

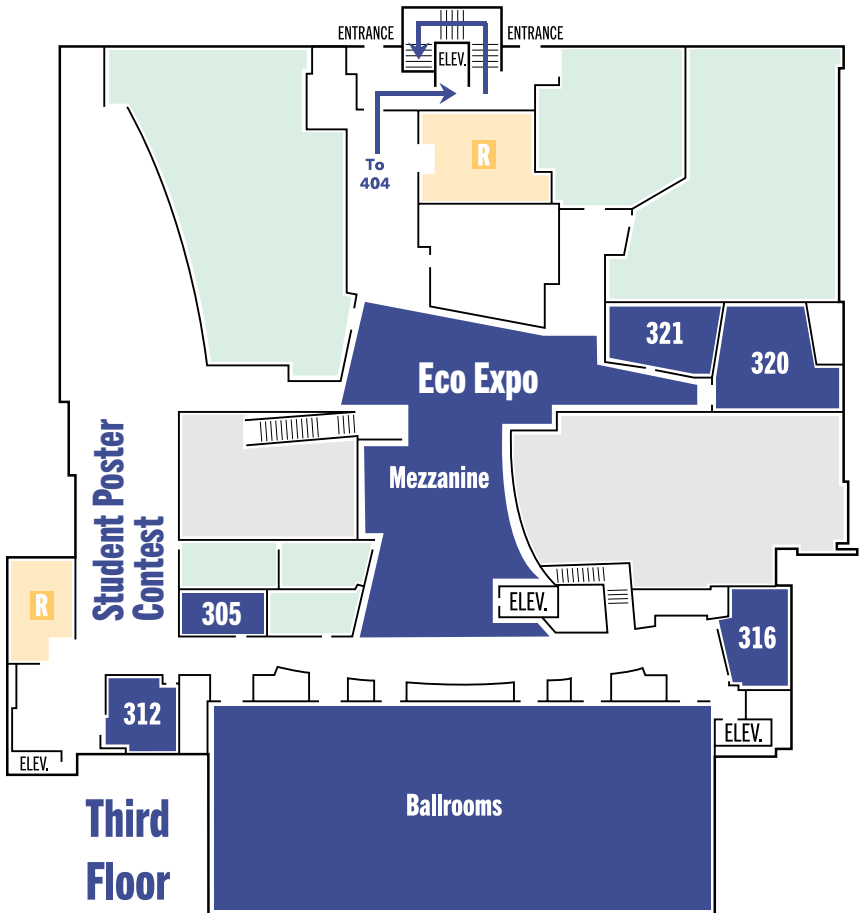
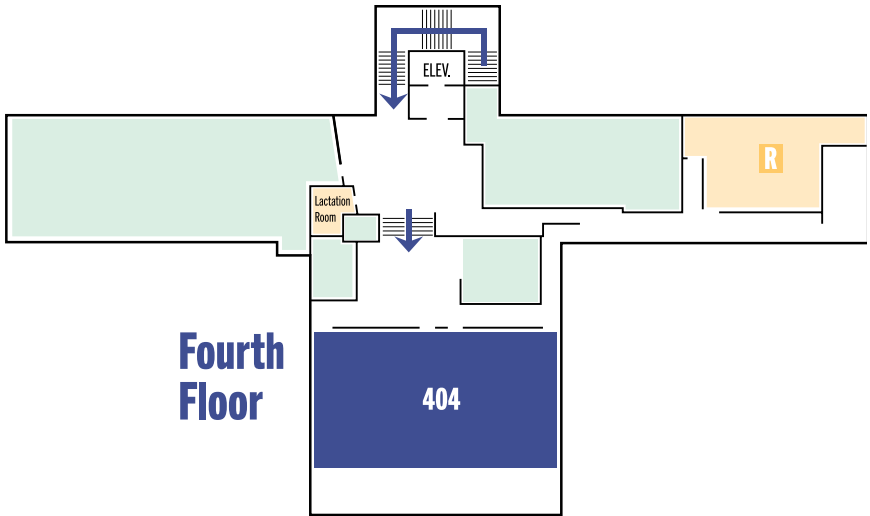
# Sustainable by *DESIGN*

March 21 – 22, 2024

Building a future that is Sustainable by Design



Intermountain  
Sustainability  
Summit



# ISS Schedule at a Glance

## Thursday, March 23

- 7:40 – 8:15 a.m. **Registration and Breakfast**  
Ballroom
- 8:15 – 9:25 a.m. **Welcome and Morning Keynote**  
Ballroom
- 9:30 – 10:00 a.m. **Eco Expo, Student Poster Contest, Art Displays, Book Signing**  
Mezzanine and Ballroom
- 10:10 – 11:00 a.m. **Session 1**  
Rooms 404, 321, 320, 316
- 11:10 – 12:00 p.m. **Session 2**  
Rooms 404, 321, 320, 305
- 12:10 – 1:00 p.m. **Networking Lunch & ISS Sustainability Collaboration Awards**  
Ballroom
- 1:10 – 1:30 p.m. **Eco Expo, Student Poster Contest, Art Displays**  
Mezzanine and Ballroom
- 1:40 – 2:30 p.m. **Session 3**  
Rooms 404, 321, 320, 305
- 2:45 – 3:50 p.m. **Plenary Session, Student Poster Contest Awards**  
Ballroom
- 4:00 – 4:50 p.m. **Session 4**  
Rooms 404, 321, 320, 316
- 5:15 – 7:30 p.m. **15th Anniversary Party**  
Free to all ISS Participants 21+ years of age. RSVP required.  
(RSVP available at registration desk until full.)  
Downtown Ogden, Utah

## Friday, March 24

- 8:30 a.m. – 12:00 p.m. **Preparing Business and Communities for a Postgrowth World**  
Room 404
- 1:00 p.m. – 5:00 p.m. **Designing for Earth Care, People Care, and Fair Share: A Taste of Utah's Inaugural Permaculture Design Certificate**  
Room 404

Please return your lanyard to the registration desk or at the party so we can reuse them next year.

# Morning Keynote Speaker



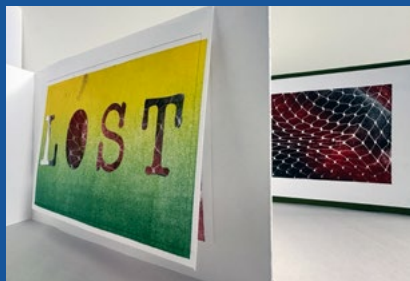
## Jeff Speck

Author, City Planner, Founding Partner at Speck Dempsey

Jeff Speck is a city planner and author who advocates internationally for more walkable cities. As Director of Design at the National Endowment for the Arts from 2003 through 2007, he presided over the Mayors' Institute on City Design and created the Governors' Institute on Community Design. Prior to his federal appointment, Mr. Speck spent ten years as Director of Town Planning at DPZ & Co., the principal firm behind the New Urbanism movement. Since 2007, he has led Speck & Associates—now Speck Dempsey, an award-winning urban planning firm serving public and private clients around the world.

With Andrew Duany and Elizabeth Plater-Zyberk, Mr. Speck is the co-author of *Suburban Nation*, which the Wall Street Journal calls “the urbanist’s bible.” His 2012 book *Walkable City* was the best-selling city planning title of the past decade and has been translated into eight languages. He is also principal author of *The Smart Growth Manual* and *Walkable City Rules*.

Jeff Speck has been named a fellow of both the American Institute of Certified Planners and the Congress for New Urbanism. In a recent Planetizen poll, he was voted one of the ten “most influential urbanists of all time.” Mr. Speck was the 2022 recipient of the Seaside Prize, whose former awardees include Jane Jacobs and Christopher Alexander. His TED talks and YouTube videos have been viewed more than six million times.



Thank you to WSU faculty and students for providing artwork for the ISS. Classes include: ART 2200, Introduction to Printmaking; ART 3200/4200, Intermediate & Advanced Printmaking; ART 3210, Relief Printmaking; and HNRS 3900, Printmaking + Poetry: As Witness For Our Land.

# Live to Breathe

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**UCAIR**

# Eco Expo

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[Biochar](#)

[Citizens' Climate Lobby Cache Valley Chapter](#)

[Climate Fresk—United Nations Climate Education Curriculum](#)

[Community Rebuilds](#)

[Eden Streets](#)

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# Morning Sessions

## Session 1 | 10:10 – 11:00 a.m.

### Room 404

#### **The Journey to Low and Zero Emissions Housing in Utah: Perspectives from Industry Leaders**

**Presented by:** Kevin Emerson, Utah Clean Energy, Bryson Garbett, Garbett Homes, Chris Zarek, Cowboy Partners, James Jonsson, Ivory Homes, Ivan Carroll, Giv Group

Low/zero emission housing is available today and plays a key role in improving Utah's air quality and addressing climate change. This panel will discuss current trends in Utah's residential construction market with a focus on construction strategies and technologies for energy efficiency, low/zero emission space heating, water heating, and cooking.

### Room 321

#### **Where Matters: Creating Access to Opportunity**

**Presented by:** Marcia White, Wasatch Front Regional Council

Increasing accessibility can have significant impacts on overall community livability. This presentation will show the power of the newly developed Access to Opportunities (ATO) Calculator, and how it can assist cities in housing and land use planning. It helps planners understand "Where Matters."

### Room 320

#### **Mini Grants, Big Impacts - Discussion on Equitable Practices & Community Leadership in Government Grant Programs**

**Presented by:** Maria Schwarz, Diana Ramirez, Chimalli Hernandez-Garcia, and Katie Riser, Salt Lake City Corporation

Salt Lake City initiated two grant programs supporting community-led projects that improve neighborhood environments and increase healthy food access. Presenters will discuss the programs' development and management, emphasizing equity as both a desired outcome and a fundamental component of program design. Attendees will workshop ideas to advance equitable funding practices.

### Room 316

#### **Design, Operation, and Lifecycle Analysis of Ground Source Geofields**

**Presented by:** Justin Owen, Weber State University

This session will focus on the lessons Weber has learned while converting a campus chilled water loop into a groundsource condenser loop for heat pumps. It will focus on design, operation, and lifecycle analysis of geofields using WSU's infrastructure as a demonstration.



## Session 2 | 11:10 a.m. – Noon

### Room 404

#### **Designing for a Healthy Climate: Utah Clean Energy's Climate Innovation Center**

**Presented by:** Kevin Emerson and Blair Brown, Utah Clean Energy

Utah Clean Energy recently retrofitted an energy-inefficient building in Salt Lake City into one of Utah's most energy efficient, climate-wise, and zero emission buildings – known as the Climate Innovation Center. This presentation will highlight the careful planning and steps that we took to design and construct the Climate Innovation Center.

### Room 321

#### **Reimagining Transportation for the 21st Century**

**Presented by:** Melanie Hall, HEAL Utah, Jon Larsen, Salt Lake City Corporation, Jasmine Walton, NeighborWorks Salt Lake

Reimagining Transportation in the 21st century. This panel addresses the need to bring diverse communities and voices to the table in transportation planning, repairing historical harms, and addressing the threats associated with climate change by building a resilient, equitable, and safe transportation system that prioritizes people.

### Room 320

#### **Selling Sustainability: Creating Lasting Change**

**Presented by:** Cynthia Bee, Utah Water Ways

Selling sustainability requires more than education. It relies upon creation of actionable processes that solve problems people know they have in a way that produces desirable outcomes for both the individual and the environment. Learn about a change framework that is transforming Utah's built environment – and why it works.

### Room 305

#### **Federal Funding for Municipalities: An Informational and Networking Session**

**Presented by:** Josh Craft and Max Becker, Utah Clean Energy

Come learn how Utah municipalities can make use of new federal funds for clean energy, transportation, walkability, and resiliency projects. In this session, you will learn about federal funding and the opportunities and challenges in applying for federal dollars. Time will be set aside for city/county representatives to network, uncover shared goals, discuss challenges and opportunities, and explore potential collaborations.

# Student Poster Contest

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## Sustainability Research (Graduate)

Efficacy of Plant Biostimulants on Seedling Emergence and Growth of Onion in Greenhouse Conditions

**Prakriti Nepal, Daniel T. Drost, Utah State University**

Electrified Multifamily Building Energy Modeling & Optimization

**Matt DeHaan, Matthew R.T. Williams, University of Utah**

Evaluation of Bioenergy Production from Advanced Microbial Fuel Cell (MFC)-Fermentation Technology

**Kundan Kumar, University of Idaho**

Fueling Our Future through Feces

**Maliea Holden, Brigham Young University**

Urban Heat Mitigation and Linear Park Typology

**Aishwarya Korkode, Amy Reid, Utah State University**

## Sustainability Research (Undergraduate)

Biogeochemical Cycling of Trace and Heavy Metals in Soil, Water, and Common Garden Vegetables

**Celina Patino, Korynn Martinez, Weber State University**

Does Bike-Ability and Air Quality Favor Certain Demographics and Locations in Salt Lake City, Utah?

**Tara Tankersley, Weber State University**

Growing Farm to School Program Success in Arizona

**Elora Bevacqua, Arizona State University**

Urban Park Cooling Island in Ogden, Utah

**Ian Nuttall, Weber State University**

Weber State University Waste Diversion

**Kaylee Anderson, Weber State University**

## Sustainability in Action and Education

Community Gleaning Programs: Highlighting USU Harvest Rescue

**Kate Markman, Utah State University**

Empowering Refugee Students: A Pathway to Sustainable Communities

**Jacob Anderson, Utah State University**

Mushrooming Markets: An Analysis of Fungal Symbolism in Capitalist Structures and the Climate Crisis  
**Jazmyne Olson**, Weber State University

Pedaling into Action Building a Community Centered Around Sustainable Transportation  
**Ella Leonelli, Emmy Noel**, Utah State University

### Green Design

Portable Water Filtration System

**Tori Abbott, Lucas Arsenith**, Boise State University

Ogden Residential Infill Study

**Kaylee Anderson, Kyle Bancroft, Annemarie Brown, Christy Cottrell, Charles Leech, Silas Robison, Alyssa Schaaf, Riley Shaw, Xenia Trujillo, Shaelynn Wood**, Weber State University

Vote for your  
favorite student  
poster and enter  
to win prizes.



**VOTE NOW!**

# SMART · SEXY · SUSTAINABLE



# Afternoon Sessions

## Session 3 | 1:40 – 2:30 p.m.

### Room 404

#### Is Electrification Too Expensive: Real World Utah Case Studies

**Presented by:** Dr. An Ho, Weber State University, and Michael Reynolds, McKinstry

Come see the objective data surrounding electrification, new construction and retrofits in K-12 and higher education projects to show that electrification compares favorably to traditional energy consuming systems.

### Room 321

#### Revolution of Biogenic Building Materials

**Presented by:** Susan Klinker and Lindsey Love, Strawtegi

Come learn about “The Good, the Bad, and the Ugly of Electrifying your Home.” We will talk about technology, cost, and the benefits of being an all electric home and how to be a “Net Zero” energy home.

### Room 320

#### Improving Water Sustainability in Utah Organizations

**Presented by:** Shane Schvaneveldt, Weber State University

Amidst water scarcity in the arid West, business, government and non-profit organizations must address their own responsibilities for water stewardship. To support organizations in their water sustainability journey, we present a hierarchy of water conservation/management, along with a portfolio of case examples of leading practice among various Utah organizations.

### Room 305

#### Collaborating to Strengthen Sustainability in Utah Higher Education: A Networking Session

**Presented by:** Kerry Case, University of Utah, Caitlin McClennan, Utah State University, and Jenn Bodine, Weber State University

How can Utah higher education institutions work together to strengthen their sustainability efforts? Weber State University, Utah State University, and the University of Utah will share one model based on AASHE’s Sustainability Tracking Assessment and Rating System (STARS) and help participants uncover shared goals, challenges, and opportunities for future collaboration.

## Plenary | 2:45 – 3:50 p.m.

### Ballroom

#### Nature and the Built Environment: A Conversation Across Design

**Presented by:** Elpitha Tsoutsounakis, University of Utah, Darren Parry, Shoshone Nation, Roslynn McCann, Utah State University, and Garth Shaw, GSBS Architects

## Session 4 | 4:00 – 4:50 p.m.

### Room 404

#### Powering a Zero Emission Future: Electric Trucks and the Grid

**Presented by:** Kelbe Goupil, Utah Clean Energy and James Campbell, Rocky Mountain Power

Learn about the latest in medium- and heavy-duty (MHD) vehicle electrification and how our utility is supporting this transition. Utah Clean Energy will present an overview of MHD vehicle electrification and Rocky Mountain Power will share how they are supporting this transition and their vision for the future of our grid with clean transportation in mind.

### Room 321

#### Deep Green Buildings and Embodied Carbon

**Presented by:** Rick Ziegler, Mark Lucuick, and Massih Nilforoushan, Morrison Hershfield

Embodied carbon is important to assess in order to understand the global warming potential result from a whole-building life cycle analysis. This presentation identifies embodied carbon analysis and a methodology to use parametric analysis with whole building energy modeling to explore and understand the energy and carbon impacts of design options.

### Room 320

#### The Convergence of Climate Urgency and Opportunity

**Presented by:** Logan Mitchell, Utah Clean Energy

Two parallel narratives about climate change are emerging and evolving. On one hand, increased climate impacts will continue to worsen as temperatures warm. Urgency. On the other hand, climate and clean energy solutions are exponentially increasing across the world. Opportunity. By holding both of these narratives at the same time we understand the urgency of action and the opportunity to do so.

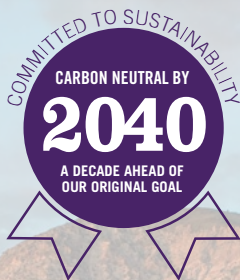
### Room 316

#### Heal the Soils of the Earth with Garbage

**Presented by:** Tyler Hacking, Dr. Gaia Ag-Tech Solutions

Localizing organic waste into passive compost production systems is economically and ecologically efficient, practical and impactful at any scale. Learn how we can transform the soils of the earth and build a more sustainable and regenerative future with garbage.





WEBER STATE UNIVERSITY

# Friday Workshops

8:30 a.m. – 12:00 p.m. | Room 404

## Preparing Business and Communities for a Postgrowth World

**Presented by:** Rob Davies, Utah State University

What if our economy didn't need to grow in order for us to thrive? It's a question whose time has come, because economic growth will end, soon. Basic physics ensures that this is true. We are not ready for a postgrowth world—but that's only because we haven't been trying. There are now available frameworks for understanding and preparing for this coming shift in the human story. In this workshop we'll cover the biophysical reality of our situation, look at timelines, and explore frameworks for both businesses and communities to begin to rethink and restructure—laying the groundwork for a postgrowth society in which ecological pressures are reduced and human wellbeing is elevated.

1:00 – 5:00 p.m. | Room 404












## Designing for Earth Care, People Care, and Fair Share: A Taste of Utah's Inaugural Permaculture Design Certificate

**Presented by:** Roslynn McCann and Jake Powell, Utah State University Extension

Permaculture is a design framework engaging systems-based thinking to generate exciting, holistic solutions through a combination of Traditional Ecological Knowledge and Western Science. This Introduction to Permaculture Design workshop will introduce you to the philosophy and methodology of permaculture as a design strategy.

# To make the ISS Sustainable by *DESIGN*

we are...

	Donating uneaten food to our local homeless shelter		Using washable china and flatware		Asking all of you to bring your reusable mugs and water bottles
Serving vegetarian and vegan meals		Composting all pre- and post-consumer food waste		Using washable napkins	
	Printing on post-consumer waste paper whenever possible		Encouraging carpooling and transit use		Powering the venue with over 20% renewable electricity
Avoiding single use creamer containers		Reusing lanyards (please return yours)		Providing EV charging	

Bringing you all together – because together, you are a sustainable force to be reckoned with!

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