# Läkemedelsakademin

Swedish Academy of Pharmaceutical Sciences

# **Therapeutic proteins – focus on analysis and formulations** February 5-6, 2019, Stockholm, Sweden

# Program

#### **Tuesday, February 5**

- 09.45 Registration with coffee/tea and sandwich
- 10.20 Introduction

# Session 1: Novel techniques and methods for therapeutic proteins

- 10.30 Advances in the analysis of protein biopharmaceuticals through application of contemporary 2D-LC coupled to UV- and Q-TOFMS. Sandra Koen, Research Institute for Chromatography, Kortrijk, Belgium
- 11.15 **New perspectives on formulation analysis and its implications** Sebastian Hansson, Solve, Sweden
- 11.45Stability testing of pharmaceutical proteins. Overview of stability indicating<br/>methods and regulatory requirements.<br/>Christine Lagerquist Hägglund, Sobi, Sweden
- 12.15 **Novel excipients for peptides and proteins** Stefan Ulvenlund, Enza Biotech, Sweden
- 12.45 Lunch, poster session, exhibition

#### **Session 2: Purity determinations**

- 14.00Glycoprotein and Antibody analysis: from CE-MS to CE-CE-MS<br/>Christian Neusüss, University of Aalen, Germany
- 14.30 **Glycoanalysis of therapeutic proteins Challenges and possibilities using current analytical approaches** Margareta Ramström, Medical Product Agency, Sweden
- 15.00 **Intermission, poster session, exhibition and coffee/tea**

# **Session 3: Registration aspects**

15.30 **Views on registration of therapeutic proteins by the authorities** Mats Welin, Medical Product Agency, Sweden

# **Session 4: Biophysical characterization**

- 16.00 **Formulation of biological drugs; effect of protein and excipient interactions on product stability** Helen Sjögren, Ferring, Denmark
- 16.30 **Deeper numerical characterization of cell-based biosensor data** Torgny Fornstedt, Karlstad University, Sweden
- 17.00-17.45 Poster presentations

Application of triple quadrupole MS for drug-to-antibody ratio and molecular weight determination of antibody-drug conjugates Malin Källsten, Uppsala University, Sweden

**Distribution and physical structure of the components in a freeze-dried protein formulation** Maria Badal Tejedor, RISE Research Institutes of Sweden

2D-NMR characterization for the higher order structure assessment of biologics and biosimilars

Björn Walse, SARomics Biostructures

- 17.45-18.15 Exhibition / Poster session
- 18.15 Dinner

#### Wednesday, February 6

09.15 **Characterization of therapeutic proteins – analysis of protein conjugates and MABs using light scattering coupled to column chromatography and field flow fractionation.** Arthur Porfetye, Wyatt Technologies, Germany

#### Session 6: Stability and aggregation studies

- 09.45Profiling and optimization of protein stability using calorimetric approaches.<br/>Natalia Markova, Microcal, Malvern Instruments Ltd, Sweden
- 10.15Avoiding problems with protein aggregation in formulation studiesJonas Fransson, Sobi, Sweden

10.45 Intermission, Posters and coffee/tea
11.15 Presentation of a new center for protein formulations: NextBioForm Anna Millqvist Fureby, Research Institutes of Sweden, NextBioForm
11.30 Novel analytical approaches for mechanistic understanding of protein aggregation Ulla Elofsson, Research Institutes of Sweden
12.00 Novel methods to study effects of moisture and formulation on the stability of Iyophilized proteins Anna Millqvist Fureby, Research Institutes of Sweden, NextBioForm
12.30 Concluding remarks

#### 12.45-13.45 Lunch

#### Exhibitors

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