CHIC

Computational Horizons in Cancer

# … at a glance …

## A general introduction to the project

# Facts and figures

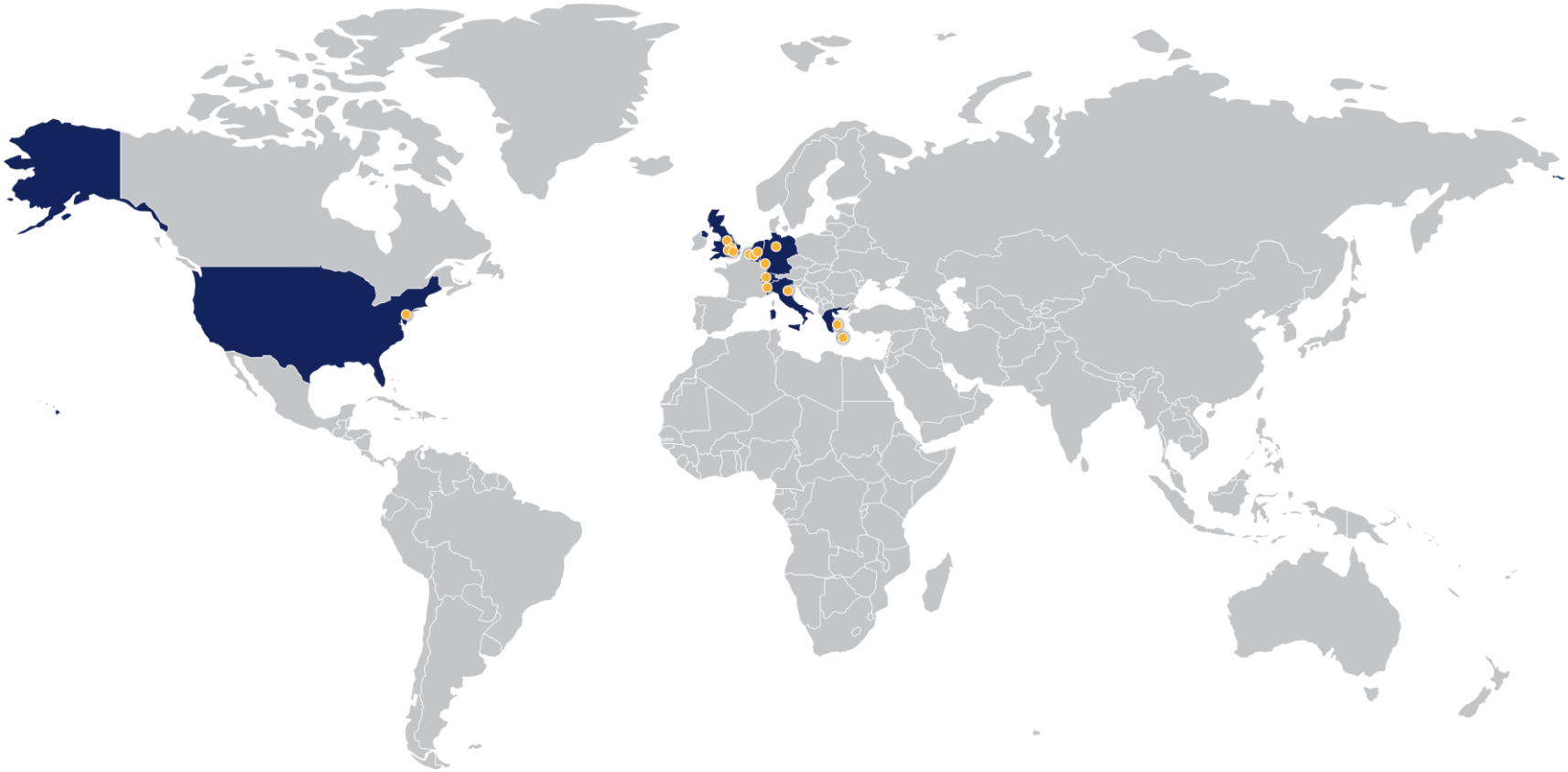
| | |
|---|---|
| **Acronym:** | CHIC |
| **Full title:** | Computational Horizons in Cancer: Developing Meta- and Hyper-Multiscale Models and Repositories for In Silico Oncology |
| **Duration:** | 48 months (start date: April 2013) |
| **Project funding:** | 10,582,000.00 € |
| **Programme:** | 7th Framework Programme of the European Commission – ICT – Large-scale Integrating Project (IP) |
| **Coordinator:** | Research Professor Georgios Stamatakos, Institute of Communication and Computer Systems (ICCS), National Technical University of Athens (NTUA), In Silico Oncology Group |
| **Website:** | www.chic-vph.eu |

CHIC
Computational Horizons in Cancer

# The CHIC Consortium

CHIC
Computational Horizons in Cancer

# The CHIC Consortium



CHIC
Computational Horizons in Cancer

# The CHIC Objectives

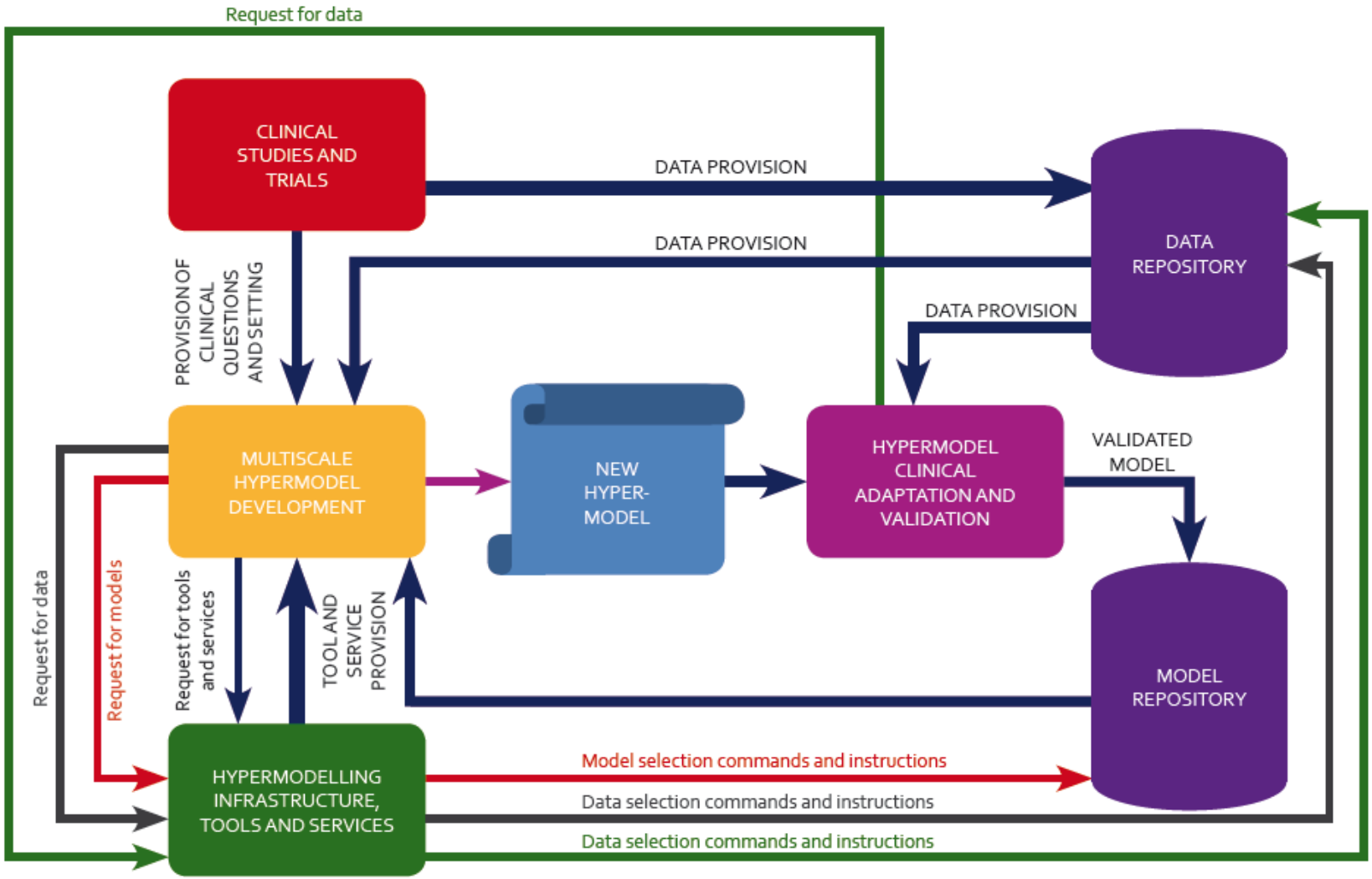
- Development of **clinical trial driven tools, services and secure infrastructure** for the creation of multiscale cancer hyper-models (integrative models).
- The secure **hypermodelling infrastructure** consists primarily of a *hypermodelling editor* and a *hypermodelling execution environment*.
- Development of an infrastructure for **semantic metadata management** along with **tools and services for ontology based annotations**.
- **Standardization** of cancer model and data annotation allowing multiscale hypermodelling.
- Development of **hypermodel repository**, a **hypermodel-driven clinical data repository**, a **distributed metadata repository** and an ***in silico* trial repository** for the storage of executed simulation scenarios, an **image processing toolkit**, a **visualization toolkit** and **cloud and virtualization services**.
- Three concrete **clinical trials/studies** (nephroblastoma, glioblastoma and non-small cell lung cancer)

CHIC
Computational Horizons in Cancer

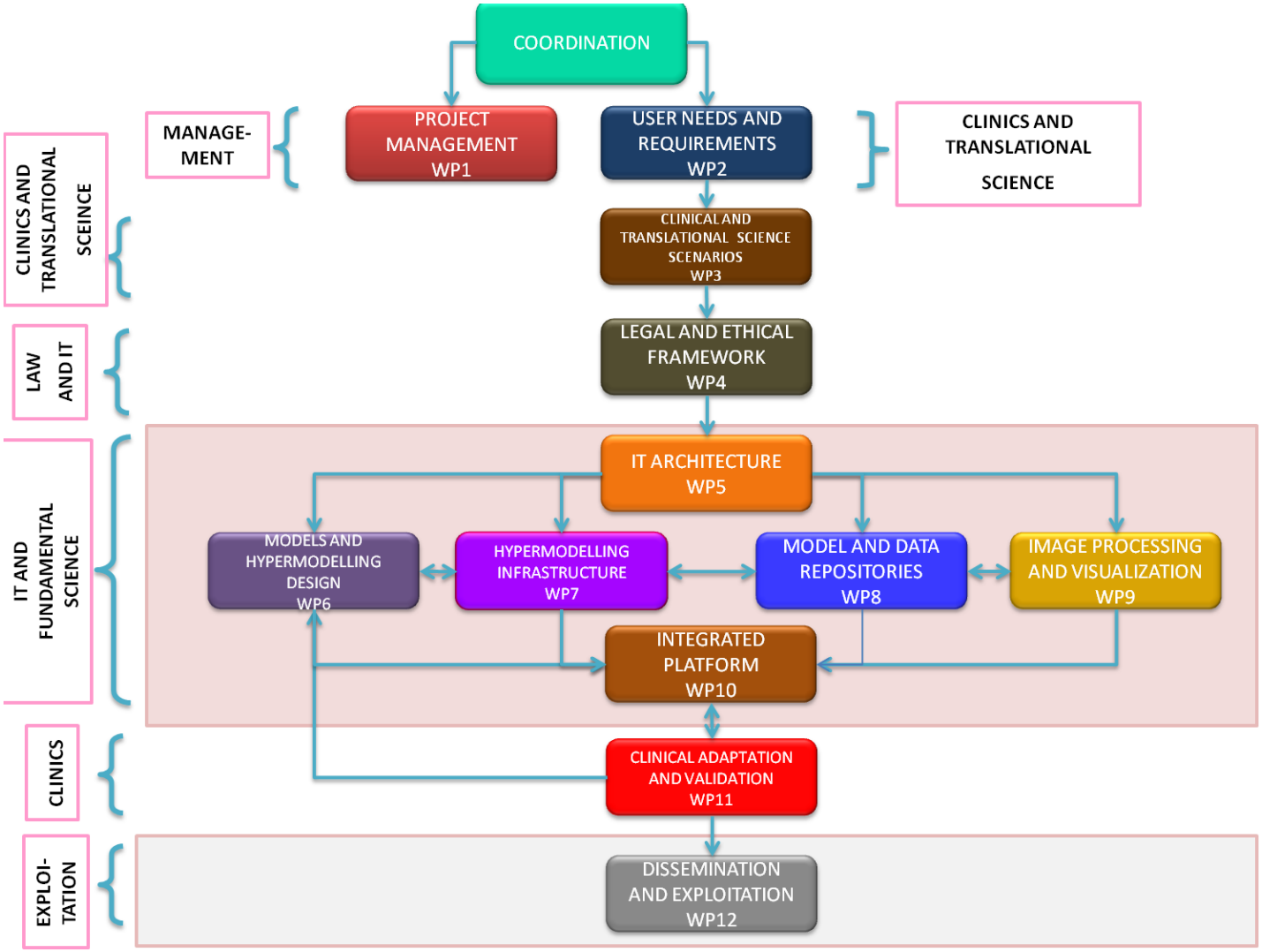
# The CHIC Objectives

- Development of a number of **integrative multiscale cancer models (hypermodels)** and **hypermodel oncosimulators** and their clinical adaptation and partly validation.
- **An integrative platform** dictated by the IT architecture of the project will provide access to all hypermodelling tools and services to be developed.
- **Legal and ethical aspects** (legal and the IT aspects of data anonymization and pseudonymization, patient's consent)
- **Intellectual rights issues** arising from the amalgamation of component models potentially developed by different modellers in order to construct integrative models.
- Dissemination and exploitation (stakeholders: clinicians, fundamental science researchers, IT specialists and engineers, industry and patients).

# The CHIC Structure



# The CHIC Work Packages



# The VPH community

# Contact

## Scientific contact

**Research Professor Georgios Stamatakos**
Institute of Communication and Computer Systems (ICCS
National Technical University of Athens (NTUA)
In-Silico Oncology Group

✉ gestam@central.ntua.gr

## Administrative contact

**Julia Petry**
European Research and Project Office GmbH
Saarbrücken, Germany

✉ j.petry@eurice.eu

*This project has received funding from the European Union Seventh Framework Programme for research, technological development and demonstration under grant agreement n° 600841.*