



CELEBRATES SCIENCE



JULY 2017

TOP 5 ARTICLES

Director: Prof Heather Zar



Article:

Zar HJ, Andronikou S, Nicol MP. Advances in the diagnosis of pneumonia in children. *BMJ-British Medical Journal (Clinical research ed)*. 2017 Jul 26;358: j2739.

DOI: 10.1136/bmj.j2739

Impact Factor: 20.785

Summary:

Pneumonia remains a major cause of childhood mortality and morbidity globally. Accurate diagnosis and attribution of the causes of pneumonia are important for measuring the burden of disease, implementing appropriate preventive or treatment strategies, and developing more effective interventions. This review summarizes recent diagnostic advances in radiological techniques, specimen collection, and laboratory methods. Although chest ultrasound and chest magnetic resonance imaging are promising modalities for radiological diagnosis, their role in clinical management and their impact on outcomes need further study. Rapid, highly sensitive, multiplex laboratory tests performed on upper respiratory tract samples or induced sputum can detect nucleic acid from potential pathogens in most children with pneumonia. However, it may be difficult to attribute causality because it is often impossible to distinguish between organisms colonizing or infecting the upper respiratory tract and those causing pneumonia. Currently available host biomarkers lack accuracy for distinguishing bacterial or mixed bacterial-viral infections from viral infections. New biomarkers derived from host transcriptional profile analysis may be more accurate but require validation. Prospective studies with appropriate control populations, including studies of clinical impact, are needed to improve our understanding of the role of tests. Although progress has been made in radiological techniques and laboratory testing, current methods for diagnosing and attributing the causes of pneumonia are suboptimal.

Director: Prof Dan Stein



Article:

Stein DJ, Lim CCW, Roest AM, de Jonge P, Aguilar-Gaxiola S, Al-Hamzawi A, Alonso J, Benjet C, Bromet EJ, Bruffaerts R, de Girolamo G, Florescu S, Gureje O, Haro JM, Harris MG, He Y, Hinkov H, Horiguchi I, Hu C, Karam A, Karam EG, Lee S, Lepine JP, Navarro-Mateu F, Pennell BE, Piazza M, Posada-Villa J, Ten Have M, Torres Y, Viana MC, Wojtyniak B, Xavier M, Kessler RC, Scott KM. The cross-national epidemiology of social anxiety disorder: Data from the world mental health survey initiative. *BMC Medicine*. 2017 Jul 31;15(1):143.

DOI: 10.1186/s12916-017-0889-2

Impact Factor: 8.097

Summary:

Background: There is evidence that Social Anxiety Disorder (SAD) is a prevalent and disabling disorder. However, most of the available data on the epidemiology of this condition originate from high income countries in the West. The World Mental Health (WMH) Survey Initiative provides an opportunity to investigate the prevalence, course, impairment, socio-demographic correlates, comorbidity, and treatment of this condition across a range of high, middle, and low income countries in different geographic regions of the world, and to address the question of whether differences in SAD merely reflect differences in threshold for diagnosis.

Methods: Data from 28 community surveys in the WMH Survey Initiative, with 142,405 respondents, were analyzed. We assessed the 30-day, 12-month, and lifetime prevalence of SAD, age of onset, and severity of role impairment associated with SAD, across countries. In addition, we investigated socio-demographic correlates of SAD, comorbidity of SAD with other mental disorders, and treatment of SAD in the combined sample. Cross-tabulations were used to calculate prevalence, impairment, comorbidity, and treatment. Survival analysis was used to estimate age of onset, and logistic regression and survival analyses were used to examine socio-demographic correlates.

Results: SAD 30-day, 12-month, and lifetime prevalence estimates are 1.3, 2.4, and 4.0% across all countries. SAD prevalence rates are lowest in low/lower-middle income countries and in the African and Eastern Mediterranean regions, and highest in high income countries and in the Americas and the Western Pacific regions. Age of onset is early across the globe, and persistence is highest in upper-middle income countries, Africa, and the Eastern Mediterranean. There are some differences in domains of severe role impairment by country income level and geographic region, but there are no significant differences

across different income level and geographic region in the proportion of respondents with any severe role impairment. Also, across countries SAD is associated with specific socio-demographic features (younger age, female gender, unmarried status, lower education, and lower income) and with similar patterns of comorbidity. Treatment rates for those with any impairment are lowest in low/lower-middle income countries and highest in high income countries.

Conclusions: While differences in SAD prevalence across countries are apparent, we found a number of consistent patterns across the globe, including early age of onset, persistence, impairment in multiple domains, as well as characteristic socio-demographic correlates and associated psychiatric comorbidities. In addition, while there are some differences in the patterns of impairment associated with SAD across the globe, key similarities suggest that the threshold for diagnosis is similar regardless of country income levels or geographic location. Taken together, these cross-national data emphasize the international clinical and public health significance of SAD.

Director: Prof Charles Wiysonge



Article:

Wiysonge CS, Bradley HA, Volmink J, Mayosi BM. Cochrane corner: Beta-blockers for hypertension. Heart (British Cardiac Society). 2017 Jul 29.

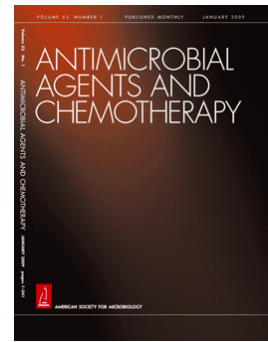
DOI: 10.1136/heartjnl-2017-311585

Impact Factor: 6.059

Summary:

Beta-blockers refer to an assorted group of medications that block the action of endogenous catecholamines on beta-adrenergic receptors. The β_1 and β_2 receptors are the primary beta-adrenergic receptors in the human cardiovascular system. Beta-blockers differ in their β_1/β_2 -receptor selectivity and vasodilatory properties. Based on this diversity, beta-blockers have been categorised into first, second and third generation. First-generation beta-blockers, also referred to as non-selective blockers, possess equal affinity for β_1 and β_2 receptors. Second-generation (or selective) beta-blockers exercise more affinity for β_1 than β_2 receptors. Neither of these traditional beta-blockers has vasodilatory properties, which is an intrinsic characteristic of third-generation beta-blockers.

Director: Prof Valerie Mizrahi



Article:

Moosa A, Lamprecht DA, Arora K, Barry CE^{3rd}, Boshoff HIM, Ioerger TR, Steyn AJC, Mizrahi V, Warner DF. Susceptibility of mycobacterium tuberculosis cytochrome *bd* oxidase mutants to compounds targeting the terminal respiratory oxidase, cytochrome *c*. *Antimicrobial Agents and Chemotherapy*. 2017 Jul 31.

DOI: 10.1128/aac.01338-17

Impact Factor: 4.302

Summary

We deleted subunits I (*cydA*) and II (*cydB*) of the *Mycobacterium tuberculosis* cytochrome *bd* menaquinol oxidase. The resulting $\Delta cydA$ and $\Delta cydAB$ mutants were hypersusceptible to compounds targeting the mycobacterial *bc₁* menaquinol-cytochrome *c* oxidoreductase, and exhibited bioenergetic profiles indistinguishable from strains deficient in the ABC-type transporter, *CydDC*, predicted to be essential for cytochrome *bd* assembly. These results confirm *CydAB* and *CydDC* as potential targets for drugs aimed at inhibiting a terminal respiratory oxidase implicated in pathogenesis.

Director: Prof Shabir Madhi



Article:

Olwagen CP, Adrian PV, Madhi SA. Comparison of traditional culture and molecular QPCR for detection of simultaneous carriage of multiple pneumococcal serotypes in African children. *Scientific Reports*. 2017 Jul 05;7(1):4628.

DOI: 10.1038/s41598-017-04915-y

Impact Factor: 4.259

Summary

S. pneumoniae is a common colonizer of the human nasopharynx in high income and low-middle income countries. Due to limitations of standard culture methods, the prevalence of concurrent colonization with multiple serotypes is unclear. We evaluated the use of multiplex quantitative PCR (qPCR) to detect multiple pneumococcal serotypes/group colonization in archived nasopharyngeal swabs of pneumococcal conjugate vaccine naive children who had previously been investigated by traditional culture methods. Overall the detection of pneumococcal colonization was higher by qPCR (82%) compared to standard culture (71%; $p < 0.001$), with a high concordance ($\kappa = 0.73$) of serotypes/groups identified by culture also being identified by qPCR. Also, qPCR was more sensitive in detecting multiple serotype/groups among colonized cases (28.7%) compared to culture (4.5%; $p < 0.001$). Of the additional serotypes detected only by qPCR, the majority were of lower density ($< 10^4$ CFU/ml) than the dominant colonizing serotype, with serotype/group 6A/B, 19B/F and 23F being the highest density colonizers, followed by serotype 5 and serogroup 9A/L/N/V being the most common second and third colonizers respectively. The ability of qPCR to detect multiple pneumococcal serotypes at a low carriage density might provide better insight into underlying mechanism for changes in serotype colonization in PCV vaccinated children.

1. INTRAMURAL RESEARCH UNITS

Biomedical Research and Innovation Platform

1. Mabhida SE, Mosa RA, Penduka D, Osunsanmi FO, **Dludla PV**, Djarova TG, Opoku AR. A lanosteryl triterpene from *protorhus longifolia* improves glucose tolerance and pancreatic beta cell ultrastructure in type 2 diabetic rats. *Molecules*. 2017 Jul 26.
DOI: 10.3390/molecules22081252
Impact Factor: 2.861

Biostatistics

1. Akilimali NA, Chang CC, Muema DM, **Reddy T**, Moosa MS, Lewin SR, French MA, Ndung'u T. Plasma but not cerebrospinal fluid Interleukin 7 and Interleukin 5 levels pre-antiretroviral therapy commencement predict Cryptococcosis-Associated Immune Reconstitution Inflammatory Syndrome. *Clinical Infectious Diseases*. 2017 Jul 5.
DOI: 10.1093/cid/cix598
Impact Factor: 8.216

Centre for Tuberculosis

1. **du Plessis J**, Cloete R, Burchell L, Sarkar P, **Warren RM**, Christoffels A, Wigneshweraraj S, **Sampson SL**. Exploring the potential of T7 bacteriophage protein Gp2 as a novel inhibitor of mycobacterial RNA polymerase. *Tuberculosis*. 2017 Jul 18.
DOI: 10.1016/j.tube.2017.07.004
Impact Factor: 2.873
2. Michel AL, Lane EP, de Klerk-Lorist LM, Hofmeyr M, van der Heijden E, **Botha L**, **van Helden P**, **Miller M**, Buss P. Experimental mycobacterium bovis infection in three white rhinoceroses (*Ceratotherium Simum*): Susceptibility, clinical and anatomical pathology. *PloS One*. 2017 Jul 07;12(7):e0179943.
DOI: 10.1371/journal.pone.0179943
Impact Factor: 2.806
3. **Kinnear C**, **Hoal EG**, **Schurz H**, **van Helden PD**, **Moller M**. The role of human host genetics in tuberculosis resistance. *Expert Review of Respiratory Medicine*. 2017 Jul 20.
DOI: 10.1080/17476348.2017.1354700
Impact Factor: 2.432
4. Nemes E, Rozot V, Geldenhuys H, Bilek N, Mabwe S, Abrahams D, Makhetha L, Erasmus M, Keyser A, Toefy A, Cloete Y, Ratangee F, Blauenfeldt T, Ruhwald M, **Walzl G**, **Smith B**, **Loxton AG**, Hanekom WA, Andrews JR, Lempicki MD, Ellis R, Ginsberg AM, Hatherill M, Scriba TJ. Optimization and interpretation of serial Quantiferon testing to measure acquisition of mycobacterium tuberculosis infection. *American Journal of Respiratory and Critical Care Medicine*. 2017 Jul 24.
DOI: 10.1164/rccm.201704-0817OC
Impact Factor: 13.204

Gender and Health

1. **Gibbs A**, Carpenter B, Crankshaw T, Hannass-Hancock J, Smit J, Tomlinson M, Butler L. Prevalence and factors associated with recent intimate partner violence and relationships between disability and depression in post-partum women in one clinic in eThekweni Municipality, South Africa. *PloS One*. 2017 Jul 20;12(7):e0181236.
DOI: 10.1371/journal.pone.0181236
Impact Factor: 2.806
2. Fielding-Miller R, **Dunkle KL**, Hadley C, Cooper HL, Windle M. Agency as a mediator in the pathway from transactional sex to HIV among pregnant women in Swaziland: A multigroup path analysis. *Journal of the International AIDS Society*. 2017 Jul 12;20(1):21554.
DOI: 10.7448/ias.20.1.21554
Impact Factor: 6.296
3. Saeed Ali T, Karmaliani R, McFarlane J, Khuwaja HMA, Somani Y, **Chirwa ED, Jewkes R**. Attitude towards gender roles and Violence Against Women and Girls (VAWG): Baseline findings from an RCT of 1752 youths in Pakistan. *Global Health Action*. 2017 Jul 31;10(1):1342454.
DOI: 10.1080/16549716.2017.1342454
Impact Factor: 1.794

Health Systems

1. **Ngandu NK**, Van Malderen C, **Goga A**, Speybroeck N. Wealth-related inequality in early uptake of HIV testing among pregnant women: An analysis of data from a national cross-sectional survey, South Africa. *BMJ Open*. 2017 Jul;7(7):e013362.
DOI: 10.1136/bmjopen-2016-013362
Impact Factor: 2.369
2. **Doherty T, Besada D, Goga A, Daviaud E, Rohde S, Raphaely N**. "If donors woke up tomorrow and said we can't fund you, what would we do?" A health system dynamics analysis of implementation of PMTCT option B+ in Uganda. *Globalization and Health*. 2017 Jul 26;13(1):51.
DOI: 10.1186/s12992-017-0272-2
Impact Factor: 2.536

HIV Prevention

1. van der Straten A, Shapley-Quinn MK, Reddy K, Cheng H, Etima J, Woeber K, **Musara P**, Palanee-Phillips T, Baeten JM, Montgomery ET, on behalf of the MTNAST. Favoring "Peace of Mind": A Qualitative study of African Women's HIV prevention product formulation preferences from the MTN-020/ASPIRE trial. *AIDS Patient Care and STDs*. 2017 Jul 1;31(7):305-14.
DOI: 10.1089/apc.2017.0075
Impact Factor: 3.236
2. Tariq S, Hoffman S, **Ramjee G**, Mantell JE, **Phillip JL**, Blanchard K, Lince-Deroche N, Exner TM. "I did not see a need to get tested before, everything was going well with my health": A qualitative study of HIV-testing decision-making in KwaZulu-Natal, South Africa. *AIDS Care*. 2017 Jul 11:1-8.
DOI: 10.1080/09540121.2017.1349277
Impact Factor: 1.824

Non-Communicable Disease

1. Noumegni SR, Ama VJM, Assah FK, Bigna JJ, Nansseu JR, Kamani JAM, Katte JC, Dehayem MY, **Kengne AP**, Sobngwi E. Assessment of the agreement between the Framingham and DAD risk equations for estimating cardiovascular risk in adult Africans living with HIV infection: A cross-sectional study. *Tropical Diseases, Travel Medicine and Vaccines*. 2017 Jul 05;3:12.
DOI: 10.1186/s40794-017-0055-z
Impact Factor: None

2. Negash S, Agyemang C, Matsha TE, **Peer N**, Erasmus RT, **Kengne AP**. Differential prevalence and associations of overweight and obesity by gender and population group among school learners in South Africa: A cross-sectional study. *BMC Obesity*. 2017 Jul 17;4:29.
DOI: 10.1186/s40608-017-0165-1
Impact Factor: None
3. Harika R, **Faber M**, Samuel F, Mulugeta A, Kimiywe J, Eilander A. Are low intakes and deficiencies in iron, vitamin a, zinc, and iodine of public health concern in Ethiopian, Kenyan, Nigerian, and South African children and adolescents? *Food and Nutrition Bulletin*. 2017 Jul 06.
DOI: 10.1177/0379572117715818
Impact Factor: 1.648
4. Mazidi M, Gao H-K, **Kengne AP**. Inflammatory markers are positively associated with serum trans-fatty acids in an adult American Population. *Journal of Nutrition and Metabolism*. 2017 Jul 11; 2017:6.
DOI: 10.1155/2017/3848201
Impact Factor: None

Office of AIDS

1. Karim SSA, Karim QA, Abimiku A, Bekker LG, Bukusi EA, Deschamps MMH, Derbew M, Garcia PJ, **Gray G**, Kanya MR, Swaminathan S, Wu Z. Closing the NIH Fogarty Center threatens us and global health. *Lancet*. 2017 Jul-Aug;390(10093):451.
DOI: 10.1016/s0140-6736(17)31912-8
Impact factor: 47.831
2. Cassim H, Otwombe K, Lazarus E, Liberty A, **Gray GE**, Greeff OBW, Violari A. A retrospective case-cohort study comparing treatment outcomes in abacavir versus stavudine containing first line antiretroviral treatment regimens in children < 3yrs old, at a paediatric programme based in Soweto, South Africa. *PloS One*. 2017 Jul 07;12(7):e0180645.
DOI: 10.1371/journal.pone.0180645
Impact factor: 2.806

Office of Cancer

1. **Stefan C**, Bray F, Ferlay J, Liu B, Maxwell Parkin D. Cancer of childhood in Sub-Saharan Africa. *Ecancermedicalsecience*. 2017 Jul 18;11:755.
DOI: 10.3332/ecancer.2017.755
Impact factor: None

South African Cochrane Centre

1. **Wiysonge CS**, Bradley HA, Volmink J, Mayosi BM. Cochrane corner: Beta-blockers for hypertension. *Heart (British Cardiac Society)*. 2017 Jul 29.
DOI: 10.1136/heartjnl-2017-311585
Impact Factor: 6.059

Violence, Injury and Peace

1. **Titi N, van Niekerk A**, Ahmed R. Child understandings of the causation of childhood burn injuries: Child activity, parental domestic demands, and impoverished settings. *Child: Care, Health and Development*. 2017 Jul 18.
DOI: 10.1111/cch.12484
Impact Factor: 1.445

2. EXTRAMURAL RESEARCH UNITS

Antiviral Gene Therapy

1. **Arbuthnot P, Maepa MB, Ely A, Pepper MS.** The state of gene therapy research in Africa, its significance and implications for the future. *Gene Therapy*. 2017 Jul 10;24(9):581-9.
DOI: 10.1038/gt.2017.57
Impact Factor: 3.110

Child and Adolescent Lung Health

1. **Zar HJ, Andronikou S, Nicol MP.** Advances in the diagnosis of pneumonia in children. *BMJ-British Medical Journal (Clinical research ed)*. 2017 Jul 26;358: j2739.
DOI: 10.1136/bmj.j2739
Impact Factor: 20.785

Developmental Pathways for Health

1. **Wrottesley SV, Pisa PT, Norris SA.** The influence of maternal dietary patterns on body mass index and gestational weight gain in urban black South African women. *Nutrients*. 2017 Jul 11;9(7):e732.
DOI: 10.3390/nu9070732
Impact Factor: 3.550
2. **Norris SA, Daar A, Balasubramanian D, Byass P, Kimani-Murage E, Macnab A, Pauw C, Singhal A, Yajnik C, Akazili J, Levitt N, Maatoug J, Mkhwanazi N, Moore SE, Nyirenda M, Pulliam JRC, Rochat T, Said-Mohamed R, Seedat S, Sobngwi E, Tomlinson M, Toska E, van Schalkwyk C.** Understanding and acting on the developmental origins of health and disease in Africa would improve health across generations. *Global Health Action*. 2017 Jul 18;10(1):1334985.
DOI: 10.1080/16549716.2017.1334985
Impact Factor: 1.794
3. **Mkwanazi NB, Rochat TJ, Bland RM.** The Amagugu intervention: A qualitative investigation into maternal experiences and perspectives of a maternal HIV disclosure support intervention in rural South Africa. *Health Policy & Planning*. 2017 Jul 19.
DOI: 10.1093/heapol/czx056
Impact Factor: 2.368
4. **Naicker SN, Norris SA, Mabaso M, Richter LM.** An analysis of retrospective and repeat prospective reports of adverse childhood experiences from the South African Birth to Twenty Plus cohort. *PloS One*. 2017 Jul 26;12(7):e0181522.
DOI: 10.1371/journal.pone.0181522
Impact Factor: 2.806

HIV/TB Pathogenesis and Treatment

1. **Sivro A, McKinnon LR, Yende-Zuma N, Gengiah S, Samsunder N, Abdool Karim SS, Naidoo K.** Plasma cytokine predictors of tuberculosis recurrence in antiretroviral-treated human immunodeficiency virus-infected individuals from Durban, South Africa. *Clinical Infectious Diseases*. 2017 Jul 06;65(5):819-26.
DOI: 10.1093/cid/cix35
Impact Factor: 8.216

2. **Naidoo A, Naidoo K, McIlleron H, Essack S, Padayatchi N.** A review of moxifloxacin for the treatment of drug-susceptible tuberculosis. *Journal of Clinical Pharmacology*. 2017 Jul 24;57(11):1369-86.
DOI: 10.1002/jcph.968
Impact Factor: 2.812

Human Genetics

1. Bauer M, Glenn T, Alda M, Aleksandrovich MA, Andreassen OA, Angelopoulos E, Arda R, Ayhan Y, Baethge C, Bharathram SR, Bauer R, Baune BT, Becerra-Palars C, Bellivier F, Belmaker RH, Berk M, Bersudsky Y, Bicakci S, Birabwa-Oketcho H, Bjella TD, Bossini L, Cabrera J, Cheung EYW, Del Zompo M, Dodd S, Donix M, Etain B, Fagiolini A, Fountoulakis KN, Frye MA, Gonzalez-Pinto A, Gottlieb JF, Grof P, Harima H, Henry C, Isometsa ET, Janno S, Kapczinski F, Kardell M, Khaldi S, Kliwicki S, Konig B, Kot TL, Krogh R, Kunz M, Lafer B, Landen M, Larsen ER, Lewitzka U, Licht RW, Lopez-Jaramillo C, MacQueen G, Manchia M, Marsh W, Martinez-Cengotitabengoa M, Melle I, Meza-Urzuza F, Yee Ming M, Monteith S, Morken G, Mosca E, Munoz R, Mythri SV, Nacef F, Nadella RK, Nery FG, Nielsen RE, O'Donovan C, Omrani A, Osher Y, Ostermark Sorensen H, Ouali U, Pica Ruiz Y, Pilhatsch M, Pinna M, da Ponte FDR, Quiroz D, **Ramesar R**, Rasgon N, Reddy MS, Reif A, Ritter P, Rybakowski JK, Sagduyu K, Scippa AM, Severus E, Simhandl C, Stein DJ, Strejilevich S, Subramaniam M, Sulaiman AH, Suominen K, Tagata H, Tatebayashi Y, Tondo L, Torrent C, Vaaler AE, Veeh J, Vieta E, Viswanath B, Yoldi-Negrete M, Zetin M, Zgueb Y, Whybrow PC. Solar insolation in springtime influences age of onset of bipolar I disorder. *Acta Psychiatrica Scandinavica*. 2017 Jul 19.
DOI: 10.1111/acps.12772
Impact Factor: 6.790

Hypertension and Cardiovascular Disease

1. Dzudie A, Rayner B, Ojji D, **Schutte AE**, Twagirumukiza M, Damasceno A, Ba SA, Kane A, Kramoh E, Kacou JB, Onwubere B, Cornick R, Sliwa K, Anisiuba B, Mocumbi AO, Ogola E, Awad M, Nel G, Otieno H, Toure AI, Kingue S, **Kengne AP**, Perel P, Adler A, Poulter N, **Mayosi B.** Roadmap to achieve 25% hypertension control in Africa by 2025. *Cardiovascular Journal of Africa*. 2017 Jul/Aug;28(4):262-72.
DOI: 10.5830/cvja-2017-040
Impact Factor: 0.967
2. Ware LJ, Charlton K, **Schutte AE**, Cockeran M, Naidoo N, Kowal P. Associations between dietary salt, potassium and blood pressure in South African adults: WHO SAGE WAVE 2 Salt & Tobacco. *Nutrition, Metabolism and Cardiovascular Diseases*. 2017 Jul 08.
DOI: 10.1016/j.numecd.2017.06.017
Impact Factor: 3.679
3. du Plooy CS, **Mels CMC, Huisman HW, Kruger R.** Three-year change in endothelin-1 and markers of vascular remodelling in a bi-ethnic South African cohort: The SABPA study. *Journal of Human Hypertension*. 2017 Jul 20.
DOI: 10.1038/jhh.2017.47
Impact Factor: 2.797

4. **Kruger HS**, Botha-Ravuse C, Havemann-Nel L, Doubell M, **van Rooyen JM**. Agreement between specific measures of adiposity and associations with high blood pressure in black South African women. *American Journal of Human Biology*. 2017 Jul 12.
DOI: 10.1002/ajhb.23042
Impact Factor: 1.780
5. Swanepoel B, Malan L, Myburgh PH, **Schutte AE**, Steyn K, **Wentzel-Viljoen E**. Sodium content of foodstuffs included in the sodium reduction regulation of South Africa. *Journal of Food Composition and Analysis*. 2017 Jul 29.
DOI: /10.1016/j.jfca.2017.07.040
Impact Factor: 2.752

Microbial Water Quality Monitoring

1. **Igwaran A**, **Iweriebor BC**, Ofuzim Okoh S, **Nwodo UU**, Obi LC, **Okoh AI**. Chemical constituents, antibacterial and antioxidant properties of the essential oil flower of *Tagetes minuta* grown in Cala community Eastern Cape, South Africa. *BMC Complementary and Alternative Medicine*. 2017 Jul;17(1):351.
DOI: 10.1186/s12906-017-1861-6
Impact Factor: 2.288

Molecular Mycobacteriology

1. Stringer T, Seldon R, Liu N, **Warner DF**, Tam C, Cheng LW, Land KM, Smith PJ, Chibale K, Smith GS. Antimicrobial activity of organometallic isonicotinyl and pyrazinyl ferrocenyl-derived complexes. *Dalton Transactions*. 2017 Jul 17;46(30):9875-85.
DOI: 10.1039/c7dt01952a
Impact Factor: 4.029
2. **Moosa A**, Lamprecht DA, Arora K, Barry CE^{3rd}, Boshoff HIM, Ioerger TR, Steyn AJC, **Mizrahi V**, **Warner DF**. Susceptibility of mycobacterium tuberculosis cytochrome bd oxidase mutants to compounds targeting the terminal respiratory oxidase, cytochrome c. *Antimicrobial Agents and Chemotherapy*. 2017 Jul 31.
DOI: 10.1128/aac.01338-17
Impact Factor: 4.302

Respiratory and Meningeal Pathogens

1. **Jallow S**, **Madhi SA**, **Madimabe R**, Sipambo N, Violari A, Kala U, Petersen K, Naidoo S, Verwey C, **Moore DP**, **Nunes MC**. Immunogenicity of 13-valent pneumococcal conjugate vaccine among children with underlying medical conditions. *Vaccine*. 2017 Jul 05.
DOI: 10.1016/j.vaccine.2017.06.081
Impact Factor: 3.235
2. **Nunes MC**, **Madhi SA**. Influenza vaccination during pregnancy for prevention of influenza confirmed illness in the infants: A systematic review and meta-analysis. *Human Vaccines & Immunotherapeutics*. 2017 Jul 14.
DOI: 10.1080/21645515.2017.1345385
Impact Factor: 2.157

3. Shi T, McAllister DA, O'Brien KL, Simoes EAF, **Madhi SA**, Gessner BD, Polack FP, Balsells E, Acacio S, Aguayo C, Alassani I, Ali A, Antonio M, Awasthi S, Awori JO, Azziz-Baumgartner E, Baggett HC, **Baillie VL**, Balmaseda A, Barahona A, Basnet S, Bassat Q, Basualdo W, Bigogo G, Bont L, Breiman RF, Brooks WA, Broor S, Bruce N, Bruden D, Buchy P, Campbell S, Carosone-Link P, Chadha M, Chipeta J, Chou M, Clara W, Cohen C, de Cuellar E, Dang DA, Dash-Yandag B, Deloria-Knoll M, Dherani M, Eap T, Ebruke BE, Echavarria M, de Freitas Lazaro Emediato CC, Fasce RA, Feikin DR, Feng L, Gentile A, Gordon A, Goswami D, Goyet S, **Groome M**, Halasa N, Hirve S, Homaira N, Howie SRC, Jara J, Jroundi I, Kartasasmita CB, Khuri-Bulos N, Kotloff KL, Krishnan A, Libster R, Lopez O, Lucero MG, Lucion F, Lupisan SP, Marcone DN, McCracken JP, Mejia M, Moisi JC, Montgomery JM, **Moore DP**, Moraleda C, Moyes J, Munywoki P, Mutyara K, Nicol MP, Nokes DJ, Nymadawa P, da Costa Oliveira MT, Oshitani H, Pandey N, Paranhos-Baccala G, Phillips LN, Picot VS, Rahman M, Rakoto-Andrianarivelo M, Rasmussen ZA, Rath BA, Robinson A, Romero C, Russomando G, Salimi V, Sawatwong P, Scheltema N, Schweiger B, Scott JAG, Seidenberg P, Shen K, Singleton R, Sotomayor V, Strand TA, Sutanto A, Sylla M, Tapia MD, Thamthitawat S, Thomas ED, Tokarz R, Turner C, Venter M, Waicharoen S, Wang J, Watthanaworawit W, Yoshida LM, Yu H, **Zar HJ**, Campbell H, Nair H. Global, regional, and national disease burden estimates of acute lower respiratory infections due to respiratory syncytial virus in young children in 2015: A systematic review and modelling study. *Lancet*. 2017 Jul 07.
DOI: 10.1016/s0140-6736(17)30938-8
Impact Factor: 47.831
4. **Olwagan CP, Adrian PV, Madhi SA**. Comparison of traditional culture and molecular QPCR for detection of simultaneous carriage of multiple pneumococcal serotypes in African children. *Scientific Reports*. 2017 Jul 05;7(1):4628.
DOI: 10.1038/s41598-017-04915-y
Impact Factor: 4.259
5. Moyes J, Walaza S, Pretorius M, **Groome M**, von Gottberg A, Wolter N, Haffejee S, Variava E, Cohen AL, Tempia S, Kahn K, Dawood H, Venter M, Cohen C, **Madhi SA**. Respiratory syncytial virus in adults with severe acute respiratory illness in a high HIV prevalence setting. *Journal of Infection*. 2017 Jul 01.
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Impact Factor: 1.794

4. RESEARCH CENTRES

Clinical and Community HIV-Tuberculosis Research Collaborating Centre

1. Rockwood N, Sirgel F, Streicher E, Warren R, **Meintjes G**, Wilkinson RJ. Low frequency of acquired isoniazid and rifampicin resistance in rifampicin-susceptible pulmonary tuberculosis in a setting of high HIV-1 infection and tuberculosis co-prevalence. *Journal of Infectious Diseases*. 2017 Jul 20.
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Impact Factor: 6.273

5. RESEARCH UNITS WITH NO QUALIFYING PUBLICATIONS

Intramural

- Alcohol, Tobacco and Other Drug
- Burden of Disease
- Environment and Health
- Office of Malaria
- Office of Tuberculosis
- Primate

Extramural

- Bioinformatics Capacity Development
- Common Epithelial Cancer
- Diarrhoeal Pathogens
- Drug Discovery and Development
- Gynaecological Cancer
- Health Services to Systems
- Herbal Drugs
- Immunology of Infectious Disease
- Maternal and Infant Health Care Strategies
- Medical Imaging
- Prospective Gastrointestinal Cancer
- Receptor Biology

Research Centres

- Advancing Care and Treatment (ACT) for TB/HIV
- Centre for Basic and Translational Human TB Research
- Centre for Tuberculosis Biomarker-Targeted Intervention
- Soweto Matlosana SAMRC Collaborating Centre for HIV/AIDS and TB
- TB Free through Research and Innovation
- Tuberculosis Collaborating Centre for Child Health (TB-CHILD)
- Tygerberg SAMRC Collaborating centre for HIV Laboratory Research
- UCT Collaborating Centre for Optimising Antimalarial Therapy in South Africa
- UP Centre for Sustainable Malaria Control
- Wits Clinical HIV/TB Research Unit, WITS Health Consortium
- Wits Collaborating Centre for Multi-disciplinary Research on Malaria
- Wits RHI Collaborating Centre for HIV/AIDS

6. GRANTS AWARDED

SAMRC LIST OF NEW CONTRACTS FOR JULY 2017					
SAMRC Unit	Funder	Main Funder	Project Title/Description	Contract Value	
				Rand	Foreign Currency
Alcohol, Tobacco and Other Drug	Boston Medical Centre	NIH	Impact of alcohol consumption on TB treatment outcomes – Amendment #2	3,509,338.00	\$268,956.00
	DST	Western Cape Government	Continuation of the implementation of performance measurement systems	744,966.00	
	RTI International	RTI International	Sub award number 1-312-0214954-52486L – Modification #2	2,943,511.00	\$225,591.00
Biomedical Research and Innovation Platform	NRF	DST	Professional Development Programme	1,420,000.00	
Biostatistics	NRF	NRF	Knowledge Interchange & Collaboration – Africa Interaction	25,000.00	
Gender and Health	American Jewish	American Jewish World Society	Develop action plan & risk assessment for young researches attending SVRI Forum during September 2017 in Brazil	1,957,200.00	\$150,00.00
	Oak Philanthropy	Oak Foundation	Develop action plan & risk assessment for young researches attending SVRI Forum during September 2017 in Brazil	88,895.00	\$6,812.90
HIV Prevention	NIH	NIH	Clinical Trials	14,152,774.00	\$1,084,670.00

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