

CURRICULUM VITAE

Full name: Gavin John Churchyard
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Present position: Chief Executive Officer
Institution: Aurum Institute for Health Research

Gavin Churchyard, MBChB, MMED (Internal Medicine), FCP (SA), PhD is a specialist physician, internationally-renowned for his contributions in tuberculosis (TB). He is the founder and Chief Executive Officer of Aurum Institute for Health Research, an independent, not for profit, proudly South African, public benefit organization with more than \$80 million in grants that focus on TB and HIV service delivery, management and research. He is an Honorary Associate Professor, Department of Medicine, School of Clinical Sciences in the Faculty of Health Sciences, University of Kwa-Zulu Natal, Visiting Honorary Associate Professor at the University of Cape Town, School of Public Health and Family Medicine and Honorary Senior Lecturer at the London School of Hygiene and Tropical medicine. He is the principle investigator on five studies the largest of which is a cluster randomized trial of community-wide isoniazid preventive therapy. Prof Churchyard is also participating in a number of other TB drug trials (Rifaquin, TMC207, SQ109). He is a member of the executive committee of the International Consortium to Respond Effectively to the AIDS / TB Epidemic (CREATE), funded by the Bill and Melinda Gates Foundation and the NIH funded Centre for the AIDS Programme of Research in South Africa (CAPRISA). He is a member of the HIV vaccine trials network scientific steering and protocol committees and a member of the South African AIDS Vaccine Initiative and the International AIDS Vaccine Initiative. He has consulted for the World Health Organisation, UNAIDS and the National Department of Health on treatment and prevention of TB and HIV. He has contributed to industry, national and international guidelines for TB treatment and preventive therapy. Prof Churchyard's has published more than 70 scientific papers and text book chapters in the areas of TB and HIV treatment and prevention.

PROFESSIONAL EXPERIENCE:

Date	Position Title	Organization
1998 - present	Chief Executive Officer	Aurum Institute for Health Research
1998 - present	Senior Honorary Lecturer	London School of Hygiene and Tropical Medicine
2004 - present	Visiting Associate Professor	School of Public Health and Family Medicine, Faculty of Health Sciences, University of Cape Town.
2002 - present	Honorary Associate Professor	Department of Medicine, School of Clinical Sciences in the Faculty of Health Sciences, Natal University, Durban.
1999	Research Associate	Department of Community Health, University of Cape Town
1995 - 1998	Chairman	Medical working group, AngloGold Health Service
1993 - 1998	Director & Chief Physician	Intensive Care Unit, Ernest Oppenheimer Hospital
1993 - 1998	Medical Consultant & Head of Department	Medicine, Ernest Oppenheimer Hospital
1991 - 1992	Consultant	Medicine Department, Ernest Oppenheimer Hospital
1990 - 1991	Consultant	Internal Medicine, Baragwanath Hospital
1986 - 1990	Resident	Internal Medicine, Baragwanath Hospital
1986	Medical Officer	Medicine, Natalspruit Hospital

QUALIFICATIONS:

Degree	Year(s)	Discipline	Institution
PhD	2001	Infectious Diseases	University of Witwatersrand
MMed	1994	Internal Medicine	University of Witwatersrand
FCP (SA)	1989	Medicine	College of Medicine of South Africa

FACULTY APPOINTMENTS:

1. Senior Honorary Lecturer, London School of Hygiene & Tropical Medicine. 2007 to Current.
2. Visiting Associate Professor, School of Public Health and Family Medicine, Faculty of Health Sciences, University of Cape Town. 1 July 2004 to 1 July 2007.
3. Honorary Associate Professor, Department of Medicine, School of Clinical Sciences in the Faculty of Health Sciences, Natal University, Durban. 1 December 2002 – Current.
4. Honorary Lecturer, London School of Hygiene & Tropical Medicine. 1998 - 2006.
5. Research Associate, Department of Community Health, University of Cape Town. 1999.

AWARDS/HONORS:

1. International Good Clinical Practice Journal (GCPj) award (2007) for excellence in clinical research
2. Chamber of Mines International Travelling Scholarship (1995).
3. Professor Bobby Greave Research Award (1990).
4. Novo Nordisc International Travelling Scholarship (1990).
5. Jock Gear Memorial Award (for outstanding service) (1988).

AREA OF STUDY:

TB, HIV and Occupational Diseases

LAST GCP TRAINING:

1. "CITI Good Clinical Practice Course". CITI Collaborative Institutional Training Initiative. 29 November 2007.
2. "Human Participants Protection Education for Research Teams", National Institutes of Health (NIH). 8 March 2007

POST GRADUATE RESEARCH: (STUDENTS & FELLOWSHIPS - MASTER AND DOCTORAL LEVEL)

Support was provided to the following students and Fellows:-

1. **Harriet Park** (Columbia University, MSc International health)
 - a) Ancillary Study of Ex-Miners Study
2. **Jessica Ross** (Columbia University, MSc International health)
 - a) Re-analysis and write-up of SIMHEALTH 617
3. **Lisa Frigati**
 - a) Attitudes to Disclosure of HIV status among HIV-infected individuals in a workplace setting: Perception of Healthcare Workers. Poster. 3rd South African AIDS Conference, Durban, South Africa, 5-8 June 2007.
4. **Mison Dahab** (CAPRISA Fellowship)
 - a) Belief in and use of traditional medicines among patients starting ART in South Africa. Poster. 3rd South African AIDS Conference, Durban, South Africa, 5-8 June 2007.
 - b) A quantitative study of barriers & facilitators to adherence in an antiretroviral therapy programme in South Africa. Abstract. XVI International AIDS Conference, Toronto, Canada. 2006.
 - c) Barriers & facilitators to adherence in an ART programme in South Africa. Abstract. XVI International AIDS Conference, Toronto, Canada. 2006.
5. **Yasmeen Hanifa** (CAPRISA Fellowship)
 - a) Evaluation of Arkansas method of urine testing for isoniazid in a South African population. 37th Union World Conference on Lung Health, Paris, France, 31 October – 4 November 2006.
 - b) Prevalence of latent TB infection, radiological TB disease and silicosis among gold miners in South Africa. Poster. 37th IUATLD World Conference, Paris, France, 31 October – 4 November 2006.
 - c) Pilot Studies for a cluster randomized study of community-wide TB preventive therapy among mine workers in South Africa. 2006
 - d) Evaluation of a video delivering health education about antiretroviral therapy for HIV-infected employees of Anglo American Group plc and Sasol in South Africa. Dissertation submitted in part fulfilment of the requirements for the degree of MSc. London School of Hygiene and Tropical Medicine & Aurum Health Research. October 2004.

6. **Jennifer Whetham** (CAPRISA Fellowship)
 - a) Early antiretroviral treatment-related adverse events in mineworkers commencing efavirenz-containing regimens in South Africa. Abstract. 2006.
 - b) Antiretroviral therapy reduces risk of TB among Southern African gold miners. Abstract. 2006.
7. **Lucie Seyler**
 - a) Effect of antiretroviral therapy on incidence of tuberculosis among employees of an industrial company in South Africa. Submitted in partial fulfilment as a requirement of the University of London for the award of Master of Science in Tropical Medicine and International Health. August 2006.
8. **Paul Mee**
 - a) Evaluation of World Health Organisation criteria for antiretroviral treatment failure among South African adults. Dissertation submitted in part fulfilment of the requirements for the degree of MSc in Epidemiology. London School of Hygiene and Tropical Medicine. September 2005.
9. **Amy Stenson**
 - a) Evaluation of antiretroviral therapy (ART)- related counselling in a workplace-based ART implementation program, South Africa. AIDS Care 2005.
10. **Dale A Babb**
 - a) The use of traditional medicine in the era of antiretroviral therapy – a South African perspective. March 2003. *Psychology, Health & Medicine* (In press)
11. **John Day**
 - a) Evaluation of the Anglogold HIV voluntary counselling and testing (VCT) programme, March – August 2001
12. **Cynthia Sterkenberg**
 - a) Adherence to antiretroviral therapy in HIV-infected gold miners in South Africa: Identifying barriers to and developing a standardized tool for monitoring adherence. MPH Candidate, Columbia University, Joseph L. Mailman School of Public Health. 2001
13. **Romina C. Reyes**
 - a) Tuberculosis attributable to HIV infection and silicosis in South African gold miners. Submitted in partial fulfilment of the requirements for the degree of Master of Science. Faculty of Graduate Studies. The University of Western Ontario. London, Ontario. June 2000
14. **Sara Kassim Ginwalla**
 - a) Evaluation of HIV Voluntary Counselling and Testing Services for mineworkers in Welkom, South Africa. Dissertation submitted as partial fulfilment of Master of Science (MSc) in Infection and Health in the Tropics. London School of Hygiene and Tropical Medicine.

CURRENT RESEARCH:

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| Principle Investigator | <ol style="list-style-type: none"> 1. Effect of community-wide isoniazid preventive therapy on tuberculosis among South African gold miners 2. A Phase II clinical trial to evaluate the safety and immunogenicity of a multiclade HIV-1 DNA plasmid vaccine, VRC-HIVDNA016-00-VP, followed by a multiclade recombinant adenoviral vector HIV-1 vaccine boost, VRCHIVADV014-00-VP, in HIV-1 uninfected adult participants (HVTN 204) 3. South African AIDS Vaccine Initiative supported research in the Klerksdorp, Orkney, Stilfontein & Haartebeesfontein district. 4. Improving the detection of smear negative pulmonary TB among South African gold miners: a comparison of liquid (MGIT) versus solid (LJ) culture systems 5. A Multi-site Evaluation of Virologic, Immunologic, and Clinical Natural History of Participants Enrolled in Phase I and Phase II HIV Vaccine Protocols or HIV Vaccine Preparedness Cohorts (HVTN 403) 6. A multicenter double-blind randomized placebo-controlled Phase IIB test-of-concept study to evaluate the safety and efficacy of a 3-dose regimen of the Clade B-based Merck Adenovirus serotype 5 HIV-1 gag/pol/nef vaccine in HIV-1-uninfected adults in South Africa (HVTN 503) 7. An international multicentre controlled clinical trial to evaluate high dose Rifapentine and a Quinolone in the treatment of Pulmonary Tuberculosis (RIFAQUIN) 8. Acute HIV-1 Infection Prospective Cohort Study (CHAVI 001) |
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- Co-Investigator
1. Factors associated with INH resistance in a setting of wide-spread use of isoniazid preventive therapy
 2. Modelling the impact of community-wide isoniazid preventive therapy on tuberculosis in South African goldminers
 3. Tolerability of isoniazid preventive therapy and association between minor adverse effects and adherence.
 4. Impact of wide-spread isoniazid preventive therapy on the molecular epidemiology of tuberculosis
 5. Characterization of M/XDR-TB in SA gold miners and to determine optimal strategies for detection of XDR-TB, RO1 award.
 6. Evaluation of the anti-bacterial activity, safety, and tolerability of TMC207 in subjects with sputum smear-positive pulmonary infection with multi-drug resistant *Mycobacterium tuberculosis* (MDR-TB).

RECENTLY COMPLETED RESEARCH:

1. A multicenter double-blind randomized placebo-controlled Phase IIB test-of-concept study to evaluate the safety and efficacy of a 3-dose regimen of the Clade B-based Merck Adenovirus serotype 5 HIV-1 gag/pol/nef vaccine in HIV-1-uninfected adults in South Africa.
2. A Phase II clinical trial to evaluate the safety and immunogenicity of a multiclade HIV-1 DNA plasmid vaccine, VRC-HIVDNA016-00-VP, followed by a multiclade recombinant adenoviral vector HIV-1 vaccine boost, VRC-HIVADV014-00-VP, in HIV-1 uninfected adult participants.
3. Improving the detection of smear negative pulmonary TB among South African gold miners: a comparison of liquid (MGIT) versus solid (LJ) culture systems.
4. Pilot studies for a cluster randomised study of community-wide TB preventive therapy among mine workers in South Africa.
5. Hepatitis B and antiretroviral therapy response in a South African ART program (*In press*).
6. Prevalence of latent TB infection amongst gold miners in South Africa (*In press*).
7. Patients' & providers' perspectives on barriers to and enablers of HIV treatment adherence in a South African workplace programme (published in *BMC Public Health*).
8. Antiretroviral Therapy using Zidovudine, Lamivudine, and Efavirenz in South Africa: Tolerability and Clinical Events (published in *AIDS*).
9. Evaluation of the Arkansas method of urine testing for isoniazid in South Africa. (published in *International Journal of Tuberculosis and Lung Disease*).
10. Hepatotoxicity in an African antiretroviral therapy cohort: the effect of tuberculosis and hepatitis B (published in *AIDS*).
11. A cross-sectional study evaluating methods to screen for active tuberculosis among HIV-infected adults in South Africa prior to starting isoniazid preventive therapy (published in *International Journal of Tuberculosis and Lung Disease*).
12. A cohort study evaluating the effect on tuberculosis of isoniazid preventive therapy given to HIV-infected adults in South Africa under routine programme conditions (published in *Journal of the American Medical Association*).
13. A cohort study evaluating secondary isoniazid preventive therapy in preventing tuberculosis among HIV-infected adults in South Africa (published in *AIDS*).

PEER-REVIEWED PUBLICATIONS IN THE PAST 3 YEARS:

1. Hoffmann CJ, Charalambous S, Martin DJ, Innes C, Churchyard GJ, Chaisson RE, Grant AD, Fielding KL, Thio CL. Hepatitis B and antiretroviral therapy response in a South African ART program. *AIDS* 2008; (In press).
2. Lewis JJ, Charalambous S, Day JH, Fielding KL, Grant AD, Hayes RJ, Corbett EL, Churchyard GJ. HIV infection does not affect active case finding of tuberculosis in South African gold miners. *American Journal of Respiratory and Critical Care Medicine* 2008; (In press).
3. Mee P, Churchyard GJ, et al. Evaluation of the World Health Organization criteria for antiretroviral treatment failure among adults in South Africa. *AIDS* 2008; (In press).
4. Fielding KL, Charalambous S, Stenson AL, Pemba LF, Martin DJ, Wood R, Churchyard GJ, Grant AD. Risk factors for poor virological outcome at 12 months in a workplace-based antiretroviral therapy programme in South Africa: a cohort study. *BMC Infectious Diseases* 2008; (In press).
5. Charalambous S, Grant AD, Moloi V, Warren R, Day JH, van Helden P, Hayes RJ, Fielding KL, De Cock KM, Chaisson RE, Churchyard GJ. Contribution of reinfection to recurrent tuberculosis in South African gold miners. *IJTL* 2008; (In press).
6. Girdler-Brown BV, White NW, Ehrlich RI, Churchyard GJ. The Burden of Silicosis, Pulmonary Tuberculosis and COPD Among Former Basotho Goldminers. *American Journal of Industrial Medicine* 2008; (E-pub ahead of print).

7. Hanifa Y, Grant AD, Lewis J, Corbett EL, Fielding K, Churchyard GJ. Prevalence of latent TB infection amongst gold miners in South Africa. *IJTLD* 2008; (In Press).
8. Dahab M, Charalambous S, Hamilton R, Fielding K, Kielmann K, Churchyard GJ, Grant AD. "That is why I stopped the ART": Patients' & providers' perspectives on barriers to and enablers of HIV treatment adherence in a South African workplace programme. *BMC Public Health* 2008; 8(1): 63.
9. Pemba L, Charalambous S, von Gottberg A, Magadla B, Moloi V, Seabi O, Wasas A, Klugman KP, Chaisson RE, Fielding K, Churchyard GJ, Grant AD. Impact of cotrimoxazole on non-susceptibility to antibiotics in *Streptococcus pneumoniae* carriage isolates among HIV-infected mineworkers in South Africa. *J Infect.* 2008; 56(3): 171-8.
10. Hoffmann CJ, Fielding KL, Charalambous S, Sulkowski MS, Innes C, Thio CL, Chaisson RE, Churchyard GJ, Grant AD. Antiretroviral Therapy using Zidovudine, Lamivudine, and Efavirenz in South Africa: Tolerability and Clinical Events. *AIDS* 2008; 22(1): 67-74.
11. Hanifa Y, Mngadi K, Lewis J, Fielding K, Churchyard G, Grant A. Evaluation of the Arkansas method of urine testing for isoniazid in South Africa. *Int J Tuberc Lung Dis.* 2007 11(11): 1232-1236.
12. Churchyard GJ, Scano F, Grant AD, Chaisson RE. TB preventive therapy in the era of HIV infection: Overview and research priorities. *J Infect Dis.* 2007; 196 (Suppl. 1): S52-62.
13. Friedland G, Churchyard GJ, Nardell E. Tuberculosis and HIV Coinfection: Current State of Knowledge and Research Priorities. *J Infect Dis.* 2007; 196(Suppl 1): S1-3.
14. Weston M, Churchyard GJ, Mametja D, McIntyre J, Randerla F. Business and AIDS: Sectoral challenges and opportunities. *AIDS* 2007; 21 (Suppl 3): S85-89.
15. Charalambous S, Innes C, Muirhead D, Kumaranayake L, Fielding K, Pemba L, Hamilton R, Grant A, Churchyard GJ. Evaluation of a Workplace HIV Treatment Programme in South Africa. *AIDS* 2007; 21(Suppl 3): S73-78.
16. Page-Shipp LS, Charalambous S, Roux S, Dias B, Sefuti C, Churchyard GJ, Grant AD. Attitudes to directly observed antiretroviral treatment in a workplace HIV care programme in South Africa. *Sex Transm Infect.* 2007; 83(5): 383-386.
17. Hoffmann CJ, Charalambous S, Thio CL, Martin DJ, Pemba L, Fielding KL, Churchyard GJ, Chaisson RE, Grant AD. Hepatotoxicity in an African antiretroviral therapy cohort: the effect of tuberculosis and hepatitis B. *AIDS* 2007; 21(10): 1301-1308.
18. Babb DA, Pemba L, Seatlanyane P, Charalambous S, Churchyard GJ, Grant AD. Use of traditional medicine by HIV-infected individuals in South Africa in the era of antiretroviral therapy. *Psychol Health Med.* 2007; 12(3): 314-320.
19. Churchyard GJ (Co-Author). Executive summary & recommendations from the who/unaid/siavi technical consultation on "Test of Concept / Phase IIB-TOC trials as a novel strategy for evaluation of preventive HIV vaccines", 31 January-2 February 2006, IAVI, New York, USA. *AIDS* 2007; 21(4): 539-546
20. Corbett EL, Bandason T, Cheung Y-B, Munyati SS, Godfrey-Faussett P, Hayes RJ, Churchyard GJ, Butterworth AE, Mason PR. Epidemiology of Tuberculosis in a High HIV Prevalence Population Provided with Enhanced Diagnosis of Symptomatic Disease. *PLoS Med.* Jan 2007; 4(1): e22: 164-172
21. Charalambous S, Grant AD, Day JH, Pemba L, Chaisson RE, Kruger P, Martin D, Wood R, Brink B, Churchyard GJ. Establishing a workplace antiretroviral therapy programme in South Africa. *AIDS Care.* 2007; 19(1): 34-41
22. Day JH, Charalambous S, Fielding KL, Hayes RJ, Churchyard GJ, Grant AD. Screening for tuberculosis prior to isoniazid preventive therapy among HIV-infected gold miners in South Africa. *Int J Tuberc Lung Dis.* 2006; 10(5): 523-529
23. Corbett EL, Marston B, Churchyard GJ, De Cock KM. Tuberculosis in Sub-Saharan Africa: Opportunities, Challenges and Change in the Era of Antiretroviral Therapy. *Lancet.* 2006; 367(9514): 926-937.
24. teWaterNaude JM, Ehrlich RI, Churchyard GJ, Pemba L, Dekker K, Vermeis M, White NW, Thompson ML, Myers JE. Tuberculosis and silica exposure in South African gold miners. *Occup Environ Med* 2006; 63(3): 187-192.
25. Stenson AL, Charalambous S, Dwadwa T, Pemba L, Du Toit JD, Baggaley R, Grant AD, Churchyard GJ. Evaluation of antiretroviral therapy (ART)- related counselling in a workplace-based ART implementation program, South Africa. *AIDS Care* 2005; 17(8): 949-957
26. Martinson N, Hausler H, Churchyard GJ, Lawn SD. Dealing with the dual epidemics of HIV and TB. *SA J HIV Med.* Sep 2005;20:33-35.
27. Grant AD, Charalambous S, Fielding KL, Day JH, Corbett EL, Chaisson RE, De Cock KM, Hayes RJ, Churchyard GJ. Effect of Routine Isoniazid Preventive Therapy on Tuberculosis Incidence among HIV-Infected Men in South Africa (A Novel Randomized Incremental Recruitment Study). *JAMA* 2005 Jun 8; 293(22): 2719-2725

RESEARCH SUPPORT:

ACTIVE:

Consortium to Respond Effectively to the AIDS / TB Epidemic (CREATE) October 2005 – March 2010
Bill & Melinda Gates Foundation \$14,1 million
PI: Prof G J Churchyard 25%
Title: A comparison between community-wide and targeted isoniazid preventive therapy as a strategy to improve control of tuberculosis among South African gold miners
Aim: A comparison between community-wide and targeted isoniazid preventive therapy as a strategy to improve control of tuberculosis among South African gold miners.

SAAVI HIV Vaccine activities April 2006 – March 2009
SAAVI R4,076,360 million
PI: Prof. G Churchyard 20%
Title: Support for the conduct of HIV vaccine trials in the KOSH district
Aims: 1. Maintaining an effective community involvement program
2. Conducting phase I, II, and IIb/III preventive HIV vaccine trials
3. Collaborate with laboratory scientists by providing clinical information and specimens required to meet the viral, immunological and host genetic objectives specified by SAAVI (in collaboration with laboratory scientists).

UKZN-CAPRISA HIV/AIDS Clinical Trials Unit Year 2 1 Feb 2008 – 31 Jan 2009
National Institutes of Health \$228,567
PI: Prof S Abdool Karim
KOSH Site Leader: G J Churchyard 10%
Aim: To establish capacity and to participate in HIV vaccines and treatment trials as an NIH international clinical trial site.

CATSA (Consortium for Adolescent Testing in South Africa) April 2008 – March 2012
European & Developing Countries Clinical Trials Partnership (EDCTP) €516,598
CI: Dr Linda-Gail Bekker
Site PI: Prof Churchyard 5%
Title: Feasibility of and Capacity building for Adolescent HIV Vaccine Trials in South Africa.
Aim: The overall aim of the proposed project is to address the clinical/ epidemiological, ethico-legal and socio-behavioural obstacles to adolescent HIV vaccine trials in South Africa through a series of feasibility studies, the development of culturally-appropriate tools, site capacity building, and the initiation of a strong and sustainable consortium of investigators dedicated to the inclusion of adolescents in HIV vaccine trials

RIFAQUIN January 2008 – December 2011
European & Developing Countries Clinical Trials Partnership (EDCTP) & Wellcome Trust €1,117,224
CI: Dr Amina Jindani
Site PI: Prof Churchyard 5% in kind
Title: An International Multicentre Controlled Clinical Trial to evaluate high dose Rifapentine and a Quinolone in the treatment of Pulmonary Tuberculosis.
Aim: To compare a standard control regimen with two alternative treatment regimens for the treatment of tuberculosis.

Center for HIV / AIDS Vaccine Immunology Year 3 July 2007 – June 2008
National Institutes of Health \$336,123
CHAVI PI: Barton Haynes
KOSH site PI: Prof Churchyard 5% in kind
Aim: To collect biological specimens to study the HIV-1 virus, the host response, and genetic factors that determine HIV transmission and viral set point.

Rustenburg HIV vaccine trials unit January 2007 – December 2008
IAVI R2,682,147
PI: Prof G Churchyard 5% in kind
Aim: To undertake HIV vaccine preparedness activities in the Rustenburg area, North West Province, South Africa

PENDING:

EDCTP TB DRUG TRIAL CONSORTIUM

European & Developing Countries Clinical Trials Partnership (EDCTP)

CI: Prof Michael Hoelscher

Site PI: Prof Churchyard

Title: SQ109 & HIGHRIF

July 2008 – August 2010

€846,786

10%

Aim: (a) To evaluate efficacy, safety and tolerability of SQ109 in a multi-drug regimen for the treatment of patients infected with drug-sensitive *M. tuberculosis*.

(b) Investigate the potential of higher dosages of rifamycins to shorten the treatment of tuberculosis (TB).

OVERLAP:

None