



## Mechanical Engineer – Medical Devices

**Location: Palo Alto, California, with domestic and international travel**

D-Rev is an international nonprofit design firm and technology incubator that develops market-driven products to improve the health and incomes of people living on less than \$4 per day. We utilize cutting-edge research and technology to design and deliver world-class products and strategies that are scalable and allow for people to lift themselves out of poverty. While D-Rev works on a portfolio of products across multiple industries, our primary focuses are the *ReMotion* Knee, a low-cost, high-performance prosthetic knee for amputees in developing countries; and *Brilliance*, an affordable and effective phototherapy device for the treatment of babies with severe jaundice. Please refer to [www.d-rev.org](http://www.d-rev.org) for more information on these and other D-Rev projects.

We are recruiting a Mechanical Engineer with biomedical experience to work across D-Rev's multiple projects. The position will initially focus on the *ReMotion* Knee and *Brilliance*, but the Mechanical Engineer will also be able to contribute to D-Rev's entire product portfolio and will have significant influence with our future product strategy and R&D. We are seeking a candidate with a strong technical background, including experience with medical devices. He or she will be an innovative thinker capable of producing thoughtful, detailed analysis and high-level product strategy. This employee will be a dynamic individual, capable of working both independently as well as within teams of D-Rev staff and external stakeholders.

The Mechanical Engineer will have the following primary responsibilities at D-Rev:

- Along with current partners and staff, drive the final production-ready design of the *ReMotion* Knee. Successfully implement the device's transition to mass manufacturing by working with internal and external stakeholders, including device testing facilities, manufacturers, and customers.
- Determine and evaluate potential risk factors and device failure modes, through a combination of simulation, bench-top testing, and evaluation of worn field units, as part of a comprehensive testing plan.
- Generate technical specifications based on user needs and quality standards, and ensure adherence to these requirements through iterative testing and design refinement.
- Lead the design and development of products as part of the D-Rev portfolio.
- Draft and manage technical CAD models using SolidWorks.
- Engage in iterative cycles of rapid prototyping, testing with users, and development as part of D-Rev's new product R&D efforts.
- Oversee the implementation of device assembly and quality assurance practices in full production, either through outsourced facilities or D-Rev licensing partners.

Our ideal candidate will have the following characteristics:

- Minimum of Bachelors degree in Mechanical Engineering with at least three years of experience with product development, design for manufacturing, and transfer of design to manufacturing.
- Familiarity with clinical testing and intellectual property strategies.



- Experience working on electromechanical systems is a plus.
- Capable of managing medical device documentation – candidate should have a history of developing detailed product specifications, implementing change orders, and generating testing protocols as part of an overall quality management system.
- Expertise with design verification and validation – candidate should be able to implement and manage a cohesive design validation plan that appropriately identifies and evaluates key risk factors, including generation and execution of testing protocols.
- Track record of demonstrated sensitivity to user needs – candidate should have experience working in a range of culturally-diverse settings, including emerging economies. He or she should be able to interact with customers from different backgrounds, identify subtle factors and user requirements from these interactions, and translate these into technical product features.
- Excellent interpersonal relationship skills including demonstrated leadership and team-building abilities— candidate should be able to communicate effectively with diverse groups of people; understand and/or appreciate the staff interdependencies of growing start-ups; manage workflow efficiently while consistently meeting deadlines and exceeding team member expectations.
- Passionate about D-Rev’s mission - we seek people who are versatile, curious, exceptionally capable in multiple domains, and want to contribute to building our organization.
- Believes that design should be driven by users and that their voices are key to successful product design and delivery.
- Ability to travel internationally for 1-2 weeks at least 3-4 times per year.

Additional language skills are a plus.

This position will start immediately.

**How to Apply:**

- Please send cover letter and resume to [jobs@d-rev.org](mailto:jobs@d-rev.org), and indicate “*Mechanical Engineer – Medical Devices – D-Rev*” in the subject line of the email.
- We will start scheduling interviews in February 2012. If we ask you for an interview, we will request to see a portfolio or examples of products you have worked on.