

# CURRICULUM VITAE

**Professor Candice Jo-Anne Christie (PhD)**

(Updated to October 2023)

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## 1.0 GENERAL INFORMATION

### 1.1 Present position:

Associate Professor (2016-present), Department of Human Kinetics and Ergonomics, Rhodes University, Grahamstown, South Africa

### 1.2 Personal information:

Date of Birth: 14 December  
Place of Birth: Kitwe, Zambia  
Citizenship: Dual: South African and British  
Email Address: [c.christie@ru.ac.za](mailto:c.christie@ru.ac.za)  
ORCID: <https://orcid.org/0000-0003-1371-2616>  
Twitter Handle: @CandiceHKE

### 1.3 Tertiary Education:

BA (Human Movement Studies), University of Port Elizabeth (1994)  
BSc (Med)(Hons) Exercise Science (Biokinetics), University of Cape Town (1995)  
MSc, Rhodes University (2002)  
Postgraduate Diploma in Higher Education, Rhodes University (2005)  
PhD, Rhodes University (2006).

#### **1.4 Professional history:**

Biokinetics internship – Sports Science Institute of South Africa (1996)

Biokineticist at the Sports Science Institute of South Africa (1997-1998)

Tutor – University of Cape Town Biokinetics Honours Students (1997-1998)

Lectured muscle physiology course, Department of Human Kinetics and Ergonomics, Rhodes University (1999) – registered as an MSc student

Junior Lecturer in the Department of Human Kinetics and Ergonomics, Rhodes University (2000-2001)

Lecturer in the Department of Human Kinetics and Ergonomics, Rhodes University (2002-2005)

Senior Lecturer in the Department of Human Kinetics and Ergonomics, Rhodes University (2006-2015)

Head of Department: Human Kinetics and Ergonomics, Rhodes University (July 2012-July 2018)

Associate Professor in the Department of Human Kinetics and Ergonomics, Rhodes University (2016- present)

## **2.0 RESEARCH AND SCHOLARSHIP**

### **National Research Foundation (NRF) Rated Researcher: C2**

My main areas of research are the medicine and science of cricket and physical activity and health. Our HKE Cricket Research Group currently works with many elite and non-elite cricket sides and our work has both scientific value and practical relevance. Our work on physical activity and health is mainly based on children and adolescents as well as post-menopausal women and breast cancer survivors.

Total number of journal articles published: 63

## 2.1 Papers published in refereed journals:

1. **Christie, C. J.**, McEwan, K., Munro, C. E., King, G. A., Le Roux, A., Olivier, B., Jackson, B., Manjra, S., MacMillan, C., & Pote, L. (2023). Do South African international cricket pace bowlers have similar bowling volume and injury risk associates compared to other elite fast bowlers? *International Journal of Sports Science & Coaching*, 0(0). <https://doi.org/10.1177/17479541231174301>
2. McEwan K, Pote L, Radloff S, Nicolls SB and **Christie CJ** (2023). The role of selected pre-match covariates on the outcome of One Day International cricket matches. *South African Journal of Sports Medicine* (35), 1-6.
3. Nicholls S, Pote L, **Christie C** and King G (2023). Anthropometric and morphological characteristics of elite male cricket bowlers and batters over time: A systematic review. *International Journal of Sports Science and Coaching*,
4. Aubert S, Barnes JD, Demchenko I, Hawthorne M, Abdeta C, Abi Nader P, Adsuar Sala JC, Aguilar-Farias N, Aznar S, Bakalár P, Bhawra J, Brazo-Sayavera J, Bringas M, Cagas JY, Carlin A, Chang CK, Chen B, Christiansen LB, **Christie CJ**, De Roia GF, Delisle Nyström C, Demetriou Y, Djordjic V, Emeljanovas A, Findling Endy L, Gába A, Galaviz KI, González SA, Hesketh KD, Huang WY, Hubona O, Jeon JY, Jurakić D, Jürimäe J, Katapally TR, Katewongsa P, Katzmarzyk PT, Kim YS, Lambert EV, Lee EY, Levi S, Lobo P, Löf M, Loney T, López-Gil JF, López-Taylor J, Mäestu E, Mahendra A, Makaza D, Mallari MFT, Manyanga T, Masanovic B, Morrison SA, Mota J, Müller-Riemenschneider F, Muñoz Bermejo L, Murphy MH, Naidoo R, Nguyen P, Paudel S, Pedišić Ž, Pérez-Gómez J, Reilly JJ, Reimers AK, Richards AB, Santos Silva DA, Saonua P, Sarmiento OL, Sember V, Shahril MR, Smith M, Standage M, Stratton G, Subedi N, Tammelin TH, Tanaka C, Tesler R, Thivel D, Tladi DM, Tlučáková L, Vanderloo LM, Williams A, Wong SHS, Wu CL, Zembura P, Tremblay MS. Global Matrix 4.0 Physical Activity Report Card Grades for Children and Adolescents: Results and Analyses From 57 Countries. *J Phys Act Health*. 2022 Oct 22;19(11):700-728. doi: 10.1123/jpah.2022-0456.
5. Weldon A, Duncan MJ, Turner A, LaPlaca D, Sampaio J and **Christie CJ** (2022). Practices of strength and conditioning coaches: a snapshot from different sports, countries and expertise levels. *Journal of Strength and Conditioning Research*, 36 (5): 1335-1344.
6. Campbell B, Davy JP and Christie CJ (2022). The effect of time of day on adolescent fast bowling performance: A pilot study. *International Journal of Sports Science and Coaching*, 18 (2), 584-593.
7. Lipinska G, Lewis R, Roden L, Scheuermaier K, Gomez-Olive X, Rae D, Iacovides S, Bentley A, Davy J, **Christie C**, Zschoernack S, Roche J. The Interrelationship of Insomnia Symptoms, Physical Activity and Sedentary Behaviour on Symptoms of Depression and Anxiety Before and During the COVID-19 Pandemic Lockdown (2022). *Sleep Medicine*. Epub 2022 Jul 21
8. Lewis R, Roden LC, Scheuermaier K, Gomez-Olive FX, Rae DE, Iacovides S, Bentley A, Davy JP, Christie CJ, Zschoernack S, Roche J, Lipinska G. The impact of sleep, physical activity and sedentary behaviour on symptoms of depression and anxiety before

- and during the COVID-19 pandemic in a sample of South African participants. *Sci Rep.* 2021 Dec 15;11(1):24059. doi: 10.1038/s41598-021-02021-8.
9. Davy JP, Scheuermaier K, Roden LC, **Christie CJ**, Bentley A, Gomez-Olive FX, Iacovides S, Lewis R, Lipinska G, Roche J, Todd A, Zschoernack S, Rae DE. The COVID-19 Lockdown and Changes in Routine-Oriented Lifestyle Behaviors and Symptoms of Depression, Anxiety, and Insomnia in South Africa. *J Phys Act Health.* 2021 Jun 29;18(9):1046-1057. doi: 10.1123/jpah.2020-0863.
  10. Weldon A, Duncan MJ, Turner A, **Christie CJ** and Pang CMC (2021). Contemporary practices of strength and conditioning coaches in professional cricket. *International Journal of Sports Science and Coaching*, 16 (3): 585-600. Impact Factor: 1.235
  11. Robinson B, Pote L & **Christie CJ** (2021). Injuries in high school level rugby union: how do coaches manage injuries? *Human Movement*, 21 (1): 50-56.
  12. McEwan K, Davy J and **Christie CJ** (2020). Get sleep or get stumped: sleep behaviour in elite South African cricket players during competition. *Journal of Sports Sciences*, 1-11. Impact Factor: 2.597
  13. Weldon A, Duncan M, Turner A, LaPlaca D' Sampaio J & **Christie CJ** (2020). Practices of strength and conditioning coaches: a snapshot from different sports, countries and expertise levels. *Journal of Strength and Conditioning Research.* 16 (3): 585-600. Impact Factor: 2.973
  14. Barnard D, Pote L & **Christie CJ** (2020). Workloads of forward and backline adolescent rugby players: a pilot study. *South African Journal of Sports Medicine*, 32 (1): 1-5.
  15. Pote L, King GA and **Christie CJ** (2020). Strength and conditioning practices of franchise-level cricket trainers. *South African Journal of Sports Medicine*, 32 (1): 1-5.
  16. **Christie CJ**, Barnard DV, Pote L & Munro CE (2020). Workload monitoring in team sports: using elite cricket as an example. *Indian Journal of Orthopaedics*, 54 (3): 271-274.
  17. Sholto-Douglas R, Cook R, Wilkie M & **Christie CJ** (2020). Movement demands of an elite cricket team during the Big Bash League in Australia. *Journal of Sports Science and Medicine*, 19 (1): 59-64. Impact Factor: 2.988
  18. Abass AO, Abiola RA, Olagbegi OM, **Christie CJ** & Bolarinde SO (2020). Effects of an eight-week lumbar stabilization exercise programme on selected variables of patients with chronic low back pain. *Bangladesh Journal of Medical Science*, 19: 467- 474.
  19. Draper C, **Christie CJ**, et al. (2019). Physical activity in South African children. *South African Journal of Child Health*, 13 (3): 130-136.
  20. Robinson B, Pote L & **Christie CJ** (2019). Strength and conditioning practices of high school rugby coaches. *South African Journal of Science*, 115(9/10) 1-6. Impact Factor: 1.866
  21. Pote L and **Christie CJ** (2019). Workloads placed on adolescent cricket players: a pilot study. *International Journal of Sports Science and Coaching* 14 (1): 107-113. Impact Factor: 1.235

22. Proctor S, McEwan K, Pote L, Davy JP & **Christie CJ** (2019). The impact of a fast bowling spell on physiological, perceptual and performance responses in non-elite cricketers. *South African Journal of Sports Medicine* 31 (1): 1-5.
23. Clarke ME, McEwan K and **Christie CJ** (2019). The effectiveness of constraint-led training on skill development in interceptive sports: A systematic review. *International Journal of Sports Science and Coaching*, 14 (2) 229-240. Impact Factor: 1.235
24. **Christie CJ**, Sheppard BJ, Goble D, Pote L and Noakes TD (2019). Effects of two different cricket-specific interval running tests on sprint speed and development of lower limb muscle fatigue. *Journal of Strength and Conditioning Research*. Impact Factor: 2.973
25. Draper CE, Tomaz SA, Bassett SH, Burnett C, **Christie CJ**, Cozett C, de Milander M, Krog S, Moneyeki A, Naidoo N, Naidoo R, Pioreschi A, Walter C, Watson E & Lambert EV (2018). Results from South Africa's 2018 Report Card on Physical Activity for Children and Youth. *Journal of Physical Activity and Health*. 15 (Suppl. 2); S406-S408. Impact Factor: 1.993
26. Munro C & **Christie CJ** (2018). Research directions for the enhancement of women's cricket. *International Journal of Sports Science and Coaching*. Impact Factor: 1.235
27. Pote L and **Christie CJ** (2018). A novel intervention program ("CricFit") for the strength and conditioning of adolescent cricket players. *Human Movement*, 19 (1): 34-43.
28. Pote L and **Christie CJ** (2018). Injury prevention strategies in cricket. *Strength and Conditioning Journal*. Impact Factor: 1.455
29. **Christie CJ**, Elliott A, Steenekamp T, Pote L, Billaut F and Noakes TD (2017). Effect of expertise on pacing strategies and sprint performance in batsmen. *Journal of Science and Medicine in Sports and Exercise*. Impact Factor: 4.029
30. Olagbegi OM, Adegoke BOA, **Christie CJ**, Bolarinde SO and Jegede JA (2017). Effects of an eight-week step climbing exercise protocol on lower limb musculature strength of apparently healthy young adults. *Human Movement*, 18 (3): 60-66. Impact Factor: 0.469.
31. Uys M, Bassett S, Draper CE, Micklesfield L, Moneyeki A, de Villiers A, Lambert EV, Byrne J, **Christie C**, Faber M, van Gent M, Harbron J, Joseph L, Khan T, Krog S, Kruger S, McQuaide K, McVeigh J, Meiring J, Meltzer S, de Milander M, Mphake N, Naidoo N, Naidoo R, Pienaar A, Puoane T, Tomaz S, Walter C and Watson E (2016). Results from South Africa's 2016 Report Card on Physical Activity for Children and Youth. *Journal of Physical Activity and Health*, 13 (Suppl 2), S265-S273. Impact Factor: 1.993
32. Goble D and **Christie CJ** (2016). Cognitive, Physical and Physiological Responses of School Boy Cricketers during a 30-Over Batting Simulation. *Journal of Sports Sciences*, 35 (12): 1148-1154. Impact Factor: 2.597
33. Pote L and **Christie CJ** (2016). Physiological responses of batsmen scoring a simulated one-day international century. *South African Journal of Sports Medicine*, 28 (2): 39-42.
34. Pote L and **Christie CJ** (2016). Strength and conditioning practices of cricket coaches at school boy and university level in South Africa. *Journal of Strength and Conditioning*, 30 (12): 3464-3470. Impact Factor: 1.455
35. Pote L and **Christie CJ** (2015). Selected physiological, perceptual and performance responses during a simulated one day international century. *European Journal of Sports Science*, 16 (6): 654-660. Impact Factor: 2.781

36. Viljoen JE and **Christie CJ** (2015). Adherence and retention to a supervised resistance training programme in previously sedentary post-menopausal women: a prospective case study. *BMC Public Health*. 15: 236-244. Impact Factor: 2.32
37. Pote L and **Christie CJ** (2014). Physiological and perceptual demands of high intensity sprinting between the wickets. *International Journal of Sports Science and Coaching*, 9 (6): 1375-1382. Impact Factor: 1.235.
38. Draper CE, Basset S, de Villiers A, Bartels C, Blomkamp Y, Micklesfield L, Kruger S, Monyeki A, Puoane T, Naidoo R, Dugmore H, Walter C, Naidoo N, Bacon J, McQuaide K, Josephs L, **Christie C**, Uys M and Lambert EV (2014). Results from South Africa's 2014 Report Card on Physical Activity for Children and Youth. *Journal of Physical Activity and Health*, 11 (Suppl 1), S98-S104. Impact Factor: 1.993. Impact Factor: 1.993
39. Berndt EJ and **Christie CJ** (2014). The efficacy of interventions aimed at reducing the incidence of upper respiratory tract infections (URTI) in athletes following the performance of strenuous, intense prolonged exercise – a Systematic Review. *Journal for Community Health Sciences*, 9; 1, 34-44.
40. Crymble T, Viljoen JE and **Christie CJ** (2013). Changes in morphology and strength following an eight week resistance training programme in post-menopausal women: a pilot investigation. *Ergonomics SA*, 25(2): 32-49.
41. Lauren HE Gillis, Timothy Olds, Grant Tomkinson, Carla Moreira, **Candice Christie**, Claudia Nigg, Ester Cerin, Esther Van Sluijs, Gareth Stratton, Ian Janssen, Jeremy Dorovolomo, John Reilly, Jorge Mota, Kashef Zayed, Kent Kawalski, Lars Bo Anderson, Manuel Carrizosa, Mark Tremblay, Michael Chia, Mike Hamlin, Non Thomas, Ralph Maddison, Stuart Biddle, Trish Gorely, Vincent Onywera and Willem Van Mechelen (2013). Research priorities for child and adolescent physical activity and sedentary behaviours: a global perspective using a twin-panel Delphi. *International Journal of Behavioral Nutrition and Physical Activity*, 10 (112): 2-8. Impact Factor: 6.714
42. **Christie CJ** (2012). Straightforward yet effective Ergonomics Collaborations in South Africa. *Ergonomics in Design*, 20 (4): 39-42.
43. Viljoen JE and **Christie CJ** (2011). Resistance training and changes to plasma lipoproteins in post-menopausal women: a pilot study. *The South African Journal of Sports Medicine*, 23 (2): 40-44.
44. **Christie CJ** and Wolfe AM (2011). Impact of ceiling restriction and lifting barriers on selected physiological and perceptual responses. *Journal of Work*, 38 (3): 225-234. Impact Factor: 0.521
45. Viljoen JE and **Christie CJ** (2011). Excellent workplace quality: questionable socio-economics. *Human Factors in Organisational Design and Management – X, (II)*. 133-140 (ISBN: 0-9768143-4-X).
46. Viljoen JE and **Christie CJ** (2011). Aging or chronic disease: which is the real culprit? *Human Factors in Organisational Design and Management – X, (II)*. 41-46 (ISBN: 0-9768143-4-X).
47. Jackson LM and **Christie CJ** (2011). Physical inactivity and cardiovascular risk in black males and females forming an urban working population. *Human Factors in Organisational Design and Management – X, (II)*. 53-60 (ISBN: 0-9768143-4-X).

48. **Christie CJ** (2010). Improving the energy and fluid balance of workers involved in harvesting tasks. *Occupational Ergonomics*, 9 (3): 6-12. Impact Factor: 1.601
49. **Christie CJ** and Ingram Lock B (2009). Impact of training status on maximal oxygen uptake criteria attainment during running. *The South African Journal of Sports Medicine*, 21 (1): 19-22.
50. **Christie CJ** (2008). Relationship between energy intake and expenditure during harvesting tasks. *Occupational Ergonomics*, 8 (1): 1-10. Impact Factor: 1.601
51. **Christie CJ**, Todd AI and King GA (2008). Energy cost of batting during a simulated cricket work bout. *Journal of Science and Medicine in Sport*, 11 (6): 581-584. Impact Factor: 3.607
52. **Christie CJ** and King GA (2008). Heart rate and perceived strain during batting in a warm and cool environment. *International Journal of Fitness*, 4 (1): 33-38.
53. **Christie CJ**, Langton M, Todd AI, Hutchings J and Elliott AB (2008). Energy requirements and perceived body discomfort of the various sub tasks of manual sugar cane harvesting: A Pilot study. *Ergonomics SA*, 20 (2): 26-33.
54. Todd AI, Bennett AI and **Christie CJ** (2007). Physical implications of prolonged sitting in a confined posture – A literature review. *Ergonomics SA*, 19 (2): 7-21.
55. **Christie CJ** and Scott PA (2005). Comparison of maximal aerobic capacity during running and lifting activities. *Ergonomics SA*, 17 (1): 41-49.
56. **Christie CJ** and Scott PA (2005). Metabolic responses of South African soldiers during simulated marching with sixteen combinations of speed and backpack load. *Military Medicine*, 170 (7): 69-76. Impact Factor: 1.025
57. Scott PA and **Christie CJ** (2004). An indirect assessment of energy expenditure of manual labourers *in situ*. *South African Journal of Science*, 100 (11/12): 694-698. Impact Factor: 0.056
58. Scott PA and **Christie CJ** (2004). 'Optimal' speed-load combinations for military manoeuvres. *International Journal of Industrial Ergonomics*, 33: 63-68. Impact Factor: 1.662
59. King GA, **Christie CJ** and Todd AI (2002). Effect of protective gear on skin temperature responses and sweat loss during cricket batting activity. *The South African Journal of Sports Medicine*, 9 (2): 30-35.
60. **Christie CJ** (2001). Consideration of the effect of nutritional status and disease patterns on the work output amongst Black South African workers involved in manual materials handling (MMH) tasks. *Ergonomics SA*, 13(1): 23-32.
61. **Christie CJ** and Todd AI (2001). Enhancing military efficiency: A South African perspective. *Ergonomics SA*, 13 (2): 10-17.
62. Scott PA and **Christie C** (2000). Cardiac responses under diverse combinations of marching speed and backpack load. *Ergonomics SA*, 12 (1): 49-60.

63. Goedecke JH, **Christie C**, Wilson G, Dennis SC, Noakes TD, Hopkins WG and Lambert EV (1999). Metabolic adaptations to a high-fat diet in endurance cyclists. *Metabolism*, 48 (12): 1509-1517. Impact Factor: 8.694

**2.2 Books published:**

1. Gobel M, **Christie CJ**, Zschernack S, Todd AI and Mattison M (eds.) (2011). Organizational Design and Management-X (I and II). ISBN: 0-9768143-4-X.

**2.3 Chapters published in books:**

1. Vickery W, McEwan K, Clarke ME & **Christie CJ** (2020). Using constraints in a complex sports system: Modern day training for modern day cricket. In: Salmon et al. (ed.). Human Factors and Ergonomics in Sports. CRC Press
2. **Christie CJ** (2012). The physical demands of batting and fast bowling during cricket. In: Zaslav KR (ed.). *Sports Medicine and Sports Injuries*. InTech (ISBN 979-953-307-096-3).
3. **Christie CJ**, Meyer F, James G and Apud E (2009). The contribution of ergonomics to the forestry industry in developing countries. In: PA Scott (ed.). *Ergonomics in developing regions: Needs and Applications*. Taylor and Francis.

**2.4 Policy Briefs**

1. Policy Brief: Physical activity for health in Africa: Guidance during and beyond the COVID-19 pandemic (2020).
2. Policy Brief: Physical activity and health for children and adolescents: COVID-19 and beyond (2020).
3. Policy Brief: Physical activity and health in Africa for children and adolescents with disabilities: COVID-19 and beyond (2020).
4. Policy Brief: Organised school sport in South Africa for children and adolescents: COVID-19 and beyond (2021).

**3 TEACHING HISTORY**

**3.1 Courses taught:**

COURSE TITLE	DEPT. & INSTITUTION	LEVEL OF INSTRUCTION	YEARS OFFERED
Orthopaedic Rehabilitation	Human Biology (UCT)	Honours (tutoring)	1997-1998



Muscle Physiology	HKE (RU)	II Year	1999-present
Work Physiology: Energy Expenditure and Nutrition	HKE (RU)	III Year	2000-present
Basic Physiology Cardiorespiratory	HKE (RU)	I Year	2003-present
Endocrinology	HKE (RU)	II Year	2000-2018
Neural physiology	HKE (RU)	II Year	2000-present
Data Analysis	HKE (RU)	III Year	2002
Physiology	HKE (RU)	Honours	2000-present
Physiology	HKE (RU)	Science Foundation	2005-2010
Postgraduate Diploma in Ergonomics: Human Characteristics module	HKE (RU)	Honours level	2015-present

### 3.2 Graduate supervision completed:

4 postdoctoral fellows, 5 PhDs, 30 MSc

## 4 ADMINISTRATIVE AND PROFESSIONAL EXPERIENCE

### 4.1 Professional affiliation:

Registered Biokineticist with the Health Professionals Council of South Africa (1996-current)

Chair, Education Committee of the International Society of Physical Activity and Health (ISPAH) (2020 – 2022)

Education Committee Member of the International Society of Physical Activity and Health (ISPAH) (2018 – 2020)

Executive Member (2020 - current). South African Sports Medicine Association.

Member of the Ergonomics Society of South Africa (2000-present)

Member of the South African Sports Medicine Association (1995-present)  
Member of the Biokinetics Association of South Africa (1995-present)  
House Warden: Prince Alfred House, Rhodes University (2001-2008)  
Rotary Exchange Student: one-year post-matriculation programme (Australia, 1990)  
Rotary Youth Study Exchange Student: 6-week programme (England, 1992)

**I am a recipient of the following intramural recognitions:**

2002, Thomas Alty Award for MSc degree – Rhodes University  
2005, Thomas Alty Award for PGDHE – Rhodes University  
2006, Thomas Alty Award for PhD – Rhodes University  
2007/2008, Nominated for the Rhodes University Distinguished Teaching Award  
2015, Nominated for the Rhodes University Senior Distinguished Teaching Award

**4.2 Committees:**

**4.2.1 Major Committees (extramural)**

Member and Chair of the Education Committee: International Society of Physical Activity and Health.  
Member: Research Committee, Cricket South Africa (CSA)  
Member: Strategic Council for Exercise is Medicine (EIM) South Africa  
Member: Global Physical Activity Network

**4.2.2 Major Committees (intramural):**

Chair: Human Kinetics and Ergonomics Ethical Standards Committee – 2010-2012, 2016-2018.  
Member: Human Kinetics and Ergonomics Ethical Standards Committee – 2016-current.  
Member: Faculty of Science (Rhodes University) – 2003 to present  
Member: Faculty of Humanities (Rhodes University) – 2012 to 2018.  
Member: Examinations committee (Rhodes University) – 2008 to 2012  
Member: Rhodes University Human Subjects sub committee of the Rhodes University Ethics Committee – 2008 to 2015  
Member: Rhodes University's Health Suite Management Committee – 2008 to 2011  
Member: Sports Council, Rhodes University – 2012 to 2016  
Member: Senate, Rhodes University – 2012 to 2018

Member: Rhodes University Research Committee – 2014 – 2021

Member: Rhodes University Science Faculty Teaching and Learning Committee – 2016 to 2020

#### **4.2.3 Other Committees**

Chair: Prince Alfred House Committee, 2001 - 2008

Member: Drostdy Hall, Rhodes University, Hall Committee, 2001- 2008

Member: Hall Fellow, Desmond Tutu Hall, 2015