



Touchstone Award and Garden Research Studies

Legacy receives highest honor for garden design; new study shows nature reduces burnout in nurses

The Oregonian

https://www.oregonlive.com/portland/index.ssf/2013/06/legacy_emanuel_medical_center_8.html

Healthcare Design Magazine

<https://www.healthcaredesignmagazine.com/projects/landscaping-exterior/legacy-emanuel-medical-center-plants-purpose/>

The Hospitalist Magazine

<https://www.the-hospitalist.org/hospitalist/article/125664/hospital-gauge-health-benefits-therapeutic-garden>

Legacy Terrace Garden Dedication: April 14, 2014

<http://www.youtube.com/watch?v=DyQnTX1zkMM>

The Society of Critical Care Medicine

<http://www.survivingsepsis.org/Communications/Critical-Connections/Archives/Pages/What-Can-Therapeutic-Gardens-Offer-to-Intensive-Care-Unit-Family-Visitors.aspx>

Medical Construction & Design

<https://mcdmag.epubxp.com/i/909550-nov-dec-2017/19>

Journal article explores relationship between therapeutic gardens, birthing experience

Health Facilities Management

<https://www.hfmmagazine.com/articles/3161-health-system-studies-therapy-gardens-affect-on-icu-nurses>

Lippincott Nursing Center

https://www.nursingcenter.com/journalarticle?Article_ID=4110425&Journal_ID=54008&Issue_ID=4109816 The impact of a hospital garden on pregnant women and their partners

American Journal of Critical Care

<http://ajcc.aacnjournals.org/content/27/6/508>

The impact of nurses taking daily work breaks in a hospital garden on burnout



Legacy Story Center

<https://www.legacyhealth.org/our-legacy/stay-connected/story-center/stories/2018-stories/people/2018-11-nurses-study.aspx>

Becker's Hospital Review

<https://www.beckershospitalreview.com/quality/why-hospitals-should-let-nurses-take-outdoor-breaks.html>

The Advisory Board

https://www.advisory.com/daily-briefing/2018/11/15/garden-walks?WT.mc_id=Email|DailyBriefing+Headline|DBA|DB|2018Nov15|ATestD

2018 Healthcare Design conference award film Phoenix, Arizona

Legacy Emanuel's research garden second floor Terrace Garden: https://youtu.be/gEaLQ_7gQH0.

2018 is the second year The Center for Health Design has awarded the Evidence-Based Design Touchstone Award. This award is given to recognize outstanding projects throughout the world that demonstrate exemplary achievement across the touchstones of the EBD process; collaboration, evaluation, and sharing.

[Why research matters top 10 HCD.pdf](#)



Accepting the 2018
Evidence-Based Design
Touchstone Award
Platinum Level

Minot Cleveland, M.D.,
Teresia Hazen, MEd, HTR,
Serene Perkins, M.D.,
FACS, Director of Surgical
and Clinical Research for
Legacy Research Institute
Roger S. Ulrich, Ph.D.,
EDAC, FASLA, co-project
investigator, Chalmers
University, Sweden.

The Lund Report <https://www.thelundreport.org/content/press-release-legacys-therapeutic-garden-receives-highest-honor>



Nature Sacred: A Nature Place Heart of the Hospital launches:

<https://naturesacred.org/heart-of-the-hospital-launches/>

The Scribe the official publication of the Medical Society of Metropolitan Portland "A healing garden: A nature place at Legacy Emanuel offers relaxation to providers"

<https://indd.adobe.com/view/dc65b326-bb08-493d-91d0-6df683076950>

November 22, 2019 "Legacy staff weed out stress in therapy garden"

<https://www.koin.com/news/human-interest/legacy-staff-weed-out-stress-in-therapy-garden/1613094599>

March 5, 2019 "Legacy Health Emanuel adds new greenery to North Portland campus"

<https://katu.com/news/local/legacy-health-adds-new-greenery-to-north-portland-campus>

March 8, 2019 "Voz workers are part of an equitable green economy!"

<https://portlandvoz.org/blog/2019/02/05/voz-workers-are-part-of-an-equitable-green-economy>

March 12, 2019 "Hospital garden reduces burnout: Nurses report less stress after spending time in Legacy Emanuel's hospital garden during 6-week study" Health Facilities Management

<https://www.hfmmagazine.com/articles/3571-hospital-garden-reduces-burnout>

March 14, 2019 "Positive impacts of a hospital garden on patients, families and nurses." HCD Icons and Innovators Live Webinars presentation by Minot Cleveland, M.D., Brian Bainson, ASLA, and Teresia Hazen <https://www.healthdesign.org/events/202>

March 26, 2019 "Gardens can cure the nursing shortage and counteract bullying" Flower Power with Jill the first daily floral news site www.flowerpowerwithjill.com/gardens-can-cure-the-nursing-shortage.

June 26, 2019, Legacy Emanuel Medical Center to Begin Large Tree Planting Project around 50-Acre Campus"

<https://eliotneighborhood.org/2019/06/26/legacy-emanuel-medical-center-to-begin-large-tree-planting-project-around-the-50-acre-campus/>

August 7, 2019 "ICU Patient Family Stress Recovery During Breaks in a Hospital Garden and Indoor Environments." Health Environments Research and Design Journal, Sage Publications.

<https://journals.sagepub.com/doi/abs/10.1177/1937586719867157>

August 29, 2019 "Hospital Finds Gardens Help with Healing" REI Blog post

<https://www.rei.com/blog/stewardship/hospitals-find-gardens-help-with-healing>

September 20, 2019 "Evidence of hospital gardens' therapeutic value grows" Legacy Story Center.

<https://www.legacyhealth.org/about/news-and-media/story-center/stories/2019-stories/community/2019-09-ICU-healing-gardens.aspx>

October 16, 2019, New Report: The Healing Power of Nature
<https://naturesacred.org/the-healing-power-of-nature-report/>

November 3, 2019, Healthcare Design Expo Conference
<https://www.hcdexpo.com/conference/conference-sessions>

The Positive Impacts of Hospital Gardens on Patients, Families, and Nurses presented by Teresia Hazen, MEd, HTR, QMHP, Coordinator, Therapeutic Gardens, Legacy Health; Minot Cleveland, MD, Medical Director, Employee Health, Legacy Health; Bridget Martin, BSN, RN, CCRN, Clinical Nurse, Legacy Health. Despite previous studies on the benefits of gardens and nature for people in healthcare facilities, many knowledge gaps remain. This presentation describes findings from new studies of the effects of a garden located near three medical departments in a hospital complex. The studies used rigorous research methods to examine impacts of the garden on three hospital populations: stressed family members of intensive care patients; critical care nurses working in high-stress units; and postpartum mothers and their partners. No previous research has examined the influences of a garden on these groups. The findings show that the garden improved various outcomes in these populations and provides new insights concerning the value of well-designed healthcare gardens. Session objectives include:

- Apply the latest research findings on the effects of gardens and nature on clinical outcomes to your garden design.
- Employ a multidisciplinary, evidence-based design process for designing successful healthcare gardens that includes involvement of clinicians, family, and former patients.
- Understand research methods that yield sound evidence directing the design of therapeutic gardens and nature in healthcare buildings.
- Apply the therapeutic benefits of programs in a well-designed garden for stressed family members of ICU patients, critical care nurses, and postpartum mothers and their partners.



November 4, 2019, Center for Health Design Expo & Conference – “State of the Science: A Review of Notable Studies Published in HERD” “ICU Patient Family Stress Recovery During Breaks in a Hospital Garden and Indoor Environments” Session Number: A25. *This presentation provides an information-rich retrospective review of studies published in HERD, the Health Environments Research & Design Journal, during the past 10 years. The HERD journal has become the premier source for peer-reviewed research on health environments and reaches an international audience of researchers, clinicians, and design practitioners. Session participants will expand their knowledge about the current state of the science of healthcare design. Health-related environmental science has been emerging over the past decade, and there are currently enough published studies to develop systematic literature reviews to guide healthcare design decision-making and the development of design guidelines.*

November 4, 2019, Congratulations to Clare Cooper Marcus, who was presented the Russ Coile Lifetime Achievement Award at the 2019 Healthcare Design Expo & Conference!



“We are living at a time when the planetary garden which is our home is under enormous stress from climate change; under threat of actual survival, and we with it. I salute many of you here who work to create more sustainable hospital buildings, saving water, saving energy, saving materials”.

Clare Cooper Marcus

<https://www.ahta.org/blog>

<https://www.youtube.com/watch?v=5ITCWdKStz8&feature=youtu.be>

January 23, 2020 Oregon Association of Nurseries trade journal, *The healing power of trees*, [The healing power of trees \(diggermagazine.com\)](https://diggermagazine.com)

April 3, 2020 Legacy Health during COVI-19, *Caring for the Caregiver*

<https://www.youtube.com/watch?v=sUKOyF8wvGE&feature=youtu.be>

May 6, 2020 KGW TV *Therapeutic gardens offer nurses respite during the pandemic*

<https://www.kgw.com/article/news/local/it-is-transformational-therapeutic-gardens-offer-nurses-respite-at-legacy-health/283-223864ce-4ed1-4360-96cd-377313fa037a>



July 17, 2020. [The SHIFT Awards](https://shiftjh.org/2020-shift-award-recipients-announced/) recognize individuals, initiatives, or organizations that make innovative, impactful, and replicable contributions to the advancement of the health benefits of time outside.
<https://shiftjh.org/2020-shift-award-recipients-announced/>

Presentation team

Louise Chawla, PhD, Boulder, CO

Christine Ekenga, PhD, St. Louis, MO

Teresia Hazen, MEd, HTR, QMHP Legacy Health Therapeutic Garden Program Portland, OR

Jill Litt, PhD, Boulder, CO

Don Rakow, PhD, Campus Nature Rx Network, Ithaca, NY

Mat White, PhD, Blue Health, University of Exeter Medical School, England

<https://naturesacred.org/2020-shift-award-honorees-include-a-nature-sacred-board-member-firesoul-and-long-time-collaborator/>

July 17, 2020, SHIFT Award

<https://naturesacred.org/2020-shift-award-honorees-include-a-nature-sacred-board-member-firesoul-and-long-time-collaborator/>

July 30, 2020, Nature Sacred Updates <https://naturesacred.org/firesoul/teresia-hazen/>
Fire Soul Chats <https://vimeo.com/442186602>

August 13, 2020, Legacy Health Front Page

Legacy Health Employee Health---Therapeutic Gardens as a COVID Coping Resource

- [The healing power of Legacy Health's hospital gardens](#) (1:12, with narration, subtitles, and music/water sound)
- [Step into Legacy Health's hospital gardens](#) (1:11, music/water sound only)

Your next break awaits in a Legacy hospital garden (videos)



We've encouraged you to [Check on You, Check on Two](#) this summer. One good way to support your health is to take a break in a Legacy hospital garden.

Whether you're alone or with others, the 12 world-class gardens offer an ideal change from a busy setting and real health benefits. Among other findings, Legacy

studies show just 20 minutes reduced fatigue, stress and burnout for our acute-care nurses.

Employee Health has hosted hundreds of staff at special garden events recently, and there are more to come. In the meantime, two new videos — [The Healing Power of Legacy's hospital gardens](#) (1:12) and [Step into a Legacy hospital garden](#) (1:11) — will get you there virtually.

The second video is for relaxation, so have your earphones nearby. See you in the garden!

August 20, 2020, Growing Research Supports Benefits of Healing Gardens, *Healthcare Design Magazine*, <https://www.healthcaredesignmagazine.com/?blocked=true>

September 10, 2020, YS Climate EP15 BBC News Coronavirus Your Stories, Philippa Thomas, *Nature & Climate Series* <https://t.co/p1pozyDyCq?amp=1>

September 16, 2020 IPPC-IPPS-AHTA, *Supporting Health and Well-being in Hospital Communities during COVID-19*, webinar https://www.ahta.org/index.php?option=com_jevents&task=icalrepeat.detail&evid=97&Itemid=115&year=2020&month=09&day=16&title=webinar-series-part-1-horticulture-and-the-community&uid=98ce7e758debbd39da564223f8275a9a

September 19, 2020, *Destressing in Nature & Rehabilitation in the Garden*, Garden Time TV <http://www.gardentime.tv/>

October 14, 2020, SHIFT Conference, *Psychological Resiliency: Nature Contact in the Time of COVID*. webinar <https://shiftjh.org/sessions/nature-contact-and-psychological-resiliency-in-the-time-of-covid/>

April 4, 2021 *Growing the urban tree canopy equitably* presented by Friends of Trees at Portland Parks and Legacy's Portland Memory Garden <https://www.youtube.com/watch?v=wHtIQBEVxY8>

November 25, 2021, *Healing Gardens and the Military: An Update on TKF Walter Reed Project* <https://vimeo.com/644934299>

February 16, 2022, Legacy Health wins exclusive \$2 million federal grant to address mental health and wellness among health care workers

<https://www.legacyhealth.org/about/news-and-media/story-center/2022/02/legacy-health-awarded-2-million-federal-grant>

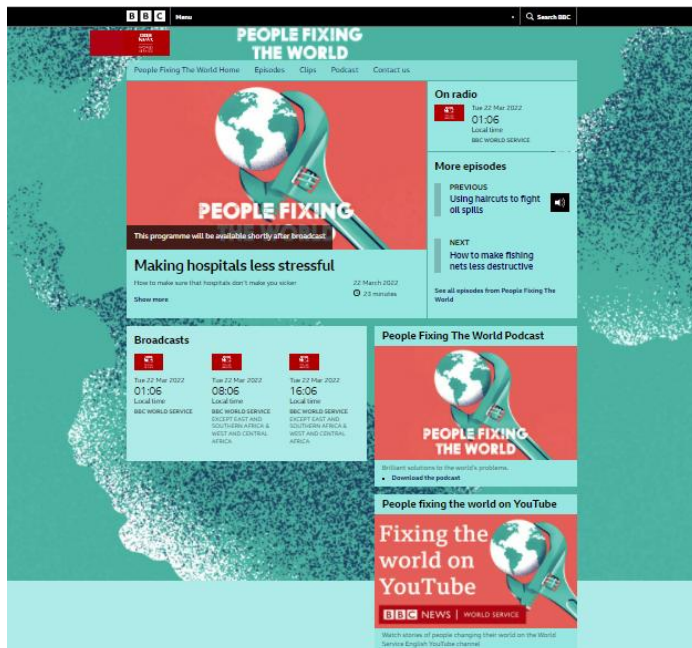
<https://bizj.us/1qe3v2>

Legacy will use the grant, provided over three years, to fund new evidence-based programs that support physical, psychological, and professional safety for the staff, including physicians. In addition, the funds allow Legacy to expand or build upon these existing wellness programs:

- Legacy's 12 therapeutic gardens, designed to create healing environments.
- The Oregon Wellness Program offers free, confidential counseling sessions to health care professionals.
- The Helping Hand Program that provides emergency financial assistance for current staff.
- The Schwartz Center for Compassionate Healthcare, a national program that creates a safe space for staff to discuss stressors and challenges.

March 22, 2022

[BBC World Service - People Fixing The World, Making hospitals less stressful](#)



<https://www.bbc.co.uk/sounds/play/w3ct1pmc> Listen to our BBC broadcast. The Legacy story is first and about 6 minutes, followed by hospital lighting with a Danish hospital team. The last segment is a London-based hospital group working on sound-reduction interventions.

[BBC World Service - People Fixing The World, Baby goats in hospital: 'The perfect stress release'](#) See the BBC video report.

[Legacy Health designs gardens to help relieve stress | kgw.com](#)

[Legacy Health featured on BBC show for its garden - YouTube](#)

4/6/22

Six trees share common threads

Goats and JFS trees team up to relieve stress

<https://www.jfschmidt.com/emailtemplate/sa040622/index.html>

Goats and JFS trees team up to relieve stress

The healing gardens of Portland-based Legacy Health hospitals have earned international acclaim for decades. Recently, it was the irresistible cuteness of baby goats and the beauty of trees that brought BBC World Service and its worldwide TV and radio audiences to the leafy green spaces that bring solace and peace to hospital patients, staff, and community.

Thanks to our nearly 30 years of collaboration with horticultural therapist Teresia Hazen in the development of the gardens, we know them well. You'll find many of our trees thriving in these spaces of peaceful, leafy respite. Recently retired, Teresia spearheaded the development of 12 healing gardens tucked into the Legacy hospital grounds in Oregon and Southwest Washington. She teamed up with [Dr. Roger Ulrich](#) and other scientists to prove beyond doubt that bringing trees and nature into hospital settings speeds healing, helps to retain staff and boost morale by reducing anger, stress, and fatigue, and improves hospital experiences for all. Find a [research roundup here](#).



Three of our trees are among Teresia's favorites: June Snow[®], Dogwood, Golden Raindrops[®] and Royal Raindrops[®] Crabapples. The latter is featured in full bloom in the BBC clip at about the 1-minute mark. Take a few minutes to watch this inspiring episode of [People Fixing the World](#), and explore more of the gardens via our local [KGW newscast](#). Enjoy the trees and the baby goats!

May 2022

[TakeBurnoutfromRedtoGreen_NatureSacred.pdf](#)

Take Burnout from Red to Green Nature Sacred white paper. <https://www.naturesacred.org/>



August 15, 2024

<https://www.economist.com/business/2024/08/15/how-to-take-proper-breaks-from-work>.

During the workday, one tip stands out. A recent review of the research on work breaks by Zhanna Lyubykh of Simon Fraser University and her colleagues concluded that being outside was a better way to recharge. A study of nurses by Legacy nurse researcher Makayla Cordoza, now at Vanderbilt University School of Nursing, and her co-authors found that breaks in the hospital garden reduced the risk of burnout more than staying indoors did. Switching off is hard enough. Staying in the office makes it tougher still.

June 24, 2026

[Terrace Garden 14th Anniversary, Nature Sacred 30th Anniversary & Yellow Journal Tour](#)

11:30 – 1:30 p.m. 2nd Floor Terrace Garden, Legacy Emanuel Medical Center 2801 N. Gantenbein, Portland, Oregon 97212.

Legacy Health Therapeutic Garden Research Publications:

Ulrich, R. S., Perkins, R.S. (2017). The Impact of a Hospital Garden on Pregnant Women and Their Partners. *The Journal of Perinatal & Neonatal Nursing*: Vol 31(2). 186–187.
doi: 10.1097/JPN.0000000000000247.

Cordoza, M., Ulrich, R. S., Manulik, B. J., Gardiner, S. K., Fitzpatrick, P. S., Hazen, T. M., Mirka, A., Perkins, R. S. (2018). Impact of nurses taking daily work breaks in a hospital garden on burnout. *American Journal of Critical Care*, 27(6), 509–512. doi:10.4037/ ajcc2018131.

Cordoza, M., Ulrich, R. S., Manulik, B. J., Gardiner, S. K., Fitzpatrick, P. S., Hazen, T. M., Mirka, A., Perkins, R. S. (2019). Feelings of Emotional Exhaustion and Depersonalization Predict Self-Report of Trouble Sleeping for Nurses Working in Hospital Environments. *Sleep*, 42(1), A74.
doi.org/10.1093/sleep/zsz067.179.

Ulrich, R.S., Cordoza, M., Gardiner, S. K., Manulik, B.J., Fitzpatrick, P.S., Hazen, T.M, Perkins, R.S. (2019). ICU Patient Family Stress Recovery During Breaks in a Hospital Garden and Indoor Environments *Health Environments Research and Design Journal*, Sage Publications.
doi/abs/10.1177/1937586719867157.

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www.legacyhealth.org/gardens 7.26.2026