



## INSIDE THIS ISSUE

RESEARCH NOTES .....	2
CLASS SPOTLIGHT .....	3
STUDENT SPOTLIGHT .....	4
ALUM SPOTLIGHT .....	5
EVENT HIGHLIGHT .....	6
ANNOUNCEMENTS .....	8

**D**espite the tragedies surrounding the ongoing coronavirus pandemic as well as human-induced climate change, Inside the Greenhouse (ITG) has managed to pivot into largely online environments in order to continue building momentum and progress for enhanced climate engagement through our work. This challenging Fall 2020 semester has nonetheless been a time where we have continued with our research, teaching, (remote) events and other creative endeavors to continue to 're-tell climate change stories' in compelling and resonant ways.

For example, this past month we have partnered with Green Shoots (<http://greenshoot.net/fashiongreen>) and Fashion TV to produce content for their sustainable fashion series beginning December 15. Our involvement is being led by ITG intern Presley Church (see ITG newsletter #17 for more about Presley: <https://insidethegreenhouse.org/about/newsletters/issue-17>), the first contribution can be seen here: <https://vimeo.com/489508459>.

Read more below on some updates on new research outputs, reflections on our Fall classes, project updates, other announcements and our ITG student/alum spotlight. And check out our website for even more: <https://insidethegreenhouse.org/>!

And as we continue with our work, your support is critical. Please visit <https://giving.cu.edu/fund/cires-inside-greenhouse-gift-fund> to provide a tax-deductible gift before the New Year arrives. Any amount helps us as we continue to work to communicate about the critical importance of climate engagement.

Happy holidays,  
Rebecca Safran, Beth Osnes, Phaedra Pezzullo and Max Boykoff  
(Inside the Greenhouse co-directors)

### Support ITG!

To support our work with your donation go to:

<https://giving.cu.edu/fund/cires-inside-greenhouse-gift-fund>

**Be Boulder.**  
University of Colorado Boulder

Subscribers to ITG will be notified by email when a new edition is available, and may access it either in pdf or html format. The newsletter is also available online at:

<http://www.insidethegreenhouse.org/about/newsletters>

## RESEARCH NOTES

We have continued to produce peer-reviewed research outputs emanating from our ongoing experimentations and explorations.

Among them, Beth Osnes and Patrick Chandler (CU Boulder Environmental Studies PhD student) are working on an Open Educational Resource (OER) adaptation of the *Drawdown Review* for a 5th grade reading level, accompanied by a translation to Spanish (scheduled for release in February 2021). Top climate solutions identified by leading climate experts are now available in a lively format accessible to K-12 students (the top 20 available in Spanish too). Young people all over the world are calling for the right to a survivable future. This resource provides the most reliable and up-to-date information available in one source to guide education and action towards that aim. This OER is an adaptation of the publication, *The Drawdown Review*, created by Project Drawdown (<https://drawdown.org>) that lists and describes the most impactful solutions for reversing global warming. This adaptation is adjusted to be accessible to a 5th-grade reading level, but students younger and older will enjoy the engaging writing, descriptive illustrations, and vibrant photos. Each solution has its own 1-2-page entry that provides a written description and story of the solution, illustrations to help students visualize this solution in context, and data relevant to each solution, along with further research sources. Along with Beth and Patrick, three undergraduate interns and two experienced bilingual PhD graduate students in Education have made up the team that has taken on the challenge of adapting each solution for k-12 students. Along the process we have had our work peer reviewed by 5th grade students themselves as well as leading climate experts. These solutions are classroom-ready to raise awareness and inspire meaningful climate action.

Also, the previously mentioned piece that Max Boykoff and ITG Alum David Oonk co-authored is now out in this month's Special Issue of *Climatic Change* journal entitled 'Evaluating the perils and promises of academic climate advocacy' (<https://link.springer.com/journal/10584/volumes-and-issues/163-1>). This Special Issue was co-edited by Mike Goodman (Reading University, <http://www.reading.ac.uk/ges/Aboutus/Staff/m-k-goodman.aspx>), Julie Doyle (University of Brighton, <https://research.brighton.ac.uk/en/persons/julie-doyle>) and Nathan Farrell (Bournemouth University, <https://microsites.bournemouth.ac.uk/cjcr/journalism-research-group/staff>).

In this article, Max Boykoff and David Oonk examined the central questions 'what are causes and consequences of academic climate advocacy in contemporary times?', 'should it be celebrated and pursued, or derided and



Maria Florinda planting her garden in Guatemala.  
Photo: Laura Benoit.

eschewed?' and 'does advocacy in various forms tarnish or enhance the reputation of science?'. They conducted a survey of US-based natural- and social-science climate researchers/scholars and analyzed interviews from an ITG partnership with the 'More Than Scientists' project. Among their findings, there was broad agreement that climate change is a pressing issue, yet among social scientists, women are more likely to agree that advocacy should not be criticized than their male social scientist counterparts. Furthermore, younger respondents were more likely than older respondents to be compelled to change by advocacy from someone with a smaller carbon footprint. Meanwhile, social scientists were more likely than natural scientists to be compelled to change by someone with a smaller carbon footprint. Max and David concluded that ongoing conflation of 'advocacy' overall generates a need for ongoing efforts to improve understandings of distinctions between different kinds of advocacy (e.g. between advocacy for evidence-based climate science and advocacy for particular policy outcomes).



## CLASS SPOTLIGHTS

### Environmental Communication

**P**haedra Pezzullo taught Environmental Communication this fall to 27 undergraduates remotely. It was a tough semester for our undergraduates, some of who were ill, some who struggled with remote learning, and some who were overwhelmed by 2020. The format of the class changed, as Phaedra tested out the new organization of the textbook she coauthors with former Sierra Club president Robbie Cox. Their 6th edition will be published in August 2021. Given teacher feedback, they rearranged the book to place thinking about advocacy campaigns earlier in the semester. The class debated timely topics like wolf reintroduction in Colorado and who should have standings in court (youth? Dolphins? Climate refugees?) and the class culminated in final video projects on topics of the students' choosing.



Phaedra's Environmental Communication class ended with digital presentations due to COVID. Above is a slide from one of the top student's presentations on palm oil, the discourse of the free market, condensation symbols, and pragmatic communication.

### The Art of Science Communication

**T**he Art of Science Communication class took place online this fall term! Becca Safran and a former student, Jade Munsinger, teamed up with 30 undergraduate students from the College of Arts and Sciences and the College of Media, Communication, and Information to work on three short film projects this term. They also partnered with the executive board of the newly formed Center on Creative Climate Communication and Behavioral Change to come up with logo design ideas! The term will end, as usual, with a film festival to highlight the final projects. Unlike any year, this festival took place online. Everyone looked forward to highlighting the beautiful work these students have put together this term. Despite the many challenges of the semester, the students have more than risen to the occasion in terms of staying engaged and producing truly creative climate communications in the form of 2.5 minute films. Stay tuned for links to the final projects as soon as the term is over!



Chandler Sanchez film on coffee beans.



Chandler Sanchez film on the demise of the coffee bean.



Jessica Sneesby film on forest fires.



Jessica Sneesby film on Indigenous Knowledge.



Jessica Sneesby on biodiversity.

## STUDENT SPOTLIGHT



Ben Stasny with fellow graduate students manipulating a crow puppet on Flagstaff Mountain. Photo: Beth Osnes.

### Ben Stasny

**B**en arrived late this summer from New York City, where he had been working as a professional actor, to begin an Master's in Arts (MA) in Theatre. His first introduction to ITG was on a socially distanced hike with Beth Osnes. As they hiked through Settlers Park up towards Sanitas Mountain, excited conversation bubbled over easily between the two about their shared passion for using performance to communicate climate solutions. Beth suggested an alternative path from the park over to the established trail. They soon found themselves along a steep area of brush and rocks and together coached each other safely to the path below. Laughing, Beth admitted that this was a perfectly fitting introduction to collaborating with ITG. In that spirit, Ben has jumped right into contributing to the ITG Side by Side project by performing a barn swallow at our filming on Open Space Mountain Parks and a crow at the Sunrise Amphitheatre on Flagstaff Mountain. He even performed a new original climate comedy piece, *The Eleventh Commandment- Thou Shalt Not Contribute to Global Warming* (<https://www.earth.columbia.edu/videos/view/thriving-online-the-role-of-comedy-in-pursuing-pandemic-and-climate-progress>), with Beth for Andrew Revkin's weekly webcast, *Thriving Online*, through Columbia University's Earth Institute on November 9, 2020. Ben is currently working with the Department of Theatre & Dance to be the artistic director of a Climate Cabaret for the main season in fall 2021. In addition, he is reviewing for publication the 2019 Climate Change Theatre Action plays. He intends to continue research and artistic creation on theatre for social change, eco-theatre, and theatre of decolonization. This coming summer he will be performing as the Hoopoe bird for our next Side by Side iteration of art/science exploration of friendship between humans and a wide variety of bird species.



Ben Stasny darts in flight as a barn swallow in performance on Boulder County Open Space Mountain Parks during filming for Side by Side. Photo: Rebekah Anderson.



A socially distanced selfie taken for Ben's mom of Ben Stasny and Beth Osnes on Mount Sanitas in Boulder. Photo: Ben Stasny.

## ALUM SPOTLIGHT



Side by Side film. Photo: Rebekah Anderson.

### Sara Herrin

Sara will be graduating from NYU this December and will be based in Denver if anyone wants to connect. Visit her website (<https://www.saraherrin.com>) and the film she created for Inside the Greenhouse, *Side by Side* (<https://vimeo.com/473564810>):

Hi there! My name is Sara Herrin and I am a graduate student in the film-based News & Documentary Journalism program at New York University. I'm thrilled to reconnect with ITG, where my work in video began! As an undergraduate at CU Boulder, I gained my first introduction to video production and editing through Max Boykoff and Beth Osnes' Creative Climate Communication class. I was an Environmental Studies major and loved the idea of being able to blend my love of the arts and sciences through ITG courses.

Fast forward to this summer, I reached out to Beth to see if she was working on any projects that I could help document while I was home in Denver. She, of course, had a wonderful project underway with ITG co-founder, Professor Becca Safran, and the young women at SPEAK. The project explored themes of empowerment, friendship, and survivability through performance and the observation of birds. That was all I had to hear; I was in. I spent a few months meeting with Beth, Becca,



Sara Herrin, ITG Alumni. Photo: Marcus Niro.

and the young women who took part in the project to capture the essence of their work. I also brought on a colleague, Jonah Sublette, to help film the final project performance. The result is breathtaking! I am so proud to be an alum of ITG, where science communication meets boundless creativity.

## EVENT HIGHLIGHT



Young women hold up a crow puppet on Open Space Mountain Park land as part of Side by Side. Photo: Rebekah Anderson.

### Side by Side

**B**eth Osnes and Becca Safran continue their work on Side by Side - an intentional mashup of art and science focused on observations of the natural world. The title of the project, Side by Side means many things. It focuses on the side by side coexistence of humans and non-human animals to explore what it means to live so far removed from our natural world though our very existence depends on this. It also focuses on the need for women to own their place at work, side by side with others, in male-dominated spaces in science. Thus, the process of the work with young women is as much about empowerment and confidence-building as much as it is about considering new ways of humans being in a sustainable relationship with the rest of the natural world.

Beth and Becca worked with an incredible group of young women during the summer 2020 and are currently putting what we learned into practice in collaboration with PhD candidate Molly McDermott (see ITG newsletter #12 to learn more about Molly: <https://insidethegreenhouse.org/about/newsletters/issue-12>). Molly, Beth and Becca have been meeting regularly to design a series of experiences in which young women work on artistic and scientific observations of birds in nature. They are currently in the process of writing grants to raise funds for the next phase in the Side by Side work during the summer 2021. Goals include the integration



Young women moves as a chickadee bird as part of Side by Side. Photo: Rebekah Anderson.

of fifth grade teachers, a more formal inclusion of high school age women, and the opportunity to continue to develop a curriculum for both summer and school-year learning experiences. View the film at: <https://vimeo.com/473564810>

# EVENT HIGHLIGHT

## 10,000 Teachers

This September - in conjunction with the United Nations General Assembly and Climate Week NYC - Max Boykoff accompanied comedian Chuck Nice and Dave Bakker (from Pocketlab) on camera (with many offering organizing support and assistance off camera, including ITG intern Presley Church) for a three-hour extravaganza where they interviewed many elected officials, celebrities and entertainers as well as climate researchers and teachers about bring climate change curriculum into the classroom. Guests included Colorado Governor Jared Polis, New Jersey First Lady Tammy Murphy, DJ Cavem, WE ACT for Environmental Justice Executive Director Peggy Shepard, comedian Roy Wood Jr, rapper Baba Brinkman, Professor Heather Berlin and Professor Katharine Hayhoe.

The (ongoing) objective is to reach 10,000 teachers with helpful curriculum and ideas for teaching about climate change. Over 5,000 people joined the live event online from all over the world. If you missed it and want to check it out, here is the link: <https://business.facebook.com/watch/?v=1097554793992412>.

## Institutional Racism in STEM event

This Fall, ITG co-sponsored a virtual 'Discussion on Institutional Racism in STEM' took place, with organization and involvement from Max Boykoff.

Over four hundred people registered and over two hundred joined the event. The event was co-organized by Kadidia Thiero, SOARS (Significant Opportunities in Atmospheric Research and Science) Program Lead at UCAR (the University Corporation for Atmospheric Research), Matthew Druckenmiller, CIRES (Cooperative Institute for Research in Environmental Sciences) and Max Boykoff.

Two panels discussed institutional racism in STEM (science, technology, engineering, and mathematics) education, research, and culture in United States and then in Colorado. The panel focused on two main considerations:

- confronting how anti-racist actions emanate from STEM research, teaching and engagement in the US; and how Colorado can foster dialogue, and make progress at the science-policy interface, and



Chuck Nice and Max Boykoff interview Colorado Governor Jared Polis as part of the 10k teachers event.



Chuck Nice, Dave Bakker and Max Boykoff interview comedian Roy Wood Jr as part of the 10,000 teachers event.

- strengthening science, policy, and society networks as resources to discuss pressing challenges that require evidence and science-based information, shared through trusted and equitable processes.

The event was held by the AAAS (American Association for the Advancement in Science) Colorado Local Science Engagement Network and was also co-sponsored by the Environmental Studies Program, Western Colorado University, and CIRES. The work continues.

Find out more about the event: <https://drive.google.com/file/d/1wDImQEhJqZD7cd9oTI-g7fhVZ1F0mn0t/view>.

Watch the recording here: <https://coloradolsen.quorum.us/racism-stem>.

# ANNOUNCEMENTS

## C3BC

**P**haedra and Professor Leaf Van Boven (Department of Psychology) became the inaugural co-directors of a new center on our campus, which ITG is an essential part: the Center for Creative Climate Communication and Behavior Change (C3BC: <https://www.colorado.edu/center/c3bc>). We have a soft opening, due to COVID, but plan to launch more public events in 2021-2022. This fall, we did remotely host an international climate policy conference in social and behavioral sciences.

The Center for Creative Climate Communication and Behavior Change (C3BC) was founded in 2020. C3BC will be the preeminent international leader in creating meaningful climate messages, stories, and human behavior change. C3BC will build on CU's internationally recognized strength as a leader in climate science to design transformational solutions and engagement that confront issues of human behavior and culture to help imagine a more viable future. We will forge interdisciplinary connections and connect practitioners with leading academics and researchers. Locally, nationally, and internationally, we will engage scholars, scientists, students, community members, artists, business leaders, non-governmental organizations, policymakers, and other critical decision makers. C3BC will support endeavors that, at scale and grounded in cutting edge climate science, advance climate conversations, increase civic engagement, and change people's attitudes, emotions, beliefs, and behaviors.

## Ongoing information-sharing, talks and workshops

**T**his fall, Inside the Greenhouse co-directors have participated in a number of information-sharing workshops and have given many talks involving creative climate communications.

Among them, ITG co-director Beth Osnes participated in a Climate Comedy Workshop for Earth Day Network Vote Earth Campaign. Sam Hunt and Evan Raskin with the national headquarters with Earth Day Network invited Beth to design and facilitate a climate comedy workshop for their campus leaders throughout the nation who are leading student groups at their universities. On September 21, 2020, Osnes led a video conference workshop to help student leaders integrate comedy into their communication strategies and meeting facilitation. Here's what Hunt had to say after the workshop-- "The climate comedy workshop empowered the students to create relatable, engaging, and funny material for their Vote Earth campaigns, thus enabling them to better reach their peers. What is more, students breathed a sigh of relief during the workshop. After months of chaos and unrelenting bad news, the workshop allowed them to feel silly, and feel positive about the nature of their Vote Earth work." Reversing global warming is a mighty challenge to our survival that requires a steep incline in new behaviors, even comedic ones. But like any huge mountain, there's only one way to get over it. Climate!

Also, ITG co-director Rebecca Safran continued to adapt her ongoing work this Fall. As she has noted, if there is



Earth Day Climate Comedy Workshop. Photo: Beth Osnes, Sam Hunt and Evan Raskin with Beth Osnes and student leaders participating in a climate comedy workshop.

# ANNOUNCEMENTS

any advantage to the pandemic, it's that folks are able to 'visit' classrooms and audiences around the world without leaving home! Becca had the opportunity to share her work with ITG and the experience of teaching a film class with a group of graduate students working on Science Communication projects at Virginia Tech University. Becca also enjoyed being interviewed by students on the CU Boulder campus taking a course in Leadership where she shared the cooperative leadership model embraced by ITG.

And, as part of the COVID life of ITG co-director Phaedra Pezzullo, her 10 year old was without school on Mondays; so, they decided to create a Climate Club. In addition to other activities, the group worked with Patrick Chandler and ITG Co-Director Beth Osnes to enact and give feedback on climate curriculum as peer reviewers—5th graders reading climate curriculum for 5th graders. On Zoom to stay socially distanced, the solutions reviewed were Project Drawdown's top ten and it now will go to top national scientists for review at CLEAN before becoming an Open Educational Resource (OER) online.



The local climate club, remotely hosted by Phaedra, invited Patrick Chandler to our session asking questions of Chef Ann, the head of the school district's food and a leader in healthy, local food access for kids. Questions about plant-based diets, food waste, and what is "local" were asked by the kids, including: Jaden Chang, Luna Fierer, Niko Striphos, Simone Tewksbury, Darya Yazdi, and Osel Yeh.

Last, ITG co-director Max Boykoff adapted to the changing constraints and pressures during the coronavirus pandemic as he continued to press ahead with ITG-related talks online as well as other activities. Among them, Max gave remote talks at the University of Arizona, the University of California San Diego, Penn State University and Oslo Metropolitan University while participating in panel discussions as part of the National Association of Science Writers annual meeting and in the Midwest (US) Climate Summit. Max also earned the University of Colorado Thomas Jefferson Award for multi-faceted leadership: <https://insidethegreenhouse.org/node/4930>.

Finally, in September ITG co-directors Max Boykoff and Phaedra Pezzullo together participated in a panel discussion called 'Unpacking Whiteness' as part of the Center for Humanities & the Arts Difficult Dialogue series. Phaedra was a speaker and Max served as the moderator while over 250 people virtually attended and participated in the discussion. During the event, they talked about how conversations by white people about white privilege are important to addressing white supremacy, including how CU Boulder's campus mimics Tuscan rooftops instead of displaying solar panels as part of the deeply interwoven ways environmental unsustainability and Eurocentrism are intertwined.



Panel discussion called 'Unpacking Whiteness' as part of the Center for Humanities & the Arts Difficult Dialogue series.

Going forward, you can also follow us via Twitter (@ITG\_Boulder), Instagram ('everydayclimate') and Facebook. More information can be found on our website: <https://insidethegreenhouse.org>.

Be on the lookout for various ITG t-shirts, hoodies and hats circulating in the world too!



Darren Berns (left) and his son Connor (right) summit Long's Peak in the Colorado Rocky Mountains while Darren proudly shows off his Inside the Greenhouse trucker hat.

Going forward, you can also follow us via Twitter (@ITG\_Boulder),  
Instagram ('everydayclimate') and Facebook:  
<https://www.facebook.com/Inside-the-Greenhouse-at-CU-Boulder-1267256946701231>

**More information can be found on our website:**  
<http://insidethegreenhouse.org>

### **Support ITG!**

To support our work with  
your donation go to:

<https://giving.cu.edu/fund/cires-inside-greenhouse-gift-fund>

**Be Boulder.**  
University of Colorado Boulder

## **ABOUT US**

Creative framing and storytelling of issues surrounding climate change through video, theatre, dance, and writing can connect a wider audience to the deep and pressing need to address climate change. Project leaders Max Boykoff (Associate Professor, Environmental Studies; CIRES Fellow), Rebecca Safran (Associate Professor, Ecology and Evolutionary Biology), Beth Osnes (Associate Professor, Department of Theater and Dance) and Phaedra Pezzullo (Associate Professor, Department of Communication) have

been producing events and classes over the past six years under the banner of the 'Inside the Greenhouse'. Support for this work catalyzes creative climate communication and builds capacity among CU Boulder undergraduate and graduate students in particular. Our efforts to engage our students, those working at the science-policy interface, and the public alike seek to help concerned make climate change meaningful in the lives of everyday people. Students are involved directly and collaboratively connecting work in the classroom to applied contexts.



Max Boykoff, [boykoff@colorado.edu](mailto:boykoff@colorado.edu)

Beth Osnes, [beth.osnes@colorado.edu](mailto:beth.osnes@colorado.edu)

Phaedra C. Pezzullo, [phaedra.pezzullo@colorado.edu](mailto:phaedra.pezzullo@colorado.edu)

Rebecca Safran, [rebecca.safran@colorado.edu](mailto:rebecca.safran@colorado.edu)

Online Version: <http://insidethegreenhouse.org/about/newsletters>

**Inside the Greenhouse**  
University of Colorado  
Boulder, CO 80309  
<http://insidethegreenhouse.org>