OUR TEAM

Dr. Srikant Mohapatra
Head of Project, AuRA
14+ years as a Cardiac Surgeon
MBBS, MS, MCh (CTVS), Fellow in Advanced Cardiac Surgery, Flinders University, Australia

Gyanendra Acharya
CEO, Ekistics Solutions
20+ years in Leadership roles
MBA (NIILM)

Sambit Mahapatra
Head of Technology, AuRA
19+ years in IT Innovations & Solutions,
BE (Utkal University)

Shubhasis Pattnaik
Head of Business, AuRA
20+ years in Leadership,
MBA (XLRI), BE (NIT)

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www.ekiticssolutions.com

EKISTICS SOLUTIONS

AuRA

Autologus Reconstruction of Aortic Valve

WINNER
BIRAC
Bio Technology Ignition Grant 2018

Autologous Reconstruction of Aortic Valve (AuRA) is a cloud based technology innovation for recreating the native aortic valve by using patient's own tissue.

The Market & Opportunitiy

AuRA has a current addressable market size of ~ $3 Billion world-wide and ~ $ 500 Million in India

2,00,000 valve replacement surgeries per year	55% Aortic valve replacements	10.4% CAGR

Our Aspiration

$ 100 Million in 4 years [India only]
$ 500 Million in 7 years [Worldwide]
$ 1 Billion in 10 years [Worldwide]

Product Differentiation

- Universally accessible
- Easily reproducible
- No dependence on harmful anti-coagulants
- Minimal host reactions
- Reasonable longevity
- Reduced risk of structural failure

THE PROPOSED SOLUTION

DATA INGESTION

API based native integration
Manual app based UI to enable parameter capture
→ Uniquely identify parameters against the diseased organ/patient
→ Stage raw parameter data in cloud based relational DB

SIMULATION

Continuous Self learning algorithm

Extrapolate and create virtual 3D modelling image of the valve
→ Apply virtual simulation of hemodynamics
→ Web/App based visual 3d simulation software
→ Finalize 3D print render format

IN-SITU 3D PRINTING

In-situ 3D printing of template
→ Replication of template design using pericardium
→ Perform surgical procedure
→ App to provide feedback for any in-situ characteristics change

PHASE 1 : PROOF OF CONCEPT — 18 Months
- BIRAC Grant
- EKISTICS' own Investment
- Other Grants

PHASE 2 : IN-VIVO TRIALS — 18 Months
- Sponsored Research support
- Follow-up grants
- Venture Financing

PHASE 3 : BIO-PRINTING & DELIVERY — 24 Months
- Debt Financing
- Equity Dilusion (Series A)