

CV and recent publications, Christian Brochmann (born March 16, 1953)

Current position: Professor (1996-), National Centre for Biosystematics (NCB), Natural History Museum (NHM), University of Oslo, PO Box 1172 Blindern, NO-0318 Oslo, Norway; phone +47 22851611; fax +47 22851835; email christian.brochmann@nhm.uio.no; <http://www.nhm.uio.no/english/research/ncb/>

Honours, prizes: *The Research Prize of University of Oslo* (2009); Elected member, *Norwegian Academy of Science and Letters* (2004-); 'Best lecturer in basic biology', University of Oslo ('Den Gyldne Pekestokk', 2000); *NCB Special Prize* (2011).

Education: 1992, Dr. philos., Univ. Oslo.

Main research stays abroad: 1989 and 1993, Washington State University, USA (hosts DE & PS Soltis); 2012, University of Grenoble, France (hosts E Coissac & P Taberlet).

Research interests: Molecular systematics incl. biogeography and evolutionary processes at low taxonomic levels, focus on arctic and alpine regions. Speciation, comparative phylogeography, metabarcoding of modern and ancient DNA, polyploid evolution, long-distance dispersal.

Research group: Current: 1 postdoc (Nowak), 3 PhD students (Chala, Hou, Mugizi). Previous: 11 postdocs (Alsos, Bellemain, Boessenkool, Brysting, Ehrich, Epp, Gabrielsen, Gizaw, Gussarova, Popp, Sønstebø), 17 completed PhDs (Alsos, Assefa, Carlsen, Eidesen, Fjellheim, Gabrielsen, Gizaw, Grundt, Gustafsson, Kapralov, Kebede, Masao, Skrede, Solstad, Tollefsrud, Westergaard, Wondimu), 17 completed Masters. Visiting scientists (2-24 months): Elvinger, Luxembourg; Geml, USA; Gussarova, Russia; Jimenez, Spain; Listl, Germany; Mikhaylova, Russia; Obermayer, Austria; Parisod, Switzerland; Pimentel, Spain; Pineiro, Spain; Popp, Sweden; Sannier, France; Schönswetter, Austria; Tribsch, Austria; Vilatersana, Spain; Volkova, Russia; Vrancken, Belgium.

Various: Initiating and leading National Centre for Biosystematics (NCB) at Univ. Oslo involving 40-60 people per year (2001-2010); Initiating and leading Norwegian-Swedish Research School in Biosystematics (2009-2011); Member of the Council for IOPB (International Organization for Plant Biosystematists, 2008-2013); Chair (2004-2008) and member (2003-2004) of the Board for the Biodiversity Research Programme at the Research Council of Norway; Member of expert evaluation panel for the EU BiodivERsA call (2008); Member of four expert evaluation panels at Academy of Finland (2001, 2004, 2011) and one at Swedish Research Council (2009); Member of the National Committee for Development of Biological Sciences in Norway ('Biofagplanutvalget', 2002-2003); Member of the National committee for evaluation of professor competence in biology (2009-2016); Opponent/reviewer at PhD defenses in Grenoble, Vienna, Zürich (x2), Bratislava, Cluj, Copenhagen, Lund, Uppsala (x3), Trondheim. Member of Editorial Boards of five international journals.

Invited talks accepted since 2004: 2013 Oxford, U.K.; Mainz, Germany; 2012 Pinsot, France; 2011 Palmse, Estonia; Melbourne, Australia; Miranda, Venezuela; Trondheim, Norway; 2010 Ås, Norway; Oslo, Norway; 2008 Bonn, Germany; Göttingen, Germany; Vysoke, Slovakia; Neuchatel, Switzerland; Trondheim, Norway; 2007 St Andrews, UK; Lund, Sweden; Trondheim, Norway; Ås, Norway; 2006 Zürich, Switzerland; Trondheim, Norway; Basel, Switzerland; 2005 Vienna, Austria; Uppsala, Sweden; Oslo, Norway; 2004 Amsterdam, The Netherlands; Addis Ababa, Ethiopia; Ås, Norway; Zürich, Switzerland; Regensburg, Germany; Kiel, Germany.

Major external grants as PI since 2002:

2010-2011: 5.3 mill NOK (Res. Council Norway 199713/V20 and Norwegian Biodiversity Information Centre): 'ForBio – Norwegian-Swedish Research School in Biosystematics 2010-2020: Preproject 2010-2011'

2009-2013: 9.5 mill NOK (Res. Council Norway, FRIBIO 191627/V40): 'BarFrost – Reconstruction of past ecosystems by barcoding DNA preserved in permafrost'

2007-2012: 3.0 mill NOK (partner EC Integrated Project FRP6 036866-2, coordinated by P. Taberlet, Grenoble): 'ECOCHANGE: Challenges in assessing and forecasting biodiversity and ecosystem changes in Europe'

- 2007-2012: 6.0 mill NOK (NUFU Norway 2007/10058): 'AFROALP-II – Afro-alpine 'sky islands': genetic versus taxonomic biodiversity, climate change, and conservation'
- 2006-2010: 4.8 mill NOK (Res. Council Norway, FRIBIOØKO 170952/V40): 'SURV-ICE – Did vascular plants and bryophytes survive the last ice age in Scandinavia?'
- 2003-2007: 3.2 mill NOK (NUFU Norway 1127): 'AFROALP - Afroalpine islands as natural laboratories: dynamics and units of plant biodiversity'.
- 2002-2006: 36.2 mill NOK (13.1 mill from Res. Council Norway, Strategic University Program 146515/420, and 23.1 mill from host inst. (NHM): 'National Centre for Biosystematics'.
- 2002-2006: 6.2 mill NOK (Res. Council Norway, NorKlima 150322/720): 'Effects of climate change on ecosystems in Svalbard: past and future immigration of thermophilous key species'.

Publications

~110 papers in ISI journals (including *Nature*, *Science*, *PNAS*, *Systematic Biology*, *Proceedings of the Royal Society B*, *New Phytologist*, *Nucleic Acids Research*, *Evolution*, *Molecular Ecology*), one monograph, ~20 popular papers and reports. H-index 35, total citations 4393, average 39 (ISI Web of Science). H-index 41, total citations 5975 (Google Scholar).

Most-cited papers

- Bonin A, Bellemain E, Eidesen PB, Pompanon F, Brochmann C, Taberlet P 2004. How to track and assess genotyping errors in population genetics studies. *Molecular Ecology* 13: 3261-3273 (613 citations)
- Abbott RJ, Brochmann C 2003. History and evolution of the arctic flora: in the footsteps of Eric Hultén. *Molecular Ecology* 12: 299-313 (211 citations).
- Brochmann C, Brysting AK, Alsos IG, Borgen L, Grundt HH, Scheen A-C, Elven R 2004. Polyploidy in arctic plants. *Biological Journal of the Linnean Society* 82: 521-536 (184 citations).
- Gabrielsen TM, Bachmann K, Jakobsen KS, Brochmann C 1997. Glacial survival does not matter: RAPD phylogeography of Nordic *Saxifraga oppositifolia*. *Molecular Ecology* 6: 831-842 (147 citations).
- Brochmann C, Gabrielsen TM, Nordal I, Landvik JY, Elven R 2003. Glacial survival or *tabula rasa*? The history of North Atlantic biota revisited. *Taxon* 52: 417-450 (142 citations).
- Taberlet P, Coissac E, Pompanon F, Gielly L, Miquel C, Valentini A, Vermet T, Corthier G, Brochmann C, Willerslev E 2007. Power and limitations of the chloroplast *trnL*(UAA) intron for plant DNA barcoding. *Nucleic Acids Research* 35, e14: 1-8 (135 citations).
- Alsos IG, Eidesen PB, Ehrlich D, Skrede I, Westergaard K, Jacobsen GH, Landvik JY, Taberlet P, Brochmann C 2007. Frequent long-distance plant colonization in the changing Arctic. *Science* 316: 1606-1609 (129 citations).

Peer-reviewed publications since 2010

- Gustafsson ALS, Gussarova G, Borgen L, Ikeda H, Antonelli A, Mayrose I, Karin EL, Suda J, Rieseberg LH, Brochmann C. High speciation rates in the arctic flora (submitted).
- Tollefsrud MM, Latałowa M, van der Knaap WO, Brochmann C, Sperisen C. Late Quaternary distribution and cytoplasmic DNA variation of Norway spruce (*Picea abies*) and Siberian spruce (*Picea obovata*) in northern Eurasia (in review).
- Ikeda H, Gustafsson ALS, Brochmann C, Setoguchi H. Pre-speciation origin of selective divergence and balancing selection in a plant photoreceptor gene, phytochrome E (in revision).
- Wondimu T, Brochmann C, Popp M, Gizaw A, Tusiime FM, Masao CA, Abdi AA, Bjorå CS, Mirré V, Nemomissa S. Twice into the African 'sky islands' from the Himalayas followed by rapid radiations: evidence from plastid and nuclear ribosomal DNA variation in *Swertia* L. (Gentianaceae) (in revision).
- Popp M, Mirré V, Suda J, Stedje B, Elven R, Brochmann C. Widespread and ecologically important, but poorly understood in terms of history and taxonomy: the circumarctic and bipolar crowberries (the genus *Empetrum*, Ericaceae) (in revision).
- Soininen EM, Ehrlich D, Lecomte N, Yoccoz NG, Tarroux A, Berteaux D, Gauthier G, Gielly L, Brochmann C, Gussarova G, Ims RA. Sources of variation in small rodent trophic niche: new insights from DNA metabarcoding and stable isotope analysis. *Isotopes in Environmental & Health Studies* (accepted).
- Gustafsson ALS, Skrede I, Rowe HC, Gussarova G, Borgen L, Rieseberg LH, Brochmann C, Parisod C 2014. Genetics of cryptic speciation within an arctic mustard, *Draba nivalis*. *PLoS ONE* 9: e93834. doi:10.1371/journal.pone.0093834.
- Willerslev E*, Davison J*, Moora M*, Zobel M*, Coissac E*, Edwards ME*, Lorenzen ED*, Vestergård M*, **Gussarova G***, Haile J*, Craine J, Gielly L, **Boessenkool S**, **Epp LS**, Pearman PB, Cheddadi R, Murray D, Bråthen KA, Yoccoz N, Binney H, Cruaud C, Wincker P, Goslar T, **Alsos IG**, **Bellemain E**, **Brysting AK**, **Elven R**, **Sønstebø JH**, Murton J, Sher A, Rasmussen M, Rønn R, Mourier T, Cooper A, Austin J, Möller P, Froese D, Zazula G, Pompanon F, Rioux D, Niderkorn V, Tikhonov A, Savvinov G, Roberts RG, MacPhee RDE, Gilbert MTP, Kjær KH, Orlando L, **Brochmann C****, Taberlet P** 2014 (*joint first authors; **joint senior authors; Brochmann group members in bold). Fifty thousand years of Arctic vegetation and megafaunal diet. *Nature* 506: 47-51 (article).
- Wondimu T*, Gizaw A*, Tusiime FM, Masao CA, Abdi AA, Gussarova G, Popp M, Nemomissa S#, Brochmann C# 2014 (*shared first authors, # shared senior authors). Crossing barriers in an extremely fragmented system: two case studies in the afro-alpine sky island flora. *Plant Systematics and Evolution* 300: 415-430. DOI 10.1007/s00606-013-0892-9
- Boessenkool S, McGlynn G, Epp L, Taylor D, Pimentel M, Gizaw A, Nemomissa S, Brochmann C, Popp M 2014. Use of ancient sedimentary DNA as a novel conservation tool for high-altitude tropical biodiversity. *Conservation Biology* 28: 446-455.

- Eidesen PB, Ehrich, D, Bakkestuen V, Alsos IG, Gilg O, Taberlet P, Brochmann C 2013. Genetic roadmap of the Arctic: plant dispersal highways, traffic barriers and capitals of diversity. New Phytologist 200: 898–910. doi: 10.1111/nph.12412
- Pimentel M, Sahuquillo E, Torrecilla Z, Popp M, Catalán P, Brochmann C 2013. Hybridization and long-distance colonization at different time scales: towards resolution of long-term controversies in the sweet vernal grasses (*Anthoxanthum*). Annals of Botany 112: 1015–1030. doi:10.1093/aob/mct170
- Masao CA, Gizaw A, Piñeiro R, Tusiime FM, Wondimu T, Ahmed AA, Popp M, Gussarova G, Lye KA, Munishi P, *Nemomissa S**, *Brochmann C** (* shared senior authors) 2013. Phylogeographic history and taxonomy of some afro-alpine grasses assessed based on AFLPs and morphometry: *Deschampsia cespitosa*, *D. angusta* and *Koeleria capensis*. Alpine Botany 123: 107–122. DOI 10.1007/s00035-013-0119-2
- Gizaw A, Kebede M, Nemomissa S, Ehrich D, Bekele B, Mirré V, Popp M, Brochmann C 2013. Phylogeography of the heathers *Erica arborea* and *E. trimera* in the afro-alpine 'sky islands' inferred from AFLPs and plastid DNA sequences. Flora 208: 453–463.
- Soininen EM, Zinger L, Gielly L, Bellemain E, Bråthen KA, Brochmann C, Epp LS, Gussarova G, Hassel K, Henden J-A, Killengren ST, Rämä T, Stenøien HK, Yoccoz NG, Ims RA 2013. Shedding new light on the diet of Norwegian lemmings: DNA metabarcoding of stomach content. Polar Biology 36: 1069–1076. DOI 10.1007/s00300-013-1328-2.
- Cook JA, Brochmann C, Talbot SL, Fedorov VB, Taylor EB, Väinölä R, Hoberg EP, Kholodova M, Magnusson KP, Mustonen T 2013. Genetics. Pp 459-483 in Meltofte H (ed.). Arctic Biodiversity Assessment. Status and Trends in Arctic Biodiversity. Conservation of Arctic Flora and Fauna, Akureyri.
- Bellemain E, Davey ML, Kauserud H, Epp LS, Boessenkool S, Coissac E, Geml J, Edwards ME, Willerslev E, Gussarova G, Taberlet P, Haile J, Brochmann C 2013. Fungal palaeodiversity revealed using high-throughput metabarcoding of ancient DNA from arctic permafrost. Environmental Microbiology 15: 1176–1189.
- Brochmann C, Edwards ME, Alsos IG 2013. The dynamic past and future of arctic plants: climate change, spatial variation, and genetic diversity. In: Rohde K (ed.). The Balance of Nature and Human Impact. Cambridge University Press. Pp 133-152.
- Jiménez-Mejías P, Luceño M, Lye KA, Brochmann C, Gussarova G 2012. Genetically diverse but with surprisingly little geographical structure: the complex history of the widespread herb *Carex nigra* (Cyperaceae). Journal of Biogeography 39: 2279–2291.
- Piñeiro R, Popp M, Hassel K, Listl D, Westergaard KB, Flatberg KI, Stenøien HK, Brochmann C 2012. Circumarctic dispersal and long-distance colonization of South America: the moss genus *Cinclidium*. Journal of Biogeography 39: 2041–2051.
- Yoccoz NG, Bråthen KA, Gielly L, Haile J, Edwards ME, Goslar T, von Stedingk H, Brysting AK, Coissac E, Pompanon F, Sønstebo JH, Miquel C, Valentini A, de Bello F, Chave J, Thuiller W, Wincker P, Cruaud C, Gavory F, Rasmussen M, Gilbert MTP, Orlando L, **Brochmann C*, **Willerslev E*, **Taberlet P* (** joint senior authorship*) 2012. DNA from soil mirrors plant taxonomic and growth form diversity. Molecular Ecology 21: 3647-3655 (*with Perspective, Mol. Ecol.* 21: 3637-3639).
- Vrancken J, Brochmann C, Wesselingh RA 2012. A European phylogeography of *Rhinanthus minor* compared to *Rhinanthus angustifolius*: unexpected splits and signs of hybridization. Ecology and Evolution doi: 10.1002/ece3.276.
- Demissew S, Brochmann C, Kelbessa E, Friis I, Nordal I, Nemomissa S, Woldemariam T, Bekele T, Asfaw Z, Woldu Z 2012. The Ethiopian Flora Project: a springboard to other projects. Symbolae Botanicae Upsalensis 35(2): 189-215.
- Ikeda H, Carlsen T, Fujii N, Brochmann C, Setoguchi H 2012. Pleistocene climatic oscillations and the speciation history of an alpine endemic and a widespread arctic-alpine plant. New Phytologist 194: 583–594.
- Epp LS, Boessenkool S, Bellemain EP, Haile J, Esposito A, Riaz T, Erséus C, Gusarov V, Edwards ME, Johnsen A, Stenøien HK, Hassel K, Kauserud H, Yoccoz NG, Bråthen KA, Willerslev E, Taberlet P, **Coissac E*, **Brochmann C* (**joint senior authorship*) 2012. New environmental metabarcodes for analysing soil DNA: potential for studying past and present ecosystems. Molecular Ecology 21: 1821–1833.
- Geml J, Kauff F, Brochmann C, Lutzoni F, Laursen GA, Redhead SA, Taylor DL 2012. Frequent circumarctic and rare transequatorial dispersals in the lichenised agaric genus *Lichenomphalia* (Hygrophoraceae, Basidiomycota). Fungal Biology 116: 388-400.
- Taberlet P, Coissac E, Pompanon F, Brochmann C, Willerslev E 2012. Towards next-generation biodiversity assessment using DNA metabarcoding. Molecular Ecology 21: 2045–2050.
- Alsos IG, Ehrich D, Thuiller W, Eidesen PB, Tribsch A, Schönswetter P, Lagaye C, Taberlet P, Brochmann C 2012. Genetic consequences of climate change for northern plants. Proceedings of the Royal Society B Biological Sciences 279: 2042-2051.
- Gussarova G, Alsos IG, Brochmann C 2012. Annual plants colonizing the Arctic? Phylogeography and genetic variation in the *Euphrasia minima* complex (Orobanchaceae). Taxon 61: 146–160.
- Jørgensen T, Kjær KH, Haile J, Rasmussen M, Boessenkool S, Andersen K, Coissac E, Taberlet P, Brochmann C, Orlando L, Gilbert MTP, Willerslev E 2012. Islands in the ice: detecting past vegetation on Greenlandic nunataks using historical records and sedimentary ancient DNA meta-barcoding. Molecular Ecology 21: 1980–1988.
- Jørgensen T, Haile J, Möller P, Andreev A, Boessenkool S, Rasmussen M, Kienast F, Coissac E, Taberlet P, Brochmann C, Bigelow NH, Andersen K, Orlando L, Gilbert MTP, Willerslev E 2012. A comparative study of ancient sedimentary DNA, pollen and macrofossils from permafrost sediments of northern Siberia reveals long-term vegetational stability. Molecular Ecology 21: 1989–2003.
- Boessenkool S, Epp LS, Haile J, Bellemain E, Edwards M, Coissac E, Willerslev E, Brochmann C 2012. Blocking human contaminant DNA during PCR allows amplification of rare mammal species from sedimentary ancient DNA. Molecular Ecology 21: 1806–1815.
- Geml J, Timling I, Robinson CH, Lennon N, Nusbaum HC, Brochmann C, Noordeloos ME, Taylor DL 2012. An arctic community of symbiotic fungi assembled by long-distance dispersers: phylogenetic diversity of ectomycorrhizal basidiomycetes in Svalbard based on soil and sporocarp DNA. Journal of Biogeography 39: 74-88.
- Parducci L, Jørgensen T, Tollefsrud MM, Elverland E, Alm T, Fontana SL, Bennett KD, Haile J, Matetovici I, Suyama Y, Edwards ME, Andersen K, Rasmussen M, Boessenkool S, Coissac E, Brochmann C, Taberlet P, Houmark-Nielsen M, Larsen NK,

- Orlando L, Gilbert MTP, Kjær KH, Alsos IG, Willerslev E 2012. Glacial survival of boreal trees in northern Scandinavia. Science 335: 1083-1086.
- Popp M, Mirré V, Brochmann C 2011. A single Mid-Pleistocene long-distance dispersal by a bird can explain the extreme bipolar disjunction in crowberries (*Empetrum*). PNAS (Proceedings of the National Academy of Sciences of the United States of America) 108: 6520-6525 (with Commentary by MJ Donoghue, *Bipolar biogeography*, pp 6341-6342).
- Westergaard KB, Alsos IG, Engelskjøn T, Flatberg KI, Brochmann C 2011. Trans-Atlantic genetic uniformity in the rare snowbed sedge *Carex rufina*. Conservation Genetics 12: 1367-1371.
- Westergaard KB, Alsos IG, Popp M, Engelskjøn T, Flatberg KI, Brochmann C 2011. Glacial survival may matter after all: nunatak signatures in the rare European populations of two west-arctic species. Molecular Ecology 20: 376-393 (with *Perspective*, Mol. Ecol. 20: 190-192).
- Bellemain E, Carlsen T, Brochmann C, Coissac E, Taberlet P, Kausserud H 2010. ITS as an environmental DNA barcode for fungi: an *in silico* approach reveals potential PCR biases. BMC Microbiology 10: 189 doi:10.1186/1471-2180-10-189 (9 p).
- Sønstebø JH, Gielly L, Brysting AK, Elven R, Edwards M, Haile J, Willerslev E, Coissac E, Rioux D, Sannier J, Taberlet P, Brochmann C 2010. Using next-generation sequencing for molecular reconstruction of past arctic vegetation and climate. Molecular Ecology Resources 10: 1009-1018.
- Carlsen T, Elven R, Brochmann C 2010. The evolutionary history of Beringian *Smelowskia* (Brassicaceae) inferred from combined microsatellite and DNA sequence data. Taxon 59: 427-438.
- Volkova PA, Trávníček P, Brochmann C 2010. Evolutionary dynamics across discontinuous freshwater systems: rapid expansions and repeated allopolyploid origins in the Palearctic white water-lilies (*Nymphaea*). Taxon 59: 483-494.
- Geml J, Kauff F, Brochmann C, Taylor DL 2010. Surviving climate changes: high genetic diversity and transoceanic gene flow in two arctic-alpine lichens, *Flavocetraria cucullata* and *F. nivalis* (Parmeliaceae, Ascomycota). Journal of Biogeography 37: 1529-1542.
- Westergaard KB, Jørgensen MH, Gabrielsen TM, Alsos IG, Brochmann C 2010. The extreme Beringian/Atlantic disjunction in *Saxifraga rivularis* (Saxifragaceae) has formed at least twice. Journal of Biogeography 37: 1262-1276 (and front cover).
- Parisod C, Holderegger R, Brochmann C 2010. Evolutionary consequences of autopolyploidy. New Phytologist 186: 5-17.
- Mikhaylova YV, Gussarova GL, Brochmann C 2010. Molecular variation and phylogeography of the moss campion *Silene acaulis* (L.) Jacq. (Caryophyllaceae) in the North of Europe and the Svalbard archipelago. Ecological Genetics 8(3): 52-60 [In Russian].

Monograph

- Brochmann C, Rustan ØH, Lobin W, Kilian N 1997. The endemic vascular plants of the Cape Verde Islands, W Africa. Sommerfeltia 24: 1-356.

Selected earlier publications (see also most-cited papers above)

- Soininen EM, Valentini A, Coissac E, Miquel C, Gielly L, Brochmann C, Brysting A, Sønstebø JH, Ims RA, Yoccoz NG, Taberlet P 2009. Analysing diet of small herbivores: the efficiency of DNA barcoding coupled with high-throughput pyrosequencing for deciphering the composition of complex plant mixtures. Frontiers in Zoology 6: 16 (doi: 10.1186/1742-9994-6-16).
- Carlsen T, Bleeker W, Hurka H, Elven R, Brochmann C 2009. Biogeography and phylogeny of *Cardamine* (Brassicaceae). Annals of the Missouri Botanical Garden 96: 215-236.
- Alsos IG, Alm T, Normand S, Brochmann C 2009. Past and future range shifts and loss of diversity in dwarf willow (*Salix herbacea* L.) inferred from genetics, fossils, and modelling. Global Ecology and Biogeography 18: 223-239.
- Brochmann C, Brysting AK 2008. The Arctic – an evolutionary freezer? Plant Ecology & Diversity 1: 181-195.
- Tollefsrud MM, Kissling R, Johnsen Ø, Skrøppa T, Cheddadi R, van der Knaap WO, Latalowa M, Terhürne-Berson R, Litt T, Geburek T, Brochmann C, Sperisen C 2008. Genetic consequences of glacial survival and postglacial colonization in Norway spruce: combined analysis of mitochondrial DNA and fossil pollen. Molecular Ecology 17: 4134-4150.
- Skrede I, Brochmann C, Borgen L, Rieseberg LH 2008. Genetics of intrinsic postzygotic isolation in a circumpolar plant species, *Draba nivalis* (Brassicaceae). Evolution 62: 1840-1851.
- Popp M, Gizaw A, Nemomissa S, Suda J, Brochmann C 2008. Colonization and diversification in the African 'sky islands' by Eurasian *Lychnis* L. (Caryophyllaceae). Journal of Biogeography 35: 1016-1029.
- Brysting AK, Oxelman B, Huber KT, Moulton V, Brochmann C 2007. Untangling complex histories of genome mergings in high polyploids. Systematic Biology 56: 467-476.
- Eidosen PB, Carlsen T, Molau U, Brochmann C 2007. Repeatedly out of Beringia: *Cassiope tetragona* embraces the Arctic. Journal of Biogeography 34: 1559-1574.
- Ehrich D, Gaudeul M, Assefa A, Koch MA, Mummenhoff K, Nemomissa S, IntraBioDiv Consortium, Brochmann C 2007. Genetic consequences of Pleistocene range shifts: contrast between the Arctic, the Alps and the East African mountains. Molecular Ecology 16: 2542-2559.
- Grundt HH, Kjølner S, Borgen L, Rieseberg LH, Brochmann C 2006. High biological species diversity in the arctic flora. PNAS (Proceedings of the National Academy of Sciences of the United States of America) 103: 972-975.
- Brochmann C, Borgen L, Stabbetorp OE 2000. Multiple diploid hybrid speciation of the Canary Island endemic *Argyranthemum sundingii* (Asteraceae). Plant Systematics and Evolution 220: 77-92.
- Gabrielsen TM, Brochmann C 1998. Sex after all: high levels of diversity detected in the arctic clonal plant *Saxifraga cernua* using RAPD markers. Molecular Ecology 7: 1701-1708.
- Brochmann C, Elven R 1992. Ecological and genetic consequences of polyploidy in arctic *Draba* (Brassicaceae). Evolutionary Trends in Plants 6: 111-124.
- Brochmann C, Soltis PS, Soltis DE 1992. Recurrent formation and polyphyly of Nordic polyploids in *Draba* (Brassicaceae). American Journal of Botany 79: 673-688.