

Dear Network Member,

A warm welcome to the Winter digest of the World Rugby Science Network. It has been a great 12 months for the Network. We were very delighted to be able to support the inaugural Conference of the World Rugby Science Network (RSNLive15) that took place concurrently at the Universities of Bath (UK) and Cape Town (South Africa) back in September. For your perusal we have included in the digest links to a sample of the presentations from that day.

In addition to the inaugural Conference we now have over 1200 members registered, with a further 4000 followers on social media. This now represents a considerable audience within which to promote, disseminate and discuss the latest science and practice of the rugby football codes.

We hope you enjoy the latest digest - our Section Editors and Editorial Board have once again compiled an interesting collection - your support is greatly appreciated and feel free to contact us regarding feedback, potential networking or research ideas/opportunities.

As ever can we encourage you to engage in our discussion forums and pass on any journal articles, news or items you think may be of interest to the readership via the online 'suggest the article, news or items' links on the site. If you use social media please follow us on twitter [@rugbyscinetwork](https://twitter.com/rugbyscinetwork) and get tweeting!

Lastly, we wish you a Happy New Year and a prosperous 2016

Yours in rugby

Stephen, Keith, & Grant  
Network Editors

### **Biomechanics**

[Pre-binding prior to full engagement improves loading conditions for front-row players in contested Rugby Union scrums](#)

Preatoni E, Cazzola D, Stokes KA, England M, Trewartha G  
Scandinavian Journal of Medicine & Science in Sports (Early View)

[Male-Female Differences in Knee Laxity and Stiffness: A Cadaveric Study](#)

Boguszewski DV, Cheung EC, Joshi NB, Markolf KL, McAllister DR  
American Journal of Sports Medicine 43 2982-7

### **Coaching Science**

[Playing by the Rules: A Developmentally Appropriate Introduction to Rugby Union](#)

Gethin LI, Thomas & Mark R. Wilson  
International Journal of Sports Science & Coaching 10 413 - 424

[The relationships between rugby players' tackle training attitudes and behaviour and their match tackle attitudes and behaviour](#)

Sharief Hendricks, Steve den Hollander, Nicholas Tam, James Brown, Michael Lambert  
BMJ Open Sport & Exercise Medicine 1 e000046

### **Injury Prevention**

[Understanding mismatches in body size, speed and power among adolescent rugby union players](#)

Lyndon M Krause, Geraldine A Naughton, Greg Denny, Declan Patton, Tim Hartwig, and Tim

<p>J Gabbett Journal Science and Medicine in Sport 18 (3) 358-363</p>
<p><u>Time loss injuries compromise team success in Elite Rugby Union: a 7-year prospective study</u> S S Williams, G Trewartha, S P T Kemp, J H M Brooks, C W Fuller, A E Taylor, M J Cross, and K A Stokes British Journal of Sports Medicine (BJSM) Online first 9 November 2015 N/A, DOI: 10.1136/bjsports-2015-094798</p>
<p><b>Match Analysis</b></p>
<p><u>Comparison of scoring profile and game related statistics of the two finalist during the different stages of the 2011 Rugby World Cup</u> Luís Vaz , Iancu Vasilica , Wilbur Kraak and Luis S. Arrones International Journal of Performance Analysis in Sport 15. Number 3, December 2015 967-982 (16)</p>
<p><u>Match-related statistics discriminating between playing positions during the men's 2011 Rugby World Cup.</u> Villarejo, D., Palao, J. M., Ortega, E., Gomez-Ruano, M. Á., &amp; Kraak, W. International Journal of Performance Analysis in Sport (2015) 15(1) 97-111</p>
<p><b>Nutrition</b></p>
<p><u>The physical demands of Super League rugby: Experiences of a newly promoted franchise.</u> Evans SD1, Brewer C, Haigh JD, Lake M, Morton JP, Close GL. Eur J Sport Sci. 2015 Jun 9 :1-9. [Epub ahead of print]</p>
<p><u>Statement of the third international exercise-associated hyponatremia consensus development conference, Carlsbad, California, 2015</u> Hew-Butler, T., Rosner, M. H., Fowkes-Godek, S., Dugas, J. P., Hoffman, M. D., Lewis, D. P., ... &amp; Roberts, W. O. Clinical Journal of Sport Medicine 2015, 25(4) 303-320</p>
<p><b>Physiology &amp; Conditioning</b></p>
<p><u>Relationship Between Physical Qualities and Minutes Played in International Women's Rugby Sevens</u> Goodale TL, Gabbett TJ, Stellingwerff T, Tsai MC, Sheppard JM Int J Sports Physiol Perform in press</p>
<p><u>Repeated High-Intensity Effort Activity in Relation to Tries Scored and Conceded during Rugby League Match-Play</u> Gabbett TJ, Gahan CW Int J Sports Physiol Perform in press</p>
<p><b>Psychology</b></p>
<p><u>Psychobehaviorally Based Features of Effective Talent Development in Rugby Union: A Coach's Perspective</u> Hill, A., MacNamara, A. &amp; Collins, D. The Sport Psychologist, 2015, 29(3), 201-213</p>
<p><u>Collective efficacy at the Rugby World Cup 2015 – The role of imagery and observation.</u> Shearer, D. European Journal of Sport Science 2015, 15(6), 530-536</p>
<p><b>Sports Medicine</b></p>
<p><u>Concussed or Not? An Assessment of Concussion Experience and Knowledge Within Elite and Semiprofessional Rugby Union.</u> Mathema, P., Evans, D., Moore, I. S., Ranson, C., &amp; Martin, R. Clinical journal of sport medicine 2015</p>

Cervical Range of Motion, Cervical and Shoulder Strength in Senior versus Age-grade Rugby Union International Front-Row Forwards.

Davies, M., Moore, I. S., Moran, P., Mathema, P., & Ranson, C. A.  
Physical Therapy in Sport 2015

**Strength and Power**

Heavy-resistance exercise-induced increases in jump performance are not explained by changes in neuromuscular function.

Thomas K, Toward A, West DJ, Howatson G1, Goodall S.  
Scand J Med Sci Sports. Ahead of print

Comparison of Different Modes of Morning Priming Exercise on Afternoon Performance.

Russell M, King A, Bracken RM, Cook CJ, Giroud T, Kilduff LP.  
Int J Sports Physiol Perform Ahead of print

**RSNLive15**

The inaugural conference of the World Rugby Science Network was a two-day event hosted by the University of Bath and the University of Cape Town on the 15 and 16 September 2015 respectively. The conference is part of the Network's strategy to showcase leading international research relevant to scientists and practitioners of the rugby codes. E-posters from the conference can be accessed at: <http://rsnlive15.com>

A sample of the oral presentations can be accessed via the following links:

Concussion - Keith Stokes

<https://www.youtube.com/watch?v=Xt1DSpjg-Q4&feature=youtu.be>

Biomechanics & Injury Mechanisms - Dario Cazzola

<https://www.youtube.com/watch?v=I9LYE1qtZpE&feature=youtu.be>

Biomechanics & Injury Mechanisms - Neil Bezodis

[https://www.youtube.com/watch?v=tfvHrIVwi\\_g&feature=youtu.be](https://www.youtube.com/watch?v=tfvHrIVwi_g&feature=youtu.be)

**RWC Game Analysis 2015**

Game analysis of the recent 2015 Rugby Union World Cup, along with summaries of other international rugby union tournaments, can be found on the World Rugby Game Analysis Reports page of the World Rugby website:

<http://playerwelfare.worldrugby.org/?documentid=156>

**News & Events**

10th World Congress of the International Society for Physical and Rehabilitation Medicine (ISPRM 2015)

29th May - 2nd June 2016

Kuala Lumpur, Malaysia

European College of Sport Science Annual Congress

6th - 9th July 2016

Vienna, Austria, Europe

5th International Conference on Qualitative Research in Sport and Exercise

1st - 3rd September 2016

Chichester University, England, UK

International Research Council on Biomechanics of Injury (IRCOBI)

14th - 16th September 2016

Malaga, Spain

**WORLD CONGRESS OF PERFORMANCE ANALYSIS OF SPORT XI**

14th - 17th September 2016 University of Alicante, Spain
<u>Sports Medicine Australia Conference of Science and Medicine in Sport (ACSMS)</u> 12th - 15th October 2016 Melbourne, Australia
<u>International Congress on Sport Sciences Research and Technology Support</u> 7th - 9th November 2016 Porto, Portugal
<u>British Association of Sport &amp; Exercise Sciences (BASES) 2015 Annual Conference</u> 29th - 30th November 2016 East Midlands Conference Centre, Nottingham, UK
<u>IOC World Conference on Prevention of Injury and Illness in Sport</u> 16th - 18th March 2017 Grimaldi Forum, Monaco, Europe