Entrepreneurial ID
«Academy-Industry Training Camp» 2016

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University: ETH Zurich
Project/ Company name: Immunas
Short description: Test enabling responsible use of antibiotics through rapid, one-drop-of-blood diagnostics for upper respiratory tract infections.
Web site: N/A
Industry: Medtech

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<tr>
<th>Status of project/science: Early stage (looking for partners, R&amp;D)</th>
<th>Company / team size: 3</th>
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**Technology/science:**

IMMUNAS technology will be able to recognize the **immuno-response** in blood of patients with infections. This technique converts directly the biological binding events between the biomarkers in the blood and the capture molecules that are used to functionalize the bio-chip surface to electronic signals. This approach allows very rapid detection time.

**Problem / Solution:**

**Problem:**
- antibiotic overuse

India - world’s largest consumer of antibiotics

**Infection** bacterial or viral?

**Solution**
1. Chip
- Disposable
2. Reader
- Reusable

**Immunas** develops a diagnostic device consisting of a **handheld reader** and a **disposable chip**. Within minutes, with a drop of blood our test will be able to determine if the source of the infection is bacterial or viral. This will lead to an informed treatment decisions and responsible use of antibiotics for the benefits of patients and societies at large.

**Market Opportunity / Target customers:**

Hospitals because of their time and cost pressure as well as risk of spreading infections. Later on, private physicians.

**Competition and competitive advantage:**

1. Rapid
2. Cheap
3. Easy-to-use
4. Minimally invasive

**Team**
- Joanna Pawlikowska - PhD Candidate at ETHZ (biotechnology & bioengineering, medical diagnostics, nanomedicine)
- Fangjian Lin - Postdoc at University of Zurich (polymers, materials science/engineering & nanofabrication)
- Leo Scheller - PhD Candidate at ETHZ (protein engineering)

**AIT Camp objectives:**
- understand the needs of the Indian market and validate the business model
- create network - partners and investors, experts from academia and industry, hospitals and doctors