Transforming lives through science, innovation and collaboration

# Welcome to Reading Scientific Services Ltd (RSSL)

## Early Career - Laboratory Biographies

# Our Laboratories

The **RSSL Graduate Scientist** position will work within one of our state-of-the-art laboratories, more information about what each area does can be found using the hyperlinks below;

| Pharmaceutical Analysis | Food Analysis | Both |
|---|---|---|
| Biomolecular Analysis | DNA & Protein | Functional Ingredients |
| Pharmaceutical Chemistry | Packaging | Investigative Analysis |
| Pharmaceutical Chromatography | Product and Ingredient Innovation | Physical Sciences |
| Pharmaceutical Development | | Metals |
| Pharmaceutical Microbiology | | Microscopy |

# Biomolecular Analysis (BMA)

The BMA team primarily focus on biopharmaceutical product identification and characterisation through an ever increasing range of analytical methods.

BMA perform structural characterisation and confirmation through peptide sequencing or mapping, or can check molecular weight or size of the products, using techniques like SDS-PAGE, PCR, LC-MS or ELISA.

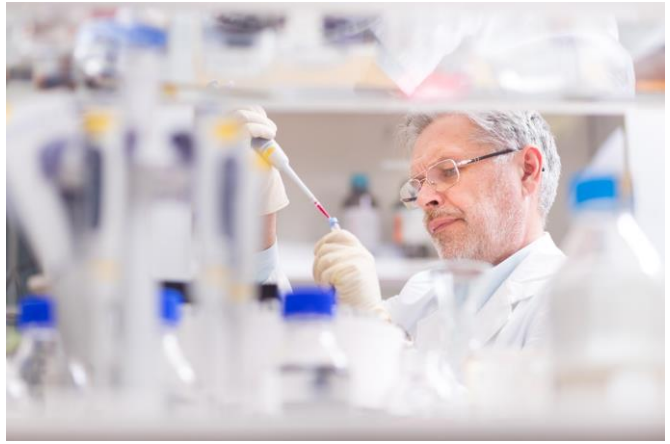
Joining this team will allow you to increase your expertise in checking functionality of the materials and their ability to activate cells. You will develop technical skills, increase your knowledge on the pharmaceutical industry in general whilst working to GMP standards.

# DNA & Protein

The DNA and Protein team provide analytical methods to assist customers with food safety in relation to allergens and EU allergen labelling regulations.  The team also supports the parent company with the identification of *Salmonella* isolates to help determine the source of an outbreak.

A Graduate here will work both with a team, and independently, to undertake a range of routine analyses. There may also be opportunities to assist in the development of new analytical methods.

You will also develop expertise in a range of analytical methods such as ELISA, DNA Extraction, PCR, PAGE, WGS, NGS.

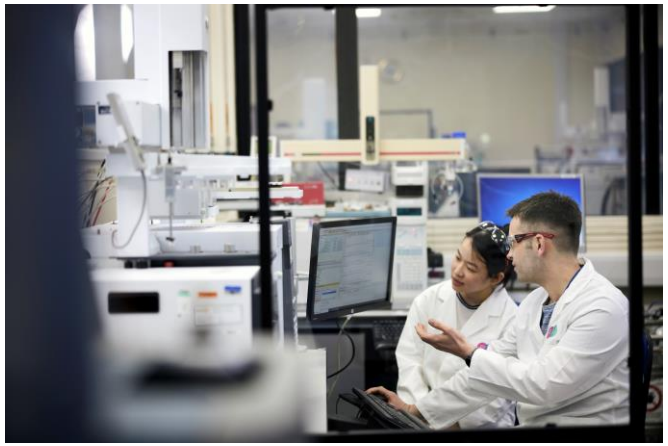


# Functional Ingredients

The Functional Ingredients team provides a range of analytical methods to assist customers with nutritional claim substantiation, due diligence, labelling and ingredient stability.

A Graduate here will work both with a team, and independently, to undertake a range of routine and investigative analyses. There may also be opportunities to assist in the development of new, bespoke analytical methods.

You will also develop expertise in a range of analytical methods and laboratory equipment such as HPLC, IC, LC-MS, GC, GC-MS HunterLab Colourimeter, and UV-Vis spectroscopy.



# Investigative Analysis

The Investigative Analysis group work with a wide range of clients from the food, pharmaceutical, healthcare, cosmetics and forensics industries.

Using a variety of analytical techniques, we support our clients with routine analysis, contaminant investigations, troubleshooting, method development, validation – whatever is needed!

As a graduate, you will build technical capabilities in areas such as wet chemistry, spectroscopy and chromatography, as well as project management, client communication and multi-lab collaborations.

# Metals

The Metals group undertake a wide range of analytical contracts for a variety of pharmaceutical, healthcare and food companies as well as supporting Mondelēz research and development.

Graduates in this department will conduct sample preparation (e.g. ashing and microwave digestion) and undertake analyses using a range of spectroscopy techniques including AAS, ICP-OES and ICP-MS.

# Microscopy

The Microscopy group carries out investigative analysis to support our foreign body identification and product contamination services. These also carry out routine and bespoke pharmacopoeia testing. In addition we can support food clients, either internal or external with food microstructure analysis.

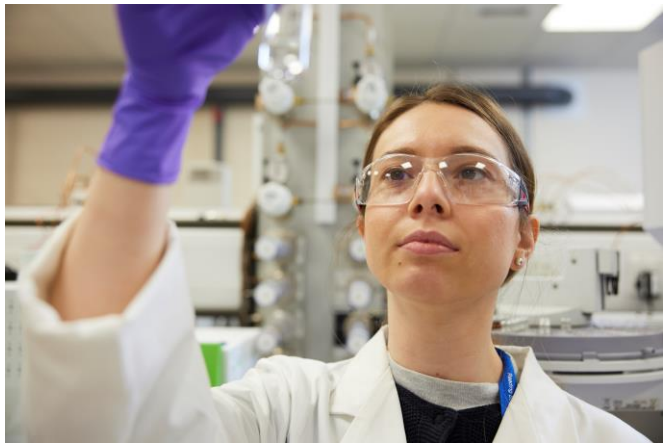
A Graduate in this team will develop expertise in analytical techniques including light microscopy, FT-IR & RAMAN spectroscopy, Scanning Electron Microscopy, X-ray microanalysis and microfluorescence.

# Packaging

Packaging testing is a new offering for RSSL and expanding quickly. The team carry out physical testing on packaging on a wide range of products. They support our parent company and external food companies, ensuring packaging is fit for purpose for the client, the consumer and the environment.

We have a wide range of equipment to carry out permeation testing (OTR, WVTR, aroma barrier), mechanical properties (opening and sealing of packaging), structural evaluation and optical properties.

As a graduate in this team, you will be part of a growing team and exposed to multiple sides of the business (project and stakeholder management, multi lab collaboration, implementing quality systems and method development).



# Pharmaceutical Chemistry

The Pharmaceutical Chemistry team performs a range of routine and specialised analyses for a variety of pharmaceutical and healthcare companies.

You will be part of a team of over 20 and learn to work to GMP standards in our compliant laboratory (inspected by the MHRA and FDA). You will undertake a comprehensive training programme to perform routine testing of pharmaceutical raw materials, API's, excipients and finished drug product against pharmacopoeia and client methods.

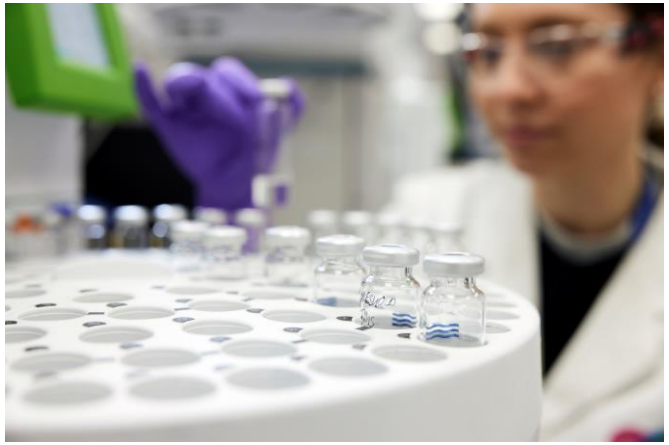
You will develop expertise in a wide range of analytical methods and techniques such as FTIR, UV-VIS Spectrophotometry, Specific Optical Rotation, Specific Gravity, Refractive Index and Osmolality.

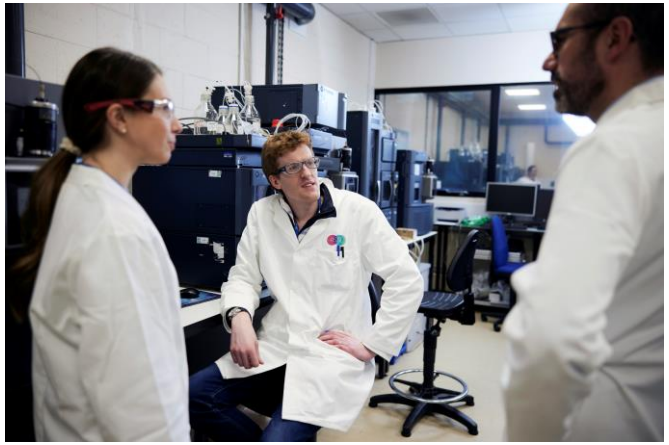
# Pharmaceutical Chromatography

The Pharmaceutical Chromatography team provides a range of routine and specialised analyses for a variety of pharmaceutical and healthcare companies utilising GC, GCMS and LCMS techniques.

You will undertake a comprehensive training programme, learning to work to GMP standards in our compliant laboratory and gain experience over time in all of our techniques (GC, GC-MS & LC-MS).

The work you perform will contribute to our support of the external Pharmaceutical market testing active pharmaceutical ingredients, excipients and finished drug products and may also support method development/validation, extractables and leachable and investigative projects.





# Pharmaceutical Development

The Pharmaceutical Development team supports the life science market with a wide range of analytical testing. Working to current GMP standards, the laboratory undertakes pharmacopeial testing of APIs and excipients and release and stability testing of drug products, including method development and investigational projects.

Using techniques like HPLC, LCMS, Dissolution and Karl Fischer, a Graduate would prepare, analyse and investigate across a range of formulated drug products and their components, from small molecules to large proteins and simple tablets and capsules to complex suspensions and inhaled formulations.

# Pharmaceutical Microbiology

The Pharmaceutical Microbiology team supports the pharmaceutical and healthcare industries with a wide range of microbiological tests. Working to current GMP standards, the laboratory undertakes a wide range of pharmacopeial testing.

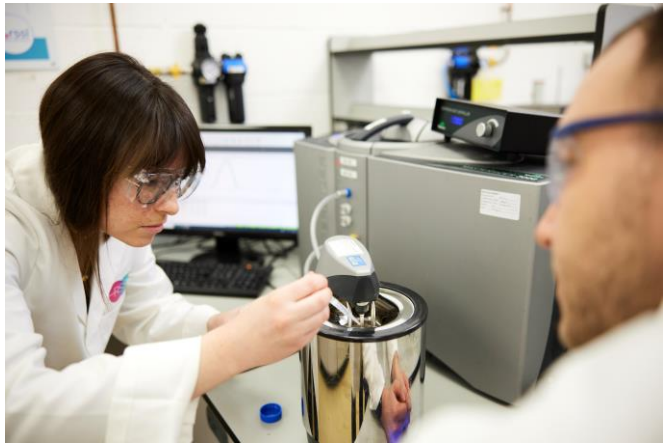
As a Graduate in this laboratory, you will gain technical experience in using aseptic techniques to perform tests like Microbial Limits test and Bioburden test. In addition, you will develop relevant technical skills by being part of a team that performs a range of microbiological analyses like Endotoxin analysis, Sterility, Preservative Efficacy test, Disinfection test and Bacterial identification.

# Physical Sciences

The Physical Sciences team look at physical properties of food and pharmaceutical products, which are of vital importance in predicting and optimising quality and behaviour during processing and storage.

As a Graduate in this area, you will perform a wide range of analyses both with a team and independently on products from the food, pharmaceutical and healthcare industries, as well as projects for Mondelez.

You will develop expertise in analytical methods and operation of laboratory equipment including Karl Fischer, Malvern Mastersizer, mechanical sieving, and texture analysers.

# Product and Ingredient Innovation (PII)

The Product and Ingredient Innovation (PII) team support clients across the food industry with product development and reformulation, and ingredient evaluation. We also support on development projects across the Mondelez categories.

As a graduate in this department you will work both independently and as part of a team on a wide range of food and beverage products. You will develop your understanding of ingredient functionality through the formulations you will prepare and increase your knowledge on how products are manufactured as we support our clients to get their products to the market shelves.