

## Short CV for Per Bruun Brockhoff, March 2017



Professor, Statistics and Data Analysis

DTU Compute, Richard Petersens Plads, Building 324, DK-2800 Kgs. Lyngby, Denmark.

Per Bruun Brockhoff is Professor in statistics at the Department DTU Compute at the Technical University of Denmark (since 2004), and was Head of the Statistics Section (2008-2012). He was the Chairman of DSTS, the Danish Society for Theoretical Statistics (2003-2007), and Chairman of the Sensometrics Society (2006-2010). Professor Brockhoff co-authored around 90 peer reviewed scientific papers and 2 research books and 2 online text books with close to 4000 citations. His H-index is 32 and his i10-index is 59 (Google Scholar). The research books are both on Sensometrics: Statistics for Sensory and Consumer Science (with T. Næs and O. Tomic, John Wiley Sons, 2010), and Nonparametrics for Sensory Science: A More Informative Approach (with J.C.W. Rayner, D.J. Best and G.D. Rayner, Blackwell Publishing, USA, 2005). He is an Elected Member of the International Statistical Institute (ISI) (2005), was member of the editorial board of international journal Food Quality and Preference (2009-2010) and currently member of the editorial board of the international journal: Journal of Chemometrics. Since 2004 Professor Brockhoff has been involved in numerous externally funded projects (initiating involvement in more than one project pr year), supervise(d) 10 PhD projects and co-supervised another 5. Professor Brockhoff has 25 years of academic and industrial teaching experience (involved in more than 100 courses) and supervised more than 20 master projects and during these 25 years been giving on average 4 presentations pr. year in all parts of the World.

### Work

**Sep 2009** Professor (“permanent”) in Statistics at DTU Informatics, The Technical University, Denmark.

**Feb 2008** Head of Statistics Section at Informatics and Mathematical Modelling, DTU, Denmark.

**Sep 2004** Professor (“mso”) in Statistics at Informatics and Mathematical Modelling, DTU, Denmark.

**May 1997** Associate Professor in Statistics at Department of Mathematics and Physics, The Royal Veterinary and Agricultural University (KVL), Denmark

**Jan 1995** Assistant Research Professor at Department of Mathematics and Physics, KVL

**Oct 1991** Research Assistant at Centre for Advanced Food Studies, KVL.

### Education

**Mar 1995** Ph.D. in Statistics at Department of Mathematics and Physics, KVL.

**Sep 1991** Master in Statistics, Department of Theoretical Statistics, University of Aarhus, Denmark.

### Personal

Born 1964 in Vamdrup, Denmark. Lives in Værløse, Denmark.

Married with Lene Bruun Brockhoff, Head of Hedge Portfolio, Tryg Investments, Father of 3 children: Trine (1995), Fie (1998) and Julie (2000).

### Projects involving external funding:

1. Discrimination testing in industry. Industrial contract, **2016-2017** (Project leader)
2. Industrial Pharmacometrics. Industrial contract, Novo Nordisk A/S, **2015-**, (Project leader)
3. KvaliHøj - Effektiv fastlæggelse af kødprodukters holdbarhed med nyt IT-værktøj. Danish Meat Research Institute and other meat producing companies. Supported by GUDP, **2013-2016**. (Project partner)
4. Statistical analysis of boar taint data. Scientific contract with Danish Meat Research Institute, **2013-2014**. (Project leader)
5. Characterization of absorption enhancers for orally administered therapeutic peptides in tablet formulations – applying statistical learning, Industrial Ph.D. with Novo Nordisk A/S, **2013-2016**. (University project leader)
6. Towards evidence-based risk management of food allergies, FP7-KBBE-2012-6, **2013-2016**, (Project partner)
7. ConsumerCheck: Brugervenlig software og statistiske/kemometriske metoder til at kombinere sensorisk og supplerende produktinformation i forbrugeracceptstudier. (Project leader), **2010-2015**. Supported by DFFE.
8. Emotion Measurement in Food Choice: An inversed engineering approach. ESN Industry Network Partnership (**2010-2012**). (Project partner)
9. Food satisfaction – Understanding sensory drivers to eat well and in a sustainable healthy manner (SensWell). DSF Application – 15 mill. DKK, **2010-2015** (Project partner)
10. Optimizing product testing by sensometrics, psychometrics and statistics, Ph.D. project co-financed by Unilever Research, Vlardingem, **2010-2014** (Project leader)

11. Sensometrics, Quality assurance and optimal utilization of sensory profile data. Funded by Direktoratet for FødevarerErhverv, **2005-2009**. (Project leader)
12. Optimering af formalingsteknologi i cementindustrien. Industrial Ph.D. with IPL, DTU and F.L. Schmidt. **2007-2010** (Project partner)
13. Web based IT programme for prediction of growth of Clostridium Botulinum in meat products. Funded by Direktoratet for FødevarerErhverv, **2007-2009**. (Project partner)
14. Skræddersyede sensoriske hurtigmetoder til kvalitetsoptimering i kødindustrien, Funded by Direktoratet for FødevarerErhverv, **2007-2009**. (Project partner)
15. Chemometrics for chain data, Funded by Globaliseringsfonden (within DTU), **2007-2010**. (project leader)
16. In silico ADME classification of chemical (NCE) and biological (NBE) drug candidates. Industrial Ph.D. with Novo Nordisk A/S, **2003-2006**. (University project leader)
17. Commercial post educational courses in statistics, **2004-2013**. (Partner and leader)
18. Norfa summer school, **2005**. Marie Curie Summer School, **2008** (Partner in both)

### Research visits

Several smaller visits, 6 months at CSIRO, Australia 2001 and 7 months, at UC Davis, California, USA, 1993.

### Talks

4 invited and/or conference presentations each year 1992-2016

### Teaching

25 years experience in developing and giving courses at academic level, industry courses, short courses, summer schools, web-based distant learning courses nationally and internationally. Nominated for the "Teacher of the year award" at KVL in 1998 and at DTU in 2006, 2008, 2012, 2013 and 2014. Awarded IMM teacher of the year 2007.

### Project supervision

- Recent and current supervision of more than 20 DTU Compute master thesis projects
- 10 Ph.D. projects:
  - Advancing linear and non-linear mixed models in engineering sciences. (DTU Compute grant) (2015-2018)
  - Characterization of absorption enhancers for orally administered therapeutic peptides in tablet formulations – applying statistical learning. Industrial Ph.D. (Erhvervs Ph.d.) (together with Novo Nordisk A/S)(2013-2016)
  - Sensometrics: Multivariate analysis and mapping of sensory and consumer data. (DTU Compute grant) (2013-2017)
  - Modelling allergenic risk. (EU project iFAAM) (2013-2016)
  - Sensometrics: Analysis of consumer preference data (ConsumerCheck project) (DFFE grant) (2010-2014)
  - Optimizing product testing by sensometrics, psychometrics and statistics (Unilever co-financed) (2010-2014)
  - Sensometrics: Thurstonian and statistical models. (DFFE grant) (2008-2012)
  - Chemometrics: Analysis and modelling of chain data.(Globalization funds)(2007-2013)
  - Sensometrics. (PanelCheck projetc) (DFFE grant)(2005-2009)
  - Industrial Ph.D. (Erhvervs Ph.d.): In silico ADME classification of chemical (NCE) and biological (NBE) drug candidates (together with Novo Nordisk A/S)(2003-2006)
- Co-supervising another 5 PhD Projects:
  - Industrial Ph.D. project (IPL, DTU and F.L. Schmidt): Optimering af formalingsteknologi i cementindustrien.(2006-2009)
  - Ph.D. project in collaboration with DTU Food: Sammenhænge mellem kost- og aktivitetsvaner blandt danske børn.(2008-2012)
  - Ph.D. project in collaboration with DTU Food: Web based dietary assessments. (2008-2012)
  - Ph.D. project in collaboration with DTU Food: Rapid Sensory Methods. (2009-2012)
  - Ph.D. project in collaboration with University of Lavras, Brazil. *Sensometrics*. (2011-2015)

### Other activities

- Associate Editor for Biometric Brazilian Journal, 2016-

- Member of Scientific Committee for The joint 62nd RBras and 17th SEAGRO meeting” in Lavras, Brazil.
- Member of Scientific Committee for Agrostat 2016, SFDS (Societe Francaise de Statistique)
- Completing 1.5 year management education programme at DTU, January 2013.
- Member of the ILSI Europe Expert Group on *Allergic Reactions Registries*, August 2007-January 2009.
- Elected ISI-member (ISI=International Statistical Institute), 7. November, 2005.
- Co-editor of “Sensory Data” special issue of the Journal of Chemometrics, 2005.
- Member of the Editorial Board of the Journal of Chemometrics, 2004-.
- Member of the Editorial Board of Food Quality and Preference, 2009-2010.
- Member of the corps of evaluators (“Censorkorpset”) for Food Science, Mathematics/Statistics and Health Science.
- Chairman of the Danish Society of Theoretical Statistics (DSTS), 2003-2007.
- Chairman of The Sensometrics Society, 2006-2010.
- Offering open source statistical software
- Offering online statistics lecture videos – more than 200.000 video views pr. year.
- Giving international short courses in Seoul, Tokyo, Brazil, Chicago, UK, Norway, Italy, Iceland, Sweden, Latvia, France.

#### **Per BB in media (In Danish)**

- Statistik i gymnasiet. Claus Thorn Ekstrøm, Ernst Hansen og Per Bruun Brockhoff, BLOG, 5/11 2016
- Polemikken om p-værdier. Claus Thorn Ekstrøm og Per Bruun Brockhoff, BLOG, 24/4 2016
- Balladen om p-værdier, Synspunkt, Claus Thorn Ekstrøm og Per Bruun Brockhoff, Aktuel Naturvidenskab, 11/5 2016
- Vi mangler eksperter i statistik. Information, 23/11 2015.
- Statistikere dybt uenige: Får sorte fodboldspillere flere røde kort end hvide? Ingeniøren, 8/11 2015.
- Sådan løser vi forskernes statistiske mareridt: Gør data til open source. Ingeniøren, 9/11 2015.
- Hvad er mest sandsynligt - at blive dræbt i et flystyrt eller af en flodhest? Videnskab.dk, 20/3 2014.
- Video-foredrag: Ølsmagning og statistik, Videnskab.dk, 12/9 2012.
- Ølsmagning og Statistik, Danskernes Akademi på DR2 23. marts 2011.
- Elever med statistisk gode smagsløg, Bornholmstidende, 20/3 2010

#### **Academic evaluations:** 25 tasks during 2001-2016

Member of the committee for the evaluation of 8 candidates for a full professor position in Business and Quantitative Methods at Aarhus University, International Ph.D. committees, description committee for professor position in chemometrics at KVL, evaluation committees for professor positions in sensory science and chemometrics at KVL, evaluation committees for Ph.D. grants under the Danish Research School in Biostatistics, evaluation committees for the evaluation of two candidates for an associate professor position in statistics at Department of Basic Sciences and Environment, Faculty of Life Sciences, Copenhagen University, for the evaluation of a candidate for an associate professor position in sensory science at Department of Food Science, Faculty of Life Sciences, Copenhagen University, the evaluation of two applicants for an associate professor position in biostatistics at Biostatistical Department, Copenhagen University, the evaluation of two candidates for an assistant/associate professor in Applied Chemometrics and multivariate analysis KU Life, Copenhagen University, the evaluation of four candidates for a professor position in biostatistics at Department of Basic Sciences and Environment, Faculty of Life Sciences, Copenhagen University, the evaluation of one candidate for an adjunct professor position in biostatistics at Aalborg University, the evaluation of a candidate for a part time associate professor position at Clinical Institute, Århus University.