



# Planning of therapeutic gardens and use of horticulture for health and well-being

EMANUEL Medical Center	GOOD SAMARITAN Medical Center	MERIDIAN PARK Medical Center	MOUNT HOOD Medical Center	SALMON CREEK Medical Center	
RANDALL CHILDREN'S HOSPITAL Legacy Emanuel		LEGACY MEDICAL GROUP	LEGACY LABORATORY	LEGACY RESEARCH	LEGACY HOSPICE



# Kuntouttavan viherympäristön suunnittelu ja käyttö -seminaari

*Planning of therapeutic gardens  
and use of horticulture in  
rehabilitation*

Teresia Hazen, MEd,  
HTR, QMHP  
Registered Horticultural  
Therapist  
Coordinator of  
Therapeutic Gardens  
October 16, 2018

Our legacy is yours.



# Legacy Therapeutic Garden Program

1991 – 2018

Gardens for rehabilitation, recovery and restoration for everyone

[www.legacyhealth.org/gardens](http://www.legacyhealth.org/gardens)

[thazen@lhs.org](mailto:thazen@lhs.org)



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# Professional resources

[www.legacyhealth.org/gardens](http://www.legacyhealth.org/gardens)

Professional resources>conference handouts

- Research
- Job description for Coordinator of Therapeutic Gardens
- How to connect with nature at work
- Terrace research garden design
- [thazen@lhs.org](mailto:thazen@lhs.org)



# Health promotion & prevention (self care)





# Lily in nature









Our legacy is yours.



Explain how gardens promote health agency mission.

Outline EBD, planning protocols and processes for the development of therapeutic gardens.

Describe horticulture programs and practices to support rehabilitation, recovery, quality of life and restoration in hospitals and communities to support health and wellness.



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# Therapeutic garden program 1991- present

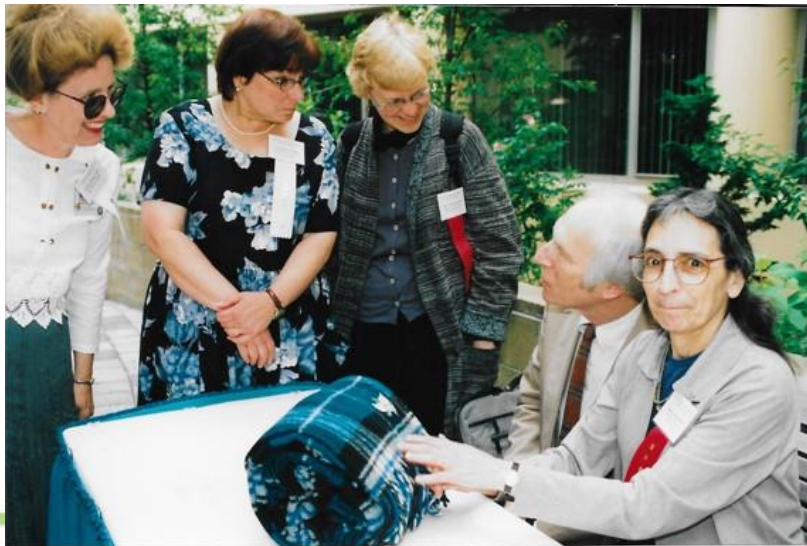
- Twelve gardens at eight hospital campuses
- Garden budgets in patient care services and managed by TGC
- Restoration, prevention and wellness activity for patients, visitors and employees 24-7 partnering with employee health and sustainability programs
- Designing & maintaining garden environments to support therapies, health and well-being, hospital beautification



# Therapeutic garden program 1991- present

- Horticulture/gardening education, environmental education, conservation, and stewardship
- Leadership, collaboration, collective impact—USDA USFS, Intertwine Alliance, TKF Foundation, internships, education and more
- HT---Rehabilitation for RIO & psychiatry patients
- Therapeutic horticulture activities---Pediatrics, Cancer Services and others
- PR, Marketing and more across the system
- [www.legacyhealth.org/gardens](http://www.legacyhealth.org/gardens)

# Kaplans 1999



## *With People in Mind*



DESIGN AND MANAGEMENT OF EVERYDAY NATURE

RACHEL KAPLAN, STEPHEN KAPLAN,  
AND ROBERT L. RYAN



# Roger S. Ulrich 2000 - present





# Who Are We?

## Progressive

→ Open Culture  
Healing Gardens  
Improving the region  
Epic  
Research



# Attributes & Personality

People

Responsible

Quality

Community centered

Progressive







“Most hospitals have manicured shrubs and grounds. The difference here is the gardens are part of the therapeutic space, where there are patients out in them.”

Wall Street Journal  
April 6, 2010

George Brown, M.D. President, CEO  
2008 – 2018 retired  
Legacy Health





This project was funded in large part by the TKF Foundation through its Nature Sacred National Awards program.

[www.naturesacred.org](http://www.naturesacred.org)





# EBD process



The Center for Health Design

<https://www.healthdesign.org>

# Objectives

- Describe an evidence-based design process used to create a hospital garden intended to effectively reduce stress in different user groups.
- Describe new studies of the effects of the garden on three different populations of hospital users:
  1. **Nurses** working in high-stress units
  2. Stressed **family** members of ICU patients
  3. Postpartum **mothers** and their partners



# Previous research on gardens and nature in healthcare settings

- Simply viewing nature, plants, or flowers fosters rapid recovery from **stress**.
- Nature exposure can reduce **pain**.
- Viewing nature reduces **anger**.
- Nature exposure can buffer a person's reaction to a subsequent stressor.

(Ulrich, 1984; Ulrich et al., 1991; Parsons et al., 1998; Kweon et al., 2008; Diette et al., 2003; Lottrup et al., 2013)



# Design implications of prior research

- Gardens designed in informal natural styles with prominent vegetation are more effective in reducing stress than formal spaces with little nature.
- Important that garden is unlocked; located close to departments served; provides seating options; privacy access; shade access; and users feel safe.

(Shukor, 2012; Marcus & Sachs, 2014; Twedt et al., 2016; Nejati et al., 2015)





# But research gaps remain

- Most studies have used simulations, not real gardens.
- The few studies of real healthcare gardens tend to have scientific weaknesses.
- No prior research has compared the effect on stress of a garden versus a “control” environment such as a waiting room.

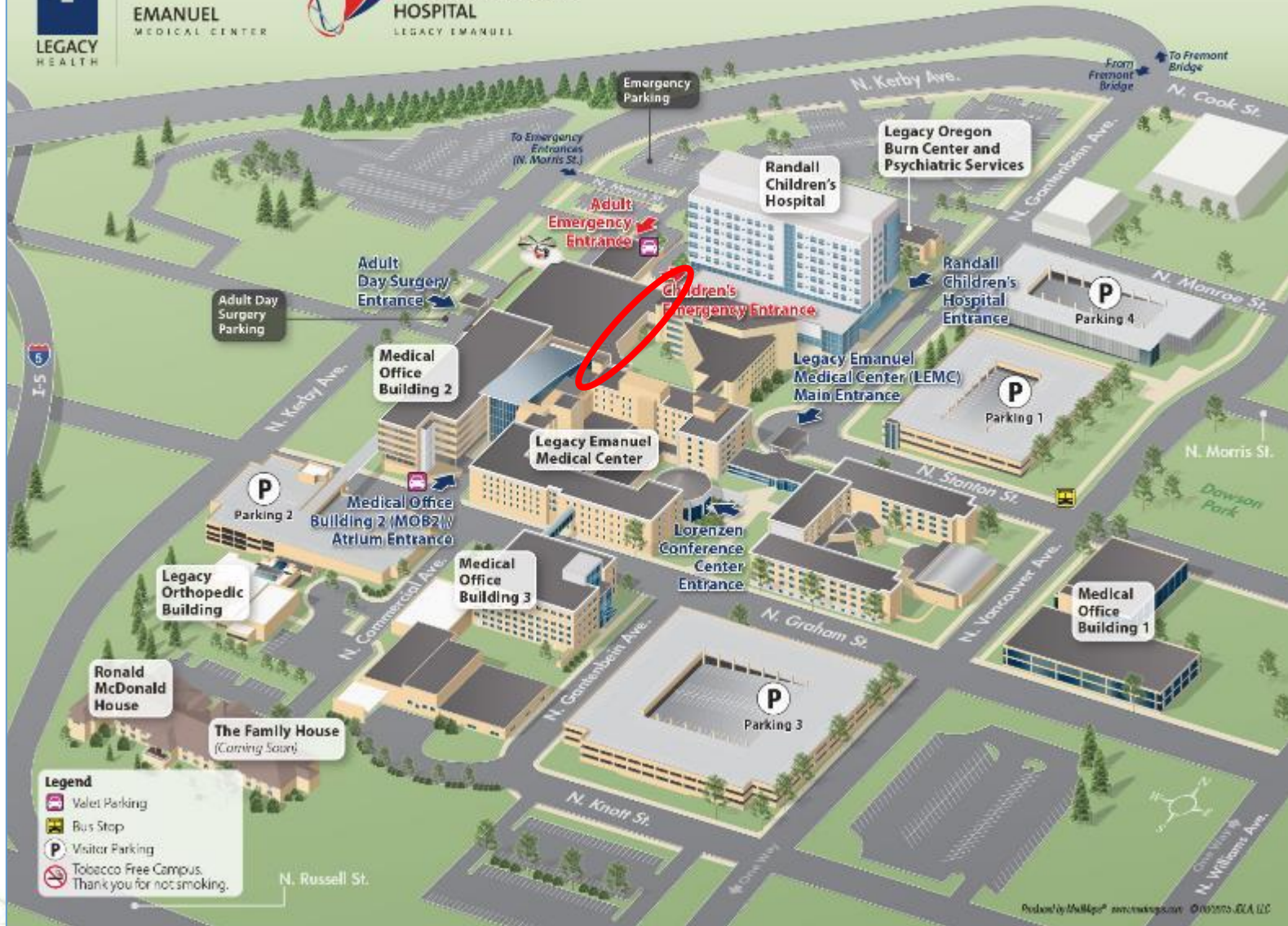




EMANUEL  
MEDICAL CENTER



RANDALL CHILDREN'S  
HOSPITAL  
LEGACY EMANUEL



**Legend**

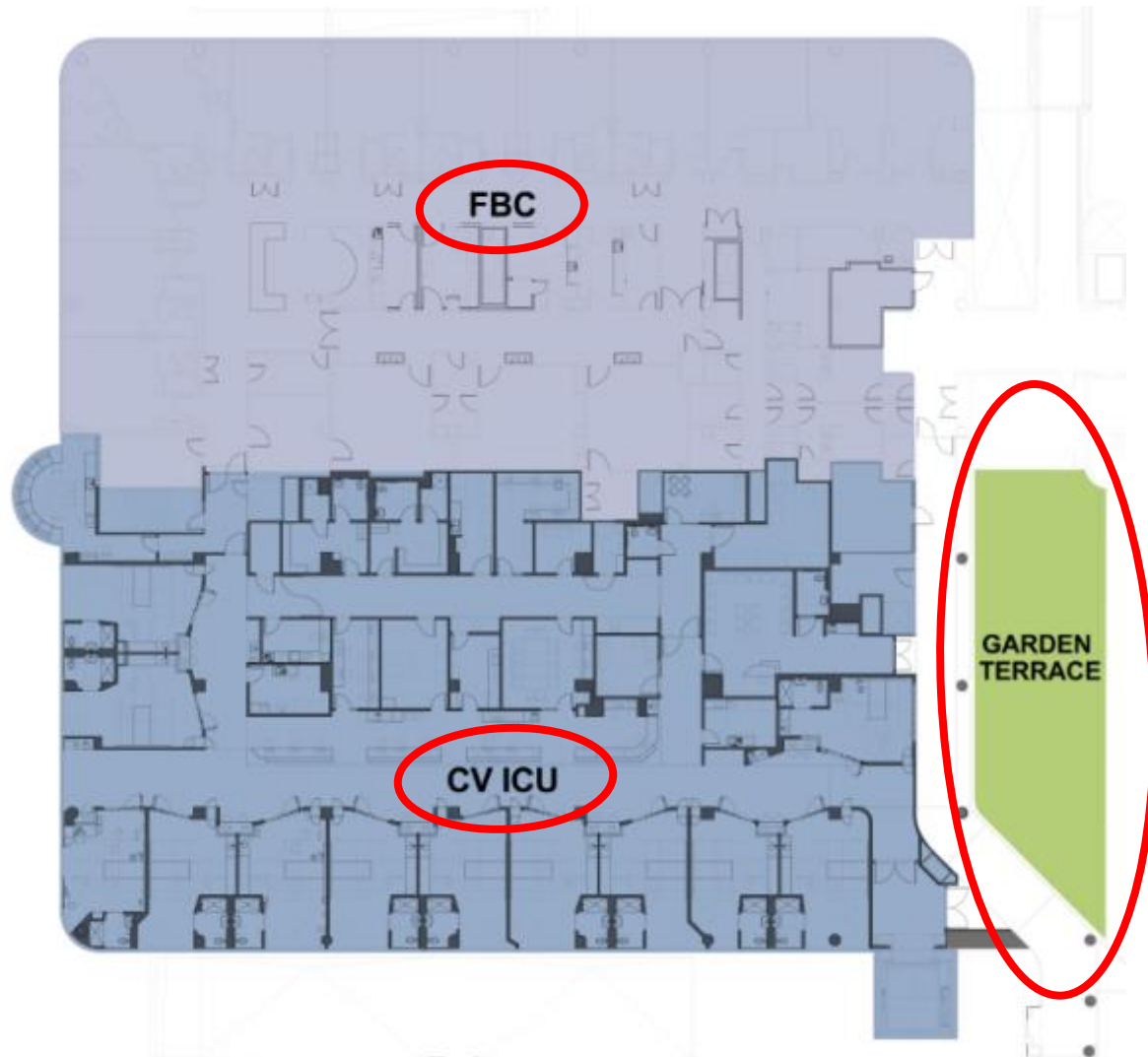
- Valet Parking
- Bus Stop
- Visitor Parking
- Tobacco Free Campus. Thank you for not smoking.



# Location, location, location



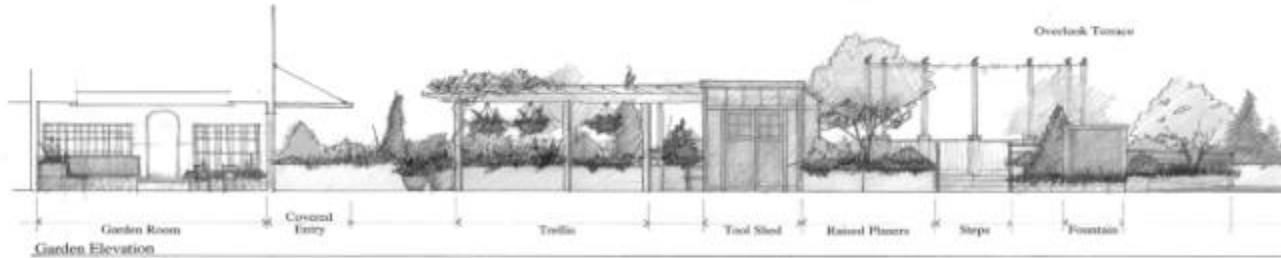
# Close proximity to departments served





# Terrace Garden at Legacy Emanuel Medical Center

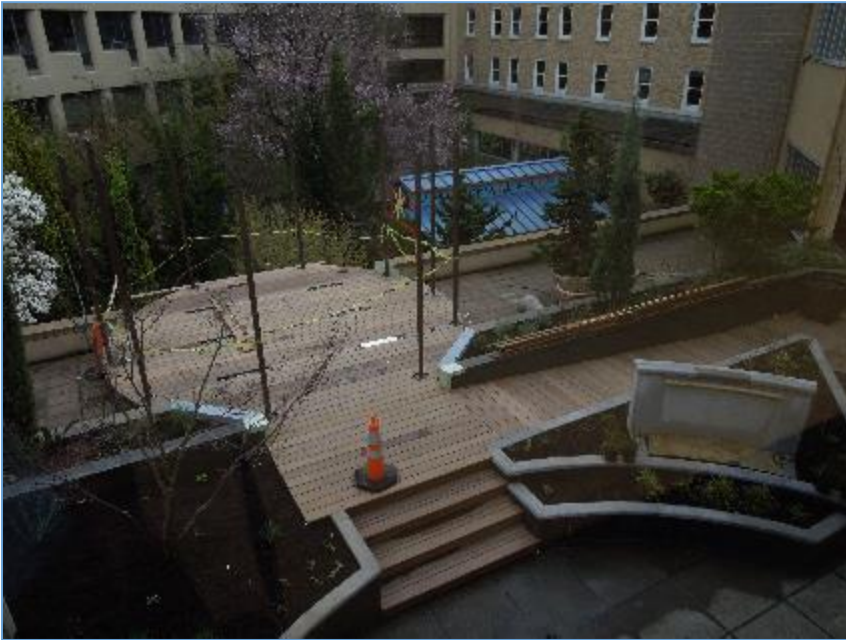
Landscape architect:  
Quatrefoil, Inc.  
Portland, Oregon



# Construction September 2013 - April 2014



# Overlook construction





# Terrace Garden Emanuel Medical Center 2014





# EBD strategies and techniques

- Collaboration
- Evaluation
- Sharing



# Collaboration

Engagement

Development

Participation



# Patient engagement



“I know how important the garden was to my health and the health of my baby.”



# University student participation





# Nurse engagement

“For a caregiver and patient to experience this together strengthens the wholeness and life in both of them. Seeing the "life" that is in the garden helps recalibrate the life in each of us.”

Bridget, RN NTICU



# Physician and administrative engagement





# Interdisciplinary design team work 2012



- Physicians
- Landscape architect
- Facilities & grounds
- Patients
- Families
- Therapists
- Managers
- Nurses including infection control
- Researchers
- Spiritual care
- Volunteers
- Social workers
- Legacy Philanthropy





# Evaluate

## Research

## Hypothesis

## Analyze

## Understand



# Sharing

<http://naturesacred.org>



**Nature Sacred**  
Helping communities heal from the outside.



BUY OUR BOOK

Search

OUR APPROACH   DISCOVERIES   EXPLORATIONS   OPEN VOICES/NEWS

## A Nature Place

Emphasizing patient, family and employee centered care through nature-based programming.

...



# Sharing

## Disseminate



## Apply





# Sharing

Research journal articles

Trade journal interviews

AHTA

AHS

ASLA

IMGA

WPA

ANA

NICH

IPPS2018



Plantsomething.org

# EBD strategies and techniques

- Views of prominent nature and flowers
- Seating options
- Access to privacy
- Access to shade
- Users feel safe
- Four seasons use
- 24-7 for patients, visitors and employees



# Four seasons of sensory stimulation







# Views of nature





# Seating choices





# Garden breaks near the medical unit





# Access to privacy



# Access to shade





# Users feel safe



## 24-7 users





# Interdisciplinary research teams 2012 - present





# Team collaboration



## Three studies:

1. Nurses working in high-acuity units
2. Family members of critical care patients
3. Postpartum mothers and their partners



# Study 1 -- Nurse Study



# Symptoms of Burnout

Psychological symptoms	Physical symptoms
Frustration Anger Fear Anxiety Inability to feel happy Being unprofessional Feeling overwhelmed Disillusionment Hopelessness Lack of empathy Feeling insufficient at work	Exhaustion/fatigue Insomnia Muscle tension Headache Gastrointestinal problems

(Moss, et al 2016; Maslach & Leiter 1997)



# Nurse Study

## **Primary Aim:**

To compare the effect of nurses taking a daily work break in a hospital-integrated garden to indoor-only breaks on burnout.

## **Secondary Aim:**

To compare the change in acute psychological symptoms from the beginning to the end of each break (anxiety, sadness, anger, worry, fatigue, and pain).



# Indoor Break Room Examples



# Results

- Nurses reported moderate burnout at baseline (beginning of study)
  - > Improved to low burnout after garden breaks
  - > Slightly worsened after indoor-only breaks





# Conclusions from Nurse Study

- Taking a daily break in the garden reduced nurse burnout and immediately reduced feelings of anger and tiredness.
- The garden clearly out-performed quality interior break rooms.
- Taking a break in a hospital-integrated garden could be part of a multi-modal approach to reduce burnout for nurses.



# American Journal of Critical Care Nov 2018

## Brief Report



# IMPACT OF NURSES TAKING DAILY WORK BREAKS IN A HOSPITAL GARDEN ON BURNOUT

By Makayla Cordoza, PhD, RN, CCRN-K, Roger S. Ulrich, PhD, Bette J. Manulik, MPH, Stuart K. Gardiner, PhD, Paul S. Fitzpatrick, BS, Teresia M. Hazen, MEd, HTR, Alar Mirka, MD, PhD, and R. Serene Perkins, MD

**Background** Nurses working in hospital environments are at risk for burnout. Exposure to nature has psychological benefits, but the effect of hospital gardens on nurse burnout is less understood.

**Objective** To compare the effect on nurse burnout of taking daily work breaks in a hospital-integrated garden with the effect of indoor-only breaks.

**Methods** A prospective crossover trial was conducted of nurses assigned to either 6 weeks of a work break in an outdoor hospital garden or 6 weeks of indoor-only

## Study 2 – Family of ICU patients

- Family members of ICU patients experience acute distress, anxiety, and depression.
- Other symptoms: disturbed sleep, fatigue.
- 30%-40% of ICU family experience PTSD for months post-hospitalization.

(Pochard et al., 2001; Pochard et al., 2005; Azoulay et al., 2005; Wartella et al., 2009; McAdam et al., 2010; Davidson et al., 2012; Day et al., 2013)



# Family Distress in Intensive Care

- Society of Critical Care Medicine recognizes PTSD in families of ICU patients as a “significant concern with high prevalence.”
- But research is lacking on the effects of interventions intended to help ICU families cope with stress.
- No prior research on ICU family has focused on a garden.



# Family Study

## **Primary Aim:**

Measure the change in stress of family members from the beginning to the end of each person's exposure to the garden.

## **Secondary Aim:**

Compare the effects of the garden on stress with the effects of spending time in an atrium café or ICU family waiting rooms.









**Neuro Trauma family waiting**





# Family study: findings

- Both the garden and atrium/café significantly reduced stress, but the garden was somewhat more effective.
- Waiting rooms: too little data for comparative analysis.





# Conclusions: Family Study

- After spending even a few minutes in the garden ICU family members experienced broad and substantial reduction of stress.
- Providing a garden located close to an ICU could be part of a multi-modal approach for reducing family stress.
- Journal submission



# **Study 3.1 -- Birthing (discontinued) and Study 3.2 – Postpartum (completed)**

- This appears to be the first research to assess the effects of garden exposure on maternity patients and their partners.



## Study 3.1 – Birthing (discontinued)

- Randomized controlled clinical trial (RCT) comparing labor and delivery in 100 women assigned 50:50 to standard of care vs. garden enhanced care.
- **Garden intervention:** minimum of 20 mins of garden exposure prior to delivery.







# Study 3.1 – Birthing “findings”

- 90% of an ethnically and socio-economically diverse sample of women in Oregon would not consent to participating in the study because it might mean they could not spend time in the garden.

- Pregnant women in Oregon like gardens!



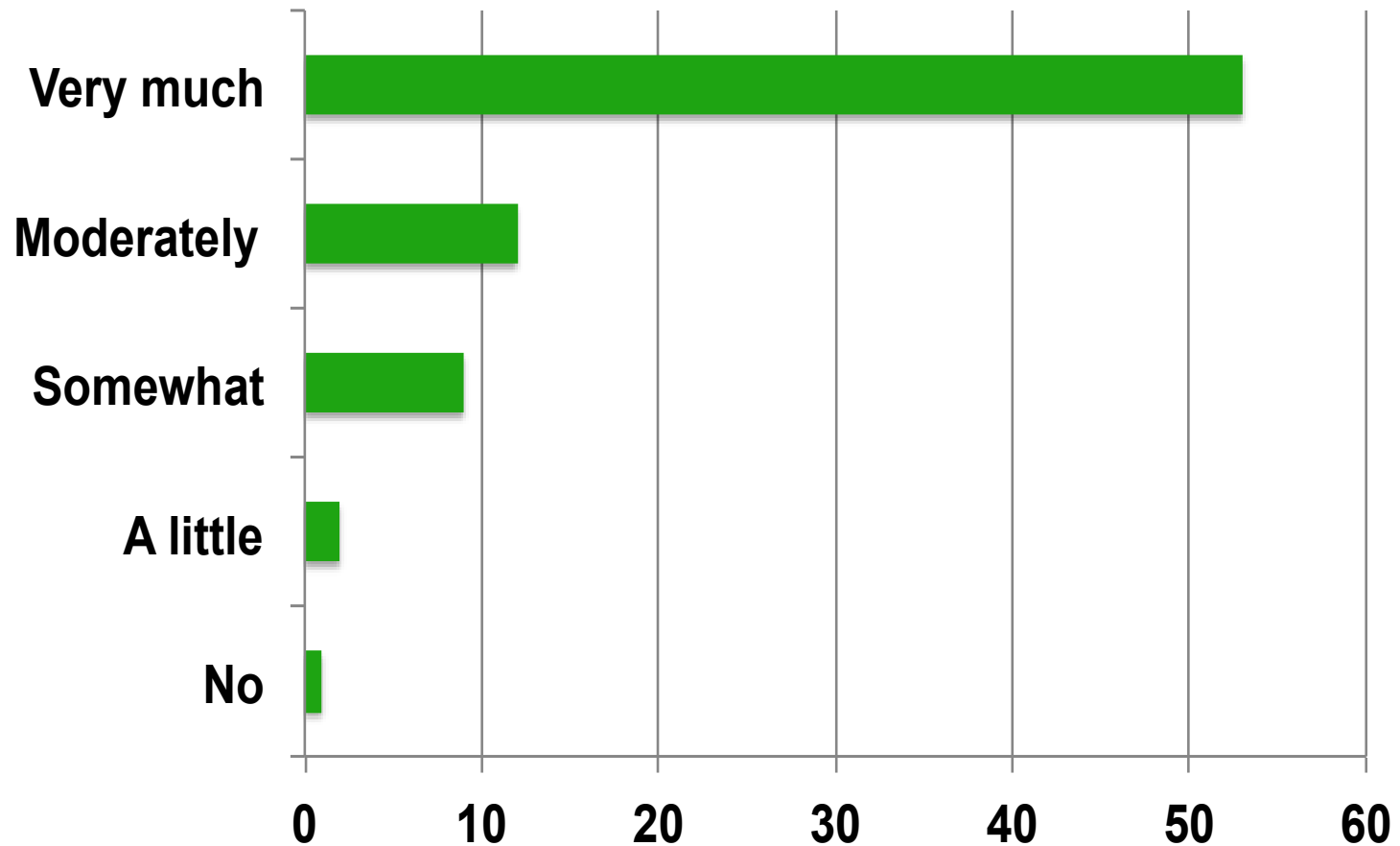
## Study 3.2 – Postpartum Mothers

- **Research design:** observational study of mothers and partners following labor and delivery.
- **Method:** questionnaire that assessed satisfaction with labor experience, whether they knew about the garden, used it, and if so, for how long.

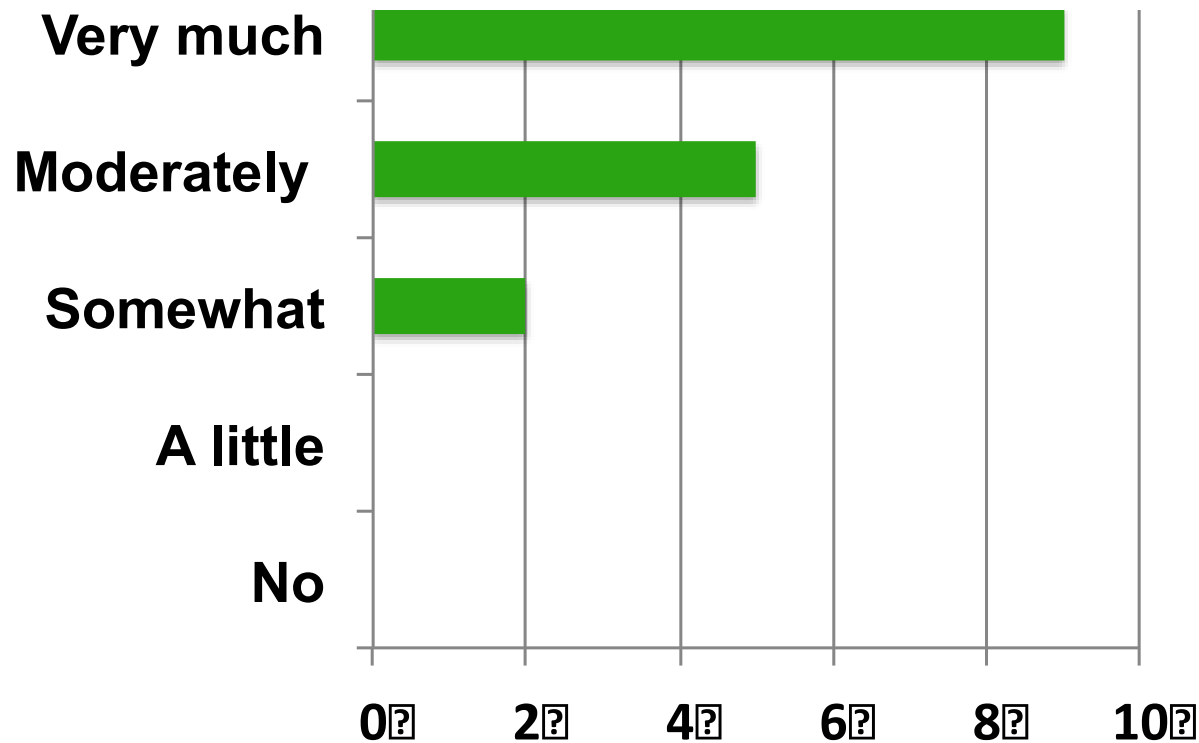
Researchers: R. Ulrich, S. Perkins, D. Neilson, A. Mirka, B. Manulik, K. Hickey, T. Cohen, T. Hazen, L. Logue-Green, S. Gardiner et al.



# Do you think having access to a garden while you are in the hospital is a good idea?



# If you did use the garden during labor, did it help?



# The Journal of Perinatal & Neonatal Nursing: [April/June 2017 - Volume 31 - Issue 2 - p 186–187](#)

doi: 10.1097/JPN.0000000000000247



[https://journals.lww.com/jpnnjournal/Citation/2017/04000/The\\_Impact\\_of\\_a\\_Hospital\\_Garden\\_on\\_Pregnant\\_Women.18.aspx](https://journals.lww.com/jpnnjournal/Citation/2017/04000/The_Impact_of_a_Hospital_Garden_on_Pregnant_Women.18.aspx)



# Summary and Implications

- The three studies together provide strong evidence that the garden has positive effects on different hospital populations.
- The garden is robustly effective in reducing stress for family of ICU patients, and reducing stress and burnout among nurses.



# Summary and Implications

- Abundant presence of nature, seating choices, privacy access, and close proximity to users appear important for the garden's effectiveness.
- The findings imply that allocating spending to provide several modestly-sized gardens, each located close to targeted populations, may have greater overall positive impact than providing a few large gardens located far from stressed hospital populations.



# Summary and Implications

- By demonstrating that a garden can outperform costly interior spaces in reducing stress and even burnout, the findings suggest a new direction for creating a strong business case (ROI) for gardens.





# Care transformation in the US

- **Primary prevention** of disease is better than secondary prevention of subsequent episodes. Interventions that **target vulnerable populations** are better still and **overall population health protection** is the ideal.
- At the organizational level, the Legacy employee health plan has been restructured to **encourage healthy behaviors and discourage unhealthy ones**.

# Nurse study already has influenced Legacy's system-wide employee wellness program

1. Therapeutic gardens as a top priority
2. Reducing stress and fatigue
3. Regular breaks near the unit

Minot Cleveland M.D.  
Medical Director for Employee  
Health, Legacy Health



# Employee Health 14,000 team members



Minot Cleveland M.D.  
Medical Director  
Employee Health

- ✓ Take a break in nature
- ✓ Garden tours
- ✓ Nature walks
- ✓ Music in the garden
- ✓ Employee and program event space
- ✓ 24-7



# Good Health Council---system wide

## Good Health Teams at each hospital

- > **Healthy eating**

- > **Active living**

- > **Peaceful mind**

Encourage healthy behaviors and discourage unhealthy ones.

# Healthy eating





# Active living





# Peaceful mind





# Good Health Team, Gardens and Pets





# Good Health Team (GHT)





# Earth day

## Partners

1. GHT
2. Sustainability
3. Gardens



# Legacy's annual Earth Day event

All are welcome.

11 a.m.-1 p.m.



Sustainability is a core belief that we  
act on every day at Legacy Health.

This way to our annual event.





# Garden music programs



Please Join Us for

## Music In The Garden



Be serenaded while you lunch in the **Stenzel Garden** or just drop by for a refreshing break. Musicians will share the healing and restorative gift of music from 12:15 to 12:45 pm most Tuesdays.

June 27 and July 11 \* Rebecca Cohen—Voice and Guitar  
July 18 \* The Kathy Young Trio  
July 25 \* The Good Sam Carolers

More to follow ! However, **SAVE THE DATE:**  
August 15 \* **Special guest appearance of The Legacy Brass featuring Dr. Brown!**



# Restoration at midnight



# System Office garden club





# Employee health choices





# Nature: A stress coping resource 24-7



# Rehabilitation interventions













# Therapies in the garden



# Recreational therapy





# Legacy Good Samaritan Healing Garden 1997



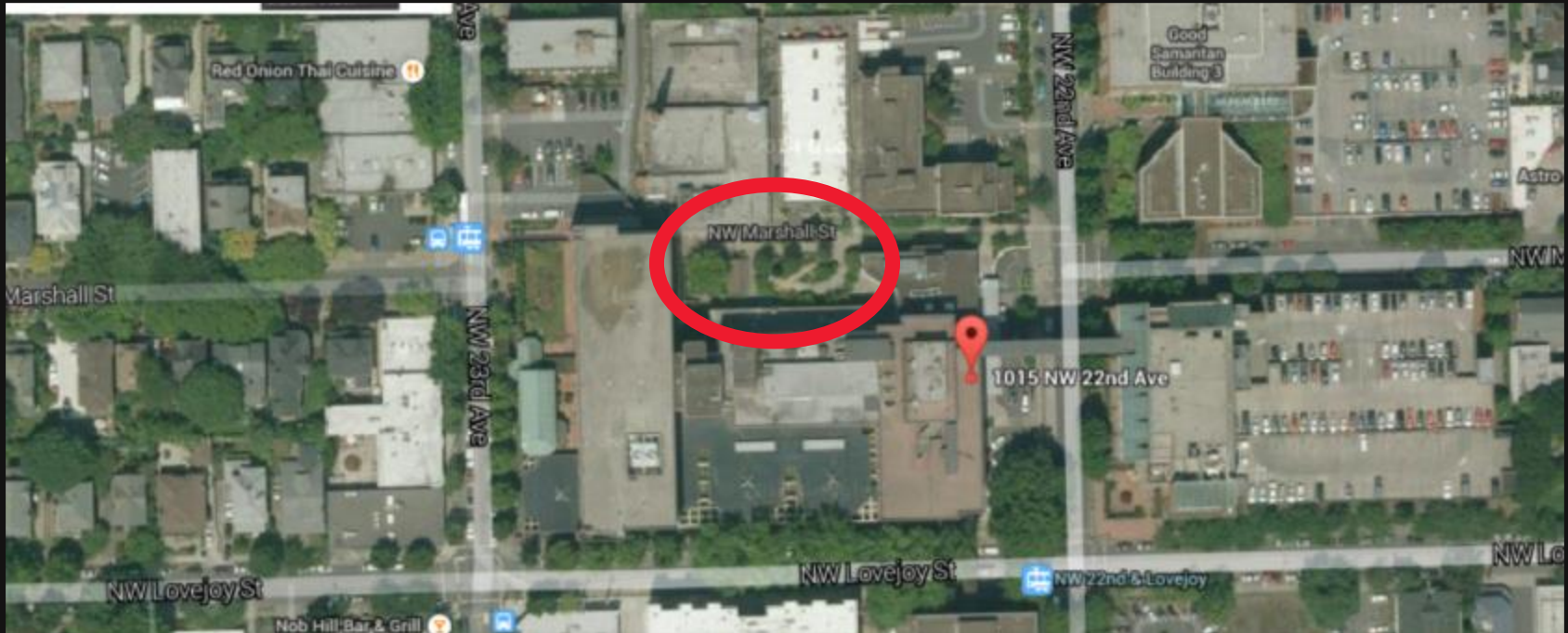
# Rehabilitation Institute of Oregon (RIO)

Portland,  
Oregon USA



# Legacy Good Samaritan Medical Center

The garden as the heart of a neighborhood





# Stenzel Healing Garden 1997 Rehabilitation Institute of Oregon





# Rehabilitation patients in HT



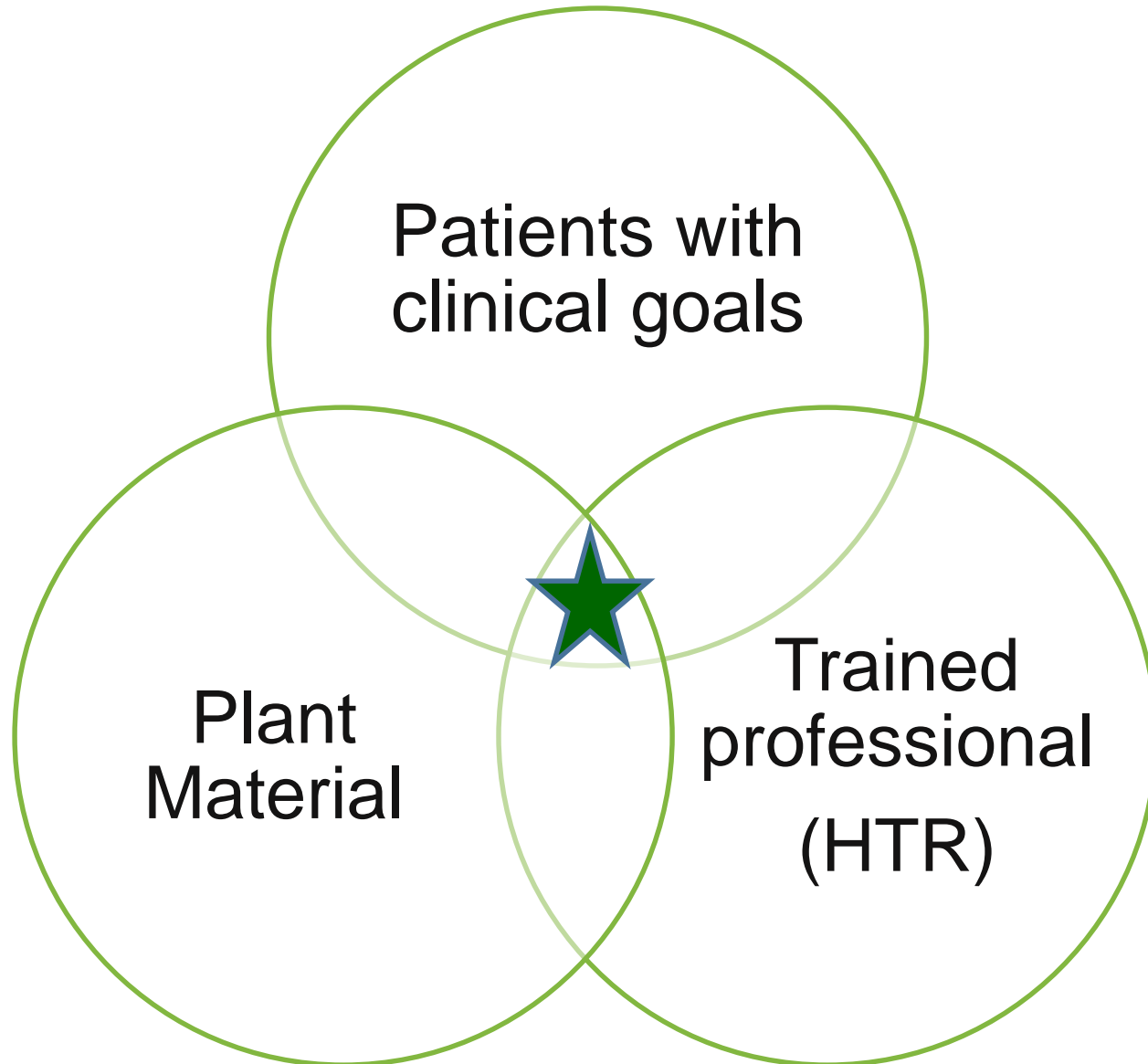
# Horticultural Therapy (HT)

- Patient with a clinical goal
- Trained professional (HTR)
- Using plant material
- Usually in hospital or rehabilitation facility
- Medical model for rehabilitation
- HT is a treatment





# Horticultural Therapy (HT)



# RIO Horticultural Therapy Program























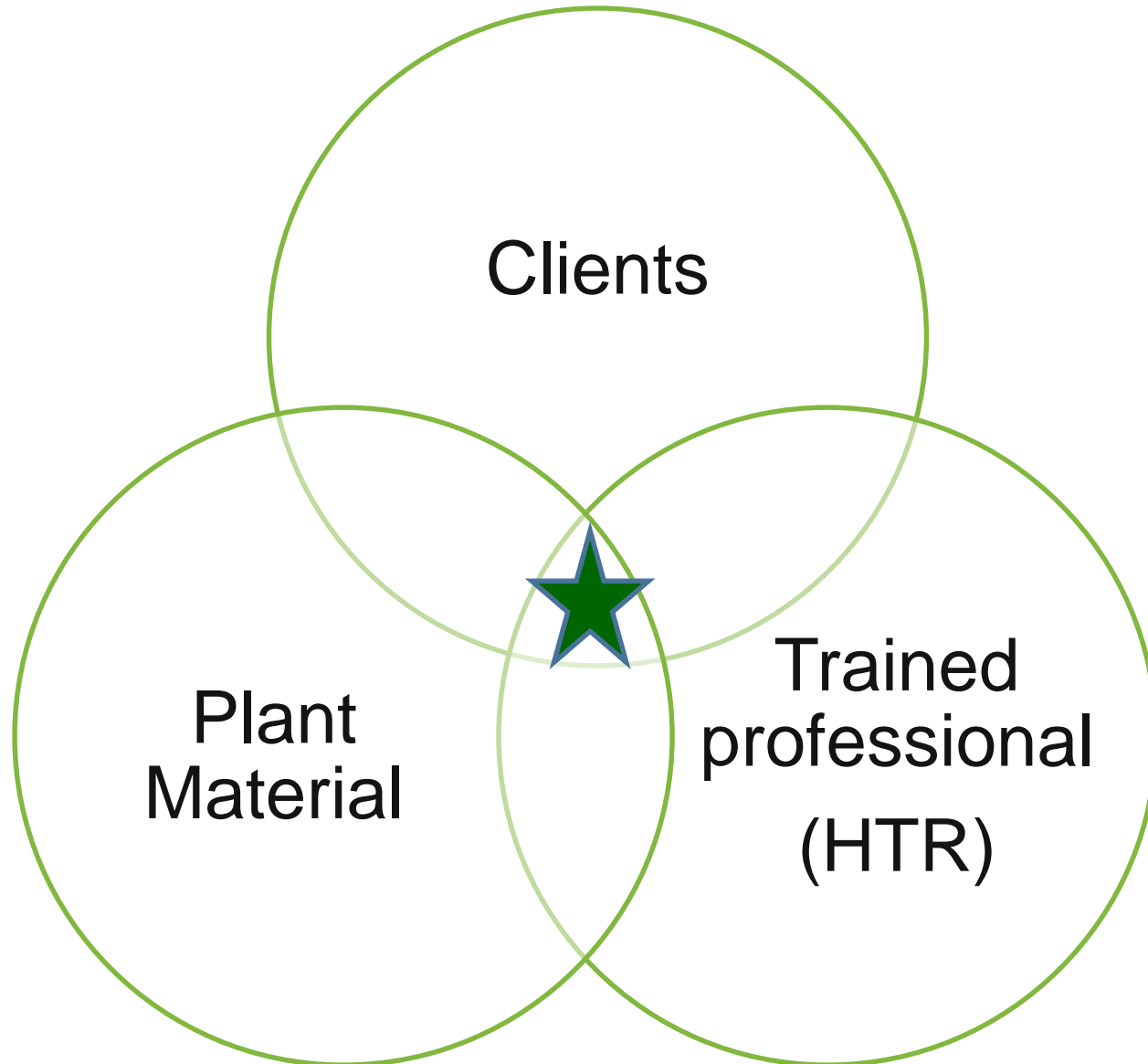
# Therapeutic Horticulture (TH)

- Client, patient
- Trained professional (HTR)
- Using plant material
- Healthcare, senior living, community-based, public garden
- Quality of life and wellness goals





# Therapeutic Horticulture (TH)



# Portland Memory Garden

Planning and fundraising 1998 – 2002

Dedication June 2002



# Portland Memory Garden

[www.PortlandMemoryGarden.org](http://www.PortlandMemoryGarden.org)

Portland Parks &  
Recreation

Center of Design for  
an Aging Society

Legacy Health

PSU Urban  
Planning

ASLA Oregon  
Chapter



The screenshot shows the homepage of the Friends of the Portland Memory Garden website. The header features the title "FRIENDS OF THE PORTLAND MEMORY GARDEN" in a serif font. Below the title is a navigation bar with links: "WELCOME", "ABOUT US", "JOIN US", "EVENTS", "NEWS", and "DIRECTIONS". The main content area is divided into three sections. On the left, there are two photographs: the top one shows three people (two women and one man) standing around a table with potted plants, and the bottom one shows a garden path with a wooden pergola and benches. On the right, there is a text box titled "Our mission:" which contains the following text: "To enhance the lives of individuals with memory disorders and their caregivers by maintaining the Portland Memory Garden and providing therapeutic and educational activities." Below these sections, there is a heading "Welcome to Friends of the Portland Memory Garden" followed by a paragraph of text: "The Portland Memory Garden is located in Portland, Oregon off SE Powell at 104th Avenue in the southeast corner of Ed Benedict Park. This very special garden is open to the entire community, but was designed to meet the special needs of those with memory disorders (such as Alzheimer's disease) and to provide respite for their caregivers. The garden was dedicated in May 2002 and is one of eight memory gardens in the U.S., and one of only two built on public land."

FRIENDS OF THE  
PORTLAND MEMORY GARDEN

WELCOME ABOUT US JOIN US EVENTS NEWS DIRECTIONS

**Our mission:**

*To enhance the lives of individuals with memory disorders and their caregivers by maintaining the Portland Memory Garden and providing therapeutic and educational activities.*

**Welcome to Friends of the Portland Memory Garden**

The Portland Memory Garden is located in Portland, Oregon off SE Powell at 104th Avenue in the southeast corner of Ed Benedict Park. This very special garden is open to the entire community, but was designed to meet the special needs of those with memory disorders (such as Alzheimer's disease) and to provide respite for their caregivers. The garden was dedicated in May 2002 and is one of eight memory gardens in the U.S., and one of only two built on public land.





## Summer Program 2012

**FREE Senior Activities  
in the Portland Memory Garden**

July 9th through August 29th  
Mondays, Wednesdays, & Fridays

*Presented by*  
**Friends of the Portland Memory Garden**

*Funded by*  
**Evercare, Oregon**

*Location:*  
Portland Memory Garden (next to Ed Benedict Park)  
SE 104th between Powell Blvd & Bush Street

# Summer Program: Free Senior Activities



2004 - present

# Save the Dates

Wednesday, September 9 / Wednesday, October 14, 2009

PORTLAND  
NURSERY  
5050 SE STARK 28-0050 & 9000 SE DIVISION 788-9000

Home Instead  
SENIOR CARE™

## 5th Annual Senior Gardening Day

### Portland Nursery at Division

Wednesday, September 9, 1 – 5 p.m.

9000 SE Division

Senior gardening activity stations

Special senior discount coupons

Artists painting in the nursery

Special sale items

Refreshments

Staff and volunteers to assist you with shopping

### Elder Day at Apple Tasting at Stark

Wednesday, October 14, 1 – 5 p.m.

5050 SE Stark

Senior gardening activity stations

Special sales items

Staff and volunteers to assist you with shopping

Special senior discount coupons

Events held rain or shine  
Ample parking and seating  
FREE admission

**Who should participate?** All community members are invited to attend, including seniors and their families, individuals and facilities serving seniors.

*Senior facilities and groups of five or more: reservations are required to Aimee Roth at 503-335-0626 at least four weeks prior.*

Legacy Health System, a nonprofit organization, is Emanuel Hospital, Emanuel Children's Hospital, Good Samaritan Hospital, Meridian Park Hospital, Mount Hood Medical Center, Salmon Creek Hospital, Legacy Clinic, Legacy Hospice, Legacy Laboratory and Managed HealthCare Northwest. ©2009 - RHB-4205

Legacy Rehabilitation  
Services





# Senior Gardening Days at Portland Nursery



# Free senior garden tour and walks





# The Children's Garden at Legacy Emanuel 1997





# The heart of the hospital





# Designing to meet the needs of families



# Pediatric nature stations for everyone











# Nature stations indoors and free for all













# Oregon Burn Center Garden 2004

Legacy Emanuel Medical Center







# Burn Concern Support Group



Patient centered care---patients actively engaged in and directing their care.

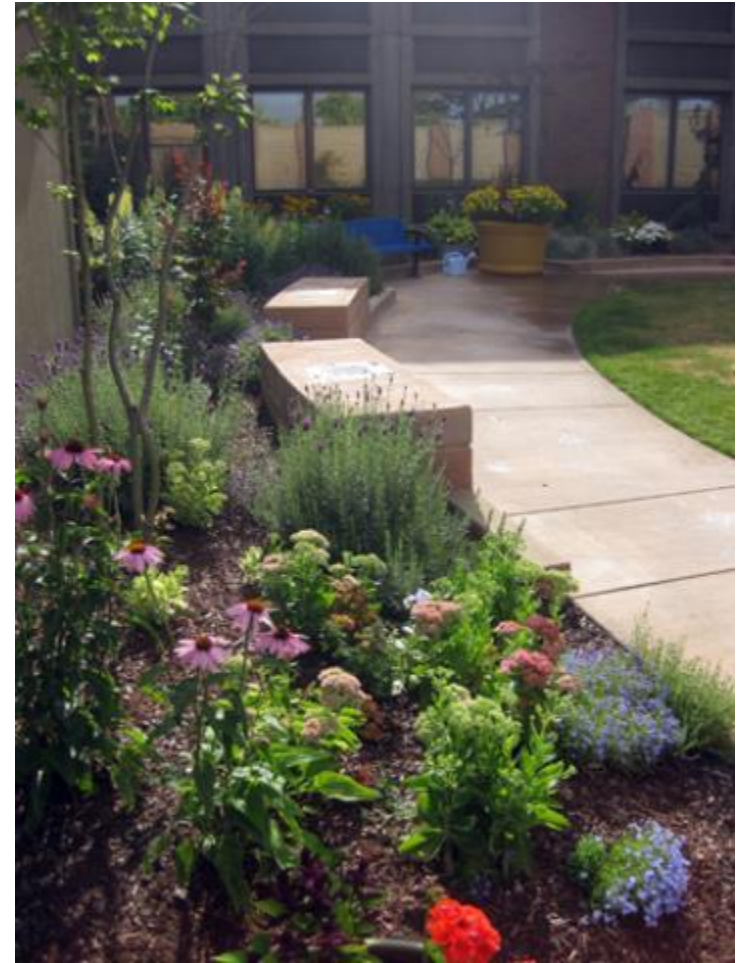


# Behavioral Health Garden 2008

## Legacy Emanuel Medical Center







# Family-centered care



# Family centered care: Needs of the hospitalized patient and family

- Nursing care and therapies
- Stress coping
- Together for emotional support
- Normalizing settings for regular activity
- Play and discovery
- Movement, exercise, running off steam
- Fresh air
- Schedule, structure, daily routines
- Indoors, outdoors, view out





# Therapeutic

1. Of or relating to the healing of disease or condition;
2. Having a good effect on the body or mind;
3. Contributing to a sense of well-being.

New Oxford American Dictionary



# Employee, patient, and visitor therapeutic garden programs



GOOD SAMARITAN  
MEDICAL CENTER

## 2018 Stenzel Garden

**Celebrating  
Healing, Hope and Health in the Garden**

**April 10 & July 10      11:30 – 1:00pm**

**August 8      4:00 – 6:00pm      RIO 70<sup>th</sup> & RIO Guild 60<sup>th</sup>**



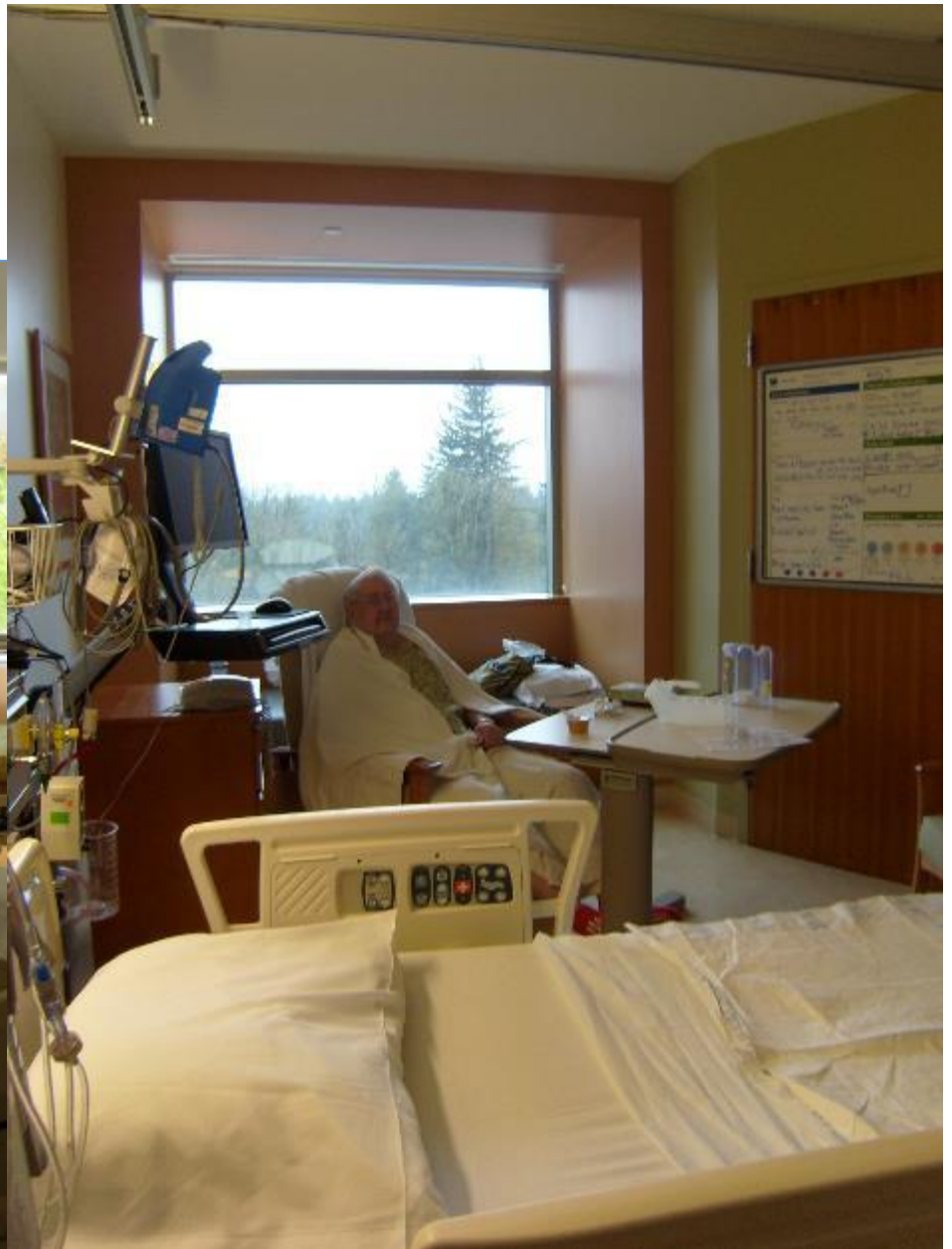
**Activities, garden tours, raffle prizes,  
pet therapy, music and more.**

**Events held rain or shine!**

**Take a break every day in nature!**

For more information, Teresia Hazen [thazen@lhs.org](mailto:thazen@lhs.org)  
[www.legacyhealth.org/gardens](http://www.legacyhealth.org/gardens)

# Patient view





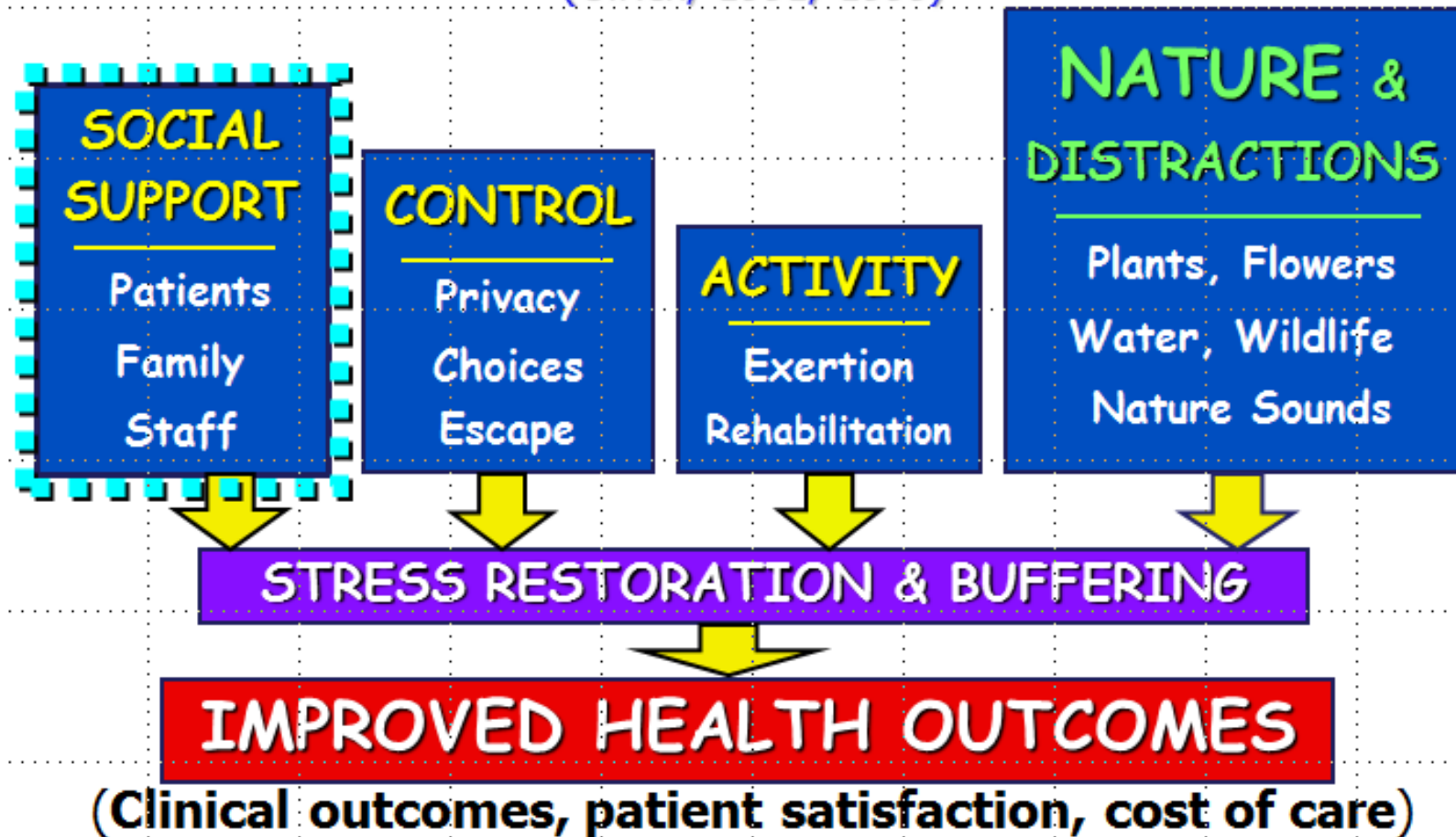
# Legacy interdisciplinary design team process



# Evidence-Based Garden Design Theory:

*Design for Reducing Stress, Improving Outcomes*

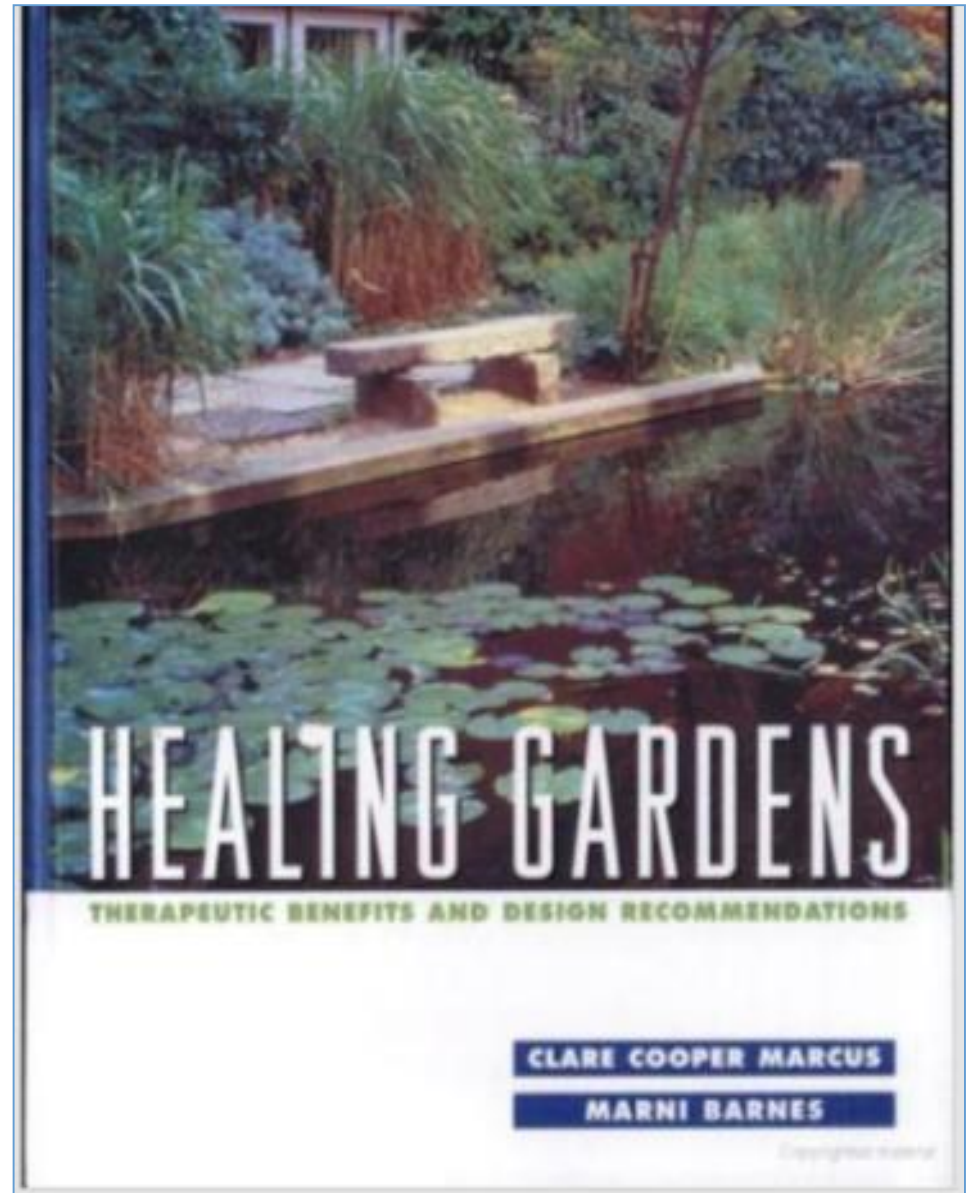
(Ulrich, 1991, 1999)



Courtesy of Roger S. Ulrich

Ulrich, R. S. (1999).  
Effects of gardens on  
health outcomes:  
Theory and research.  
In C.C. Marcus & M.  
Barnes (Eds.), *Healing  
Gardens*. New York:  
Wiley, 27-86.

- Chapter two

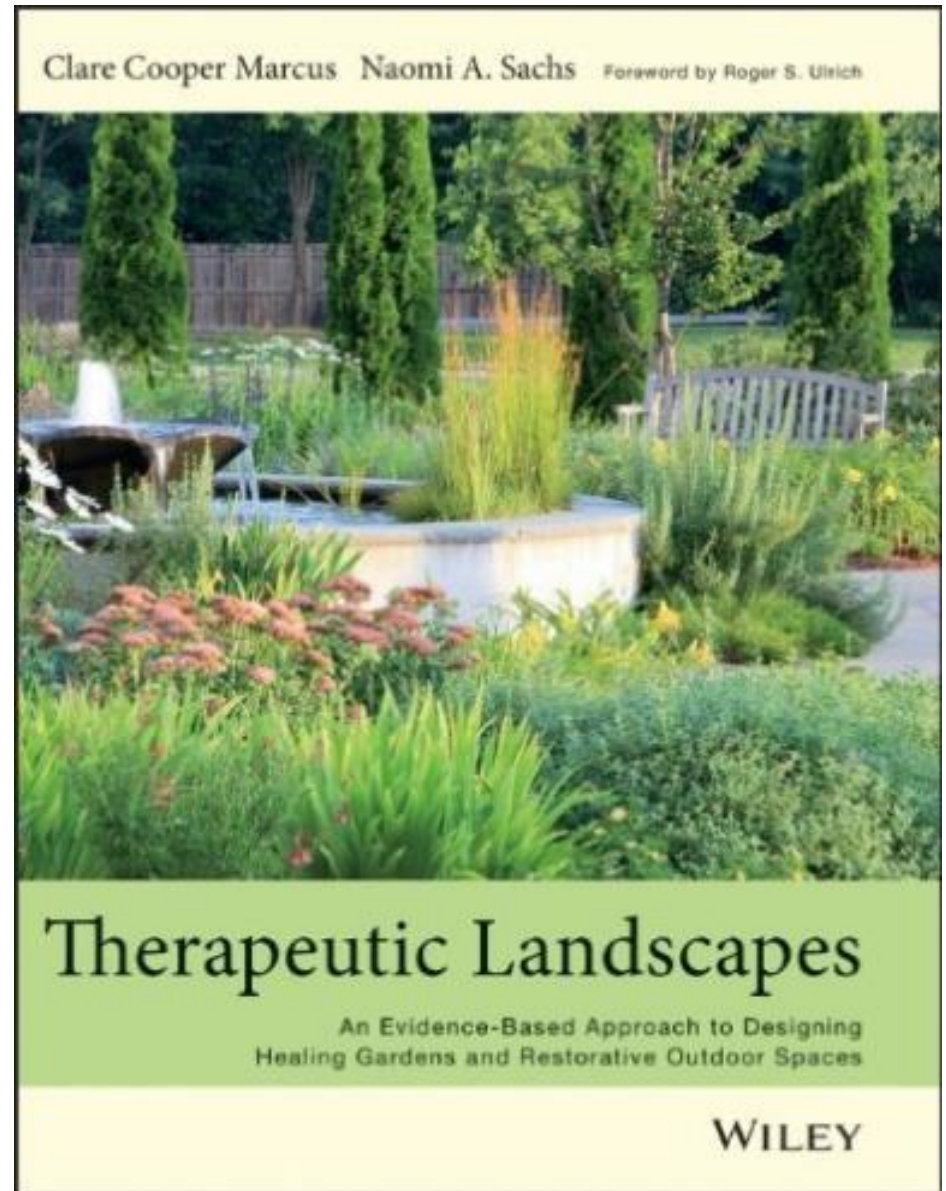




# Evidence base

FIVE The Participatory  
Design Process

SIXTEEN Horticultural  
Therapy and Healthcare  
Garden Design



## Connect with HTRs/providers from health care settings.

## LEGACY HEALTH 145

# Research informs planning, funding and program decisions

## Preventive Medicine Reports

Soga, M., Gaston, K. J., & Yamaura, Y. (2017). Gardening is beneficial for health: A meta-analysis. Preventive Medicine Reports, 5, 92–99.

<http://doi.org/10.1016/j.pmedr.2016.11.007>





# Human Ecology Review

Pleasant, A., M. Scanlon and M. Pereira-Leon (2013). Literature review: Environmental design and research on the human health effects of open spaces in urban areas. *Human Ecology Review*, 20 (1), 36-49.

This literature review identified six overarching design criteria:

1. encourage human activities
2. a setting for sensory stimulation
3. develop the space for safety and security
4. encourage present moment awareness
5. consider the culture of the population using the space
6. promote nature as a metaphor for healing

# Journal of Obstetric, Gynecologic, & Neonatal Nursing

Stark, M. A. (2001), Nature as a complementary therapy for women. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 30: 574–578.

- Nurses can present information about the value of natural restorative environments in the workplace.
- Employee lounges with plants and window views of nature.
- Gardens, picnic tables, and bird feeders outdoors.
- Promote attentional health and restoration by incorporating nature.
- Maintaining gardens accessible to staff, patients, and families.

# American Journal of Critical Care

McAdam, J., D.K. Fontaine, D.B. White, K.D. Dracup and K.A. Putillo (2012),  
“Psychological symptoms of family members of high-risk intensive care unit patients,”  
*American Journal of Critical Care*, 21(6):386-394.

- To compare levels of posttraumatic stress disorder, anxiety, and depression
- Significant decrease after 3 months after the experience. Many family members still had significant risk for PTSD and borderline anxiety and depression at 3 months.





# Legacy Salmon Creek Medical Center



# Legacy design team meetings 1 2 3







# SC Design team meeting #3



# Fundraising by Legacy Philanthropy

Professional  
services

Funds before  
construction

Forever  
fundraising





# Fundraising helps us achieve quality





# Legacy Mount Hood Medical Center 2009

## Gresham, Oregon



# Fundraising 2006 - 2009





# Groundbreaking April 2009





# Community engagement



# Construction





# Dedication November 19, 2009





# In-Kind Contractor Donors



# Safety, health and well-being through sustainability

## Legacy Health

### Legacy Mount Hood Medical Center Healing Garden Sustainable Design

Did you know that all of Legacy's Therapeutic Gardens are designed with environmental sustainability in mind?

- Organic and safe methods used in garden maintenance
- Use native, drought tolerant plants
- Neonicotinoid-free plants to avoid harm to insects
- Plant many plants to encourage pollinators to visit and work
- Bioswales to more effectively manage storm water
- Environmentally friendly techniques used to avoid and treat pest issues
- Educational signage
- Audubon approved bird houses made of recycled, repurposed materials
- Year-round events hosted in gardens emphasizing benefits of gardens and green spaces, good health and environmental stewardship
- National Wildlife Federation certification  
<https://www.nwf.org/Garden-for-Wildlife/Certify>
- Designed in accordance with Sustainable Sites Initiative principles -  
<http://www.sustainablesites.org>
- Inspiration for creating your own healthy environments



# Maintenance: Contract gardeners





# Community volunteers 20 – 25 year-round



# Community benefit, integration and connections

- Some gardens 24-7 public
- Community benefit
- Collaborations
- Collective impact



# American Horticultural Therapy Association

- Registered horticultural therapist (HTR)
- Core curriculum, degree, registration
- Therapeutic Garden Characteristics
- People-plant connections for health





# Internships support community



# Internships support community





# Family Relief Nursery



Therapeutic classroom outdoors





## Welcome

## Inside This Section

Family Recovery Support Picnic at Blue Lake Park

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## Thank you, Volunteers!

We are pleased to introduce the "Seed-to-Table" Project!

Thanks to generous community support, Volunteers of America Oregon is establishing a community garden at our Family Relief Nursery program, which works to strengthen vulnerable families. The garden will help parents and children enrolled in the program to plant and harvest vegetables, herbs, and other crops, cultivating a stronger family bond as they cultivate a garden.

The garden will also serve as a healthy food source for these families. In addition, horticulture therapy students from PCC and Legacy Health Systems will work about gardening.

Volunteers from the Home Building materials donated by Parr Lumber.

We are very grateful for this generous





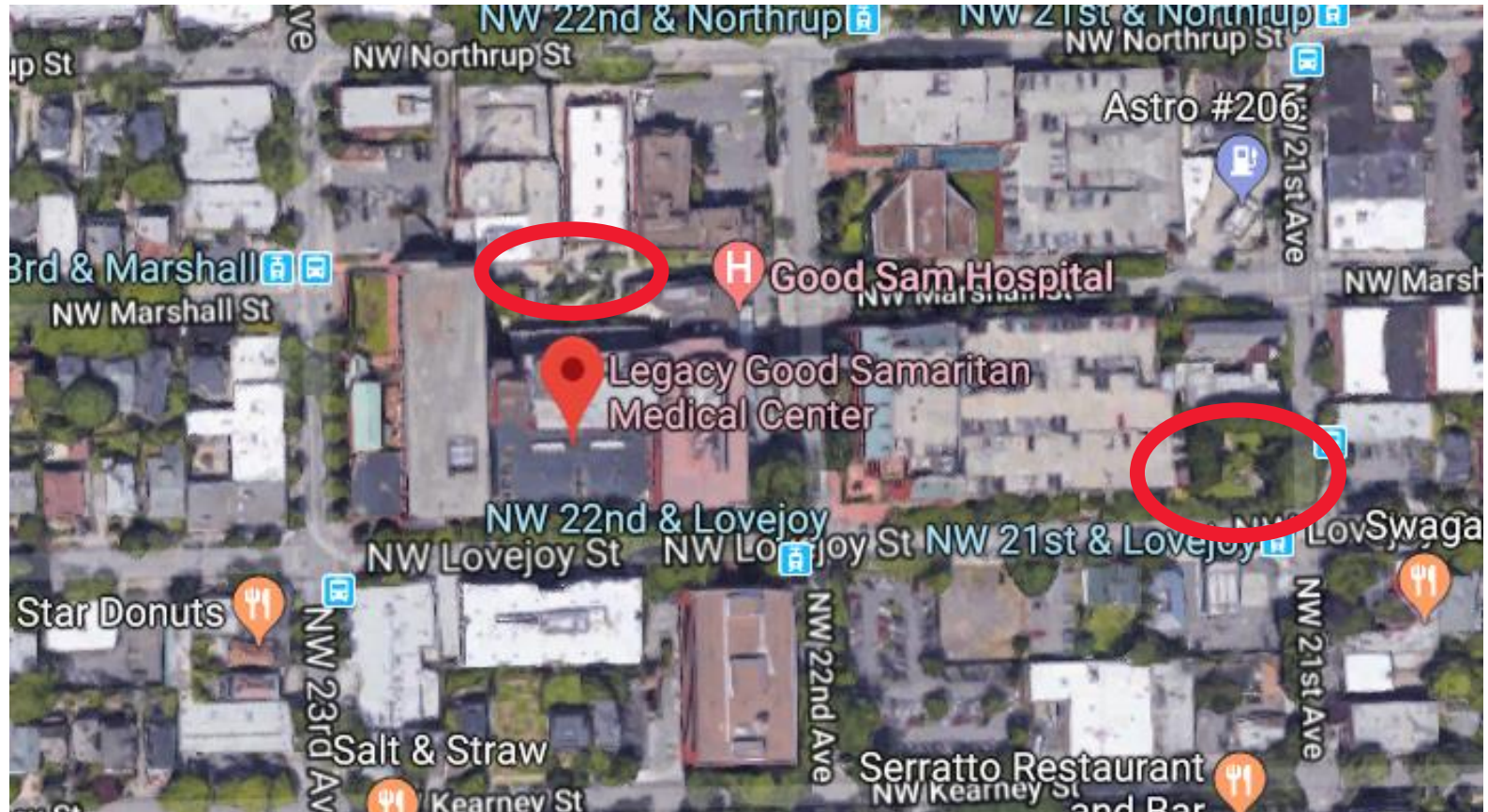
# Stenzel Healing Garden 1997 Rehabilitation Institute of Oregon





# Legacy Good Samaritan Medical Center

The garden as the heart of the neighborhood





# Legacy Good Samaritan Park 2016





# Legacy Good Samaritan Park June 2017









# Neighborhood Association July 2018







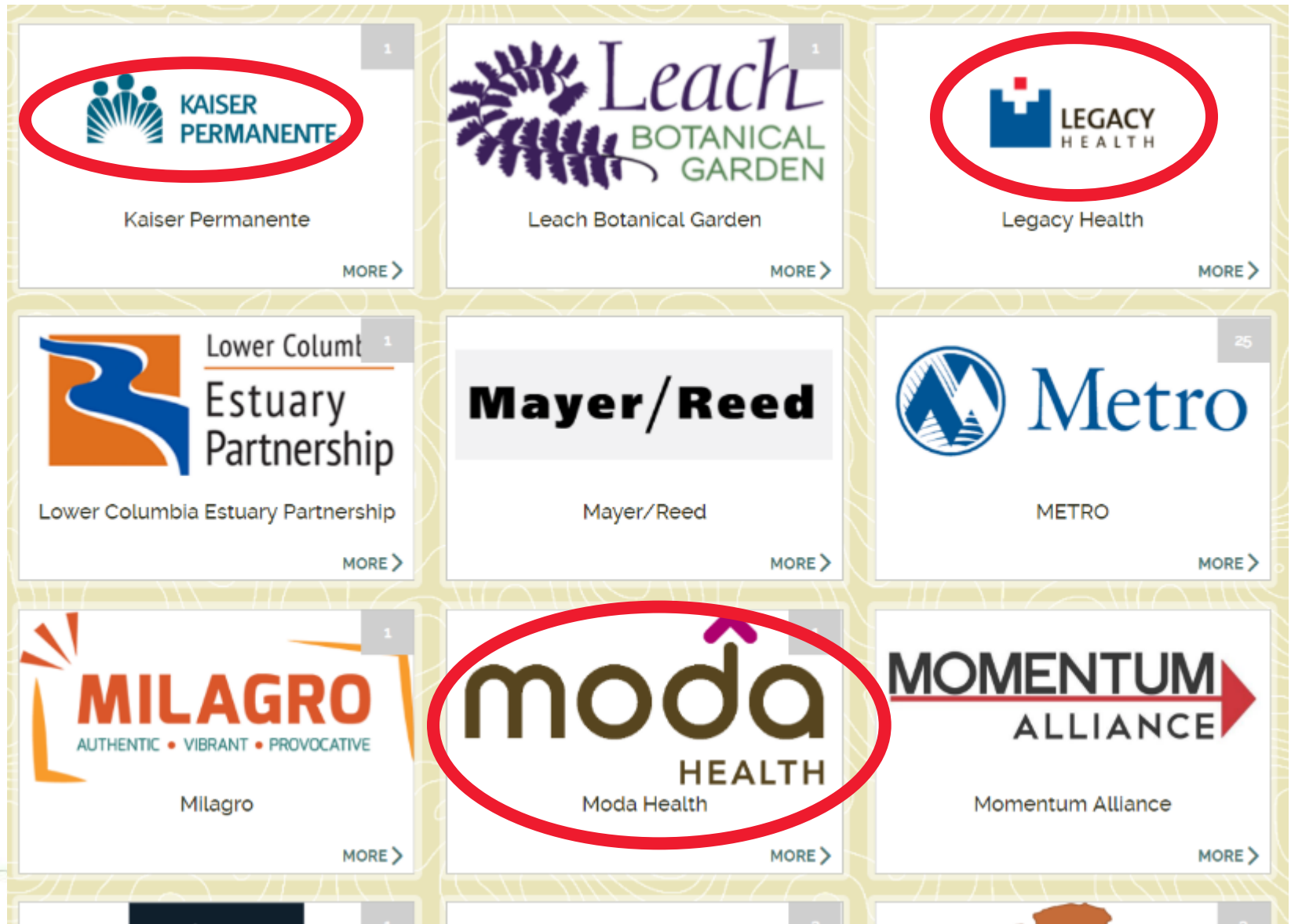


# Community engagement





# Intertwine Alliance---Collective impact





<http://willamettepartnership.org/green-infrastructure-health-guide/>



# We Must Better Communicate the Health Benefits of Nature

ASLA



# A culture of health and nature





# Health and nearby nature

