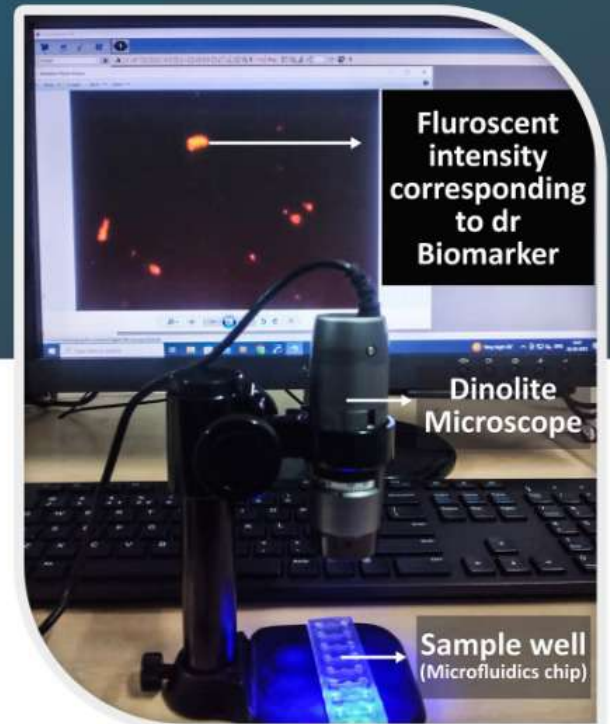


TECHNOLOGY DEVELOPMENT PROGRAM HEALTHTECH

DR Biomarking

A portable diagnostic system which is a digital solution for diabetic retinopathy in remote & rural areas



Issue Being Addressed

- ▶ Diagnose and prognosticate Diabetic Retinopathy in remote and rural areas
- ▶ Validate the portable system with conventional biomarkers

Key Feature of the Technology/Product /App Which is Being Developed

- ▶ A Portable Immunoassay connected with smartphones
- ▶ Easily accessible to remote and rural areas hence would be cost-effective for follow-up in rural areas

Impact & Benefits

- ▶ Cost-effective for diabetic retinopathy follow-ups
- ▶ One device can cater to 5000 -10000 population as it is portable, and smartphone enabled
- ▶ Reduces carbon footprint and rationalizes health expenditure

Team

- ▶ **Dr. Sayantan Ghosh**
PhD scholar, Dept. Of Ophthalmology, Calcutta National Medical College & Hospital,
- ▶ **PI: Dr..Lopamudra Giri**, Associate Professor, Dept. Of ChE
- ▶ **Co-PI: Dr.Haripriya Narasimhan**, Associate Professor, Dept.of LA IIT-Hyderabad

Targeted Customers & End Users

- ▶ Hospitals & Clinics
- ▶ Ophthalmologists
- ▶ CMOH
- ▶ BMOH

Commercialization Status

- ▶ Able to differentiate NPDR (Non-Proliferative Diabetic Retinopathy) and PDR (Proliferative Diabetic Retinopathy)
- ▶ Coating modification is readily done and improving with the dataset
- ▶ Collaborated with the Govt. hospital of West Bengal

CHANAKYA Ph.D. Fellowship