International Agreement to Improve Quality in Laboratory Medicine Nomenclature, Properties and Units (NPU) Terminology

The undernoted three organisations are pleased to announce the signing on 7 January 2014 of a Memorandum of Understanding (MoU) and Agreement regarding NPU terminology:

- International Federation of Clinical Chemistry & Laboratory Medicine (IFCC)
- International Union of Pure and Applied Chemistry (IUPAC)
- Danish National e-Health Authority (DeHA)

In laboratory medicine one of the most basic, but important, challenges is to ensure that we have a common understanding of what is being measured in what biological system and of how the results will be expressed and in what units. To address this issue the three partner organisations have developed, tested and refined an intuitive and comprehensive NPU terminology. The MoU and Agreement formalises the achievements to date and provides a template for greater international promotion of NPU terminology as an aid to harmonised practice and better patient safety.

At the centre of the IUPAC-IFCC project are the NPU codes and definitions which have been in widespread use in electronic health communication for more than a decade. The NPU system involves the application of the syntax, semantic rules and format of NPU terminology for coded kinds-of property across clinical laboratory sciences. The database has been built over five decades within the IUPAC framework of terminology, and with IUPAC's support of NPU terminology thus carries the endorsement of the chemical community.

In welcoming the MoU and Agreement IFCC President Graham Beastall said: “Laboratory Medicine results influence a high percentage of clinical decisions. In an increasingly global health community it is vital to have harmonised terminology for these results. We encourage the widespread adoption and application of NPU terminology and use of the NPU database. We will work with other international organisations to ensure that NPU terminology is aligned with international healthcare terminology.”

A user’s guide to NPU terminology and the NPU database has been published in both chemistry and clinical chemistry literature. This guide provides a clear explanation of the system and of its operation. Access to the NPU terminology in English is available from the Danish Release Centre under the National e-Health Authority (www.labterm.dk) and also from the IFCC website (www.ifcc.org) and from the IUPAC website (http://www.iupac.org/body/702).

Persons wishing to know more about the NPU terminology should contact:

- Ulla Magdal Petersen, Scientific lead for the NPU database at UMP@ssi.dk
- Robert Flatman, Chair of the joint Committee on NPU robert_flatman@snp.com.au

References:

Petersen UM, Dybkaer, R, Olesen H. Properties and units in the clinical laboratory sciences. Part XXIII. The NPU terminology, principles, and implementation: A user’s guide. Published

simultaneously in *Pure Appl Chem* 2012; **84**: 137-165; http://dx.doi.org/10.1351/PAC-REP-11-05-03 and *Clin Chem Lab Med* 2012; **50**: 35-50.

About IUPAC
The International Union of Pure and Applied Chemistry, IUPAC, was formed in 1919 by chemists from industry and academia. For more than nine decades, the Union has succeeded in fostering worldwide communications in the chemical sciences and in uniting academic, industrial and public sector chemistry in a common language. IUPAC is recognized as the world authority on chemical nomenclature, terminology, standardized methods for measurement, atomic weights and many other critically evaluated data. IUPAC has also been pro-active in establishing a wide range of conferences and projects designed to promote and stimulate modern developments in chemistry, and also to assist in aspects of chemical education and the public understanding of chemistry.http://www.iupac.org/

About IFCC
The International Federation of Clinical Chemistry and Laboratory Medicine (IFCC) is a worldwide, non-political organization for clinical chemistry and laboratory medicine. As such it has a range of roles that include (1) global standard setting in collaboration with other international organizations, (2) supporting its members through scientific and educational endeavour, and (3) providing a series of congresses, conferences and focused meetings in order for laboratory medicine specialists to meet and present original findings and best practice. http://www.ifcc.org/

About DeHA
The Danish National eHealth Authority is an agency under the Ministry of Health responsible for setting national standards for eHealth with powers stipulated in legislation. The DeHA set the framework for digitalisation of the healthcare system by stipulating the overall strategy, setting goals and mileposts, and following up on progress in order to ensure that benefits are fully realised. The Danish version of the NPU terminology has been translated and published for national use since 2001. Today The National eHealth Authority serves as the National NPU Release Center for Denmark and as the daily manager and repository for the International version of NPU Terminology and the NPU coding system is very widely deployed.

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