# **CURRICULUM VITAE**

# **Gunnar Flivik**

# MD, PhD, Associate Professor

ADDRESS WORK: DATE OF BIRTH:

Department of Orthopedics February 11<sup>th</sup>, 1965, Lund, Sweden

Skåne University Hospital

Lund University FAMILY:

221 85 Lund, Sweden Wife, son (1995), daughter (1998)

### **MEDICAL EDUCATION:**

0 2011	Associate Professor, Faculty of Medicine, Lund University (Docent)
0 2005	Dissertation, PhD, Faculty of Medicine, Lund University (avhandling)
o 1998	Specialist in Orthopaedic surgery (specialistexamen i Ortopedi)
o 1993	Swedish medical licence (läkarlegitimation)
0 1985-1991	Faculty of Medicine, Lund University, M.D. 1991 (läkarexamen)

#### Positions:

1 (	JSITIONS.	
0	2022	Senior Consultant Orthopaedic Surgeon, GHP Ortho & Spine Center,
		Malmö, Sweden (Current part time position)
0	2011	Associate Professor, Senior Consultant Orthopaedic Surgeon, Dept of
		Orthopaedics, Skåne University Hospital, Lund, Sweden (Current position)
0	2007-2011	Senior Consultant Orthopaedic Surgeon, Dept of Orthopaedics, Lund
0	2006-2007	Consultant Orthopaedic Surgeon, Dept of Orthopaedics,
		Sir Charles Gairdner Hospital, Perth, Australia and
		Fremantle Hospital, Perth, Australia
0	1998-2005	Staff surgeon, Dept of Orthopaedics, Lund, Sweden
0	1993-1998	Residency in Orthopaedic surgery (Including Orthopaedic surgery,
		Hand surgery, General surgery, Anaesthesiology, Plastic surgery
		and Neurosurgery), Ystad, Malmö and Lund, Sweden
0	1992-1993	Internship (Surgery, Internal medicine, Psychiatry and General
		practitioner), Ystad, Sweden
0	1991 (6 months)	Temporary General Practitioner, Fränsta and Skurup, Sweden
0	1990-91 (8 months)	House officer, Dept of Surgery, Bollnäs, Sweden
0	1989 (2 months)	House officer, Dept of Radiology, Jönköping, Sweden

# FELLOWSHIP AND POST-DOC:

- Hip and Knee Arthroplasty Fellowship and Post Doc Research position:
   Sir Charles Gairdner Hospital and Perth Orthopaedic Institute, Perth, Australia;
   January-June, 2006
- Nordic Exeter Hip Fellowship. Princess Elisabeth Ortopedic Centre, Exeter, UK;
   Nov-Dec, 2000

## **MEMBERSHIP:**

- European Hip Society
- o Swedish Hip and Knee society (Svenska Höft- och knäföreningen), (former board member)
- Swedish Orthopaedic Association (Svensk Ortopedisk Förening)
- o Swedish Medical Association (Svenska Läkarförbundet)
- Swedish Society of Medicine (Svenska Läkaresällskapet)

#### **ADMINISTRATIVE EXPERIENCE:**

- Member of board Swedish Hip and Knee Society, August 2008-September 2009 and September 2011- September 2014
- Co-head of the Biomechanical and Biomaterials laboratory at Lund University Hospital,
   January 2008 January 2009
- Head of Lund University Hospital's Orthopaedic activity at Trelleborg Hospital
   (Arthroplasty Centre with about 1200 arthroplasties a year). August 2007 August 2012
- o Member of board for Centre for Biomechanics at Lund University. July 2007 May 2015
- o Manager of the RSA-laboratory at Dept of Orthopedics, Lund, Sweden, January 2002 --
- Staff administrator, Dept of Orthopedics, Lund, Sweden, January 2000 January 2003

#### **TEACHING EXPERIENCE:**

- >200 lecture hours at national and international courses and congresses
- o Engineering students, Course in Medical Biomechanics, LTH Faculty of Engineering, 2012--
- o Medical students at Lund University Medical School, 1999 --
- o Radiology Nurses yearly national course, 2012--
- o Scrub Nursing students at Lund University Nursing School, 2002 2005
- o Physiotherapist students at Lund University Physiotherapist School, 2000 2005

### FORMAL PEDAGOGIC TRAINING FOR UNIVERSITY TEACHERS:

- o Perspectives on Course Design (Perspektiv på kurs), 3 weeks, autumn 2018
- o Problem based learning (Problembaserat lärande), 1/2 week, January 2010
- Group Communication and Supervision (Gruppkommunikation och handledning),
   1/2 week, March 2008
- o Course for Doctoral Supervisors, (Forskarhandledning), 1/2 week, November 2007
- Introductory Course in University Pedagogics (Högskolepedagogisk introduktionskurs), 1 week, November 2007

# POSTGRADUATE COURSES FOR DOCTORAL EDUCATION (PHD):

- o Regression analyses, advanced biostatistical course, May 2004
- Variance analyses, advanced biostatistical course, April 2004
- o Oral communication (Presentationskurs), May 2000
- o Publication methodology (Publiceringsmetodik), December 1999
- Clinical research methodology and statistics (klinisk forskningsmetodologi och statistik),
   December 1997

### SCIENTIFIC PUBLICATIONS (SEE SEPARATE LIST):

- o 56 published scientific manuscripts in peer reviewed international journals
- o 3 book chapters
- o 43 oral presentations at scientific meetings
- o 23 posters at scientific meetings

#### **SUPERVISOR EXPERIENCE:**

## Supervisor for PhD student at Medical Faculty Lund University

- Albin Christensson, Dept of Orthopedics, 2021 –
   "Migration- and 3D-measurements of total joint arthroplasty"
- Erik Weber, Dept of Orthopedics, 2013 "Design- and periprosthetic factors affecting the stem performance in THA"
- Halldór Bergvinsson, Dept of Orthopedics, 2017 -2022 Ph.D. 10<sup>th</sup> June 2022
   "Factors affecting cup wear and migration in total hip arthroplasty"
- Sverrir Kiernan, Dept of Orthopedics. 2011-2020 Ph.D. 9<sup>th</sup> October 2020
   "The importance of biomechanical restoration for total hip arthroplasty"

# Assistant supervisor for PhD student at Medical Faculty Lund University

- Vasileios Zampelis, Dept of Orthopedics. 2011-2017. *Ph.D. 24<sup>th</sup> March 2017* "Revision hip arthroplasty using impacted allograft bone and cement. Studies on prosthetic stability and outcome"
- Abdulemir Ali, Dept of Orthopedics. 2009-2016. Ph.D. 25<sup>th</sup> November 2016
   "Pain after total knee arthroplasty with special reference to patella"
- Ola Belfrage, Dept of Orthopedics. 2007-2014. *Ph.D. 25<sup>th</sup> April 2014* "Allograft bone in hip revision. Effect of locally applied pharmacological treatment"

# Assistant supervisor for PhD student at Medical Faculty Copenhagen University

- Müjgan Yilmaz, University of Copenhagen. 2017 "Comparison of Persona® uncemented total knee arthroplasty versus Persona® cemented total knee arthroplasty" In a randomized controlled trial using RSA and DXA
- Karen Vorre Dyreborg, University of Copenhagen. 2016-2020 *Ph.D. 18<sup>th</sup> Sept 2020* "Uncemented Total Hip Arthroplasty. Femoral bone and implant interaction evaluated by Radiostereometric Analysis and Dual-Energy X-ray Absorptiometry"
- Mikkel Rathsach Andersen, University of Copenhagen. 2013-2016 *Ph.D. 13<sup>th</sup> May 2016* "Monoblock versus Modular polyethylene design in uncemented total knee arthroplasty and the effect of preoperative bone quality on tibial component migration"

### Supervisor for Master theses by student from Medical Faculty Lund University

- Gustav Rundgren, 2016. "Low-Dose Computed Tomography for Preoperative 3D Planning and Postoperative Evaluation of Total Hip Arthroplasty - a Qualitative Analysis of Radiation Dose and Image Quality as well as Comparison with Conventional Radiography". Published 2017 in Acta Radiologica.
- Pontus Norman, 2012. "Fatigue fracture of uncemented modular stems for revision hip arthroplasty". Published 2014 in J Arthroplasty,

- o Fredrik Olerud, 2012. "Comparison of Refobacin Bone Cement and Palacos cum Gentamicin in Total Hip Arthroplasty. An RSA study with 2 years follow up. Published 2014 in Hip International.
- Elisabeth Abdon, 2008. "Hip joint revision arthroplasty according to Wagner: outcome of operations performed at UsiL during 2002-2007".

## Supervisor for Master theses by students from Lund Institute of Technology

 Fredrik Samuelsson, 2005. "Finite element study of the human pelvis in hip arthroplasty - with special emphasize on the subchondral bone plate".

# Assistant supervisor for Master theses by students from Lund Institute of Technology

- o Andreas Olsson, 2001. "Automatic Roentgen Stereophotogrammetric Analysis"
- o Ingrid Hauer and Eirik Langjord, 2000. "A biomechanical study of the interface between PMMA bone cement and prosthesis stem for joint replacements".

# Clinical supervisor in orthopaedics:

o Anna-Kajsa Harding, Resident, Dept of Orthopedics, Lund, Sweden, 2003-2006

### THESIS OPPOSITIONS / OPPONENT / EXTERNAL EXAMINER

- Karin Rilby, Med Lic Thesis defence, Gothenburg University, Sweden, 27<sup>th</sup> January 2022.
   "Influence of stem design on total hip arthroplasty"
- o Kristian Kjaergaard. **PhD Thesis** defence, University of Southern Denmark, Odense, Denmark. 11<sup>th</sup> December 2020. "Measuring longevity of total hip replacements with vitamin E-doped liners"
- Georgios Chatziagorou. PhD Thesis defence, Sahlgrenska Academy, Gothenburg University,
   Sweden, 20<sup>th</sup> March 2020. "Periprosthetic femoral fracture after total hip replacement. Incidence, risk factors and treatment"
- Ammar Jobory, Med Lic Thesis defence, Lund University, Sweden, 18<sup>th</sup> Jan 2019.
   "Dislocation after hip fracture related arthroplasty -Incidence, risk factors and prevention"
- Bita Shareghi, PhD Thesis defence, Sahlgrenska Academy, Gothenburg University, Sweden,
   9<sup>th</sup> February 2018. "Wear and migration in total hip arthroplasty measured with Radiostereometric analysis. Methodological aspects and clinical aspects"
- Jon Dahl, PhD Thesis defence, Oslo University, Norway, 5<sup>th</sup> September 2014.
   "Wear and wear measurement in total and hemi hip replacement"
- Per Olav Østbyhaug, PhD Thesis defence, Trondheim University, Norway, 4<sup>th</sup> Oct 2013.
   "The importance of stem geometry for load transfer and primary stability in uncemented hip arthroplasty. Experimental laboratory studies on human cadaver femurs"
- Nina Dyrberg Lorenzen, PhD Thesis defence, Aarhus University, Denmark, 16<sup>th</sup> March, 2012.
   "Hip resurfacing Arthroplasty Evaluated by a Meta-Analysis, Microdialysis, Laser Doppler Flowmetry, RSA, DXA, X-ray and Clinical follow-up"
- Mats Salemyr, Med Lic Thesis defence, Danderyd Hospital, Stockholm, Sweden,
   23<sup>rd</sup> Sept,2011. "Periprosthetic bone remodelling and fixation in hip arthroplasty"
- Juozas Petruskevicius, PhD Thesis defence, Aarhus University, Denmark, 17<sup>th</sup> Sept, 2010.
   "Optimizing the cementation of femoral component in hip arthroplasty"
- Sarunas Tarasevicius, Med Lic Thesis defence, Lund University, Sweden, 4<sup>th</sup> Dec 2008.
   "Soft tissues in osteoarthritis and arthroplasty of the hip"

### ASSESSMENT COMMITTEE FOR PHD THESIS

- Hampus Stigbrand, Dept of Surgical Sciences, Akademiska Sjukhuset, Uppsala University,
   Sweden, 22<sup>nd</sup> April, 2022. "Revision Hip Arthroplasty. Impaction bone grafting and low-dose CT-based measurements of bone density and migration"
- Anders Pålsson, Dept of Health Sciences, Lund University, Sweden. March 19<sup>th</sup>, 2021. "Hips don't lie...or do they? Patient characteristics, diagnosis and physical impairments in young to middleaged patients with longstanding hip and groin pain"
- Aamir Mahdi, Örebro University Hospital, Örebro University, Sweden, 11<sup>th</sup> September 2020.
   "Psychological distress and contentment after primary total knee replacement". Chairman of Committee
- Vasileios Lempesis, Skåne University Hospital, Lund University, Sweden, 11<sup>th</sup> May 2018.
   "Epidemiology and Etiology of Childhood Fractures in Southern Sweden". Chairman of Committee.
- o Gunilla Müller, Skåne University Hospital, Lund University, Sweden, 10<sup>th</sup> Dec 2015. "Reduction of metal artefacts in MR imaging of patients with total hip arthroplasty"
- Maziar Mohaddes, Sahlgrenska Hospital, University of Gothenburg, Sweden, 20<sup>th</sup> Oct 2015.
   "Acetabular Revisions, Risk-factors & Prediction of Re-revision"
- Mats Salemyr, Danderyd Hospital, The Karolinska Institute, Stockholm, Sweden, 13<sup>th</sup> Dec 2013. "Uncemented Hip Arthroplasty in Primary and Revision Surgery. Patterns of bone remodeling and options to influence periprosthetic bone loss. Periprosthetic bone remodeling and fixation in hip arthroplasty"

### VISITING LECTURER/GUEST:

- Dept of Orthopaedics, Hospital for Special Surgery, New York, USA, 27<sup>th</sup>-29<sup>th</sup> October 2014 (Prof Mathias Bostrom)
- Dept of Orthopaedics, ZhuJiang Hospital of Southern Medical University, Kanton (Guangzhou), China, 2<sup>nd</sup>-6<sup>th</sup> Nov, 2013 (Prof Qi Li)
- Dept of Orthopaedics, Endo-Klinik, Hamburg, Germany, 17<sup>th</sup>-18<sup>th</sup> May, 2010 (Prof Thorsten Gehrke)
- Dept of Orthopaedics, Mayo Clinic, Rochester, Minnesota, 2<sup>nd</sup>-8<sup>th</sup> Dec 2007 (Prof David Lewallen)
- Dept of Orthopaedics, Dalhousie University, Halifax, Canada, 23<sup>rd</sup>-28<sup>th</sup> Aug 2005 (Assoc Prof Michael Dunbar)

### COURSE FACULTY MEMBER / INVITED SPEAKER

- o Nordic Joint Replacement Champions Meeting (Stryker), Copenhagen, 30<sup>th</sup>-31<sup>st</sup> May 2022.
- Hip Academy (Course organizer), second series, part 2 (Depuy. J&J), Stockholm, Sweden, 5<sup>th</sup>
   6<sup>th</sup> May 2022
- Hip Academy (Course organizer), second series, part 1 (Depuy. J&J), Malmö, Sweden, 7<sup>th</sup> 8<sup>th</sup> October 2021
- Public Webinar "When memory fails or joints are hurting". Lecture for the general population about "When is it time for a Joint Replacement?". Lund, Sweden, 6<sup>th</sup> October, 2021.

- Seminar on Periprosthetic hip fractures, Swedish Orthopaedic Society Meeting, Östersund, Sweden, 7<sup>th</sup> Sept 2021
- o Hip revision webinar on bone loss, Swedish Hip&Knee Society. 3<sup>rd</sup> June 2021
- Shorter stem hip arthroplasty: An evidence-based discussion (JRI Orthopedics). Webinar, 16<sup>th</sup> September 2020.
- Swedish Hip&Knee Society annual meeting, Hip Revision Session, Stockholm, Sweden 7<sup>th</sup> November 2019.
- Nordic Uncemented Hip Instructional Course, (Depuy. J&J), Hamburg, Germany, 5<sup>th</sup> 6<sup>th</sup> November 2019
- o Hip Academy, part 3 (Depuy. J&J), Hamburg, Germany, 4<sup>th</sup> 5<sup>th</sup> November 2019
- o Pathways International Orthopaedics Conference, London, England, 4<sup>th</sup> October 2019.
- o Break the revision cycle, Materialize Expert meeting, Copenhagen, 19th Sept 2019.
- 9<sup>th</sup> Congress of the International Society of Orthopaedic Centres, Lund, Sweden, 15<sup>th</sup>-18<sup>th</sup>
   May 2019
- o Uncemented Hips, Cadaveric Lab Meeting (Stryker). Tampere, Finland, 2<sup>nd</sup>-3<sup>rd</sup> April 2019
- o Southern China Joint Surgery Conference 2108. Guangzhou, China, 17<sup>th</sup> November 2018
- o Hip Academy, part 2 (Depuy. J&J), Stockholm, Sweden,  $14^{th} 16^{th}$  November 2018
- Uncemented Hip Conference 2018, Royal College of Physicians, London, United Kingdom, 15<sup>th</sup> October 2018.
- Battle Acetabular revision arthroplasty; restoring bone defects with 3D printed metal cup or bone grafting. The Dutch Orthopedic Society meeting. Rotterdam, the Netherlands, 10<sup>th</sup> October 2018.
- Present and Future Technologies in Acetabular Revisions. European Hip Society session during EFORT. Barcelona, Spain, 30<sup>th</sup> May-1<sup>st</sup> June, 2018
- o Cementless course and Cadaveric lab (Stryker), Tampere, Finland, May 27<sup>th</sup>-28<sup>th</sup>, 2018
- o Hip Academy, part 1 (Depuy. J&J), Malmö, Sweden, 18<sup>th</sup> 20<sup>th</sup> April 2018
- Swedish Orthopaedic Association, Annual Meeting, Umeå, Sweden, Aug 29<sup>th</sup> Sept 1<sup>st</sup> 2017.
- Course in Orthopaedic Surgery for Scrub Nurses (Smith&Nephew), Malmö, Sweden, 30-31<sup>st</sup> March 2017.
- o Advanced Acetabular reconstructions (Materialise), satellite symposium in conjunction with *Current Concept in Joint Replacement*, Florida, USA, 16<sup>th</sup> Dec, 2016
- o Anato Hip Symposium (Stryker), Madrid, Spain, 11th-12th February 2016.
- Instructional Course in Modern Cementing Technique (Zimmer-Biomet), Malmö, Sweden 27<sup>th</sup> November, 2015.
- Orthopaedic Revision Forum (Mobelife/Materialize) Amsterdam, The Netherlands, 12<sup>th</sup>-13<sup>th</sup> November, 2015.
- Acetabular Revisons Challenges and Possibilities, Symposium at Norwegian Orthopaedic Association, Annual Meeting, Oslo, Norway, 22 October, 2015.
- Hip & Knee Arthroplasty meeting, Norrland Arthroplasty Surgeon's annual meeting, Luleå, Sweden 15<sup>th</sup> October 2015.
- o European Hip Symposium (Stryker), Amsterdam, The Netherlands, 1st-2nd October, 2015

- Furlong Hip Meeting, Celebrating 30 years of Clinical Excellence (JRI). Liverpool, England, 14<sup>th</sup> September, 2015.
- The Hip&Knee Society Symposium, Swedish Orthopaedic Association, Annual Meeting, Falun, Sweden, Aug 27<sup>th</sup>, 2015.
- Västledens vårmöte (Sahlgrenska Academy regional meeting)(Stryker). Göteborg Sweden, 4<sup>th</sup> June 2015.
- Evidence and registry based excellence. International course on the perfectly cemented hip. (Link). Uppsala, Sweden, May 19<sup>th</sup>-20<sup>th</sup> May 2015.
- Cementing technique in hips and knees for residents (Biomet). Malmö, Sweden, 24<sup>th</sup> April 2015.
- Restoration Primary & Revision Hip Technique & Cadaveric Course (Stryker), Tampere, Finland, 4<sup>th</sup>-5<sup>th</sup> December 2014.
- Biomet Academy Infection & Revision Management, Modern Cementing Technique (Biomet), Malmö, Sweden, 29th September 2014.
- o Sirius THA: Beyond Compliance Training (Biomet), Bristol, England, 1st Sept 2014
- Instructional course in Total Hip Arthroplasty Technique, Swedish Orthopaedic Association , Annual Meeting, Helsingborg, Sweden, Aug 26<sup>th</sup>, 2014
- o Orthomedic Hip User Meeting (Orthomedic), Oslo, Norway, 12th-13th June, 2014
- o Infection Control and Modern Cementing Technique Orthopaedic Skills Academy (Biomet), Hamburg, Germany, 3<sup>rd</sup>- 4<sup>th</sup> April, 2014
- Revision Hip Instructional Course (Depuy Synthes Institute), Kiel, Germany, 12<sup>th</sup>-13<sup>th</sup> March, 2014.
- o Orthopaedic Revision Forum Challenges in the Hip (Mobelife), Leuven, Belgium, 14<sup>th</sup>-15<sup>th</sup> November, 2013.
- Guangzhou Hip Arthroplasty Reconstruction Symposium 2013, Kanton (Guangzhou), China, 3<sup>rd</sup> November, 2013.
- Nordic Hip Meeting primary to revision THA (Depuy Synthes), Stockholm, Sweden. 24<sup>th</sup>-25<sup>th</sup> October, 2013 (Course Chairman)
- o Exeter Academy Level 2 (Stryker), Copenhagen, Denmark, 16<sup>th</sup>-17<sup>th</sup> September 2013.
- o The Knee: A new era has arrived. International Sports Medicine & Knee Arthroplasty Meeting (Biomet), Prague, Czech Republic, 11<sup>th</sup>-14<sup>th</sup> September, 2013.
- Instructional course in Total Hip Arthroplasty Technique, Swedish Orthopaedic Society Meeting, Uppsala, Sweden, Aug 27<sup>th</sup>, 2013
- o 3<sup>rd</sup> International RSA Meeting, Lund, Sweden, 22-24 May, 2013. (Meeting organizer and chairman)
- Infection Control and Modern Cementing Technique Orthopaedic Skills Academy (Biomet), Hamburg, Germany, 11<sup>th</sup>-12<sup>th</sup> April, 2013
- Revision Hip Instructional Course (Depuy Synthes Institute), Kiel, Germany, 12<sup>th</sup>-13<sup>th</sup> March, 2013.
- Modern Cementing Technique, Instructional Course (Biomet), Malmö, Sweden, 8<sup>th</sup> February, 2013.
- o Revision Hip Symposium (Depuy), London, England, 12<sup>th</sup>-13<sup>th</sup> November, 2012.

- Pain Week 2012 by Mundipharma, Aspects on Osteoarthritis, Malmö, Sweden, 8<sup>th</sup> November, 2012,
- Advances in Technologies and Techniques: Controversies in Hips (Stryker). Oxford, England, 1<sup>st</sup> - 2<sup>nd</sup> November, 2012
- Primary to Revision THR Instructional Course with Anatomical Specimens (Biomet),
   Medical University of Vienna, Vienna, Austria, 1<sup>st</sup>-3<sup>rd</sup> October, 2012
- Instructional course in Total Hip Surgery Technique, Swedish Orthopaedic Society Meeting, Kristianstad, Sweden, Sept 4<sup>th</sup>, 2012
- Revision surgery Swedish Hip & Knee Society meeting at SOF, Kristianstad, Sweden, Sept 6<sup>th</sup>, 2012
- Infection Control, Cementing University Symposium (Biomet), Hamburg, Germany, April 12<sup>th</sup>-13<sup>th</sup>, 2012.
- o Evolution Hip Meeting (JRI Ltd), London, England, March 20th, 2012.
- o Principles in Basic Cementing Technique (Stryker), Malmö, Sweden, November 18th, 2011
- Moderne Zementiertechnik in der Hüft- und Knie-Endoprothethik. Prophylaxe und Therapie von Infektionen in der Hüft-, Knie und Unfallchirurgie (Biomet).
   Hamburg, Germany, Sept 29-30, 2011.
- Instructional course in Total Hip Surgery Technique, Swedish Orthopaedic Society Meeting, Karlskrona, Sweden, Aug 30<sup>th</sup> - Sept 2<sup>nd</sup>, 2011
- o 12th EFORT Congress, ExMEx session. Copenhagen, Denmark, 1st- 4th June 2011
- o AFOR Expert's hip symposium. Lucerne, Switzerland. 26th-28th may 2011.
- Contemporary fixation and bearings in total joint arthroplasty (Biomet) Copenhagen,
   Denmark, 14-15 April, 2011. (Co-Chairman)
- International Hip Symposium (Biomet) Contemporary Approaches in Total Hip Arthroplasty. Amsterdam, Holland, February 9-11, 2011
- Lubinus SP II Norwegian Hip Symposium (Link). Bergen, Norway, 1<sup>st</sup>-2<sup>nd</sup> December 2010.
- HAC-25 years celebration meeting (Furlong Foundation). The Royal College of Surgeons of England, London, England, November 26<sup>th</sup>, 2010
- Instr Course in Modern Cementing Technique (Biomet), Lund, Sweden. 7<sup>th</sup> 8<sup>th</sup> October, 2010
- o Modern Cementing Technique in TKR and THA. Prevention and Treatment of Infections in Hip, Knee and Trauma Surgery (Biomet). Hamburg, Germany, 15<sup>th</sup>-16<sup>th</sup> April 2010.
- Advanced Instructional Course in Modern Cementing Technique (Biomet). Lund, Sweden, 18<sup>th</sup>-19<sup>th</sup> March 2010. *Chairman*.
- Instr Course in Modern Cementing Technique (Biomet), Brno, Czech Republic. Nov 23, 2009
- o Stryker Orthopaedic Hip Academy, Snogeholm Castle, Sweden. November 10, 2009
- International Symposium on Clinical and Scientific Research in RSA. Hallifax, Cape Breton, Canada, October 22-25, 2009.
- 4<sup>th</sup> Benelux-Nordic Hip Symposium (Stryker) Strategy for the Next Decades Hip Arthroplasty, Copenhagen, Denmark, October 8-9, 2009

- Instructional course in Hip Cementing Technique, Swedish Orthopaedic Society Meeting,
   Jönköping, Sweden, August 25-28, 2009.
- Modern Cementing Technique with focus on Prevention and Treatment of Infections in Hip,
   Knee and Trauma Surgery (Biomet). Genoa, Italy, February 5-6, 2009
- 2<sup>nd</sup> International Symposium on Acetabular Reconstruction (Furlong Foundation). The Royal College of Surgeons of England, London, England, June 20-21, 2008
- 5<sup>th</sup> Asia Pacific Orthopaedic Symposium. Hip and Knee Arthroplasty, Singapore, August 15-19, 2006.
- o State of the art in hip arthroplasty (Biomet), Beijing, China, October 23-29, 2005
- o State of the art for the cemented implant (Biomet), Brussels, Belgium, October 7-8, 2005
- o Cementing University Summer Course (Biomet), Nice, France, June 27-29, 2001

### **MODERATOR/CHAIRMAN**

- Pathways International Orthopaedics Conference, London, England, 4<sup>th</sup> October 2019 (Moderator for hip revision session)
- 9th Congress of the International Society of Orthopaedic Centres, Lund, Sweden, 15<sup>th</sup>-18<sup>th</sup> May, 2019. (Moderator)
- European Hip Society 11<sup>th</sup> Congress 9-11 October 2014, Stockholm (Moderator for 2 sessions)
- Nordic Hip Meeting primary to revision THA (Depuy Synthes), 24<sup>th</sup> -25<sup>th</sup> October, 2013,
   Stockholm, Sweden. (Course Chairman)
- o 3<sup>rd</sup> International RSA Meeting, Lund, Sweden, 22-24 May, 2013. (Chairman and Meeting Organizer)
- Symposium: Cemented, Uncemented or Hybrid THA, Swedish Orthopaedic Society Meeting, Kristianstad, Sweden, Sept 4<sup>th</sup>, 2012 (Moderator and organizer)
- o 12th EFORT Congress, Copenhagen, Denmark, 1st- 4th June 2011 (Moderator)
- o AFOR Expert's hip symposium. Lucerne, Switzerland. 26th-28th may 2011 (Moderator)
- Course in Modern Cementing Technique in TKR and THR. Prevention and Treatment of Infections in Hip, Knee and Trauma Surgery. Hamburg, Germany, April 15-16, 2010 (Co-Chairman with Prof Thorsten Gehrke, and Lecturer)
- Advanced Instructional Course in Modern Cementing Technique. Lund, Sweden, March 18-19, 2010 (Chairman and lecturer)
- Free Paper session: Diagnostics, Planning and Technical Treatments in THA.
   10<sup>th</sup> EFORT Congress, Vienna, Austria, June 4<sup>th</sup>, 2009 (Moderator)

### **CONGRESS ORGANIZER:**

o 3<sup>rd</sup> International RSA Meeting, The 40 year Anniversary of Radiostereometry in Orthopaedics. Lund, Sweden, May 22-24, 2013.

#### **COURSE ORGANIZER:**

- o Hip Academy, second series, part 2 (Depuy. J&J), Stockholm, Sweden, 5<sup>th</sup> 6<sup>th</sup> May 2022
- o Hip Academy, second series, part 1 (Depuy. J&J), Malmö, Sweden, 7<sup>th</sup> 8<sup>th</sup> October 2021
- o Hip Academy, part 3 (Depuy. J&J), Hamburg, Germany, 4 5 November 2019

- o Hip Academy, part 2 (Depuy, J&J), Stockholm, Sweden, 14-16 November, 2018
- o Hip Academy, part 1 (Depuy. J&J), Malmö, Sweden, 18-20 April, 2018
- o Orthopedic Implant Course, Lund University, Sweden, 17-19 April, 2002
- o National Course in Biomechanics, Lund University, Sweden, 25-28 April, 2000
- o National Course in Biomaterials, Lund University, Sweden, 7-9 December, 1998

#### PEER REVIEWED AWARDS:

- o Best Poster Award EFORT, Lisbon, Portugal, June 2019
- o Best Poster Award Swedish Orthopedic Society Meeting, Helsingborg, Aug 2014
- o The Göran Selvik Prize, 16<sup>th</sup> EORS meeting, Bologna, June 2006

### **ADVISORY COUNSILS**

- o Nordic Joint Replacement Council of Expertise (Stryker) 2020 --
- o EU hip council of Expertise (Stryker) 2018 --

### JOURNAL BOARD MEMBER:

o Orthopaedics Today Europe - The Official Newspaper of EFORT, 2012--

#### SCIENTIFIC MANUSCRIPT REVIEWER

- o Acta Orthopaedica (2005-) (52)
- o Acta Radiologica (2014-) (3)
- o BMJ (British Medical Journal) (2015-) (2)
- o Clinical Orthopaedics and Related Research (2005-) (8)
- o Journal of Orthopaedic Research (2011-) (2)
- o The Knee (2017-) (3)
- o Abstract review committee for 12th EFORT Congress, Copenhagen 2011
- o McMaster PLUS (McMaster Online Rating of Evidence) (2006-) (26)

### **PATENTS**

- Method and system for planning implant component position, United States Patent and Trademark Office, Patent number: 10705677, Date of patent July 7<sup>th</sup>, 2020. Inventors: Matts Andersson and Gunnar Flivik
- Computer-implemented method and system for planning implant component position, European Patent, EP2908762, Date Aug 2<sup>nd</sup> 2017. Patent holder: Matts Andersson and Gunnar Flivik.
- Metod och system för planering av position för implantatkomponent, Swedish Patent,
   SE536759C2 and SE1251187A1, Date: July 15<sup>th</sup> 2014. Patent holder: Matts Andersson and
   Gunnar Flivik
- o Prosthesis Inserter; United States Patent, number 6,110,179; Date: Aug 29<sup>th</sup>, 2000; and European Patent EP0940128, Oct 25<sup>th</sup>, 2000.
  - Patent Holder: Gunnar Flivik, Krister Wulff and Andrew Storer

# SCIENTIFIC PUBLICATIONS

# Gunnar Flivik, MD PhD, Associate Professor

Dept of Orthopedics, Skåne University Hospital, Lund University, Sweden

#### JOURNAL PUBLICATIONS:

(8 first author, 27 last author)

- 56. Bergvinsson H, Zampelis V, Sundberg M, Tjörnstrand J, **Flivik G**. Vitamin E infused highly cross-linked cemented cups in total hip arthroplasty show good wear pattern and stabilize satisfactorily: a randomized, controlled RSA trial with 5-year follow-up. *Acta Orthopaedica* 2022;93:249-255 https://doi.org/10.2340/17453674.2022.1517
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- 48. Dyreborg K, Winther N, Lind T, Flivik G, Petersen MM. Evaluation of different coatings of the tibial tray in uncemented total knee arthroplasty. A randomized controlled trial with 5 years follow-up with RSA and DEXA. The Knee 2021;29:208-215 <a href="https://doi.org/10.1016/j.knee.2021.02.002">https://doi.org/10.1016/j.knee.2021.02.002</a>

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#### DISSERTATION (DOCTOR OF PHILOSOPHY):

*Flivik G*. Fixation of the cemented acetabular component in hip arthroplasty, Lund University, Dept of Orthopedics. March 2005

#### **BOOK CHAPTER**:

- Eriksson K, Flivik G, Sundberg M, Lindstrand A, Möller M, Brittberg M, Karlsson J, Roos H.
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- Lindstrand A and Flivik G., Allmänläkarpraktikan Ortopedi, Studentlitteratur 2012. Kapitlet Höftartros (the chapter on Hip Osteoarthritis), 2012; (4):69-92
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### **O**RAL PRESENTATIONS WITH ABSTRACTS AT SCIENTIFIC MEETINGS

- 43. Bergvinsson H, Zampelis V, Sundberg M, Tjörnstrand J, **Flivik G.** Vitamin-E doped polyethylene show superior wear pattern compared with conventional polyethylene in cemented cups. A randomized 5-year RSA study. 7<sup>th</sup> International RSA meeting, Oslo, Norway, 10-12 May 2021
- 42. Christensson A, Tveit M, Kesteris U, Flivik G. Migration comparison between medial congruent and cruciate retaining tibial components in TKA. A randomised controlled trial followed with RSA for 2 years. 7th International RSA meeting, Oslo, Norway, 10-12 May 2021
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- *Flivik G*, *Weber E, Flivik C, Sundberg M.* Migration and bone preserving effect of a short uncemented hip stem with and without collar. A randomized RSA and DXA study with 2 years follow-up. *59<sup>th</sup> NOF Congress, Reykjavik, Iceland, 13-15 June 2018.*
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- 32. Rathsach Andersen M, Winther N, Lind T, Schroder H, Flivik G, Mørk Petersen M. A randomized controlled RSA study comparing mono-block and modular design in uncemented tibia components. One year migration results in 54 patients. 4<sup>th</sup> International RSA Meeting, Bologna, Italy, 13<sup>th</sup>–15<sup>th</sup> May 2015.
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- 12. *Flivik G*, *Kristiansson I*, *Kesteris U*, *Ryd L*. The effect of removal or retention of the subchondral bone plate on cemented cup fixation. A randomized 2-year study using RSA. *SOF Annual Meeting*, *Örebro*, *Sweden*, *Aug 30 Sept 2*, 2005.

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- 10. Abdulghani S, Flivik G, Wang JS, McCarthy I. The importance of cement pressure application time and viscosity on cement penetration in an acetabular model. EORS, Amsterdam, The Netherlands, 25-27 Nov, 2004.
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- 8. Ornstein E, **Flivik G** et al. Rerevision after impaction grafting with the Exeter stem. A multicenter study. NOF, 52<sup>nd</sup> Congress, Reykjavik, Island, 16-19 June, 2004.
- 7. *Flivik G*, *Sanfridsson J*, *Önnerfält R*, *Kesteris U and Ryd L*. The effect of cement pressurization on the fixation of acetabular cups. A randomized study followed with Radiostereometric analyses for 5 years. *NOF*, 52<sup>nd</sup> *Congress*, *Reykjavik*, *Island*, 16-19 June, 2004.
- 6. Wang J-S, **Flivik G**, McCarthy I, Lidgren L. In Vitro stability of femoral plugs during cementation. EORS, 12<sup>th</sup> Annual Meeting, Lausanne, Switzerland, October, 2002.
- 5. **Flivik G**, Wulff K, Sanfridsson J and Ryd L. Improved cement pressurization in the acetabulum gives better cement penetration. *EFORT*, 6<sup>th</sup> congress, Rhodos, 3-7June, 2001.
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- 3. **Flivik G**, Wulff K and Ryd L. Exeter hip surgery with a temporary collar technique improves stem positioning and cementation. SOF Annual Meeting, Skövde, Sweden, 25-28 May, 1999.
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- 1. *Flivik G*, Yuan X, Ryd L, Juliusson R, Lidgren L. Effects of laminations on the strength of bone cement. *EORS*, 6<sup>th</sup> Annual Conference, Bergen, Norway, 15-16 June, 1996.

### Posters:

- 23. Rathsach Andersen M, Winther N, Lind T, Morville Schreöder H, Flivik G, Mörk Pedersen M. Tibia Component Under-Sizing Is Related To High Degrees Of Migration In Cementless TKA. - 116 Patients With Cementless Tibia Components. RSA Data, Blinded X-ray Assessments And Two Years Follow-Up. Virtual EFORT Congress,30 June-2 July 2021.
- 22. Dyreborg K, Flivik G, Rathsach Andersen M, Winther N, Solgaard S, Mörk Peterssen M. 1-Year Evaluation Of The Uncemented Echo Bi-Metric THA Stem Versus The Uncemented Bi-Metric Porous Primary THA Stem In A Randomized Controlled Trial Using RSA. EFORT 20<sup>th</sup> Congress, Lisbon, Portugal, 5-7 June 2019. (Got the Best Poster Award the Jacues Duparc Award)
- 21. Dyreborg K, Winther N, Lind T, **Flivik G**, Petersen, Mörk Peterssen M. 5-Year Follow-Up With RSA On A RCT With Comparison Of The Vanguard Tibial Component With Either Regenerex® Or

- Porous Plasma Spray Coating In Total Knee Arthroplasty. EFORT 20<sup>th</sup> Congress, Lisbon, Portugal, 5-7 June 2019.
- 20. Yilmaz M, Holm C, **Flivik G**, Lind T, Odgaard A, M. Petersen M. Early Follow-Up Of Hybrid Total Knee Arthroplasty (TKA) Using Persona® Prostheses A Prospective Study With Model-Based Radiostereometric Analysis (Mb-RSA). EFORT 20<sup>th</sup> Congress, Lisbon, Portugal, 5-7 June 2019.
- 19. Kiernan S, Sundberg M, Flivik G. Evaluation of 2D vs 3D templating in uncemented total hip arthroplasty. 59<sup>th</sup> NOF Congress, Reykjavik, Iceland, 13-15 June 2018.
- 18. Tägil M, Belfrage O, Sundberg M, Kesteris K, Flivik G. Locally Administered Bisphosphonates in Hip Revisions Using the Bone Impaction Technique. A Randomized Controlled Study with DXA and 5 Year Radiostereometry (RSA) Follow Up. ORS 2018 Annual Meeting, New Orleans, USA, 10-13 March 2018.
- 17. Kiernan S, Geijer M, Sundberg M, Flivik G. The importance of Biomechanical restoration for prosthesis stability. A radiostereometric randomized clinical study involving 75 patients with two-year follow-up. EFORT, 17<sup>th</sup> congress, Geneva, Switzerland, 1-4 June, 2016. (Got the prize "Best Poster Presentation")
- Khayyeri H, Väänänen S, Flivik G, Jurvelin J, Dahlberg L, Isaksson H. A Novel Method to Test Association of 3D hip Morphological Parameters with Hip Osteoarthritis. ORS 2016 Annual Meeting, Orlando, Florida, 5th-8th March 2016.
- 15. Belfrage O, Tägil M, Sundberg M, Kesteris U, Flivik G. The effect of a locally administered bisphosphonate in hip stem revisions using the bone impaction grafting technique. 2-years results from a randomized, placebo-controlled study evaluated with RSA and DXA. Swedish Orthopaedic Association Annual meeting, 25-29 August 2014, Helsingborg, Sweden. (Got Best Poster Award)
- 14. Weber E, Sundberg M, Flivik G. Design modifications of the uncemented Furlong hip stem result in minor early subsidence but do not affect further stability. A randomized, controlled RSA-study with 5 years follow-up. 3<sup>rd</sup> International RSA Meeting, Lund, Sweden, 22-24 May, 2013
- 13. Stoffel K, Flivik G, Yates P, Nicholls R. Intraosseous blood flow of the everted or laterally-retracted patella during total knee arthroplasty. AAOS Scientific Exhibit, Las Vegas, USA, 25-28 Febr 2009
- 12. Kesteris U, Rydholm U, **Flivik G.** Radiostereometric analysis of Durom hip resurfacing. *EFORT 8<sup>th</sup>* congress, Florence, Italy, 11-15 May, 2007.
- 11. Abdulghani S, Wang JS, McCarthy I, **Flivik G**. The effect of initial pressurisation on cement penetration in an acetabular model. *EFORT* 8<sup>th</sup> congress, Florence, Italy, 11-15 May, 2007.
- 10. Ørskov M, Abdulghani S, McCarthy I, Søballe K, Flivik G. A comparison of flanged and unflanged acetabular cup design: An experimental study using ceramic and cadaveric pelvises. EFORT 8<sup>th</sup> congress, Florence, Italy, 11-15 May, 2007.
- 9. Abdulghani S, **Flivik G**, Wang JS, McCarthy I. The effect of initial pressurisation on cement penetration in an acetabular model. ESB 2005, 19<sup>th</sup> European Conference on Biomaterials, Sorrento, Italy, 11-15 Sept 2005.
- 8. Thompson M, McCarthy I, **Flivik G**, Mattsson L, Ryd L, Lidgren L. The effect of changing antetorsion on forces on the proximal femur. 4<sup>th</sup> World Congress for Biomechanics, August 2002, Calgary, Canada.

- 7. Wang J-S, Taylor M, Flivik G, Lidgren L. Influence of stem roughness on the static shear strength of the stem-cement interface. European Orthopaedic Research Society, 9<sup>Th</sup>Annual Conference, Brussels, June, 1999, Page 99. (Trans. Orthop. Res. Soc., 24,872, 1999)
- 6. Wang J-S, **Flivik G**, Taylor M, Lidgren L. Influence of cement type on the stem-cement interface strength. European Orthopaedic Research Society, 9<sup>Th</sup>Annual Conference, Brussels, June, 1999, Page 86. (Trans. Orthop. Res. Soc., 24,871, 1999)
- 5. Wang J-S, **Flivik G**, Taylor M, Lidgren L. Stem-cement interface shear strength is influenced by stem surface finish but not cement interface porosity. *European Orthopaedic Research Society*, 9<sup>Th</sup>Annual Conference, Brussels, June, 1999, Page 87.
- 4. Flivik G, Wulff K. Exeter hip surgery with a temporary collar technique improves stem positioning and cementation. European Federation of National Associations of Orthopedics and Traumatology, 4<sup>th</sup> Congress, Brussels, Belgium, 1999.
- 3. Wang J-S, **Flivik G**, Taylor M, Lidgren L. Stem-cement interface shear strength is influenced by stem surface finish but not cement interface porosity. *Orthopaedic Research Society, 45<sup>th</sup> Annual Conference, Anaheim, CA, USA, February, 1999.*
- 2. Wang J-S, Taylor M, Flivik G, Lidgren L. Influence of stem roughness on the static shear strength of the stem-cement interface. Orthopaedic Research Society, 45<sup>th</sup> Annual Conference, Anaheim, CA, USA, February, 1999.
- 1. Ryd L, **Flivik G**, Juliusson R, Odgaard A. Flow resistance of trabecular bone in the femoral head and in the acetabulum. European Orthopaedic Research Society, 7<sup>th</sup>Annual Conference, Barcelona, Spain, 1997.