

CURRICULUM VITAE

Carina Lourens

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Personal Information

Title : Mrs.
 First names : Carina Wilhelmien
 Name : Carina
 Surname : Lourens
 Health condition : Excellent (non-smoker)
 Birth date : 25 February 1976
 Residential address : 692 de Beer Street
 Wonderboom-South
 Pretoria
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 Postal address : 692 de Beer Street
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 Telephone - home : -
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 - e-mail : carina.lourens@up.ac.za
 Nationality : South African
 Racial group : White
 Identity number : 760225 0046 089
 Criminal offences : None
 Home language : Afrikaans
 Other languages : English
 Northern-Sotho (high school training)
 Marital status : Divorced
 Sex : Female
 Own transport : Yes
 Driver's licence : Code 08 (1994)

Formal Information

Secondary Education

High school	:	Hercules High School												
Highest standard passed	:	Std 10												
Year	:	1993												
Subjects	:	<table> <tr> <td>Afrikaans</td> <td>HG</td> </tr> <tr> <td>English</td> <td>HG</td> </tr> <tr> <td>Mathematics</td> <td>SG</td> </tr> <tr> <td>Science</td> <td>HG</td> </tr> <tr> <td>Biology</td> <td>HG</td> </tr> <tr> <td>Northen-Sotho</td> <td>HG</td> </tr> </table>	Afrikaans	HG	English	HG	Mathematics	SG	Science	HG	Biology	HG	Northen-Sotho	HG
Afrikaans	HG													
English	HG													
Mathematics	SG													
Science	HG													
Biology	HG													
Northen-Sotho	HG													
Achievements	:	Academic award Sport award Duty award Cultural award												
Leadership	:	Pupil's council Standard committee Class captain Netball captain (std. 6-9) ACSA-ringleader and committee-member												
Extramural activities	:	Orators competition Operetta and play-act Chorister Akpolspan												

Tertiary Education

1. Institution : Technicon Pretoria (1994 – 1996)
(TUT – Tswane University of Technology)
- Field of Study : National Diploma in Veterinary Technology
- Subjects : Anatomy and physiology
Chemistry 1b
Physics 1b
Calculations and statistics
Microbiology i, ii
Biochemistry ii, iii
Veterinary Hematology
Histology
Immunology ii
Experimental-Animal Technology ii
Veterinary Microbiology
Virology iii
Helminthology iii
Computer-literacy ii
Protozoölogy iii
Veterinary entemology iii
Practical experience i
Applied Veterinary Teghnology ii

Special training (practical experience):

University of Pretoria, Faculty of Veterinary Science, Department Veterinary Tropical Diseases, 1996)

Student assistant in Bacteriology: Preparation of media
Bacteriology
Preparation and assisting of b.v.sc iii practicals
Project: antimicrobial sensitivity in urinary tract infections
Assist in research projects

2. Institution : Technicon Pretoria (1999 – 2000)
(TUT – Tswane University of Technology)
- Field of Study : B-Tech Veterinary Technology
- Subjects : Entrepreneurial skills
Research methodology exemption
(University of Pretoria)
Pharmacology and Toxicology iv
Virology iv
Project: Veterinary Technology ii

employment history/...

Employment History

Name of firm: University of Pretoria
Faculty of Veterinary Sciences
Equine Research Centre
Onderstepoort

Position: First Technologist
Deputy Technical Manager
Technical Signatory (Laboratory Manager)

Duration: January 1998 – March 2003
April 2007 – Present

Experience: Laboratory Services

Key Tasks

- Prepare laboratory apparatus for analyses
- Prepare reagents and quality control samples
- Conduct virological analyses of body fluids including blood and spinal fluids as well as tissue samples to determine the presence of virus particles
- Analyse laboratory findings to check the accuracy of results
- Operate, calibrate, maintain and troubleshoot equipment used in qualitative and quantitative analysis such as balances, centrifuges and microscopes
- Enter data from analyses of serological tests and clinical results into computer data base for storage
- Establish and monitor quality assurance program and activities to ensure the accuracy of laboratory results
- Arrange for the set-up, cleaning, servicing and maintenance of laboratory equipment
- Provide technical advice and information about test results to practitioners, researchers and owners/clients
- Ensure timeous communication of test results and/or compile special reports on test results and summaries of findings

Experience: Serology and Virology

Key Tasks

- Tissue/Cell culture maintenance (including primary cell culture preparation from foetal tissues).
- Preparation and testing of all reference antigens and sera of all local equine viruses
- Process samples and perform serological/immunological analyses
- Perform assays on controlled animal diseases by DAFF in support on International trade and Industries
- Perform special techniques such as viral isolation and identification, serological tests and serotyping on serum and tissue samples
- Plaque performing studies
- Perform and interpret results of all serological tests (serum neutralisation tests, complement fixation tests, Competitive and Capture Elisa) as well as virological tests
- Provide technical advice and information about test results to practitioners, researchers and owners/clients
- Compile special reports on test results and summaries of findings
- Sample registration process and ensure that samples are received and registered in accordance with the prescribed procedure
- Provide guidance on the appropriate techniques to be used to provide the required results
- Ensure that samples for examination are prepared accurately to have staining and special techniques performed on them
- Ensure that reagents are prepared accurately and positive controls are applied (where appropriate)

- Oversee examinations of body fluids, including blood and tissue to determine the absence or presence of virus particles
- Perform and oversee the analyses of laboratory findings, checking of accuracy of results and order re-testing if indicated
- Do troubleshooting and provide inputs in experiments to improve laboratory techniques
- Ensure that equipment used are set-up, calibrated and maintained and assist with troubleshooting of equipment
- Ensure storage of data such as results of diagnostic tests
- Establish and monitor quality assurance program and activities to ensure the accuracy of laboratory results
- Provide technical advice and information about diagnostic tests and examinations to practitioners, researchers and clients
- Ensure timeous communication of diagnostic test and examination reports
- Training of technical staff and Post-graduate students in advanced serological and virological methods.

Experience: Laboratory Management and Administration

Key Tasks

- Direct and supervise the work activities of support staff
- Monitor the use of diagnostic services and facilities to ensure effective use of resources and assess the need for equipment and services
- Review laboratory activities to aid planning and improve service delivery and utilisation
- Develop manual and maintain computerized record management systems to store and process data and produce reports
- Establish work schedules and assignments according to workload and equipment availability
- Maintain awareness of advances in diagnostic and test equipment, data processing technology, legislation etc,
- Set standards for and oversee development of standard operating procedures and maintenance schedules for accreditation of laboratory
- Manage stock and effective use thereof
- Implement and maintain quality assurance system and monitor laboratory work to ensure compliance with set standards
- Assist internal and external audits and provide corrective actions for non-conformances

Experience: Practical/Vocational Training

Key Tasks

- Contribute to present web-based and CE courses
- Oversee bench training in laboratory techniques
- Oversee vocational training of post-graduate students in virology in applicable laboratory techniques

Courses:

- SANAS Laboratory System Course (Based on ISO 17025) – Successfully completed
Internal Audit Course – Successfully completed
- Occupational Health and Safety Course

Auditor:

- **Technical auditor for DAFF (Dept of Agricultural Fisheries and Forestry)**

Name of Firm : University of Pretoria
Faculty of Veterinary Science
Dept. Production Animal Studies
Onderstepoort

Position : Laboratory Technologist

Duration : 1 November 2005 – 31 March 2007

Experience

Microbiology :

- Diagnostic service
- Stock control and ordering of all media, reagents, consumables and equipment.
- Preparation of all solid and liquid growth and selective media used routinely in isolating bacteria, fungi, yeast and antimicrobial sensitivity testing according to the laboratory quality control procedures.
- Plating of milk samples submitted for bacterial and / or fungal isolation.
- Subculturing of cultures containing more than one organism.
- Staining of bacteriology preparations and microscopical investigation and interpretation by means of:
 - gram's stain
 - acid fast stain
 - cam's quick / diff quick
 - spore staining
 - cotton blue (fungi)
- Identification of different isolates by means of gram's stain, biochemical tests, carbohydrate profiles and serotyping
- Performing antimicrobial susceptibility tests on isolates according to kirby - bauer agar diffusion technique.
- Interpretation and analysing of results
- Determination of milk hygiene by means of the brucella milk ring test, coliforms and *e.coli* counts, standard colony counts and alkaline phosphatase test.
- Obtaining the somatic cell counts of milk by means of testing with the fossomatic 90 and fossomatic 5000 machines.
- Preparation for herd visitations as well as parcels for couriers
- Administration:
- Data capturing and compiling and sending of reports.

Name of Firm : Labretoria BK/CC
Position : Personal assistant / Representative
Duration : 1 August 2004 – 31 October 2005
Experience :

- Office administration
- Receptionist
- Secretarial duties
- General office administration.
- Record keeping of all products ordered and supplied.
- Issuing of invoices and monthly statements
- Client liaisons
- Supplying quotations to clients
- Ordering of various products – (local or overseas)
- Company representative

Name of Firm : University of Pretoria
Faculty of Veterinary Science
Dept. of Veterinary Tropical Diseases
Onderstepoort

Position : Senior Laboratory Technologist

Duration : 1 January 1996 – December 1997
1 April 2003 – 31 July 2004

Experience

Microbiology :

- diagnostic service:
- stock control and ordering of all media, reagents, consumables and equipment.
- preparation of all solid and liquid growth and selective media used routinely in isolating bacteria, fungi, yeast and antimicrobial sensitivity testing according to the laboratory quality control procedures.
- plating of specimens for bacterial and / or fungal isolation.
- subculturing of cultures containing more than one organism.
- staining of bacteriology preparations and microscopical investigation and interpretation by means of:
 - gram's stain
 - acid fast stain
 - cam's quick / diff quick
 - spore staining
 - cotton blue (fungi)
- identification of different isolates by means of gram's stain, biochemical tests, carbohydrate profiles and serotyping
- performing antimicrobial susceptibility tests on isolates according to kirby - bauer agar diffusion technique.
- interpretation and analysing of results
- administration:
- compiling and sending of reports.
- students: planning, preparation, assistance in presentation and supervision of student practicals
-
- Research – assistance in research projects

Personal Skills, Knowledge, Abilities and Work Style**Skills**

Computer Literacy:	Intermediate MS Word and Excel. Database and laboratory information software
Report Writing:	Present information and conclusions in writing
Investigative:	Frequently working with ideas and extensive thinking, searching for facts and figuring out problems mentally
Active Listening:	Give full attention to persons' needs and ask appropriate questions
Critical Thinking:	Use logic and reasoning to identify strengths and weaknesses of alternative solutions, conclusions or approaches to problems
Comprehension:	Use scientific rules and methods to solve problems
Judgement:	Consider the relative costs and benefits of potential actions to choose the most appropriate one
Supervision:	Evaluate and monitor performance of self and other staff to make improvements and/or take corrective action. Motivate and direct people as they work
Quality Control:	Conduct tests and inspections of products, services and processes to evaluate quality and performance of laboratory
Complex Problem Solving:	Identify complex problems and review related information to develop and evaluate options and implement possible solutions
Assessment:	Gather evidence and judge personal performance within measurable outcomes to determine competence levels, that is, integrated knowledge, demonstrated skill and application in appropriate circumstances
Interpersonal:	Build and maintain relationships of trust.

Abilities

Near Vision:	See details at close range
Reasoning:	Apply general rules to specific problems and produce answers that make sense; to combine pieces of information to form general rules or conclusions and to find relationships among seemingly unrelated events
Problem Sensitivity:	Tell when something is wrong or likely to go wrong and recognise problems
Information Ordering:	Arrange things in a certain order or pattern according to a specific rule or sets of rules
Oral Expression:	Communicate information and ideas in speaking so that others will understand
Selective Attention:	Concentrate on a task over a period of time without being distracted
Flexibility of Closure:	To identify or detect a known pattern that is hidden in other distracting material
Arm-Hand Steadiness:	To keep one's arm and hand steady while moving one's arm or hand or holding one's arm and hand in one position

Knowledge

ISO:	Compliance with regulations and standards (ISO 17025)
SANAS	Laboratory System Course (Based on ISO 17025) – Successfully completed Internal Audit Course – Successfully completed
DAFF:	Compliance with Animal Diseases Act regulations and approved to process samples for controlled animal diseases.
Biology:	Animal pathogenic micro-organisms, tissues, cells, functions, interdependencies and their interactions with each other and the environment
Chemistry:	Chemical compositions, structures and properties of substances and chemical processes and transformations they undergo. Uses of chemicals, their interactions, danger signs, production techniques and disposal methods
Service Delivery:	Principles and processes for providing services, including quality standards, needs assessment and customer satisfaction evaluation
Clerical:	Administrative procedures and systems to manage files and records
Mechanical:	Knowledge of laboratory equipment, their uses and maintenance
Training:	Principles of teaching and instruction for individuals and measuring of training effectiveness

Work Style

Integrity:	Honest and ethical
Leadership:	Willingness to lead, take charge and offer opinions and direction
Innovation:	Creative and alternative thinking to develop new ideas for and answers to work-related problems
Initiative:	Willingness to take on responsibilities and challenges
Persistence:	Persistent in the face of obstacles and maintain achievement of objectives and exerting effort toward mastering tasks
Independence:	Develop own ways of doing things, guiding oneself with little or no supervision and depend on oneself to get things done
Dependability:	Reliable, responsible and dependable, fulfilling obligations
Adaptability:	Open to change and to considerable variety in the workplace
Co-operation:	Pleasant with others and displaying a good-natured, co-operative attitude
Self-Control:	Maintain composure, keep emotions in check, control anger and avoid aggressive behaviour, even in difficult situations
Attention to Detail:	Careful about detail and thorough in completing work tasks
Stress Tolerance:	Accept criticism and deal calmly and effectively with high stress situations
Support:	Foster a co-operative work environment
Motivation:	Highly motivated
Language Proficiency:	Knowledge of the structure and grammar of the English language

Communication / Liaison

- Researchers & Supervisors of Researchers
- Head of Department and Divisional Head
- Academic Staff
- Clinical Staff
- Technical Support Staff
- Administrative Support Staff
- Peers in the Faculty
- Students
- Representatives of private enterprises (e.g. SANAS, DAFF)
- Staff of Onderstepoort Veterinary Institute (e.g. Sample Registration)

Publications

The classification of seven serotypes of equine encephalosis virus and the prevalence of homologous antibody in horses in South Africa. Onderstepoort Journal of Veterinary Research.

HOWELL, P.G., GROENEWALD, D., VISAGÉ, C.W., BOSMAN, A., COETZER, J.A.W. & GUTHRIE, A.J. 2002.

West Nile Infection of Thoroughbred Horses in South Africa, 2000 – 2001. Equine Veterinary Journal.

GUTHRIE, A.J., HOWELL, P.G., GARDNER, I.A., SWANEPOEL, R.E., NURTON, J.P., HARPER, C.K., PARDINI, A., GROENEWALD, D., VISAGÉ, C.W., HEDGES, J.F., BALASURIYA, U.B., CORNEL, A.J. & MACLACHLAN, N.J. 2002

Prevalence of serotype specific antibody to equine encephalosis virus in Thoroughbred yearlings in South Africa (1999-2004).

Howell PG, Nurton JP, Nel D, Lourens CW, Guthrie AJ. Onderstepoort J Vet Res. 2008 Jun;75(2):153-61.

Development and optimisation of a duplex real-time reverse transcription quantitative PCR assay targeting the VP7 and NS2 genes of African horse sickness virus

M. Quan, C.W. Lourens, N.J. MacLachlan, I.A. Gardner, A.J. Guthrie

Diagnostic accuracy of a duplex real-time reverse transcription quantitative PCR assay for detection of African horse sickness virus.

Guthrie AJ, Maclachlan NJ, Joone C, Lourens CW, Weyer CT, Quan M, Monyai MS, Gardner IA. J Virol Methods. 2013 Apr;189(1):30-5. doi: 10.1016/j.jviromet.2012.12.014. Epub 2013 Jan 3.

Protective immunization of horses with a recombinant canarypox virus vectored vaccine co-expressing genes encoding the outer capsid proteins of African horse sickness virus.

Guthrie AJ, Quan M, Lourens CW, Audonnet JC, Minke JM, Yao J, He L, Nordgren R, Gardner IA, Maclachlan NJ.

Vaccine. 2009 Jul 16;27(33):4434-8. doi: 10.1016/j.vaccine.2009.05.044. Epub 2009 May 31.

African horse sickness in naturally infected, immunised horses

CT Weyer, M Quan, C Joone, CW Lourens, NJ Maclachlan, AJ Guthrie

Passive transfer and rate of decay of maternal antibody against African horse sickness virus in South African Thoroughbred foals.

JE Crafford, CW Lourens, IA Gardner, NJ Maclachlan, AJ Guthrie

Posters

Development of a real time polymerase chain reaction assay for Equine Encephalosis Virus

NM Rathogwa, M Quan, J Smit, C Lourens, AJ Guthrie, M van Vuuren

References

1. Prof M vanVvuuren
Head of the Virology Laboratory

Telephone: (012) 529-8329

2. Prof. P.G.Howell
Head of the Equine Research Laboratory

Telephone: (033) 239-4584

3. Mnr. C.O. Uys
Managing Director of Labretoria

Telephone: (012) 460-6943 / 2249

ATTACHMENTS

MATRIC CERTIFICATE

TECHNICON EXAMINATION RESULTS

TESTIMONIALS

/sh/
C-LOURENS.CV