

## WORKSHOP

### Metrology Needs for Next Generation Sequencing ?

Advances in genomics have many benefits for precision medicine. Emerging technologies such as Next Generation Sequencing (NGS) are improving patient health, enabling earlier and more accurate diagnosis, helping to target therapies and reducing the overall cost of care (precision medicine). NGS offers ultra-high throughput, scalability and speed. However, the quality, comparability and standardization of genomic profiling varies significantly, and the development of reference measurement systems and standards is still in their infancy stage. The workshop aims to bring together experts and stakeholders to identify the metrological-related questions and approaches that may contribute to the standardization and harmonization of NGS results. Standardization in NGS provides a first basis for further work on the implementation of NGS in important areas such as clinical diagnostics, where reliable results and rapid processing are essential. The workshop will also support the quality assurance, standardization, and reproducibility of sequence data.

We are delighted to have speakers from National Metrology Institutes (NIST, NML(LGC), METAS), from Ben Gurion University of the Negev, Helios University Hospital Wuppertal, Berlin Institute of Health, Charité, NHS, Illumina and Bio-Rad.

#### Key metrological questions related to NGS:

1. How can metrology contribute to the quality assurance, comparability and reproducibility of NGS results?
2. Which biochemical and/or biomedical properties should be measured quantitatively, and to what level of accuracy?
3. How can metrology contribute to the development of clear guidelines and instructions for NGS workflows needed to verify the quality of data and procedures?
4. How can metrology be integrated into NGS regulatory processes?
5. How can metrology overcome the challenges of sample commutability with different metrics?

**Date:** 28.September.2023

**Venue:** PTB Berlin, Charlottenburg, Hermann von Helmholtz Lecture Hall

**Registration:** <https://eveeno.com/ngs2023>



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## Agenda is coming soon ...