# U-M Museum of Natural History • Science Cafés

# 2023

January 25	<b>Climate Solutions: Renewable Energy Storage and Carbon Capture</b> Charles McCrory of the U-M Department of Chemistry and David Kwabi of the U-M Department of Mechanical Engineering <i>This Science Café was postponed to March 22 2023 due to weather.</i>
February 22	<b>The Future of mRNA Vaccines</b> Rachel Niederer and Nils Walter of the U-M Department of Chemistry and the Center for RNA Biomedicine <i>This Science Café was postponed to May 3, 2023 due to weather.</i>
April 12	<b>Terrible Tsunami: How the End-Cretaceous Asteroid Caused a Massive Wave</b> Ted Moore and Brian Arbic of the U-M Department of Earth and Environmental Sciences
October 25	<b>Extreme Science! Dark Matter and Dark Energy Research</b> Bjoern Penning and Marcelle Soares-Santos of the U-M Department of Physics
November 15	<b>Politics and Power in Your Morning Coffee</b> John Vandermeer, Ecology and Evolutionary Biology and Ivette Perfecto, School for Environment and Sustainability
2022	
October 26	<b>Of the Galaxy, and Beyond—Photos from the Webb telescope</b> Ted Bergin and Monica Valluri of the U-M Department of Astronomy
November 16	<b>Mapping biodiversity hotspots in ancient oceans</b> Matt Friedman, director of the U-M Museum of Paleontology
2020	
January 22	<b>DNA, chromosome structure, and health</b> Gyorgyi Csankovszki of the Department of Molecular, Cellular, and Developmental Biology
February 19	<b>Something Fishy in Lake Michigan</b> Bo Bunnell of the U.S.G.S. Great Lakes Science Center and U-M School for Environment and Sustainability, Yu-Chun Kao of MSU's Center for Systems Integration and Sustainability, and Ed Rutherford of the NOAA Great Lakes Environmental Research Lab
2019	

October 16 Secrets of Birds Shane DuBay and Ben Winger of the University of Michigan Museum of Zoology.

#### November 20 What does water sustainability have to do with microbes?

Melissa Duhaime and members of her lab team of the U-M's Department of Ecology and Evolutionary Biology

#### 2018

# January 25 An Archaeology of Migration

Jason De Leon, U-M Department of Anthropology

# February 21 Mass Extinctions - Past and...Present?

Matt Friedman of the U-M Museum of Paleontology and Department of Earth and Environmental Sciences and Johannes Foufopoulos of the School for Environment and Sustainability.

# March 21 **Postcards from the Anthropocene** Julia Cole and Naomi Levin of the University of Michigan's Department of Earth and

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# April 11 Designer Genes? Genetic engineering in the age of CRISPR

Jody Platt, Assistant Professor in the Department of Learning Health Sciences at the U-M Medical School, Daniel Thiel, doctoral student at the U-M School of Public Health and Department of Sociology, and Thom Saunders, Director of the U-M Transgenic Animal Model Core.

# October 17 You're the scientist now! Citizen and community science in a connected world

Nyeema Harris of the U-M Applied Wildlife Ecology Lab; Marty Kaufman of the Department of Geography, Planning, and Environment (U-M Flint); Natalie Sampson of the Department of Health & Human Services (U-M Dearborn); and Justin Schell of the U-M Shapiro Design Lab

# November 14 **Cyanobacteria: Toxic tide or treasure?** Vincent Denef of the University of Michigan's Department of Ecology and Evolutionary Biology, and Anthony Vecchiarelli of the Department of Molecular, Cellular, and Developmental Biology.

# 2017

# January 25 Politics and Psychology from Mussolini to the Alt-Right

Dario Gaggio of the U-M History department and Joshua Rabinowitz of the U-M Psychology department

# February 22 Ancient Climates, Future Climates-What Can the Deep Past Tell Us?

Chris Poulsen, Professor and Chair of Earth and Environmental Sciences and Nathan Sheldon, Associate Professor Earth and Environmental Sciences, Associate Director of the Program in the Environment

# March 22 Can Nutrition, Stress, and Environmental Exposures Change Your DNA?

Kelly Bakulski and Dana Dolinoy of the U-M School of Public Health, and Srijan Sen of the Department of Psychiatry at Michigan Medicine

# April 12 Safeguarding Science: Expanding Access to Public Data

Jake Carlson, Research Data Services Manager, University of Michigan Library, Paul Edwards, Professor of Information, School of Information and Professor of History, Catherine Morse, Government Information, Law and Political Science Librarian and Justin Schell, Director, Shapiro Design Lab, University of Michigan Library

# October 4 Oil and Soil: The Forces of Climate Change

Jennifer Blesh, Assistant Professor, U-M School for Environment and Sustainability and Juan Cole, Professor of History and Director of the U-M Center for Middle Eastern and North African Studies

#### November 8 What Cost, Basic Research? Meghan Duffy, Professor, Ecology and Evolutionary Biology and Kristin Koutmou, Professor for the Department of Chemistry

# 2016

# January 27 **A Mammoth Find**

Daniel Fisher the Claude W. Hibbard Collegiate Professor of Paleontology and Director of the Museum of Paleontology and Adam Rountrey the Collection Manager for Vertebrate Fossils

# February 17 Evolution and Deep Time

Professors Catherine Badgley and Stephen Smith of the UM Department of Ecology and Evolutionary Biology

# March 30 Memory

Professor Cindy Lustig and graduate student Tiffany Jantz of the UM Psychology Department, and Professor Geoffrey Murphy of the UM Medical School and the Molecular Behavioral Neuroscience

# April 13 Implicit Bias, Race and Politics

Denise Sekaquaptewa the Professor and Associate Chair of Psychology and professor of Women's Studies at the University of Michigan, and Vincent Hutchings the professor of Political Science and research professor in the Center for Political Studies

# October 19 Death and Dying

Dr. Adam Marks the Assistant Professor of Medicine in the Division of Geriatrics and Palliative Medicine at the University of Michigan Health System, Dr. Thomas O'Neil, Assistant Professor of Family Medicine and Geriatrics and Palliative Medicine at the University of Michigan Health System, Anne Murphy, M.B.A., FACHE, Administrative Director at the University of Michigan Health System Transplant Center, and Merilynne Rush, R.N., B.S.N., midwife, and educator/consultant about home funerals and green burial

# November 16 Has Particle Physics Fizzled?

Dante Amidei the Professor of Physics at the University of Michigan, and Aaron Pierce the Professor of Physics at the University of Michigan and the Director of the Michigan Center for Theoretical Physics.

#### 2015

#### January 28 Shining Light on the Brain

Professor Ioulia Kovelman of the U-M Psychology department.

#### February 25 Can You Train Your Brain?

Professor Priti Shah of the U-M department of Psychology and Ben Katz, Ph.D. student in psychology and former researcher and game designer at Lumosity.

#### March 25 Sports and Brain Injuries

U-M Department of Kinesiology Professor Steven Broglio, Director of U-M's Neurosport Research Laboratory; Darryl Conway, Associate Athletic Director for Student Athlete Health and Welfare; and Dr. Jeffrey Kutcher, Professor of Neurology in the U-M Medical School and Director of Michigan NeuroSport.

#### April 15 Environmental Impact of Food

Marty Heller of the U-M Center for Sustainable Systems, and Lesli Hoey of the U-M Taubman College of Architecture and Urban Planning.

#### October 21 Science, Politics, and Power

John Vandermeer, Asa Gray Distinguished University Professor of Ecology and Evolutionary Biology; and George W. Pack, Professor of Ecology, Natural Resources and Environment

#### November 18 Of Butterflies and Climate Change

Henry A. Gleason, Collegiate Professor of Ecology and Evolutionary Biology

#### 2014

January 29 Aging, Memory Loss, and Dementia: Causes, Challenges, and Current Research Dr. Henry Paulson, Director of the Michigan Alzheimer's Disease Center and Prof. Scott Roberts of the U-M School of Public Health

#### February 26 Black Holes, Gravity, and Cosmic Geometry Lydia Bieri of the University of Michigan Department of Mathematics and Kayhan Gultekin of the Department of Astronomy

- March 26 **The Politics of Preserving the Past** Carla Sinopoli, Curator of Asian Archaeology and Director of the U-M Museum Studies program and Susan Wineberg, local author and Ann Arbor historian.
  - April 16 Wolves, People, and Policy Joseph Bump of Michigan Technological University's School of Forest Resources & Environmental Science

# October 22 Extinction is Forever...

Sara Adlerstein-Gonzalez and Johannes Foufopoulos of the U-M School of Natural Resources and the Environment (SNRE) and Jim Diana, Professor of SNRE and Director of Michigan Sea Grant.

# November 19 **Ebola: Science, Fear and Public Health Policy** Arnold Monto, Professor of Epidemiology and Joseph Eisenberg, Associate Professor of Epidemiology, School of Public Health

# 2013

# January 23 Race and Public Health

Professor Cleopatra Caldwell (U-M School of Public Health), Professor Amy Schulz (U-M School of Public Health), and Charles Wilson (Washtenaw County Public Health Department)

# February 27 Race and the Legal System

Washtenaw County Sheriff Jerry Clayton, Professor Jelani Exum (University of Toledo College of Law), Professor David Harding (U-M Dept. of Sociology, U-M Institute for Social Research), and Timothy Threat

# March 20 Race and Education

Dr. Shayla Griffin, Research Fellow at the U-M School of Education, AAPS Board Trustee Simone Lightfoot and Eastern Michigan University Professor Ronald Woods

# April 10 Race and Immigration

Bridgette Carr of the Human Trafficking Clinic at the U-M Law School, John Garcia of the UM Institute for Social Research, and Laura Sanders and Ramiro Martinez, co-founders of the Washtenaw Interfaith Council of Immigrant Rights

# October 23 Pollination, Pesticides and Problems: The future of bees

Professor Zachary Huang of Michigan State University, Lisa Bashert of the Local Honey Project, and Jamie Berlin of Ypsi Melissa

# November 20 **The Future of Fracking in Michigan** Brian Ellis, Knute Nadelhoffer, and Kim Wolske, U-M authors of a new set of technical reports on fracking

# 2012

#### January 25 Making Supergerms: Evolution, Antibiotic Resistance, and Public Health Betsy Foxman, Professor of Epidemiology and Director of the U-M Center for Molecular and Clinical Epidemiology of Infectious Diseases, and Terri Stillwell, Clinical Lecturer of Pediatric Infectious Disease

- February 22Evolution and Infectious DiseasesArnold Monto, Professor of Epidemiology from the U-M School of Public Health , and<br/>Pejman Rohani, U-M Professor of Ecology and Evolutionary Biology and Complex Systems
  - March 7 **Evolution, Obesity, and Public Health** Dr. Joyce Lee, Assistant Professor of Pediatric Endocrinology and Health Services Research, and Dr. Susan Woolford, Medical Director at the Pediatric Comprehensive Weight Management Center at C. S. Mott Children's Hospital
  - April 11 **Evolution, Poverty, and Public Health** Professor Richard Lichtenstein of the UM School of Public Health and Zachary Rowe, Executive Director of Friends of Parkside

## October 10 Climate Change in the Great Lakes

Brent Lofgren from the National Oceanic and Atmospheric Administration's Great Lakes Environmental Research Laboratory and Dan Brown from the U-M Great Lakes Integrated Sciences & Assessments Center

#### November 14 Finding the Higgs Bosn - What's Next?

Gordon Kane, the Victor Weisskopf Distinguished University Professor of Physics at the University of Michigan

#### 2011

#### January 19 Ice: The Past, Present, and Future

Jeremy Bassis, School of Engineering, Department of Atmospheric, Oceanic, and Space Sciences, and Sarah Aciego, Department of Geological Sciences

#### February 9 Water, Oil, and Energy

Steve Hamilton, Michigan State University W. K. Kellogg Biological Station, and Andrew Maynard, U-M School of Public Health

#### March 9 Water and Women's Lives

Barbara Anderson, Ronald Freedman Collegiate Professor of Sociology and Population Studies; Elisha Renne, Professor and Associate Director, Center for Afroamerican and African Studies and the Department of Anthropology; and John Romani, Professor Emeritus, Public Health Administration

#### April 13 The Future of the Great Lakes

Jim Diana, Professor at the UM School of Natural Resources and the Environment and Director of Michigan Sea Grant, and Christine Manninen, Communications Director at the Great Lakes Commission

# October 19 Neanderthals Are Us?

John Speth, Professor of Anthropology and Curator of Archaeology, and Milford Wolpoff, Professor of Anthropology and Research Scientist

#### November 16 Water and Life - On Mars and Beyond!

Nilton Renno, Professor, Department of Atmospheric, Oceanic and Space Sciences, and Ted Bergin, Professor, Astronomy

#### 2010

- February 17 Science in Dangerous Places: Field Work in Areas of Armed Conflict and Unrest Henry Wright, U-M Museum of Anthropology
  - March 24 **Evolutionary Science: From Diseases to Doctor Training** Randolph Nesse, M.D., U-M Departments of Psychology and Psychiatry, and Institute for Social Research
    - April 14 What is Life? Is synthetic life possible? Diarmaid O'Foighil, U-M Museum of Zoology and Department of Ecology and Evolutionary Biology

- October 20 **Polar Opposites? Exploring Art and Science at the North and South Poles** Jeff McMahon, U-M Physics professor, and Osman Kahn, Professor, U-M Art and Design
- November 17 Happiness is Different Things to Different People: Perspectives from Around the World Ruth Behar, Professor of Anthropology and Women's Studies, and Ron Inglehart, Political Science Professor

#### 2009

#### January 14 Science and Religion

David Baker, U-M Philosophy; Margaret Evans, U-M Center for Human Growth and Development; Rolf Bouma, Center for Faith and Scholarship and U-M Program in the Environment; and Tim McKay, U-M Physics

#### February 11 Astrobiology

Deborah Goldberg, Chair of Ecology and Evolutionary Biology, and Ted Bergin, Professor of Astronomy

#### March 11 Dark Energy and the Accelerating Universe

Dragan Huterer, U-M Physics, and Timothy McKay, U-M Physics

#### April 15 Manned vs. Unmanned Space Exploration

Tony England, former astronaut and Associate Dean, College of Engineering; and Doug Richstone, Chair, U-M Astronomy

#### October 14 Presenting Culture in Museums

Elaine Heumann Gurian, prominent author, museum consultant, and past interim director of the Cranbook Institute of Science; Gwyn Isaac, Director of the Museum of Anthropology at Arizona State University; and Veronica Pasfield, Bay Mills Ojibwe Tribe

#### November 11 Museums, Parents, and Science Education: What's Next?

Pamela Davis-Kean, Professor, U-M Department of Psychology and the Institute for Social Research, and Jon Miller, the John A. Hannah Professor of Integrative Studies at Michigan State University.

#### 2008

#### January 24 **Politics and the Poles**

Henry Pollack, U-M geologist Henry Pollack (co-winner of the 2007 Nobel Peace prize with other members of the Intergovernmental Panel on Climate Change), and Lana Pollack, environmental policy expert

#### February 13 Pollution and the Poles

Neal Basu, U-M faculty, and Gerald Keller, U-M faculty

#### March 19 Melting at the Poles

Ben van der Pluijm, U-M professor of Geology, the Environment, and Director of the U-M Global Change program; and Barry Rabe, professor of Public and Environmental Policy

# April 9 **People at the Poles**

Knute Nadelhoffer, Ecologist and Director of the U-M Biological Station; and Gary Meadows, U-M marine engineer

# October 15 Winds of Change: Great Lakes Wind Power

Duncan Callaway, U-M Research Scientist, Natural Resources and Environment, and Mechanical Engineering; and Tom Lyon, U-M Professor, Business Economics and Natural Resources and Environment

# November 5 Balance of Power? Prospects for Renewable and Non-renewable Energy

Steve Kesler, U-M Department of Geological Sciences, and Greg Keoleian, Co-director of the Center for Sustainable Systems, U-M School of Natural Resources and the Environment

# 2007

# January 24 The Climate Will Change: Now What? Perry Samson Weather Scientist, U-M; Richard "Ricky" Rood, former NASA scientist now at U-M

- February 7 **Ideas for Reducing Your Carbon Footprint** Knute Nadelhoffer, U-M Biological Station Director and Professor in Ecology and Evolutionary Biology; and Dave Konkle, 18 years experience as the City of Ann Arbor Energy Coordinator
  - March 3 What's For Dinner after Global Warming? John Vandermeer, U-M ecologist
  - April 18 Alternative Energy Solutions Henry Pollack, Professor of Geological Sciences and scientific advisor on climate change to former President Al Gore

# October 10 Weighty Matters

Aaron Pierce, U-M Department of Physics

November 14 Where We Live: Understanding the Causes of Residential Segregation Elizabeth Bruch, U-M sociologist