

Name	Gitte Brandt Hedegaard
Titles	PhD, Geophysicist, Meteorologist and Stud. Journalist
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Work address	Department of environmental Science, Aarhus University Frederiksborgvej 399 DK-4000 Roskilde, Denmark. Phone: +45 21612577 E-mail: gbh@envs.au.dk Web: https://pure.au.dk/portal/en/persons/gitte-brandt-hedegaard(acf4341f-ad76-4390-9dfb-b02fc6503d6b).html

Personal data

Birth date	April 21 st , 1977, Hillerød, Denmark,
Citizenship	Danish.
Civil status	Married to Morten Bille Adeldam
Children	Two children born December 2005 and June 2008.

Short résumé

PhD Gitte Brandt Hedegaard. (GBH) is currently Centre Manager at Aarhus University Interdisciplinary Centre for Climate Change. GBH has a BSc in physics and geophysics, a MSc in geophysics and a PhD in atmospheric science, all from the Niels Bohr Institute, Faculty of Science, University of Copenhagen. Further GBH is educated operative aviation meteorologist from Danish Meteorological Institute (DMI), Copenhagen and has several years of experience and academic courses in teaching at high School level. GBH is an excellent science communicator and is currently doing a Diploma of Specialized Journalism at the Danish School of Media and Journalism in Copenhagen.

Basic scientific disciplines: Science communication and dissemination, Teaching, Numerical modelling advanced visual and statistic data analysis, programming. Fluid dynamics, geophysics, mathematics, environmental chemistry.

Publications: GBH has written several international per review papers, proceedings, contributed to both national and international scientific reports and educational books on climate change and environmental issues. GBH has participated in and presented scientific work at a large number of international conferences, seminars and workshops and is a strong communicator. The recent years GBH's focus has been on science communication.

References

Professor Jørgen Brandt, Department of environmental Science, Atmospheric Modelling, Aarhus University, Roskilde, Denmark. E-mail: jbr@envs.au.dk.
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Employment

- 2017-current iClimate Centre Manager, Aarhus University. Roskilde, Denmark
- 2014-2017 Teacher, Greve Gymnasium, Greve, Denmark
- 2012-2013 Post Doc, Centre for Environmental and Climate Research, Lund University, Lund, Sweden.
- 2011-2012 Post Doc, Aarhus University, Roskilde, Denmark.
- 2007-2011 PhD-student, National Environmental Research Institute, Roskilde, Denmark.
- 2001-2007 Operative aviation meteorologist, the Weather Service, Danish Meteorological Institute, Copenhagen, Denmark.
- 1998-2001 Student assistant, Danish Meteorological Institute and Substitute teaching mainly in math and physics at three primary schools in Copenhagen.

Education

- 2023- Diploma of Specialized Journalism from the Danish School of Media and Journalism. I have finished module 1, 2 and 4 and is currently doing a course Science journalism. I expect to finish the full diploma by the end of 2024.
- 2011 PhD in atmospheric modeling from the Niels Bohr Institute, Faculty of Science, University of Copenhagen, Denmark. The title of the thesis is; “Future air pollution levels in the northern hemisphere – Sensitivity to climate change and projected emissions”.
- 2006 M.Sc., Geophysics, Niels Bohr Institute, Faculty of Science, University of Copenhagen, Denmark.
- 2002 Operative Meteorologist, Weather Service, Danish Meteorological Institute, Copenhagen, Denmark
- 2001 BSc, Geophysics and Physics, Niels Bohr Institute for Astronomy, Physics and Geophysics, Geophysical Department, University of Copenhagen.

Additional University course after PHD

- 2017 By og regional udvikling, IGN, University of Copenhagen, 7,5 ETCS
- 2017 Fagenes samspil, del af teoretisk pædagogikum, Syddansk Universitet

- 2016 Fagdidaktisk modul fysik, del af teoretisk pædagogikum, Syddansk Universitet
- 2016 Almendidaktisk modul 1, del af teoretisk pædagogikum, Syddansk Universitet
- 2016 Videnskabsteori og Etik for fysikere, NBI, University of Copenhagen, 7,5 ETCS
- 2016 Kursus om brugen af satellitbilleder i undervisningen, v. Phillip Kruse Jakobsen, Jakob Kirknæs og Niels Vinther, Roskilde Katedralskole.
- 2015 Fysiske Undervisningsforsøg (FUF), NBI, University of Copenhagen 7,5 ETCS

Maternity Leave

October 2005 – August 2006 and April 2008 – February 2009

Mobility and Fieldwork

- 2012-2013 Lund University, Sweden, Postdoc in CEC within the MERGE project.
- 2004 University of Svalbard, Norway, including three weeks of fieldwork in the marginal ice zone around Svalbard. Research focus: Oil recovery in snow and ice, transport and bioaccumulation of Persistent Organic Pollutants (POPs) and heavy metals.
- 2000 Oceanographic research expedition in the North Atlantic Ocean between Iceland and the Faroe Islands

Language

	Speaking	Reading	Understanding	Writing
Danish (native language):	Excellent	Excellent	Excellent	Excellent
English:	Excellent	Excellent	Excellent	Excellent
German:	Some	Fair	Fair	Some
Italian:	-	Some	Some	-
Swedish:	-	Excellent	Excellent	-
Norwegian:	-	Excellent	Excellent	-

Computer experience

- Platforms: UNIX, Windows and DOS
- Languages: Matlab, IDL, Fortran77, Fortran90, CDO, UNIRAS, Excel, Typo3, Conference Manager

International peer review publications

1. Hedegaard, G. B., J. Brandt, J. H. Christensen, L. M. Frohn, C. Geels and M. Stendel, 2008: "Impacts of climate change on air pollution levels in the Northern Hemisphere with special focus on Europe and the Arctic". *Atmospheric Chemistry and Physics*, 8, pp. 3337-3367, 2008.
2. Hedegaard, G. B. 2008: "Natural Sources" in Air pollution – from a local to a global perspective, Polyteknisk Forlag, Eds.: Jes Fenger and Jens Christian Tjell., pp 163-174, 2008.

3. Skjøth, C. A., Geels, C., Hvidberg, M., Hertel, O., Brandt, J., Frohn, L. M., Hansen, K. M., Hedegaard, G. B., Christensen, J. H., Moseholm, L., 2008. "An inventory of tree species in Europe-An essential data input for air pollution modelling", *Ecological Modelling*, Vol. 217, nr. 3-4, p. 292-304, 2008.
4. Hedegaard, G. B., Gross, A., Christensen, J. H., May, W., Geels, C., Hansen, K. M. and Brandt, J., "Modelling the Impacts of Climate Change on Tropospheric Ozone over three Centuries", *Atmospheric Chemistry and Physics Discuss.*, 11, p. 6805-6843, 2011 (revised manuscript not accepted for *Atmospheric Chemistry and Physics*).
5. Brandt, Jørgen; Silver, Jeremy David; Christensen, Jesper Heile; Andersen, M. S.; Bønløkke, Jakob Hjort; Sigsgaard, Torben; Geels, Camilla; Gross, Allan; Hansen, Ayoe Buus; Hansen, Kaj Mantzius; Brandt Hedegaard, Gitte; Kaas, K.; Frohn, Lise, 2011, "EVA - en metode til kvantificering af sundhedseffekter og eksterne omkostninger fra luftforurening", Miljø og sundhed, Vol. 17, Nr. suppl. 1, p. 3-10, 2011.
6. Hedegaard, G. B., Christensen, Jesper Heile; Geels, Camilla; Gross, Allan; Hansen, Kaj Mantzius; May, W.; Zare, A.; Brandt, Jørgen, "Effects of changed climate conditions on tropospheric ozone over three centuries", *Atmospheric and Climate Science*, Vol. 2, Nr. 4, p. 546-561, 2012.
7. Geels, C., Hansen, K. M., Christensen, J. H., Skjøth, C. A., Ellerman, T., Hedegaard, G. B., Hertel, O., Frohn, L. M., Gross, A., Hansen, A. B., Brandt, J., "Projected change in atmospheric nitrogen deposition to the Baltic Sea towards 2020" *Atmospheric Chemistry and Physics*, Vol. 12, p. 2615-2629, 2012.
8. Langner, J., Engardt, M., Baklanov, A., Christensen, J. H., Gauss, M., Geels, C., Hedegaard, G. B., Nuterman, R., Simpson, D., Soares, J., Sofiev, M., Wind, P., Zakey, A., "A multi-model study of impacts of climate change on surface ozone in Europe", *Atmospheric Chemistry and Physics*, 12, p. 10423-12440, doi:10.5194/acp-12-2615-2012, 2012.
9. Brandt, Jørgen; Silver, Jeremy David; Frohn, Lise; Geels, Camilla; Gross, Allan; Hansen, Ayoe Buus; Hansen, Kaj Mantzius; Brandt Hedegaard, Gitte; Skjøth, Carsten Ambelas; Villadsen, Heidi; Zare, Azimeh; Christensen, Jesper Heile, "An integrated model study for Europe and North America using the Danish Eulerian Hemispheric Model with focus on intercontinental transport of air pollution", *Atmospheric Environment*, Vol. 53, p. 156-176, 2012.
10. Hedegaard, G. B., Christensen, J. H., May, W., Geels, C. and Brandt, J., 2012:" The relative importance of impacts from climate change vs. emissions change on air pollution levels in the 21st century", *Atmos. Chem. Phys.*, 13, 3569-3585, doi:10.5194/acp-13-3569-2013, 2013.
11. Brandt, Jørgen; Silver, Jeremy David; Christensen, Jesper Heile; Andersen, Mikael Skou; Bønløkke, Jakob Hjort; Sigsgaard, Torben; Geels, Camilla; Gross, Allan; Hansen, Ayoe Buus; Hansen, Kaj Mantzius; Brandt Hedegaard, Gitte; Kaas, E.; Frohn, Lise, "Contribution from the ten major emission sectors in Europe and Denmark to the health-cost externalities of air pollution using the EVA model system – an integrated modelling approach", *Atmospheric Chemistry and Physics*, Vol. 13, p. 7725-7746, 2013.

12. Brandt, Jørgen; Silver, Jeremy David; Christensen, Jesper Heile; Andersen, Mikael Skou; Bønløkke, Jakob Hjort; Sigsgaard, Torben; Geels, Camilla; Gross, Allan; Hansen, Ayoe Buus; Hansen, Kaj Mantzius; Brandt Hedegaard, Gitte; Kaas, Eigil; Frohn, Lise, "Assessment of Past, Present and Future Health-Cost Externalities of Air Pollution in Europe and the contribution from international ship traffic using the EVA Model System", *Atmospheric Chemistry and Physics*, Vol. 13, p. 7747-7764, 2013.
13. Colette, A., Andersson, C., Baklanov, A., Bessagnet, B., Brandt, J., Christensen, J. H., Doherty, R., Engardt, M., Geels, C., Giannakopoulos, C., Hedegaard, G. B., Katragkou, E., Langner, J., Lei, H., Manders, A., Melas, D., Meleux, F., Rouil, L., Sofiev, M., Soares, J., Stevenson, D. S., Tombrou-Tzella, M., Varotsos, K. V. and Young, P., 2013: "Is the ozone climate penalty robust in Europe?", *Environmental Research Letters*, Vol. 10, Nr. 8, 2015

And a large number of conference papers, scientific reports, posters and oral presentations presented at international conferences, one of them as invited expert.

Recent popular scientific publications in Danish:

1. Hedegaard, G. B., Bjare, F. S. R., 2018: "Fra kemiske til sociale interaktioner: - iClimate - et nyt klimacenter på Aarhus Universitet studerer årsager til og løsninger på klimaforandringer", *Dansk Kemi*, Nr. 8, p. 14-15, 2018, URL: <http://ipaper.ipapercms.dk/TechMedia/DanskKemi/2018/?page=14>
2. Hedegaard, G. B., 2022: "4000 danskere dør hvert år af luftforurening, trods luften ikke har været renere i 40 år", *Mediadungle*: <https://gbhedegaard.mediajungle.dk/>
URL: <https://gbhedegaard.mediajungle.dk/2022/11/21/4000-danskere-doer-hvert-aar-af-luftforurening-trods-luften-ikke-har-værer-renere-i-40-aar/>
3. Hedegaard, G.B., 2022:"Luftforurening ødelægger lungesygdommen hverdag – Betina kan ikke gå tur i sit eget nabolog", *Mediadungle*: <https://gbhedegaard.mediajungle.dk/>
URL: <https://gbhedegaard.mediajungle.dk/2023/01/03/luftforurening-oedelaegger-lungesygdommen-hverdag-betina-kan-ikke-gaa-tur-i-sit-eget-nabolog/>
4. Hedegaard, G.B., 2023:"Trafikstøj er livsfarlig: På Amager kræver borgerne handling nu", *Mediadungle*: <https://gbhedegaard.mediajungle.dk/>
URL: <https://gbhedegaard.mediajungle.dk/2023/03/15/trafikstoej-er-livsfarlig-paa-amager-kraever-borgerne-handling-nu/>
5. Hedegaard, G.B., 2023:"Klimamad: Hvor skal inspirationen komme fra", *Mediadungle*: <https://gbhedegaard.mediajungle.dk/>
URL: <https://gbhedegaard.mediajungle.dk/2023/10/25/klimamad-hvor-skal-inspirationen-komme-fra/>
6. Hedegaard, G.B., Petersen, J. M. Terp, A. S. 2023."Inspiration til at spise klimavenligt", artikel samling, URL: <https://klimamadmedbedste.mediajungle.dk/>

