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| Last updated: | September 2022 |

**JOB DESCRIPTION**

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| Post title: | Research Fellow - Hard and soft tissue 3D imaging specialist (with Haleon) | | |
| School/Service: | School of Engineering, Mechanical Engineering | | |
| Faculty: | Faculty of Engineering and Physical Sciences | | |
| Career pathway: | Education, Research and Enterprise | Level: | 4 |
| \*ERE category: | Research focused | | |
| Posts responsible to: | Principal Investigator | | |
| Posts responsible for: | n/a | | |
| Post base: | Non Office-based | | |

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| Job purpose |
| You will embed within the Oral Health Research and Development team at Haleon (formally GlaxoSmithKline) to transfer knowledge to the company about 3D imaging techniques and their processing. The role will focus on using 3D imaging to provide enhanced efficacy testing of toothpaste formulations, insights into how formulations could be improved and imaging options for generation of high-quality marketing material.  Applications for Research Fellow positions will be considered from candidates who are working towards or nearing completion of a relevant PhD qualification. The title of Research Fellow will be applied upon successful completion of the PhD. Prior to the qualification being awarded the title of Senior Research Assistant will be given. |

| Key accountabilities/primary responsibilities | | % Time |
| --- | --- | --- |
|  | Undertake research and knowledge transfer activities in alignment to the KTP workplan. To include project management and reporting. | 50% |
|  | Regularly disseminate findings by taking the lead in preparing publication materials for referred journals, presenting results at conferences, or exhibiting work at other appropriate events. | 5% |
|  | Investigate imaging modalities to enhance GSK R&D activities | 25% |
|  | Undertake personal development and training opportunities. | 10% |
|  | Any other duties as allocated by the line manager following consultation with the post holder and the partnering company in line with KTP rules of engagement. | 10% |

| Internal and external relationships |
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| Direct responsibility to both the industrial supervisor within Haleon and the academic supervisor from the University of Southampton.  Additional reporting and liaison responsibilities to the Knowledge Transfer Advisor from Innovate UK and team specific managers during placements at Haleon |

**PERSON SPECIFICATION**

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| Criteria | Essential | Desirable | How to be assessed |
| Qualifications, knowledge & experience | PhD or equivalent professional qualifications and experience in a quantitative research discipline: Engineering, Dentistry, Physics or Biological Science  Detailed understanding of 3D imaging techniques, their processing and techniques for their quantitative analysis  Experience of undertaking 3D imaging of biological materials  Experience of processing 3D imaging datasets | Experience of imaging calcified and or soft biological materials.  Experience of oral healthcare products, in particular toothpastes for dental hypersensitivity.  Knowledge of Bioglasses, tribology and material characterisation methods, both nano-mechanical and chemical | Application CV and Interview |
| Planning & organising | Able to organise own research activities to deadline and quality standards |  |  |
| Problem solving & initiative | Able to develop understanding of complex problems and apply in-depth knowledge to address them  Able to identify or develop original techniques/methods to obtain a required outcome |  |  |
| Management & teamwork | Able to supervise work of junior research staff, delegating effectively  Able to contribute to management and administrative processes  Work effectively in a team, understanding the strengths and weaknesses of others to help teamwork development |  |  |
| Communicating & influencing | Communicate new and complex information effectively, both verbally and in writing, engaging the interest and enthusiasm of the target audience  Able to present research results at group meetings and conferences  Able to write up research results for publication in leading peer-viewed journals  Work proactively with colleagues in other work areas/institutions, contributing and transferring specialist knowledge to achieve outcomes |  |  |
| Other skills & behaviours | Understanding of relevant Health & Safety issues  Proactive in promoting a working environment that is inclusive and engaging; recognising the value diversity brings |  |  |
| Special requirements | Able to travel within the UK.  No previous experience of being a KTP for greater than 1 year  No previous experience within GSK |  |  |

**JOB HAZARD ANALYSIS**

**Is this an office-based post?**

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| Yes | If this post is an office-based job with routine office hazards (eg: use of VDU), no further information needs to be supplied. Do not complete the section below. |
| No | If this post is not office-based or has some hazards other than routine office (eg: more than use of VDU) please complete the analysis below.  Hiring managers are asked to complete this section as accurately as possible to ensure the safety of the post-holder. |

## - HR will send a full PEHQ to all applicants for this position. Please note, if full health clearance is required for a role, this will apply to all individuals, including existing members of staff.

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| **ENVIRONMENTAL EXPOSURES** | **Occasionally**  (<30% of time) | **Frequently**  (30-60% of time) | **Constantly**  (> 60% of time) |
| Outside work |  |  |  |
| Extremes of temperature (eg: fridge/ furnace) |  |  |  |
| ## Potential for exposure to body fluids |  |  |  |
| ## Noise (greater than 80 dba - 8 hrs twa) |  |  |  |
| ## Exposure to hazardous substances (eg: solvents, liquids, dust, fumes, biohazards). Specify below: | √ |  |  |
| * Use off Human and bovine tissue samples | | | |
| Frequent hand washing |  |  |  |
| Ionising radiation |  |  |  |
| **EQUIPMENT/TOOLS/MACHINES USED** | | | |
| ## Food handling |  |  |  |
| ## Driving university vehicles(eg: car/van/LGV/PCV) |  |  |  |
| ## Use of latex gloves (prohibited unless specific clinical necessity) |  |  |  |
| ## Vibrating tools (eg: strimmers, hammer drill, lawnmowers) |  |  |  |
| **PHYSICAL ABILITIES** | | | |
| Load manual handling |  |  |  |
| Repetitive crouching/kneeling/stooping |  |  |  |
| Repetitive pulling/pushing |  |  |  |
| Repetitive lifting |  |  |  |
| Standing for prolonged periods |  |  |  |
| Repetitive climbing (ie: steps, stools, ladders, stairs) |  |  |  |
| Fine motor grips (eg: pipetting) |  |  |  |
| Gross motor grips |  |  |  |
| Repetitive reaching below shoulder height |  |  |  |
| Repetitive reaching at shoulder height |  |  |  |
| Repetitive reaching above shoulder height |  |  |  |
| **PSYCHOSOCIAL ISSUES** | | | |
| Face to face contact with public |  |  |  |
| Lone working |  |  |  |
| ## Shift work/night work/on call duties |  |  |  |