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Pregnancy at high altitude: the challenge of hypoxia

A Discussion Meeting issue organized and edited by Graham J Burton, Lorna G Moore, Dino A Giussani and Andrew J Murray

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About this issue

Pregnancy at high altitude represents a powerful experiment of nature in which the mother and her unborn baby face the challenge of breathing thin air with a reduced supply of oxygen. Indigenous populations that have resided at altitude for generations fare better than recent migrants due to genetic, physiological and metabolic adaptations that help to preserve birthweight.

This theme issue provides a comprehensive exploration of these adaptations and how they relate to common complications of pregnancy at sea level that are associated with low birthweight due to deficient oxygen reaching the baby. Data from human populations and animal species are considered. The issue will be of interest to all those involved in maternal-fetal research and the clinical management of high-risk pregnancies.

This issue is based on a Royal Society discussion meeting held in September 2024.

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