



# AI Kitchens & Robot Cooks: Ethical and Social Impacts

Workshop May 6, 2025



The workshop explores the rise of artificial-intelligence (AI) kitchens and robot cooks. As the first extensive conversation on the subject, the project maps out and develops a full range of ethical and societal issues in this emerging space, looking at both benefits and risks. Because food is so fundamental, automating kitchens can have far-reaching impacts beyond the usual kinds in technology ethics. Kitchens are often the heart of our homes, where traditions and science education are passed along to children. Restaurants and their kitchens are also the heart of our communities and culture. Automating that creative labor may impact values that society cares about, such as those related to child development, family and communal relationships, gender roles, cultural and religious traditions, authenticity, nutrition and wellbeing, food safety and waste, economic vitality, agriculture, and more. At the same time, cooking can be labor-intensive and hard on both physical and mental health, such as in busy restaurants. Freeing creators from that taxing, mundane work can allow them to focus on more creative and experimental elements. Indeed, AI is already helping to develop innovative recipes—pairing tastes at the molecular level, as well as making maximal use of ingredients on hand to reduce food waste.

Archbishop Vincenzo Paglia - President of the Pontifical Academy for Life  
- Introductory Remarks.

I am especially pleased to welcome you here to the headquarters of the Pontifical Academy for Life for your meeting. I know how important is the work you do. My wish is that you can continue it, because it is an important part of the future of humanity. In a fragmenting world it is important to have a global vision. This is the problem of the international politics of today. And I would like to recall here, very briefly, the vision of Pope Francis, and it is indispensable to preserve. With the Encyclical *Laudato Si*, Pope Francis reminded us that the planet is the Common Home of all peoples. And at the same time - with the Encyclical *Fratelli Tutti* - he reminded us that our peoples are all brothers and sisters. This is a vision that must support the common responsibility to preserve Creation and we need to have a sustainable development for all peoples. In several occasions I have spoken with Pope Francis about the need that in this Common House of all peoples, there should be one table, where everyone, both peoples and individuals, must find their place. The ancient and inhumane Malthusian theory, which condemns some people to never sit at the common table, is among those theories that need to be decisively removed. New technologies can help us to understand how to sustain development that allows everyone to sit at this common table, to help this generation and future generations, to live a dignified human life. I am especially pleased that you can hold this meeting here, urging you to feel at home. *Sentitevi a casa* (in Italian). Good work to all.

Expert meeting: Tuesday, 6 May 2025

9:00-9:30 Check-in

9:30-10:00 Opening remarks and participant introductions

10:00-11:00 Introduction to the technology Speakers: John Hutt, Luca locchi Moderator: Mike Wolf

11:00-11:30 Break

11:30-1:00 Food in human life and flourishing Speaker: Sara Roversi Moderator: Anya Foxen

1:00-2:00 Lunch

2:00-3:30 Benefits and risks in automating food Speakers: Nunziata Comoretto, Andrea Borghini Moderator: Jennifer Jipson

3:30-4:00 Break

4:00-5:00 Evaluation (Rome Call) Speaker: Fr. Andrea Ciucci Moderator: Daniel Story

5:00-5:30 Closing discussion + end of workshop

This workshop is supported by funding from the US National Science Foundation, award no. 2220888, and is organized by a joint team at Cal Poly (San Luis Obispo) and Pontifical Academy for Life. At Cal Poly, the organizers are Patrick Lin and Daniel Story; at PAV, the organizers are Fr. Andrea Ciucci, Gaetano Torlone, and Federica Sezzatini.