

RE-DEFINING FORENSIC SCIENCE

At the recent Australian and New Zealand Forensic Science Society (ANZFSS) Symposium in Auckland, New Zealand, Dr. Joseph Almog stated that "forensic science starts not in the laboratory, but in the field." Mr. Ken Creer spoke of the importance of team work in crime scene examination and there is no doubt that team work is important right from the crime scene to the courtroom.

An all too common view in the past was that forensic science started in the laboratory and that crime scene investigation was an activity which was pre-forensic science. Furthermore, disciplines such as fingerprints and firearms and toolmarks were seen to fall outside main stream forensic science. Clearly this is not the case and the obvious recognition of these disciplines at the Auckland meeting was most refreshing.

Having worked with practitioners from these disciplines through the ACTRAC project, there is no doubt about the commitment to, and enthusiasm and professionalism for their chosen field of forensic science.

It is vital that when forensic science is defined, all the disciplines which contribute to the team work necessary for a forensic investigation are included in the definition.

ALASTAIR ROSS
DIRECTOR

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PEN PICTURES

As a continuation of our series of pen pictures of key players at NIFS, we are featuring another member of our Board of Control, Mr. David Gidley.

Mr. David Gidley

Mr. David Gidley graduated from Monash University with a B.Sc. in 1968. In 1972 he qualified for a Certificate of Management from the Australian Institute of Management and in 1977 a Masters Degree in Business Administration from Melbourne University.

From 1968 to 1971 David was employed as a Research Biochemist. In 1971 he joined the Victoria Forensic Science Centre (then the Norman McCallum Police Forensic Science Laboratory) as a chemist working in the drugs/blood alcohol area. Since that time, David has held various positions at the Centre including Senior Chemist, Scientific Co-ordinator and Assistant Director (Operations). David was appointed as Director in 1987, his current position.



Mr. David Gidley

David has published and presented papers in the area of forensic science and management issues both nationally and internationally.

David is a foundation member of the NIFS Board of Control and is the Board's representative on the Research Grants Committee.

His continual support and assistance have been very important in the time since NIFS began operations in February 1992.

RETIRING MEMBERS OF THE PANEL OF ADVISERS

Two of the inaugural members of the NIFS Panel of Advisers will retire as from February 1995, having served a three year term. These members are Professor Fred Smith and Dr. James Robertson.

Professor Fred Smith

Professor Fred Smith undertook his undergraduate and postgraduate studies at the University of Sheffield, UK. He subsequently held research positions at the University of California, San Diego, the United Kingdom Atomic Energy Authority, Harwell and the CSIRO National Measurement Laboratory, Sydney before joining the Department of Physics, Monash University in 1974 as a Senior Lecturer. He was appointed Professor in 1976 and Head of Department in 1981.



Professor Fred Smith

Fred has played an active role in the scientific community, serving as inaugural President of the Federation of Australian Scientific and Technological Societies (FASTS) and President of the Australian Institute of Physics. He is Chair, Australian Science Olympiads Committee.

Fred joined La Trobe University as Deputy Vice-Chancellor (Research) in March 1991 and was Chair Australian Vice-Chancellors Committee (AVCC) Pro-Vice-Chancellors (Research) Committee 1993. He is currently a member of the AVCC Standing Committee on Research.

Professor Smith's experience in the research area was invaluable to NIFS in establishing the research grants program and in assessing the grant proposals. His contribution is very much appreciated.

Dr. James Robertson

Dr. James Robertson graduated from the University of Glasgow with an Honours Degree in Agricultural Botany in 1972 and a PhD in plant physiology in 1976. He undertook Post doctoral studies at Bedford College, University of London and between August 1976 and February 1985 was a Lecturer in the Forensic Science Unit at the University of Strathclyde, Glasgow.



Dr. James Robertson

In February 1985, James joined the staff of State Forensic Science (SFS) in Adelaide South Australia and was a Senior Forensic scientist at SFS until December 1989. At that time he took up his present position as Assistant Secretary in charge of the Forensic Services Division with the Australian Federal Police.

Dr. Robertson has authored or co-authored over thirty papers published in scientific journals covering a wide range of biological and forensic topics. He is the series editors for the Ellis Horwood book series on forensic science.

James has been a strong supporter of, and constant contributor to NIFS during his time as a member of the Panel of Advisers and his efforts are much appreciated. We will continue to work with him in his role as Chair of the Senior Managers of Australian and New Zealand Forensic Laboratories (SMANZFL).

WORKSHOPS AND SYMPOSIA

MEDICO/LEGAL ASPECTS OF ADULT SEXUAL ASSAULT

This workshop was held in Adelaide on Thursday 29 and Friday 30 September 1994. It was attended by over 40 police officers and medical practitioners representing all States and Territories.

The workshop was designed to give practitioners knowledge of the investigative, medical, scientific and legal procedures involved in incidents of sexual assault.

Drs. David Wells, (Dept. of Forensic Medicine, Vic), Margaret Moody (Rape & Sexual Assault Service, SA) and Alison Creagh (Sexual Assault Reference Centre, WA) and Sgt. Barry Woolvern (SA Police Dept) were of great assistance to NIFS in organising the workshop. We were also fortunate to secure the services of Justice E. Mulligan (Supreme Court, SA), Ms. Marie Shaw (Edmond Barton Chambers, SA) and Ms. Geraldine Davison (DPP Office, SA) for an interactive courtroom session involving a case of sexual assault.

The course assessment forms indicate that the workshop was most worthwhile. Of interest was the fact that the three sessions which were seen as most useful by the majority of participants were the interactive courtroom session, a session on case file and court report preparation and a session on legal aspects of rape. It is quite clear that there is a real need for further interaction between science, medicine and the law.

CRIME SCENE ACCREDITATION WORKSHOP

In the last newsletter, it was reported that the development of the NATA-ASCLD/LAB accreditation program was complete. There are, however, disciplines such as crime scene investigation and forensic pathology which are not yet included in the program.

The registration advisory committee (RAC) is keen to have these disciplines included and on Monday 17 to Wednesday 19 October, members of the Police SAG met at NIFS to discuss accreditation criteria and proficiency testing for crime scene investigation.



Delegates at the crime scene accreditation workshop

The group is starting from scratch as no other accreditation program nationally or internationally includes crime scene investigation.

During the three days of the meeting, the participants developed draft accreditation criteria and draft protocols for external and internal proficiency testing programs and evidence monitoring. The protocols for external proficiency tests are based on the use of video recordings of actual and mock crime scenes.

The group will meet again early in the new year to further develop the proficiency testing protocols.

DNA PROFILING FOR ADVOCATES

Unfortunately, this workshop which was scheduled for Friday 7 and Saturday 8 October 1994 had to be cancelled due to the lack of a sufficient number of registrants.

The workshop was designed to give advocates a better understanding of DNA profiling and its utility in the legal arena. The failure to attract sufficient delegates was in spite of encouraging responses to "market research" on a national basis and some 50 initial expressions of interest.

We will keep trying to find the right formula.

12th AUSTRALIAN AND NEW ZEALAND INTERNATIONAL SYMPOSIUM ON THE FORENSIC SCIENCES, AUCKLAND 21-25 NOVEMBER 1994

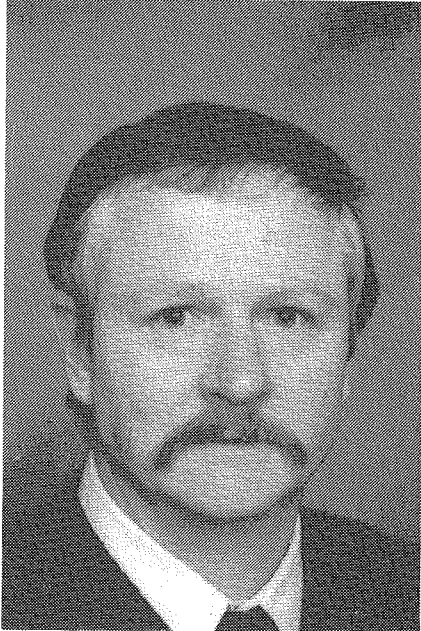
Congratulations go to our New Zealand colleagues for organising this very successful Symposium of the Australian and New Zealand Forensic Science Society (ANZFSS).

The quality of papers and posters was generally very high and the number of registrants (250) a record for these meetings.

From a NIFS perspective, it is very pleasing that over twenty papers and posters were presented by delegates who were either jointly sponsored by NIFS and the ANZFSS to attend or who were recipients of a NIFS research grant. Particularly pleasing was the fact that the two papers to receive prizes at the Symposium were presented by Mr. Tony Raymond (Victoria Forensic Science Centre) and Mr. Bryan Found (La Trobe University), both of whom received funding from NIFS research grants.

The winning paper by Tony Raymond was entitled "Effects of blood droplet shape on reconstructing trajectories of drops from their impact pattern", and that by Bryan Found was entitled "A computer technique for objectively selecting measurement points from handwriting".

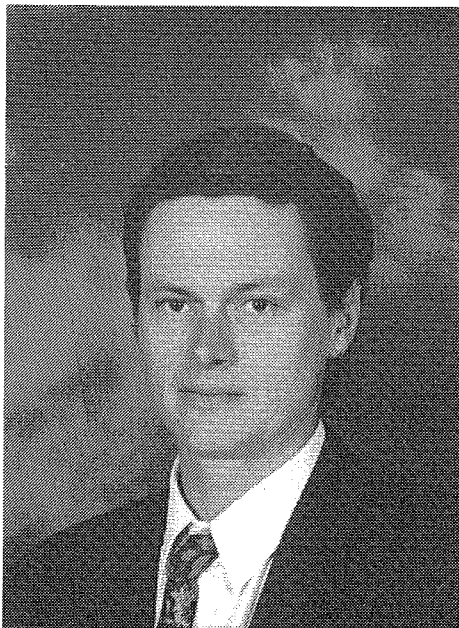
Congratulations go to both Tony and Bryan for their innovative work.



Mr. Tony Raymond

The large number of delegates from countries other than Australia and New Zealand certainly added to the success of the meeting.

At a recent meeting, the NIFS Board agreed to continue the arrangement whereby NIFS forms a partnership with the ANZFSS in offering scholarships to attend the biennial meetings.



Mr. Bryan Found

MICHAEL DUFFY TRAVEL FELLOWSHIP

As reported in our last Newsletter, Dr. Roland van Oorschot is the winner of the 1995 Michael Duffy Travel Fellowship.

The fellowship will enable Roland to present a paper at the American Academy of Forensic Sciences meeting in Seattle Washington in February 1995 and then visit laboratories in the USA, UK and Europe to study aspects of DNA profiling and database management.

Roland was recently presented with his airline tickets by Mr. Duffy at a morning tea hosted by Mr. Justice J.H. Phillips, Chairman of the NIFS Board of Control.

We trust that Roland has a most rewarding trip and look forward to his travel report. The report will be made available through NIFS.



The Hon. Michael Duffy presenting Dr. Roland van Oorschot with his airline tickets

TECHNICAL NOTE AWARD

We were encouraged by the response this year to the Technical Note Bulletin and Technical Note Award. Having received only three articles last year, this year we received ten.

The situation has arisen where some of the contributions were much closer in format to papers, rather than technical notes and this made judging for the award difficult. To overcome the problem, the Panel of Advisers has recommended and the Board has approved the granting of two awards in 1994, one for the best note and one for the best paper.

The awards go to the following:

Best Technical Note

Mr. Arthur W. Tsonis and Mr. John W. Scheffer for their note on "Identification of Urine Stains". Arthur and John are from the Victoria Forensic Science Centre.

Best Technical Paper

Mr. Terry Johnsen for his paper on "Detection and Characterisation of Tetryl in Post Blast Explosion Debris". Terry is from the Government Chemical Laboratory in Brisbane.

Congratulations to the authors who receive \$250 (Arthur and John to share) and to the laboratories who receive a framed citation.

As a guide to authors, a Technical Note should be no more than two pages with no additional attachments such as tables, photographs or references. It should in brief terms spell out the approach to address a specific technical issue and give the results and conclusions resulting from that approach.

A Technical Paper should follow the accepted conventions for papers submitted to refereed journals, ie with headings including introduction, methods, results, discussion, conclusion. Attachments such as photos, tables and references are acceptable. However, it is preferable that the paper does not exceed ten pages total.

The Technical Bulletin including all articles will be circulated in late December, early January. We look forward to receiving your contributions for the next Technical Bulletin and Awards.

RESEARCH GRANTS

NIFS received 32 applications for funding for research grants in 1995. The Research Grants Committee met in October 1994 to assess the applications and make recommendations to the Board of Control in relation to projects to be funded.

The Board met on Wednesday 7 December and approved 9 projects for funding with an additional 2 projects to undergo further review.

Those projects approved for funding are:

Project title: Traumatic lesions of the brain with special reference to the ageing of the lesions

Institution: Victorian Institute of Forensic Pathology

Principle researcher: Dr. R. Anderson

Level of funding: \$25,000.00

Project title: Development and validation of selected STR systems by automated fluorescence based detection with particular emphasis on environmental studies

Institution: John Tonge Centre, Queensland

Principle researcher: Mr. L. Freney

Level of funding: \$38,400

Project title: A survey to examine the composition of motor vehicle paints and to establish the evidential value of casework samples

Institution: Division of Analytical Laboratories, NSW

Principle researcher: Mr. J. Gothard

Level of funding: \$22,000.00

Project title: Examination of damage to bolt cutters when used on case hardened padlock shackles

Institution: South Australia Police

Principal researcher: Senior Constable S. Smith

Level of funding: \$4,000.00

Project title: Investigation into improved reagents for the chemical development of latent fingerprints

Institution: State Forensic Science, SA

Principle researcher: Dr. H. Kobus

Level of funding: \$17,500.00

Project title: Investigation of the chemistry of the lead rhodizonate complex

Institution: Flinders University

Principle researcher: Dr. K. Wainwright

Level of funding: \$6,000.00

Project title: Comparative study of the surface and sub-surface of hair using surface analysis

Institution: University of New South Wales

Principle researcher: Assoc. Prof. R. Lamb

Level of funding: \$6,000.00

Project title: Establishment of a database covering clandestine publications and computer ware relating to illegal and/or unauthorised use of explosives, incendiaries and pyrotechnics

Institution: Victoria Forensic Science Centre

Principle researcher: Mr. J. Kelleher

Level of funding: \$30,000.00

Project title: Study of genetic variations of cannabis sativa using molecular methods to assess whether such methods can be reliably used to distinguish cannabis cultivars and marijuana sources

Institution: Australian National University

Principle researcher: Prof. A. Gibb

Level of funding: \$28,000.00

Project title: Development of psychotropic drug extraction techniques for fingernails and hair, including significance studies

Institution: Division of Analytical Laboratories, NSW

Principle researcher: Mr. R. Malhotra

Level of funding: \$18,000.00

In addition, a further \$125,000 has been set aside for the establishment of a national DNA database and for education and training seminars and workshops in DNA profiling and interpretation.

Congratulations go to those who were successful in their applications and we look forward to positive results.

The Board also approved of a proposal that progress reports on research grants are to be prepared every six months, rather than quarterly.

Seasons Greetings from all at NIFS

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