
CURRICULUM VITAE - LOUISE BUNDGAARD

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ADDRESS

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EDUCATION/PROFESSIONAL DEGREES

PhD, Department of Large Animal Sciences, University of Copenhagen (Jan 2014).

Doctor of Veterinary Medicine, Faculty of Life Sciences, University of Copenhagen (June 2007).

SCIENTIFIC FOCUS

My primary research focus is identification of early biomarkers in impaired tissue healing and musculoskeletal disorders in companion animals and the translational research to the disorders in humans. In my work I am bridging clinical work with mass spectrometry based proteomics including spatial proteomics and degradomics.

MOST RECENT PROFESSIONAL EXPERIENCE

Associate Professor, ANIVET Aarhus University (Aug 2023 – present)

Assistant Professor, ANIVET Aarhus University (Jan 2023 – July 2023)

Shared Postdoc in Clinical Biomedicine and Biotechnology, Department of Clinical Veterinary Sciences, University of Copenhagen & Department of Biotechnology and Biomedicine, DTU Bioengineering (Jan 2018 – Aug 2022), including research stay at Division of Infection Medicine Proteomics, Lund, Sweden

Postdoc in Applied Clinical Biomedicine Sciences, Department of Clinical Veterinary Sciences, University of Copenhagen (July 2016 – Dec 2017)

COMMERCIAL COLLABORATION

Hartmann (PhD project, co-supervisor), **Coloplast** (Master project, co-supervisor)

EXTERNAL FUNDING

ANIVET foundation to support veterinary research, Unravelling the tissue pathology of osteoarthritis and mining for potential early disease biomarkers by use of laser capture microdissection and mass spectrometry (€ 377,500) 2025; **Horserace Betting Levy Board**, Exploiting microvesicle small non-coding RNA and protein cargo in osteoarthritis for early diagnosis and treatment, co-applicant (€ 313,500) 2019; **Danish Council for Independent Research**, Unravelling the role of inflammation in osteoarthritis: insights obtained from an equine disease model by innovative molecular biological techniques, named postdoc (€ 812,000) 2017; **Private foundations**: 8 in total, (€ 47,700) during PhD-project

AWARDS

J. Jerry Kaneko Prize. Best platform presentation by a young scientist at 16th ISACP (2017)

Early Career Research Award at ProteoMMX - British Society of Proteome Research (2017)

COMMISSIONS OF TRUST

Board member as early career researcher at the European Tissue Repair Society board (2018 – 2022)

Board member of the Danish Animal Experimentation Council, Ministry of Justice (2017 – 2022)

Board member of The Pension Fund for Agricultural Academics and Veterinary Surgeons (2017 – present)

Board member of The Danish Veterinary Association Biomedicine board (2017 – 2020)

PhD STUDENTS, MASTER STUDENTS, PhD ASSESMENT COMMITTEES

1 PhD student (co-supervisor), 7 Master students (co-supervisor), 1 PhD Assessment (KU-SUND, DK)

PUBLICATION SUMMARY, *h-index*: 11 (Scopus April 23th 2025)

22 Peer-reviewed papers (8 first author, 3 second author, 1 last author); 5 Book chapters; International conference abstracts: 9 oral, 16 poster; 10 times invited speaker at conferences and post-graduate courses.

1. K. Kalogeropoulos, S. Savickas, A.H. Haack, C.A. Larsen, J. Mikosiński, E.M. Schoof, H. Smola, **L. Bundgaard**[§], U. Auf dem Keller[§] (2024): “*High-Throughput and High-Sensitivity Biomarker Monitoring in Body Fluid by Fast LC SureQuant IS-Targeted Quantitation*”. *Mol Cell Proteomics*, 23(12), 100868; doi.org/10.1016/j.mcpro.2024.100868 (**JIF: 7.0**) ([§] shared last author)
 2. **L. Bundgaard**, F. Årman, E. Åhrman, M. Walters, U. Auf dem Keller, J. Malmström, S. Jacobsen (2024): “*An Equine Protein Atlas Highlights Synovial Fluid Proteome Dynamics during Experimentally LPS-Induced Arthritis*”. *J Proteome Res*, 23(11), doi.org/10.1021/acs.jproteome.4c00125 (**JIF: 4.4**)
 3. J.R. Anderson, E. Johnson, R. Jenkins, S. Jacobsen, D. Green, M. Walters, **L. Bundgaard**, B.A.C. Hausmans, G. van den Akker, T.J.M. Welting, A. Chabronova, Y.A. Kharaz, E.J. Clarke, V. James, M.J. Peffers (2023): “*Multi-Omic Temporal Landscape of Plasma and Synovial Fluid-Derived Extracellular Vesicles Using an Experimental Model of Equine Osteoarthritis*”. *Int J Mol Sci*, 24(19), 14888; doi: 10.3390/ijms241914888 (**JIF: 5.6**)
 4. J. Mikosiński*, K. Kalogeropoulos*, **L. Bundgaard**, C.A. Larsen, S. Savickas, A.H. Haack, K. Pańczak, K. Rybołowicz, T. Grzela, M. Olszewski, P. Ciszewski, K. Sitek-Ziółkowska, K. Twardowska-Sauchka, M. Karczewski, D. Rabczenko, A. Segiet, P. Buczak-Kula, E.M. Schoof, S.A. Eming, H. Smola[§], U. Auf dem Keller[§] (2022): “*Longitudinal evaluation of biomarkers in wound fluids of venous leg ulcers and split-thickness donor site wounds treated with a protease-modulating wound dressing*”, *AktaDV*, 102:adv00834. doi: 10.2340/actadv.v102.325 (**JIF: 4.4**) (*shared first author; [§] shared last author)
 5. **L. Bundgaard**, E. Åhrman, J. Malmström, U. auf dem Keller, M. Walters, S. Jacobsen (2021): “*A comprehensive and quantifiable insight into the proteomes of articular cartilage and subchondral bone*”, *Osteoarthritis Cartilage*, doi:10.1016/j.joca.2021.09.006 (**JIF: 6.6**)
 6. A.B. Leuchsenring, C. Karlsson, **L. Bundgaard**, J. Malmström, P.M. Heegaard (2020): “*Targeted mass spectrometry for Serum Amyloid A (SAA) isoform profiling in sequential blood samples from experimentally Staphylococcus aureus infected pigs*”, *J Proteomics*, 15:227 (8 pages), doi: 10.1016/j.jprot.2020.103904 (**JIF: 4.0**)
 7. **L. Bundgaard**, A. Stensballe, K.J. Elbæk, L.C. Berg (2020): “*Mass spectrometric analysis of the in vitro secretome from equine bone marrow-derived mesenchymal stromal cells to assess effect of chondrogenic differentiation on response to interleukin-1 β treatment*”, *Stem Cell Res Ther* 11:187 (10 pages), doi: 10.1186/s13287-020-01706-7 (**JIF: 6.8**)
 8. S.L. Wunderli, U. Blache, A. Beretta Piccoli, B. Niederöst, C.N. Holenstein, F.S. Passini, U. Silván, **L. Bundgaard**, U. auf dem Keller, J.G. Snedeker (2020): “*Tendon response to matrix unloading is determined by the patho-physiological niche*”, *Matrix Biol* 89, doi: 10.1016/j.matbio.2019.12.003 (**JIF: 11.6**)
 9. **L. Bundgaard**, A. Stensballe, K.J. Elbæk, L.C. Berg (2018): “*Mapping of equine MSC surface proteomes for identification of specific markers using proteomics and gene expression analysis: an in vitro cross sectional study*”, *Stem Cell Res Ther* 9:288, doi: 10.1186/s13287-018-1041-8 (**JIF: 6.8**)
 10. **L. Bundgaard**, M.A. Sørensen, T. Nilsson, E. Salling, S. Jacobsen (2018): “*Evaluation of systemic and local inflammatory parameters and manifestations of pain in an equine experimental wound model*”, *J Eq Vet Sci*, 68, doi: 10.1016/j.jevs.2018.05.219 (**JIF: 1.6**)
 11. **L. Bundgaard**, E. Bendixen, M.A. Sørensen, V.M. Harman, R.J. Beynon, L.J. Petersen, S. Jacobsen (2016): “*A selected reaction monitoring based analysis of acute phase proteins in interstitial fluids from experimental equine wounds healing by secondary intention*”, *Wound Repair Reg* 24:3 (8 pages), doi: 10.1111/wrr.12425 (**JIF: 3.6**)
 12. **L. Bundgaard**, S. Jacobsen, T.F. Dyrland, M.A. Sørensen, V.M. Harman, R.J. Beynon, P.J. Brownridge, L.J. Petersen, E. Bendixen (2014): “*Development of a method for absolute quantification of equine acute phase proteins using concatenated peptide standards and selected reaction monitoring*”, *J Proteome Res*, 13:12 (13 pages), doi: 10.1021/pr500607s (**JIF: 4.5**)
 13. S. Jacobsen, D.M. Adler, **L. Bundgaard**, M.A. Sørensen, P.H. Andersen, E. Bendixen (2014): “*The use of liquid chromatography tandem mass spectrometry to detect proteins in saliva from horses with and without systemic inflammation*”, *Vet Journal*, 202:3, doi: 10.1016/j.tvjl.2014.08.032 (**JIF: 2.7**)
 14. **L. Bundgaard**, S. Jacobsen, M.A. Sørensen, Z. Sun, E.W. Deutsch, R.L. Moritz, E. Bendixen (2014): “*The Equine PeptideAtlas – a resource for developing proteomics-based veterinary research*”, *Proteomics*, 14:6 (11 pages), doi: 10.1002/pmic.201300398 (**JIF: 4.0**)
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