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## Prison TB Alliance Meeting

Date 19<sup>th</sup>-20<sup>th</sup> March 2024  
 Location Index SACI, Asuncion, Paraguay  
 Time 8:00 – 16:30 (both days)

Scientific committee	Target audience
Prof. Raquel Duarte, ISPUP Dra. Sarita Aguirre, PNCT Lic. Angelica Medina, PNCT Dr. Adrian Sanchez, VHIR Eva Sluijs, RUMC Minke Holwerda, RUMC Anouk Vos, RUMC Dr. Cecile Magis-Escurra, RUMC	<ul style="list-style-type: none"> <li>• (vice) Minister, doctors and (para)medics from (the health department of) the Ministry of Justice, Paraguay</li> <li>• (vice) Minister, epidemiologists and health economists from the Ministry of Health, Paraguay</li> <li>• Experts National TB program, National Reference laboratory and National reference center for pulmonary diseases, Asuncion, Paraguay</li> <li>• Experts World Health Organization/ OMS</li> <li>• Experts PAHO Pan American Health Organization, Paraguay country office and Washington head office. Pedro Avedillo and Belkys Marcelino</li> <li>• Experts KNCV Tuberculosis Foundations, the Netherlands. Dr. Svetlana Pak, Ms. Niesje Jansen &amp; Dr. Jerod Scholten</li> <li>• International Union against TB and lung diseases; prison working group</li> <li>• Prof. Jason Andrews, Stanford University</li> <li>• Dr. Julio Croda, Yale School of Public Health</li> <li>• Conacyt Paraguay</li> <li>• NGO; Alvida, Campaigns in Global Health, Mecanismo contra la tortura</li> <li>• Patient representatives</li> <li>• The EUSAT-TB consortium, its beneficiaries and partners</li> </ul>

### Aims

The scientific committee aims that partners from academia, policy makers and authorities will share knowledge, evaluate interventional data and discuss possible future directions, policies and measures to decline TB incidence in Latin American prisons.

To measure the impact of this meeting, before-during and after the meeting attendees will be asked about their experiences by means of questionnaires and interviews.

### Objectives

*Define prison health as a priority and create a white-paper about:*

1. Decreasing TB prevalence
2. Establishing TB research in prisons



## Day 1: March 19, 2024

Aim day 1: to share knowledge and interventions and discuss possible future directions and policies to improve prison health

Knowledge: current screening policies and epidemiology Paraguay, research work Brazilian-Stanford group, epidemiology and demographic findings PriNose study,

Interventions: AI solutions with CAD4TB software to read digital chest X-ray images and breath sampling with an electronic Nose.

Future directions and policies: panel discussion

Time	Objective
<b>8:00 - 8:30</b>	Registration, Coffee & tea
<b>8:30 – 8:35</b>	Opening
<b>8:35 – 10:10</b>	<b>Session 1: Surveillance and Understanding TB in Prisons</b>
<b>8:35 – 8:55</b>	Talk 1: "Surveillance Data and Screening Policies in Paraguay"
<b>8:55 – 9:10</b>	Talk 2: " Paraguay Prison Brief
<b>9:10 – 9:30</b>	Talk 3: "Community Health Issues and Prisoner Health Status: the case of TB"
<b>9:30 – 9:50</b>	Talk 4: "Risk Factors and Transmission of TB in Prisons"
<b>9:50 – 10:15</b>	Plenary discussion
<b>10:15 – 10:30</b>	Short break
<b>10:30 – 12:30</b>	<b>Session 2: TB Diagnosis, Management, and Research</b>
<b>10:30 – 10:50</b>	Talk 5: "Epidemiology and Demographic Findings: PriNose Study"
<b>10:50 – 11:10</b>	Talk 6: "Cascade of Care: TB Management in Prisons"
<b>11:10 – 11:30</b>	Talk 7: "Possible screening algorithms in high risk populations"
<b>11:30 - 12:30</b>	Panel discussion
<b>12:30 – 13:30</b>	Lunch
<b>13:30 – 15:30</b>	<b>Afternoon workshops</b> Workshop 1: "TB programs in Latin American prisons" Workshop 2: "From research to policy"
<b>15:30 – 16:10</b>	Plenary discussion
<b>16:10 – 16:30</b>	Coffee & tea



## Session 1: Surveillance and Understanding TB in Prisons

**Chair: Dr. Adrian Sanchez**

### Talk 1: "Surveillance Data and Screening Policies in Paraguay"

- **Speaker: Dr. Sarita Aguirre & Angelica Medina, Director and Lic Programa Nacional de Control de la Tuberculosis, Asuncion, Paraguay**
- Description: this talk will provide insights into the current surveillance data related to TB in Paraguayan prisons and discuss the screening policies in place. Latest statistics and policy updates are given.

### Talk 2: "Paraguay Prison Brief"

- **Speaker: Dante Leguizamon, Codehupy, Asuncion, Paraguay**
- Description: this talk will provide insights into the current prison population, prison population rate and percentage of pre-trial detainees and current occupancy level of the penals. More information on ([Paraguay | World Prison Brief](#))“

### Talk 3: "Community Health Issues and Prisoner Health Status: the case of TB"

- **Speaker: Dr. Guillermo Sequera, TB researcher and former director surveillance department MoH**
- Description: this talk will provide insights in the actual interconnectedness of community health issues and the health status of prisoners, with a focus on TB: how TB of incarcerated individuals influences the health of the general population.

### Talk 4: "Risk Factors and Transmission of TB in Prisons"

- **Speaker: Prof. Jason Andrews, ass Prof Stanford University , Stanford, California, USA**
- Description: this talk will provide insights into host risk factors, transmission of mycobacterium tuberculosis within the prison system. Challenges, potential solutions, and the unique aspects of TB control in correctional facilities will be discussed.

### Plenary discussion



## Session 2: TB Diagnosis, Management, and Research

**Chair: Prof. Raquel Duarte**

### Talk 5: "Epidemiology and Demographic Findings: PriNose Study"

- **Speaker: Dr. Cecile Magis, RadboudUMC-Coordinator EUSAT-RCS Consortium**
- Description: the findings of the PriNose study project will be presented, sharing epidemiological and demographic insights relevant to TB in Paraguayan prisons. The presentation will highlight key findings and implications for public health policy.

### Talk 6: "Cascade of Care: TB Management in Prisons"

- **Speaker: Luis Gomez MD, PhD student EUSAT-RCS consortium and doctor INERAM, Py**
- Description: the findings of the current 'cascade of care' after TB diagnosis within the PriNose study' will be presented, focusing on the challenges and opportunities for improving patient care, reduction of transmission and treatment outcomes.

### Talk 7: "Possible screening algorithms in high risk populations"

- **Speaker: Minke Holwerda, MSc Biomedical scientist RadboudUMC**
- Description: this talk will present possible screening algorithms based on modelling of the PriNose study project data and introduce AI-based solutions, including Cad4Tb and eNose, as potential innovative screening tools for TB diagnosis.

### Panel discussion

- **Panel members: all presenters of the first day talks**
- **Moderators: Dr. Adrian Sanchez, Prof. Raquel Duarte & Dr. Julio Croda**
- Description: this discussion will be interactive with the audience. Subjects discussed concern the knowledge gained (current screening policies and epidemiology Paraguay, transmission and risk factors, epidemiology and demographic findings priNose study, potential future screening algorithms and AI solutions with Cad4Tb and eNose).



## Afternoon workshops

### Workshop 1: “TB programs in Latin American prisons”

- **Tutors: Julio Croda, Brazil scientist and member working group prison health IULTD and Dr Belkys Marcelino, PAHO**
- **Participants: researchers, employees national TB programs, doctors, nurses and epidemiologists**
- Description: bring in good practices and challenges of the interaction of TB programs and ministries of Justice
- End product: what are examples of effective collaboration practices?

### Workshop 2: “From research to policy”

- **Tutors: co-creation of Janika Hauser (Campaigns in Global Health) and Niesje Jansen (KNCV Tuberculosis Foundation)**
- **Participants: researchers, employees national TB programs, policy makers, doctors, nurses and epidemiologists**
- Description: evidence from research projects impacting on implementable policy solutions. CGH will give a short presentation about addressing policy makers and influencing policy. After that, KNCV will give a presentation on the way they advocate for TB, with several real-life examples. After that the in-person moderator will give the participants an assignment: design a strategy to influence policy on TB diagnosis/treatment in prisons (take one specific challenge in either TB diagnosis or TB treatment). The moderator will help each group (consisting of 4-5 participants). After 20 minutes, each group will present their ‘strategy’. A wrap up is done by the moderator by asking CGH and KNCV what their take-home-message is and what according to the assignments done by the participants, their ‘ideal’ strategy is.
- End product: a strategy to influence policy on TB diagnosis/treatment in prisons

Plenary discussion: identify feedforward questions from the workshops with an explicit focus on the future

- **Moderators: Dr. Cecile Magis-Escurra, RadboudUMC and Jerod Scholten, KNCV Tuberculosis Foundation**



## Day 2, March 20, 2024

*Aim: discuss different interventions and future directions and policies to decline TB incidence in prisons and considering health economics involved.*

*Interventions: prophylactic therapy for latent TB, screening, treatment and isolation of active TB cases and optimization of infrastructure (housing, ventilation).*

*Future directions and policies: attention to all three pillars (prophylaxis, screening/treatment, infrastructure) is needed to decline TB incidence*

Time	Objective
<b>8:00 - 8:30</b>	<i>Registration, Coffee &amp; tea</i>
<b>8:30 – 10:10</b>	<b>Session 1: "Breakdown of non-medical issues: A Comprehensive Approach"</b>
<b>8:30 – 8:50</b>	Talk 1: "Environmental conditions and their role in TB transmission"
<b>8:50 – 9:10</b>	Talk 2: : "Reforming the prison system: focusing on pre-trial detainees"
<b>9:10 – 9:30</b>	Talk 3: "The economic impact of TB in prisons and the cost-effectiveness of different intervention strategies"
<b>9:30 – 10:10</b>	Plenary discussion
<b>10:10 – 10:30</b>	<i>Short break</i>
<b>10:30 – 12:30</b>	<b>Session 2: "Breakdown of medical issues: a comprehensive approach"</b>
<b>10:30 – 10:50</b>	Talk 4: "Prophylactic therapy to reduce TB incidence in prisons"
<b>10:50 – 11:10</b>	Talk 5: "Active case finding in prisons"
<b>11:10 – 11:30</b>	Talk 6: "ACT FAST"
<b>11:30 - 12.:30</b>	Panel discussion
<b>12.:30 – 13:30</b>	<i>Lunch</i>
<b>13:30 – 15:30</b>	<b>Afternoon workshops</b> Workshop 3: "Modelling of interventions in prisons" Workshop4: "Practical & economic implications of diagnostic interventions in prisons"
<b>15:30 – 16:10</b>	Plenary discussion
<b>16:10 – 16:30</b>	<i>Coffee &amp; tea</i>



## Session 1: Breakdown of non-medical issues: A Comprehensive Approach

**Chair: Dr Sarita Aguirre**

### Talk 1: "Environmental conditions and their role in TB transmission"

- **Speaker: Ass Prof. Dr. Julio Croda, Brazilian scientist (Federal university Matto Grosso do Sul, Oswaldo Cruz Foundation, Yale school of public health) and member working group prisons and TB -IUTLD**
- Description: this talk will discuss prison environmental conditions and their role in TB transmission. Address issues such as overcrowding, ventilation, sanitation, and other factors contributing to the spread of TB. Highlight potential interventions to improve the environmental conditions.

### Talk 2: : "Reforming the prison system: focusing on pre-trial detainees"

- **Speaker: Dr. Svetlana Pak KNCV Tuberculosis foundation, the Netherlands/Kazachstan**
- Description: this talk will discuss the challenges and opportunities in reforming the prison system, focusing on pre-trial detainees. Address issues like prison overcrowding and overloaded systems and the role of policy and advocacy in implementing changes.

### Talk 3: "The economic impact of TB in prisons and the cost-effectiveness of different intervention strategies"

- **Speaker: Dr. Celia Martinez, public health specialist, former director NTP, PY**
- Description: this talk will discuss the economic impact of TB in prisons and analyze the cost-effectiveness of different intervention strategies. This could include the cost of treatment, prevention measures, and the potential return on investment for health and social outcomes.

### Plenary discussion



## Session 2: “ Breakdown of medical issues: A Comprehensive Approach”

**Chair: Guillermo Sequera**

### Talk 4: "Prophylactic therapy to reduce TB incidence in prisons"

- **Speaker: Prof. Raquel Duarte, ISPUP, Porto, Portugal**
- Description: this talk will provide insight for whom and when to provide LTBI treatment. Question like ‘how can prophylactic TB treatment help reduce TB transmission and improve prison health’ will be answered during this talk.

### Talk 5: "Active case finding in prisons"

- **Speaker: Prof. Dr. Belkys Marcelino, University Santo Domingo, former director National TB program, Republica Dominicana and PAHO Washington**
- Description: this talk will provide insight in which screening algorithms are proposed by the WHO. Insights will be given why active case finding is of high importance and context will be given on the different elements under which this should be done.

### Talk 6: "ACT FAST"

- **Speaker: Dr. Jerod Scholten, KNCV Tuberculosis Foundation, the Netherlands**
- Description: This presentation will offer a comprehensive overview of the benefits of prompt action following a TB diagnosis in prisons. It will delve into the multiple advantages of initiating treatment shortly after diagnosis and discuss difficulties and challenges but also how this approach can effectively reduce transmission rates.

### Panel discussion

- **Panel members: all presenters of the second day talks**
- **Moderators: Dr Sarita Aguirre, Dr Guillermo Sequera and Prof. Jason Andrews**
- Description: This discussion will be interactive with the audience. Subjects discussed concern the knowledge gained (environmental and other non-medical elements, prophylactic therapy, prison reforms, economic consequences).





## Afternoon workshops

### Workshop 3: “Modelling of interventions in prisons”

- **Tutors:** Jorge Gonzalez, Msc, VHIR, Spain / RadboudUMC, the Netherlands & Dr. Juan F. Vesga, UK Health Security Agency, United Kingdom. (Foreword provided by Dr. Nimalan Arinaminpathy, World Health Organization, Geneva, Switzerland).
- **Participants:** scientists, people with a basic knowledge of data handling
- **Description:** in this workshop two approaches for using data to inform interventions for TB in prisons are reviewed: mathematical modelling and bioinformatics. The session uses simple guided examples, led by a mathematical modeller and a bioinformatician.
- **End product:** TB screening intervention models in prisons

### Workshop4: “Practical & economic implications of diagnostic interventions in prisons”

- **Tutors:** Dr. Celia Martinez, public health specialist, Paraguay and Jerod Scholten, KNCV Tuberculosis Foundation, the Netherlands.
- **Participants:** researchers, employees national TB programs, policy makers, doctors, nurses and epidemiologists
- **Description:** in this workshop strategies and frequencies of implementable screening policy solutions will be worked out in detail considering practicalities and also the economic implications
- **End product:** a list of supplies for future TB screening in prisons

Plenary discussion: identify feedforward questions from the workshops with an explicit focus on the future

**Moderators:** Dr. Adrian Sanchez and Dr. Belkys Marcelino