

SANA RESTART – Bologna 9 ottobre 2020



*Scienza e Ricerca sulle piante
ai tempi del COVID-19*



PLANTAE MEDICINALES MEDITERRANEAЕ:
dalla tradizione pan-mediterranea
alla ricerca scientifica attuale

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Chair Holder Unesco Chair Salerno

Plants for Health in the Mediterranean Tradition



United Nations
Educational, Scientific and
Cultural Organization



UNESCO Chair Salerno
Plants for Health in the
Mediterranean Traditions



University of Salerno
Department of Pharmacy



UNITWIN UNESCO CHAIRS PROGRAM

IN 1992 **UNESCO** LAUNCHED

THE UNITWIN UNESCO CHAIRS PROGRAM

TO PROMOTE INTER UNIVERSITIES COLLABORATION
THROUGH SHARING, KNOWLEDGE AND CONTACT WORK



CURRENTLY,
THERE ARE OVER 800
UNESCO CHAIRS
IN THE WORLD,
32 IN ITALY



UNISA UNESCO CHAIR

PLANTS FOR HEALTH IN THE MEDITERRANEAN TRADITION

Protecting, promoting and transmitting
heritage on plants for health
in the Mediterranean Area



United Nations
Educational, Scientific and
Cultural Organization



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2020 UNISA CHAIR SALERNO

IDEA WAS BORN IN 2018 FROM THE EXPERIENCE OF SOME RESEARCHERS EXPERT IN OFFICIAL AND MEDICINAL PLANTS, HUMANITIES, ANTHROPOLOGY, SOCIOLOGY, PHYTOTHERAPY, PLANTS FOR COSMETICS, FOR NUTRITION, FOR PHYTODEPURATION

PURPOSE -> TO BUILD AN INTERNATIONAL **CENTER OF EXCELLENCE** FOR HIGH **EDUCATION** AND **RESEARCH** ON PLANTS FOR HEALTH



The UNESCO Chair
Plants for Health in the Mediterranean Traditions
is conceived
as a **multi-, trans- and cross-disciplinary chair**
aimed to spread
the extraordinary knowledge on medicinal/health plants
evolved through the centuries
in the Mediterranean area

Campus
University of Salerno
- Unisa -



2020 UNISA CHAIR SALERNO: DISCIPLINES

- **Documentary sciences:** Library sciences /archivistic, Digital Humanities
- **Historical sciences:** History of Science, History of Medicine, History of Pharmacy; Art History; Archaeology; Archaeobotany; Palaeopathology
- **Life sciences:** Biology, Environmental and Applied Botany; Horticulture
 - **Medical sciences:** Pathology; Epidemiology; Genetics.
 - **Pharmaceutical Sciences:** Pharmaceutical Technology; Cosmetics; Food Chemistry; Phytotherapy; Phytovigilance
- **Natural Medicine**
- **Social sciences:** Anthropology; Ethnomedicine; Sociology
- **Environmental sciences:** Architecture and Ecology; Garden History/Architecture, Hydraulic Engineering

WHY PLANTS FOR HEALTH?

The *Convention for Safeguarding Intangible Cultural Heritage* adopted in Paris on 17 October 2003, at the 32nd Session of UNESCO, **stated for the first time that**

*KNOWLEDGE AND PRACTISES CONCERNING
NATURE AND THE UNIVERSE ARE
A PART OF OUR CULTURAL HERITAGE*

This means that ethnobotany, ethnobiology, ethnoecology (including ethnopedology and ethnoclimatology), traditional environmental knowledge, ethnoveterinary, folk medical, and pharmaceutical knowledge

are now recognised as being inextricable components of culture,

and therefore worthy of being protected and

sustained

WHY MEDITERRANEAN AREA?

One of the areas with the greatest **biodiversity** on the planet,
a **circum-Mediterranean cultural heritage**
existing and influencing many human activities and health practises

Mediterranean region, commonality and difference in cultures, practices and social processes resulting in a very complex system of exchanges and relationships between cultures

During the entire history,
this system of exchanges and relationships
between cultures has taken place and
had a remarkable influence on education
traditions and transmission in medicine and
“**pharmacopoeias**”

The current pharmacopeia of Western
countries has its origin in the works of
Classical authors, implying an ample fund
of plants and medicinal uses
in the Mediterranean basin

GREEK-LATIN TRADITION

ARAB TRADITION

JEWISH TRADITION

Local Traditions

..... SALERNO MEDICAL SCHOOL

WHY SALERNO AND ITS UNIVERSITY?

University of Salerno
thanks to

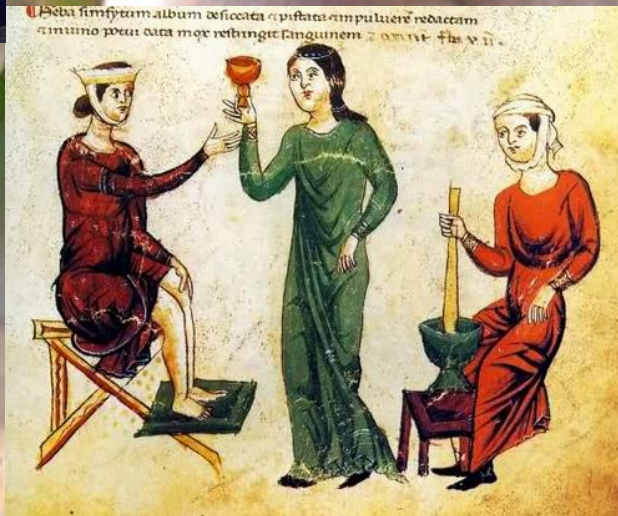
“Plants for Health in the Mediterranean Traditions” Chair,
and with the recent establishment of the
Interdepartmental Research Center
- *Althea A Mediterranean Institution:*
- *The Salerno Medical School* -

is a candidate to assume the role and responsibility of cultural mediation between Mediterranean countries by stimulating dialogue between cultures and enhancing millenary knowledge for human health.





THE SALERNO MEDICAL SCHOOL




Scuola Medica Salernitana

the first and most important medical institution in Europe at the beginning of the Middle Ages.

where the GREEK-LATIN medical tradition and the ARAB and JEWISH one merged,

It also welcomed many women in the practice and teaching of medicine, the "*mulieres salernitanae*", women experts in medicine who prepared cosmetics and health care products for women of the nobility



Between the 13th and 14th centuries, in Salerno, on the terracing of the Minerva Gardens some plants were cultivated to obtain some active ingredients for therapeutic purposes

MINERVA GARDEN IN SALERNO

THE FIRST BOTANICAL GARDEN IN EUROPE HISTORY

MINERVA GARDEN IN SALERNO TODAY NOT ONLY HISTORY ...

The Minerva Garden in Salerno is reaching **new records**

Recently, thanks to the interest of Prof. **Alain Touwaide** - History of Medicine and Science –
a unique collection of over 540 plants
has been acquired



Within a year, they will be planted in the new large terrace of the Garden upstream of the last level.

A new collection of "therapeutic" plants from all over the world is arriving.....

CHAIR HOLDER AND PROJECT LEADER



Prof. Rita Patrizia Aquino

Full Professor Pharmaceutical and
Cosmetic Technology

*Design and Development of
Medicines, Cosmetic and
Nutraceutic Products from plants*

*Department of Pharmacy
University of Salerno - Italy*



PRINCIPAL INVESTIGATOR



Prof. Alain Touwaide

Founder of the Institute for the Preservation of Medical Traditions, Washington, DC, USA

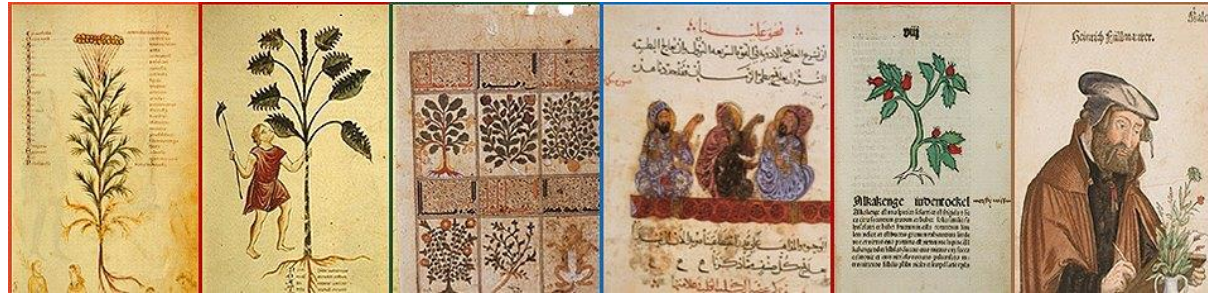
(Formerly Division of Humanities, University of California Los Angeles UCLA, USA)



History of Medicine,
History of Pharmacy,
Humanities,
Digital Humanities

FOUNDING MEMBERS AND MAIN PARTNERS

Institute for the Preservation of Medical Traditions, Washington, DC, USA



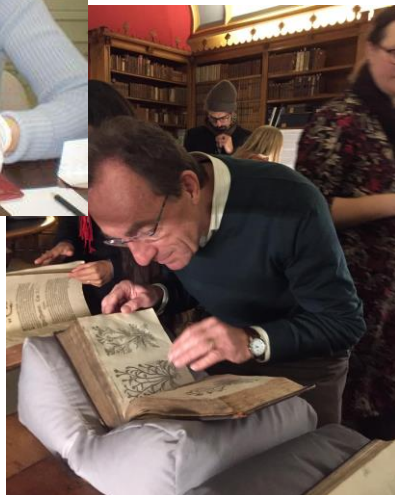
Traditional Mediterranean Medicine, Monastic Republic of Mount Athos, Greece



Unesco Chair Genua Anthropology of Health - Biosphere and Systems of Health Genua University, Italy



Dr. Emanuela Appetiti
Sociology and History



Dr. Giovanni Canora
Phytotherapy



Dr. Tania Re
Community and Health Antropology



Dr. Luciano Mauro
Director Minerva Garden, Salerno



SCIENTIFIC TEAM

Department of Pharmacy, DIFARMA, University of Salerno, Italy.

Prof. Giuseppe Celano
Arboriculture



Prof. Teresa Mencherini
Pharmacognosy



Prof. Paola Russo
Cosmetic Technology



Prof. Pasquale Del Gaudio
Pharmaceutical Technology



Prof. Luca Rastrelli
Food Chemistry



Prof. Valeria D'Amato
Matemathical Models and Methods

Department of Civil Engineering, DICIV, University of Salerno, Italy.



Prof. Enrica De Falco
Agronomy

Prof. Vincenzo Naddeo
Sanitary and Environmental
Engineering



Prof. Antonia Longobardi
Water Resources, Climatology,
Hydrology, Environmental
Engineering

ASSOCIATED INSTITUTIONS



HIGHER NATIONAL SCHOOL OF HYDRAULIC OF BLIDA, **ALGERIA**



ANAU ARMENIA NATIONAL AGRARIAN UNIVERSITY, **ARMENIA**



NATIONAL RESEARCH CENTER NRC, ENGINEERING AND ENVIRONMENTAL RESEARCH DIVISIONS, **EGYPT**



THE HUNTINGTON LIBRARY, ART COLLECTIONS, BOTANICAL GARDENS, SAN MARINO, CA, **USA**



NATIONAL HELLENIC RESEARCH FOUNDATION, ATHENS, **GREECE.**



UNIVERSIDAD POLITÉCNICA SALESIANA DEL **ECUADOR**



LA SAPIENZA UNIVERSITY, INSTITUTE FOR THE HISTORY OF MEDICINE, ROME, **ITALY**





UNIVERSITÈ DE SFAX INSITUT SUPÈRIEUR DE BIOTECHNOLOGIE DE SFAX , **TUNISIA**



FACULTÈ DES LETTRES ET DES SCIENCES HUMAINES DE MOHAMMEDIA UNIVERSITÈ HASSAN II DE CASABLANCA, **MOROCCO**



PARCO ARCHEOLOGICO DI PAESTUM, **ITALIA**

ASSOCIATED INSTITUTIONS



UNIVERSITA' DEGLI STUDI DI TORINO



United Nations Educational, Scientific and Cultural Organization



UNESCO Chair in Sustainable Development and Territory Management

Prof. Dario Padovan
UNESCO Chair
"Sustainable development and territorial management"
University of Turin

CÁTEDRA UNESCO
BIODIVERSIDADE E CONSERVAÇÃO PARA O DESENVOLVIMENTO SUSTENTÁVEL



Prof. Helena Freitas
UNESCO Chair
Biodiversidade e Conservacao Para O Desenvolvimento Sustenavel
University of Coimbra

UNESCO
CHAIR
PARTNERS

PLANTS FOR HEALTH IN THE MEDITERRANEAN TRADITION IS ORGANIZED AROUND 4 LONG-TERM SPECIFIC AIMS

1. INVENTORYING, RESCUING AND PRESERVING THE LIBRARY PATRIMONY

ancient manuscripts in Greek, Latin, and Arabic containing the knowledge of medicinal plants developed in the Mediterranean world and suffering unavoidable damage



2. INTERPRETING ANCIENT DATA through modern scientific keys

biology, molecular biology, pharmaceutical technology and chemistry, pharmacology, botany, pharmacognosy and natural medicines

3. MAKING THIS INTANGIBLE AND TANGIBLE PATRIMONY KNOWN AND ACCESSIBLE FOR RENEWED APPLICATIONS

contributing to the development of a new strategy, economically and environmentally sustainable, in modern pharmacotherapy, phytocosmesis, and nutrition



4. EDUCATION OF THE NEXT GENERATION

scholars and scientists studying contents and methods for the preservation of the medical and scientific Mediterranean heritage



MAIN RESEARCH PROJECTS

PLANTS IN THE ANCIENT MEDITERRANEAN WORLD

Texts and documentation, Systematic review, recording, organization and interpretation with all scientific relevant keys



ANCIENT DOCUMENTS, AROMATIC PLANTS AND RESINS

from Arabic Peninsula to Mediterranean basin



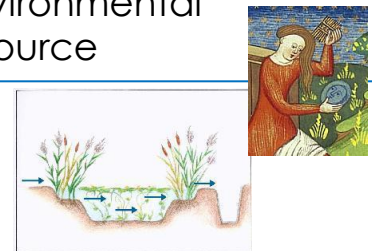
WOMEN'S HEALTH CARE

Tradition Herbal Remedies and Phyto-cosmesis



FOOD, MEDICINAL AND POISONOUS PLANTS AND PLANTS FOR PHYTODEPURATION

human and environmental resource



PLANTS & HEALTH

Role of Plants and Phytotherapy in Immune System

Focus on plants with effects on microbial and viral protection or boosting immune system



COVID-19?

Complementary treatments reducing symptoms due to the inflammatory status, slowing disease progression, preventing acute exacerbation; synergy with therapeutic protocols and with medicines



EDUCATION PROJECTS

The **Summer School**, organized by the chair and all partners, is mainly addressed to researchers, PhD students and students focusing on the different aspects of the studies on plants from the Mediterranean Tradition.

The course is opened to 50 participants and is held in English.

The **workplan** of the School comprises

- **main sessions**, focusing on challenges and new approaches to plants for health
- **follow-up sessions**, opportunity for exchange of experiences



THE UNESCO CHAIR

PLANTS FOR HEALTH IN THE MEDITERRANEAN TRADITION

We believe that documentation, safeguard, valorization, studies on the intangible and tangible **cultural heritage concerning traditional plant uses in the Mediterranean region**

could offer an extraordinary background transferred to the society aimed at

- implementing clinical phytotherapy in human healthcare
- the use of plant-derivatives in nutraceuticals, cosmetics, phyodepuration field

with the aim of improving the quality of human health, environment and health care systems' sustainability in all over the world.