For more information, please contact

Dr Tim Laurens

MSc, PhD, FRSC, MFSSoc, Pr. Sci. Nat

Technical Director: Forensic Division

Department of Chemistry, University of Pretoria Tel: +27 12 319 2116

Cell: +27 82 891 4886 Fax: +27 12 319 2915

Email: tim.laurens@up.ac.za

Mr Adriaan Marais BSc Hons.

Forensic Scientist Department of Chemistry, University of Pretoria

Tel: +27 12 319 2612 Cell: +27 83 276 3139 Fax: +27 12 319 2915

Email: adriaan.marais@up.ac.za

Postal Address

Forensic Division, Business Enterprises at University of Pretoria (Pty) Ltd, Department of Chemistry, PO Box 2034, Pretoria, 0001

Physical Address

Pathology Building, Room 3-40 Prinshof Campus, Cnr Dr Savage Rd & Voortrekker Rd, Department of Chemistry, University of Pretoria, Pretoria, 0002

Information available online: www.be.up.co.za/forensicanalysis

Alternatively, please contact

Business Enterprises at University of Pretoria (Pty) Ltd

Izan Crause

Operations Manager Tel: +27 (12) 420 5063 Fax: +27 (12) 362 5270

Cell: 083 447 9709 E-mail: izan.crause@up.ac.za

Website: www.be.up.co.za

PROFILE OF BUSINESS ENTERPRISES AT UNIVERSITY OF PRETORIA (PTY) LTD (BE at UP)

In 2000 a structure for campus enterprises was established to enable the University of Pretoria to position itself as a true leader in the fields of research, training and consulting. These campus enterprises promote contact with the private and the public sector, as well as the broader community. One of the enterprises established was Business Enterprises at University of Pretoria (Pty) Ltd (BE at UP), in which the University has 100% shareholding.

BE at UP acts as facilitator that allows the business world access to the vast pool of multidisciplinary brainpower and resources at the University. It aims at creating an environment for entrepreneurship, which includes the commercialisation and marketing of viable products and services in a wide variety of fields.

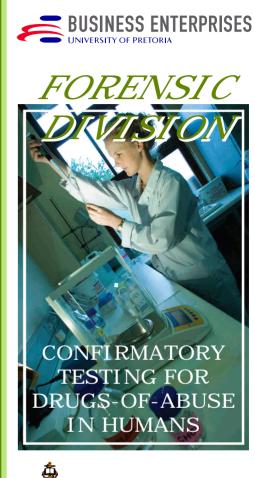
A selected profile of available services:

- Economic input/output models for local government, and local and international investors
- · Statistical data-mining solutions
- Business and professional ethics strategies
- Consultation and research in the fields of community health, public health and health systems
- · Forensic analysis of drugs of abuse
- · Actuarial risk management solutions
- · Gender audits and related research activities
- Macroeconomic modelling
- Water quality assessments for livestock, game, domestic use and irrigation purposes
- Organisation and work behaviour assessment
- Business strategy services
- · Human capital and risk management
- Clinical trials
- · Development and planning in the field of tourism
- Cultural resource management and relocation of graves
- Consultation and research on Information Communication Technology (ICT)



Graduate Centre, First Floor, Entrance 2.27 Cnr Lunnon and Herold Streets, Hatfield, Pretoria, 0083 PO Box 14679, Hatfield, 0028 Tel: +27 (12) 420 4245 Fax: +27 (12) 362 5270 E-mail: be@up.ac.za Website:www.be.up.co.za

Marketing Manager: Celia da Silva Tel: +27 (12) 420 4247 E-mail: celia.dasilva@up.ac.za Marketing Consultant: Thobi Selemela Tel: +27 (12) 420 5892 E-mail: thobi.selemela@up.ac.za





NATURAL AND AGRI CULTURAL SCIENCES

Testing for drugs is not that simple

Testing for drugs-of-abuse has numerous pitfalls and should therefore be approached in an ethically and scientifically correct, and legally defensible manner. If these criteria are not met, all parties involved may be harmed. On the one hand an innocent individual may be accused falsely or, on the other, a guilty drug-abuser may go undetected.

The current internationally accepted philosophy for the detection of drugs-of-abuse in urine involves a two-stage testing procedure:

- A preliminary test: These tests, also called screening tests, involve immunochromatographic or enzymatic colour-strip testing. Typical testing kits can be obtained from chain stores, pharmacies or pathology companies. The results of these tests can at most be regarded as preliminary since these tests are well known to be subjected to interference by other similar (and sometimes legal) compounds and can also be masked by some formulations taken on purpose.
- A confirmatory test: These tests should be performed by a laboratory specialising in drugof-abuse testing to provide a conclusive test result. Confirmatory tests can also be obtained directly without screening tests being performed first.

How the University of Pretoria can help

The Forensic Division of Business Enterprises University of Pretoria (Pty) Ltd (BE at UP) is proud to offer a urine drug-testing procedure that is legally defensible. This procedure falls in the category of confirmatory tests, which are crucial to confirm the results obtained by in-house preliminary testing kits.

Our Forensic Laboratory employs Gas Chromatography-Mass Spectrometry (GC-MS), which is without doubt the gold standard for confirmation of presumptive positive screening tests. The GC-MS test provides the highest level of confidence regarding the test results. This testing procedure is not subjected to interferences and, if employed in a scientifically correct manner, it provides a result that can be regarded as a "fingerprint" of an illicit compound in urine.

As part of our services we are willing to assist and guide clients through the ethical aspects and legally defensible sampling protocol.

Obtaining written consent

The individual undergoing the drug test has to provide written consent. In the case of a minor, the parent needs to give written permission. A copy of the Informed consent document is available on request or can be obtained from our website (www.be.up.co.za/forensicanalysisforms). This requires punctual completion before the sample is voided.

Forensic urine drug-sampling kits

As an additional service we supply legally defensible forensic urine drug sampling kits, which are available at a cost of R30,00 each. Each kit is assembled and designed to prevent tampering and meets all the requirements to ensure that the urine sample is taken in a legally defensible manner. A copy of the legally defensible protocol and the consent form are also included in the kit.

Sampling protocol

The sampling protocol is based on international principles and is designed to ensure that the entire drug-testing process is capable of legal scrutiny. It also provides safeguards to protect specimen

donors, and accurate and reliable information about a donor's legal/illegal drug use. The sampling protocol ensures that the specimen is:

- · Freshly voided
- Not subjected to contamination during the sampling procedure
- · Protected against tampering and adulteration
- Traceable back to the donor.

The donor's written informed consent and permission that the results may be communicated to a third party is a prerequisite.

Our personnel will happily assist you with sampling in a legally defensible manner at our facilities. However, educators/responsible persons can also perform this task at their own facilities, provided that they take responsibility and are willing to testify to the procedure. The sealed urine sample can then be shipped to our Forensic Urine Drug Testing Laboratory at the University of Pretoria.

In cases of a confirmation not for legally defensible purposes but where, say, parents want to confirm their child's results and do not have any legal action in mind, the legally defensible sampling collection procedure is not required. However, please take note of the pitfalls that can hamper reliable urine collection for drugs-of-abuse analysis.

A copy of the Legally Defensible Sampling Protocol is included in our forensic urine drug sampling kit or can be obtained from www.be.up.co.za/forensicanalysisforms.

Affidavit

If the urine sample is taken according to the legally defensible sampling protocol we are willing to issue an affidavit, which can be used in disciplinary hearings and court procedures, at an additional cost.

