November 2018

CURRICULUM VITAE
Henrik Vibe Scheller

Academic degrees:

Cand. scient. (M. Sc.) in biology, Dept. of Population Biology, Univ. of Copenhagen, 1983.
Ph. D., Dept. of Plant Physiology, Royal Veterinary and Agricultural Univ., Frederiksberg, 1989.
Dr. scient., Univ. of Copenhagen, 1992.

Employment etc.:

01.01.1984 - 15.03.1984: Scientist, Statens Planteværnscenter, Dept. of Zoology, Lyngby, Denmark
15.03.1984 - 15.03.1985: Visiting Scientist, Purdue Univ., Dept. of Entomology, West Lafayette, Indiana, USA. Fellowship supported by NATO and the Danish Veterinary and Agricultural Research Council.
15.03.1985 - 01.08.1985: Scientist, Statens Planteværnscenter, Dept. of Zoology, Lyngby, Denmark
01.08.1985 - 01.08.1986: Graduate Research Assistant, Purdue Univ., Dept. of Horticulture, West Lafayette, Indiana, USA.
01.09.1986 - 01.02.1987: Principal, Forskningssekretariatet, Ministry of Research and Education, Copenhagen.
01.02.1987 - 01.08.1989: Kandidatstipendiat (graduate research assistant), Dept. of Plant Physiology, Royal Veterinary and Agricultural Univ. (KVL), Frederiksberg, Denmark
01.08.1989 - 01.02.1990: Research Assistant, Dept. of Plant Physiology, KVL, Frederiksberg.
01.02.1990 - 01.04.1991: Seniorstipendiat, Plant Biochemistry Laboratory, Dept. of Plant Biology, KVL, Frederiksberg.
01.05.1991 - 31.12.1998: Lektor (associate professor), Plant Biochemistry Laboratory, Dept. of Plant Biology, KVL, Frederiksberg.
01.01.1999-28.02.03: Research Professor, Center for Molecular Plant Physiology, Dept. of Plant Biology, KVL, Frederiksberg.
01.03.2003-28.02.2008: Professor, Center for Molecular Plant Physiology, Dept. of Plant Biology, KVL / University of Copenhagen, Frederiksberg.
01.03.2008-31.05.2011: Director of Cell Wall Biosynthesis, Joint Bioenergy Research Institute, and Senior Scientist, Lawrence Berkeley National Laboratory, California, USA
24.05.2011-present: Vice-President of Feedstocks Division, Joint Bioenergy Research Institute, and Senior Scientist, Lawrence Berkeley National Laboratory, California, USA

01.01.2010-present: Adjunct Professor, Department of Plant and Molecular Biology, University of California Berkeley.
01.05.2011-present: Adjunct Professor, Department of Plant and Environmental Sciences, University of Copenhagen, Denmark.

Sabbaticals

01.10.1996 - 01.02.1997: Visiting Scientist, Complex Carbohydrate Research Center, Univ. of Georgia, Athens, USA.
01.01.2005 – 31.01.2005 and 13.01.2006 – 27.01.2006: Forestry and Forest Products Research Institute, Tsukuba, Japan

Commercial enterprise etc.

Co-founder of Poalis A/S (previously BioLogic A/S), 2001
Member of the board of Poalis A/S, 2001-2005

Co-founder and President of Afingen Inc, 2012-

Awards and memberships:

Brinch's Research Prize, 1998.
Member of Royal Danish Academy of Sciences and Letters (2014-present)
Member of ATV (Danish Academy of Technical Sciences)
Member of DNA (Danish Academy of Natural Sciences)
Treasurer of Scandinavian Society of Plant Physiology 2001-2008
Member of:
- Society for Glycobiology
- American Society of Plant Biologists
- Scandinavian Plant Physiology Society
- International Society for Molecular Plant Microbe Interactions
- American Institute of Chemical Engineers
- Society for Industrial Microbiology and Biotechnology
- American Association for the Advancement of Science

Directors Award for Exceptional Achievement, LBNL, 2014
R&D100 Award, 2014
Kaj Linderstrøm-Lang Prize, 2016

Guest lectures:

05.03.1985, Oklahoma State Univ., Dept. Entomolgy, Stillwater, Oklahoma.
06.01.1988, Univ. of the Philippines, Inst. Biological Sciences, Los Baños.
17.01.1990, Mahidol Univ., Dept. Biochemistry, Bangkok.
18.07.1991, University of Nebraska, Dept. Biochemistry, Lincoln
25.03.1992, Chalmers Univ. of Technol., Dept. Biophys. & Biochem., Göteborg
26.11.1992, Technical Univ. of Braunschweig, Dept. Botany, Braunschweig
15.03.1994, Lund University, Plant Cell Biology, Lund
09.02.1995, Carlsberg Laboratory, Copenhagen
17.02.1998, Freie Universität Berlin, Dept. of Physics, Berlin
05.10.1999, Technical University, Dept. Physical Chemistry, Berlin
16.02.2000, International Rice Res. Inst., Los Baños, Philippines: "Biosynthesis of plant cell wall polysaccharides"
22.03.2000, Næstved Folkeuniversitet: "Gensplejsede organismer".
07.04.2000, Forskningscenter Flakkebjerg: "Biosynthesis and function of cell wall polysaccharides".
21.02.2001, Biological Society of Denmark: "Knocking out photosynthesis".
10.08.2001, University of Adelaide, "Biosynthesis and modification of plant cell wall polysaccharides"
13.08.2001, University of Melbourne, "Biosynthesis and modification of plant cell wall polysaccharides"
24.01.2002, University of Rostock, "Biosynthesis and role of polysaccharides in the plant cell wall".
27.02.2003, Umeå University, "Photosystem I – function and regulation".
09.04.2003, Helsinki University, "Photosystem I – function and regulation".
02.10.2003, Ungdommens Naturvidenskabelige Forening, "Plantebioteknologi og udvikling".
04.03.2004, Turku University, "The Photosystem I complex – function and regulation".
05.04.2004, University of Kiel, "Function and photodamage of the Photosystem I complex".
17.01.2005, Forestry and Forest Products Research Institute, Tsukuba, Japan: "Identification of enzymes involved in the biosynthesis of pectin".

28.01.2005, Kyushu University, Fukuoka, Japan: “Structure, function and photodamage of Photosystem I”.
23.01.2006, Forestry and Forest Products Research Institute, Tsukuba, Japan: “Pectin biosynthesis”.
27.04.2006, University of Rome ‘La Sapienza’: “Identification of glycosyltransferases involved in pectin biosynthesis”.
17.01.2007, University of Grenoble, “Pectin biosynthesis in Arabidopsis”.
28.03.2007, Carnegie Institution, Stanford, California: “Biosynthesis of matrix polysaccharides in Arabidopsis”.
12.04.2007, University of Rouen, France, “Pectin biosynthesis in Arabidopsis”
02.08.2007, University of California-Berkeley, "Building the wall -Biosynthesis of matrix polysaccharides"
15.02.2008, University of Copenhagen, ‘California Dreaming – sun, sand and cell walls’
15.09.2008, University of California-Berkeley, "Building the wall - biosynthesis of cell wall polysaccharides in plants'
26.03.2010 University of Copenhagen, ‘Biofuel Research by the Bay. How to save the world and have fun at the same time’.
23.06.2010 Pacific Northwest National Laboratory, Richland, WA: ‘Biosynthesis of the plant cell wall: Modifying feedstocks for improved biofuel production’
23.11.2010 Energy Bioscience Institute, Berkeley, CA: ‘Optimizing cell wall biosynthesis for biofuel production’.
10.01.2011 Max-Planck Institute for Molecular Plant Physiology, Golm, Germany: ‘Cell wall biosynthesis as a target for developing plants for biofuel production.’
24.06.2011 Oak Ridge National Laboratory, TN: ‘JBEI Feedstocks Research’.
16.11.2011 Dong Energy, Denmark: ‘Bioenergy and biorefinery research at JBEI’.
11.05.2012 Carlsberg Laboratory, Denmark: ‘Plant cell wall biosynthesis - a target for optimizing plants for biofuel production’.
28.08.2012 University of Copenhagen: ‘Plant cell walls – an obvious target for synthetic biology’.
07.03.2013 Umeå Plant Science Center, Sweden: 'Optimizing plant cell walls for biofuel production'.
03.04.2013 Complex Carbohydrate Research Center, University of Georgia, Athens: ‘Improving biofuel production by targeting cell wall biosynthesis’.
30.04.2014 Dept of Plant Biology, University of California, Davis: ‘Biosynthesis of plant cell walls - a target for improving biofuel production’.
17.09.2014 College of Life Sciences, Nanjing Agricultural University: ‘Cell wall biosynthesis and improved biofuel production’.
20.01.2015 International Rice Research Institute, Los Baños, Philippines: ‘Optimizing plant cell walls for biorefinery applications - using rice and Arabidopsis as model plants’.
30.04.2015 Futuragene, Rehovot, Israel: ‘Engineering plants for improved biofuels production’.
08.06.2015 University Andres Bello, Santiago, Chile: ’Optimizing plant polysaccharide biosynthesis for biofuel production’.
16.06.2015 Technical University of Denmark, Lyngby, Denmark: ’Biofuels and biomass - biosynthesis of plant cell wall polysaccharides’.
12.04.2016 University of California, Davis: ‘Building and breaking the walls - how to improve plants for biorefinery’.
04.05.2016 University of Melbourne, Australia: ‘Building walls and making America great again’.
09.05.2017 Tianjin University of Science and Technolgy, China: ‘Development of plants with improved cell wall composition and digestibility’.
10.05.2017 Nankai University, Tianjin, China: ‘Designing Plants for Improved Production of Biofuels and Chemicals’.

11.05.2017 Nankai University, Tianjin, China: 'The Plant Cell Wall, structure, function and biosynthesis'.
22.05.2017 Umeå Plant Science Centre, Umeå, Sweden: 'The importance of nucleotide sugars in plants'.
23.05.2017 Umeå Plant Science Centre, Umeå, Sweden: 'Optimizing plant cell walls for improved production of biofuels'.
06.11.2017 Huazhong Agricultural University, Wuhan, China: 'The Plant Cell Wall: Biosynthesis and Function'.
06.11.2017 Huazhong Agricultural University, Wuhan, China: 'Designing Plants for Improved Production of Biofuels and Chemicals'.
09.10.2018 Northeast Forestry University, Harbin, China: 'Designing Plants for Improved Production of Biofuels and Chemicals'.
10.10.2018 Northeast Forestry University, Harbin, China: 'The Plant Cell Surface - Biosynthesis and function'.

Invited lectures at scientific meetings:

Minisymposium on Plant Biotechnology, The Danish Biochemical Society, University of Copenhagen, May 30, 1991: 'Structure, Function, and Assembly of Photosystem I'.
The 3rd Internatl. Congress of the Internatl. Soc. for Plant Mol. Biol., Tucson, Arizona, Oct. 6-11, 1991: 'Organization and development of photosystem I in barley'.
Gordon Conference, photosynthesis - biochemical aspects, New Hampshire, Aug. 2-6, 1993: 'The photosystem of green sulfur bacteria'.
3rd German Swedish Symposium on Structure and Function of Photosynthetic Reaction Centers, Freiburg, March 19-21, 1994: 'Function of the pscB iron-sulfur protein in the photosynthetic reaction center complex from the green sulfur bacterium *Chlorobium vibrioforme*'.
Symposium in Bioinorganic Chemistry, Odense, May 16, 1994: 'Function of iron-sulfur centers on the acceptor side of photosynthetic reaction center complexes'.
XVII Congress Scandinav. Soc. Plant Physiol., Helsingør, Aug. 7-12, 1994: 'Photosystem I, assembly and function'.
Bioscience for Future Energy Sources, Copenhagen, June 25, 1996: 'Photosynthesis and biomass productivity'.
3rd International Workshop on Green Sulfur and Heliobacteria, Urbino, Italy, Aug. 31 - Sept. 4, 1997: 'Electron acceptors and reconstitution of the photosynthetic reaction center complex from *Chlorobium vibrioforme'*.
4th Swedish-German Symposium on Structure and Function of Photosynthetic Systems, Vilm, Sept. 17-19, 1997: 'The PSI-N subunit of photosystem I is involved in the interaction with plastocyanin but is not essential'.
Annual Meeting of the Cereal Network, Slagelse, Nov. 8-9, 2000: 'Forædling af cerealier ved hjælp af bioteknologi'.
Photosynthetic Electron Transport, Couran Cove Resort, Australia, Aug. 15-18, 2001: 'PSI-O – a new subunit of Photosystem I'.
12th International Conference on Photosynthesis, Brisbane, Australia, Aug. 18-23, 2001: 'Lessons from knocking out Photosystem I'.
IBC Conference on Enzyme Technologies, San Francisco, CA, March 4-6, 2002: 'Cell wall modification enzymes'.
Plant Cell Wall Biosynthesis Meeting, Lake Arrowhead, CA, May 12-15, 2002: 'Pectin biosynthesis: Solubilization of arabinan arabinosyltransferase'.

Gordon Research Conference on Biochemical Aspects of Photosynthesis, Bristol, Rhode Island, June 16-21, 2002: 'Protein interaction in PSI light harvesting'.
Journée Européenne Chloroplaste et Photosynthèse. Paris, June 26, 2002 : 'Molecular dissection of Photosystem I function'.
Genteknologi og Planteproduktion. Det Kgl. Danske Landhusholdningsselskab, Copenhagen, Denmark, Dec. 12, 2002: 'Bioteknologi, muligheder og problemer - hvad venter vi på?'.
EMBO Workshop: Molecular Genetics and Biophysical Aspects of Photosynthesis, Les Diablerets, Switzerland, Jan 26-29, 2003: 'Reverse nuclear genetics of Photosystem I'.
Troedsson Symposium: Intracellular Trafficking and Cell Wall Formation in Plants, Umeå, Sweden, Feb. 4-5, 2005: 'Identification of enzymes involved in the biosynthesis of pectin'.
Plant Cell Wall Biosynthesis Meeting, Asilomar, Monterey, CA, August 4-7, 2005: 'Identification of three novel glycosyltransferases involved in pectin biosynthesis in *Arabidopsis*'.
1st EPOBIO Workshop: Products from Plants - the Biorefinery Future, Wageningen, Netherlands, May 22-24, 2006: 'Pectins'.
Gordon Research Conference on Plant Cell Walls, Biddeford, ME, July 30 - August 4, 2006: 'Characterization of GT47 glycosyltransferases involved in pectin biosynthesis'.
Plantekongres, Herning, Denmark, Jan. 9-10, 2007: 'Sundhedsfremmende kostfibre i korn'.
Plant Biotech Denmark Annual Meeting, Frederiksberg, January 23-24, 2007: 'Plant Biotechnology and the Bioenergy Agenda'.
EPSO Workshop on the Feed Value Chain, Copenhagen, June 26-27, 2007: 'Biochemistry and genetic background of cell wall digestibility in cereals'.
Gordon Conference on Plant Molecular Biology, Holderness, NH, July 13-18, 2008: 'Biochemistry of cell wall biosynthesis and digestibility'.
9th Nordic Photosynthesis Congress, Copenhagen, Denmark, October 21-24, 2008: 'Biofuel and Biomass'
4th annual Nano−Science Center Spring School, Neksø, Denmark, April 14-17, 2009: 'Engineering of plant cell walls'.
21th International Conference on Arabidopsis Research, Edinburgh, June 30-July 4, 2009: 'Arabidopsis as a model for cell wall biosynthesis in bioenergy crops'.
Synthetic biology Workshop, Berkeley, July 23-25, 2009: Design of plants suitable for biofuel production
Gordon Research Conference on Plant Cell Walls, Smithfield, RI, August 2-7, 2009: 'Identification of targets for modification of hemicellulose composition'.
Fifth Annual Georgia Glycoscience Symposium, Athens, GA, September 17-18, 2009: 'California Dreaming - Sun, Sugar and Cell Walls'.
Workshop on strategic plant research − solutions to global societal challenges, Copenhagen, March 24, 2010. 'Biomass - Design of plants for biofuel production and other novel applications'.
Joint 65th Northwest/22nd Rocky Mountain Regional Meeting of the ACS, Pullman, WA, June 20-23, 2010: 'Developing plants with improved properties as feedstocks for biofuel production'.
XIIth Cell Wall Meeting, Porto, Portugal, July 25-30, 2010: 'RWA proteins are required for acetylation of cell wall polysaccharides in *Arabidopsis thaliana*'
Agricultural Biotechnology International Conference, Saskatoon, September 12-15, 2010: 'How can we design plants with improved properties as feedstocks for production of biofuels?'
2nd Annual Next Generation Bio-Based Chemicals Summit, San Diego, February 14-17, 2011: "Optimizing feedstocks for biobased chemicals production".
Genomic Science Awardee Meeting IX and USDA-DOE Plant Feedstock Genomics for Bioenergy Awardee Meeting, Crystal City, Virginia, April 10–13, 2011: 'Optimizing Plant Cell Walls for Efficient Biofuel Production'
Transforming Biomass into Feedstock, Idaho Falls, Idaho, August 22-24, 2011: 'Engineering of biomass density and cell wall composition for improved biofuel production'.

Transforming Biomass into Feedstock, Idaho Falls, Idaho, August 22-24, 2011: 'Conversion of Mixed Feedstocks using Ionic Liquids'.
International Synthetic Biology Workshop: A Bio-based Future, Berkeley, CA, August 29-31, 2011: 'Improving biofuel production by modifying biosynthesis of cell wall polysaccharides'.
4th Conference on Biosynthesis of Plant Cell Wall, Awajishima, Japan, October 2-6, 2011: 'Biosynthesis and engineering of xylan'.
LIFE, Light and Laetrile, Copenhagen, Denmark, November 17, 2011: 'Fog, Fuel and Cell Walls'.
Set4Future Kick Off Meeting, Lyngby, Denmark, May 9, 2012: 'Cell Wall Biosynthesis'.
Cold-Spring Harbor Asia, Synthetic Biology, Suzhou, November 26-30, 2012: 'Plant synthetic biology—Engineering of plants for use as biorefinery feedstocks'.
Gordon conference on Cellulosomes, Cellulases & Other Carbohydrate Modifying Enzymes, Andover NH, Aug. 4-9, 2013: 'Enzyme discovery in plant cell wall biosynthesis'.
Annual Meeting of the Society for Glycobiology, St. Petersburg, FL, November 17-20, 2013: 'Identification of a GlcA transferase involved in biosynthesis of glycosyl inositol phosphorylceramide sphingolipids in plants'
8th Annual Georgia Glycoscience Symposium, Athens, GA, April 7, 2014: 'Enzymes and nucleotide sugar transporters involved in biosynthesis of RG-I'.
International Systems and Synthetic Biology Symposium, Querétaro, México, April 25, 2014: 'Engineering of plants for use as biorefinery feedstocks'.
4th Pan American Bioenergy Conference, Guelph, Canada, June 4-7, 2014: 'Gene discovery and engineering of matrix polysaccharides'.
5th International Conference on Plant Cell Wall Biology, Cairns, Australia, July 27-31, 2014: 'Targeted modification of plant cell walls for improved biofuel production'.
Gordon Research Conference on Glycobiology, Lucca, Italy, March 1-6, 2015: 'Nucleotide Sugar Transporters in Plants and Their Role in Glycan Biosynthesis'.
249th ACS National Meeting, Denver, CO, March 22-26, 2015: 'Use of Synthetic Biology to Improve Bioenergy Crops'.
The Berkeley – Tel Aviv Workshop on Bioeconomy, Tel Aviv, Israel, April 27-28, 2015, 'Engineering plants for improved biofuels production'.
The 5th PanAmerican Plant Membrane Biology Workshop, San Pedro de Atacama, Chile, June 1-5, 2015: 'Nucleotide Sugar Transporters And Their Role In Cell Wall Biosynthesis'.
Plant Cell Walls. Gordon Research Conference, Waltham, MA. July 12-17, 2015: 'Engineering of Cell Walls in Plants for Use in Biorefineries'.
Plant Genomics Congress USA, St. Louis, MO, Sept. 14-15, 2015: 'Engineering of plant cell walls for improved biofuel production'.
11th International Congress on Plant Molecular Biology, Iguazú Falls, Brazil, Oct. 25-30 2015: 'Design of plants with improved cell wall properties for use in biorefineries'
Glycobiotechnology 2016, Manchester, UK, April 4-5, 2016: 'Cell wall biosynthesis as a target for improved biofuels production'.
XIV Cell Wall Meeting, Chania, Greece, June 12-17, 2016: 'Stacking of traits for improved biofuel production'.
4th Plant Genomics Congress USA, Philadelphia, PA. September 12-13, 2016: 'Improving bioenergy crops for lignocellulosic biofuel production'.
Carlsberg Forum – Science to Business, Copenhagen, Denmark, November 29, 2016: 'Building walls and making America great again'.
International Conference on Plant Synthetic Biology and Bioengineering, Miami Beach, Florida, December 16-18, 2016: 'Increasing the C6/C5 Sugar Ratio in Bioenergy Crops By Modulating Nucleotide Sugar Transporters and Glycosyltransferases'.

North American SMALP Conference, Berkeley, California, March 24, 2017: 'Dynamic protein complexes involved in plant cell wall biosynthesis'.
39th Symposium on Biotechnology for Fuels and Chemicals, San Francisco, California, May 1-4, 2017: 'Optimizing polysaccharide composition in biomass'.
The 6th International Conference on Plant Cell Wall Biology, Dalian, China, July 16-20, 2017: 'Cell wall proteins and glycans involved in interactions with symbiotic microorganisms'.
Symposium in memory of Diter von Wettstein, Kiel, Germany, Sept. 17, 2017: 'Making a plant out of thin air - the role of cell walls in plant interaction with mycorrhizal fungi and rhizobia'.
Annual Meeting of the German Botanical Society. Kiel, Germany, Sept. 17-21, 2017: 'Improving cell wall composition of bioenergy crops'.
7th International Congress on Biofuels and Bioenergy, Toronto, Canada, Oct. 2-4: 2017: 'Engineering of plants for improved conversion into biofuels and bioproducts'.
Symposium on Biotechnology for Fuels and Chemicals, Clearwater Beach, Florida, Apr. 29 – May 2, 2018: 'Engineering and environmental resilience of plants with improved biomass composition'.
Cell Wall Research Conference, Asilomar, California, June 18-22, 2018: 'Reduced xylan and lignin in plants can be accomplished while maintaining resilience against stress'.
6th Pan American Plant Membrane Biology Workshop, Vancouver, Canada, June 24-27, 2018: 'Biosynthesis and function of glycosylinositol phosphorylceramides in the plant plasma membrane'.
Annual Meeting of the Society for Glycobiology, New Orleans, LA, November 5-8, 2018: 'Sphingolipid glycosylation and its role in membrane organization and plant-microbe interactions'.

Graduate students:

M.Sc thesis
B. Sc. Casper Nicholas Søgaard: Characterisation of cellulose synthase like genes in rice. Sept 2006- Sept 2007.
B. Sc. Eva Knoch: Identification of glycosyltransferases involved in biosynthesis of cell wall glycoproteins. Sept 2008-Aug. 2009.
B. Sc. Pia Damm Petersen: Engineering of plants with decreased xylan content. March 2011-Aug 2012.
B. Sc. Vibe Maria Gondolf: Engineering of plants with increased galactan content. Feb. 2012-Feb. 2013.
B. Sc. Lisa Thormann: Enzymatic degradation of plant biomass: Effect of biomass composition. Feb.-June 2013.
B. Sc. Joanna Gawron, Sept. 2013-Aug. 2014
B. Sc. Michael Maimann, Sept. 2013-March 2014
B. Sc. Paul Hussey. May 2013-Jan 2015.
B. Sc. Alexandra Oechsner, April-Oct. 2014.
B. Sc. Isabella Nielsen, Sept. 2014-Feb. 2015.
B. Sc. Camille Chalvin, Oct. 2014-Aug. 2015.
B. Sc. Sonia Chapiro, May 2016-October 2017.

PhD thesis
Cand. hort. Klaus K. Nielsen: 'Purification and characterization of an acidic chitinase from sugar beet' (minor subject), 1991-1992.
Cand. scient. Bodil Kjær: 'Structure and function of the photosynthetic reaction center complex from the green sulfur bacterium *Chlorobium vibrioforme*', 1992-1997
Cand. hort. Søren Kjærulff: 'Molecular biology of the photosynthetic reaction center complex of *Chlorobium vibrioforme*', 1992-1996.

Cand. scient. Helle Naver: 'Site-directed mutagenesis of photosystem I subunits and use of modified subunits in reconstitution experiments', 1993-1998.
Cand. agro. Harald B. Teicher: 'Cyclic electron transport around photosystem I and isolation of ferredoxin:plastoquinone reductase', 1995-1999.
Cand. scient. Anna Carina Wiborg Simonsen: 'Protein transport between symbionts in legume root nodules', 1996-1998.
Cand. scient. Michael Skjøt: 'Heterologous expression of fungal pectinases in *Solanum tuberosum*, 1998-2001.
Cand. scient. Christian Sig Jensen: 'Isolation and characterization of flowering genes in grasses', 1998-2001.
Cand. polyt. Nicolai Obel: 'Characterization of arabinoxylan feruloyl and coumaroyl transferases in grasses', 1998-2002.
Cand. scient. Susanne Oxenbøll Sørensen: 'Heterologous expression of fungal pectinases in *Solanum tuberosum*, 1998-2002.
Cand. scient. Pernille Uldall Bolvig: 'Identification, cloning and characterization of plant cell wall active esterases', Oct. 1998-.
Cand. scient. Christina Lunde: 'The role of photosystem I subunits in cyclic electron transport', Jan. 1999-2003.
M. Sc. Jerome Martin: 'Molecular characterization of the floral transition in *Lolium perenne* - a functional conservation approach', April 2001-2005.
M. Sc. Agnieszka Zygadlo: 'Molecular dissection of Photosystem I', 2002-2007.
Cand. scient. Jack Egelund: 'Identification and characterization of glycosyltransferases with putative function in cell wall biosynthesis', June 2003-2007.
Cand. agro. Jesper Harholt: 'Identification of Glycosyltransferases Involved in Plant Cell Wall Biosynthesis', January 2003-2006.
Cand. scient. Jacob Krüger Jensen; 'Characterization of three glycosyltransferases involved in plant cell wall biosynthesis', March 2004-2007.
Cand. scient. Ulla Christensen; 'BEST: A functional genomic approach to identify biosynthetic and regulatory genes involved in xylan synthesis in cereals', Feb. 2006-June 2009.
B. Sc. Emilie A Rennie: Biosynthesis of glucuronoxylan in Arabidopsis. July 2010-Aug. 2013.
B. Sc. William Moore. May 2013-.Aug 2018.
B. Sc. Andrew Brandon. May 2014-.
M. Sc. Yurong Yang, Sept 2013-Oct 2015 (visiting graduate student).
M. Sc. Tess Scavuzzo-Duggan. May 2015-.
M. Sc. Mengmeng Wang. Oct 2015-Sept 2017 (visiting graduate student).
M. Sc. Jingwei Yan, Jan 2016-Jan 2018 (visiting graduate student).
B. Sc. Michael Belcher, May 2018-

Publications:

ORCID id: 0000-0002-6702-3560
Web of Science h-index = 53

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234. Ebert B, Birdseye D, Liwanag AJM, Laursen T, Rennie EA, Guo X, Catena M, Rautengarten C, Stonebloom SH, Pidatala V, Andersen MCF, Cheetamun R, Mortimer JC, Heazlewood JL, Bacic A, Clausen MH, Willats WGT, and Scheller HV. (2018) The three members of the *Arabidopsis thaliana* glycosyltransferase family 92 are functional β-1,4-galactan synthases. **Plant Cell Physiol**, in press.
233. Li G, Jones KC, Eudes A, Pidatala VR, Sun J, Xu F, Zhang C, Wei T, Jain R, Birdseye D, Canlas PE, Baidoo EEK, Duong PQ, Sharma MK, Singh S, Ruan D, Keasling JD, Mortimer JC, Loqué D, Bartley

LE, Scheller HV, Ronald PC. (2018) Overexpression of a rice BAHD acyltransferase gene in switchgrass (*Panicum virgatum* L.) enhances saccharification. **BMC Biotechnol** 18: 54.

232. Stranne M, Ren Y, Fimognari L, Birdseye D, Bardor M, Mollet JC, Komatsu T, Kikuchi J, Scheller HV, Sakuragi Y. (2018) TBL10 is Required for O-acetylation of Pectic Rhamnogalacturonan-I in *Arabidopsis thaliana*. **Plant J**, in press.
231. Ebert B, Rautengarten C, McFarlane HE, Rupasinghe T, Zeng W, Ford K, Scheller HV, Bacic A, Roessner U, Persson S, Heazlewood JL. (2018) A Golgi UDP-GlcNAc transporter delivers substrates for N-linked glycans and sphingolipids. **Nature Plants** 4: 792-801.
230. Scheller HV, Ulvskov. (2018) PECTIN BIOSYNTHESIS. Cell walls have a new family. **Nature Plants** 4: 635-636.
229. Yan J, Aznar A, Chalvin C, Birdseye DS, Baidoo EEK, Eudes A, Shih PM, Loque D, Zhang A, Scheller HV. (2018) Increased drought tolerance in plants engineered for low lignin and low xylan content. **Biotechnol Biofuels** 11: 195.
228. Ishikawa T, Fang L, Rennie E, Sechet J, Yan J, Jing B, Moore W, Cahoon EB, Scheller HV, Kawai-Yamada M, Mortimer JC. (2018) GINT1 is a GIPC GlcNAc glycosyltransferase. **Plant Physiol** 177: 938-952.
227. Xu, L., Naylor, D., Dong, Z., Simmons, T., Pierroz, G., Hixson, K. K., Kim, Y-M., Zink, E. M., Engbrecht, K. M., Wang, Y., Gao, C., DeGraaf, S., Madera, M., Sievert, J. A., Hollingsworth, J., Birdseye, D., Scheller, H. V., Hutmacher, R., Dahlberg, J., Jansson, C., Taylor, J. W., Lemaux, P. G., and Coleman-Derr, D. (2018) Drought delays development of the sorghum root microbiome and enriches for monoderm bacteria. **Proc Natl Acad Sci USA** 115: E4284-E4293. doi: 10.1073/pnas.1717308115.
226. Zhu Y, Xie L, Chen GQ, Lee MY, Loque D, Scheller HV. (2018) A transgene design for enhancing oil content in Arabidopsis and Camelina seeds. **Biotechnol Biofuels** 11: 46. https://doi.org/10.1186/s13068-018-1049-4
225. Denby CM, Li RA, Costello Z, Vu VT, Lin W, Chan LJ, Williams J, Donaldson B, Bamforth C, Petzold C, Scheller HV, Martin HG, Keasling JD. (2018) Industrial brewing yeast engineered for the production of primary flavor determinants in hopped beer. **Nature Commun** 9: 965. doi:10.1038/s41467-018-03293-x
224. Laursen T, Stonebloom S, Pidatala V, Birdseye D, Clausen M, Mortimer J, Scheller HV (2018). Bi-functional glycosyltransferases catalyze both extension and termination of pectic galactan oligosaccharides. **Plant J** 94: 340-351.
223. Jensen JK, Busse-Wicher M, Poulsen CP, Fangel JU, Smith PJ, Yang JY, Pena MJ, Dinesen MH, Martens HJ, Melkonian M, Wong GK-S, Moremen KW, Wilkerson CG, Scheller HV, Dupree P, Ulvskov P, Urbanowicz BR, Harholt J (2018). Identification of an algal xylan synthase indicates that there is functional orthology between algal and plant cell wall biosynthesis. **New Phytologist** 218: 1049-1060. https://doi.org/10.1111/nph.15050
222. Aznar A, Chalvin C, Shih PM, Maimann M, Ebert B, Birdseye DS, Loque D, Scheller HV. (2018) Gene stacking of multiple traits for high yield of fermentable sugars in plant biomass. **Biotechnol Biofuels 11**: 2. doi.org/10.1186/s13068-017-1007-6

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