

## **UBORA Design Competition 2018**

## Second stage results

	Project's title	Project Leader	Institution	Consortium
1	Surgical Simulation – Pulsating Organ Model	Anthony Behle	Colorado State University	NA
2	Design of an Intelligent Walking Stick for the Elderly Population	Dongmo Tankeu Charlin	Université des Montagnes	NA
3	A Smartphone App for Early Diagnosis and Cognitive Rehabilitation of Dementia Patients	Farhana Islam Oishi1	Bangladesh University of Engineering and Technology	NA
4	Use Of Pace Reminder To Promote Healthy Ageing Of The Elderly People Living With Dementia	Patience Bwire	Mbarara University of Science and Technology	ABEC
5	Multilanguage Body Fat Analyzer for Aging Populations	Shimelis Nigusu	Jimma University	ABEC
6	Early detection and monitoring of Atrial Fibrillation (AF)	Mercy Takuwa	Makerere University	ABEC
7	An innovating walking frame made up of carbon fibre composite material	Ermes Botte	University of Pisa	UBORA
8	Low cost spectacles: the 3D printing revolution	Nicolò Mezzasalma	University of Pisa	UBORA
9	Hand Exercise Assistant Device for Healthy Ageing	Manuel Chamorro	Universidad Politécnica de Madrid (UPM)	UBORA
10	Application for Health Care for the Elderly	César de las Casas	Universidad Politécnica de Madrid (UPM)	UBORA
11	Early Detection Of Breast Cancer Via The Design Of Smart Self-diagnosing Wearable Sensor To Elderly Women	Mastewal Mathiwos	Addis Ababa Institute of Technology	ABEC
12	Design and Fabrication of Self Driving Intelligent mobile robot (G –Robot)	David Givondo	University of Eldoret	ABEC
13	Low Cost Hearing Aid with Rechargeable Battery and Adjustable Volume	Bazil Mlamba	Kenyatta University	UBORA
14	Design of low cost smart hearing aid and its solar battery charger.	Omega Mitinda	Malawi University of Science and Technology	ABEC
15	A NOVEL METHOD OF PREVENTING PRESSURE SORES	Atish Shaa	Muhimbili University of Health and Allied Sciences	ABEC
16	Smart bed for heart failure patients	Aya Lithy	Cairo University	ABEC
17	Spinal Board Made In Carbon Fiber	Giovanni Battista Marongiu	University of Pisa	UBORA
18	Design of a SmartBall: device for hand rehabilitation and grip force control	Guglielmo Pacetta	University of Pisa	UBORA
19	Development of low-cost and easy-to-use home care medical device to monitor Breathing, ECG	Hugo Linder	The School of Technology and Health (STH)-KTH	UBORA
20	and Arterial pulse rate REKULL TECHNOLOGY	Ishmael Ofori Aboagye	Ashesi University College	NA
21	An electrically actuated walking Stick for the Elderly	Wilfred Dieke	University of Lagos	ABEC
22	WEARABLE LOW VISION GUIDER AND FALL DETECTION MODULE	Jim Gitonga	Technical University of Mombasa	ABEC
23	DESIGN AND CONTRUCTION OF WIRELESS ELECTROCARDIOGRAM (ECG) FOR ELDERLY	DANIEL ETUMU	Kyambogo University	ABEC
24	MONITORING Guide Robots for Senior Citizens and for People with Visual Impairment	Friedrich Kaasik	University of Tartu	UBORA
25	On-Demand Service Smartphone Application for Elderly (ProKonect)	Alain Binamungu	Bugema University	NA NA
26	Remote Monitoring Critical Physiological Parameters Using Smartphone (RMCPPS)	Al-Hammadi Husam1	University of Science and Technology of Yemen	NA NA
27	Design of a Simple Technique to Monitor the Location of People with Dementia	Nick Ipali	Kenyatta University	UBORA
28	Delivery monitoring device	Muhammed Erziku	University of Gondar	NA
29	Bracelet Alerting and moNitoring Device for cardiovascular-related drugs (DrugBAND)	Matteo Lo Preti	Sant'Anna - University of Pisa	NA
30	An Adaptable Sensorized Seat for Elderly Posture Analysis and Fall Prevention	Caterina Giuliani	University of Bologna	NA
31	Pill Dispenser with Alarm and Notification Via Smartphone	Filipa Leal	University of Porto	NA
32	Design And Construction Of A Low-Cost And Affordable Hearing Aid	Atieno Dorothy	Kenyatta University	UBORA
33	IO Guard Cushion: Sensor based in-shower on-time injury protection for elderly	Susan Gitau	Kenyatta University	UBORA
34	ChepOut  Use of Hot and Cold Water Therapy to Reduce Pain Caused by Knee Osteoarthritis in Elderly	Andrea Hermida	Universidad Politécnica de Madrid (UPM)	UBORA
35	People	Patience Bwire	Mbarara University of Science and Technology	ABEC
36	Smart Assistance for Elder Parkinson Disease	Merna Ashraf	Cairo University	ABEC
37	Powered Flexible Wheelchair  Automatic Bill Box Disposes and Vital Size Magitaring Povice with Reminder for Eldors	Brenda Chepngeno	University of Eldoret	ABEC
38	Automatic Pill Box Dispenser and Vital Sign Monitoring Device with Reminder for Elders (APDVMD)	Nebyu Ahmed	Jimma University	ABEC
39	Smart EyeCare Tonometer	Leonard Ondigo	Kenyatta University	UBORA
40	StepBy: Fall Detection System	Beatriz Aviñó	Universidad Politécnica de Madrid (UPM)	UBORA
41	ARTICIAL INTELLIGENCE HOME BASED STROKE MONITORING DEVICE	NOEL MAHIU WAITHAKA	Kenyatta University	UBORA
42	Low-cost customizable knee orthosis	Florinda Coro	University of Pisa	UBORA
43	FurahiTech: A Self Blood Pressure Monitor linked with mobile application for Self-Management of Hypertension.	Benson Kagiri	University of Eldoret	ABEC
44	Simple Multipurpose Walking Aid Stick	Elbetel Taye	Jimma University	ABEC
45	Continuous Heart Rate, Cuffless Blood Pressure, and Breathing rate Monitoring Device for Aged People	Zelalem Adbar	Jimma University	ABEC
46	Smart Stick Friend for Aged	Nebiyu Mulugeta	Jimma University	ABEC
47	Rafiki-Smart Arm Splint	Kenneth Odongo	Kenyatta University	UBORA
48	Urinating Tube System for Elderly	Jonathan Mhango	Malawi University of Science and Technology	ABEC

49	Structure for hands-free self-cleaning of teeth	Filipa Leal	University of Porto	NA
50	Automatic Portable Pillbox by Hampi Yachay	Natalia Béjar Ayllón	Universidad Politécnica de Madrid (UPM)	UBORA
51	Melanoma prevention by measurement of UV radiation	Marina Buezo Tordesillas	Universidad Politécnica de Madrid (UPM)	UBORA
52	Solar Sterilization And Distillation Unit (SSDU)	Ibrahim Alhothily	University of Science and Technology of Yemen	NA
53	Easy Seat	Simone Micalizzi	University of Pisa	UBORA
54	Dementia Hope Tech	Ephantus Wanyeki	University of Eldoret	ABEC
55	Blood Glucose Monitoring Device for Old Diabetes Patients	Redeat Birhanu	Jimma University	ABEC
56	Ultraviolet B Radiation Treatment for Type 2 Diabetes	Marjorie Koimburi	Kenyatta University	UBORA
57	Blood Strip For Early Detection of Rheumatoid Arthritis.	Maureen Etuket	Makerere University	ABEC
58	WEARABLE, SELF MANAGEMENT GLUCOSE TESTING MACHINE (GLUCOWATCH)	Justine Eilu	Makerere University	ABEC
59	Smart Wheelchair	Cyrus Zulu	Malawi University of Science and Technology	ABEC
60	Solar Powered Smart Wheelchair	Dominic Sandram	Malawi University of Science and Technology	ABEC
61	Urinary Incontinence of Aging Population	Nusrat Binta Nizam	Bangladesh University of Engineering and Technology	NA
62	Design of a Spine Shock Absorber Band and Dietary Manual for Osteoporotic.	Francis wachira	University of Eldoret	ABEC
63	Walking Aid for the Blind	Cyrus Zulu	Malawi University of Science and Technology	ABEC
64	Auto Working Portable Defibrillator Based on ECG Monitoring	Khalid Ahmed	University of Science and Technology of Yemen	NA
65	An Early, Non-Invasive and Portable Malaria Detection Device in rate of vibration of Nano particle (Hemozoin) with Magnetic field and Electromagnetic wave.	Anatholly.A	Addis Ababa Institute of Technology	ABEC
66	SMART MEDICAL CONTAINERS	James Ochuka	University of Eldoret	ABEC
67	Design and Construction of an Ultrasonic Smart Stick for Visually Impaired People	Sam Odong	Kyambogo University	ABEC
68	HEALTHYAGINGTOALL	Lulu Gabriel	Muhimbili University of Health and Allied Sciences	ABEC
69	Automatic IV administration set for Hypovolemic Shock Cases - HYPOCAM	Francori Mulugeta	Addis Ababa Institute of Technology	ABEC
70	Device To Prediction Of Stroke	Mestawot Bogale	Jimma University	ABEC
71	Arthritis Vibration therapeutic Device	Isaac S Chisembe	Malawi University of Science and Technology	ABEC
72	Low Cost, Non-invasive Diabetic Mellitus and Blood Pressure Monitoring Device for Elder people	Kokeb Dese	Jimma University	ABEC
73	Switching Aider for the Elderly	Susan Gitau	Kenyatta University	UBORA
74	Using Organic Electronic Ink to Print ECG Circuits on Clothing for Monitoring and Diagnosing Atrial Fibrillation in Elderly Patients	Adam Yawe	Kenyatta University	UBORA
75	Loca	Tadala Mtimuni	Malawi University of Science and Technology	ABEC
76	Exotherapy Device	Suzan Mbabazi	Mbarara University of Science and Technology	ABEC
77	Body Fat, Body Mass Index, Basic Metabolic Rate and Caloric Maintenance Level Monitor	Henok Gebremedhin	Addis Ababa Institute of Technology	ABEC
78	RAFIKI PROJECT A SUSTAINABLE PROJECT FOR PREVENTING HYPERTENSION RELATED DISABILITIES	Deogratias Mtei	Muhimbili University of Health and Allied Sciences	ABEC
79	An easier way to test for blood sugar levels without blood contact useful in treatment of diabetes in older people	Ntonde Usher Kirungi	Mbarara University of Science and Technology	ABEC