# Empowering Trusted Voices for Climate Action



2022 ANNUAL REPORT







The Mason 4C research team gathers in Fairfax, VA for our annual holiday gathering.

# 4C Research Team

# Update from the Director

Edward Maibach MPH, PHD

Mason 4C is not like most other academic research centers—we value and are active contributors to academic research, but we also embrace what can be thought of as a "think tank" model to put our research into practice. We seek to discover new, actionable communication insights. In turn, we aim to put communication insights into practice in our own public engagement programs, and to help strengthen other organization's public engagement programs. This takes the form of public communication programs led by trusted messengers who start important new conversations, enhance public understanding, and build public and political will for climate solutions. In effect, we are a "think and do tank."

In this annual report, you'll discover the ways we helped make America a more climate-ready nation in 2022, and get a preview of how we plan to contribute in 2023. This year we:

- Leaned heavily into our "communities of practice" approach which identifies and supports trusted voices in communities across America—to help them illuminate the impacts of climate change in their community and develop climate solutions.
- Helped launch the Virginia Climate Center at George Mason University to enable communities across the Commonwealth to better understand their climate change risks and vulnerabilities, and better understand their options for becoming more resilient.
- Continued to produce ground-breaking research with the aim of helping trusted messengers improve their effectiveness with evidence-based messages.

On a personal note, I was elected a Member of the U.S. National Academy of Medicine this year which, in addition to being a wonderful honor, is already creating new opportunities for our important work at Mason 4C.

My colleagues and I invite you—indeed, we urge you—to join us in efforts to empower trusted voices for climate action. We look forward to collaborating with you in 2023 and beyond. Onward and Upward!

Our motivation is to apply our research discoveries about the public understanding of climate and communication to benefit the world.



Zd MAIBACH



# Mason 4C By The Numbers

# Mason 4C: By The Numbers

Our **Climate Change in the American Mind** polling data reveals that the number of Americans who think global warming is happening outnumber those who think it is not happening by a ratio of **6-to-1 (72% versus 12%)**. Yet, only slightly more than half of Americans (56%) say that hear about global warming in the media once a month or more frequently.



700,000 physicians

Our Medical Society Consortium on Climate and Health has 44 national medical societies representing over 700,000 physicians —more than 70% of U.S. doctors.

Our **Climate Matters** program supports **1,100 weathercasters** and **900 local journalists** with localized climate reporting data they use in their reporting and broadcasts. Our research shows there's been a **100 fold** increase in on-air climate reporting by weathercasters.



# Mason 4C: By The Numbers

Mason 4C hosted **14 graduate and postdoctoral students** in 2022.





republicEn, a public engagement project by conservatives, for conservatives, has grown to **20,000 members** strong with representation in all **50 states.** 

Our Center, our data, and our experts were **cited in the media hundreds of times**, including in the New York Times, Washington Post, PBS NewsHour, NPR, The Atlantic, The Guardian, Inside Climate News, and more.









# 2022 Noteworthy Accomplishments

#### Dr. Ed Maibach Elected to National Academy of Medicine

Mason 4C founder and director **Dr. Ed Maibach** was elected in October 2022 to the National Academy of Medicine. Considered one of the highest honors in the fields of health, medicine, and behavioral sciences, Maibach is recognized for "groundbreaking research on public understanding of climate change."



#### **Student Achievements**

Mason 4C graduate students gave presentations and attended major academic and professional conferences, such as the National Communication Association, American Meteorological Society, and COP27.



#### Climate Matters surpasses 2,000 broadcasters

Climate Matters was a newsmaker this year—the program was featured prominently in a February 2022 profile in *The Atlantic*. It gained national attention in a story about weathercasters on *PBS NewsHour* in July 2022. The program also had a featured paper in the journal *Nature Climate Change*, offering a look at the impact of the program during its decade run.



#### republicEn Podcast crosses the century mark

**republicEn** published its 100th "EcoRight Speaks" podcast episode in 2022 as part of five seasons of conversations with leaders on climate change. Episodes featured current and former members of Congress, mayors, and even a former EPA director. The podcast has generated more than 33,000 downloads, and will debut a sixth season in 2023.



#### Mason 4C Professors Promoted for Research Contributions

**Dr. Teresa Myers** and **Dr. John Kotcher** earned promotions to **Research Associate Professor.**Drs. Myers and Kotcher are promoted for their significant research contributions advancing the fields of climate, science, and health communication.



#### The Virginia Climate Center is established at GMU

In close partnership with colleagues in Mason's College of Science and others across the university, we secured a \$2 million federal grant to develop and pilot-test the Virginia Climate Center. The goal of the Virginia Climate Center is to help communities across the Commonwealth become more resilient to the impacts of climate change.







#### Dr. Mona Sarfaty honored; Dr. Lisa Patel promoted to Executive Director

**Dr. Mona Sarfaty r**etired as the founding executive director of the Medical Society Consortium on Climate and Health at the end of 2022. Dr. Sarfaty was honored in September 2022 for her leadership and excellence in the fields of climate and health. Dr. Lisa Patel takes over the executive director role in 2023.





#### The Mona Sarfaty Fund on Climate, Health and Equity

In September, we launched the Mona Sarfaty Fund on Climate, Health and Equity to support the Consortium's state groups, advocacy efforts, and communication needs. To date, we've raised more than \$300,000 for this current use fund and with growing support we plan to endow it in Mona's name for the future.





2022 ANNUAL 14





The Medical Society Consortium on Climate & Health (MSCCH) is on a path to becoming the largest climate and health organization in America. Since 2016, our membership has grown rapidly to 46 national medical societies representing over 700,000 physicians—more than 70% of U.S. doctors. We have 71 partner organizations representing millions of health professionals across the spectrum of health care and public health, including the American Lung Association, American Heart Association, and American Cancer Society—each with a strong grassroots membership. And, we have incubated or helped strengthen 25 state "clinicians for climate action" groups, doubling the size of our state network in the past two years. These state groups educate the public and policymakers in their state, and advocate for state and local policies that support healthy people and a sustainable future.

The MSCCH's work also had considerable policy influence this year. In early 2022, we released a new report titled, "The Health Promise of Climate Solutions." The Biden Administration headed our recommendation—issued in partnership with many other health organizations—to create the Office of Climate Change and Health Equity in the Department of Health and Human Services. And our 2022 Annual Meeting brought together practitioners, students and leaders on climate and health, and featured HHS Secretary Admiral Rachel Levine and White House National Climate Advisor Gina McCarthy, among others.

In 2023, founding executive director **Dr. Mona Sarfaty** is retiring. However, she will remain engaged with the MSCCH advisory board and on strategic projects.

Dr. Lisa Patel, a Stanford Medicine pediatrician and climate and health leader, will step in as executive director. Dr. Patel has served as deputy executive director since January 2022. To recognize Dr. Sarfaty's incredible contributions to our Center, the MSCCH, and the field of medicine, we have established The Mona Sarfaty Fund for Climate, Health and Equity that will support our state groups, our outreach efforts, and our environmental justice work. You can support this fund here go.gmu.edu/MonaSarfatyFund



#### 2022 ANNUAL TECHANE

## 4C STUDENT IMPACTS

Saahi's interest in solving environmental issues is inspired by the rapid growth and changes she has seen in her home country, India. She says the cities she grew up in "have evolved in ways she never imagined." Today, her research illuminates how effective policy can address both environmental and social issues, with a focus on health and equity.

"We know the ways that climate change impacts health, but not enough people understand how it impacts their social well-being and life," says Saahi. "I want to understand how it can be better communicated to inform good policy, and to benefit those experiencing the harshest impacts." Saahi describes the student experience at Mason as welcoming and supportive. "We have a large department, with diverse interests interlinked by the rigor, research interests, and high standard we share, and a respect for science." At Mason 4C, Saahi feels she has the "flexibility to go anywhere."

"We have a large department with diverse interests interlinked by the rigor, research interests, and high standard we share, and a respect for science."



Third Year PhD Student, MasonCOMM





### **4C STUDENT IMPACTS**

Patrick Owusu Ansah is an international journalist, researcher, and communicator passionate about solving global problems. After completing broadcast journalism studies in his home country Ghana, Patrick acquired a master's degree in China before joining as a PhD student with Mason 4C. An emerging researcher—and a journalist at heart—Patrick is leveraging his practitioner experience and global perspective to drive his research interests.

"As a communicator. I want to know. 'how we can use media to increase public engagement with climate change solutions," says Patrick about his research approach.

Patrick wants to serve as a conduit between academic research and practitioner success, specifically in nonviolent civil disobedience and climate aid to developing countries. He credits mentorship from Mason 4C faculty for giving him a chance to explore new ideas.

"Mason 4C is great because they lift you. Faculty join hands with you to explore your interests, and I get to do that through leading experts. I have never done this type of research, but they've given me the opportunity to lead and explore."

"At Mason 4C, the faculty join hands with you to explore and shape your interests. I have never done this type of research, but they've allowed me to lead and explore."

#### Patrick Ansah

Second Year PhD Student, MasonCOMM



## **4C STUDENT IMPACTS**

Growing up in Southwest Virginia, Eryn Campbell's time outdoors exploring the Appalachian and Blue Ridge mountains inspired her path to study environmental science at the University of Virginia. Eryn's concerns about the human implications of climate change had her looking for ways to bridge her physical science background with a social science research focus.

At the University of Miami in Florida, Eryn met Mason 4C founder and director Ed Maibach and realized she had found a home for her PhD studies. "Mason 4C is one of the very few places where you can be so engaged in climate change communication research and access to the most top-quality data and researchers in this field. Not a lot of programs have this kind of opportunity."

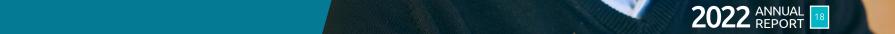
Eryn's research focuses on working with advocacy organizations to test the effectiveness of messages, specifically the connections between climate and human health. Her work reflects the research-to-practice spirit of the Center. Eryn says the best impact is "getting our research into the hands of people that can use it. And in the most possible ways for that to be translated into practice. Not only am I studying something I'm interested in, but I'm working with those organizations to help."

"The best impact is getting our research into the hands of people that can use it. And in the most possible ways for that to be translated into practice."

#### Eryn Campbell

2023 PhD Graduate (anticipated), MasonCOMM

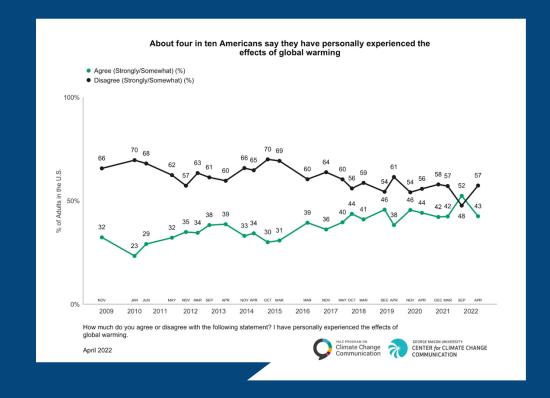






# Climate Change in the American Mind

Our Climate Change in the American Mind (CCAM) polling data continues to show a large increase in public concern about climate change. The number of Americans most 'alarmed' about climate change currently outnumber those who are 'dismissive' by more than 3-to-1, with the alarmed segment having nearly doubled over the past five years. We find that, overall, Americans are now more worried about global warming, more engaged with the issue, and more supportive of climate solutions. Produced in partnership with our friends at the Yale Program on Climate Change Communication, our CCAM surveys have become an indispensable source of data and insight for climate professionals in government, civic organizations and the private sector nationwide. Since its launch in 2008, it has grown to become the largest and most comprehensive source of information available on American public opinion about climate change.



# republicEn



Former **Rep. Bob Inglis (R-SC)** is the driving force and voice behind our influential **republicEn** program that engages climate leadership among conservatives. The program is now approaching 20,000 members, with all 50 states represented. Leveraging media, events, and experiential learning, **republicEn** reaches thousands each year. Through their **EnCourage Tour**, Bob and the team traveled around the country for climate action. All together, the project reached almost 7,000 people through more than 100 events.

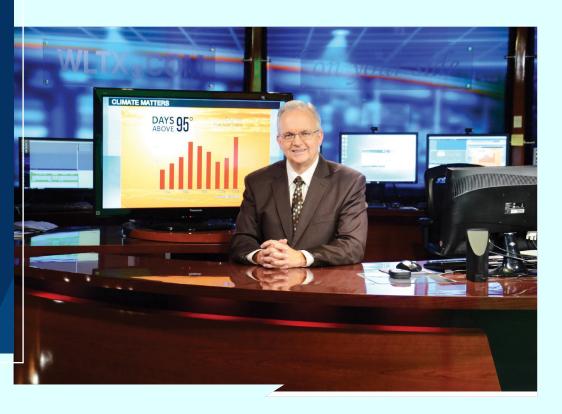
In addition to this, republicEn publishes a popular podcast— *EcoRight Speaks*—via Spotify and other major podcasting platforms. Going strong in 2022, they launched their fourth and fifth seasons and crossed the threshold of 100 episodes. Conversations featured several first-time guests, including Sarasota, Florida Mayor Erik Arroyo, R Street Institute founder Eli Lehrer, and a suite of experts from Florida to talk about the impacts of Hurricane Ian and where the state goes from there. They also featured two authors, repeat guest Utah Congressman John Curtis, and former EPA Administrator under President George H. W. Bush, Bill Reilly.

The fifth season included 33 episodes and 33,428 total downloads/listens. Season six launches in early 2023.





# Climate Matters in the Newsroom



The **Climate Matters in the Newsroom** program has reached several important milestones—enrolling our 1,100th TV weathercaster and our 900th journalist into the program, and celebrating the program's 10th anniversary. We now support local news reporting by weathercasters and journalists in more than 95% of America's media markets. This year they reported more than 5,600 TV news stories about climate change, a more than 100-fold increase in the rate of reporting since we launched the program nationwide in 2012. In early 2022, the program's efforts were covered in The Atlantic, including quotes from 4C assistant research professor Dr. John Kotcher, and in late June PBS NewsHour ran a feature story on the impact of the program. The prestigious science journal Nature Climate Change also ran our paper, "Improving public understanding of climate change by supporting weathercasters" in July 2022.

# Virginia Climate Center



The **Virginia Climate Center** is a newly developing climate extension service intended to eventually support communities across the Commonwealth of Virginia, is a new Mason resource. Based in the Center for Land-Ocean-Atmosphere Studies (COLA) and Mason 4C, VCC is supported by \$2 million in federal funding that comes to the University as part of a federal funding package for FY22 in Virginia's 11th district. In April 2022, Drs. Jim Kinter and Ed Maibach published an op-ed in The Richmond Times-Dispatch, The Roanoke Times, and other newspapers throughout the Commonwealth to introduce the Center directly to members of those communities.





# Thank You to Funders

Our work would not be possible without the generous philanthropic support of many individuals, major grant funders, and our home institution, George Mason University.

Major support for Mason 4C research and programs is provided by the National Science Foundation, NASA, Energy Foundation, Kresge Foundation, Robert Wood Johnson Foundation, Johnson & Johnson Services, Inc., High Tide Foundation, Northlight Foundation, Clayton Baker Trust, The Clayton Fund, Lockhart Vaughan Foundation, Gordon and Betty Moore Foundation, American Medical Association, Merck, and the Skoll Fund.

We would also like to thank Mason's College of Humanities and Social Sciences and the Department of Communication, who support our work with vital resources including office space, utility costs, human resources, and salary support.

Furthermore, we are endlessly grateful for the generosity of hundreds of individual donors throughout the 2022 calendar year. Thank you! Your gift to Mason 4C directly supports our graduate students, post-doctoral fellows, administrative staff, and our faculty positions. It enables us to recruit and retain high-performing individuals while increasing our ability to respond and advocate for new opportunities, partnerships, and projects.





We are seeking additional investment to grow our community and enable our Center to make faster progress towards helping more groups of Americans better understand the climate solutions within our reach. If you would like to support Mason 4C, please contact Associate Director, Dan Reed at dreed21@gmu.edu or go.gmu.edu/GiveToMason4C or scan the QR code with your mobile device.



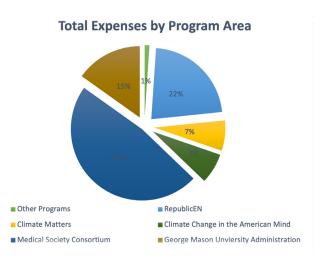


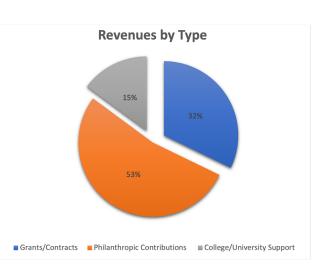
2022 ANNUAL 24

#### FY22 FINANCIAL SUMMARY

JULY 1, 2021 - JUNE 30, 2022

PROGRAM AREA	TOTAL FY22 EXPENSES	TOTAL PROGRAM REVENUES	CONTRACTS/ GRANTS	PHILANTHROPIC CONTRIBUTIONS
Climate Change in the American Mind	\$196,297	\$100,000	\$100,000	\$0
Climate Matters in the Newsroom	\$196,319	\$0	\$0	\$0
Medical Society Consortium	\$1,359,209	\$1,564,676	\$779,000	\$785,676
RepublicEn	\$635,703	\$632,577	\$0	\$632,577
GMU Administrative Support	\$432,361	\$406,276	\$0	\$0
Other Programs	\$30,638	\$27,435	\$0	\$0











Members of the Mason 4C and Medical Society Consortium team gather in September 2022

#### Faculty & Staff

Maya Abu-Zahra Mohamed Ahmed Price Atkinson Chris Clarke Sara Cobb Tianna Cobb John Cook Richard T. Craig **Judith Cramer** Nicole Duritz Rob Gould Beverly Harp Chelsea Henderson Kate Hoppe **Bob Inglis** Sojung Kim John Kotcher

Angela Larck Akila Ka Ma'at Edward Maibach Savannah Martincic Mark Mitchell Zerena Martinez Murillo Teresa Myers Colin Nackerman Lisa Patel Clarissa Peyton Daniel Reed Connie Roser-Renouf Mona Sarfaty Kimberly Williams Sophia Whitaker Xiaquan Zhao

#### **Graduate & Postdoctoral Students**

Richard Opoku Amoako
Nic Badullovich
Amanda Borth
Eryn Campbell
Rochelle Davidson
Kate Luong
Sammi Munson
Margaret Orr
Patrick Owusu
Shaelyn Patzer
Kristin Timm
Doran Tucker
Sri Saahitya Uppalapati
Hilyatuz Zakiyyah

The 2022 Mason 4C Annual Report was designed by PhD student Richard Amoako.



Climatechangecommunication.org



