# **MIGUEL ESCOBAR**

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### **CORE COMPETENCIES**

React JS, Handlebars, JavaScript HTML, CSS, Tailwind, Bootstrap New Product Development Medical Device Statistics & Packaging Node.js, Express, Apollo, GraphQL, REST API MongoDB, Mongoose, mySQL, Sequelize Fluent in Spanish

## **PROFESSIONAL EXPERIENCE**

# Medline, Inc. April 2021 – Present

Medline, LP., is one of the world's leading manufacturers and distributors of medical devices.

Senior Verification & Validation Engineer April 2021 – Present Member of the Research & Development organization holding a position of responsibility in the Design V&V Laboratory supporting 24 medical device divisions within Medline.

- Develop and implement process improvements for the laboratory (e.g., statistical sampling plan procedures, TMV procedures, training plans, etc.).
- Author and review DHF documentation such as design verification plans, protocols, technical justifications, data analyses, and reports.
- Interpret data and evaluate product performance to verify product requirements and design inputs.
- Collaborate with design and development teams to develop product requirements based on user needs, regulatory strategy, and applicable standards.
- Perform product failure and out of calibration equipment investigations.
   Determine root causes, assess impact to data based on risk, identify mitigating factors, and support solution implementation.
- Lead test method development activities, including test fixture design, equipment acquisition, and hardware/software validation.
- Teach Quality organization about topics relevant to medical devices (e.g., medical device statistics, new testing standards, etc.).
- Test and evaluate new and existing products.

## ICU Medical, Inc. Nov 2017 – March 2021

ICU Medical is one of the world's leading infusion therapy companies.

Engineer II – Sustaining and Packaging
July 2020 – March 2021

Member of the Consumables Operations organization holding a position of responsibility in the on-market product support and packaging activities for IV consumables and IV solutions.

Engineer I – Sustaining and Packaging
Nov 2017 – July 2020

- Lead and managed projects for on-market products and packaging from development to completion across several manufacturing sites.
- Authored DHF documentation such as Design & Development plans, design verification plans, protocols, technical justifications, data analyses, and reports.
- Served as technical lead for on-market product projects such as EU MDR.
- Balanced multiple projects of varying priority.
- Worked alongside suppliers in the development of components and materials for both on-market product and packaging changes.
- Compiled technical review presentations and meeting minutes for the DHF.

- Communicated with manufacturing sites to ensure understanding of validation process and successful builds/testing.
- Oversaw sample builds and testing at manufacturing sites.
- Updated BOMs, specifications and drawings in Agile documentation system.
- Authored Technical Data Sheets for new and on-market products.
- Developed and maintained project hopper for team's future packaging project ideas.
- Trained new hires on all Sustaining & Packaging Engineering job responsibilities.

## Fresenius Kabi Aug 2017 - Oct 2017

Sr. Engineer Aug 2017 – Oct 2017

# ICU Medical, Inc. August 2014 - May 2017

Sr. Engineering Technician; ICU Medical, Inc., Pfizer June 2016 – May 2017

Product Development Test Engineer; Pfizer, Hospira Aug 2014 – June 2016

Fenwal, a Fresenius Kabi company, is one of the world's leading manufacturers of automated blood collection machines and disposables.

Member of the Disposable R&D organization holding position of responsibility in the design and development activities for automated blood collection technologies.

- Authored protocols & reports to support the identification, qualification, and implementation of new plastic material and filter replacements on existing on-market disposable kits for the automated blood collection systems.
- Developed design specifications for disposable kits used in automated blood collection systems.
- Performed mechanical and biological laboratory testing on disposable kits to support regulatory submissions and new product development verification.

ICU Medical is one of the world's leading infusion therapy companies.

Member of the Consumables R&D organization holding positions of increasing responsibility in the design and development activities for infusion set technologies.

- Authored TMV protocols & reports based on design inputs and ISO design specifications for consumable and combination medical devices using Attribute Agreement Analysis and Gage R&R techniques in Minitab.
- Designed fixtures and failure modes for TMV.
- Developed Verification test plans and timelines for ISO 80369-3 and ISO 80369-6 connectors. Established business case for the project, interfaced with vendors, and performed initial feasibility of new connectors.
- Performed laboratory testing on consumable and combination medical devices to support regulatory submissions and new product development verification.
- Sterilization coordinator: Facilitated product sterilization by determining an efficient process to document and execute sterilization for R&D purposes.
- Utilized manually operated and computer controlled mechanized equipment (e.g. Instron) to perform tests per device design specifications.

#### **EDUCATION**

Northwestern University & Trilogy Education January 2022 – July 2022

#### **Full Stack Web Development Boot Camp**

Online boot camp to learn the fundamentals of both Frontend and Backend web development. Portfolio at: <a href="https://mae2136.github.io/Miguel-Escobar/">https://mae2136.github.io/Miguel-Escobar/</a>

Statistical Tools for Medical Devices

Minitab

February 2019 In person training course of statistical techniques used in Medical Device

manufacturing.

Technology Education

Packaging Science Fundamentals Certificate

April – August 2018 Online course in the fundamentals of packaging across all industries, including food,

medical, and industrial packaging.

Oakton Community College January – May 2017 Certified Solidworks Associate [CSWA]

License #: C-222RYPGXAR

14 week course in the methodology associated with designing products ranging from

household objects to sheet metal in Solidworks.

Columbia University

**B.S.** in Biomedical Engineering

September 2009 – May 2013

Focus Area: Biomechanics Minor: Mechanical Engineering