Narcotics:
Problems and Solutions of This Global Issue

23-24 November 2016 • Casina Pio IV • Vatican City
Following a special wish of Pope Francis, the Pontifical Academies of Sciences is organizing a two-day Workshop on Narcotics: Problems and Solutions of this Global Issue on 23-24 November 2016. The current system to be examined presents numerous aspects: the history of drug use from a cultural and geopolitical point of view, the different types of substances, the centres of production and distribution and consumer typologies. Particular attention will be devoted to prevention of substance abuse related to children and young people.

Today, substance abuse problems are undeniably topical, since drugs are one of the scourges of our globalised world, despite the enormous resources employed all over the world to fight drug trafficking and production.

The UNODC\(^1\) conservatively estimated that in 2013, the most recent year for which data is available, 246 million people worldwide, or 1 out of 20 individuals between the ages of 15 and 64, used an illicit drug, an increase of 3 million people over the previous year. More alarmingly, 27 million people were characterized as “problem drug users.” Only one out of every six of these problem users had access to any sort of addiction treatment.

Our workshop intends to focus specifically on the scientific aspect, presenting the consequences of substance abuse (both soft and hard drugs) on our bodies and brains, as well as the potential medical uses of certain drugs for specific diseases and disorders. Other aspects that will be discussed include the illicit and relatively easy production of drugs (in cities, slums, and in the countryside); strategies that fight the conditions fostering the use of drugs; exploitation of young children in criminal organizations that distribute narcotics; and effects of soft drugs legalization on our society.

Leading professionals, scientists, experts, medical doctors, researchers, practitioners, members of civil society, judges and our Academicians are invited by the PAS to examine and discuss possible innovative socio-political solutions to these drug-related issues.

Our goal is to reach a consensus that investing in education, prevention, health care, addiction treatment and, in certain cases, alternatives to incarceration would do more to end the drug trade than relying primarily on the criminalization of the victims.


**Marcelo Sánchez Sorondo**
INTRODUCCIÓN
<table>
<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>9:00</td>
<td>Word of Welcome</td>
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<td>H.E. Msgr. Marcelo Sánchez Sorondo</td>
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<tr>
<td>9:05</td>
<td>Introduction</td>
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<td>H.M. Queen Silvia of Sweden</td>
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<td>Mr. Yuri Fedotov</td>
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<td>Dr. Francis L. Delmonico, M.D.</td>
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<td>9:30</td>
<td>History of Drug Use from a Cultural and Geopolitical Point of View</td>
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<td>Chairperson: ...</td>
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<td>10:00</td>
<td>Interpol or DEA expert to speak about production, drug trafficking and routes</td>
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<td>Coffee Break</td>
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<td>11:00</td>
<td>Expert on sale of drugs online</td>
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<td>Opiates and the Brain</td>
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<td>Dr. Angela Me</td>
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<td>Discussion</td>
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<td>Lunch at the Casina IV</td>
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<td>14:30</td>
<td>Prevention and Education. Evidence-Based Principles and Strategies</td>
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<td>Chairperson: Joanna Rubinstein</td>
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<td>14:30</td>
<td>Minister Per Johan Gabriel Wikström</td>
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<td>15:00</td>
<td>Ms. Yvonne Thunell</td>
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<td>Round Table</td>
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<td>Ms. Carmen Fernández-Caceres</td>
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<td>Ms. Betina Zubeldía</td>
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<td>Trestad 2 (Three City Project 2) collaboration between the three major cities in Sweden: Stockholm, Gothenburg and Malmö</td>
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<td>18:30</td>
<td>Discussion</td>
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### NEUROSCIENCES
Chairperson: ...

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<th>Time</th>
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<tr>
<td>9:00</td>
<td><strong>Dr. Nora Volkow</strong></td>
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<td>9:30</td>
<td><strong>Dr. Robert L. DuPont, M.D.</strong></td>
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<tr>
<td>10:00</td>
<td><em>Opium and the Brain</em>风情</td>
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<td>10:30</td>
<td>Coffee Break</td>
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<td>11:00</td>
<td>Discussion</td>
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### MEDICINAL AND RECREATIONAL USE
Chairperson: **Sir Philip Henry Montgomery Campbell, FinstP**

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<th>Time</th>
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<td>11:30</td>
<td><strong>Prof. Bertha K. Madras, PhD</strong></td>
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<td><strong>Lunch at the Casina Pio IV</strong></td>
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<td>14:30</td>
<td><strong>Dr. João Goulão, M.D.</strong></td>
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<td>15:00</td>
<td><em>The Endocannabinoid System: Therapeutic Perspectives and Risks of Cannabis Consumption</em></td>
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<td>15:30</td>
<td><strong>Prof. Rafael Maldonado</strong></td>
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<td><strong>Discussion</strong></td>
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### SOCIOECONOMIC ASPECTS
Chairperson: ...

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<tr>
<td>16:00</td>
<td><strong>Dr. Kevin Sabet</strong></td>
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<td>16:30</td>
<td><strong>Mr. Gustavo Vera</strong></td>
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<td>Discussion</td>
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<td>18:00</td>
<td><strong>Prof. Jonathan P. Caulkins</strong></td>
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<td>18:30</td>
<td><strong>Prof. Jeffrey Sachs</strong></td>
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<td>19:00</td>
<td><strong>Mr. Alexis Goosdeel</strong></td>
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<td>19:30</td>
<td>Discussion and Final Statement</td>
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<td>20:30</td>
<td><strong>Dinner at the Casina Pio IV</strong></td>
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LIST OF PARTICIPANTS

Sir Philip Henry Montgomery Campbell, FInstP

Prof. Bertha K. Madras, PhD
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Institute for Behavior and Health,
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Dr. Kevin Sabet
President, Smart Approaches to Marijuana (SAM)
Director of the Drug Policy Institute,
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Yuri Fedotov
Executive Director of the United Nations Office on Drugs and Crime (UNODC), Vienna, Austria

Joanna Rubinstein
President & CEO
of The World Childhood Foundation USA

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Co-founder of the World Childhood Foundation
Honorary board member of The Mentor Foundation International

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Yvonne Thunell
Chairman, Mentor Foundation International,
Stockholm, Sweden

Brigitte Kieffer, PhD
Scientific Director,
Douglas Research Centre
Professor, Dpt Psychiatry, Faculty of Medicine,
McGill University, Canada

Gustavo Vera
MP
City of Buenos Aires, Argentina
Bertha Madras (the honorable) is Professor of Psychobiology, Harvard Medical School at McLean Hospital. Her neuroscience research focuses primarily on addiction biology and is published in over 200 manuscripts, articles and commentaries. She is principal/co-editor of three books, “The Cell Biology of Addiction”, “The Effects of Drug Abuse in the Human Nervous System” and “Imaging of the Human Brain in Health and Disease”. In Dec. 2015, the World Health Organization published her monograph “Update of Cannabis and its Medical Use”. She is former Deputy Director for Demand Reduction (prevention, treatment) in the White House Office of National Drug Control Policy, Executive Office of President, an appointment unanimously confirmed by the U.S. Senate. As an inventor, she received 19 U.S. patents and 27 international patents. A recipient of a number of awards, her brain imaging agent was listed by The Better World Report (2006) as “one of 25 technology transfer innovations that changed the world”.

Luis Alberto Ferrari, Ph.D; MSc.Chemistry; MSc.Pharm; Cons.Toxicol. Chief (ret.) Laboratory of Toxicology and Forensic Chemistry, Supreme Court of Justice, Buenos Aires, Argentina. Ph.D with Thesis about Forensic Toxicology. He produced as author, reviewer and speaker over 200 papers in national, international journals and events in Analytical and Forensic Toxicology. Scholar of Narcotics Drugs-United Nations, 1989. He obtained eight awards and organized several International meetings. Full Professor and Principal Researcher in Toxicology and Forensic Chemistry, UM University. Reviewer Outstanding of Forensic Science International. Reviewer of UNODC, United Nations. Adviser of National Prosecution. Adviser Commission on Drug Dependence, Argentine Episcopal Conference.

Rafael Maldonado (Cádiz, Spain, 1961), MD, PhD, is Professor of Pharmacology (University Pompeu Fabra, Barcelona, Spain). He investigates the neurochemical basis of drug dependence and related disorders (affection, pain, cognitive, eating), particularly in the field of the endocannabinoid system. He has 272 scientific articles in international journals, has been Principal Investigator for 27 years of research grants funded by the main Spanish, European and USA agencies, is reviewer/member of the Editorial Board of several scientific journals and has also collaborated with public authorities and private companies in the research policy and pharmaceuticals development on novel treatments for drug abuse and pain.

Brigitte Kieffer is Professor at the Dpt Psychiatry, McGill University and Scientific Director of the Douglas Mental Health Research Center (Montréal, Canada) since 2014. She developed most her research activity at IGBMC, Strasbourg, France. She isolated the first opioid receptor gene and her genetic dissection of the opioid system brought major advances in pain, addiction and mood research. She received numerous awards (French/US Academies of Science, International L’OREAL-UNESCO award) and is member of the French Academy of Sciences. She published about 200 articles in international peer-reviewed journals, wrote >40 invited reviews and book chapters, and gave >200 invited conferences worldwide.