

Dear Network Member,

A warm welcome to the May digest of the World Rugby Science Network. In addition to our usual selection of articles we are delighted to provide details of several news & events items for your attention. We now include further details regarding the second Conference of the World Rugby Science Network (RSNLive16) that will be taking place on 13-14th September 2016 at Bath University (UK). We would also draw your attention to details of World Rugby's annual research funding call.

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 [@rugbyscinenetwork](https://twitter.com/rugbyscinenetwork) and get tweeting!

Yours in rugby

Stephen, Keith, & Grant

Network Editors

### **Biomechanics**

The neuromuscular fatigue induced by repeated scrums generates instability that can be limited by appropriate recovery

Morel B & Hautier CA

Scandinavian Journal of Medicine & Science in Sports

The influences of rugby spin pass technique on movement time, ball velocity and passing accuracy

Worsfold, Paul R; Page, Matthew

International Journal of Performance Analysis in Sport Volume 14, Number 1 pp. 296-306(11)

### **Coaching Science**

Testing a sequence of relationships from interpersonal coaching styles to rugby performance, guided by the coach-athlete motivation model.

Pope, J. Paige & Wilson, Philip M.

International Journal of Sport & Exercise Psychology Vol. 13 Issue 3 258-273

That spatial shit! Performance training an untapped resource in the training of rugby union players

Wendy Buswell

Theatre, Dance and Performance training Volume 5, Issue 3, 2014 242-254

### **Injury Prevention**

Tackling in Youth Football

From the American Academy of Pediatrics: Policy Statement

Pediatrics November 2015, VOLUME 136 / ISSUE 5 DOI:

<http://dx.doi.org/10.1542/peds.2015-3282>

Tackle technique and tackle-related injuries in high-level South African Rugby Union under-

18 players: real-match video analysis

Nicholas Burger, Michael I Lambert, Wayne Viljoen, James C Brown, Clint Readhead, Sharief Hendricks  
British Journal of Sports Medicine doi:10.1136/bjsports-2015-095295

**Match Analysis**

Application of Global Positioning System and Microsensor Technology in Competitive Rugby League Match-Play: A Systematic Review and Meta-analysis.

Hausler, J., Halakai, M. and Orr, R.  
Sports Medicine DOI 10.1007/s40279-015-0440-6

Early Success is Key to Winning an IRB Sevens World Series

Michele van Rooyen  
International Journal of Sports Science and Coaching 10 (6) 1129-1138

**Nutrition**

Enhanced Endurance Performance by Periodization of Carbohydrate Intake: "Sleep Low" Strategy.

Marquet LA1, Brisswalter J, Louis J, Tiollier E, Burke LM, Hawley JA, Hausswirth C.  
Medicine & Science in Sports & Exercise 48(4) 663-72

Higher compared with lower dietary protein during an energy deficit combined with intense exercise promotes greater lean mass gain and fat mass loss: a randomized trial.

Longland TM1, Oikawa SY1, Mitchell CJ1, Devries MC1, Phillips SM2.  
American Journal of Clinical Nutrition 103(3) 738-46

**Physiology & Conditioning**

The effects of physical contact type on the internal and external demands during a rugby league match simulation protocol.

Norris JP, Highton J, Hughes SF, Twist C.  
J Sports Sci Epub ahead of print

Perspective: Does Laboratory-Based Maximal Incremental Exercise Testing Elicit Maximum Physiological Responses in Highly-Trained Athletes with Cervical Spinal Cord Injury?

West CR, Leicht CA, Goosey-Tolfrey VL, Romer LM.  
Front Physiol 2016 Jan 14;6:. 419

**Psychology**

Conversations with parents: A collaborative sport psychology program for parents in youth sport

Vincent, A.P., & Christensen, D.A.  
Journal of Sport Psychology in Action (2015) 6 73-85

Delivery of Psychological Skills Training to Youngsters.

Foster, D., Maynard, I., Butt, J., & Hays, K.  
Journal of Applied Sport Psychology (2016) 28 62-77

**Sports Medicine**

Return to play progression for rugby following injury to the lower extremity: a clinical commentary and review of the literature

Michael P Sclafani, Chelseana C. Davis  
International Journal of Sports Physical Therapy 11 302-320  
Clinical journal of sport medicine 2015

Is the content and duration of the graduated return to play protocol after concussion demanding enough? A challenge for Berlin 2016

Kemp, S., Patricios, J., & Raftery, M.  
British Journal of Sports Medicine online in press

## **Strength and Power**

Effects of 10-week eccentric overload training on kinetic parameters during change of direction in football players

de Hoyo M1,2, Sañudo B2, Carrasco L2, Mateo-Cortes J1, Domínguez-Cobo S1, Fernandes O3, Del Ojo JJ1, Gonzalo-Skok O4.

J Sports Sci. Ahead of print

Effect of Strength and Power Training on Tackling Ability in Semiprofessional Rugby League Players.

Speranza MJ1, Gabbett TJ, Johnston RD, Sheppard JM.

J Strength Cond Res 30 336-43

## **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:

Mike McGuigan

<https://www.youtube.com/watch?v=f4-M5RTOYwI>

Graeme Close

<https://www.youtube.com/watch?v=YETnvezOz9Y>

Group Session 1: Player Load

<https://www.youtube.com/watch?v=bKBODiDhdX8>

## **News & Events**

World Rugby Research Funding Call

Details of World Rugby's Annual Research Funding Application Process can be found at

<http://playerwelfare.worldrugby.org/?documentid=149>

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

Sports Medicine Australia Conference of Science and Medicine in Sport (ACSMS)

12th - 15th October 2016

Melbourne, Australia

International Congress on Sport Sciences Research and Technology Support

7th - 9th November 2016

Porto, Portugal

British Association of Sport & Exercise Sciences (BASES) 2016 Annual Conference

29th - 30th November 2016

East Midlands Conference Centre, Nottingham, UK

IOC World Conference on Prevention of Injury and Illness in Sport

16th - 18th March 2017

Grimaldi Forum, Monaco, Europe