Helene Faustrup Kildegaard - DTU Orbit (11/10/2019)

Helene Faustrup Kildegaard

Research outputs:

**BiP Inducer X: An ER Stress Inhibitor for Enhancing Recombinant Antibody Production in CHO Cell Culture**
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

**CRISPR/Cas9 as a Genome Editing Tool for Targeted Gene Integration in CHO Cells**
Research output: Chapter in Book/Report/Conference proceeding › Book chapter – Annual report year: 2019 › Research › peer-review

**Genetic engineering approaches to improve post-translational modification of biopharmaceuticals in different production platforms**
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

**Glyco-engineered CHO cell lines producing alpha-1-antitrypsin and C1 esterase inhibitor with fully humanized N-glycosylation profiles**
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

**Mitigating Clonal Variation in Recombinant Mammalian Cell Lines**
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

**Reduced apoptosis in Chinese hamster ovary cells via optimized CRISPR interference**
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

**Reprogramming AA catabolism in CHO cells with CRISPR/Cas9 genome editing improves cell growth and reduces byproduct secretion**
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

**Systematic Evaluation of Site-Specific Recombinant Gene Expression for Programmable Mammalian Cell Engineering**
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

**An Online Compendium of CHO RNA-Seq Data Allows Identification of CHO Cell Line-specific Transcriptomic Signatures**
Research output: Contribution to journal › Journal article – Annual report year: 2018 › Research › peer-review

**Baicalein reduces oxidative stress in CHO cell cultures and improves recombinant antibody productivity**
CRISPR/Cas9-multiplexed editing of Chinese hamster ovary B4Gal-T1, 2, 3 and 4 Tailors N-Glycan Profiles of Therapeutics and Secreted Host Cell Proteins

Enhanced genome editing tools for multi-gene deletion knock-out approaches using paired CRISPR sgRNAs in CHO cells

Impact of CHO Metabolism on Cell Growth and Protein Production: An Overview of Toxic and Inhibiting Metabolites and Nutrients

Method for reducing ammonium and lactate production in cho cells

Minimizing Clonal Variation during Mammalian Cell Line Engineering for Improved Systems Biology Data Generation

Modular 5′-UTR hexamers for context-independent tuning of protein expression in eukaryotes

Revealing key determinants of clonal variation in transgene expression in recombinant CHO cells using targeted genome editing

Using titer and titer normalized to confluence are complementary strategies for obtaining Chinese hamster ovary cell lines with high volumetric productivity of etanercept

Application of CRISPR/Cas9 Genome Editing to Improve Recombinant Protein Production in CHO Cells

Cell Factory Engineering
CHO glyco-engineering using CRISPR/Cas9 multiplexing for protein production with homogeneous N-glycan profiles
Research output: Contribution to conference › Poster – Annual report year: 2017 › Research › peer-review

Developing a CRISPR/Cas9 screening platform for Chinese hamster ovary cells
Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

Engineer medium and feed for modulating N-glycosylation of recombinant protein production in CHO cell culture
Research output: Chapter in Book/Report/Conference proceeding › Book chapter – Annual report year: 2016 › Research › peer-review

Humanizing recombinant glycoproteins from Chinese hamster ovary cells
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2017 › Research › peer-review

Improving the secretory capacity of Chinese hamster ovary cells by ectopic expression of effector genes: Lessons learned and future directions
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review

Network reconstruction of the mouse secretory pathway applied on CHO cell transcriptome data
Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

Reprogramming amino acid catabolism in CHO cells with CRISPR-Cas9 genome editing improves cell growth and reduces by-product secretion
Research output: Contribution to conference › Poster – Annual report year: 2017 › Research › peer-review

Ribosome profiling-guided depletion of an mRNA increases cell growth rate and protein secretion
Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

Accelerated Homology-Directed Targeted Integration of Transgenes in Chinese Hamster Ovary Cells Via CRISPR/Cas9 and Fluorescent Enrichment
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review

A Consensus Genome-scale Reconstruction of Chinese Hamster Ovary Cell Metabolism
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review
CRISPR/Cas9-mediated genome engineering of CHO cell factories: application and perspectives
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

Glycoengineering of Chinese hamster ovary cells for enhanced erythropoietin N-glycan branching and sialylation
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

Multi-omic profiling of EPO-producing Chinese hamster ovary cell panel reveals metabolic adaptation to heterologous protein production
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

Multi-omic profiling of EPO-producing CHO cell panel reveals metabolic adaptation to heterologous protein production
Research output: Contribution to conference › Poster – Annual report year: 2015 › Research › peer-review

One-step generation of triple knockout CHO cell lines using CRISPR/Cas9 and fluorescent enrichment
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

Site-specific integration in CHO cells mediated by CRISPR/Cas9 and homology-directed DNA repair pathway
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

Versatile microscale screening platform for improving recombinant protein productivity in Chinese hamster ovary cells
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

Accelerating Genome Editing in CHO Cells Using CRISPR Cas9 and CRISPy, a Web-Based Target Finding Tool
Research output: Contribution to journal › Journal article – Annual report year: 2014 › Research › peer-review

A Versatile System for USER Cloning-Based Assembly of Expression Vectors for Mammalian Cell Engineering
Research output: Contribution to journal › Journal article – Annual report year: 2014 › Research › peer-review

Engineering amino acid supply pathways in Chinese hamster ovary cells
Research output: Contribution to conference › Poster – Annual report year: 2014 › Research › peer-review

Protein network reconstruction of CHO cell secretory pathway
Research output: Contribution to conference › Poster – Annual report year: 2014 › Research › peer-review
Toward genome-scale models of the Chinese hamster ovary cells: incentives, status and perspectives
Research output: Contribution to journal › Journal article – Annual report year: 2014 › Research › peer-review

A validated system for ligation-free USER™-based assembly of expression vectors for mammalian cell engineering
Research output: Contribution to conference › Poster – Annual report year: 2013 › Research › peer-review

RNA-seq based expression analysis of the CHO cell protein secretion pathway
Research output: Contribution to conference › Poster – Annual report year: 2013 › Research › peer-review

The emerging CHO systems biology era: harnessing the ‘omics revolution for biotechnology
Research output: Contribution to journal › Journal article – Annual report year: 2013 › Research › peer-review

A versatile expression vector system for mammalian cell factories
Research output: Contribution to conference › Poster – Annual report year: 2011 › Research › peer-review

Exploring the Role of Ubiquitylation in the Mammalian DNA Damage Response

USP7 counteracts SCFβTrCP-but not APCCdhl-mediated proteolysis of Claspin
Research output: Contribution to journal › Journal article – Annual report year: 2009 › Research › peer-review

RNF8 ubiquitylates histones at DNA double-strand breaks and promotes assembly of repair proteins
Research output: Contribution to journal › Journal article – Annual report year: 2007 › Research › peer-review

Projects:
Regulering af kromatins omstrukturering efter DNA beskadigelse og dennes effekt på DNA reparation og celle cyklus checkpoint
Kildegaard, H. F., Mortensen, U. H., Lukas, J., Workman, C., Medema, R. & Sørensen, C. S.
Ansat eksternt
01/05/2006 → 01/04/2009
Project: PhD

Development of genome editing tools and identification of targets for CHO cell factory engineering
Marie Curie (EU-stipendium)
01/09/2015 → 10/12/2018
Project: PhD

Engineering of a by-product-reduced CHO cell line (CleanCHO)
Domingues Pereira, S. I., Kildegaard, H. F., Jensen, M. K., Åkesson, M. F., Chotteau, V. & Andersen, M. R.
Marie Curie (EU-stipendium)
15/09/2015 → 09/11/2018
Design of Optimal CHO Protein N-glycosylation Profiles
Marie Curie (EU-stipendium)
01/09/2015 → 14/01/2019
Project: PhD

Studies in CHO genomics and transportation networks
Marie Curie (EU-stipendium)
01/09/2015 → 06/05/2019
Project: PhD

Accelerated and rational design of Improved CHO Cell factories
Offentlig finansiering
01/12/2014 → 18/04/2018
Project: PhD

Developing and Implementing high throught-put methods for the analysis of glycans
Grundforskningsfonden
01/12/2014 → 17/06/2019
Project: PhD

Engineering amino acid supply pathways in CHO cells expressing Biopharmaceuticals
Technical University of Denmark
15/12/2013 → 25/08/2017
Project: PhD

System-wide studies of cell biology of CHO cells
Technical University of Denmark
01/06/2012 → 16/06/2016
Project: PhD

Microbial platform for expression of membrane integrated enzymes and sustainable production of high value chemicals
Technical University of Denmark
01/12/2012 → 27/01/2016
Project: PhD

microRNA based Chinese hamster ovary cell engineering towards improved recombinant protein N-glycosylation
Fan, Y., Andersen, M. R. & Kildegaard, H. F.
01/10/2015 → 31/03/2018
Project: Research

Accelerated and rational design of improved CHO cell factories for production of biopharmaceuticals
01/12/2014 → 30/11/2017
Project: Research

Development of novel genome engineering tools to improve CHO cell factories
Julie la Cour Karottki, K., Lee, J. S. & Kildegaard, H. F.
01/03/2016 → 28/02/2019
Project: Research
Design of optimal CHO glycosylation profiles
Amann, T., Kildegaard, H. F. & Andersen, M. R.
01/09/2015 → 31/08/2018
Project: Research

Engineering nutrient and by-product metabolism
Domingues Pereira, S. I., Kildegaard, H. F. & Andersen, M. R.
15/09/2015 → 14/09/2018
Project: Research

Genomics, transcriptomics and transcription networks
Singh, A., Kildegaard, H. F. & Andersen, M. R.
01/09/2015 → 31/08/2018
Project: Research

Genome editing tools and target screening
01/09/2015 → 31/08/2018
Project: Research

Enhancement of therapeutic protein production in CHO cells: Coping with the ER stress
Kwang Ha, T. & Kildegaard, H. F.
01/04/2016 → 31/03/2019
Project: Research

eCHO Systems: Enhancing CHO by Mammalian Systems Biotechnology
Horizon 2020
01/01/2015 → 31/12/2018
Project: Research

Activities:

27th ESACT meeting
Helene Faaustrup Kildegaard (Organizer)
5 May 2019 → 8 May 2019
Activity: Attending an event › Participating in or organising a conference

Helene Faaustrup Kildegaard (Invited speaker)
18 May 2018
Activity: Talks and presentations › Conference presentations

Helene Faaustrup Kildegaard (Invited speaker)
24 Apr 2018
Activity: Talks and presentations › Conference presentations

Novo Nordisk Foundation Cross Cluster Collaboration Event "Talking about CRISPR*
Helene Faaustrup Kildegaard (Organizer)
5 Apr 2018
Activity: Attending an event › Participating in or organising a conference
Towards efficient and controlled genome engineering of CHO Cell Factories. Fujifilm Diosynth Biotechnologies, Billingham, U.K.
Helene Fastrup Kildegaard (Guest lecturer)
8 Mar 2018
Activity: Talks and presentations › Talks and presentations in private or public companies and organisations

CRISPR-mediated genome engineering. Symphogen, Copenhagen, Denmark
Helene Fastrup Kildegaard (Guest lecturer)
2 Mar 2018
Activity: Talks and presentations › Talks and presentations in private or public companies and organisations

What do Chinese hamsters and therapeutics have in common? Wine and Science event, Natural History Museum of Denmark, Copenhagen, Denmark.
Helene Fastrup Kildegaard (Speaker)
1 Mar 2018
Activity: Talks and presentations › Talks and presentations in private or public companies and organisations

CRISPR-mediated genome engineering. Novo Nordisk Foundation Center for Basic Metabolic Research, Copenhagen, Denmark
Helene Fastrup Kildegaard (Guest lecturer)
15 Jan 2018
Activity: Talks and presentations › Talks and presentations in private or public companies and organisations

Tools for improved genome engineering of CHO cell factories, KAIST, Korea
Helene Fastrup Kildegaard (Guest lecturer)
31 Oct 2017
Activity: Talks and presentations › Talks and presentations in private or public companies and organisations

Improving CHO cell factories with CRISPR-mediated genome engineering. 4th Annual BioProNET Science Symposium, University of Warwick, UK
Helene Fastrup Kildegaard (Invited speaker)
10 Oct 2017
Activity: Talks and presentations › Conference presentations

13th Protein Expression in Animal Cells (PEACe) Conference
Helene Fastrup Kildegaard (Organizer)
24 Sep 2017 → 28 Sep 2017
Activity: Attending an event › Participating in or organising a conference

Girls' Day in Science event. Mærsk Mc-Kinney Møller Science Center, Sørø, Denmark.
Helene Fastrup Kildegaard (Guest lecturer)
30 Aug 2017
Activity: Talks and presentations › Talks and presentations in private or public companies and organisations

CRISPR Tools for CHO Cell Engineering. 9th Bioprocessing Summit, Boston, USA.
Helene Fastrup Kildegaard (Invited speaker)
22 Aug 2017
Activity: Talks and presentations › Conference presentations

Genome engineering of CHO cell factories. 12th Danish Conference on Biotechnology and Molecular Biology, Vejle, Denmark.
Helene Fastrup Kildegaard (Invited speaker)
2 Jun 2017
Activity: Talks and presentations › Conference presentations
Tools for improved genome engineering of CHO cell factories. 2nd International Advanced Biomanufacturing Conference. Sheffield, UK.
Helene Fastrup Kildegaard (Invited speaker)
23 May 2017
Activity: Talks and presentations › Talks and presentations in private or public companies and organisations

Towards efficient and controlled genome engineering of CHO Cell Factories. UCB Pharma, Slough, U.K.
Helene Fastrup Kildegaard (Guest lecturer)
4 May 2017
Activity: Talks and presentations › Talks and presentations in private or public companies and organisations

Helene Fastrup Kildegaard (Invited speaker)
2 May 2017
Activity: Talks and presentations › Talks and presentations in private or public companies and organisations

Helene Fastrup Kildegaard (Invited speaker)
25 Apr 2017
Activity: Talks and presentations › Conference presentations

Efficient and controlled genome engineering of CHO cell factories. 9th Conference on Recombinant Protein Production (RPP9). Dubrovnik, Croatia.
Helene Fastrup Kildegaard (Invited speaker)
24 Apr 2017
Activity: Talks and presentations › Conference presentations

CRISPR Technologies, Harvesting the Rare Earth, Overgaden Institute of Contemporary Art.
Helene Fastrup Kildegaard (Guest lecturer)
24 Feb 2017
Activity: Talks and presentations › Talks and presentations in private or public companies and organisations

CHO cell factory engineering, for working towards improved production of therapeutic proteins. 7th Cell Culture World Congress. Munich, Germany.
Helene Fastrup Kildegaard (Invited speaker)
22 Feb 2017
Activity: Talks and presentations › Conference presentations

Improving CHO cell factories with CRISPR. European Summit of Industrial Biotechnology. Graz, Austria.
Helene Fastrup Kildegaard (Invited speaker)
16 Nov 2016
Activity: Talks and presentations › Conference presentations

Latest advances in applying CRISPR/Cas9 for accelerated and efficient generation of CHO cell factories with improved properties. 2nd Annual Genome Editing Congress. London, UK.
Helene Fastrup Kildegaard (Invited speaker)
10 Nov 2016
Activity: Talks and presentations › Conference presentations

Accelerated genome engineering of CHO cell factories for improved protein production. Bioprocessing Summit. Boston, USA.
Helene Fastrup Kildegaard (Invited speaker)
19 Aug 2016
Activity: Talks and presentations › Conference presentations
CRISPR and CHO cell factories. Johns Hopkins University. Baltimore, USA.
Helene Fastrup Kildegaard (Invited speaker)
18 Aug 2016
Activity: Talks and presentations › Conference presentations

Application of CRISPR/Cas9-mediated genome engineering for improved protein production in mammalian cells.
Helene Fastrup Kildegaard (Invited speaker)
9 Jun 2016
Activity: Talks and presentations › Conference presentations

Generation of desirable CHO cell factories with predictive culture performance using CRISPR/Cas9-mediated genome engineering. Cell Culture Engineering XV. Palm Springs, USA.
Helene Fastrup Kildegaard (Invited speaker)
9 May 2016
Activity: Talks and presentations › Conference presentations

CRISPR meets CHO cell factories. Club Biotech at University of Natural Resources and Life Sciences (BOKU). Vienna, Austria.
Helene Fastrup Kildegaard (Invited speaker)
9 Mar 2016
Activity: Talks and presentations › Conference presentations

Application of omics data, screening and genome editing to improve CHO cell factories. 6th annual Cell Culture World Congress. Munich, Germany.
Helene Fastrup Kildegaard (Invited speaker)
23 Feb 2016
Activity: Talks and presentations › Conference presentations

Helene Fastrup Kildegaard (Invited speaker)
3 Feb 2016
Activity: Talks and presentations › Conference presentations

Improved CHO cell factories using CRISPR/Cas9 genome editing Technologies. PEGS Europe. Lisbon, Portugal.
Helene Fastrup Kildegaard (Invited speaker)
3 Nov 2015
Activity: Talks and presentations › Conference presentations

Helene Fastrup Kildegaard (Guest lecturer)
29 Oct 2015
Activity: Talks and presentations › Talks and presentations in private or public companies and organisations

Key note PEACe lecture: Application of CRISPR/Cas9-mediated genome engineering for improved protein production in mammalian cells. 12th Protein expression in animal cells (PEACe) conference. San Diego, USA.
Helene Fastrup Kildegaard (Invited speaker)
23 Sep 2015
Activity: Talks and presentations › Conference presentations

Helene Fastrup Kildegaard (Invited speaker)
31 May 2015
Activity: Talks and presentations › Conference presentations
Helene Fastrup Kildegaard (Invited speaker)
31 May 2015
Activity: Talks and presentations › Conference presentations

Helene Fastrup Kildegaard (Invited speaker)
30 Apr 2015
Activity: Talks and presentations › Conference presentations

Optimizing CHO cell line development, design and performance using genome editing Technologies. 5th annual Cell Culture World Congress. Munich, Germany.
Helene Fastrup Kildegaard (Invited speaker)
24 Feb 2015
Activity: Talks and presentations › Conference presentations

Helene Fastrup Kildegaard (Invited speaker)
11 Feb 2015
Activity: Talks and presentations › Conference presentations

Improving CHO Cell Factories Using Systems Biology and Genome Editing Technologies. Cambridge Healthtech Institute’s 14th Annual PepTalk. The protein Science Week. San Diego, USA.
Helene Fastrup Kildegaard (Invited speaker)
22 Jan 2015
Activity: Talks and presentations › Conference presentations

Short course: Genome editing using CRISPR. Cambridge Healthtech Institute’s 14th Annual PepTalk. The protein Science Week. San Diego, USA.
Helene Fastrup Kildegaard (Invited speaker)
18 Jan 2015
Activity: Talks and presentations › Conference presentations

Accelerating Genome Editing in CHO Cells using CRiSPR Cas9. 9th Danish Conference on Biotechnology and Molecular Biology. Vejle, Denmark.
Helene Fastrup Kildegaard (Invited speaker)
22 May 2014
Activity: Talks and presentations › Conference presentations

Press clippings:

Interview contribution: Article "CRISPR technologies have changed the ball game" in Biosustain magazine
Helene Fastrup Kildegaard
08/06/2018
1 Media contribution
Press/Media: Press / Media

Interview contribution: Article "Tricks of the Trade for Cell Culture optimization" in Genetic Engineering & Biotechnology (GEN)
Helene Fastrup Kildegaard
15/04/2018
1 Media contribution
Press/Media: Press / Media
Interview contribution: Article "A new genetic revolution" in Technologist
Helene Fastrup Kildegaard
01/04/2017
1 Media contribution
Press/Media: Press / Media

Interview contribution: Article "Hamsterceller producerer medicin" in Dynamo
Helene Fastrup Kildegaard
16/09/2016
1 Media contribution
Press/Media: Press / Media