

# NephroCage

A bilateral Canadian - German Cooperation 1st NephroCAGE symposium, 2021-05-20



























# Unit KI-3 "Development of Digital Technologies"

- Is running national funding programs in a pre-competitive phase in various technology fields and application areas, as especially
  - Data management and data economy / Artificial Intelligence
  - Service platforms for business ecosystems / "Smart Service Worlds"
  - Industry 4.0 / IoT / Robotics
  - Quantum Software Development
  - Private 5G networks / open RAN
  - Secure Digital Identities
- Consortia of research organisations with multiple industry players
- Complementary bi-national projects with strategic partners



# Cooperation Germany Canada

Research cooperation between Canada and Germany has a long good tradition – based on a framework agreement from 1971 of both Governments

- Most projects are funded by BMBF (german side):
  e.g. 2+2 projects, EUREKA, ERA-nets
- BMWi: ZIM (for smaller SME based projects)





# Why we fund bilateral projects with Canada

### BMWi is funding international cooperation projects

- To foster bilateral exchange and research activities in relevant innovation areas
- To transfer good results from national developments to international application scenarios and markets
- To profit from the specific competences of research organisations and businesses in the respective partner country







05/2019: Visit of a BMWi / BMBF delegation (political level, business visits)





09/2019: German business and research delegation; "Matchmaking Tour" to several High class Al organisations / businesses in Toronto, Montreal, Ottawa, Waterloo

# Competition and selection of projects

- As a follow-up, BMWi and the Canadian Embassy in Berlin decided to run a competition for funding among the participants of the "matchmaking tour".
- Four out of seven drafts were rated as particularly promising in terms of content quality and funding feasibility



### Four bilateral projects

- AIR\_PTE: aims to develop artificial intelligence (AI) methods to predict individual health risks and improve the assessment of treatment effects based on health insurance data in Canada and Germany.
- **NephroCage:** develops a federated learning solution for secure application of AI algorithms to multinational health data (chronic kidney disease).
- FLAIROP: aims to develop an international federated learning system in the field of robot-based picking and placement of unknown objects.
- ARIBIC: aims to develop AI methods for precise navigation and exact route planning of autonomous mobile robots in warehouse environments



# Beyond money: Awareness raising and networking

- 50 years of German Canadian cooperation agreement in research –
  BMWi and the Canadian Embassy Berlin have agreed on specific activities involving the four bilateral projects (today is one of these)
- An accompanying research team will be assigned to support NephroCage in networking and public relations on a national and international level.
- Multiplier support (e.g. Associations, chambers of commerce, ministries, embassies) e.g. for a targeting approach of stakeholders



# All the best for your project !!

### How to get in touch:

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#### **Further Information:**

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