



Workshop on Quality assurance and reproducibility of results

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Brief history and overview

- NEURON takes a specific responsibility on ethics in preclinical and clinical research
 - Experimental design, data collection, statistical analysis and data reporting have a major impact on the inability to reproduce published results: **lack of transparency due to incomplete documentation** of methodological details has been suggested to undermine reproducibility.

NEURON Activities – Partner in EBRA

European Brain Research Area (EBRA)



Project Partners: European Brain Council (EBC, Coordinator), Human Brain Project, NEURON, JPND; funded by EC

Aims

- Analyse existing research portfolio and foster clustering of, and exchange between researchers
- Create European and global brain research agenda
- Accelerate excellence, innovation and translation by Open Science

Workshop „Quality assurance and reproducibility of results“



Brief history and overview

- NEURON first tackled the issue on 'Increasing value and decreasing waste in experimental biomedical research' by an information workshop for funders on '**Quality assurance, and reproducibility of results**' in January 2017
 - **New proposal template** for study design, ethics and statistics in preclinical research was introduced in JTC2017 "Synaptic Dysfunction in Disorders of the Central Nervous System"
 - Positive feedback by reviewers of JTC 2017:
new requirements for preclinical studies were very useful,
"proposals that addressed the items properly appeared more 'mature' and it shows that the applicants thought the issues through".
- NEURON funders workshop 'Open Science – open access in research' in January 2018.
 - New procedures in regard to **Data Management Plan**

NEURON and EBRA workshop



In conjunction with the European Brain Research Area (EBRA) EU funded project NEURON organized today's workshop for PIs and ECRs.

Aim 1: Research methodology in the **preclinical area** aims to enhance awareness and to help scientists further developing their experimental skills. Prime focus is on experimental design and data analysis to generate high quality, robust, reproducible and relevant data (keynote and two break-out sessions) .

Aim 2: Increase impact, integrity, credibility and reproducibility of research through **open science** (keynote and one break-out session).

Aim 3: TBI specific recommendations for improved **clinical trial** design and standardization of data collection (keynote on ECRIN and one break-out session).



Workshop “Quality assurance and reproducibility of results”

Key note lectures:

Reducing bias and improving science by transforming biomedical research

Ulrich Dirnagl (Germany) – Charité Berlin, Germany

Increasing impact, reproducibility, and credibility through open science

David Mellor, Center of Open Science, Charlottesville, VA, USA

ECRIN - Facilitating European Clinical Research

Christian Ohmann, former Head of KKS Düsseldorf, University clinics Heinrich-Heine-University and Consultant for ECRIN, Düsseldorf, Germany



Dissemination

To make the sessions available to a broader audience it is planned to make the presentations accessible via the NEURON and EBRA website.

We are indeed honored that seven internationally renowned experts accepted our invitation to address the aims.