

**PROJECT TITLE**

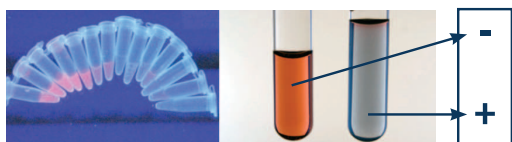
# “Nanotechnology and Molecular Biology-Based diagnostics”

**TARGET**

- Tuberculosis (HUMAN / ANIMAL)
- Leishmaniasis (HUMAN / ANIMAL)
- Paratuberculosis (RUMINANTS)

**APPROACH**

COLORIMETRIC / FLUORESCENCE NANOTECHNOLOGY  
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ONE-TUBE, SEMI-NESTED PCR



**INNOVATION**

**Tuberculosis / Leishmaniasis**

One-method-test-all, No dedicated equipment, Very simple to use, 1/10th of PCR cost for detection of microbial. Methods have been patented and published.

**NEXT STEPS**

**TUBERCULOSIS / LEISHMANIASIS**

**PARATUBERCULOSIS**

Molecular detection of microbial DNA with minimum detection limit down to single cell, immediate result conformation. The potential of profit in comparison to currently available kits is by no-means less than substantial.

**TUBERCULOSIS / LEISHMANIASIS**

Optics for the development of a low-cost prototype (50-300 euro) towards decreasing minimum detection limit to the level of PCR. Work is being planned in collaboration with UCL, London, Dep. of Medical Physics.

**PARATUBERCULOSIS**

Commercial development (intra-laboratory validation has been performed at international level).

**OUR TEAM**

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