

**XXVIII SEMINÁRIO LAVERAN & DEANE SOBRE MALÁRIA  
ITACURUÇÁ-RJ, 8<sup>nd</sup> to 12<sup>th</sup>, SEPTEMBER, 2025  
PROGRAM**

**Coordinator:** Cláudio Tadeu Daniel-Ribeiro

**Organizers:** Cláudio Tadeu Daniel-Ribeiro (IOC, Fiocruz, RJ)  
Maria de Fátima Ferreira da Cruz (IOC, Fiocruz, RJ)

**Senior Professors:**

Alice Sanna (IOC, Fiocruz, RJ)  
Antônio Pacheco (PROCC/Fiocruz, RJ)  
Arnaud Chêne (INSERM, Paris)  
Cassio Leonel Peterka (SVS, AP)  
Filomeno Fortes (IHMT, Lisboa)  
Flávia Lima Ribeiro-Gomes (IOC, Fiocruz, RJ)  
Jamille Gregório Dombrowski (USP, SP)  
Laetitia Vincensini (Sorbonne Université, Paris)  
Lara Esteves Coelho (INI, Fiocruz)  
Mariano Gustavo Zalis (UFRJ, RJ)  
Paulo Renato Rivas Totino (IOC/Fiocruz, RJ)  
Ricardo Lourenço de Oliveira (IOC/Fiocruz, RJ)

**Rapporteur Professors:**

Michelle de Oliveira e Silva (CEPEM, PV)  
Natália Ketrin Almeida de Oliveira Mocelin (IOC/Fiocruz, RJ)  
Rodolfo Ferreira Marques (USP, SP)

**Malaria Health Care Professionals:**

Alexander Vargas (SVSA-DF)  
Ronan Rocha Coelho (SVSA-DF)

**Observer:** Celeste Figueiredo (IHMT, Lisboa)

**Sponsors:** Instituto Oswaldo Cruz / Fiocruz  
Department of Brazilian Ministry of Health Surveillance (SVSA)  
French Government  
Faperj

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**SEPTEMBER 8th, 2025 – MONDAY**

**3h00 pm:** Departure from Rio de Janeiro - campus of Fiocruz.

**5h30 pm:** Arrival at the Hotel Pierre – Itacuruçá.

**6h30 pm:** Welcome speech, introduction of students and professors, distribution of documents and identification cards.

***Professors Cláudio Tadeu Daniel-Ribeiro and Maria de Fátima Ferreira da Cruz***

**7h00 pm: Conference:** Hepatocyte invasion by *Plasmodium* sporozoites : a tale from two perspectives.

**Professor Laetitia Vincensini (Sorbonne Université, France)**

**8h00 pm:** Cocktail and dinner

**SEPTEMBER 9th, 2025 – TUESDAY**

**7h30- 8h30 am:** Breakfast

**8h30–8h55 am: Conference:** Malaria epidemiological scenarios: challenges and Perspectives in Brazil.

**Professor Alexander Vargas (SVSA – DF)**

**9h00-9h25 am: Conference:** Gestational and placental malaria: epidemiological and clinical aspects.

**Professor Jammille Dombrowski (USP, SP)**

**9h30–10h20am: Presentation of MSc student Alexia Martines Vieira Silva**

**Project :** Evaluation of the clinical and laboratory characteristics of patients diagnosed with malaria and their methemoglobin levels.

**10h20-10h40 am:** Coffee break

**10h40–11h30 am: Presentation of PhD student Guilherme Salgado Sanches**

**Project:** Identification of the Plasma Factor Inducing Nitric Oxide Production by Cerebral Vessels in Experimental Cerebral Malaria.

**11h30 am-12h30 pm:** Discussion of  $\alpha$ x,  $\beta$ y and  $\gamma$ z groups

**12h30 pm:** Lunch

**2h30–3h20 pm: Presentation of MSc student Fernanda Souza de Souza**

**Project:** Assessment of MCP-1 protein as vaccine candidate against *Plasmodium vivax*.

**3h20 pm–4h10pm: Presentation of MSc student Edília Samela Freitas Santos**

**Project:** Impact on the incidence of *Plasmodium vivax* malaria with the implementation of tafenoquine in the Brazilian Amazon region: an interrupted time series analysis.

**4h10–4h30 pm:** Coffee break

**4h30–5h20pm: Presentation of student PhD Estefani Andrea Piedrahita Hernandez**

**Project:** Effect of *Anopheles* gut microbiota bacteria on the sexual development of *Plasmodium vivax* in *Anopheles darlingi*.

**5h20–6h20 pm:** Discussion of  $\alpha$ z,  $\beta$ x and  $\gamma$ y groups

**8h00 pm:** Dinner

<b>SEPTEMBER 10th, 2025 – WEDNESDAY</b>
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**7h30 – 8h30 am:** Breakfast

**8h30-8h55 am: Conference:** Development of Multistage Malaria Vaccines Using mRNA Technology.

**Professor Rodolfo Ferreira Marques (USP, SP)**

**9h00-9h25 am: Conference:** Epidemiology and Public Health: Methodological tools.

**Professor Lara Esteves Coelho (INI, Fiocruz)**

**9h30–10h20 am: Presentation of PhD student Ana Carolina Shuan Laco**

**Project:** Performance of the Natplus assay and integration of ultrasensitive molecular targets for malaria screening in asymptomatic blood donors from malaria-endemic areas of Amazonas, Brazil.

**10h20–10h40 am:** Coffee break

**10h40–11h30 am: Presentation of MSc student Luiza Barbosa Barros**

**Project:** Enhancement of *ex vivo* cultivation methods of *Plasmodium vivax*.

**11h30 am–12h30 pm:** Discussion of  $\alpha$ y,  $\beta$ z and  $\gamma$  x groups

**12h30 pm:** Lunch

**2h00–2h50 pm: Presentation of student MSc Jiovania Barbosa Maklouf de Oliveira**  
**Project:** A spatiotemporal analysis of malaria cases in children in Brazil between 2003 and 2023.

**2h50–3h40 pm: Presentation of MSc student Victor Calebe Alves da Costa**  
**Project:** : *In vitro* Evaluation of the Delivery of the *Plasmodium vivax* Circumsporozoite Surface Protein Gene Using Non-Viral Vectors.

**3h40–4h30 pm:** Discussion of  $\alpha x$ ,  $\beta y$ , and  $\gamma z$  groups

**4h30–4h50 pm:** Coffee break

**4h50–5h40 pm: Presentation of MSc student Fernanda de Oliveira Busato**  
**Project:** Development of an R package for analysis of *Plasmodium* population data.

**5h40–6h30 pm: Presentation of PhD student Gisele Tatiane Soares da Veiga**  
**Project:** Evaluation of extracellular vesicles as carriers of vaccine antigens in the fight against vivax malaria.

**6h30–7h30 pm:** Discussion of  $\alpha z$ ,  $\beta x$ , and  $\gamma y$  groups

**8h30 pm:** Dinner

<b>SEPTEMBER 11th, 2025 – THURSDAY</b>
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**7h30 – 8h30 am:** Breakfast

**8h30–9h20 am: Presentation of MSc student Aloma Roberta Costa Silva**  
**Project:** Study of the invasion process by *Plasmodium simium* in erythrocytes of Non-Human Primates from the Brazilian Atlantic Forest.

**9h20–10h10 am: Presentation of PhD student Gabriela Maia Fernandes**  
**Project:** Immunological characterization of a novel erythrocyte-binding protein from *Plasmodium vivax* potentially involved in the invasion of human reticulocytes.

**10h10–10h30 am:** Coffee break

**10h30–11h20 am: Presentation of PhD student Heliana Christy Matos Belchior**  
**Project:** Assessment of the microbiota and immune response of *Anopheles darlingi* (Diptera: Culicidae) populations with different susceptibilities to *Plasmodium vivax* infection.

**11h20am- 12h10 pm: Presentation of MSc student Wallyson de Jesus da Costa**  
**Project:** Identification of new antiplasmodial compounds through laboratory bioprospecting assays, using derivatives of naphthoquinones.

12H10 – 13H10: Discussion of  $\alpha$ y,  $\beta$ x and  $\gamma$ z groups

**13H10:** Lunch

**3h30 – 4h30 pm:** Meeting of tutors and students

**4h30 – 4h45 pm:** Coffee break

**4h45 – 6h45 pm:** Meeting of professors for final discussion about the thesis projects and preparation of the final document with suggestions for the students.

Meeting of students to prepare the final report taking into account the suggestions received during the seminar.

**6h45 – 8h00 pm:** Consolidation of the final report on the thesis projects with suggestions for the students (professors) and the students' final reports. Filling out evaluation forms.

**8h00 pm:** Dinner

<b>SEPTEMBER 12th, 2025- FRIDAY</b>
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**7h30 – 8h30 am:** Breakfast

**8h30am – 12h00 pm:** Presentation of students' critical analysis of the impact and relevance of the comments and suggestions received for their thesis projects and how they plan to incorporate them. Final comments from students and lecturers on their experience with the *seminar*, including their opinions on the importance of the format and content in making the event valuable for postgraduate training.

Certification.

**12h00 pm:** Lunch

**2h00 pm:** Departure to Rio de Janeiro (Fiocruz)

## STUDENTS AND TUTORS LIST

STUDENTS	TUTORS
Alexia	Michelle
	Filomeno
Aloma	Cláudio Ribeiro
	Paulo
Ana Carolina	Ronan
	Fátima
Edília	Alice
	Lara
Estefani	Ricardo
	Laetitia
Fernanda Busato	Pacheco
	Lara
	Alice
Fernanda Souza	Jamille
	Arnaud
Gabriela	Flávia
	Paulo
Gisele	Jamille
	Cláudio Ribeiro
Guilherme	Filomeno
	Arnaud
Heliana	Flávia
	Ricardo Lourenço
Luiza	Mariano
	Natalia
	Michele
Jiovania	Cassio
	Pacheco
Victor	Laetitia
	Rodolfo
Wallyson	Fátima
	Mariano Zalis

## GROUPS OF DISCUSSION

PROFESSORS AND REPORTS	STUDENTS AND AUDITORS
<p style="text-align: center;"><b>Group <math>\alpha</math></b></p> <p style="text-align: center;"><b>Fátima Cruz</b> Lara Laetitia Ronan Filomeno Rodolfo</p>	<p style="text-align: center;"><b>Group x</b></p> <p style="text-align: center;">Fernanda Busato Estefani Ana Carolina Fernanda Souza Guilherme Giovanna</p>
<p style="text-align: center;"><b>Group <math>\beta</math></b></p> <p style="text-align: center;"><b>Cláudio Ribeiro</b> Antônio Pacheco Mariano Zalis Alice Sanna Jamille Michelle</p>	<p style="text-align: center;"><b>Group y</b></p> <p style="text-align: center;">Alexia Heliana Samela Victor Costa Aloma Ana Clara</p>
<p style="text-align: center;"><b>Group <math>\gamma</math></b></p> <p style="text-align: center;"><b>Ricardo Lourenço</b> Arnaud Flávia Cássio Paulo Natália</p>	<p style="text-align: center;"><b>Group z</b></p> <p style="text-align: center;">Jiovania Luiza Wallyson Gabriela Gisele Victor Maia</p>

## PRESENTING STUDENTS X DISCUSSION STARTER STUDENT

PRESENTING STUDENT	STARTER STUDENT
Estefani	Alexia
Jiovania	Aloma
Aloma	Ana Carolina
Gabriela	Edília
Fernanda Busato	Estefani
Fernanda Souza	Fernanda Busato
Luiza	Fernanda Souza
Gisele	Gabriela
Wallyson	Gisele
Ana Carolina	Guilherme
Alexia	Heliana
Guilherme	Jiovania
Edília	Luiza
Heliana	Victor
Victor	Wallyson