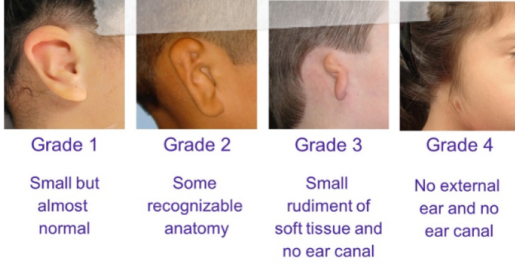


# Zwitterink

*Design, print and implant. Just that simple.*

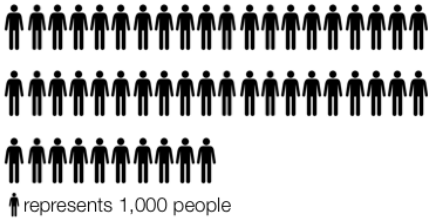
## Microtia



**Microtia:** a congenital deformity where the external part of the ear is undeveloped.

1

## THE PROBLEM



- ▶ There are about **50,000** children in the US alone who currently suffer from this disease.
- ▶ There are currently two surgical options:
  - **Rib cartilage implant**
  - **Synthetic material implant**
- ▶ The market for this application alone is **\$3.3 billion**.

2

## SURGICAL OPTIONS ISSUES

- **Rib cartilage implant**
  - ▶ Highly invasive harvesting of rib cartilage
  - ▶ Long surgical procedure
  - ▶ Less precision of the carved ear
- **Synthetic material implant**
  - ▶ High possibility of body rejection
  - ▶ Short-term durability
  - ▶ High infection rate
  - ▶ Poor mechanical strength

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## OUR BIO-INK PROPERTIES

### No body rejection

Our implant material has been shown to be compatible with living bodies and shows no signs of rejection in vivo. Our material's superior chemical stability makes it compatible with living cells for a long-time.

### 3D printable

Incorporating the newest 3D printing technology and our breakthrough cross-linking technology allows us to 3D print individualized products with precision and strength.

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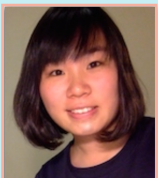
## HOW IT WORKS

1. Scan & Design
2. 3D Print with our material
3. Implant

5

## BEYOND IMPLANTS

Our material's cell-friendly nature makes it valuable in many applications like tissue engineering. Our vision is to sell our product as a biocompatible and 3D printable "bio-ink", for many applications in the future.



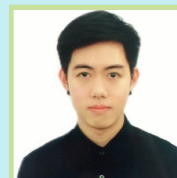
**Caroline Tsao**



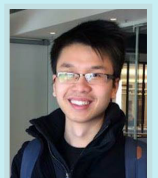
**Julio Rojas-Espinoza**



**Michael Phuong**



**Thanadej Throngkitpaisan**



**Viet Nguyen**