



NOTES

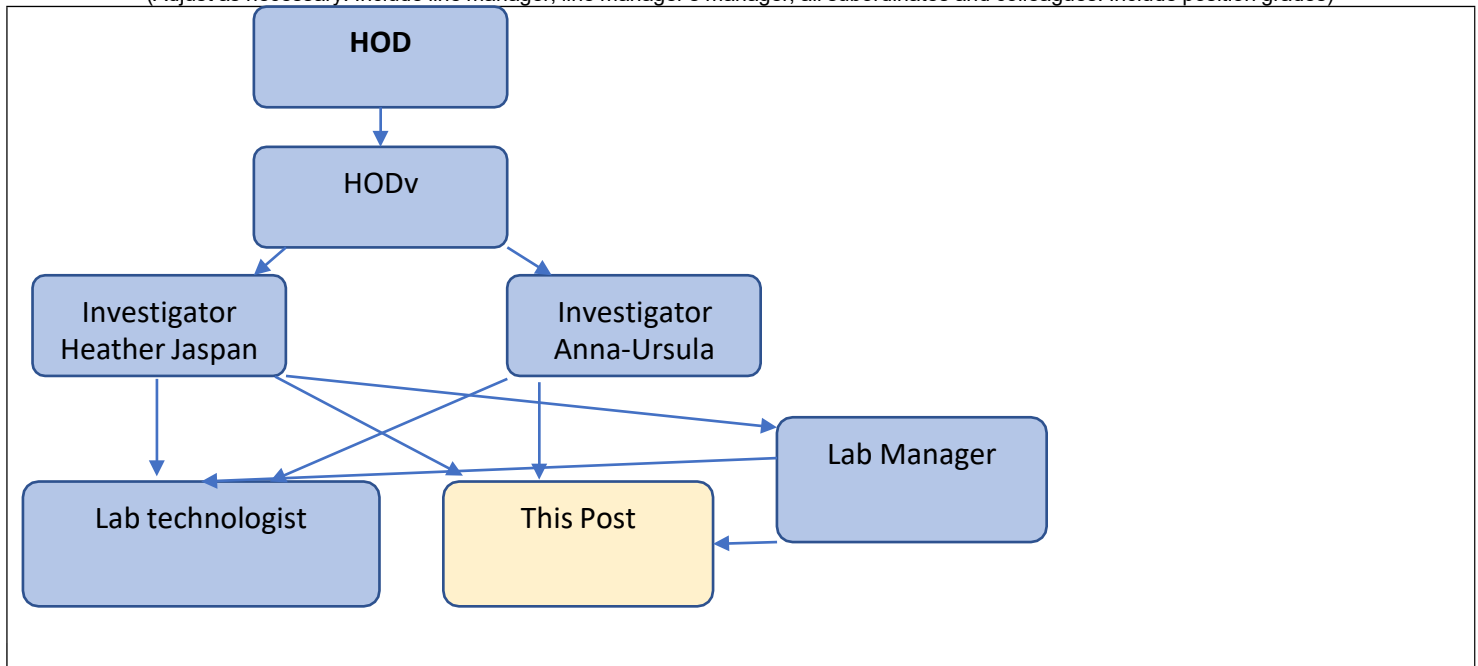
- Forms must be downloaded from the UCT website: <http://forms.uct.ac.za/forms.htm>
- This form serves as a template for the writing of position descriptions.
- A copy of this form is kept by the line manager and the position holder.

POSITION DETAILS

| | | | |
|--|-------------------------|-----------------------------|--|
| Position title | LABORATORY TECHNOLOGIST | | |
| Job title (HR Practitioner to provide) | | | |
| Position grade (if known) | Payclass 8 | Date last graded (if known) | |
| Academic faculty / PASS department | Health Sciences | | |
| Academic department / PASS unit | Pathology | | |
| Division / section | Immunology | | |
| Date of compilation | 30 September 2020 | | |

ORGANOGRAM

(Adjust as necessary. Include line manager, line manager's manager, all subordinates and colleagues. Include position grades)



PURPOSE

The Laboratory Technologist in the Division of Immunology will work with other members of the laboratory team under the supervision of the lab manager and or academic team leader. The Technologist is required to perform laboratory procedures with an emphasis on processing and cryopreservation of biological specimens and performing related assays in support of the scientific goals of the research. He or she should adhere to good laboratory practice regulations in BSL2 laboratories and perform day-to-day general laboratory housekeeping.

CONTENT

| Key performance areas | | % of time spent | Inputs (Responsibilities / activities / processes/ methods used) | Outputs (Expected results) |
|-----------------------|---|-----------------|--|---|
| E.g. | General and office administration | 25% | <p>Takes, types up and distributes minutes and agendas for monthly departmental meeting.</p> <p>Greets visitors, enquires as to the nature of their visit and directs them to the appropriate staff member.</p> | <p>All staff members receive an electronic copy of accurate minutes and agendas, in the departmental template/format, a week before the meeting.</p> <p>Visitors are directed to appropriate staff member in a professional and efficient manner.</p> |
| 1 | Laboratory Research Support | 65 | <p>a) Prepare laboratory packs for sample collection</p> <p>b) Performs laboratory techniques related to clinical studies as required.</p> <ul style="list-style-type: none"> • Peripheral blood lymphocyte isolation and cryopreservation • Multiparameter flow cytometry • Preparation of mucosal and other tissue • Isolation of cord blood cells • Setting and analyzing Flow cytometry, Luminex and ELISA-based assays • RNA and DNA isolation and storage • PCR/qPCR, library preparation and other basic molecular methods <p>c) Receive, verify and ensure quality of all laboratory specimens.</p> <p>d) Ensures appropriate storage and preservation of laboratory specimens.</p> <p>e) Practices safe lab techniques and adheres to lab safety procedures.</p> | <p>a) Viable PBMC derived from thawed cryopreserved cells for immunology assays</p> <p>b) T cell subsets acquired on the LSRII flow cytometer from isolated cells.</p> <p>c) Measuring soluble cytokines in plasma</p> <p>d) High-quality RNA/DNA transcripts obtained from blood and tissue.</p> <p>e) Libraries prepared successfully</p> <p>f) Appropriate positive and negative controls</p> |
| 2 | Administration (SOPs, Stock Control, Data Management, Shipment) and Quality assurance | 20 | <p>a) Maintains excellent notes and data storage and collection.</p> <p>b) Maintain operational processes to receive and process blood and tissue samples.</p> <p>c) Good communication skills</p> <p>d) Maintain stock take and inventory, Ordering reagents etc...</p> <p>e) Interact with the clinic staff on a daily basis.</p> <p>f) Maintaining the lab information system (Sample Log in Freezerworks)</p> <p>g) Have Good problem-solving skills, Good computer skills, Good report writing skills</p> <p>h) Participate in SOP management, writing of SOPs</p> <p>i) Accurate retrieval of samples from freezers</p> <p>j) Ensure proper maintenance and safekeeping of certain equipment, by adhering to specified servicing and maintenance requirements</p> <p>k) Entry and quality control of study-related data</p> | <p>a) Manual of Operations and Procedures</p> <p>b) Keeping the laboratory in a GCLP-like condition</p> <p>c) Keeping control over laboratory activities and maintaining a clean area.</p> <p>d) Sample Log in freezerworks</p> <p>e) Ensure accurate retrieval of samples from freezers</p> <p>f) Shipment of samples to national and international collaborators.</p> <p>g) Ensure appropriate quality control and efficient use of study materials</p> |

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|---|--|----|--|--|
| 3 | Teaching & Learning Support | 10 | <ul style="list-style-type: none"> a) Contribute to training of new students in laboratory activities b) Contribute to training of new Research Staff in laboratory activities | a) Ensuring students and new staff are proficient in health and safety, sterile techniques, pipetting SOPs and protocols |
| 4 | Contributing to the research agenda | 5 | <ul style="list-style-type: none"> a) Attendance of group meetings b) Keeping up to date with current research /methodologies by attending seminars, journal club as time permits. | <ul style="list-style-type: none"> a) Ability to trouble shoot experiments b) Knowledge of latest techniques |
| | NOTE: FLEXIBLE WORKING HOURS AND ON CALL WEEKEND HOURS MAY BE REQUIRED | | Arrival of clinical samples is unpredictable, expect processing after hours | |
| | | | | |

MINIMUM REQUIREMENTS

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|---|---|--------------|--|--------------|
| Minimum qualifications | National Diploma, BTech/ Bachelor of Science in Biomedical Sciences or related life sciences field | | | |
| Minimum experience (type and years) | At least 2- 3 years' laboratory experience | | | |
| Skills | Analytical, Laboratory techniques, | | | |
| Knowledge | Interpersonal skills Excellent communication skills (verbal and written) Excellent organizational Skills Scientific and technical Knowledge Clinical Research Sample Reception, quality control and process | | | |
| Professional registration or license requirements | N/A | | | |
| Other requirements (If the position requires the handling of cash or finances, other requirements must include 'Honesty to handle cash or finances'.) | N/A | | | |
| Competencies (Refer to UCT Competency Framework) | Competence | Level | Competence | Level |
| | Interpersonal Relationships | intermediate | Decision Making & Problem-Solving Skills | intermediate |
| | Results Focus | intermediate | Planning & Organizing Skills | intermediate |
| | Continuous Learning | intermediate | Communication Skills | intermediate |
| | Resource Management Skills | intermediate | Technological Agility | intermediate |
| | Numerical Skills | intermediate | Research Skills | intermediate |
| | Report Writing skills | intermediate | Computer Skills | intermediate |

SCOPE OF RESPONSIBILITY

| | |
|--|--|
| Functions responsible for | Sample reception, process and storage 2. Sample shipment. 3. Quality Management System 4. Data Entry 5. Data Analysis 6. Inventory 7 Purchasing of goods and services 8. Equipment maintenance |
| Amount and kind of supervision received | Weekly meetings with line manager / research team to discuss update on database status for multiple projects, report of areas of needs and progress report. |
| Amount and kind of supervision exercised | Daily quality checks on the technologists/ research assistant laboratory reports and evaluate and report non-compliance where applicable. |
| Decisions which can be made | Decisions over inventory and stock keep, specimen quality evaluation, implementing new lab protocols and forms, supervision of systems and queries affecting study progression. Setting up of new systems. |
| Decisions which must be referred | Freezerworks Troubleshooting, licensing, changes in system which may affect study progression, |

CONTACTS AND RELATIONSHIPS

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|-----------------|---|
| Internal to UCT | Laboratory Technologists, Research assistants, Scientists, PG Students, Visitors, Postdoctoral Fellows, Laboratory Manager Clinical Driver, Study coordinators, clinic team, Principal investigators |
| External to UCT | Sale Representatives, Service Providers, Collaborators |