# Encouraging early talent

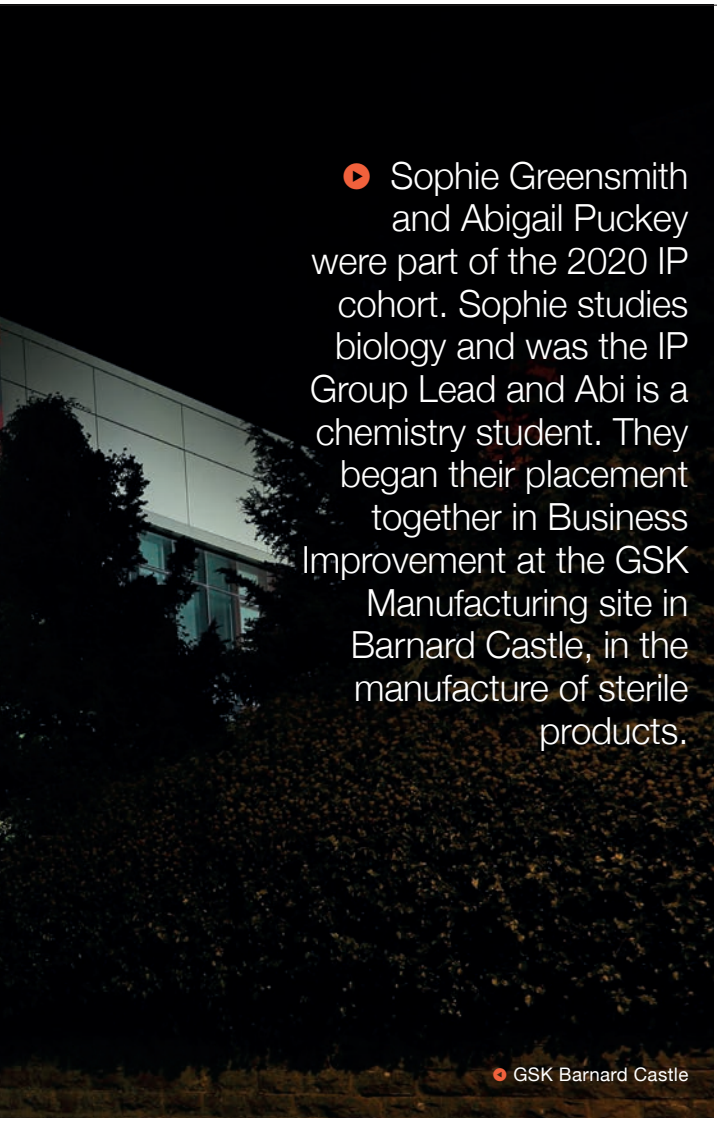

In the UK, over 200 students join the science-led, global healthcare company, GlaxoSmithKline 'early talent' programme each year, with several of them taking up future graduate roles. Inclusion of human factors in the Industrial Placement students' training at the Barnard Castle site has been a revelation, as **Julie Avery** explains.

GSK has three global businesses that research, develop and manufacture innovative pharmaceutical medicines, vaccines and consumer healthcare products. Every day, we help improve the health of millions of people around the world. Our Pharmaceuticals business has a broad portfolio of innovative and established medicines including respiratory, HIV, immuno-inflammation and oncology. The business recognises the value of talented people (see www.GSK.com).

As human factors lead, I coach students that we are all change agents from the moment we arrive in a supportive organisation at whatever level. Trusting we can make a difference brings confidence to our human factors work and helps us deliver performance. We focus on three areas:

- **Reactive:** Problem solving.
- **Preventive:** Mitigating risk.
- **Proactive:** Setting people up for success.

We work to integrate human factors into existing systems to enhance organisational resilience.



Sophie Greensmith and Abigail Puckey were part of the 2020 IP cohort. Sophie studies biology and was the IP Group Lead and Abi is a chemistry student. They began their placement together in Business Improvement at the GSK Manufacturing site in Barnard Castle, in the manufacture of sterile products.

GSK Barnard Castle

Translating human factors tools and language into operational 'speak' is part of our strategic approach. At Barnard Castle we use practical, relevant examples to bring human factors to life and help with everyday challenges and opportunities. We coach people to wear 'human factors glasses' and develop a growth mindset to help see things differently. We integrate human factors into our lean thinking and the GSK Production System.

Our industrial placement students, or 'IPs', join us for a year. We offer insight and technical experience in many aspects of the pharmaceutical industry. We help our students add value in the workplace to make an impact and develop career opportunities.

Students come from a variety of universities and backgrounds and although most study STEM-related subjects (Science, Technology, Engineering and Maths), there are many other opportunities such as business improvement roles. Students bring curious minds, they question and challenge, and their fresh ideas and different ways of thinking can really support our business objectives.

We give our IPs real roles and responsibilities with projects to complete that will have a significant impact →

**SOPHIE'S STORY**
2020 IP COHORT

**Near the beginning of our placement, we joined an introductory session on human factors with Julie Avery. The intention was to widen our interests and explore an area that many of us had not heard of before that we could apply to support site goals. I found this an interesting opportunity to expand my skills and capability and subsequently took the lead in developing a human factors programme for the IP students. The programme grew organically based on feedback from the IPs to align with their interest, curiosity and activities.**

We quickly realised human factors enabled many of us to become change agents across the site. A key focus for myself and Abigail was how to increase the pace of digitalisation in process performance management. The cycle of application of human factors and resulting benefit increased interest in the IP human factors programme at our site including by the Site Leadership Team who asked us to help digitise their process performance system. Being able to step out of our placement year shoes and be seen as change agents helped us gain confidence and be respected as peers by colleagues.

The students that took part in this programme had diverse roles in the manufacturing site including engineering, microbiology and supply chain logistics. This strengthened the viewpoint about how universal human factors and growth mindset principles are and how they can be applied. Within the programme, we saw a harmonious link between our learning from the NeuroLeadership Institute (NLI) and human factors. Combining these skills helped us to have better conversations and implement change more effectively.

With some people working from home due to Covid-19, my IP colleagues and I were able to expand our reach with a wider online audience for our human factors and change agent work. I hosted a mini series of webinars on growth mindset and human factors which enabled a greater appreciation and awareness of these disciplines.

Human factors became a familiar part of conversations, and, more importantly, people sought us out to learn more. We found there was legacy thinking that human factors meant human error, but of course, understanding how something happened rather than who made the mistake is the fundamental starting place for any human factors work. We set up focus sessions with manufacturing teams and problem solved how to set teams up for success. Leaders recognised my work in establishing the human factors programme which was very encouraging.

Human factors still plays a key part for me day to day, from conversations with my family about achieving a growth mindset to applying human factors to scenarios at university. I particularly recognised the wider application of this discipline when I attended the CIEHF's Ergonomics & Human Factors 2020 virtual conference, where I could see that human factors is very identifiable and transferable across sectors. My placement year would not have been as rewarding if I hadn't been introduced to human factors. It opened new doors, allowed me to network and most importantly, achieve and exceed my goals and those of the business.

New Aseptic Facility at Barnard Castle

on the business, focusing on Safety, Quality and Efficiency improvements. A supportive manager is key to an IP student's success. At Barnard Castle we have a strong reputation for supporting and developing early talent; the competition to join us is strong and the partnership forged over the year is challenging and productive.

In addition to their technical development, the IPs focus on human factors and change management skills. They ask more effective questions and develop their understanding of human performance behaviours to gain insight into work as done. Sharing their insight with the business helps develop user-centric improvements. The students are now able to describe their new skills in their CVs with examples of using human factors with demonstrable improvements in the business being shared at their end of year graduation.

**Students bring curious minds, they question and challenge, and their fresh ideas and different ways of thinking can really support our business objectives**

The 2020 group were an engaging and enthusiastic group who soon took the lead in sharing their practical knowledge of human factors to engage others. The IPs achieved much and brought energy, pace and optimism everywhere they went. The 2021 group are now up and running, inspiring all stakeholders with their newfound passion for human factors.

The learning gained from human factors as individuals and as an organisation has helped us improve and set people up for success beyond our original expectations. It also helps us deliver our GSK mission to our patients and consumers: Do More, Feel Better, Live Longer. In these challenging times this mission has never been more relevant.

**Julie Avery** is Director Human Factors at GSK, BioPharm Supply Chain. With thanks to Helen Smith, Learning & Development Lead – Early Talent at GSK Barnard Castle for her input into this article.

**ABI'S STORY**
2020 IP COHORT

One part of the human factors sessions that fascinated me was learning about personality types. Recognising that any change needs to start with us, we looked at various personality profile models and used a psychometric questionnaire to highlight personality preferences and behaviours for individuals and teams.

Learning about NeuroLeadership as described by NLI really resonated with my scientific mindset as a chemistry student. It helped me understand the science behind decision making and the link to human factors, for example, how mistakes can occur due to habits created.

Sophie and I initially collaborated on the digitisation of the Tiered Accountability Boards for performance management in Steriles manufacturing. For some time, the morning meetings were completed using a sticky notes system with varying success. Working with the meeting participants, Sophie and I slowly but surely encouraged people to change. The result was a streamlined and effective meeting, that was later used as a standard template for the site.

Julie noticed our ability to act as change agents and challenged us to tackle bigger things by changing the rest of the site's Tiered Accountability Process and Boards, including for the Site Leadership Team. We helped the Leadership Team to develop their skills and nurtured their confidence in the new technology and innovative process. Old habits were exchanged for new.
At the same time, our own confidence grew to implement change. In the IP programme, we learned about change management tools and techniques as shared by Chip and Dan Heath in *Switch Change Management*, which guides people in a cycle of engagement for improvement.

During lockdown some key processes, such as completing a Root Cause Analysis, became more difficult to conduct effectively online and I started to develop a new way of working. I thought if Barnard Castle site had this issue perhaps other sites would find it challenging too, so I contacted GSK sites across the world, building a wide network and found that if you just reach out, people are willing to engage.

I designed material for online engagement and education sessions including a video, which helped me effectively communicate the benefits that human factors and change management could bring. Using our internal communications network and platform allowed us to easily share knowledge globally and get real time feedback.