Employee Profile



Matthew Cutcliffe R&D Engineer

Read Matthew's piece on his career in Intelesens – from a part-time member of staff while undertaking his Mathematics degree when the facility was based near the Titanic to now as R&D Engineer working on exciting new electrode development projects.

For more information on Intelesens, go to www.Intelesens.com I started in Intelesens in 2002 as a part time production associate while I also began a Mathematics degree at Queens University Belfast. At that time Intelesens was connected with the University of Ulster through its founding directors Professor John Anderson, Professor Jim McLaughlin and Professor Eric McAdams. Life in Intelesens started with working next to the dry dock where the Titanic was built, working in a temporary mobile building which was put up while construction was underway on a new Northern Ireland science park sector. My early role was to work as part of a team to create medical electrodes and devices under specific target times. I had the opportunity to help make prototypes for the first screen-printed defibrillation electrodes. As my first real job after leaving school this was a big learning experience for me to working life. Intelesens then moved to a research centre located within the University of Ulster grounds in Jordanstown.

After graduating with a Mathematics degree in 2005, I was offered the full-time role of production controller with Intelesens. This was a supervisory role of the production associates which included conducting full training in the manufacture of the company's products. Other work included analysing production processes to implement improvements, creating work instructions, stock control, preparing for audits and working alongside the design engineers in research for future products. As Intelesens continued to growth, it moved to a larger premises in Belfast.

Working with the design engineers inspired me to return to university and undertake a four-year electrical and electronic engineering master's degree. During my first year I retained a role for Intelesens as production associate group leader. This role involved organising the part time staff's timetables for each week, calculating pay hours each month and organising training interviews when employing new staff.

After my studies I returned to Intelesens in 2012 as they requested my help with a large customer order. On completion of the order, I moved to the role as product realisation engineer. My responsibilities included control of documents passing to design to production including work instructions, part specs, bill of materials, device master records. I helped implement design changes controlled under engineer control notices. My understanding of regulatory requirements relating to ECG and Defibrillation electrodes increased greatly during this period. Intelesens growth continued and its manufacturing facility was at its limit which resulted in moving to a bigger premises within the same industrial park in Belfast.

From June 2014 to December 2015 my primary work was with an Invest NI funded project - the aim of this project was to look at different methods and materials for the advancement of medical electrodes produced by Intelesens, to reduce overall cost while increasing the quality of ECG and respiration.

After the Renew Health Ltd. acquisition in 2017 I began working closer with the Renew quality team on updating the Intelesens quality management system in which I had a key role. In 2018 I took on the role of quality engineer with responsibilities of KPI integrity, Audit compliance, QMS transition, complaint management, CCP support and document control. The highlight during this time was successfully passing an FDA audit with no findings. Working with the Renew quality team was a positive learning experience for me regarding my understanding of quality system processes, ISO13485, risk analysis and continuous improvement.

In 2019 Intelesens underwent significant changes to strengthen its electrode development and manufacturing facilities. Due to my experience in manufacturing and electrode design I was promoted to R&D Engineer reporting to Michael Skillen (R&D Manager) to support the electrode development opportunities within Intelesens. I have worked with Michael from my earliest employment in 2002 and we make an excellent team.

Working with Renew Health and Intelesens as an R&D engineer, I am really proud of seeing the company grow and being part of that growth. I enjoy creating technical files for new electrode projects, working with new designs as well as developing electrodes to customer design needs and timelines. With my experience and versatility in other areas within the company, I am always there to offer assistance, and help out when required. I am continually developing my skills and experience and enjoy the opportunities to take on more project leadership roles.

