

BIOGRAPHICAL SKETCH

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NAME R.M. Castelein (René)	POSITION TITLE MD, PhD
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EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Leiden, the Netherlands	MD	1978	Medicine
Erasmus University of Rotterdam, the Netherlands	PhD	1988	Orthopaedic Surgery

A. Positions and Honors:

Positions and Employment

2003 – present	Chairman of the Department of Orthopaedic Surgery, University Medical Center Utrecht
2002 – present	Professor of Orthopaedic Surgery, University Medical Center Utrecht, The Netherlands
2008 – 2011	Chairman of the Division of Surgical Specialties, University Medical Center Utrecht
2003 – 2009	Head of the Specialist Training Program, UMC Utrecht, The Netherlands
1996 – 2002	Head of the Specialist Training Program, Isala Clinics, Zwolle, The Netherlands
1988 – 2002	Orthopaedic Surgeon, Isala Clinics, Zwolle, The Netherlands

Other Experience and Professional Memberships

2015 – 2017	President Nordic Spinal Deformities Society (NSDS)
2015 – 2018	President International Research Society of Spinal Deformities (IRSSD)
2011 – present	Board Member International Group for Advancement in Spinal Science
2016 – 2019	Visiting Professor University of Poznan, Poland
2016	Visiting Professor University of Montreal
2013 + 2018	Visiting Professor Chinese University of Hong Kong
2010 – 2012	Vice President Dutch Orthopedic Society
1992 – 1999	Scientific Secretary Dutch Orthopedic Society

Honors and Awards

2017	Yves Cotrel Foundation Award on the Etio-pathogenesis of Idiopathic Scoliosis
2015	Alexandre Suerman MD PhD Stipendium
2011	Alexandre Suerman MD PhD Stipendium
2006	Yves Cotrel Foundation Award on the Etio-pathogenesis of Idiopathic Scoliosis

B. Selected peer-reviewed publications or manuscripts in press (in chronological order):

1. Brink, R.C., Schlösser, T.P., Colo D., Vavruch, L., Stralen, M. van, Vincken, K.L., Malmqvist, M., Kruijt, M.C., Tropp, H., Castelein, R.M. (2016). Anterior Spinal Overgrowth is the Result of the Scoliotic Mechanism and is located in the Disc. Spine (Phila Pa 1976) (epub ahead of print.)
2. Cheng, J.C., Castelein, R.M., Chu, W.C., Danielsson, A.J., Dobbs, M.B., Grivas, T.B., Gurnett, C.A., Luk, K.D., Moreau, A., Newton, P.O., Stokes, I.A., Weinstein, S.L., Burwell, R.G. (2015). Adolescent Idiopathic Scoliosis. Nat. Rev. Dis. Primers, 24;1:15030.
3. Schlösser, T.P., Vincken, K.L., Rogers, K., Castelein, R.M., Shah, S.A. (2015). Natural sagittal spino-pelvic alignment in boys and girls before, at and after the adolescent growth spurt. European Spine Journal, 24(6), 1158-67.
4. Schlösser, T.P., Stralen, M. van, Brink, R.C., Chu, W.C., Lam, T.P., Vincken, K.L., Castelein, R.M., Cheng, J.C. (2014). Three-dimensional characterization of torsion and asymmetry of the intervertebral discs versus vertebral bodies in adolescent idiopathic scoliosis. Spine 1;39(19), E1159-66.
5. Schlösser, T.P., Shah, S.A., Reichard, S.J., Rogers, K., Vincken, K.L. & Castelein, R.M. (2014). Differences in early sagittal plane alignment between thoracic and lumbar adolescent idiopathic scoliosis. The Spine Journal, 14(2), 282-290.
6. Janssen, M.M.A., Vincken, K.L., Kemp, B., Obradov, M., Kleuver, M. de, Viergever, M.A., Castelein, R.M. & Bartels, L.W. Pre-existent Vertebral Rotation in the Human Spine is Influenced By Body Position. In 8th Biennial Meeting of the International Research Society of Spinal Deformities 2010 Vol. 158. Studies in Health Technology and Informatics (pp. 67-71) (2010)
7. Janssen, M.M.A., Kouwenhoven, J.W.M. & Castelein, R.M. The Role of Posteriorly Directed Shear Loads Acting on a Pre-rotated Growing Spine: a Hypothesis on the Pathogenesis of Idiopathic Scoliosis. In 8th Biennial Meeting of the International

8. Kouwenhoven, J.W.M. & Castelein, R.M. The pathogenesis of adolescent idiopathic scoliosis - review of the literature. *Spine*, 33(26), 2898-2908. (2008).

Supervision PhD theses (promotor)

- 2017 P. Rahnamay Moshtagh, 'Mechanobiology of Articular Cartilage: Consequences of Physical Activity and Advanced Glycation'
- 2015 M. Stegeman 'Fusion of the Tarsal Joints: Outcome, Diagnostics and Management of patient expectations'
- 2015 K. Wiegant 'Knee Joint Distraction Intrinsic Cartilage Repair and Sustained Clinical Benefit'
- 2014 T.P.C. Schlösser 'Adolescent Idiopathic Scoliosis: From Normal Spine Anatomy to Three-dimensional Deformity'
- 2014 H.J. Oostenbroek 'Limb reconstruction with the Ilizarov Method'
- 2013 D.A. van Kampen 'Combining Clinical Information and Patient Reported Outcome Measures in Orthopaedic Surgery'
- 2013 J.M. Brinkman 'Fixation stability and new surgical concepts of osteotomies around the knee'
- 2011 W.G. Horstmann 'Perioperative blood saving measures in total hip and knee arthroplasty'
- 2011 M.M.A. Janssen 'Human upright Spinopelvic Alignment and the Etio-Pathogenesis of idiopathic scoliosis'
- 2011 T. Vrtovec 'Evaluation of spinal and pelvic parameters from three-dimensional medical images'
- 2010 F. Intema 'Loading and unloading in the development and treatment of osteoarthritis'
- 2010 S. Ramwadhoebe 'Screening for developmental dysplasia of the hip in primary care: implementation by simulation'
- 2010 D.J.F. Moojen 'Implant Related Infections: Application of PCR-based Diagnostics and New Antimicrobial Strategies in Prevention and Treatment'
- 2010 B.C.H. van der Wal 'Hydroxyapatite-coated Uncemented Hip Stems and Bone Remodelling'
- 2009 J.H.M. Goosen 'Dilemmas in Uncemented Total Hip Arthroplasty'
- 2007 J.W.M. Kouwenhoven 'The Role of Intrinsic Spinal Mechanisms in the Pathogenesis of Adolescent Idiopathic Scoliosis'
- 2007 A.R. Vaccaro 'A Novel Thoracolumbar Trauma Classification System and Injury Severity Score (TLICS)'
- 2005 M. Spruit 'Surgical Treatment of Degenerative Disc Conditions of the Lumbar Spine'.

C. Research Support:

Grants PI	Years:	Status
Yves Cotrel Foundation Award	2017	Ongoing
K2M (restricted research grant)	2015-2017	Ongoing
Medtronic (restricted research grant)	2015, 2016	Completed
Alexandre Suerman MD PhD Stipendium	2015	Ongoing
Alexandre Suerman MD PhD Stipendium	2011	Completed
Yves Cotrel Foundation Award	2006	Completed