THE PONTIFICAL ACADEMY OF SCIENCES

Conference on

THE ART & SCIENCE OF OLIVE OIL: NUTRITION, MEDICINE AND PLANETARY HEALTH

Securing the Future of a World Cultural Heritage

October 12, 2021 (Virtual Preparatory Session – 2 Hours)

Tuesday, October 12, 2021 at 6 PM EET / 5 PM CET / 11 AM EDT / 8 AM PDT

May 3-4, 2022 (Invitational Conference at the Academy)
Vatican City

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Overview

In November 2020, the world marked the 10th anniversary of the designation by UNESCO of the Mediterranean Diet as an Intangible Cultural Heritage. At the foundation of the Mediterranean Diet is the olive oil kitchen, and behind that the world of olive tree cultivation and olive oil production from growing and harvesting to processing. Olive oil has been an integral part of Mediterranean food and society for millennia. And yet even today—with all of the attention that has been paid to olive oil and the Mediterranean Diet over the past several decades—we are still early in the discovery process about the true value of olive oil and the heritage of olive grove landscapes across the Mediterranean to our health, to our cultures and the sharing of food with family and friends, and to the sustainability of our environment.

The Art & Science of Olive Oil: Nutrition, Medicine and Planetary Health is being designed as a small, two-day invitational conference hosted by the Pontifical Academy of Sciences that brings together leading scientists and other experts from a variety of fields to highlight what we know about the contribution that olive oil can make to our lives as well as what needs further research attention. Our inquiry will highlight the scientific case for a heightened focus on quality in olive oil production, the many pathways that olive oil is thought to contribute to optimal health, and the surprising contribution this ancient food and related food system is making toward our planetary health.

In centuries past, many food and agricultural practices persisted for many hundreds of years due in part to the slow pace of change. Today, in the modern world, the future of olive oil and the sustainability of rural agricultural communities throughout the Mediterranean that depend on a robust olive oil sector are not automatically assured. The challenges are: the headwinds of competitive, global marketing practices; consumer preferences that are still largely detached from healthy food system considerations; and impacts from climate change that will likely require sustained investment in agricultural research to keep olive groves healthy. A final focus of this workshop, then, is to add to our understanding of why and how this Mediterranean tradition of olive oil needs our active, vigilant attention to assure that it survives and thrives for future generations. This discussion will include a focus on innovation in the culinary arts, preventive medicine, education, marketing and digital communications.

El arte y la ciencia del aceite de oliva:
Nutrición, Medicina y Salud Planetaria.
Asegurar el futuro de un patrimonio cultural mundial

Resumen

En noviembre de 2020, el mundo celebró el décimo aniversario de la designación por parte de la UNESCO de la Dieta Mediterránea como Patrimonio Cultural Inmaterial. En la base de la Dieta Mediterránea está la cocina basada en el aceite de oliva, y detrás de ella el mundo del cultivo del olivo y la producción de aceite de oliva, desde el cultivo y la cosecha hasta el procesamiento. El aceite de oliva ha sido parte integrante de la alimentación y la sociedad mediterráneas durante milenios. Y, sin embargo, incluso hoy –con toda la atención que se ha prestado al aceite de oliva y a la Dieta Mediterránea en las últimas décadas– todavía estamos en el proceso de descubrimiento del verdadero valor del aceite de oliva y del patrimonio de los paisajes de olivares en todo el Mediterráneo para nuestra salud, para nuestras culturas, como también para compartir la comida con la familia y los amigos, y en fin para la sostenibilidad de nuestro medio ambiente.

El arte y la ciencia del aceite de oliva: Nutrición, Medicina y Salud Planetaria se ha concebido como una pequeña conferencia de dos días, organizada por la Academia Pontificia de las Ciencias, que reúne a destacados científicos y otros expertos de diversos campos para poner de relieve lo que sabemos sobre la contribución que el aceite de oliva puede hacer a nuestras vidas, así como lo que necesita más atención en la investigación. Nuestra investigación pondrá de relieve los argumentos científicos que justifican una mayor atención a la calidad en la producción de aceite de oliva, las numerosas vías por las que se cree que el aceite de oliva contribuye a una salud óptima y la sorprendente contribución que este antiguo alimento y el sistema alimentario relacionado con él están haciendo a nuestra salud planetaria.

En siglos pasados, muchas prácticas alimentarias y agrícolas persistieron durante muchos cientos de años debido, en parte, a la lentitud del cambio. Hoy, en el mundo moderno, el futuro del aceite de oliva y la sostenibilidad de las comunidades agrícolas rurales de todo el Mediterráneo que dependen de un sector del aceite de oliva robusto no están automáticamente asegurados. Los retos son: los vientos en contra de las prácticas de comercialización competitivas y globales; las preferencias de los consumidores, que todavía están muy alejadas de las consideraciones de un sistema alimentario saludable; y los impactos del cambio climático, que probablemente requerirán una inversión sostenida en investigación agrícola para mantener la salud de los olivares. Así pues, el objetivo final de este taller es contribuir a nuestra comprensión de por qué y cómo esta tradición mediterránea del aceite de oliva necesita nuestra atención activa y vigilante para garantizar que sobreviva y prospere para las generaciones futuras. El debate se centrará en la innovación en las artes culinarias, la medicina preventiva, la educación, el marketing y las comunicaciones digitales.

Programme

Please note: Session plans and presentation titles have not yet been fully confirmed, and are subject to change

MAY 2, 2022	
	No-host, small group dinners for program participants

MAY 3, 2022	
Opening Session	
9:00	*Words of Welcome* **H.E. Msgr. Marcelo Sánchez Sorondo**
9:15	*Olive Oil, Religion and Culture: An Enduring Symbol of Life* **H.Em. Card. Giovanni Battista Re**
Session II Olive Oil and the Convergence of Public Health and Environmental Imperatives	
9:45	*Personal Health, Planetary Health and the Mediterranean Olive Oil Kitchen: Framing our Challenges and Opportunities* **Walter Willett**
10:05	*The Olive in Food Systems Perspectives – Inspiring Sustainability Thinking* **Joachim von Braun**
10:25	Discussion
10:50	Coffee Break
Session III Olive Oil, Nutrition and the Prevention of Chronic Disease—The State of our Knowledge	
11:20	*Olive Oil and the Mediterranean Diet: Finding Context in Healthy Fats, Plant-Forward Dietary Patterns, and Global Patterns of Chronic Disease* **Frank Hu**
11:40	*Keys for Greater Longevity: The Role of the Olive Oil in the Mediterranean Diet* **Ramon Estruch**
12:00	*Olive oil and its Unique Antioxidants: Protection against Cholesterol Oxidation and Cardiovascular Diseases* **Michael Aviram**
12:20	Discussion
12:45	Lunch

Session IV Olive Oil and the Mediterranean Diet—Insights from Italy, Greece and Spain	
14:00	*Olive Oil and the Heritage of the Italian Mediterranean Diet: The Imperative to Innovate* **Francesco Sofi**
14:20	*Olive Oil and the Heritage of the Greek Mediterranean Diet: Priorities for Research and Education* **Antonia Trichopoulou**
14:40	*Olive Oil and the Heritage of the Spanish Mediterranean Diet: Priorities for Research and Education* **Miguel Ángel Martínez-González**
15:00	Discussion
15:25	Coffee Break
Session V Translation, Adoption and Education—Pathways of Opportunity	
15:55	*Science into Action: Sector-Specific Strategies to Increase Adoption of the Mediterranean Diet and the Culture of Olive Oil* **Stefanos Kales**
16:15	*Chefs, Olive Oil and the Plant-Forward Kitchen: Culinary Strategies to Support Food System Transformation* **Greg Drescher**
16:35	*Sensory Science, Emotion and Technology —Increasing Engagement Around the Olive Oil Experience* **Jean-Xavier Guinard and Gemma Pasquali**
17:05	Discussion
17:30	*The Olive Tree and Planetary Health—A Vision for Advancing Research and Scholarship, Education, Preservation and Practice* **Tassos Kyriakides and Vasilis Vasiliou**
18:05	Discussion
18:30	Reception
19:00	Dinner at Pontifical Academy of Sciences

MAY 4, 2022	
Session VI **Olive Oil and the Plant-Forward Kitchen—Micronutrients, Health and Longevity**	
9:00	*Olive Oil Excellence and the Mediterranean Diet: Phytochemical Research, Inflammation, and the Prevention of Cognitive Decline* **Walter Willett**
9:20	*High-Altitude Production and the Polyphenol Content in Olive Oil* **Alarcos Martinez**
9:40	*Advancing a Framework for High-Polyphenolic Olive Oil, from Production to the Consumer Market* **Prokopios Magiatis**
10:00	Discussion
Session VII **Advancing Excellence and Innovation in the Olive Oil Industry**	
10:30	Panel Discussion Moderator: **Dan Flynn** Panelists: **Jaime Lillo, Rosa Vañó, Leandro Ravetti, Eleni Melliou, Javier Fernandez Salvador**
11:15	Coffee Break
Session VIII **Knowledge Agenda: Towards a Better-Educated Olive Oil Consumer Market**	
11:40	Panel Discussion Moderator: **Greg Drescher** Panelists: **Emmanouil Anagnostatakis, Teresa Pérez, Joseph Profaci, Maria Loi, Rafi Taherian**
Session IX **Looking to the Future: Consensus Document**	
12:25	Review of Draft Consensus Document **Olive Oil: The Future of a World Heritage—Nutrition, Medicine and Planetary Health** Group Discussion Co-Moderators: **Greg Drescher, Stefanos Kales**
12:55	*Concluding Remarks* **H.E. Msgr. Marcelo Sánchez Sorondo**
13:00	Lunch
14:30	Program Ends

List of Participants

Francisco José Alarcos Martínez
Catedrático de Ética Teológica en la Facultad de Teología de Granada de la Universidad Loyola Andalucía y director de la Cátedra de Bioética de la U. Loyola.

Michael Aviram, DSc
Professor (Emeritus) of Biochemistry, Head, The Lipid Research Laboratory, Rappaport Faculty of Medicine, Technion, Israel Institute of Science & Technology

Joachim von Braun, PhD
President, Pontifical Academy of Sciences; Director of the Center for Development Research (ZEF), Bonn University, and Professor for Economic and Technological Change; and Chair of the Scientific Group, United Nations Food Systems Summit (2021)

Greg Drescher
Vice President of Strategic Initiatives & Industry Leadership, The Culinary Institute of America

Ramon Estruch, MD, PhD
Senior Consultant, Internal Medicine, Hospital of Barcelona, Professor of Medicine, University of Barcelona, and Principle Investigator, PREDIMED study; Chair, Scientific Advisory Council, Torribera Mediterranean Center (confirmed)

Jean-Xavier Guinard, PhD
Professor of Sensory Science, University of California, Davis

Frank Hu, MD, PhD
Chair, Department of Nutrition, and Professor of Nutrition and Epidemiology, Harvard T.H. Chan School of Public Health; Professor of Medicine, Harvard Medical School and Channing Lab, Brigham and Women's Hospital

Stefanos Kales, MD, MPH
Professor of Medicine, Harvard Medical School; and Professor and Director of the Occupational and Environmental Medicine Residency, Harvard T.H. Chan School of Public Health

Tassos C. Kyriakides, PhD
Research Scientist, Yale Center for Analytical Sciences, Yale School of Public Health; Co-founder, Yale Olive Institute

Prokopios Magiatis, PhD
Associate Professor, School of Pharmacy, University of Athens, and General Secretary, World Olive Center for Health

Miguel Ángel Martínez-González, MD, PhD, MPH
Professor and Chair of the Department of Preventive Medicine and Public Health at the University of Navarra Medical School

Gemma Pasquali, PhD
Villa Campestri and Villa Campestri Oleoteca, The Mugello, Italy

Marcelo Sánchez Sorondo
Chancellor, Pontifical Academy of Sciences, The Vatican

Francesco Sofi, MD, PhD
Associate Professor of Food Science and Clinical Nutrition, University of Florence

Antonia Trichopoulou, MD
President, Hellenic Health Foundation; Professor Emeritus, School of Medicine, National and Kapodistrian University of Athens

Vasilis Vasiliou, PhD
Professor of Epidemiology and Chair, Department of Environmetal Health Sciences, Yale School of Public Health; Co-founder, Yale Olive Institute

Walter Willett, MD, DrPH
Past Chair, Department of Nutrition, and Professor of Nutrition and Epidemiology, Harvard T.H. Chan School of Public Health; Professor of Medicine, Harvard Medical School; Chair, CIA-Harvard Menus of Change Scientific and Technical Advisory Council, and Co-Chair, EAT-Lancet Commission

PANELISTS

Emmanouil Anagnostatakis
Owner, Creta Verde, Crete

Paul Bartolotta
Chef/Owner and co-founder, The Bartolotta Restaurants, Milwaukee, Wisconsin

Javier Fernandez Salvador
Executive Director, University of California, Davis Olive Center

Dan Flynn
Consultant and Founding/Former Executive Director, University of California, UC Davis Olive Center

Jaime Lillo
Deputy Director, International Olive Council, Madrid

Maria Loi
Chef/Owner, Loi Estiatorio Restaurant, New York City, author and television host

Eleni Melliou, PhD
Researcher, School of Pharmacy, University of Athens, and President, World Olive Center for Health

Teresa Pérez Millán
Director General, Olive Oil from Spain, Madrid

Joe Profaci
Executive Director, North American Olive Oil Association

Leandro Ravetti
Co-CEO and Technical Director, Cobram Estate, California and Australia

Rafi Taherian
Associate Vice President, Yale Hospitality, Yale University

Rosa Vañó
Co-owner and Commercial Manager, Castillo de Canena, Jaen, Spain

COLLABORATING ACADEMIC INSTITUTIONS AND ORGANIZATIONS

The Culinary Institute of America
Harvard T.H. Chan School of Public Health
Hellenic Health Foundation
Olive Wellness Institute
University of Barcelona/Torribera Mediterranean Center
University of California, Davis Olive Center
University of Florence
University of Navarra
World Olive Center for Health
Yale University

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