

Preliminary Programme of 2024 ICGEB Workshop (June 23-26)

Advances in the development and evaluation of diagnostics for precision medicine
(<https://www.icgeb.org/activities/meeting-and-courses/#sponsored2024>)

Keynotes:

- (1) From precision oncology to personalized cancer care
- (2) Novel technologies for cancer diagnostics
- (3) Diagnosing infectious diseases and combating antibiotic resistance
- (4) International regulatory landscape for diagnostics

Section I: Emerging technologies for diagnostics

- (1) Crispr-based assays for the fast identification of pathogens
- (2) Nanoenzyme-based novel diagnostics
- (3) Ribozymes and their applications in diagnosis
- (4) AI for molecular and cellular diagnostics
- (5) Lab-on-a-Chip and microfluidics
- (6) Development of biosensor-based diagnostics

Section II: Progress in developing novel diagnostic methods

- (1) Developing and deploying biomarkers into novel diagnostics
- (2) Liquid biopsy: circulating biomarkers: cfDNA, RNA, EVs
- (3) Urine biomarkers for early cancer surveillance and disease management
- (4) Discovery of DNA methylation biomarker for cancer and complex diseases
- (5) Electrochemiluminescence technology in the detection of pathogens
- (6) Next-generation tools and technology at the point-of-care

Section III: Application of novel diagnostics

- (1) Clinical applications of liquid chromatography-tandem mass spectrometry
- (2) Precision diagnosis of *Helicobacter pylori* infection and associated diseases
- (3) Fluorescent microsphere array for multiplex detection of antigens
- (4) Diagnosing allergies
- (5) Point-of-Care Tests for infectious diseases
- (6) Microneedle biosensors for Point-of-Care diagnostics

Section IV: Regulation of diagnostics and international cooperation

- (1) ICGEB and international cooperation of biopharma products and IVD
- (2) The landscape of IVD production in China
- (3) Registration regulations of *in vitro* diagnostics in China
- (4) Registration and regulations of IVD production in Brazil
- (5) IVD production and registration in Zimbabwe and Southern Africa
- (6) A Chinese company's experience of international cooperation on IVD