

Nel rispetto  
delle norme **anti-Covid**  
sono disponibili solo **40** posti.

**Green Pass** obbligatorio

*In compliance  
with **anti-Covid** rules  
only **40** seats are available.*

**Green Pass** required

DIRETTA FACEBOOK

**Amici delle Tombe Dipinte di Tarquinia | Facebook**

FACEBOOK LIVE

**Amici delle Tombe Dipinte di Tarquinia | Facebook**

## INTERNATIONAL WORKSHOP OF A JOINT RESEARCH PROJECT

(Research of conservation environment and eco-friendly  
damage control of cultural heritage Korea and Italy)



## Biological Risk for Hypogea: Shared Data among Italy and Republic of Korea

Tarquinia 12<sup>nd</sup> November 2021

Biblioteca Comunale, V. Cardarelli, via Umberto I°, 34



## PROGRAM

### 10.00 Greetings from the authorities

10.20 **Caneva G.** (Univ. Roma Tre) *Biological risks for hypogeal tombs: a review from international literature and new contributions*

10.40 **Chung Y. J.** (Korea National University of Cultural Heritage) – *Microbial risk of Goguryeo Tomb Murals in North Korea and international cooperation plan for conservation.*

11.00 **Maras D.F. - Cecchini A.** (Soprintendenza Archeologia, Belle Arti e Paesaggio per la provincia di Viterbo e l'Etruria Meridionale - Associazione Amici delle tombe dipinte di Tarquinia) – *Protection and conservation of the Etruscan painted tombs of Tarquinia (UNESCO Heritage site): previous experience, current necessities and future expectations.*

11.20

### 11.35 Coffee break

11.35 **Lee H.S.** (Konkuk University) – *Manufacturing Technology and Material of Ancient Murals in Korea.*

11.55 **Yu Y. G.** (Konkuk University) – *Degradation According to the Material Properties of Ancient Murals in Korea*

12.15 **Lee H. J.** (Korea National University of Cultural Heritage) – *In vitro trials: detrimental potential, trials of compatibility between bacterial and fungal species, and antimicrobial activity of green biocides on Italian and Korean biodeteriogens.*

12.35 **Park J. H.** (National Research Institute of Cultural Heritage) – *A study on the microclimate characteristics and microbial diversity for preservation of Seokbinggo (ice storage made of stone).*

12.55 **Bartoli F.** (Roma Tre University) – *Comparative evaluation of Antimicrobial activity of green biocides on infected substrata reproducing original materials of Italian.*

13.15 **Casanova A.** (Roma Tre University) – *Interference tests of green biocides for application on mural painting of Italian and Korean hypogeal*

13.35

### 14.30 Lunch break

14.30 **Isola D.** (Roma Tre University) – *Roots damages in Etruscan tombs and biomolecular tools for their identification.*

14.50 **Rinaldi T.** (Univ. Sapienza) – *Microbial communities in the hypogeal Etruscan tombs in Tarquinia, protection and biodeterioration of frescoes*

15.10 **Bruno L.** (Univ. Tor Vergata) – *Biological colonization of Roman Catacombs and other confined stone monuments: characterization and control methods*

15.30 **Zucconi L.** (Tuscia University, Viterbo) – *Black fungi in Etruscan tombs of Tarquinia: new findings from different tombs*

15.50

### 16.30 General Discussion and Closing of the works

---

#### INTERNATIONAL WORKSHOP OF A JOINT RESEARCH

(Research of conservation environment and eco-friendly damage control of cultural heritage Korea and Italy)



**Biological Risk for Hypogea:  
Shared Data among Italy and Republic of Korea**

Tarquinia, 12<sup>nd</sup> November 2021