

## PRESS RELEASE

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### Bitten by a Tick? Help Science Understand What Happens Next

**Luxembourg Institute of Health launches nationwide study on tick bites causing red-meat allergy**

The [Molecular and Translational Allergology group](#) at the Luxembourg Institute of Health (LIH) is launching a new research study and is calling on the public for help. The “**ImmunoGal**” study focuses on understanding tick bites and their possible link to red-meat allergy, a poorly understood condition known as  $\alpha$ -Gal syndrome. If you have recently been bitten by a tick, LIH researchers encourage you to bring it in and participate in this important study.

Red-meat allergy, or  $\alpha$ -Gal syndrome, is a potentially life-threatening condition triggered by eating mammalian meat or other products such as innards. Unlike most food allergies, symptoms typically appear several hours after consumption. The most frequent symptom is a skin reaction, but many patients experience combined symptoms such as skin, gastro-intestinal and/or respiratory symptoms. Recent research suggests that tick bites are the key trigger for developing this allergy, yet much remains unknown.

*“By studying the immune responses of people right after they are bitten by a tick, we hope to uncover why certain individuals develop allergic sensitizations and others don’t,”* explains Dr Christiane Hilger, project leader and head of the Molecular and Translational Allergology group at the LIH. *“Understanding these mechanisms could significantly improve our ability to diagnose, treat, and even prevent red-meat allergies and other tick-borne illnesses.”*

Participants who have been bitten by a tick are invited to contact the LIH and visit the Luxembourg Research Clinic within 48 hours of detecting the bite, and again 4-6 weeks later. The study will analyse the tick species, screen for pathogens, and collect blood samples to observe immune responses over time. A subgroup of participants will be invited to a third visit 3 months after the tick bite for a complete follow-up at the Allergology unit of CHL.

The ImmunoGal study also aims to answer broader questions, including:

- When and where do people get bitten by ticks?
- Which tick species are responsible?
- How frequently do ticks carry pathogens?
- Why does the immune system sometimes respond with severe allergies?

For more information, visit the study website at [www.lih.lu/immunogal](http://www.lih.lu/immunogal) and contact the LIH via [immunogal@lih.lu](mailto:immunogal@lih.lu) or +352 26970-400 to participate.

Your contribution could help scientists develop better prevention strategies and improve public health responses to tick-borne diseases and emerging allergies.

**Funding and collaboration:**

The study will be conducted in collaboration with the Centre Hospitalier Luxembourg. The work is supported with funding from the Luxembourg National Research Fund (FNR), project ImmunoGal C24/BM/18907591.

**About the Luxembourg Institute of Health (LIH)**

*The Luxembourg Institute of Health (LIH) is a public biomedical research organisation focused on precision health and invested in becoming a leading reference in Europe for the translation of scientific excellence into meaningful benefits for patients.*

*The LIH places the patient at the heart of all its activities, driven by a collective obligation towards society to use knowledge and technology arising from research on patient derived data to have a direct impact on people's health. Its dedicated teams of multidisciplinary researchers strive for excellence, generating relevant knowledge linked to immune related diseases and cancer.*

*The institute embraces collaborations, disruptive technology and process innovation as unique opportunities to improve the application of diagnostics and therapeutics with the long-term goal of preventing disease.*

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