMAN HEALTH

The Teleosis Institute promotes a new model of health care based on the understanding that human and environmental health are inextricably linked. In this model, health professionals serve as environmental educators, advocates and stewards. This model is called Green Health Care.

The Teleosis vision of Green Health Care takes us beyond the Hippocratic oath, calling upon health professionals to “do more good.” We believe that health professionals—by focusing more on prevention, precaution, education, and wellness—can significantly contribute to improving the health of their patients, community, and the environment.

In Green Health Care, toxic-free buildings, literacy around local environmental health issues, and the use of safe, effective, precaution-based medicine are all intrinsic parts of a new system of health care that is good for people and the environment.

Several notable “green” efforts exist today in the health care field focused on addressing the negative environmental impacts of hospital resource use and disposal. These important hospital-based initiatives promote the use of safer medical supplies and materials, and the reduction of toxic medical waste. What has been overlooked is the important role of primary health care practitioners operating in small- to medium-sized clinics. The Teleosis Institute is partnering with this influential and important group to transform health care as we know it.

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<tr>
<th>GREEN HEALTH CARE</th>
<th>TRADITIONAL HEALTH CARE</th>
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<tr>
<td>Links the environment and human health</td>
<td>Environmental impacts on health are only acknowledged by specialists in environmental medicine</td>
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<td>Delivers affordable medicine</td>
<td>Costs rise at an annual growth rate of 8.2%—three times the rate of overall inflation</td>
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<td>Offers renewable medicine</td>
<td>Hospitals generate more than 2 million tons of waste each year</td>
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<td>Creates healthy workplaces</td>
<td>Only considers occupational risks</td>
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<td>Fosters environmental advocacy</td>
<td>Waits for research to prove environmental consequences</td>
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<td>Protects people and the environment</td>
<td>Contributes to environmental degradation</td>
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Imagine a health care system where a visit to a health practitioner is healthful, educational, and life-enhancing. Imagine a conversation with your provider where you learn about environmental issues in your community that might impact your health or your family’s health. Imagine a health care office that proudly showcases how it is reducing its impact on the environment through conserving natural resources and reducing waste.

The Green Health Care Program is a first-of-its kind integral process for health care professionals representing small- to medium-sized clinics committed to improving human and environmental health. The purpose of the program is to build a network of health care professionals who reflect the core value of sustainability in all aspects of their practice.

The Green Health Care Program provides health care professionals a practical and manageable roadmap to improve health and the environment. The Teleosis Institute assists participants to:

- **Green the Workplace**
- **Become an Environmental Health Advocate**
- **Provide Sustainable Medical Care**

By meeting rigorous health and environmental standards, professionals provide a model of health for their staff, patients, and the community. By serving as educators and environmental advocates with their patients, health professionals protect human and environmental health. By emphasizing and prioritizing Ecologically Sustainable Medicine (ESM)—practices that are affordable and renewable—professionals save money and resources.

Teleosis recognizes that significant change requires transformation at multiple levels—beginning with individual learning or personal mastery. Exploring individual values, beliefs, experience, and purpose provides an essential and often overlooked first step towards making changes within one’s organization and community. The Green Health Care Program integrates evaluation, education, action, and professional development to nurture the individual learning process.

An over-reliance on pharmaceutical and high-technology-based medicine generates significant amounts of pollution and solid waste, to the exclusion of medical treatments that are safe, effective, and sustainable. All of these practices vastly contribute to the degradation of the environment and human health.
PROGRAM SERVICES AND DELIVERABLES

The Teleosis Institute provides Green Health Care Program participants with the following:

- **LEADERSHIP FORUMS**: A kick-off Leadership Summit provides participants the opportunity to create a learning community with other emerging Green Health Care Professionals, develop a shared vision for Green Health Care—and learn from thought leaders about environmental health, leadership, and instituting Green Health Care. A closing Leadership Awards Celebration acknowledges participants’ accomplishments and provides additional resources for ongoing work in Green Health Care.

- **TOOLS**: A checklist and onsite “green audit” by a trained member of the Teleosis team are used to assess the sustainability of the workplace. Workbooks assist participants in learning about environmental health and sustainable medicine, and in deepening their understanding of their values and purpose in being a Green Health Care Professional. Action Plans help identify and institute immediate and longer-term changes for all program components.

- **RESOURCES**: A rich variety of printed and online educational materials are distributed to increase the health care professional’s knowledge about environmental issues in the community that impact human health. Resources include: Environmental Health Brochures, Professional Guides for Environmental Health, Green Purchasing Resource List, *Symbiosis: The Journal of Ecologically Sustainable Medicine* and the upcoming Guide to Environmental Health in Alameda County.

- **COACHING**: Ongoing coaching is provided to support participants as they navigate through each aspect of the Green Health Care process and design longer-term sustainability efforts.

- **PEER NETWORKING**: Face-to-face and online discussion groups are offered to foster a learning community among participants, and to share emerging Green Health Care best practices.

- **LECTURES AND COURSES**: Teleosis offers an ongoing series of events, lectures and courses focused on sustainable medicine, healthy lifestyle choices and sharing effective Green Health Care practices.

- **GREEN CERTIFICATION**: Professionals who successfully complete the Green the Workplace component may receive certification and be recognized as a Bay Area Green Business.
DENTAL PRACTITIONERS:
ANDREW MARSHALL, DDS AND LYNNE MARTZ, DDS

Dental practitioners Lynne Martz, DDS, and Andrew Marshall, DDS, believe that changing their practice from ordinary to a place of toxic-free tranquility makes a huge difference in how patients receive treatment. As participants in the Green Health Care Program, Martz and Marshall have done just that. They now employ digital imaging—reducing patients’ x-ray exposure to only 10-25 percent of conventional systems, and eliminating chemicals from the image developing process. They provide porcelain restorations for damaged teeth, and have completely eliminated the use of mercury and other metal fillings. They also purchased a waterless dental vacuum system, which greatly reduces their practice’s consumption of water. Their physical office space has non-toxic paints and natural air-flow for health and comfort. Marshall states, “For us, dentistry has always been associated with fear and pain. By incorporating an environmentally safe physical workspace with state of the art technology, and educating our patients on the importance of proper dental care … we can change the way people perceive dental care.”
THE GREEN HEALTH CARE PROGRAM ROADMAP

1. Green the Workplace

A Green Workplace provides a model of health by meeting rigorous environmental health standards for its staff, patients, the community, and the environment.

Through education, self-assessment and action planning, health professionals become aware of the upstream and downstream consequences of their activities and implement more sustainable practices in their workplace.

Goals:

- Reduce the environmental impact of the health care workplace.
- Conserve resources, reduce waste, and monitor ongoing environmental performance.
- Explore the personal benefits of shifting to more sustainable practices.

Action Steps:

- Use the Green Workplace Checklist to better understand the impact of the workplace and its day-to-day operational practices on occupants’ health and the environment.
  Areas reviewed:
  — Energy efficiency
  — Water conservation
  — Solid waste and recycling
  — Pollution prevention
- Create a Green Workplace Action Plan to define short-term tasks and longer-term improvements.
- Implement the Action Plan. Engage all staff members to ensure success.
- Reassess the office annually and plan for ongoing improvements.

Outcome:

A healthier and more sustainable workplace for its occupants and the community

Many small changes in Greening the Workplace are easy to implement and cost-effective. As larger and longer-term improvements are planned, the negative environmental impacts on building occupants, the surrounding community, and the global environment will be greatly reduced.

Teleosis has partnered with the Bay Area Green Business Program to certify health professionals who complete the Green the Workplace component and are in compliance with all Green Business Program standards.
2. Become an Environmental Health Advocate

Environmental Health Advocates educate patients and their communities about environmental health issues—providing leadership while protecting the health of people and the environment.

Health professionals have a responsibility to understand the implications of a compromised environment on human health. In this program component, health professionals gain a deeper understanding of environmental health and reconnect to their inspiration for environmental action. Further environmental pollution or damage in local areas is discouraged and prevented to the benefit of patients, peers, the community, and regulatory agencies.

**Goals:**
- Become knowledgeable about local environmental health issues.
- Learn the signs and symptoms of environmental illness.
- Teach the importance of a healthy environment.
- Reconnect with the natural world and the passion for and purpose of environmental action.

**Action Steps:**
- Assess your knowledge and commitment to environmental health with the Environmental Health Advocate Workbook.
- Develop an Environmental Health Advocate Action Plan to affirm your goals and commitments.
- Implement the Action Plan. Engage staff, patients and community.
- Evaluate your commitments and create new goals annually.

**Outcome:**
- An environmental wellness leader

As our environment is in constant flux, the role of an environmental wellness leader requires an ongoing commitment to learning about environmental issues and their relationship to health. To advocate for the environment, health professionals must rekindle their passion for the natural world, inspiring and motivating others beyond the workplace—providing leadership for a healthier world.
3. Provide Sustainable Medical Care

Ecologically Sustainable Medicine (ESM) advances medicine with environmental integrity by offering affordable and renewable medical choices—saving resources and money—while preserving the health of the environment.

The practice of sustainable medical care necessitates fundamental changes in the delivery of medicine. Whether practicing family medicine, oncology, chiropractic, acupuncture, massage, psychotherapy, or any other medical technique, providers emphasize prevention, precaution, efficacy and wellness in their daily practice. As a result, the delivery of medicine becomes increasingly more sustainable.

Goals:

- Become aware of the environmental impact of conventional medicine.
- Emphasize wellness in daily medical practice and choose ESM treatments first.
- Recognize the importance of ecological health in medical ethics.
- Promote the psychological and cultural benefits of sustainable medicine.

Action Steps:

- Complete the ESM Workbook.
- Commit to an ESM Action Plan to better serve you and your patients.
- Implement the Action Plan. Engage staff, patients and community.
- Evaluate your commitments and create new goals annually.

Outcome:  

A Green Health Care Professional

A Green Health Care Professional provides more sustainable medical services. As providers integrate ESM into their practice, they effectively change health care as we know it.

Green Health Care Professionals recognize how their physical workplace impacts human health, how their role as environmental advocates directly relates to their patients’ and community’s health, and their ongoing responsibility to practice sustainable medicine.
ECOLOGICALLY SUSTAINABLE MEDICINE (ESM)

Ecologically Sustainable Medicine (ESM) is an approach to health and wellness that focuses on sustainable, cost-effective health care and preventative self-care education. Medical practices that meet these criteria include a range of effective preventative and complementary therapies.

**ESM PRACTICES ARE:**
- Renewable and non-toxic
- Affordable and accessible
- Adaptable and flexible
- Protective of human and environmental health

Teleosis believes that when conventional care is warranted, it should be provided. However, often there are alternatives that should be used as a first line of defense for acute and chronic disease. Empowering patients, through preventative education, to take responsibility for their own health, enables a lasting health care option that avoids the overuse of costly and invasive procedures and medications. ESM practices are widely used and broadly applicable. They include:
  - Lifestyle Counseling, Nutrition, Exercise, Health Education
  - Physical Therapy, Massage
  - Biofeedback, Guided Imagery, Meditation
  - Acupuncture, Therapeutic Touch
  - Psychotherapy

*If a respiratory physician can be encouraged to take a stand to decrease pollutants in the air, and therefore decrease respiratory illnesses in the patient, we will all benefit. The Green Health Care Program provides a manageable roadmap for us to make these important changes."

— Teleosis Board Member Calista Hunter, MD

Dr. Hunter is board certified in both endocrinology and internal medicine. She attended medical school at Temple University and has practiced in the Diablo Valley since 1985. She has specialized in women's health issues, eating disorders, osteoporosis, thyroid disorders, weight management, PMS and menopause. She has also obtained a MA in Culture and Spirituality and has training in cranio-sacral work.
GREEN HEALTH CARE PROFILE

PROFESSIONAL SCHOOL OF MASSAGE:
McKINNON INSTITUTE

As a professional school of massage, McKinnon Institute exemplifies an approach to health that values people and the environment. The staff is comprised of educators and practitioners of sustainable medicine, and their building was refurbished to reduce their environmental footprint. For McKinnon Director Selena Lee, “Green Health Care means bringing all aspects of the massage practice in line with the primary value of increasing sustainability in one’s daily life.” Reflecting the Green Health Care Program’s goals, the McKinnon workplace has natural wool-blend carpet with recycled padding, full spectrum, energy-efficient lighting, and a solar-powered garden water fountain, which students and staff enjoy as they relax and socialize on their breaks. McKinnon advocates education and the sharing of best practices as essential to the health care field. “People are looking for Green Health Care options; offering working models and ways to see Green Health Care in action will heal the world!”
GREEN HEALTH CARE OUTCOMES

PRIMARY OUTCOME:
Green Health Care Professionals act as environmental advocates and stewards in their local communities

SECONDARY OUTCOME:
Patients become more educated and engaged about local environmental health issues

TERTIARY OUTCOME:
Green Health Care informs public policy on protecting human and environmental health

INTEGRAL HEALTH CARE

The Green Health Care Program offers an integral approach to health care and the environment. An emphasis is placed on the continuous transformation of the medical professional by attending to multiple perspectives of physical well-being, mental and emotional health, meaningful relationships, and environmental sustainability. Throughout the three components of the program, medical practitioners highlight the links between themselves, their patients, their communities, and the environment. As a result, participants benefit from integral action that reconnects personal health with vibrant communities and a flourishing environment.
TARGET AUDIENCE

The Green Health Care Program is designed for visionary health care professionals committed to a healthy environment and sustainable medicine. Participants include the following practitioners from small- to medium-sized clinics:

- Primary care providers
- Traditional biomedicine providers
- Complementary and alternative medicine practitioners
- Mental health practitioners

PROGRAM LENGTH AND COST

Each Green Health Care Program component is projected to take participants two to three months to complete (approximately one day a month, or 20 hours total). The actual amount of time depends on the professional’s prior knowledge, level of engagement, and readiness to implement changes.

For a limited time, the Green Health Care Program is a free service for Teleosis members. For additional program information, please contact Associate Director Bonita Ford at (510) 558-7285 or bonita@teleosis.org.
GREEN HEALTH CARE PROFESSIONAL BENEFITS

Green Health Care Professionals can expect to reap immediate and ongoing program benefits including:

- A safer and healthier office for clients, staff and the health care provider.
- Improved morale among employees and patients in the workplace.
- Renewed inspiration and internal recognition that one’s vision and action can be part of the solution.
- Savings in money for patients, clients and the health care provider.
- Certification as a Bay Area Green Business and a listing in the Bay Area Green Business Directory.
- Public acknowledgement in our semi-monthly e-newsletter with a readership base of over 2,000, and through Symbiosis: A Journal of Ecologically Sustainable Medicine—a quarterly journal published by Teleosis with a readership base of over 200 health conscious readers.
- Public recognition through Teleosis promotional activities, events and news stories.
- Partnership opportunities with other Green Health Care Professionals and a growing market of citizens committed to green business.

REFERENCES:

For more information about the Green Health Care Program, please contact:

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