

---

## BIOGRAPHICAL SKETCH

---

NAME: Durovni, Betina

---

eRA COMMONS USER NAME (credential, e.g., agency login):

---

POSITION TITLE: Researcher at Fiocruz Center of Strategic Studies

---

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

---

INSTITUTION AND LOCATION	DEGREE	Completion Date	FIELD OF STUDY
Souza Marques Foundation, Brazil	MD	1985	Medicine
Federal University of Rio de Janeiro, Brazil	Residence	1988	Infectious Diseases
Federal University of Rio de Janeiro, Brazil	MBA	2000	Health Administration
Johns Hopkins University, USA	MPH	2009	Public Health
Federal University of Rio de Janeiro, Brazil	PhD	2014	Medicine

### A. Personal Statement

I have experience in conducting operational and clinical research on infectious disease of importance to the Brazilian population, especially tuberculosis and HIV. As a Principal Investigator or co-investigator I have participated in many international collaborative studies on tuberculosis and tuberculosis associated to HIV. I was the Principal Investigator in Brazil in the THRIO study part of the CREATE consortium and co-investigator in NIH funded collaborative studies with Johns Hopkins University on innovative approaches for tuberculosis control. I served as a consultant to UNAIDS in several countries in TB and HIV Global Fund projects. I am a consultant for the MoH tuberculosis program and member of the STAG-TB WHO and advisor for Brazilian MoH in tuberculosis. As part of these studies, I have extensive experience working with latent TB infection in people living with HIV in Rio de Janeiro and am well prepared to be the local PI for this study.

As the Rio de Janeiro city's transmissible diseases programs coordinator for more than ten years, I had the opportunity to conduct many studies that contributed to building research capacity, provided opportunities for development of new investigators, and led to implementation of new tools for tuberculosis and HIV control.

- **Durovni B**, Saraceni V, Moulton LM, Pacheco AG, Cavalcante SC, King BS, Cohn S, Efron A, Chaisson RE, Golub JE. (2013). Effect of improved tuberculosis screening and isoniazid preventive therapy on incidence of tuberculosis and death in patients with HIV in clinics in Rio de Janeiro, Brazil: a stepped wedge, cluster-randomised trial. *Lancet Infect Dis*;10: 852-8. PMID: 3899698
- Golub JE, Saraceni V, Cavalcante SC, Pacheco AG, Moulton LH, King BS, Efron A, Moore RD, Chaisson RE, **Durovni B**. (2007). The impact of antiretroviral therapy and isoniazid preventive therapy on tuberculosis incidence in HIV-infected patients in Rio de Janeiro, Brazil. *AIDS*; 21:1441-8. PMID: 17589190 PMID 3063947
- Golub JE, Saraceni V, Cohn S, Cavalcante SC, Pacheco AG, Moulton LH, **Durovni B**, Chaisson RE. (2015) Long-term protection from isoniazid preventive therapy for tuberculosis in HIV-infected patients in a medium burden tuberculosis setting: the TB/HIV in Rio (THRio) Study. *Clin Infect Dis* 2015;60:639-45. PMID: PMC4366579

## B. Positions and Honors

### Positions and Employment

1986- 1988	Medical Resident, Infectious Diseases Service, Federal University of Rio de Janeiro, Brazil
1988- 1992	Attending Physician Infectious Diseases Service, University Hospital “Clementino Fraga Filho”, Federal University of Rio de Janeiro, Brazil.
1988-1989	Associate Professor, Infectious Diseases Department, Medicine School, Souza Marques University, Rio de Janeiro, Brazil.
1992- 2009	Head, Transmissible Disease Department (STD/AIDS, Tuberculosis and Leprosy), Public Health Secretariat of Rio de Janeiro city.
2009 - 2012	Superintendent of the Programmatic Areas of Rio de Janeiro City Health Secretariat.
2012 - 2013	Especial Advisor of the Primary Health Care Department of Rio de Janeiro City Health Secretary
2013	Undersecretary of Rio de Janeiro City Health Department
2017	Researcher at Fiocruz Center of Strategic Studies

### Other Experience and Professional Memberships

Since 2018	Member of the Unitaids Proposals <i>Review Committee (PRC)</i>
Since 2015	Member of the WHO   Strategic and Technical Advisory Group for Tuberculosis
Since 2012	Member of the Brazilian NTP Tuberculosis Advisory Technical Committee
2000/2001	Executive Secretary of the Brazilian National Board of AIDS Program Directors
2001	UNAIDS Consultant, Project: “Sharing best practices in HIV prevention and reproductive health for youth, among Brazil and <u>Mozambique</u> ”. Funded by UNF.
2001	UNAIDS Consultant, “Brazilian Investments Opportunities Menu” for the World Economic Forum Meeting
2002	UNAIDS Consultant, assisted the <u>Ukrainian</u> , <u>Georgian</u> , <u>Armenian and Cuban</u> CCM in the development of the Project for the AIDS control program presented to the Global Fund to Fight AIDS, Tuberculosis and Malaria, first and second rounds.
2003	UNAIDS Consultant, assisted the <u>Bolivian</u> and <u>Russian Federation</u> CCM in the development of the Project for the AIDS control program presented to the Global Fund to Fight AIDS, Tuberculosis and Malaria, third and fourth rounds.
2004	UNAIDS Consultant, assisted the <u>Equatorial Guinea</u> and <u>Suriname</u> CCM in the development of the Project for the AIDS control program presented to the Global Fund to Fight AIDS, Tuberculosis and Malaria, fourth round.
2005	UNAIDS Consultant, assisted the <u>Uruguay</u> CCM in the development of the Project for the AIDS control program presented to the Global Fund to Fight AIDS, Tuberculosis and Malaria, fifth round.

## C. Contribution to Science

I have conducted research on tuberculosis and HIV control, mainly operational research to improve delivery of care. Building research programs in services, we had impact on the ground with new strategies and technologies implemented and research capacities developed. These projects have created opportunities for development of new investigators and a background on research implementation and development. The research experiences and some of their key contributions are summarized below.

Tuberculosis control strategies. As the head of the transmissible diseases department at Rio de Janeiro Municipal Secretariat I have been working in an intensive and productive collaboration with the Johns Hopkins Center for Tuberculosis Research. I implemented multiple studies of TB control measures. I was co-investigator in Brazil of studies to evaluate different models to implement the WHO' DOTS strategy and other strategies to control tuberculosis. Major contributions include reports demonstrating that better results are obtained using a comprehensive and community based DOTS program. Most importantly that an enhanced DOTS (DOTS-A) program, adding contact evaluation to identify secondary TB cases and to provide treatment of latent TB infection had more significant impact in reducing the incidence of TB.

- Soares, E. C. C. ; Pacheco, A. G. F. ; Mello, F. C. Q. ; **Durovni, B.** ; Chaisson, R. E. ; Cavalcante, S. C. Improvements in treatment success rates with directly observed therapy in Rio de Janeiro city. The International Journal of Tuberculosis and Lung Disease, v. 10, p. 591-708, 2006.
- Cavalcante, S. C. ; Soares, E. C. C. ; Pacheco, A. G. ; Chaisson, R. E. ; **Durovni, B.** ; DOTS Expansion Team. Community DOT for tuberculosis in a Brazilian favela: comparison with a clinic model. The International Journal of Tuberculosis and Lung Disease, v. 11, p. 544-549, 2007. [PMCID: PMC3812056](#)
- Cavalcante, S. C.; **Durovni, B.** ; Barnes, G. L. ; Souza, F. B. ; BARROSO, P. F. ; MOHAN, C. I. ; Golub JE ; Chaisson, RE . Community-randomized trial of enhanced DOTS for tuberculosis control in Rio de Janeiro, Brazil. The International Journal of Tuberculosis and Lung Disease, v. 14, p. 203-209, 2010. [PMID:17439679](#)
- Soares, ECC ; Vollmer, W. M. ; Cavalcante, SC ; Pacheco, AG; Saraceni, V. ; Silva, JS.; Neves, GR.; Golub, JE ; Efron, AR.; **Durovni, B** ; Chaisson, R. E. Tuberculosis control in a socially vulnerable area: a community intervention beyond DOT in a Brazilian favela. The International Journal of Tuberculosis and Lung Disease, v. 17, p. 1581-1586, 2013. [PMID: 24200272](#)

#### Consortium to Respond Effectively to the AIDS-TB Epidemic (CREATE) – TB/HIV no Rio study (THRio).

CREATE, is a consortium of investigators conducting population level intervention trials to control HIV-related TB in three countries and addressing global TB/HIV policies through evidence-based advocacy. CREATE is funded by a grant from the Bill and Melinda Gates Foundation. I am Principal investigator of one of the CREATE studies, the TB/HIV study in Rio de Janeiro (THRio), Brazil. THRio was a clinic-randomized trial of INH preventive therapy in HIV+ patients that provided important information about usefulness of IPT as in the HIV + patients using ARV. A major part of this study was collecting a large amount of data from clinical sites and linking it with existing Health Department databases, such as TB and death registers.

- Golub, J. E. **Durovni, B.** ; King BS ; Cavalcante, S. C. ; Pacheco, A. G. ; Moulton, L. H. ; Moore, R. D. ; Chaisson, R. E. ; Saraceni, V . Recurrent tuberculosis in HIV-infected patients in Rio de Janeiro, Brazil. AIDS,v. 2, p. 2527-2533, 2008. [PMCID: PMC2603140](#)
- **Durovni, Betina** ; Cavalcante, Solange C. ; Saraceni, Valeria ; Vitoria Vellozo ; Israel Giselle ; King, Bonnie ; Cohn Silvia ; Efron, Anne ; Pacheco, A. G. ; Moulton, L. H. ; Chaisson, Richard E. ; Golub, Jonathan E. . The implementation of isoniazid preventive therapy in HIV clinics; the experience from the TB/HIV in Rio (THRio) Study. AIDS (Supplement), v. 24, p. S49-S56, 2010 [PMCID: PMC3006070](#)
- Dowdy, David W. ; Golub, Jonathan E. ; Saraceni, V. ; Moulton, Lawrence H. ; Cavalcante, S. C. ; Cohn, SILVIA ; Pacheco, Antonio G. ; Chaisson, Richard E. ; **Durovni, Betina** . Impact of Isoniazid Preventive Therapy for HIV-Infected Adults in Rio de Janeiro, Brazil. Journal of Acquired Immune Deficiency Syndromes (1999), v. 66, p. 1-558, 2014. [PMID:24853308](#)
- Saraceni, Valeria ; Cohn, Silvia ; Cavalcante, Solange C ; Pacheco, Antonio G F ; Moulton, L H ; Chaisson, Richard E ; **Durovni, Betina** ; Golub, Jonathan E . Prevalent Tuberculosis (TB) at HIV diagnosis in Rio de Janeiro, Brazil. Journal of Acquired Immune Deficiency Syndromes (1999), v. 67, p. 1, 2014. [PMID :24933097](#)

#### TB/ HIV mortality

As a public health researcher I was involved in many studies exploring the surveillance data to improve the knowledge about tuberculosis and HIV mortality in Rio de Janeiro and Brazil.

- Pacheco, A. G. ; Saraceni, Valeria ; Suely H Tuboi ; Lauria, LM ; Moulton LH ; FAULHABER, J. C. ; King, Bonnie ; Golub, Jonathan E. ; **Durovni, Betina** ; Cavalcante, Solange C. ; Harrison, LH ; Chaisson, Richard E. ; Schechter, M. . Estimating the Extent of Underreporting of Mortality among HIV-

Infected Individuals in Rio de Janeiro, Brazil. *AIDS Research and Human Retroviruses*, v. 26, p. 1-4, 2010. [PMCID: PMC3026651](https://pubmed.ncbi.nlm.nih.gov/22026651/)

- Pacheco, A. G. ; Saraceni, V. ; Tuboi, S. H. ; Moulton, L. H. ; Chaisson, R. E. ; Cavalcante, S. C. ; **Durovni, B.** ; Faulhaber, J. C. ; Golub, J. E. ; King, B. ; Schechter, M. ; Harrison, L. H. . Validation of a Hierarchical Deterministic Record-Linkage Algorithm Using Data From 2 Different Cohorts of Human Immunodeficiency Virus-Infected Persons and Mortality Databases in Brazil. *American Journal of Epidemiology*, v. 168, p. 1326-1332, 2008.
- Saraceni, V. ; King, B. S. ; Cavalcante, S. C. ; Golub, J. E. ; Lauria L. M. ; Moulton, L. H. ; Chaisson, R. E. ; **Durovni, B.** . Tuberculosis as primary cause of death among AIDS cases in Rio de Janeiro, Brazil. *The International Journal of Tuberculosis and Lung Disease*, v. 12, p. 769-772, 2008.
- Pacheco, A. G. ; **Durovni, B.** ; Cavalcante, S. C. ; Lauria L. M. ; Moore, R. D. ; Moulton, L. H. ; Chaisson, R. E. ; Golub, J. E. . AIDS-Related Tuberculosis in Rio de Janeiro, Brazil. *Plos One*, v. 3, p. e3132, 2008.

#### Pilot study for the implementation of Xpert MTB / RIF in Brazil

Randomized stepped Wedge study in two municipalities (RJ and Manaus) for the implementation of new tuberculosis test and resistance to rifampicin (MDR-TB ) in primary care in the SUS. 30,000 tests were applied in 14 laboratories that cover 70% of the diagnoses of TB in both municipalities. Incorporation of the test to the public health system after presentation of the preliminary results in CONITEC.

- Durovni B, Saraceni V, Hof S van den, Trajman A, Cordeiro-Santos M, Cavalcante S, et al. Impact of Replacing Smear Microscopy with Xpert MTB/RIF for Diagnosing Tuberculosis in Brazil: A Stepped-Wedge Cluster-Randomized Trial. *PLOS Medicine*. 2014 Dec 9;11(12):e1001766.
- Trajman A, Durovni B, Saraceni V, Menezes A, Cordeiro-Santos M, Cobelens F, et al. Impact on Patients' Treatment Outcomes of XpertMTB/RIF Implementation for the Diagnosis of Tuberculosis: Follow-Up of a Stepped-Wedge Randomized Clinical Trial. *PLOS ONE*. 2015 Apr 27;10(4):e0123252.
- Durovni B, Saraceni V, Cordeiro-Santos M, Cavalcante S, Soares E, Lourenço C, et al. Operational lessons drawn from pilot implementation of Xpert MTB/Rif in Brazil. *Bulletin of the World Health Organization*. August 1<sup>st</sup> 2014;92(8):613–7.

#### **Complete List of Published Work in:**

[http://www.ncbi.nlm.nih.gov/sites/myncbi/1petF5hPZ\\_r55/bibliography/43306581/public/?sort=date&direction=ascending](http://www.ncbi.nlm.nih.gov/sites/myncbi/1petF5hPZ_r55/bibliography/43306581/public/?sort=date&direction=ascending).

#### **D. Research Support**

##### Ongoing Research Support

U01AI069923 Sterling/Rolla (PI)

07/01/2013-06/30/2017

NIH/NIAID & DECIT/Ministry of Health, Brazil

Regional Prospective Observational Research for TB (RePORT)- Brazil Supplement to Caribbean, Central and South America network for HIV epidemiology (CCASAnet).

This large supplement to CCASAnet (C McGowan, PI) is a joint venture between NIH and Brazilian Ministry of Health to establish biorepositories in tuberculosis patients with different outcomes. Subaward VUMC 41966.

Role: Co-investigator

##### Completed Research Support (last 5 years)

19790.01 Chaisson (PI)

06/01/2004-03/31/2014

Bill and Melinda Gates Foundation

Consortium to Respond Effectively to the AIDS-TB Epidemic (CREATE)

Initiative to organize, implement and evaluate novel strategies to reduce morbidity and mortality from tuberculosis in populations with high rates of HIV and TB co-infection.

Role: Co-investigator (PI in Brazil)

U19AI045432 Chaisson (PI)

05/01/2005-04/30/2010

International Center for infectious Disease Research (ICIDR) - NIAID/National Institutes of Health NIH

A cluster-randomized trial of DOTS versus DOTS plus active case finding to reduce TB incidence in Rio de Janeiro, Brazil

Study to determine whether TB active case finding (ACF) in conjunction with DOTS results in lower incidence of TB compared with routine DOTS alone. A community-randomized trial conducted in 20 Rio de Janeiro's communities within with high rates of TB. A collaborative effort between the Municipal Health Secretariat of Rio de Janeiro and the Johns Hopkins University Center for Tuberculosis Research

Role: Co-Investigator

200-2009 32587 Dorman (PI)

09/18/2010-09/17/2013

CDC Foundation

Tuberculosis Trial Consortium with the Brazil Component

A Phase II Randomized, Open-Label Trial of a Rifapentine Plus Moxifloxacin-Based Regimen for Intensive Phase Treatment of Smear-Positive Pulmonary Tuberculosis

Role: Co- Investigator