

Rikke Buhl
Professor
Sektion for Medicin og Kirurgi

Postadresse:
Højbakkegaard Allé 5, bygn. 8-68, 2630 Taastrup
E-mail: rib@sund.ku.dk
Telefon: +45 35 33 29 94
Web: <http://ecg.ku.dk>



Kort præsentation

Born and raised in Jutland and obtained the veterinary degree (DVM) in 1999 at The Royal Veterinary and Agricultural University (KVL). In 2004 she defended her PhD thesis. She was the first veterinarian to introduce and develop modern equine clinical cardiology in Denmark and she works within Large Animal Internal Medicine at the Large Animal University Hospital at Taastrup Campus. Here she participates in the clinical teaching of veterinary students within Internal Medicine. Since 2009 she has been Section Head of Medicine and Surgery, member of the leader group at Department of Large Animal Sciences and at present supervisor of 3 PhD students. Internationally she has recently coauthored a consensus statement for clinical evaluation of cardiac diseases in the equine athletes. Privately she lives at Frederiksberg, is married and has three daughters and two stepsons.

Karriere & kollegiale opgaver

Present occupation:

Professor, Faculty of Health and Medical Sciences, University of Copenhagen

Education:

Doctor of Veterinary Medicine (1999)

PhD (2004). Thesis title: Cardiac development assessed by echocardiography in young Standardbred trotters

Employment:

PhD student, Department of Clinical Sciences, Internal Medicine, The Royal Veterinary and Agricultural University (May 1999)

Maternity leave (May 1999 – February 2000)

PhD student, Department of Clinical Sciences, Internal Medicine, The Royal Veterinary and Agricultural University (March 2000-December 2002)

Assistant Veterinarian, Department of Clinical Sciences, Large Animal Surgery, KVL (December 2002-April 2003)

Maternity leave (April 2003-February 2004)

PhD student, Department of Clinical Sciences, Internal Medicine, KVL (March 2004-June 2004)

Assistant Professor, Department of Large Animal Sciences, Medicine and Surgery, Faculty of Life Sciences, University of Copenhagen (June 2004-November 2007)

Associate Professor, Department of Large Animal Sciences, Medicine and Surgery, Faculty of Life Sciences, University of Copenhagen (November 2007 – October 2013)

PhD Coordinator, Department of Large Animal Sciences, Faculty of Life Sciences, University of Copenhagen (April 2009 - present)

Head of Medicine and Surgery at Department of Large Animal Sciences, Faculty of Life Sciences, University of Copenhagen (August 2009 - present)

Professor (MSO), Department of Large Animal Sciences, Faculty of Health and Medical Sciences, University of Copenhagen (October 2013 - present)

Other scientific qualifications:

Reviewer:

- Acta Veterinaria Scandinavia
- Journal of Equine Veterinary Science
- Equine Veterinary Journal
- Veterinary Journal
- Journal of Veterinary Medical Science
- Journal of American Veterinary Medical Association (JAVMA)
- Journal of Veterinary Cardiology

Co-editor:

Equine Veterinary Journal (2010)

Editorial Board Member:

- BMC Veterinary Research (2012 - present)
- ACVIM board for the ACVIM consensus statement 2013: "Recommendations for equine athletes with cardiovascular abnormalities"
- Editorial Board Member for Dansk Veterinær Tidsskrift (Danish Veterinary Journal) (2012 -present)

Publikationer; fagfællebedømte bidrag i tidsskrifter og bøger

Detection of atrial fibrillation with implantable loop recorders in horses

Buhl, Rikke, Hesselkilde, Eva Melis, Carstensen, Helena, Fenner, Merle Friederike, Jespersen, Thomas, Tfelt-Hansen, Jacob & Sattler, Stefan M, 7 jun. 2020, I : Equine Veterinary Journal.

Effect of Selective IK_{ACh} Inhibition by XAF-1407 in an Equine Model of Tachypacing-induced Persistent Atrial Fibrillation (AF)

Fenner, Merle Friederike, Carstensen, Helena, Nissen, Sarah Dalgas, Hesselkilde, Eva Melis, Lunddahl, C., Loft-Andersen, A. V., Sattler, Stefan M, Platonov, P. G., El-Haou, S., Jackson, C., Tang, R., Kirby, R., Ford, J. W., Schotten, U., Milnes, J. T., Sørensen, U. S., Jespersen, Thomas & Buhl, Rikke, 20 maj 2020, I : British Journal of Pharmacology.

First catheter-based high-density endocardial 3D electroanatomical mapping of the right atrium in standing horses

Hesselkilde, Eva Melis, Linz, D., Saljic, Arnela, Carstensen, Helena, Kutieleh, R., Jespersen, Thomas, Sanders, P. & Buhl, Rikke, 2020, (Accepteret/In press) I : Equine Veterinary Journal. 8 s.

Pulmonary vein firing initiating atrial fibrillation in the horse: Oversized dimensions but similar mechanisms

Linz, D., Hesselkilde, Eva Melis, Kutieleh, R., Jespersen, Thomas, Buhl, Rikke & Sanders, P., 2020, I : Journal of cardiovascular electrophysiology. 31, 5, s. 1211-1212

Effect of Selective IK_{ACh} Inhibition by XAF-1407 in an Equine Model of Tachypacing-induced Persistent Atrial Fibrillation (AF)

Jespersen, Thomas, Fenner, Merle Friederike & Buhl, Rikke, 2019, I : Acta Physiologica. 227, S721, s. 96-96

Effects of dofetilide and ranolazine on atrial fibrillatory rate in a horse model of acutely induced atrial fibrillation

Carstensen, Helena, Hesselkilde, Eva Melis, Haugaard, M. M., Flethøj, Mette, Carlson, J., Pehrson, S., Jespersen, Thomas, Platonov, P. G. & Buhl, Rikke, 2019, I : Journal of cardiovascular electrophysiology. 30, 4, s. 596-606

Implantable loop recorders for arrhythmia detection - a new promising diagnostic tool for longterm arrhythmia monitoring

Hesselkilde, E. Z., Carsten, H., Fenner, Merle Friederike, Jespersen, Thomas, Tfelt, J., Sattler, Stefan M & Buhl, Rikke, 2019, I : Acta Physiologica. 227, S721, s. 93-93 35.

Longitudinal study of electrical, functional and structural remodelling in an equine model of atrial fibrillation

Hesselkilde, Eva Melis, Carstensen, Helena, Flethøj, Mette, Fenner, Merle Friederike, Kruse, D. D., Sattler, Stefan M, Tfelt-Hansen, Jacob, Pehrson, S., Braunstein, T. H., Carlson, J., Platonov, P. G., Jespersen, Thomas & Buhl, Rikke, 2019, I : BMC Cardiovascular Disorders. 19, 1, 12 s., 228.

Antiarrhythmic Effects of Combining Dofetilide and Ranolazine in a Model of Acutely Induced Atrial Fibrillation in Horses
Carstensen, Helena, Kjær, L., Haugaard, M. M., Flethøj, Mette, Hesselkilde, Eva Melis, Kanters, Jørgen K., Pehrson, S., Buhl, Rikke & Jespersen, Thomas, jan. 2018, I : Journal of Cardiovascular Pharmacology. 71, 1, s. 26-35 10 s.

Effect of induced chronic atrial fibrillation on exercise performance in Standardbred trotters

Buhl, Rikke, Carstensen, Helena, Hesselkilde, Eva Melis, Klein, B. Z., Hougaard, K. M., Ravn, K. B., Loft-Andersen, A. V., Fenner, Merle Friederike, Pipper, C. & Jespersen, Thomas, 2018, I : Journal of Veterinary Internal Medicine. 32, 4, s. 1410-1419 10 s.

Effects of trimethoprim-sulfadiazine and detomidine on the function of equine $K_v11.1$ channels in a two-electrode voltage-clamp (TEVC) oocyte model

Trachsel, D. S., Tejada, M. A., Groesfjeld Christensen, V., Pedersen, P. J., Kanters, Jørgen K., Buhl, Rikke, Callø, Kirstine & Klærke, Dan Arne, 2018, I : Journal of Veterinary Pharmacology and Therapeutics. 41, 4, s. 536-545 10 s.

Time-dependent antiarrhythmic effects of flecainide on induced atrial fibrillation in horses

Carstensen, Helena, Hesselkilde, Eva Melis, Fenner, Merle Friederike, Loft-Andersen, A. V., Flethøj, Mette, Kanters, Jørgen K., Sattler, Stefan M, Tfelt-Hansen, Jacob, Pehrson, S., Jespersen, Thomas & Buhl, Rikke, 2018, I : Journal of Veterinary Internal Medicine. 32, 5, s. 1708-1717 10 s.

Effect of flecainide on atrial fibrillatory rate in a large animal model with induced atrial fibrillation

Hesselkilde, Eva Melis, Carstensen, Helena, Haugaard, M. M., Carlson, J., Pehrson, S., Jespersen, Thomas, Buhl, Rikke & Platonov, P. G., dec. 2017, I : B M C Cardiovascular Disorders. 17, 6 s., 289.

Molecular cloning and functional expression of the K^+ channel $K_v7.1$ and the regulatory subunit KCNE1 from equine myocardium

Pedersen, P. J., Thomsen, K. B., Flak, J. B., Tejada, M. D. L. A., Hauser, Frank, Trachsel, D. S., Buhl, Rikke, Kalbfleisch, T., DePriest, M. S., MacLeod, J. N., Callø, Kirstine & Klærke, Dan Arne, aug. 2017, I : Research in Veterinary Science. 113, s. 79-86 8 s.

Appropriate threshold levels of cardiac beat-to-beat variation in semi-automatic analysis of equine ECG recordings

Flethøj, Mette, Kanters, Jørgen K., Pedersen, P. J., Haugaard, M. M., Carstensen, Helena, Olsen, Lisbeth Høier & Buhl, Rikke, 28 nov. 2016, I : BMC Veterinary Research. 12, 10 s., 266.

Left Ventricular Function After Prolonged Exercise in Equine Endurance Athletes

Flethøj, Mette, Schwarzwald, C. C., Haugaard, M. M., Carstensen, Helena, Kanters, Jørgen K., Olsen, Lisbeth Høier & Buhl, Rikke, jul. 2016, I : Journal of Veterinary Internal Medicine. 30, 4, s. 1260-1269 10 s.

Characterization and differentiation of equine experimental local and early systemic inflammation by expression responses of inflammation-related genes in peripheral blood leukocytes

Vinther, A. M. L., Heegaard, P. M. H., Skovgaard, K., Buhl, Rikke, Andreassen, S. M. & Andersen, P. H., 1 jun. 2016, I : BMC Veterinary Research. 12, 13 s., 83.

Changes in heart rate, arrhythmia frequency, and cardiac biomarker values in horses during recovery after a long-distance endurance ride

Flethøj, Mette, Kanters, Jørgen K., Haugaard, M. M., Pedersen, P. J., Carstensen, Helena, Balling, J. D., Olsen, Lisbeth Høier & Buhl, Rikke, 1 maj 2016, I : Journal of the American Veterinary Medical Association. 248, 9, s. 1034-1042 9 s.

Pharmacological inhibition of I-K1 by PA-6 in isolated rat hearts affects ventricular repolarization and refractoriness

Skarsfeldt, Mark, Carstensen, Helena, Skibsbye, L., Tang, C., Buhl, Rikke, Bentzen, Bo Hjorth & Jespersen, Thomas, apr. 2016, I : Physiological Reports. 4, 8, 11 s., e12734.

Differences in the electrocardiographic QT interval of various breeds of athletic horses during rest and exercise

Pedersen, P. J., Karlsson, M., Flethøj, Mette, Trachsel, D. S., Kanters, Jørgen K., Klærke, Dan Arne & Buhl, Rikke, 2016, I : Journal of Veterinary Cardiology. 18, 3, s. 255-264 10 s.

Pharmacologic inhibition of small-conductance calcium-activated potassium (SK) channels by NS8593 reveals atrial antiarrhythmic potential in horses

Haugaard, M. M., Hesselkilde, Eva Melis, Pehrson, S. M., Carstensen, Helena, Flethøj, Mette, Præstegaard, K. F., Sørensen, U. S., Diness, J. G., Grunnet, M., Buhl, Rikke & Jespersen, Thomas, apr. 2015, I : Heart rhythm : the official journal of the Heart Rhythm Society. 12, 4, s. 825-835 11 s.

Acquired pulmonic stenosis due to a compressing intrathoracic abscess in a Thoroughbred yearling

Laursen, S. H., van Galen Verwilghen, G., Wolf-Jäckel, Godelind Alma & Buhl, Rikke, 2015, I : Journal of Equine Veterinary Science. 35, 8, s. 692-696 5 s.

Action potential repolarization in equine hearts

Callø, Kirstine, Pedersen, P. J., Tejada, M. D. L. A., Poulsen, K. L., Grubb, Søren, Buhl, Rikke & Klærke, Dan Arne, 2015, I : Biophysical Journal. 108, 2, Supplement 1, s. 113a 1 s.

Antiarrhythmic and electrophysiologic effects of flecainide on acutely induced atrial fibrillation in healthy horses

Haugaard, M. M., Pehrson, S., Carstensen, Helena, Flethøj, Mette, Hesselkilde, Eva Melis, Præstegaard, K. F., Diness, J. G., Grunnet, M., Jespersen, Thomas & Buhl, Rikke, 2015, I : Journal of Veterinary Internal Medicine. 29, 1, s. 339-347 9 s.

Molecular cloning and functional expression of the Equine K⁺ channel KV11.1 (Ether à Go-Go-related/KCNH2 gene) and the regulatory subunit KCNE2 from equine myocardium

Pedersen, P. J., Thomsen, K. B., Olander, E. R., Hauser, Frank, Tejada, M. D. L. A., Poulsen, K. L., Grubb, Søren, Buhl, Rikke, Callø, Kirstine & Klærke, Dan Arne, 2015, I : PloS one. 10, 9, 19 s., e0138320.

Acute exercise does not induce an acute phase response (APR) in Standardbred trotters

Kristensen, L., Buhl, Rikke, Nostell, K., Bak, L., Petersen, E., Lindholm, M. & Jacobsen, Stine, 2014, I : Canadian Journal of Veterinary Research. 78, s. 97-102 6 s.

Cardiac arrhythmias and electrolyte disturbances in colic horses

Hesselkilde, Eva Melis, Almind, M. E., Petersen, J., Flethøj, Mette, Præstegaard, K. F. & Buhl, Rikke, 2014, I : Acta veterinaria Scandinavica. 56, 11 s., 58.

Diurnal modulation and sources of variation affecting ventricular repolarization in Warmblood horses

Pedersen, P. J., Moeller, S. B., Flethøj, Mette, Kanters, Jørgen K., Buhl, Rikke & Klærke, Dan Arne, 2014, I : Journal of Veterinary Cardiology. 16, 4, s. 265-276 12 s.

Recommendations for management of equine athletes with cardiovascular abnormalities

Reef, V. B., Bonagura, J., Buhl, Rikke, McGurrin, M. K. J., Schwarzwald, C. C., Loon, G. V. & Young, L. E., 2014, I : Journal of Veterinary Internal Medicine. 28, 3, s. 749-761 13 s.

Normal electrocardiographic QT interval in race-fit Standardbred horses at rest and its rate dependence during exercise

Pedersen, P. J., Kanters, Jørgen K., Buhl, Rikke & Klærke, Dan Arne, mar. 2013, I : Journal of Veterinary Cardiology. 15, 1, s. 23-31 9 s.

Cardiac arrhythmias in standardbreds during and after racing: possible association between heart size, valvular regurgitations, and arrhythmias

Buhl, Rikke, Petersen, E. E., Lindholm, M., Bak, L. & Nostell, K., 2013, I : Journal of Equine Veterinary Science. 33, 8, s. 590-596 7 s.

Evaluation of clinical and electrocardiographic changes during the euthanasia of horses

Buhl, Rikke, Andersen, L. O. F., Karlshøj, M. & Kanters, Jørgen K., 2013, I : Veterinary Journal. 196, 3, s. 483-491 9 s.

Echocardiographic evaluation of changes in left ventricular size and valvular regurgitation associated with physical training during and after maturity in standardbred trotters

Buhl, Rikke & Ersbøll, A. K., 2012, I : Journal of the American Veterinary Medical Association. 240, 2, s. 205-212 8 s.

Atrieflimmer og elektrofysiologi hos heste

Haugaard, M. M., Buhl, Rikke & Jespersen, Thomas, 2011, I : Dansk Veterinærtidsskrift. 12, s. 28-31 4 s.

Building a platform for diagnosing long QT syndrome in the horse. Fundamental and clinical pharmacology

Pedersen, P., Kanters, Jørgen K., Klærke, D. A. & Buhl, Rikke, 2011, I : Fundamental and Clinical Pharmacology. 25, 6, s. III-III 1 s.

Cardiac arrhythmias in clinically healthy showjumping horses

Buhl, Rikke, Meldgaard, C. & Barbesgaard, L., 2010, I : Equine Veterinary Journal. 42, Suppl. 38, s. 196-201 6 s.

Prevalence of exercise-associated arrhythmias in normal performing dressage horses

Barbesgaard, L., Buhl, Rikke & Meldgaard, C., 2010, I : Equine Veterinary Journal. 42, Suppl. 38, s. 202-207 6 s.

Valvular regurgitations in the horse: the importance of an exercise ECG

Buhl, Rikke, 2010, I : The Veterinary Journal. 183, 2, s. 117-118 2 s.

Jugular venous pooling during lowering of the head affects blood pressure of the anesthetized giraffe

Brøndum, E., Hasenkam, J. M., Secher, N. H., Bertelsen, Mads Frost, Grøndahl, C., Petersen, K. K., Buhl, Rikke, Aalkjaer, C., Baandrup, U., Nygaard, H., Smerup, M. H., Stegmann, F., Sloth, E., Østergaard, K. H., Nissen, P., Runge, M., Pitsillides, K. & Wang, T., 2009, I : American Journal of Physiology: Regulatory, Integrative and Comparative Physiology. 297, 4, s. R1058-R1065 8 s.

***Actinobacillus equuli* subsp. *equuli* associated with equine valvular endocarditis: case report**

Aalbæk, B., Østergaard, S., Buhl, Rikke, Jensen, Henrik Elvang, Christensen, Henrik & Bisgaard, M., 2007, I : Acta Pathologica Microbiologica et Immunologica Scandinavica. 115, 12, s. 1437-1442 6 s.

Bakteriel endokarditis hos hest: en kasuistik

Østergaard, S., Buhl, Rikke, Aalbæk, B. & Jensen, Henrik Elvang, 2007, I : Dansk Veterinærtidsskrift. 90, 19, s. 19-22 4 s.

Anvendelse af arbejds-EKG under praksisforhold

Buhl, Rikke, 2006, I : DANSK VETERINÆRTIDSSKRIFT. 89, 21, s. 10-11 2 s.

Effect of light exercise on valvular regurgitation in standardbred trotters

Buhl, Rikke & Ersbøll, A. K., 2006, I : Equine Veterinary Journal. Suppl. 36, s. 178-182 5 s.

Changes over time in echocardiographic measurements in young Standardbred racehorses undergoing training and racing and association with racing performance

Buhl, Rikke, Ersbøll, A. K., Eriksen, L. & Koch, Jørgen, 2005, I : Journal of the American Veterinary Medical Association. 226, 11, s. 1181-1187 7 s.

Complete situs inversus in a two-year-old standardbred horse

Buhl, Rikke, Koch, Jørgen, Agerholm, Jørgen Steen, Hyttel, Poul, Søland, Tine Mangart & Eriksen, L., 2004, I : Veterinary Record. 154, 19, s. 600-602 3 s.

Low-intensity race training does not induce left ventricular hypertrophy in 2-year-old standardbred trotters

Buhl, Rikke, Ersbøll, A. & Eriksen, L., 2004, I : Journal of Equine Veterinary Science. 24, 7, s. 295-300 6 s.

Sources and magnitude of variation of echocardiographic measurements in normal standardbred horses

Buhl, Rikke, Ersbøll, A. K., Eriksen, L. & Koch, Jørgen, 2004, I : Veterinary Radiology & Ultrasound. 45, 6, s. 505-512 8 s.

Use of color doppler echocardiography to assess the development of valvular regurgitation in standardbred trotters

Buhl, Rikke, Ersbøll, A. K., Eriksen, L. & Koch, Jørgen, 2002, I : Journal of the American Veterinary Medical Association. 227, 10, s. 1630-1635 5 s.

Andre fagfællebedømte publikationer

Cardiac response to exercise: the athlete's heart

Buhl, Rikke, 2011. 2 s.

Publikation: [Konferencebidrag](#) › [Paper](#) › [Forskning](#) › [fagfællebedømt](#)

Clinical cases - what is your decision?

Buhl, Rikke, 2011. 3 s.

Publikation: [Konferencebidrag](#) › [Paper](#) › [Forskning](#) › [fagfællebedømt](#)

Clinical examination of the cardiovascular system

Buhl, Rikke, 2011. 3 s.

Publikation: [Konferencebidrag](#) › [Paper](#) › [Forskning](#) › [fagfællebedømt](#)

The most common cardiac arrhythmia and murmurs

Buhl, Rikke, 2011. 3 s.

Publikation: [Konferencebidrag](#) › [Paper](#) › [Forskning](#) › [fagfællebedømt](#)

Publikationer; formidling til lægmand

Medlemskaber af styrelser, råd, nævn mv.

Aktiviteter