KISTEUROPE The gateway to Korea-EV RED collaboration

KIST Europe is the only governmental R&D institute of Korea in Europe founded in 1996 in Saarbrücken, Germany. Since its inception, KIST Europe has exhibited a sustainable growth to establish a bridgehead for Korean R&D institutes and industries seeking collaborations and advances into the Europe.

VISION & CORE STRATEGIES

Serve as an Open Research Platform for Korea-EU R&D Collaboration and Industry Support



Capacity

- Concentration on core research themes
- Expansion of research infrastructure to the strengthen core research capacities



Open R&D

- Launching a global test-bed platform to stimulate **R&D** cooperation
- Expansion of cooperation with EU



Industry Support

Support for improved sustainability and industrial competitiven

LOCATION & INFRASTRUSTURE





KIST Europe Main Building



Korea-EU Cooperation Building



Guest House (Coming Soon)

HISTORY

1995.03

The official visit of the 14th Korean President KIM, Youngsam to Germany Both governments agreed on the establishment of a Korean research institute organization within FhG.

2010.04

2nd building completion (providing 2,069 m² with 3 stories)

Facilities: 2 complexes for offices, laboratories

Roles: Providing facilities for local industries, academic institutions and

research organisations

1996.02

Foundation of KIST Europe Roles: Researches on applied environmental & strategic technologies and channels for national cooperations

Classification of organization : Limited liability company with 1 sole member (President of KIST)

1st building completion (providing 5,275 m² with 4 stories)

Facilities : Labotories, Offices, Meeting Rooms, Lecture and Conference Rooms

2000.04 2006.04

10th Anniversary

2016.05

20th Anniversary

2017.12

Inauguration of 8th Director (Dr. Junkyung Kim)



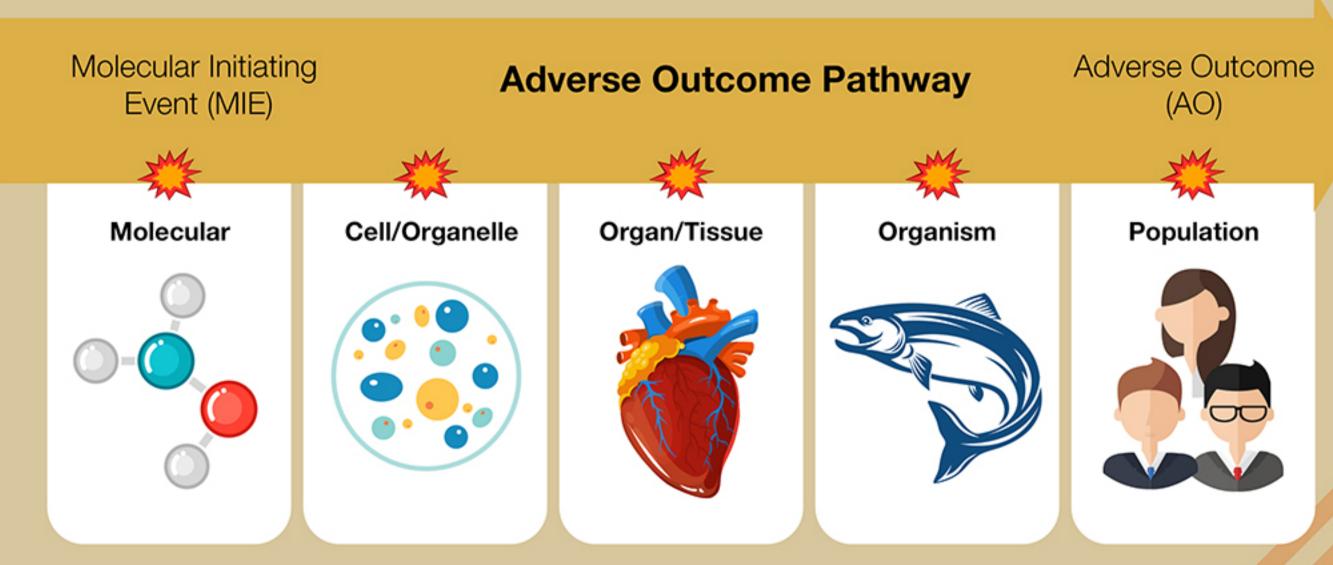


SIGNATURE RESEARCH

THEME Development of Steroidogenesis AOP framework

Definition of AOP

Relationship of adverse outcomes from the molecular to population level



★ Key Event(KE)

RESEARCHAREAS

ENVIRONMENTAL SAFETY

- Adverse outcome pathway platform for non-animal or animal alternative test in chemical safety assessment
- Ecotoxicological model using zebrafish embryo/larvae and other environmental biota
- + Quantitative mass spectrometry based metabolomics in toxicological assessment
- + 3D tissue mimics and organoids for in vitro toxicity screening
- + Mathematical biology and in silico computational ecotoxicology
- + Environmental Risk assessment on EDCs

BIOSENSOR

- + EDC screen sensors simulating enzymes and receptors
- Probe materials with high selectivity to molecules/heavy metals for non-animal or animal alternative test
- + Ultra high efficient electrophoretic analysis and isotachophoretic sample concentration
- + Magnetotactic bacteria for environmental safety assessment
- + Flow batteries and fuel cells with ionic liquid for improvement of device safety

SMART CONVERGENCE

- + Development of IoT-based monitoring system
- + Machine learning algorithm for smart services
- + Conceptual architecture design of future mobile and web applications
- + Analysis and consulting for Industry 4.0 (Smart Factory/Healthcare/City etc)

PERSONNEL STATUS

