

Name: Statistician- Microbiology Department

Department (and Section where appropriate): Microbiology Department, Microbiology Risk Assessment and Training Group

Grade: G3

Job Title: Statistician

Immediate Line Manager (Job Title): Head of Microbiology Risk Assessment and Training, Phil Voysey

Job Purpose

To plan and execute delegated scientific and technical work in the Science Directorate. To contribute to development of directorate capabilities.

Main Duties (including % of time spent)

- Infrastructure (Minitab, R, RStudio) 5%
- Maintain and moderate "Numbers Network" sharepoint site.
 - Administration including usage monitoring, managing upgrades/installation, site specific customisation.
 - User support including training, ad-hoc support, macro writing
- Planning and execution of scientific and technical work in line with project briefs 40%
 - Design and analysis of experiments
 - Power and sample size calculations
 - Multivariate statistics
 - Design/analysis of compliance surveys
 - Graphics; training in principles and practical help, especially advanced graphs in R
 - Method validation: according to ISO 5725
- Microbiological statistics 10%
 - Growth/death modelling, experimental design, fit models with bespoke R package
 - Maintain bespoke R package, put fitted models into Excel predictor library
 - Method validation; according to ISO 16140 and AOAC
- Lab QA 10%
 - Uncertainty of measurement; advice, training and consultancy on micro MU, maintenance of Excel workbook, internal micro MU procedures
 - Campden BRI organised proficiency tests; advice on appropriate statistics and maintenance of Minitab data processing macros
- Advice to external clients on Sampling plans, Control Charts and Sampling for food safety 5%
- Preparing project and client reports to agreed standards and level of detail 10%
- Developing and maintaining effective relationships with colleagues and clients 5%
- Developing own functional and technical expertise appropriate to role 5%
- Developing and maintaining Campden BRI profile in appropriate areas 5%
 - Participating in ISO (WG2) and BSI meetings
 - Presenting external training
- Training colleagues 5%
- Help with requests on bioinformatic analysis

Knowledge, Skills & Experience

- Time management and financial awareness
- Verbal and written communication skills
- Project and resource management
- Degree or equivalent qualification in statistics
- Substantial exposure to experimental science
- Technical knowledge of relevant food industry sectors
- Continue to develop own expertise in relevant areas
- Several years experience in each of:
 - Design and analysis of experiments
 - Minitab, R, RStudio, Excel
 - Uncertainty of Measurement

<ul style="list-style-type: none"> ○ Microbiology mathematical modelling ○ Method validation ○ Industrial statistics
<u>KEY TASKS & RESPONSIBILITIES</u>
<u>1. Communications</u> <ul style="list-style-type: none"> • Verbal and written client facing communication to impart and discuss technical and commercial detail with audiences having both specialist and non-specialist knowledge. • Proactive communication of information to Line Manager and cascade information and instructions to team members. • Giving formal presentations at conferences, training events and client meetings. • Managing client interaction and communication where appropriate.
<u>2. Analytical Skills & Creativity</u> <ul style="list-style-type: none"> • Able to analyse complex data sets and draw business-relevant conclusions
<u>3. Management of Activities</u> <ul style="list-style-type: none"> • Managing own technical work effectively to achieve agreed objectives. • Ensure clear scope for own projects in agreement with line manager. • Identifies any non-compliances and informs line manager. • (For more senior staff) Proposes and implements corrective actions
<u>4. Management of People</u> <ul style="list-style-type: none"> • Responsible for appraisals, ongoing performance review, training and development of direct reports (if applicable) • Identifying needs for staff training in statistical topics, preparing and delivering such training. • Oversight of statistical content of projects and reports, advising project managers on such content.
<u>5. Management of Finance & Resources</u> <ul style="list-style-type: none"> • Responsible for delivery of projects in accordance with budgetary constraints. • Ability to balance longer term objectives and deliver against shorter term deadlines with variable notice periods.
<u>6. Autonomy & Accountability</u> <ul style="list-style-type: none"> • Working primarily independently in technical content, under the line management of Head of Microbiology Risk Assessment and Training.
<u>7. Working Environment</u> <ul style="list-style-type: none"> • Primarily office-based but requirement for travel in the UK as well as abroad. • Requirement to undertake activities in processing environments and specialised laboratories.
<u>8. Other designated job roles</u> (Please tick those applicable) <p>Quality Co-ordinator Safety Co-ordinator First Aider First Aid Leader Fire Officer</p>

Fire Leader
Software Co-ordinator ✓
Trained internal Auditor
Equipment Officer
Departmental Archivist
Hygiene Manager
Process Hall Manager
Event Director
Risk Assessor
Biological Safety Officer
Safety Representative
Safety Committee Member
Sample Receipt Steward
Authorised Driver (in line with Car Policy)

DSE User YES

Manual Handler NO

Signed & Dated

Job Holder Date

Line Manager Date