Etablierung eines Referenzlabors für *Helicobacter*-assozierte Magenkarzinome

APRA kick off meeting
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Gastric Cancer (GC): leading cause of cancer-related deaths in China, but rare in Germany (difficult to conduct clinical trials and obtain samples). GC mostly results from chronic infection with *Helicobacter pylori*.

Long-lasting collaboration between Technische Universität München (TUM) and Peking University School of Oncology (PUSO) on *H. pylori* induced GC.

Large-Linqu-Trial (200,000 participants) to study prevention of GC by *H. pylori* therapy.

Regular bilateral visits of both partners (supported by BMBF/IB CHN 11-021; 2011-2013).

Implementation into the Sino-German Life Science Platform.
Establishment of a "Joint Key Laboratory (JKL) for Helicobacter pylori and Gastric Cancer Research"

- State of the art laboratory and training center to advance knowledge and patient care in the field
  - Basis for conductance and coordination of clinical trials
  - Reference laboratory for clinical and molecular analyses
  - International reference point for H. pylori and GC research
  - Key center for scientific and technologic exchange
  - State of the art training center for researchers in gastrointestinal diseases
  - International visibility through meetings, publications, website
Gastric Cancer (GC): is the third leading cause of cancer-related deaths worldwide, 950,000 new cases each year, half of these in China.

GC mostly results from chronic infection with *Helicobacter pylori* (but only 1-2% of infected individuals develop GC).

GC could be prevented by treatment of H. pylori infection.

Need/Challenge:
- Identification of patients at high risk for GC (Biomarkers!; patient stratification)
- Better therapies (antibiotic resistance, no vaccine available)
- Early diagnosis (endoscopic screening and surveillance programs)

Implementation of Research Presence to improve scientific knowledge and patient care.
Engagement des ausländischen Partners

- provides infrastructure for implementation of Research Presence
- conducts clinical trials
- provides samples from clinical trials
- performs scientific studies in collaboration with TUM partners
- enables training of scientists within Reference Laboratory
Results

- Establishment of an internationally visible Research Presence of TUM at PUSO
- Presentation of Research Presence activities on meetings and conferences
- Conductance of clinical trial of endoscopic GC prevention
- Publication in high-impact, peer-reviewed international journals
- Identification of Biomarkers for patient stratification
- Implementation of website for research presence
- Training of clinician scientists and researchers

Obstacles

- Political/legal issues hindering implementation of research presence / collaboration
- Lack of funding for scientific projects and trials
- Regulatory hurdles during approval of studies
- difficulties during transfer of technologies