



Donna Gaffney

Donna is a psychotherapist, author and educator, has long addressed a wide range of life-altering experiences in the lives of children and families—loss, trauma, and stress. She has counseled professionals, young people and schools in the aftermath of individual and national tragedies — 9/11, Sandy Hook, and Hurricane Katrina. In addition to academic papers, Donna is the author of *The Seasons of Grief: Helping Children Grow Through Loss*. She taught at Columbia University and holds master's degrees from Teachers College, Columbia University, Rutgers University, and a doctorate from the University of Pennsylvania. Her post-doctoral work includes: the Prudential Fellowship for Children and the News at Columbia Journalism School. Donna consults for the New York Life Foundation and the Resilient Parenting for Bereaved Families Program at Arizona State University.

Milagros Elia

Milagros is the founder of M. Elia Wellness, LLC, a service which offers Integrative Health Program Design within local cancer survivorship communities, larger healthcare systems and organizations. She is the proud recipient of the (SIO) Society for Integrative Oncology's 2019 Clinician Stakeholder Award for the impact her services have had, and continue to have, on the cancer survivorship community. She has twenty years of experience as a Nurse Practitioner and received her Master's of Arts from NYU in Advanced Practice Nursing. Additionally, she is a certified Health and Wellness Coach and Yoga Instructor.

Ed Lord,

Ed is a lecturer in Mental Health Nursing and RCBC PhD Fellow in Ecotherapy at Swansea University in Wales, UK. His research interests are in the intersection of critical social theory, human geography, and nature based interventions. Prior to entering nursing research and education Ed worked for over a decade in inpatient acute mental health settings in the National Health Service (NHS) in England and Wales. Since 2016 Ed has been conducting qualitative ethnographic research in the field of ecotherapy and nature based interventions as part of a PhD Fellowship awarded by RCBC Wales. In addition to his role in the Department of Nursing Ed is developing and delivering the "Actif Woods Wales" programme of woodland based wellbeing interventions in Neath Port Talbot with the social forestry NGO 'Coed Lleol'. @ecotherapyYed

Sonya Jakubec

Sonya L. Jakubec, (RN, PhD) is a Professor at Mount Royal U. in Calgary, AB, Canada where she teaches in the Faculty of Health, Community and Education. Sonya has been a community mental health nurse for nearly 30 years, a researcher/academic for nearly 20 years of those years. Her research concentrates on health & environment connection across the lifespan. She has published in areas of critical and social determinants of mental health, mental wellbeing related to community recreation and parks inclusion, as well as family/caregiver needs in illness and end of life. Sonya presents at a local library book talk or parks volunteer training group, or at professional conferences. Her research is in edited book collections, excerpted in student textbooks and featured in international journals. It is this work across/with academics, government, parks and health leaders, graduate/undergraduate students, and volunteer groups that Sonya considers the secret sauce of an engaged research program in parks and health connection! It is all connected.

Shanda Demorest

Shanda Demorest, DNP, RN-BC, PHN is a Member Engagement Manager with Practice Greenhealth, where she works with hospitals & health systems to reduce their environmental impact. She earned her DNP in Health Innovation & Leadership from the U. of Minnesota, & holds the LEED Green Associate credential through the U.S. Green Building Council. A cardiovascular nurse with horticultural training by background, Shanda leads the Nurses Climate Challenge at Health Care Without Harm: A national campaign to educate 50,000 health professionals about the health impacts of climate change. She served on the Executive Board of Health Professionals for a Healthy Climate for four years, & currently sits on the Global Climate Change Committee for the Alliance of Nurses for Healthy Environments. Shanda serves on the development team of the Nurses Drawdown, a global project to equip nurses to take climate action in accordance with Project Drawdown solutions. Additionally, she partnered in the development of CHANT: Climate, Health and Nursing Tool, which measures nurses' awareness and engagement with climate change globally. Shanda also serves as an Affiliate Faculty member at the University of Minnesota SON and has published works on environmental sustainability in health care and the health impacts of climate change in local, state, & national journals.

Cliff Joullian

Clifton Joullian is The Nurse Farmer. He is an innovator who has intertwined his career as a nurse and a passion through helping others through farming. Cliff was a home health case manager for 20 years and is now a plasmapheresis nurse. He has always had an interest in gardening, starting small with flower beds. Throughout the years his interest expanded to backyard farming and he began connecting this passion of farming into his nursing career and goals. He writes a blog as "The Nurse Farmer" at thenurseandfarmer.com. His mission as a nurse and a backyard farmer is to advocate and teach how gardening activities are a means of health promotion and disease prevention from a holistic perspective, bodies, mind, and spirit. Along with his colleague, Susan Allison-Dean, Cliff announced the launch of a national health and wellness campaign called Healthy Green Thumbs™. Cliff is a graduate of Capella University.

Courtney Schultz



Courtney Schultz holds a PhD in Parks, Recreation and Tourism Management from NC State University, where her research focused on integrating nature-based physical activity prescriptions into clinical care settings. Her MS in Parks, Recreation and Tourism is from the U. of Missouri-Columbia, where she was instrumental in fostering communication between communities of color and city officials in regards to proposed public park renovations; she also holds a Bachelor of Science from the same department. Courtney's early career was grounded in recreation services. She combines these hands-on experiences with her academic studies to inform her real-world research and programmatic protocols. She currently serves as the Research Fellow for Park Rx America, is a SHIFT Emerging Leader ("19), sits on the advisory council for the SHIFT Emerging Leaders Program, and is Adjunct Faculty for the University of Missouri.



Objectives

1. Explore the therapeutic benefits of parks, gardens, and nature for school nurses at work and at home.
2. Discuss strategies and practical approaches in one's school, on the playground or in their office.
3. Discover the role of space and re-imagining space in one's environment.
4. Appreciate the impact of environmental loss and climate change on school settings and on staff.



The Social Determinants of Health

The poor health of the poor, the social gradient in health within the US and the marked inequities are caused by:

Structural determinants
the unequal distribution in power, money, goods and services, globally, nationally and locally

Conditions of daily life
The consequent unfairness in the immediate circumstances in people's lives - access to schools, education, health care, conditions of work and leisure, their homes, communities, towns or cities

Adapted from Commission on Social Determinants of Health, 2008

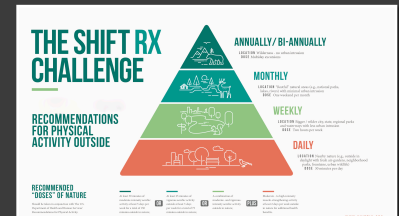


Welcome to everyone!

Our faculty from SHIFT
[Shaping How we Invest For Tomorrow]

You may hear some concepts repeated, as there is some overlap, and because this is new to many.

Each faculty member has suggested a resource for you!



NATURE'S IMPACT ON HEALTH

A Look at Health and Space at School and Home

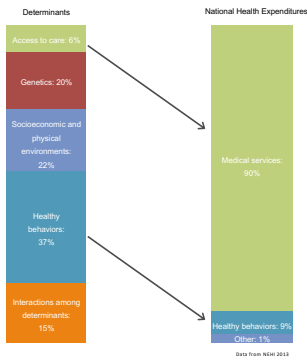
Courtney Schultz, PhD

Health & Technology Partners

90% OF THE NATION'S \$3.3 TRILLION SPENT ON ANNUAL HEALTH CARE IS FOR CHRONIC AND MENTAL HEALTH TREATMENTS

CDC, 2018

The Spending Mismatch: Health Determinants vs. Health Expenditures



Natural spaces can impact up to 74% of an individual's health determinants

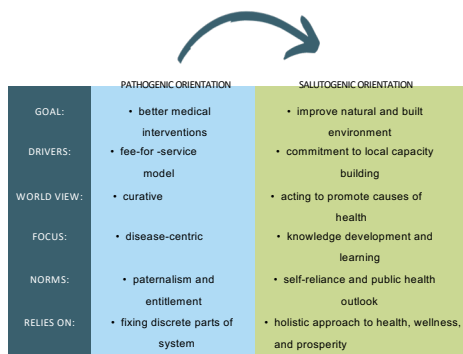
Health is a "state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity."

WHO, 2000

Health depends on our ability to understand and manage the interaction between human activities and the physical and biological environment.

WHO, 1992

SALUTOGENESIS AND HEALTH



Farrow, 2011 based on Antonovsky, 1979

Nature provides multiple health & well-being benefits

Self-Determination Theory (SDT)

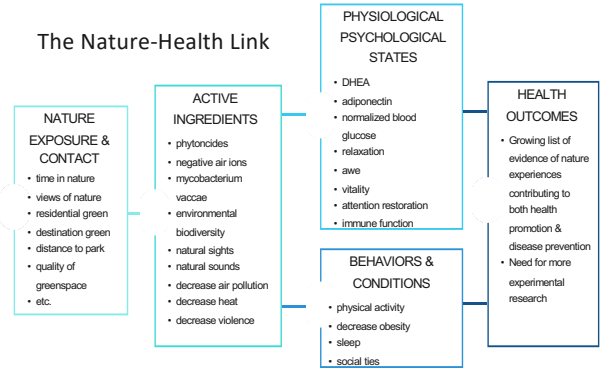
Biophilia suggests immersion in nature is inherently satisfying.

SDT further argues that humans have a basic, innate need to connect and relate to others and the world around them.

Ryan & Deci, 2000



The Nature-Health Link



Based on Kuo, 2015 and Hartig et al., 2014

Physical Benefits

Diseases & Illnesses

- Reduces Hypertension
- Improves diabetes symptoms and reduces blood glucose
- Increases number & activity of human natural killer cells
- Reduced occurrence of illness

General Physical Health

- Reduces Systolic & Diastolic blood pressure
- Improves pulse rate
- Improves sleep
- Promotes healthier birth weights
- Reduces nearsightedness
- Increases Vitamin D levels
- Reduces headaches

Physical Activity

- Greater feelings of revitalization
- Increased energy
- Greater satisfaction
- Lowers risk of obesity

Psychological Benefits

Cognitive Function

- Reduces mental fatigue
- Improves academic performance
- Improves productivity
- Promotes attentional restoration
- Improves ability to perform tasks

Psychological Wellness

- Increases self-esteem
- Improves mood
- Reduces stress
- Reduces anger/frustration
- Reduces anxiety
- Improves behavior

Mental Illness

- Contact with nature improves
 - depression
 - anxiety
 - mood disorders
 - PTSD
 - Addiction recovery

Social Health Benefits

Social Connectedness

- Increases sense of belonging
- Decreases social isolation
- Promotes social ties
- Improves relationship skills in children
- Increases interaction with community

Social Coherence

- Increases longevity in older people
- Reduces crime rates
- Reduces violence
- Enables interracial interaction

Resilience

- Urban forests and parks builds physical resistance in a community and can help mitigate natural disasters
- Natural resource stewardship correlates to increased civic engagement

Re-imagining nature engagement & space in our lives

BIOPHILIC DESIGN

01

Increase connectivity to the natural environment through direct & indirect nature

02

Engaging the senses through sight, smell, sound, & touch

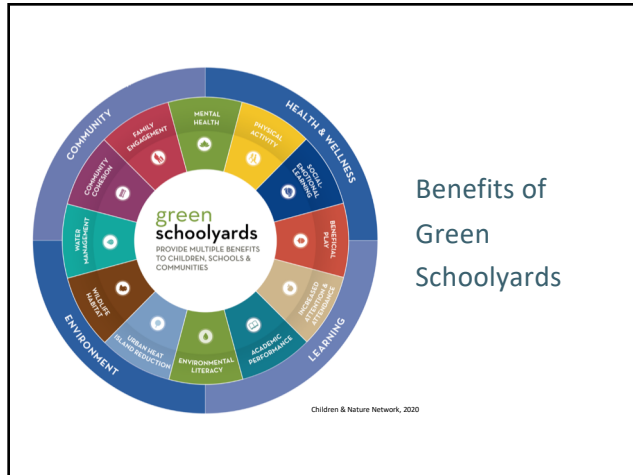
03

Images, color schemes, essential oils etc.

Green Schoolyards

Multi-functional school grounds designed for and by the school community that offer places for students, teachers, parents and community members to play, learn, explore and grow. During out-of-school time, these schoolyards are ideally open to the community to use.

Children & Nature Network, 2020



Milagros Elia



Explore the research on how the natural environment (outdoors) benefits us and ways institutional elements of biophilic design supports this.

“What does the research say can nature can do for us?”

- Mental health
 - improved sleep, decreased anxiety, improved focus, stress management
- Boosts immune system
- Improved cardiovascular and metabolic health



Donna Gaffney

Biophilic design

Definition?

An innovative way of integrating natural elements and processes into the built environment

- What characterizes it?
- Three major experiences:
 - Direct experience of nature,
 - Indirect experience of nature, and
 - Experience of space and place.




K Thewissen



- Open blinds/windows (If your school space is lacking windows, LED lights that adjust their color over the course of the day to mimic the sun.)
- Plants (consider non-flowering due to allergies)
- Decorating with pictures of nature - murals
- Listening to nature sounds in background i.e. running brook (consider earbuds if distracting to others)
- Get outside! consider in-school areas like playground / garden (consider creating rooftop garden) or walk around the block.

M Chavez

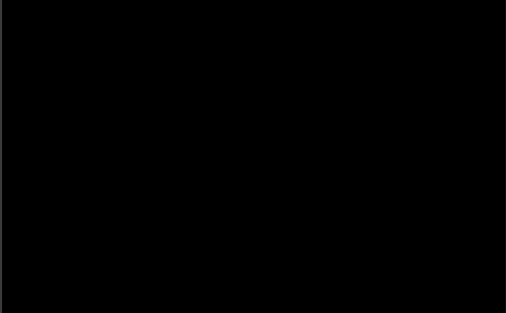
- Identify strategies both rural and urban school nurses can use to work with school leadership to practically and cost effectively utilize and/or re-imagine both the larger school environment, and their own office space.








5 Nafie

- RECOGNIZE HOW THIS ECOSYSTEM OF CARE TRANSLATES TO BENEFIT STUDENTS' HEALTH CARE GOALS AND POSITIVELY MODELS AN ENVIRONMENT OF WELLBEING.
- Science around biophilic design suggests that incorporating characteristics of nature into the physical learning environment can have positive impacts on students' well-being and cognitive development. i.e.: higher test scores, and increased attentiveness (Dadvand, 2015)
- Studies show impact of life stress was lower among children with high levels of nearby nature than among those with little nearby nature. (Gower, 2019)

ED LORD. . . SPACES AND PLACES









"EVERYONE BELONGS OUTSIDE:
Parks & nature possibilities for everyone!"

~ SONYA L. JAKUBEC, RN, PHD ~
Northeastern University, School of Nursing
School Health Academy Webinar, September 24th, 2020

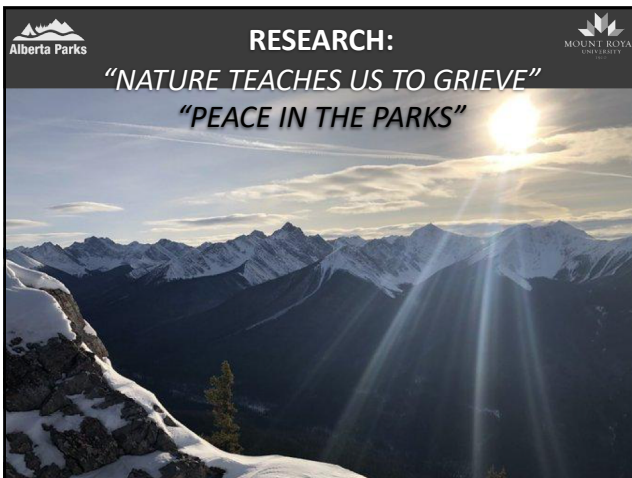


everyone belongs outside

Alberta's Plan for Parks: Inclusion Plan











BELONGING IN COMMUNITY

PRACTICES OF INCLUSION & BELONGING

- Possibilities
- Inclusion
- Awareness
- Activation
- Mindset
- Co-design
- Intergenerational
- Partnerships
- Relationships
- Advocacy
- Self Care

A campaign to engage 50,000 health professionals around climate change and health

A collaboration between Health Care Without Harm and Alliance of Nurses for Healthy Environments

Shanda Demorest, DNP, RN-BC, PHN

NURSES CLIMATE CHALLENGE GOALS

- Educate **50,000** health professionals on climate change and health.
- Build a **cohort** of informed and more-engaged health professionals in care settings.
- Launch a **movement** of health professionals committed to climate solutions at home and in care settings.

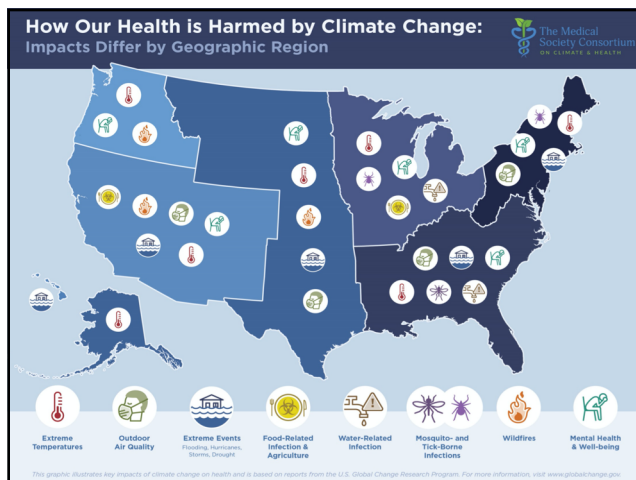
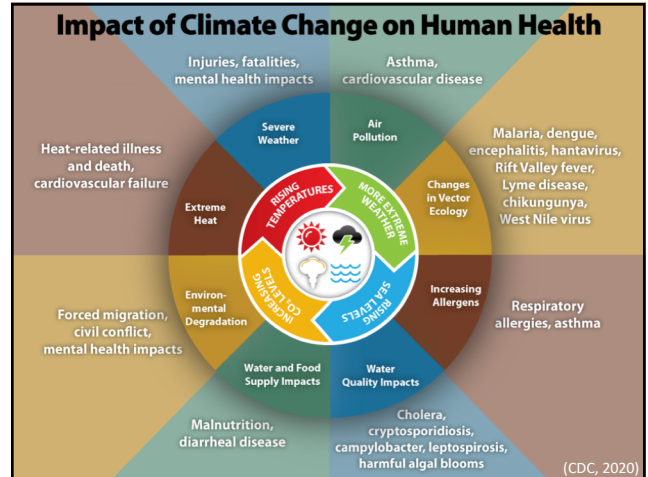
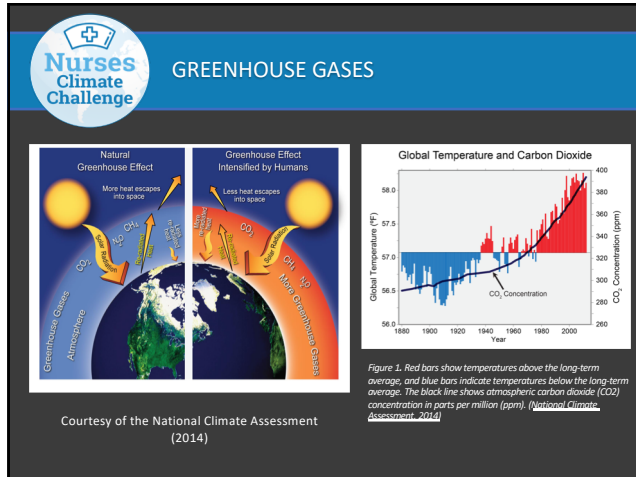
CURRENT NUMBERS

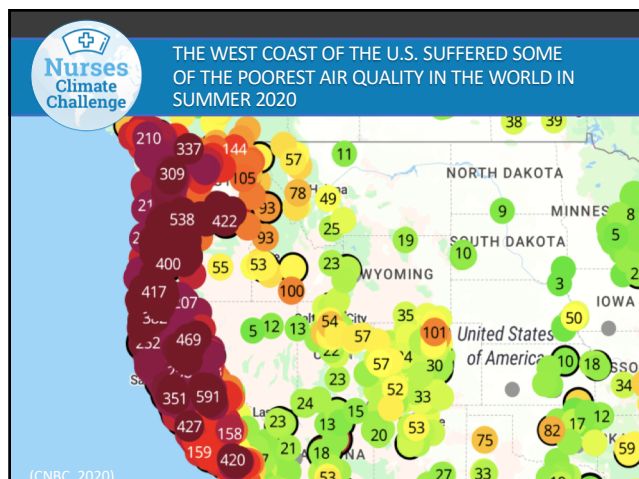
1,242
Nurse Climate Champions

15,891
Health care professionals educated on climate and health

49
states represented in the U.S.

26
countries across the globe





Nurses Climate Challenge

MAKE SURE YOUR INSTITUTION IS PREPARED

Readiness and Emergency Management for Schools (REMS) Technical Assistance (TA) Center

Wildfire Preparedness for K-12 Schools and Institutions of Higher Education

Wildfires have caused considerable damage and injuries over the past several years. According to the National Interagency Fire Center, 14,400 wildfires burned more than 10 million acres in 2017. These same fires have caused significant disruptions to teaching and learning, including canceled school districts. With more communities expanding into the Wildland-Urban Interface (WUI) which are lands prone to wildfire fire due to conditions such as the amount and type of vegetation—schools and institutions of higher education (IHE) are becoming more vulnerable and need to prepare for this type of hazard.

Further, children and infants are especially susceptible to environmental hazards caused by wildfires, including fire, smoke, and the transportation of materials released by burning structures. When wildfires are burning, the greatest risk to children is fire and smoke. After a wildfire, children and young adults are susceptible to environmental hazards such as water and soil contamination.

CLIMATE CHANGE CONNECTION

Connecting Multistakeholders to climate change facts and solutions

CLIMATE-FRIENDLY SCHOOLS

Home > Resources > Climate-friendly schools > What your school can do

Find your project

- Presentations
- Resources for schools
- Success stories
- What your school can do
- Health Conferences

WHAT YOUR SCHOOL CAN DO

Here are the climate-friendly actions that your school can take:

- Become informed
- Create an eco-group
- Calculate your school's carbon footprint
- Reduce consumption
- Reduce waste
- Make transportation a priority

Readiness and emergency management for schools (REMS): [Wildfire preparedness](#)

[Climate-friendly schools](#): What your school can do

Nurses Climate Challenge

Climate change disproportionately affects vulnerable populations

COMMUNITIES OF COLOR Some communities of color living in risk-prone areas face cumulative exposure to multiple pollutants. Adaptation plans that consider these communities and improve access to healthcare help address social inequities.

OLDER ADULTS Older adults are vulnerable to extreme events that cause power outages or require evacuation. Checking on elderly neighbors and proper emergency communication can save lives.

CHILDREN Children have higher risk of heat stroke and illness than adults. Adults can lessen risk by monitoring exertion and hydration.

LOW INCOME COMMUNITIES Low income families are at risk of physical and mental illnesses during flooding and in crowded shelter conditions. Comprehensive disaster management can improve resiliency for people with limited resources.

(National Climate Assessment)

Nurses Climate Challenge

HOW CAN SCHOOL NURSES TAKE ACTION?

- Adaptation:** protect students from poor air quality and other health impacts of climate change. Consider becoming a [Climate Friendly School](#).
- Mitigation:** reduce harmful impacts of future climate change. Consider:
 - Writing a letter to the editor as a school nurse
 - Implement sustainability actions in your school to reduce its impact on climate change

Air Quality Flag Program

Visit www.airnow.gov to learn how your school can participate in the Air Quality Flag Program

Visit the [Nurse Climate Champion profile](#) of school nurse [Gloria Reyes](#), who has testified in Washington, D.C. about the health impacts of climate change!

Sign up for an account and to learn more at www.nursesclimatechallenge.org!




THE OLD
FARMER'S ALMANAC
FOUNDED IN 1792

THE NURSE FARMER.COM




And now. . . Breakout Groups!



What have you learned from this session that you can take back to your school or community?

Who in your school or community might you recruit as an ally?

Questions



BIBLIOGRAPHY AND RESOURCES

SEPARATE HANDOUTS ON NEUSHA WEBSITE

Let us know how you are doing!



Photo: Jason Rosewell for Unsplash