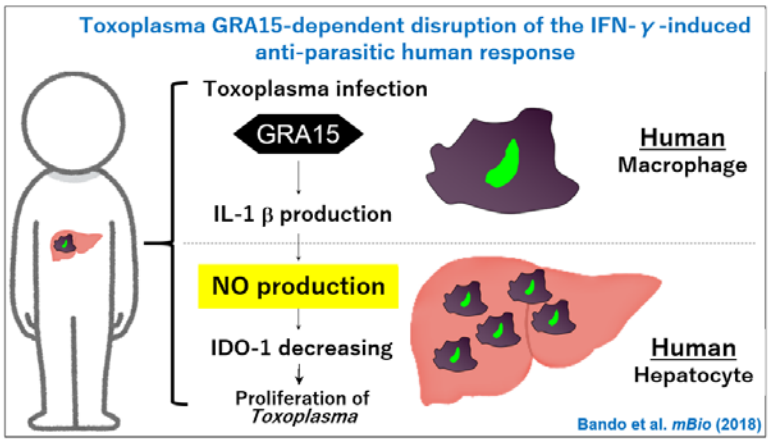
Inducible Nitric Oxide synthase is a key host factor for *Toxoplasma* GRA15-dependent disruption of the γ interferon-induced antiparasitic human response

Keywords: *Toxoplasma gondii*, cell-autonomous immunity, host-parasite interaction, human immunology, immune suppression, interferon

<Points>

- The Toxoplasma virulence factor GRA15, which had not been elucidated in mouse studies, suppresses the immune response in humans
- GRA15 acts on host cells to induce the production of nitric oxide and suppresses the immune reactions
- The inhibitors for nitric oxide synthesis are potential therapeutic agents for human toxoplasmosis



Summary for the study.

The research group of Masahiro Yamamoto (IFReC & RIMD, Osaka University) showed *T. gondii* can suppress the IFN-γ-induced antiparasitic response by indirectly targeting IDO1 in hepatocytes cocultured with monocytes.

By investigating differences between human and mouse immune responses, unidentified virulence mechanisms associated with known or unknown *T. gondii* effectors may be discovered in the future. Additionally, pharmacological blockade of NO production could offer a novel therapeutic strategy for treating human toxoplasmosis.

<Articles>

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