

Short CV

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Curriculum Vitae

Name: Birgit Juul-Kristensen (BJK), PT, PhD

Phone: +45 65503412

Email: bjul-kristensen@health.sdu.dk

Academic degrees and Education

2001 Ph.D. (Dr.Philos.) from Univ of Lund, Faculty of Medicine, Institute of PT, Sweden

1995 BSc. in PT, Univ of Lund, Institute of PT, Sweden,

1983 7 months of Master of Public Health, Univ of Illinois at Chicago, School of Public Health, US,

1980 Authorized PT at Univ College of Copenhagen, Institute of PT, Dk.

Employment history

2017-Adjunct a professor, University of Curtin, WE, Australia; Univ College of Bergen, Norway.

2016 Short-listed as Professor at Univ of Copenhagen (Dk); University of Lund (Sweden),

2013-16 Professor 2 (20%), Univ College of Bergen, Bergen, Norway,

2014-Head of Center for Research in Adapted Physical Activity, Univ of Southern Dk (SDU),

2009-Associate Professor, Research Unit of Musculoskeletal Function and Physiotherapy, Institute of Sports Science and Clinical Biomechanics, Center for Muscle and Joint Health, SDU, Dk

2007-09 Associate professor Univ of Copenhagen (cand.sc.san) and SDU (m rehab), (part-time)

2006-07 Post-doctor, Univ of Oslo, Section for Health Science, Norway (part-time),

2005-09 Senior-researcher, Department of Rheumatology, Rigshospitalet, Dk (part-time),

2001-04 Post-doctor, National Research Center for Work Environment (NRCWE), Dk,

2002-Lecturer at PhD-, and master-courses in Health Sciences, Sports Sciences, Physiotherapy and Medicine at Universities in Danish and international Universities,

1996-00 PhD-student, Univ of Lund, Sweden,

1980-96 Staff PT-jobs: Herlev hospital (2007), NRCWE, Dep. of Work Physiology (1992-96), Directorate of Labour

Inspection Service, Dep of Occupational Medicine (1986-92); Ballerup-Herlev Occupational Health Service Center (1982-86); Frederiksberg hospital (1980-82).

Scientific achievements:

Publications: in total 85 articles, further 8 in revision/submitted. Latest 5 years: totally 54 articles, H-index: 17 (July/17; Web of Science).

Opponent at 11 PhD-theses, evaluator at 5 university positions, 4 international research applications, referee at 16 international journals of musculoskeletal function.

Totally received 27.302.029 mill DK externally research grants.

Committee work: 4 expert committees for clinical guidelines of shoulder disorders (Ministry of Health 2011-13, 2016), 3 international expert committees on Generalised Joint Hypermobility (2014-17),

Evaluation committee work: Research Fund of the Association of Danish Physiotherapy (2000-06; 2014-), 5 University boards/committees, 7 national and international committees.

Leadership: Leader of research area for Neck-Shoulder disorders and Generalised Joint Hypermobility (SDU), head of Center for Research in Adapted Physical Activity (SDU), mentor for musculoskeletal research group (Univ Coll of Bergen, N) (2013-16).

Scientific guidance: Main supervisor 7 PhD-students (3 defended), co-supervisor of 6 PhD-students (5 defended), mentor and collaborator of 3 current post-doctor projects. Project manager of 5 large scientific projects of 2-6 years each.

Research profile: 20 years of research in epidemiology, mechanisms, treatment (RCT-studies) and prevention of work-related and clinical musculoskeletal disorders in the neck/upper limbs and Joint Hypermobility disorders.

International cooperation: International network group for shoulder research (EU-COST-action) 2016-, and International group of flexibility and hypermobility research (I-Flex group) 2014-.

Selected Publications within the latest 5 years.

37) Juul-Kristensen, B, Clausen, B, Ris, I, Steffensen, R, Viskær, R, Søgaard, K, 2013. 'Increased neck muscle activity and impaired balance among females with Whiplash-related chronic pain: a cross-sectional study.' *J RehabMed*; Apr;45(4):376-84, doi: 10.2340/16501977-1120.

38) Damgaard, P, Christensen, R, Bartels, E, Ris Hansen, I, Juul-Kristensen, B, 2013. 'Effect of physiotherapy in patients with chronic neck pain: A systematic review of randomised placebo or active-treatment controlled trials.' *ISRN Pain*, vol 2013, article ID 567175, 23 pages, <http://dx.doi.org/10.1155/2013/567175>.

42) Larsen CM, Søgaard K, Chreiteh SS, Holtermann A, Juul-Kristensen, B, 2013. 'Neuromuscular control of scapula muscles during a voluntary task in subjects with Subacromial Impingement Syndrome. A case-control study'. *J Electromyogr Kinesiol.*, 2013 Oct;23(5): 1158-1165. doi: 10.1016/j.jelekin.2013.04.017. Epub 2013 Jun 17.

46) Larsen CM, Juul-Kristensen, B, Olsen HB, Holtermann A, Søgaard K, 2014. 'Selective activation of intra-muscular compartments within the trapezius muscle in subjects with Subacromial Impingement Syndrome. A case-control study'. *J Electromyogr Kinesiol.* 2014 Feb;24(1):58-64. doi: 10.1016/j.jelekin.2013.09.008. Epub 2013 Oct 16.

48) Larsen CM, Juul-Kristensen, B, Lund H, Søgaard K, 2014. 'Measurement properties of existing clinical assessment methods of scapular positioning and function. A systematic review'. *Physt.Theory Practice*, 2014 Oct;30(7):453-82. doi: 10.3109/09593985.2014.899414. Epub 2014 Mar 28.

51) Damkjær, L, Petersen, T, Juul-Kristensen, B, 2014. 'Is the American Society of Shoulder and Elbow Therapists rehabilitation guideline better than standard care when applied to Bankart operated patients? A controlled study'. *Clinical Rehabilitation*, Jul 3. pii: 0269215514539819. Epub 2014 Jul 3.

- 54) Jørgensen, R, Ris Hansen, I, Falla, D, Juul-Kristensen, B, 2014. 'Reliability, construct and discriminative validity of clinical testing in subjects with and without chronic neck pain.' *BMC Musc* 2014 Dec 4; 15:408. doi: 10.1186/1471-2474-15-408.
- 56) Ingwersen, KG, Christensen R, Sørensen, L, Jørgensen HR, Jensen SL, Rasmussen S, Søgaaard, K, Juul-Kristensen, B, 2015. 'Progressive high-load strength training compared with general low-load exercises in patients with rotator cuff tendinopathy: study protocol for a randomized controlled study'. *Trials*, 2015 Jan 27;16:27, DOI 10.1186/s13063-014-0544-6.
- 62) Brage, K, Ris Hansen, I, Falla, D, Søgaaard, K, Juul-Kristensen, B, 2015. 'Pain education combined with neck- and aerobic training is more effective at relieving chronic neck pain than pain education alone – A preliminary randomised controlled trial.' *Man Ther* 2015 Jun 25, pii: S1356-689X(15)00132-0. doi: 10.1016/j.math.2015.06.003. [Epub ahead of print].
- 63) Johannessen, EC, Reiten, HS, Løvaas H, Mæland, S, Juul-Kristensen, B, 2015. 'Shoulder function, pain and health related quality of life in adults with Joint Hypermobility Syndrome/Ehlers-Danlos Syndrome, Hypermobility Type' *Disabil Rehabil*. 2016 Jan 29:1-9. [Epub ahead of print]
- 67) Ingwersen, KG, Hjarbaek, J, Eshøj, H, Larsen, CM, Vobbe, J, Juul-Kristensen, B, 2016. 'Ultrasound assessment for grading structural tendon changes in supraspinatus tendinopathy: an inter-rater reliability'. *BMJ open* 6:e011746. doi:10.1136/bmjopen-2016-011746.
- 68) Junge, T, Andersen, HL, Byskov, LD, Henriksen, P, Knudsen, HK, Juul-Kristensen, B, 2016. 'The association between Generalized Joint Hypermobility and active horizontal shoulder abduction in 10-15 year old competitive swimmers'. *BMC Sports Sci Med Rehabilitation*, 2016 Jul 12;8:19. doi: 10.1186/s13102-016-0044-y. eCollection 2016.
- 70) Ris Hansen, I, Søgaaard, K, Gram, B, Agerbo, K, Boyle, E, Juul-Kristensen, B, 2016. 'Does a combination of physical training, specific exercises and pain education improve quality of life in patients with chronic neck pain? A randomized control trial.' *Manual Therapy*, 10.1016/j.math.2016.08.004
- 73) Eshøj, H, Juul-Kristensen, B, Jørgensen, RGB, Søgaaard, K, 2017. 'Reproducibility and validity of the Nintendo Wii Balance Board for measuring shoulder sensorimotor control in prone lying'. *Gait and Posture* (52): 211-216.
- 74) Hougs Kjær, B, Ellegaard, K, Wieland, I, Warming, S, Juul-Kristensen, B, 2016. 'Intra-rater and inter-rater reliability of standardized ultrasound protocol for assessing subacromial structures'. *Physiotherapy Theory and Practice* 33 (4) (April 2017).
- 75) Ris Hansen, I, Juul-Kristensen, B, Boyle, E, Kongsted, A, Manniche, C, Søgaaard, K, 2017. 'Chronic neck pain patients with traumatic or non-traumatic onset: Differences in characteristics. A cross-sectional study. *Scandinavian Journal of Pain* 14 (1-8), dx.doi.org/10.1016/j.sjpain.2016.08.008.
- 77) Andersen, LN, Søgaaard, K, Mann, S, Paarup, H, Juul-Kristensen, B, 2017. 'A comparison of the impacts of specific strength training and general fitness training on professional symphony orchestra musicians: A feasibility study' (accepted, *Medical Problems Performing Artists*).
- 81) Eshøj, H, Rasmussen, S, Frich, LH, Lund Jensen, S, Hvass, I, Søndergaard, J, Christensen, R, Gram, B, Søgaaard, K, Juul-Kristensen, B, 2017. 'Neuromuscular exercise for patients with traumatic anterior shoulder dislocation: protocol of a randomized controlled trial (the SINEX-study)' (accepted, *Trial*).
- 83) Juul-Kristensen, B, Østengaard, L, Hansen, S, Boyle, E, Junge, T, Hestbaek, L, 2017. 'Generalised Joint Hypermobility and shoulder joint hypermobility – risk of upper body musculoskeletal trouble and health-related quality of life in the general population'. *BMC Musculoskeletal Disorders*, 2017, 18:226. DOI 10.1186/s12891-017-1595-0.
- 84) Ingwersen, KG, Jensen, SL, Sørensen, L, Jørgensen, HR, Christensen, R, Søgaaard, K, Juul-Kristensen, B, 2017. 'Effect of 3 months of progressive high-load strength training in patients with rotator cuff tendinopathy: Primary results from the double-blind, randomised, controlled Rotator Cuff Tendinopathy Exercise (RoCTEx) trial' (accepted, *BMJ*).
- 85) Eshøj, H, Bak, K, Blønd, L, Juul-Kristensen, B, 2017. 'Translation, adaptation and measurement properties of a Danish version of the Western Ontario Shoulder Instability Index (WOSI)' (accepted, *BMJ Open*).

1. Formalised pedagogical education

I have had several courses in oral and written communication, but since I have never been employed primarily with teaching tasks, I have not undertaken a formal pedagogical education. I am of course willing to undertake such pedagogical education should it be required for the position.

I undertaken international instructor courses in reproducibility of clinical examination methods, for the target group was nordic researchers in hypermobility and the health personnel at Rigshospitalet, University hospital Cph.

In 2017 I received an ERASMUS scholarship for educational and research exchange at Luleå University of Technology, which was very inspiring.

2. Educational administrative tasks

I have been course leader at master (Rehabilitation, Sports Science, Physiotherapy Science) and bsc (Sports Science, Medicine) levels at several educations.

3. Experience in teaching, supervision and examination

I have lectured at postgraduate and pregraduate levels, mostly postgraduate (se CV). The postgraduate level has either been at PhD-courses in Denmark, Sweden and Norway, at senior courses for physicians and PT's in and outside Rigshospitalet in Denmark. The postgraduate level has also been at master-educations (Health Sciences, Public Health, Master in Rehabilitation, Master in Physiotherapy Science, Sports medicine at the medical education).

The pregraduate lecturing has been at several bsc-educations (sports science, medical, engineering in welfare technology, public health science, physiotherapy).

I have been teaching at the courses listed above, in addition to further courses as listed below.

Primarily, I have used my own research, my scientific and practical experience as a background in lectures at PhD-courses, scientific congresses, Universities in Århus, Oslo, Copenhagen and Odense, and at master and bsc educations. When I was employed at NRCWE (National Research Center for the Work Environment) I worked primarily with scientific studies, and there the congress presentations, PhD-courses and public communication meetings constituted the teaching tasks.

With respect to master and bsc students I have supervised 48 Master students, and a number of bsc-student groups since 2006, which I also recognize as teaching experience. Two of my former master students were each awarded a scholarship prize from The Arthritis Research Association for their theses (10.000,-d.kr) after graduation from The University of Southern Dk (2012 and 2013), and most of my master students (also some bsc students) have published their theses. Methods of examination have included evaluation of written reports, PBL-cases and evaluation of oral presentations of case reports.

I have a great experience with the individual examination type, since I have been evaluator at a large amount of theses from master studies in Health Science and Physiotherapy (PT) Science educations, e.g. University of Lund, Århus, Cph, Southern Dk and Trondhjem.

At Master of Health Science University of Bergen and Oslo, I was evaluator at written and individual oral presentations in plenary, which gave me some experience in other evaluation types. These examination forms I have also used afterwards at Master in Rehabilitation, University of Southern Dk. At Bergen University College I supervised 6 master students in their master theses of Clinical Physiotherapy, with examinations based only on written theses.

4. Educational methods, materials and tools

The teaching form has mostly been a combination of oral presentations, practical teamwork tasks in classroom and/or laboratory to illustrate the problems, and to increase learning of new theory, concepts and methods etc.

Teaching material has primarily been power point-presentations, which has been placed at e-learn after/before the lecture. I have also written several book chapters in basic books about 'Work Environment and its influence in development of musculoskeletal diseases' (Clinical Rheumatology for occupational and physiotherapists), about 'The future research challenges in physiotherapy' (Basic book in physiotherapy), about 'Children with hypermobility' (Pediatric Physiotherapy), and two chapters about 'Motor control in hypermobility' and 'Sensorimotor disturbance in the shoulder, examination and training of motor control' (Swedish text book of 'Motor control and motor relearning in rehabilitation of musculoskeletal disorders', Student literature, Luleå Technical University, Luleå).

I contributed in development of course material for the course 'Reproducibility of clinical examination methods', approved in the research module of the Rheumatologists education program, at Master of Health Science, University of Cph, and at Master in Rehabilitation, University of Southern Dk, besides for a group of nordic researchers in hypermobility and health personnel at Rigshospitalet, University of Cph.

5. Development of Education, University pedagogical research

I have participated in development of educations in well fare technology (engineers) and the master in PT Science at SDU. In addition I contributed in developing courses at engineering, sports science, medicine (objective examination and sports medicine) and master of PT Science (scientific methods 1+4).

For 4 years as a course leader I have planned and further developed the courses 'Measurement methods', 'Rehabilitation process' and 'Evaluation and classification of function' at Master in Rehabilitation, 'Objective examination and palpation of the musculoskeletal system' and 'Sports Medicine' at the medical education, and 'Scientific methods' at the Physiotherapy Science education, University of Southern Dk.

Generally this has included:

- planning and updating of teaching plans
- design of e-learn facilities
- distribution and coordination of teaching responsibility to all co-teachers
- development and further development of examination assignments
- evaluation of the course (oral, paper and electronic based)

When I was employed at Master of Health Science at University of Cph, I contributed in planning the course 'Physical capacity' consisting of a combination of lecturing and PBL, where I was a tutor for groups who had to deliver assignments every week within 5 patient-cases.

6. Pedagogical self-reflection, consequence analysis and future development

Master and some bachelor lecturing is different from other educational sessions by the way the student through dialogues and action needs to evaluate the lesson and put it into larger perspectives (e.g. personal, social, health and society). The lecturing needs to be dialogue based, and in evaluation and decision making of professional complex problems and research methods there will normally be more than one answer.

The largest and most exciting challenge as a lecturer is to motivate the students to self-learning, to inspire and initiate development, while at the same time being coordinator and supervisor in the learning process. Until now I have used a combination of oral presentations and student activating teaching methods, of which Problem Based Learning (PBL), practical performance testing, discussion meetings, team work and discussion at e-learn are some of the methods. I like using different teaching methods.

The methods of lecturing vary, from lecturing with few or several discussions, to teamwork and PBL, and I have often received positive verbal and/or written feedback on my lecturing. At University of Oslo I was instructor at an analysis course at Master of Health Science, where the teaching form was group oriented supervision and practical help in statistical analyses, where I learned different teaching methods.

At Master of Health Sciences University of Cph I tutored groups of 10 students in PBL with different cases of musculoskeletal problems in a 7 weeks course, finishing with an oral examination.

During my employment at University of Southern Denmark I have been teaching many different disciplines at master and bsc levels, and my previous experiences from both Oslo and Copenhagen University were helpful, in relation to development of new teaching methods.

At University of Southern Denmark I have been course leader for several years, and I have always tried to further develop and improve the courses from the students' feedback, my own self-critique, and from external inspiration. Since the response rate for course evaluation at most educations is often very low, I have always saved some time for an oral evaluation at the end of the course. This feedback I have used for further development and revision of the courses.