Position Description	
JOB TITLE	Graduate Biomedical Engineer, Ellen Medical Devices
REPORTING RELATIONSHIP	Founder and Director of Engineering, Ellen Medical Devices
EMPLOYMENT DURATION	12-month contract
TYPE OF EMPLOYMENT	Full time (1 FTE)
LOCATION	Sydney

George Health Enterprises

George Health Enterprises ('GHE') is the commercial arm of the George Institute for Global Health (TGI). It is a healthcare company with a unique vision - an innovative business with global impact that develops effective, affordable treatments and technologies that better treat and manage serious, chronic medical conditions. GHE works in established countries such as Australia, Europe, and the US and emerging markets such as India and China, focused on the most common chronic conditions.

GHE has commercial rights to the intellectual property of TGI, as well as access to expertise and support from the Institute. TGI's focus on late-stage clinical research for chronic disease means that medicines and technologies are proven before GHE commercialises, resulting in a much higher probability of success rate than is usual in the industry.

An experienced management team leads GHE with a long industry track record in drug development and commercialisation, biotechnology, healthcare delivery and venture capital investment in established and emerging markets. Coupled with the global scientific leadership of TGI, GHE's business has potential for real social and economic impact.

Ellen Medical Devices (EMD)

EMD is an independent for-profit company, registered in Australia. Important minority shareholders include George Health, founding engineer Vincent Garvey and a variety of other key investors. EMD was created to bring to the clinic an innovative new form of dialysis for kidney failure, invented by Vincent Garvey, which is more affordable than current forms of dialysis and also has a much lower carbon footprint and increased portability.

EMD has built working prototypes of its new dialysis system and recently received ethics approval to conduct its first human trials. The intention is to have the new dialysis treatment available for use in clinics around the world within the next three years.

The Role

This newly established role has three main focus areas:

a) Under the direction of the EMD Director of Engineering, work on building and refining prototypes of the EMD Affordable Dialysis System (ADS), especially as it relates to its human interface and usability studies, human factor analysis and validation and verification processes.
b) Document the detailed engineering design of the EMD ADS in CAD on SolidWorks and in detailed ISO13485 compliant Design Brief files, as part of the preparatory work to submitting for regulatory approval in Australia and other relevant geographies.
c) Provide engineering support to the EMD clinical trial program as it tests the system in the clinic and in the homes of future users. EMD's clinical trials are subject to rigorous ethical approval and are managed by an expert Clinical Trials Steering Committee.

Duties and Key Responsibilities

Perform as a Graduate Biomedical and Biomechanical Engineer within the EMD engineering team

- Assist in finalising design and building of prototypes of the EMD ADS
- Document the design in CAD in SolidWorks
- Partner with local external regulatory and engineering specialists, especially in developing
- ISO13485 compliant documentation and design files
- Provide engineering support for the EMD clinical trial program
- Help prepare this EMD ADS for regulatory approval
- Participate in planning for commercialization.

Skills, knowledge, and experience

Qualification

- Engineering degree; preferably biomedical or biomechanical engineer
- Strong computer skills, including programming, especially with CAD with SolidWorks

Experience

- Hands on experience of the design and development of medical devices is preferred but not essential. This position would suit a recent graduate as strong training and support are available. It would also support an engineer looking to move into medical devices from a related field, especially electronics or mechanical engineering.

Competencies and profile

- Someone who wants to make a difference in the world
- Someone who believes that a profession is a calling, not just a job
- Innovation, challenging the status quo and the standard way of doing things
- Determination. The ability to overcome obstacles and setbacks with creativity
- Passionate about improving global health outcomes
- Global outlook and perspective
- Excellent interpersonal skills and the ability to work well flexibly, i.e., independently and engaging with a variety of teams
- Ability to communicate complex engineering concepts
- Team skills; team player
- Commercial outlook