

**Pre-conference**  
**Wednesday 4 September**

Outside the official VISTA programme there is a special opportunity to take part in five interesting workshops. These workshops are complementary to the VISTA conference, additional fees are required.

09:00 – 12:00	<b>PRE-CONFERENCE WORKSHOPS</b>
09:00 – 10:30 10:30 – 12:00 Rosa 4-5	<p><b>PRE-CONFERENCE WORKSHOP 1 - The role of functional electrical stimulation in maximising Paralympic athlete health</b></p> <p>Prof.dr. Thomas Janssen – professor in Rehabilitation Research, Spinal Cord Injury and Disability Sports, Vrije Universiteit Amsterdam, Reade rehabilitation center and the Center for Adapted Sports Amsterdam</p> <p>Ralph Scholten – Physical therapist, Reade rehabilitation center, Amsterdam</p> <p>Vasilis Tomaras MSc – Human Movement Scientist, Reade rehabilitation center, Amsterdam</p> <p>Guido van Werven – Physical therapist, Reade rehabilitation center, Amsterdam</p>
09:00 – 10:30 10:30 – 12:00 Rosa 6	<p><b>PRE-CONFERENCE WORKSHOP 2 - Testing athletes on the Lode Esseda wheelchair ergometer</b></p> <p>Sonja de Groot, PhD – Associate professor, rehabilitation center Reade, Amsterdam</p> <p>Riemer Vegter, PhD – Assistant professor, Center for Human Movement Sciences, UMCG, RUG, Groningen</p> <p>Rick de Klerk, MSc. – PhD student, Center for Human Movement Sciences, UMCG, RUG, Groningen</p>
09:00 – 10:30 10:30 – 12:00 Calla 1	<p><b>PRE-CONFERENCE WORKSHOP 3 - Training the basketball shot using occlusion glasses</b></p> <p>Raoul Oudejans PhD – Senior researcher, Vrije Universiteit Amsterdam and Amsterdam University of Applied Sciences</p>
10:30 – 12:00 Calla 2	<p><b>PRE-CONFERENCE WORKSHOP 4 – The Dutch dream for Paralympic sports</b></p> <p>Raymon Blondel – President National Paralympic Committee of the Netherlands</p>
09:00 – 12:00 Calla 3	<p><b>PRE-CONFERENCE WORKSHOP 5 - Statistical learning techniques for Classification Research (duration: 3 hours)</b></p> <p>Rianne Ravensbergen, PhD – Post-doctoral Fellow, IPC Classification Research &amp; Development Centre for Athletes with Vision Impairment, Vrije Universiteit Amsterdam</p> <p>David Mann, PhD – Associate Professor, Director IPC Classification Research &amp; Development Centre for Athletes with Vision Impairment, Vrije Universiteit Amsterdam</p>

<b>Wednesday 4 September</b>	
09:00 – 20:00	<b>Conference Registration</b> Registration desk, foyer
09:00 – 12:00	<b>PRE-CONFERENCE WORKSHOPS</b>
13:00 – 14:30 Calla 1-2	<b>#1 FREE COMMUNICATIONS – Evidence-Based Classification</b> Chairperson: Prof. dr. Lucas van der Woude
13:00 – 13:15	<b>Development and reliability of a sport specific isometric strength test battery for para-kayak (#6)</b> A. Bjerkefors; M. Ekman; J.S. Rosén
13:15 – 13:30	<b>Relationship between arm impairment, isometric strength and performance in wheelchair rugby players (#85)</b> B. Mason; V. Altmann; M. Hutchinson; F. Bettella; N. Petrone; V. Goosey-Tolfrey
13:30 – 13:45	<b>The relationship between isometric and dynamic leg strength in elite para-cyclists and its use in para-cycling classification (#77)</b> J. Liljedahl; C. Nooijen; A. Bjerkefors; T. Arndt
13:45 – 14:00	<b>Posture-Cognition Dual-Tasking in Elite Athletes with Intellectual Impairment (#115)</b> R.C. Pineda; D. Van Biesen; R. Krampe; Y. Vanlandewijck
14:00 – 14:15	<b>Adaptive behaviour related to basketball sport performance in athletes with intellectual disability – a possible method for quantitative behaviour analysis for classification (#87)</b> K. McCulloch; D. Van Biesen; I. Noens; Y. Vanlandewijck
14:15 – 14:30	<b>Decision making and game performance of elite-basketball players with intellectual impairment: a step forward for an evidence-based classification system (#116)</b> I. Polo; J. Pérez-Tejero; J. Pinilla; D. van Biesen
13:00 – 14:30 Calla 3	<b>#2 FREE COMMUNICATIONS – Sociology</b> Chairperson: Dr. David Howe
13:00 – 13:15	<b>An Intense Sabbatical: What one mid-career researcher in spinal cord injury has learned about spinal cord injury since his son acquired one (#147)</b> S. Tweedy
13:15 – 13:30	<b>Parenting in the Paralympic Pathway: roles, obstacles and rewards (#14)</b> J. Coates; P.D. Howe
13:30 – 13:45	<b>Developmental Trajectories and Training Histories of Canadian and Australian Paralympic Athletes (#26)</b> N. Dehghansai; J. Baker; R. Pinder
13:45 – 14:00	<b>Re-presenting parasport bodies: Disability and the cultural legacy of the Paralympics (#54)</b> P.D. Howe; C.F. Silva; L. Misener; M. Silk

14:00 – 14:15	<b>The Development of Participation of Women in Para sport: A Comparison of Four IPC Sports (#24)</b> N.A. Dean; N. Scadden; A. Bundon; P.D. Howe
14:15 – 14:30	<b>Local Bamboo as a Cost-Effective Construction Material for Daily Use Wheelchairs and Sports Chairs: Increasing Mobility Accessibility for Persons with Disabilities in Socioeconomically Disadvantaged Settings (#28)</b> M. Scheffers; F. Doolan; Y. Tuakli-Wosornu; R. Cooper; B. Dapaah
14:30 – 15:30 Calla 1-2	<b>#3 SYMPOSIUM – Mental Health Preparation</b>
	<b>The approach of TeamNL to mental health in Paralympic sport. Psychological support for Paralympic elite athletes and coaches in the Netherlands (#163)</b> Speakers: P. Wylleman; P. Huybrechtse; S. van Essen Chairperson: Dr. Raoul Oudejans
14:30 – 15:30 Foyer	<b>#4 POSTER SESSION I</b>
	<u>Athlete Health and Well-being</u> <ul style="list-style-type: none"> <li>- <b>An exploration of the organisational stressors encountered by international disability footballers (#3)</b> J.B. Barker; J. Whittingham; M.J. Slater; R. Arnold</li> <li>- <b>Exploring the Effects of a Single Rational Emotive Behavior Therapy (REBT) Workshop in Elite Blind Soccer Players (#4)</b> J.B. Barker; A. Wood; M. Turner; P. Thomson</li> <li>- <b>Athletic Identity (AI) formation in novice, young adult Para swimmers with cerebral palsy who have high support needs (#7)</b> T. Block, E. Enright, E. Beckman, M. Connick, S.M. Tweedy</li> <li>- <b>The impact of functional classification on competitive anxiety among wheelchair basketball athletes (#8)</b> N. Bosma; N.W. van Yperen</li> <li>- <b>Physical Fitness Status Among Athletes Participating in Primary and Secondary School Disability Sports Competitions in Kenya (#91)</b> P. Bukhala; E. Sabiri</li> <li>- <b>Oral health-related quality of life of athletes with disabilities (#125)</b> L.R. Davi; L.P.C. Ferruzzi; D.C.B. Lima; D.G. de Freitas; M. Tavares; A.M.C. Prado</li> <li>- <b>Video analysis of difference in fall characteristics between Wheelchair Rugby and Wheelchair Basketball tournament (#80)</b> N. Maeda; Y. Urabe; R. Simizu; T. Kobahashi; J. Sasadai</li> <li>- <b>What are the psychological superiorities of Paralympic Athletes? (#95)</b> A. Mousavi; M. VaezMousavi</li> </ul>

- **Sleep quantity and quality in international wheelchair rugby players across a competitive period of the season (#96)**  
C. Murphy; V. Tolfrey; I. Hartescu
- **Interference of breathing in the efficiency of screening at programming stages with the help of upper limbs (#137)**  
M.F.F. Vara; R.N. Cordeiro; K.S. Urbinati; E. Scheeren; P. Nohama; R. Menslin

Socio-Economic Determinants of Paralympic Participation and Success

- **The comparison of how sport for people with intellectual impairment is organised across 10 European Countries (IDEAL project) (#149)**  
D. Van Biesen; A. Marin-Urquiza; J. Kerremans
- **Birth of a Para-Sports Nation? An evaluation of Brazilian societal perceptions of disability, para- sports and related milestones during its rise to Paralympic prominence since the start of the 21st century (#36)**  
R.A. Flindall; R. Rodrigues Pantoja
- **A study on intangible legacy of the Paralympics Focus on the recognition of the words referring to the Paralympics (#93)**  
M. Fujita
- **Moving Beyond the 3%: Building the Paralympic Pathway through Community-Based Research (#101)**  
T. Konoval; J. O'Rourke; A. Bundon; S. Lawson
- **Analysis of the organizational structure of National Governing Bodies of Disability Sport in Japan (#66)**  
K. Obuchi; M. Fujita; M. Saito; M. Kawanishi
- **Sustainability strategy for the high performance of the Brazilian Paralympic Committee for the 2017/2012 cycle (#10)**  
D.R. Calegari; R. Pereira de Souza; J. Fernandes Filho; I. Brandão Vieira; M. Conrado de Oliveira
- **Barriers to Sports Participation amongst Youth Refugees with Disabilities in Kenya: A Case of Kakuma Refugee Camp (#92)**  
E. Sabiri; P. Bukhala
- **Female Athletes in the Paralympic Movement: Past, Present and Future (#25)**  
N. Scadden; N.A. Dean; A. Bundon; P.D. Howe
- **From Social Barriers to Paralympic Participation to Socio-Economic Emancipation for Paralympic Success. An empirical analysis of the Cameroonian context (#142)**  
E. Songa Bidjocka

Evidence-based Classification

- **Time Motion Characteristics and Physiological Responses of Para-Footballers with Cerebral Palsy in Two Small Sided Games (#50)**  
M. Henríquez; A. Iturricastillo; R. Reina

- **Expert consensus statement to guide evidence-based classification of athletes for para taekwondo: A Delphi Study (#102)**  
D. M. O’Sullivan; O. Hansson
- **The basis for the development of a point-based classification system in CP-Football (#123)**  
R. Reina
- **Objective measures of impaired lower limb coordination in RaceRunning athletes with Cerebral Palsy (#126)**  
C. Riddle; M. Verheul; S. Psycharakis; S. Ainslie; J. Whitlam
- **Evaluation of impaired balance in para-athletes using smartphones (#128)**  
A. Roldán; C. Toledo; D. Barbado; J.M. Sarabia; C. Caballero; R. Reina
- **Evidence-based classification in para-athletics: Acoustic reaction in athletes with cerebral palsy (T35-T38) (#11)**  
J.P.C. Souza; C.W. Oliveira Filho; L.G. Santos; P.S. Freitas; M. Arruda

#### Integrative Approaches to the Preparation of Paralympic Athletes

- **The wheelchair tennis serve motion pattern: a case study exploring differences between classifications (#17)**  
C. D’Angeli; M. King; B. Mason; V. Goosey-Tolfrey
- **The effect of a weight control strategy in Para powerlifting performance using multivariate analysis (#49)**  
S. Hatanaka; Y. Kojima; T. Kinugasa
- **Efficient brain activity during grip force control in individuals with complete spinal cord injury (#97)**  
T. Nakanishi; H. Kobayashi; K. Nakagawa; H. Obata; K. Kudo; K. Nakazawa
- **The Effects of Warm-up on Simulated Wheelchair Rugby Game play and Thermoregulation (#100)**  
T. O’Brien; S. Briley; B. Mason; V. Goosey-Tolfrey
- **Differences in propulsion kinematics of highly trained wheelchair rugby players after a fatiguing bout of exercise (#105)**  
Y. T. Oh; B. Mason; S. Briley; T. O'Brien; V. Altman; V. Goosey-Tolfrey
- **Paralympic Sports Training Center: a proposal for a Paralympic sports service focused on high performance (#34)**  
R. Pereira de Souza; I. Brandão; J. Fernandes Filho

#### Technology and Engineering

- **Development of built-in inertial measurement unit for kinematic analysis in the boccia ball throwing (#19)**  
T.L.F. Souza; S. Peixoto; B. Guedes; M. Jancy Bezerra; Edgard
- **MY PARALYMPIC SPORT App (#43)**  
D. G. de Freitas; L. R. Davi

	<ul style="list-style-type: none"> <li>- <b>Does the Apple Watch® provide an accurate estimate of Push Counts for People Using Manual Wheelchairs? (#64)</b> K.S. Karinharju; A.M. Boughey; S.M. Tweedy; K.M. Clanchy; S.G. Trost; S.R. Gomersall</li> <li>- <b>A novel computer-controlled servo-driven dual-roller handrim wheelchair ergometer - a technical note (#23)</b> R. de Klerk; R.J.K. Vegter; H.E.J. Veeger; L.H.V. van der Woude</li> </ul> <p><u>Other:</u></p> <ul style="list-style-type: none"> <li>- <u>Accessibility to Sports</u> <b>Accessibility as a Paralympic legacy: A comparative case study of sports infrastructure in post- event Japan and Brazil (#153)</b> A.P. van der Veere; S. Geijer</li> <li>- <u>Applied biomechanics</u> <b>Anthropometric Characteristics of Iranian Males and Females Athletes with Disabilities (#81)</b> M.R. Mahmoudkhani; M. Doosti; S. Hasani</li> <li>- <u>Athlete and performance</u> <b>A head movement strategy of blind footballers during trapping an approaching ball (#89)</b> T. Mieda; M. Saito; M. Kokubu</li> <li>- <u>Athlete training and evaluation</u> <b>Correlation between body composition, VO<sub>2</sub>peak, and sprint times in high performance wheelchair rugby players (#83)</b> L.A. Malone; B. Kane; E. Moore; K. Miller</li> <li>- <u>Body Composition</u> <b>Body composition assessment in an athlete with a congenital limb deficiency (#47)</b> N. Hakamada; K. Shitara; Y. Kubo; Y. Ishige</li> <li>- <u>Nutrition</u> <b>Total energy expenditure and physical activity level of Japanese athletes with spinal cord injury, as measured using the doubly labeled water method (#94)</b> K. Motonaga; Y. Yamada; T. Yoshida; E. Kondo; T. Nakagata; H. Sagayama; M. Yoshino; N. Hakamada; M. Yamamoto; H. Takahashi; M. Hangai; T. Ogata</li> <li>- <u>Sports injury</u> <b>Video analysis of fall patterns of wheelchair basketball player by differences in classification of disability (#140)</b> R. Shimizu; Y. Urabe; J. Sasadai; N. Maeda</li> </ul>
15:30 – 16:00 Foyer	Coffee Break

16:00 – 17:30 Calla 1-2	<b>#5 INVITED SYMPOSIUM – Data Science to Optimize Sport Performance</b>
	Speakers: Joost Kok (NED), Ryuji Hiramatsu (JPN), Laura Gastaldi (ITA) Chairperson: Ms. Debbie Low
16:00 – 17:30 Calla 3	<b>#6 FREE COMMUNICATIONS – Athlete Health and Well-Being</b> Chairperson: Dr. Sonja de Groot
16:00 – 16:15	<b>Why are athletes bringing injuries into the Games? The risk profiles associated with the high pre-competition period injury rate at the Rio 2016 Paralympic Games: a multivariate analysis of 51,198 athlete days (#131)</b> P. Runciman; E. Jordaan; W. Derman
16:15 – 16:30	<b>A comparison of injuries sustained during the Sochi 2014 and Pyeongchang 2018 Paralympic Winter Games: results of the consecutive web-based Paralympic injury and illness surveillance study (#27)</b> W. Derman; P. Runciman; E. Jordaan; N. Webborn; C. Blauwet
16:30 – 16:45	<b>Incidence of sports-related injuries and illnesses in Paralympic athletes – a prospective 52-week study (#30)</b> K. Fagher; Ö. Dahlström; J. Jacobsson; T. Timpka; J. Lexell
16:45 – 17:00	<b>The relationship between shoulder ultrasound abnormalities, physical examination findings, and pain in wheelchair athletics (Track v Field) (#159)</b> N. Webborn; W. Derman; C. Blauwet; D. Morrissey; J. Chakraverty
17:00 – 17:15	<b>Preserving shoulder health in wheelchair users: The role of wheelchair propulsion induced fatigue and capacity (#9)</b> F.M. Bossuyt; U. Arnet; A. Cools; M.L. Boninger
17:15 – 17:30	<b>Relationship between shoulder pain assessments and wheelchair basketball performance (#117)</b> I. Polo; García-Gómez, S; Pérez-Tejero, J; Pinilla, J; Barakat, R.
17:45 – 19:00 Calla 1-3	<b>Opening Ceremony including keynote IPC Scientific Award Winner</b>
19:00 – 20:00 Foyer and Rosa 4-6	<b>Opening Reception</b>

## Thursday 5 September

08:00 – 17:00	<b>Conference Registration</b> Registration desk, foyer
08:15 – 09:10 Calla 1-3	<b>#7 KEYNOTE ADDRESS</b> <b>“Parasport Development from grassroots to sporting spectacle: A view from Africa”</b> Prof. Dr. Leslie Swartz, University of Stellenbosch (RSA) Chairperson: Dr. David Howe
09:10 – 09:30 Foyer	Short break
09:30 – 11:00 Calla 1-2	<b>#8 FREE COMMUNICATIONS – Evidence-Based Classification</b> Chairperson: Dr. David Mann
09:30 – 09:45	<b>Classification of Athletes with Coordination Impairments in Wheelchair Rugby (#150)</b> K. van Breukelen; E. Lammers
09:45 – 10:00	<b>Is possible the linkage of performance determinants in team para-sports with classification purposes? An example applied in CP-Football (#122)</b> R. Reina; D. Castillo; A. Iturricastillo; C. Toledo; J. Yanci
10:00 – 10:15	<b>The new kid on the World Para Athletics block: The evidence for classification measures to be included in RaceRunning classification (#151)</b> M.L. van der Linden; O. Corrigan; N. Tennant; M.H.G Verheul
10:15 – 10:30	<b>RaceRunning Classification within World Para Athletics: A Consensus Statement (#156)</b> M.H.G. Verheul; M.L. van der Linden; N. Tennant; H.J.C. Ravensbergen
10:30 – 10:45	<b>Minimal Impairment Criteria in Para Table Tennis for Standing Players with Physical Impairments: Evidence-Based Support for Revisions (#162)</b> S.K. Wu; Y. Li; P. Perez; J. Stefak
10:45 – 11:00	<b>The influence of arm and ski pole during alpine skiing (#160)</b> D. Wedeking; M. Swarén; J. Danvind; M. Lund Ohlsson
09:30 – 11:00 Calla 3	<b>#9 SYMPOSIUM – Beat the Heat</b>  Speakers: Hein Daanen (Vrije Universiteit Amsterdam, NED), Liz Broad (US Paralympics, USA), Tatsuru Ibusuki (Japan Para Athletics and World Para Athletics, JPN), Peter van der Vliet (International Paralympic Committee, GER) Chairperson: Prof. dr. Thomas Janssen
11:00 – 11:30 Foyer and Rosa 4-6	Coffee Break



11:30 – 13:00 Calla 1-2	<b>#10 INVITED SYMPOSIUM – Equipment &amp; Technology in Paralympic sports and applied towards cycling and handcycling</b>
	Speakers: Bryce Dyer (GBR), Sonja de Groot (NED), Barbara Springer (USA) Chairperson: Prof. dr. Lucas van der Woude
11:30 – 13:00 Calla 3	<b>#11 FREE COMMUNICATIONS – Sociology</b> Chairperson: Dr. Ivo van Hilvoorde
11:30 – 11:45	<b>Fit for Optimal Performance? Creating More Inclusive Sport Systems through Policy, Funding, and Evaluation Frameworks (#109)</b> C. Pentifallo Gadd; A. Hammond; A. Bundon; S. Lawson; T. Konoval
11:45 – 12:00	<b>“Too Many Chairs at the Table”: The Athlete Perspective of Inclusion/Exclusion in Paralympic Sport (#119)</b> N. Quinn; L. Misener
12:00 – 12:15	<b>The implementation of disability inclusive sport policy by sporting organizations in British Columbia, Canada (#48)</b> A. Hammond; C. Pentifallo Gadd; A. Bundon; T. Konoval
12:15 – 12:30	<b>Paralympic Sports as content in physical education sessions: the educative program "Inclusive Sports in School" in Spain (#104)</b> C. Ocete; M.Z. Ibarra; J. Coterón; J. Pérez-Tejero
12:30 – 12:45	<b>The Integration of disability sport into mainstream sports clubs, the Dutch case (#154)</b> C. van Lindert
12:45 – 13:00	<b>Questionnaire development to assess inclusion processes in badminton sport entities at European level: the “Badminton for All” project (#46)</b> A. Gutiérrez-Suárez; C. Ocete; J. Coterón; J. Pérez-Tejero
13:00 – 14:30 Foyer and Rosa 4-6	Lunch
14:30 – 16:00 Calla 1-2	<b>#12 INVITED SYMPOSIUM - From A to Z in Classification Research</b>
	Speakers: David Mann (NED), Emma Beckman (AUS), Scott Field (RSA) Chairperson: Prof. dr. Anne Hart
14:30 – 16:00 Calla 3	<b>#13 FREE COMMUNICATIONS – Athlete Preparation</b> Chairperson: Dr. Maarten Moen
14:30 – 14:45	<b>Variability in pacing strategies along race performance of swimmers with intellectual impairment at the Paralympic Games (#111)</b> J. Pérez-Tejero; A. Navandar; A. Almena; S. Veiga
14:45 – 15:00	<b>Evaluating the anaerobic responses to physical exercise in trained male Paralympic athletes with locomotor impairment (#12)</b> V. Cavedon; F. Alvití; C. Milanese; M. Bernardi

15:00 – 15:15	<b>Effect of six weeks of high intensity strength training on power and speed development of top Brazilian Paralympic sprinters (#78)</b> T. F. Lourenço; L. G. dos Santos; A. Veríssimo; C. Winckler
15:15 – 15:30	<b>Spinal cord injury and training status impact the differentiated RPE response to incremental wheelchair propulsion (#56)</b> M.J. Hutchinson; J. Kilgallon; C.A. Leicht; V.L. Goosey-Tolfrey
15:30 – 15:45	<b>Race performance trajectories of Tandem Para-cyclists (#68)</b> T. Kinugasa; R. Hiramatsu
15:45 – 16:00	<b>The influence of equimolar nitrate doses from beetroot juice and sodium nitrate on upper and lower body exercise in paralympic athletes and able-bodied men (#37)</b> J.L. Flueck; A. Gallo; P. Bracher; C. Perret
16:00 – 19:00 Sporthallen Zuid	Side Event Workshop Wheelchair Rugby/Boccia
16:00 – 19:00 Amsterdam Noord	Side Event Visit to Friendship Sports Center
21:00 – 23:00 Amsterdam Inner City	Informal Networking Opportunity over Drinks (optional)

## Friday 6 September

08:00 – 17:00	<b>Conference Registration</b> Registration desk, foyer
08:15 – 09:10 Calla 1-3	<b># 14 KEYNOTE ADDRESS</b> <b>“Fair Play ... Play it Fair”</b> Prof. Dr. Marjan Olfers, professor Sports & Law, Vrije Universiteit Amsterdam (NED) Chairperson: Dr. Marije Deutekom
09:10 – 09:30 Foyer	Short break
09:30 – 11:00 Calla 1-2	<b>#15 FREE COMMUNICATIONS - Athlete Health and Well-Being</b> Chairperson: Prof. dr. Gudrun Doll-Tepper
09:30 – 09:45	<b>Short-term mental health effects of training for the HandbikeBattle and associations with physical capacity (#72)</b> I. Kouwijzer; S. de Groot; C.M.C. van Leeuwen; L.J.M. Valent; C.F. van Koppenhagen; L.H.V. van der Woude; M.W.M. Post
09:45 – 10:00	<b>Incidence of head injuries and concussion among Swedish Paralympic athletes – a 52-week prospective study (#76)</b> J. Lexell; G. Lovén; K. Fagher
10:00 – 10:15	<b>The relationship between disability-related identities and well-being in elite para athletes (#16)</b> C. Cunningham; J. B. Barker; M. J. Slater
10:15 – 10:30	<b>Sleep habits, quality and chronotype of Paralympic athletes in the preparation for Tokyo 2020 Games (#35)</b> O. Fliess Douer
10:30 – 10:45	<b>Psychological Preparation for Paralympians (#84)</b> J. Martin
10:45 – 11:00	<b>Non-Accidental Harms in Athletes with Impairment: A State-of-the-Art Review (#145)</b> Q. Sun; Y. Tuakli-Wosornu; M. Gentry; K. Ona-Ayala; F. Doolan; B. Caldwell; T. Ottesen; N. Naushad; P. Huang; S. Kirby
09:30 – 11:00 Calla 3	<b>#16 FREE COMMUNICATIONS - Athlete Preparation</b> Chairperson: Ms. Debbie Low
09:30 – 09:45	<b>Relationship between shoulder range of motion and specific clinical test before and after shoulder home-based exercise program in elite wheelchair basketball players (#40)</b> S. García-Gómez; J. Pérez-Tejero; R. Barakat

09:45 – 10:00	<b>Citius, Altius, Fortius? - A 10 year analysis of women's T54 wheelchair athletics performance development (#113)</b> C. Perret
10:00 – 10:15	<b>The road to the silver medal at 2016 Rio Paralympic Games: game related statistic analysis of the Spanish wheelchair basketball male team (#110)</b> J. Pérez-Tejero, J. Pinilla, J. Aceituno
10:15 – 10:30	<b>Wheelchair mobility performance of elite wheelchair tennis players during four field tests: inter-trial reliability and construct validity (#127)</b> T. Rietveld; R.J.K. Vegter; R.M.A. van der Slikke; A.E. Hoekstra; L.H.V. van der Woude; S. de Groot
10:30 – 10:45	<b>Crank fore-aft position affects economy and technique in trained recumbent handcyclists (#144)</b> B. Stone; B.S. Mason; M.B. Warner; V.L. Goosey-Tolfrey
10:45 – 11:00	<b>Evaluating the impact of sport activity on body composition in subjects with physical impairments (#13)</b> V. Cavedon; C. Zancanaro; C. Milanese
11:00 – 11:30	Coffee Break Foyer and Rosa 4-6
11:30 – 13:00	<b>#17 INVITED SYMPOSIUM - The Long-Term Impact of High Quality Social Research</b> Calla 1-2
	Speakers: Karen DePauw (USA), Stephanie Wheeler (USA), David Howe (CAN) Chairperson: Dr. Ivo van Hilvoorde
11:30 – 13:00	<b>#18 FREE COMMUNICATIONS – Evidence-Based Classification</b> Calla 3 Chairperson: Dr. David Mann
11:30 – 11:45	<b>An investigation of classifiers' perceptions of working with athletes with a disability (#75)</b> J. Lawson; J. Turnnidge; M. Habash; M. Watson; A. Latimer-Cheung
11:45 – 12:00	<b>"We know who is a cheat and who is not. But what can you do?": Athletes' Perspectives on Classification in Visually Impaired Sport (#118)</b> B. Powis; J. Macbeth
12:00 – 12:15	<b>Getting a grip on classification in judo: Developing evidence-based classification for judo athletes with vision impairment (#74)</b> K. Krabben, R. Ravensbergen, D. Mann
12:15 – 12:30	<b>When does vision impairment limit performance in swimming – towards evidence-based minimum impairment criteria (#121)</b> R.H.J.C. Ravensbergen; L. de Wit, I. Wouters; D.L. Mann

12:30 – 12:45	<b>Exploration of the Minimum Visual Impairment Criteria for Para Alpine Skiing using Simulated Vision Impairments (#18)</b> K. Dalton; A. Stalin
12:45 – 13:00	<b>Exploration of the Minimum Visual Impairment Criteria for Para Nordic Skiing using Simulated Vision Impairments (#143)</b> A. Stalin; K. Dalton
11:00 – 11:30 Foyer and Rosa 4-6	Lunch
14:30 – 16:00 Calla 1-2	<b>#19 INVITED SYMPOSIUM – Prevention of Injury and Protection of the Health of the Athlete</b>
	Speakers: Willem van Mechelen (NED), Mohammad Vaez Mousavi (IRI), Anja Hirschmueller (GER) Chairperson: Prof. dr. Wayne Derman
14:30 – 16:00 Calla 3	<b>#20 FREE COMMUNICATIONS – Technology and Engineering</b> Chairperson: Prof. dr. Rory Cooper
14:30 – 14:45	<b>A Novel Cost-Efficient Wheelchair Training Roller for Persons with Disabilities in Economically Disadvantaged Settings: EasyRoller (#29)</b> F. Doolan; M. Scheffers; Y. Tuakli-Wosornu; R. Cooper; J. Buckley
14:45 – 15:00	<b>Development and first results of the Wheelchair Exercise and Lifestyle Study (WHEELS) app: a mobile lifestyle application to stimulate physical activity, healthy diet and relaxation in wheelchair users with spinal cord injury or lower limb amputation (#53)</b> J.F.M. Holla; L. te Loo; S. Dankers; E. Nijhuis; D. Hoevenaars; H. Houdijk; T.W.J. Janssen; M. Deutekom
15:00 – 15:15	<b>The Alberta Adaptive Contact (AACT) Database – Geospatial Tracking of Accessible Resources Available to an Athlete / Participant (#138)</b> O. Sawicki
15:15 – 15:30	<b>Wheelchair Mobility Performance enhancement by changing wheelchair properties; what is the effect of grip, seat height and mass? (#152)</b> R.M.A van der Slikke; A.M.H. de Witte; M.A.M. Berger; D.J.J. Bregman; H. E.J. Veeger
15:30 – 15:45	<b>The differences between synchronous and asynchronous submaximal handcycling in light of practice: effects on physiology and force production (#73)</b> C. Kraaijenbrink; R.J.K. Vegter; H. Wagner; L.H.V. van der Woude
15:45 – 16:00	<b>Validity of two wheelchair-mounted devices for measuring wheelchair speed and distance during wheelchair-based activities (#63)</b> K.S. Karinharju; L.T. Yeo; S.R. Gomersall; K.M. Clanchy; S.G. Trost; S.M. Tweedy

16:00 – 18:00 Foyer and Rosa 4-6	<b>#21 POSTER SESSION 2 and Exhibition</b>
	<p><u>Athlete Health and Well-being</u></p> <ul style="list-style-type: none"> <li>- <b>Shoulder muscle onset activation patterns in wheelchair basketball players compared with non-wheelchair users (#41)</b> S. García-Gómez; M. Hoozemans; D.J. Veeger; J. Pérez-Tejero</li> <li>- <b>Criterion validity of a field-based assessment of aerobic capacity in wheelchair rugby athletes (#146)</b> V.L. Goosey-Tolfrey; S. de Groot; K. Tolfrey; T.A.W. Paulson</li> <li>- <b>Energy expenditure in rest and during wheelchair activities in daily life in people with chronic spinal cord injury (#51)</b> D.P. Hoevenaars; Y. Ma; H.L.D. Horemans; J. Holla; R.G. Memelink; P.J.M. Weijs; R.E. De Gouveia da Costa Cachucho; J.B. Bussmann; M. Deutekom; W. Kraaij; S. de Groot; T.W.J. Janssen</li> <li>- <b>Prevalence in painful shoulder among wheelchair marathon athletes (#58)</b> T. Ibusuki; Y. Kamijo; F. Tajima</li> <li>- <b>Injury epidemiology and preparedness in Para powerlifters at the Rio 2016 Paralympic Games: an analysis of 1410 athlete-days (#107)</b> O. Ayala; P. Huang; X. Li; W.E. Derman; J. Kissick; N. Webborn; C. Blauwet; J. Stomphorst; Y.A. Tuakli-Wosornu</li> <li>- <b>Exploration of Differences in Sources of Confidence for Team and Individual Division I Collegiate Able-Bodied Athletes and Paralympic Athletes in the United States (#39)</b> W. Lawrence; A.J. Forber-Pratt; E. Kaiser</li> <li>- <b>Can the anthropometric method detect differences in regional and percent body fat of athletes with spinal cord injury? (#45)</b> L.I.G.L. de Oliveira; S.F.M. de Oliveira; M. da Cunha Costa</li> <li>- <b>Evaluation of Dietary Supplement Use in Wheelchair Rugby Athletes (#79)</b> R.F. Madden; J. Shearer; D. Legg; J.A. Parnell</li> <li>- <b>Training and Competition Injury and Illness Surveillance Using a New Paralympic Surveillance Classification (#90)</b> S. Miller; J. Wass; C. Lander; T. Paulson</li> <li>- <b>Evaluation of Dietary Supplement Use in Wheelchair Rugby Athletes (#108)</b> J.A. Parnell; R.F. Madden; J. Shearer; D. Legg</li> <li>- <b>Comparison of falling frequency by classification and wheelchair type in wheelchair rugby (#136)</b> J. Sasadai; Y. Urabe; R Shimizu; T. Kobayashi; N. Maeda</li> <li>- <b>Characteristics of physic, static posture, and shoulder range of motion in Japanese elite para swimming athletes with unilateral congenital upper limb deficiency. A case series study (#141)</b> K. Shimura; K. Koizumi; T. Yoshizawa; T. Aoki</li> </ul>

- **Increasing core body temperature of para-sports athletes during typical training session in a hot environment in Japan: Three cases of a wheelchair tennis player, a wheelchair badminton player, and a congenital one-forearm-defect badminton player (#148)**

S. Ueki

#### Athlete and Coach Education

- **Introducing the Para Coach Project (2018-21) and preliminary workforce data (#55)**  
T. Huntley; A. Whitehead; A. Ryrie; C. Cushion
- **Effects of a backrest and vertical bar in seated shot put and javelin throws (#65)** K. Kawabata; T. Ibusuki; C. Nakamura; N. Kitabayashi; S. Kemmochi; H. Makita; K. Seo; T. Mitsui; Y. Kamijo; F. Tajima
- **Analyzes of Participants of the “Citizen Athletes Program” (#135)**  
V. Santos Oliveira; V. Severino Neto; L.G.F. Santos; C. Winckler

#### Evidence-based Classification

- **Expert consensus statement to guide evidence-based classification of vision-impaired athletes in track athletics: a Delphi study (#1)**  
P.M. Allen; R. Dolan; H. Croxall; R. Ravensbergen; A. Brooks; D.L. Mann
- **Time-motion analysis in male judo athletes with vision impairment: analysis of the Rio 2016 Paralympic Games (#71)**  
R. Kons; K. Krabben; D. Mann; D. Detanico
- **Handcycling classification: A first look into the current system (#22)**  
R. Muchaxo; S. De Groot; T. Janssen; L. Van der Woude; C. Nooijen
- **Sport-specific Classification for Football 5-A-Side: A Three Phase Method to Establish the Minimum Impairment Criteria (#132)**  
O.R. Runswick; H.J.C. Ravensbergen; D.L. Mann; P.M. Allen; N. Datson; P. Northeast; S. Blacker; S. Myers
- **Initial Steps To The Development Of An Evidence Based Classification System In Wheelchair Fencing (#157)**  
A. Villiere; E. Mashkovskiy

#### Integrative Approaches to the Preparation of Paralympic Athletes

- **Thermography applied in sitting volleyball (#2)**  
M.C. Haiachi; H. Almeida Júnior; A.P. Lima
- **Classification significantly impacts match load: implications for practice using the example of Visually Impaired cricket (#57)**  
M.J. Hutchinson; V.L. Goosey-Tolfrey

- **An evaluation of embedded sport science support within the daily training environment of a Paralympic wheelchair rugby athlete (#67)**  
B. Kean; L. Hogarth; B. Burkett
- **Attempt to evaluate gross upper extremity muscle strength in overhead position for para swimming athletes with unilateral congenital upper limb deficiency. A development of upper extremity prone push test (#69)**  
K. Koizumi; K. Shimura; T. Yoshizawa; T. Aoki
- **Goalball game Effect's control during a preparation for World Championships (#161)**  
C. Winckler; T. Lourenço; A. Tossin, A. Tramp; L.G.T.F. Santos

#### Technology and Engineering

- **Performance and risk of injury during manual wheelchair propulsion with a tennis racket (#31)**  
M. Astier; I. Alberca; F. Chénier; E. Watelain; J. M. Vallier; D. Pradon; A. Faupin
- **Sprint speed and propulsion asymmetry in wheelchair rugby (#32)**  
S. Bakatchina; D. Pradon; M. Astier; T. Weissland; A. Faupin
- **Comparison of the MMG signal in the assessment of spasticity between patients with supraspinal lesions and spinal cord injuries - Preliminary studies (#33)**  
M. de Fátima Fernandes Vara; E. da Luz dos Santos; C. Diehl Nogueira, E. Krueger; Guilherme Nunes Nogueira Neto; P. Nohama
- **Crank fore-aft position alters the distribution of work over the push and pull phase during synchronous recumbent handcycling of able-bodied participants (#155)**  
R.J.K. Vegter; B.S. Mason; B. Sporrel; B. Stone; L.H.V. van der Woude; V.L. Goosey-Tolfrey

#### Socio-Economic Determinants of Paralympic Participation and Success

- **Mobilizing United Nations Human Rights instruments for All in and through Sport (#86)**  
G. Mayr; G. Masdeu-Yelamos, C. Carty, S. Carney
- **The Statistical Analysis of the Medal Ratio At the Olympic Games and the Paralympic Games from a Socio-Economic data (#158)**  
T. Watari; N. Ideguchi

#### Other

- Accessibility to Sports  
**Accessibility as a Paralympic legacy: A comparative case study of sports infrastructure in post- event Japan and Brazil (#42)**  
A.P. van der Veere; S. Geijer



- Athlete Development Pathway  
**Development trajectories of Paralympic medalists (#70)**  
Y. Kojima; S. Hatanaka; R. Hiramatsu; T. Kinugasa
- Communication of Paralympic Goalball athletes  
**Elite Blind Athletes' Perceptions of the Role of Eye Contact in the Sport of Goalball (#60)**  
E.B. Jenks; A.B. Jenks
- Educative setting  
**The promotion of Paralympic sports in the educative settings: the educative program "Inclusive Sports in School" (#103)**  
C.Ocete; J. Pérez-Tejero; Polo,I.; M.Z. Ibarra
- Inclusive fitness facilities  
**Barriers and facilitators for fitness centre participation among adult people with or without physical disabilities: A systematic scoping review (#98)**  
H. Nikolajsen; L. Fleng Sandal; C. Juhl; J. Troelsen; B. Juul-Kristensen
- Inclusive para-sports; Inclusion in Physical Education...  
**Attitudes' change towards different impairments using three non-competitive forms of football/soccer (#112)**  
A. Pérez-Torralba; S. González-Víllora; R. Reina; M.J. Sierra-Díaz
- Novel Initiatives: Paralympic Education and Awareness  
**The Impact of a Paralympic Education and Awareness Intervention on University Student Attitudes Toward Inclusive Sport and Fitness (#88)**  
C. McKay; J. Yeon Park
- Nutrition  
**Energy and fluid intakes in Japanese Paralympic alpine skiers during the competition period (#164)**  
M. Yoshino; N. Hakamada; K. Motonaga; Y. Ishige
- Paralympic Disparities in Media Coverage  
**Media Coverage of the Paralympics: Can Instagram Fix the Disparity? (#134)**  
D. Saenz; J. Lou
- Physiology and performance  
**Age-related changes in para and wheelchair racing athlete's performances (#139)**  
J. Schipman; P. Gallo; A. Marc; J. Antero; J. Toussaint; A. Sedeaud; A. Marck
- Quality of life in athletes with disabilities  
**Influence of an adapted physical activity program on quality of life in participants with physical disabilities from a Chilean rehabilitation center (#15)**  
M. Cornejo; M. Henríquez; J. Henríquez; T. Durán; N. Rozas
- School Paralympics evaluation  
**Evolving the athletics in the Brazilian school Paralympics (#20)**

	<p>T.L.F. Filgueira Souza; M.J. Jancy Bezerra; S. Peixoto; D. Roberto; J. Irineu; I. Brandão; B. Guedes; Edgard</p> <p>- <u>Sport Policy for athlete health</u></p> <p><b>The comparative study of sport policy for athlete health in the Paralympic Movement: Japan and Korea (#61)</b></p> <p>K. Jung; D.M. Kim; J.W. Lee; F. Tajima</p>
19:00 – 23:00	<p><b>GALA DINNER</b> (additional fee)</p> <p>Calla 1-3</p>

## Saturday 7 September

08:00 – 14:00	<b>Conference Registration</b> Registration desk, foyer
08:15 – 09:10 Calla 1-3	<b>#22 KEYNOTE ADDRESS</b> <b>“The past, present and future of Paralympic Sports Medicine”</b> Prof. Dr. Nick Webborn, Clinical Professor of Sport and Exercise Medicine, School of Sport and Service Management, University of Brighton and Sports Medicine lead, Centre for Sport and Exercise Science and Medicine (GBR) Chairperson: Prof. dr. Gudrun Doll-Tepper
09:10 – 09:30 Foyer	Short break
09:30 – 10:30 Calla 1-2	<b>#23 FREE COMMUNICATIONS - Athlete Health and Well-Being</b> Chairperson: Prof. dr. Wayne Derman
09:30 – 09:45	<b>Modifiable atherosclerotic cardiovascular risk factors in Paralympic athletes with a locomotor impairment: prevalence and relationship with aerobic fitness and sport type (#5)</b> M. Bernardi; E. Cavarretta; P.G. Curatulo; D. Dante; F. Parisi; R. Lanzano; M.R. Squeo; P.E. Adami; A. Spataro; A. Pelliccia
09:45 – 10:00	<b>Differences in body composition in various wheelchair sports (#38)</b> J.L. Flueck
10:00 – 10:15	<b>A relationship between retiring rate and ambient temperature during the past 14 years of Oita International Wheelchair Marathon Race (#62)</b> Y. Kamijo; T. Mitsui; T. Ibusuki; F. Tajima
10:15 – 10:30	<b>Noncarious cervical lesions, cervical dentin hypersensitivity and gingival recession: prevalence, risk factors and quality of life in athletes with disabilities (#124)</b> L.R. Davi; D.C.B. Lima; L.P.C. Ferruzzi; I.O. Cardoso; D.G. de Freitas; D.C. Mendes; P.V. Soares
09:30 – 10:30 Calla 3	<b>#24 FREE COMMUNICATIONS – Technology and Engineering</b> Chairperson: Prof. dr. Rory Cooper
09:30 – 09:45	<b>The effect of prosthetic alignment on prosthetic and total leg stiffness while running with simulated running-specific prosthesis (#44)</b> A. Groothuis; H. Houdijk
09:45 – 10:00	<b>Putting the best foot forward – a randomised controlled cross-over trial investigating functional capacity in South African lower limb amputees (#130)</b> P. Runciman; J. Cockcroft; W. Derman
10:00 – 10:15	<b>Using instrumented Running Specific Prostheses during sprinting and long jumping for performance assessment of elite Paralympic athletes (#114)</b>

	N. Petrone; G. Costa; G. Foscan; R. Boekestijn; G. Luca Migliore; A.G. Cutti
10:15 – 10:30	<b>Estimation of muscle work in cross-country sit-skiing (#106)</b> M. Lund Ohlsson; J. Danvind; L.J. Holmberg
11:00 – 11:30 Foyer and Rosa 4-6	Coffee Break
11:00 – 12:30 Calla 1-2	<b>#25 INVITED SYMPOSIUM – Sport Psychology</b>
	Speakers: John van de Kamp (NED), Raoul Oudejans (NED), Sascha Haans (NED) Chairperson: Dr. Peter van de Vliet
11:00 – 12:30 Calla 3	<b>#26 FREE COMMUNICATIONS – Evidence-Based Classification</b> Chairperson: Prof. dr. Anne Hart
11:00 – 11:15	<b>Tethered swim performance in Para swimmers with physical impairment (#52)</b> L. Hogarth; B. Burkett; C. Payton
11:15 – 11:30	<b>Development of an objective measure of movement coordination for swimmers with neurological impairments (#82)</b> A. Maia; L. Hogarth; B. Burkett; C. Payton
11:30 – 11:45	<b>Handcycling classification: Influence of trunk strength on performance (#21)</b> R. Muchaxo; S. De Groot; T. Janssen; L. Van der Woude; I. Kouwijzer; C. Nooijen
11:45 – 12:00	<b>Inter-rater reliability of the new classification system for Para Va'a (#129)</b> J. Rosén; V. Goosey-Tolfrey; K. Tolfrey; T. Arndt; A. Bjerkefors
12:00 – 12:15	<b>The relation between performance measures in para-cycling classification research (#99)</b> C. Nooijen; A. Bjerkefors; J. Liljedahl; R. Muchaxo; T. Janssen; L. van der Woude; T. Arndt; S. de Groot
12:15 – 12:30	<b>Rapid review of performance determinants in Para-Dressage (#59)</b> S.J. Hobbs; L. St George; J. Read; E.H. Littlefair; J. Williams; R. Stockley; C. Thetford; J. Sinclair; H.M. Clayton
12:30 – 14:00 Foyer and Rosa 4-6	Lunch