

# IMMUNITY

## **Immunity Project**

**HIV controllers are miraculous -- they are people who have a natural immunity to HIV.**

Like the best comic book heroes, controllers are born with this super power. They won the genetic lottery. Although controllers carry low levels of HIV, the virus is in a dormant state and they do not contract AIDS. Controllers are incredibly rare. Only 1 out of every 300 people who are living with HIV has this incredible power.

The essence of controllers' immunity is the unique targeting capability contained within their immune systems. Like the finely tuned laser scope on a sniper rifle, the immune systems of controllers have the ability to target the biological markers on the HIV virus that are its achilles heel. When a controller's immune system attacks these biological markers it forces the virus into a dormant state. Non controllers are armed with sniper rifles, but they are missing this critical targeting ability.

Immunity Project is a team of scientists and entrepreneurs based in the San Francisco Bay Area who are developing a revolutionary vaccine platform using an entirely novel approach: to adopt the unique targeting capability inherent in controllers to give everyone that same immunity to the targeted disease. The first vaccine being developed using this platform is a vaccine for HIV. It is designed to turn everyone who receives it into an HIV controller. **Immunity Project will offer the HIV vaccine to the world for free.**

To develop the vaccine, a machine learning algorithm -- similar to what is used in the most advanced spam filtering software -- was developed to identify the achilles heel biological markers on the HIV virus. The vaccine formulation consists of the achilles heel biological markers and FDA approved chemicals that cause an immune system response. The Project's proprietary formulation enables the vaccine prototype to be stored in inert powder form without refrigeration and delivered to patients through a nasal inhaler. The Immunity Project vaccine is the first to be developed that does not contain any living or non living virus, giving it the potential to be among the safest vaccines ever developed. To date, the team holds ten granted patents -- and more are pending -- covering the vaccine formulation and delivery technology.

**The Immunity Project HIV vaccine prototype has yielded positive results in animals and is now ready for Phase I Human Trials.**

## The Team

### The team is world class:

- Dr. Reid Rubsamen. Stanford MD and MA in Computer Science. 60+ patents for novel drug delivery technologies. Founder of Aradigm.
- Dr. David Heckerman. Stanford MD and PhD in Computer Science. Inventor of the spam filter. Distinguished Scientist at Microsoft Research. Adjunct Professor of Computer Science at UCLA.
- Dr. Charles Herst. UC Berkeley MA in Bacteriology and Northwestern PhD in Tumor Cell Biology.
- Dr. Salim Abdool Karim. MD and PhD. Professor of Clinical Epidemiology at Columbia. Director of CAPRISA.
- Naveen Jain. Entrepreneur and CEO of Sparkart.

## Current Status

The team has made significant progress and is now ready to conduct Phase I Human Trials in the United States and South Africa:

- Achilles heel biological markers identified on a HLA restricted basis for HIV -- **Complete**
- Key patents filed and successfully prosecuted -- **Complete**
- Funds raised for platform development and animal studies -- **Complete** (\$1MM unrestricted grant from Microsoft Research.)
- Animal studies successfully conducted with positive results -- **Complete**
- Article authored for publication in a major peer reviewed journal -- **Complete**
- Partnership formed with HIV/AIDS-focused non profit organization (NPO) to facilitate fundraising on a non profit basis -- **Complete** (Fiscal sponsorship agreement in place with Until There's A Cure, a leading NPO focusing on HIV/AIDS and based in the San Francisco Bay Area.)

Every day that passes 5,000 people die from AIDS. **This is equivalent to ten Boeing 747s falling out of the sky every day.** We would love to meet with you to further discuss our HIV vaccine. For more information about Immunity Project, please visit <http://www.ImmunityProject.org>.