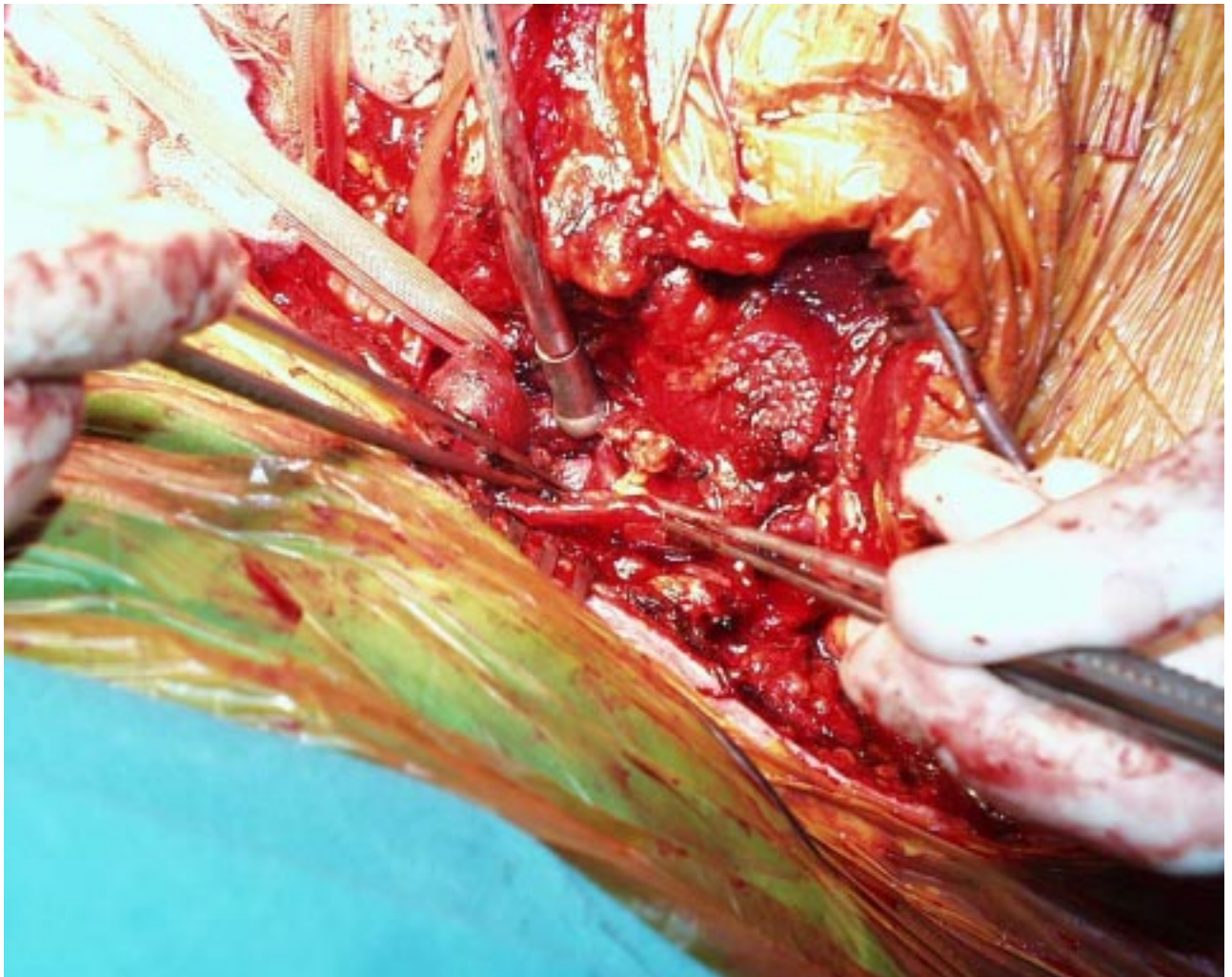


# **DEFINITIVE SURGICAL TRAUMA** **CARE COURSE**

**DSTC**

*Course Overview*



**Sydney August 3<sup>rd</sup> and 4<sup>th</sup> 1999**  
**Liverpool Hospital Sydney**

1<sup>st</sup> December, 1998

**DEFINITIVE SURGICAL TRAUMA CARE COURSE  
SYDNEY 1999**

**Letter of Invitation**

I am writing to offer to you a unique opportunity in Trauma Surgery and Education. Liverpool Hospital is conducting a new Trauma Course exclusively for surgeons. This will be the second of the Definitive Surgical Trauma Care (DSTC) Course conducted under the primary umbrella of IATSIC to be run in Australia (International Association for the Surgery of Trauma and Surgical Intensive Care). Previous pilots have been conducted in USA, Europe and Sydney in 1996. These have been run under the umbrella of IATSIC. IATSIC is part of the International Society of Surgery and since 1991 has become the international forum for trauma surgery. A second course will be running Melbourne and both courses are supported by RACS CME committee.

The course is designed to assist surgeons in their involvement in acute surgical care and decisions relating to serious trauma. It assumes all of ATLS/EMST and builds on it. If EMST deals with the "first hour", this course will deal with the "second hour". It is a response to the lack of written material and teaching on strategic issues of surgical resuscitation, early definitive care and surgical priorities. One aim of this DSTC project is to refine and promote an international standardised course package.

This course will be sponsored by the Liverpool Hospital Division of Surgery, Department of Trauma and the RACS. It will be conducted at Liverpool Hospital and University Veterinary College at Camden. A draft course program is attached. Participation is limited to 24 only.

- Course Venue: Liverpool Hospital, Sydney
- Course Dates: 3<sup>rd</sup> & 4<sup>th</sup> August, 1999 (Week of SWAN VII Trauma Meeting)
- Course Faculty:
  - Dr. Lourens Bester, Liverpool Hospital, Sydney Australia
  - Dr. Ken Boffard, Johannesburg, South Africa
  - Dr. John Crozier, Liverpool Hospital, Sydney Australia
  - A/Prof. Peter Danne, Royal Melbourne Hospital, Melbourne Australia
  - Prof. Stephen Deane, Liverpool Hospital, Australia
  - Dr. Ian Harris, Liverpool Hospital, Sydney Australia
  - Dr. Don Jenkins, Lackland Airforce Base Texas USA
  - Dr. Karel Kolkman, Liverpool Hospital, Sydney Australia
  - Dr. Margaret Knudson, San Francisco, USA
  - Dr. Damien McMahon, Canberra Hospital, Australia
  - Dr. Jim Powell, Liverpool Hospital, Sydney Australia
  - Ms. Maria Seger, Liverpool Hospital, Sydney Australia
  - Dr. Mark Sheridan, Liverpool Hospital, Sydney Australia
  - Dr. Michael Sugrue, Liverpool Hospital, Sydney Australia
  - Dr. Don Trunkey, Portland, Oregon, USA

- Course Fee: \$950 (the course will have to be heavily subsidised)
- Accommodation: Can be arranged at Hotel/Motel near to Liverpool Hospital

Dr. Trunkey, Dr Jenkins and Dr. Boffard are coming exclusively for this course. Dr. Bill Schwab and Margaret Knudson are keynote speakers at SWAN VII and will be joining the faculty of DSTC. It is a rare opportunity for a small group of surgeons to work intensively over 2 days with a teaching faculty with this depth of experience and international perspective.

I now invite you to indicate your interest below and return the slip to me by FAX as soon as possible (02 9828 3926) or email [michael.sugrue@swsahs.nsw.gov.au](mailto:michael.sugrue@swsahs.nsw.gov.au)

I do hope that you can join us.

Kind regards,

Michael Sugrue  
 Director Trauma Liverpool Hospital

✂.....

- I wish to attend the DSTC Course
- I am interested in the DSTC Course. Please send more information.
- I will not be attending the DSTC Course.

Name ..... Signature .....

Date .....

Please return by FAX (02 9828 3926) to:  
 Michael Sugrue  
 Department of Trauma  
 Liverpool Hospital  
 LIVERPOOL NSW 2170

**DEFINITIVE SURGICAL TRAUMA CARE COURSE**  
**AUGUST 1999**

**COURSE FACULTY**

<i>Name</i>	<i>Address</i>	<i>Facsimile</i>
Dr. Lourens Bester	Radiology Department Liverpool Hospital PO Box 103 Liverpool NSW 2170	
Dr. Ken Boffard	Trauma Department Johannesburg General Hospital Private Bag x39 Johannesburg 2000 South Africa	0011 11 7262985
Dr. John Crozier	Division of Surgery Liverpool Hospital PO Box 103 Liverpool NSW 2170	61 2 98284305
A/Professor Peter Danne	Royal Melbourne Hospital Clinical Science Building Parkville VIC 3050	61 3 93477695
Professor Stephen Deane	Division of Surgery Liverpool Hospital PO Box 103 Liverpool NSW 2170	61 2 98285305
Dr. Ian Harris	Department of Orthopaedics Liverpool Hospital PO Box 103 Liverpool NSW 2170	
Dr Donald Jenkins	MMKG/ 59th MDW San Antonio, TX USA 78247 Lackland AFB, TX USA 78236	Home(210) 495-5179 (210) 292-6950 (210)292-3893
Dr. Karel Kolkman	Department of Trauma Liverpool Hospital PO Box 103 Liverpool NSW 2170	61 2 98283926
Dr. Margaret Knudson	Department of Surgery Surgical Ward 3A 1001 Potero Drive San Francisco CA 94110 USA	0011 1415 2065950

COURSE FACULTY (contd.)

<i>Name</i>	<i>Address</i>	<i>Facsimile</i>
Dr. Damien McMahon	Canberra Hospital Yamba Drive Garran Canberra ACT 2606	61 2 62442334
Dr. Jim Powell	Department of Orthopaedics Liverpool Hospital PO Box 103 Liverpool NSW 2170	0011 11 215 6147015
Mrs. Maria Seger	Trauma Department Liverpool Hospital PO Box 103 Liverpool NSW 2170	
Dr. Mark Sheridan	Department of Neurology Liverpool Hospital PO Box 103 Liverpool NSW 2170	
Dr. Michael Sugrue	Trauma Department Liverpool Hospital PO Box 103 Liverpool NSW 2170	61 2 98283926
Dr. Donald Trunkey	Department of Surgery Oregon Health Sciences Centre 3181 S.W. Sam Jackson Park Road Portland, Oregon 97201-3098 USA	

# DEFINITIVE SURGICAL TRAUMA CARE COURSE

## DAY 1 – TECHNICAL STRATEGIES

Tuesday, 3<sup>rd</sup> August, 1999 – Education Centre, Liverpool Hospital

### PROGRAM

<b>07.00 am</b>	<b>Registration</b>		12.10 pm	Great Mistakes in ER Thoracic Surgery <i>Don Trunkey</i>
	<b>PRINCIPLES OF TRAUMA CARE</b> <i>Chair: John Crozier</i>			
07.30 am	Introduction Goals of Course Quality Trauma Care <i>Michael Sugrue</i>		<b>12.20 pm</b>	<b>Lunch</b>
07.45 am	Trauma Surgery - How it differs from General Surgery <i>Damien McMahon</i>		01.00 pm	<b>DECISION MAKING IN TRAUMA</b>
08.05 am	Decision Making in Trauma <i>Stephen Deane</i>		01.15 pm	<b>Vascular Injury to Limb</b>
08.25 am	Quick Fire Overview <i>John Crozier</i>		01.25 pm	Overview <i>John Crozier</i>
			01.35 pm	Discussion
			01.45 pm	<b>Blunt Abdominal Trauma</b>
			02.00 pm	Overview <i>Damien McMahon</i>
			02.15 pm	Discussion
			02.25 pm	<b>Pelvic Fractures</b>
			02.40 pm	Case I, II, III, IV
			02.45 pm	Overview <i>Ian Harris/M. Sugrue</i>
<b>Panel:</b>	Damien McMahon, Stephen Deane Don Trunkey, Bill Schwab		02.55 pm	<b>Retroperitoneal Hematoma</b>
			03.15 pm	Case I, II
			03.25 pm	Overview <i>Peter Danne</i>
	<b>SURGICAL DECISION MAKING</b> <i>Chair: Stephen Deane</i>			<b>Afternoon Tea</b>
	<b>Emergency Room Thoracotomy</b>			
09.30 am	Case		03.15 pm	<b>SURGICAL TECHNIQUES</b>
09.35 am	Overview <i>Ken Boffard</i>		03.25 pm	Liver Exposure & Repair
09.45 am	Discussion		03.35 pm	<i>Don Trunkey</i>
	<b>Blunt Thoracic Trauma</b>		03.45 pm	Discussion
10.00 am	Case		03.55 pm	Pancreas Duodenum
10.05 am	Overview <i>Don Trunkey</i>		04.05 pm	<i>Don Jenkins</i>
10.15 am	Discussion		04.15 pm	Discussion
	<b>Emergency Room Surgery</b>			Renal Injury
10.30 am	Case			Margaret Knudson
10.35 am	Overview <i>Ken Boffard</i>			Discussion
10.45 am	Discussion			
	<b>Penetrating Thoracic Trauma</b>			<b>PROBLEM SOLVING</b>
11.00 am	Case			<i>Mentor</i>
11.05 am	Overview <i>Damien McMahon</i>			<i>Critique</i>
11.15 am	Discussion			Don Trunkey <i>Michael Sugrue</i>
				Don Jenkins <i>Stephen Deane</i>
				Ken Boffard <i>Peter Danne</i>
				Margaret Knudson <i>Damien McMahon</i>
	<b>SURGICAL TECHNIQUES</b> <i>Chair: Don Jenkins</i>			
11.30 am	Thoractomy <i>Ken Boffard</i>		05.00pm	<b>CLOSING</b>
11.40 am	Discussion			<i>Ken Boffard</i>
11.50 am	Subclavian/Neck Exposure <i>John Crozier</i>			
12.00 noon	Discussion			

# DEFINITIVE SURGICAL TRAUMA CARE COURSE

## DAY 2

Wednesday, 4<sup>th</sup> August, 1999 – Education Centre, Liverpool Hospital  
University Veterinary College Camden

### PROGRAM

07.00 am	<b>TRANSPORT TO VETENIRARY COLLEGE</b>		
07.45 am	<b>SURGICAL TECHNIQUES SESSION 1</b>		
	Splenectomy		<b>Case Scenarios</b>
	Partial Nephrectomy	13.30 pm	Abdominal Trauma <i>Stephen Deane</i>
	Liver Isolation		
	Thoractomy	14.00 pm	Chest and Abdomen <i>John Crozier</i>
	Sternotomy	14.30 pm	Penetrating Chest/Abdominal <i>Margaret Knudson</i>
	Cardiac Repair		
<b>09.30 am</b>	<b>Break</b>		
		<b>15.30 pm</b>	<b>Afternoon Tea</b>
09.50 am	<b>Session 2</b>		
	Abdominal Problems	16.00 pm	Head Trauma <i>Peter Danne</i>
	Thoracic Repair		
11.20 am	Craniotomy	16.30 pm	Pelvic Trauma <i>Don Trunkey</i>
<b>12.00 noon</b>	<b>Lunch</b>		
		17.00 pm	Ischaemic Limb <i>Ken Boffard</i>
12.45 pm	<b>Key Trauma Concepts</b> FAST <i>Margaret Knudson</i>		
13.00pm	Aussie Experience <i>Karel Kolkman</i>	17.30 pm	Conclusion <i>Ken Boffard</i>
13.15pm	Damage Control and ACS <i>Michael Sugrue</i>	18.00 pm	Close - <i>Michael Sugrue</i>

# **DEFINITIVE SURGICAL TRAUMA CARE (DSTC) COURSE**

## ***DESCRIPTION***

### **BACKGROUND**

Injury (trauma) remains a major health care problem throughout the world. In addition to improving prevention and resuscitation, improved application of surgical skills is expected to save further lives and contribute to minimising disability. It is widely recognised that training of surgeons in the management of trauma is substantially deficient because of:

- (a) limited exposure within individual training programs to the types of patients required to develop the appropriate level of skills and
- (b) traditional trauma surgery training which has been organ specific.

Consequently surgeons can finish training with suboptimal skills in this field where there is often little time to contemplate an appropriate course of action.

Through the early 90's, it became apparent to a number of surgeons familiar with trauma management around the world, that there was a specific need for surgical training in the technical aspects of operative care of the trauma patient with particular emphasis on those who were close to, or had recently completed their training. This course had its origins in a meeting between Howard Champion (USA), David Mulder (Canada), Donald Trunkey (USA), Stephen Deane (Australia) and Abe Fingerhut (France) in October 1993.

This postgraduate surgical course for 24 participants assumes competence with assessment and resuscitative measures which have become standardised in Australia through the EMST (ATLS) course of the RACS, draws on the specialist surgical training of all course participants and reviews, strengthens and organises the performance of established and new procedures specially required in trauma surgery. Pilots have been conducted in Europe, USA and Australia. It is expected that the final standardised course will have special relevance for surgeons in countries like Australia, where major trauma rates are relatively low and to rapidly mobilised medical units in areas of conflict. It is also likely to be valuable in developing countries where education and physical resources are limited

DSTC has been developed over the last few years by IATSIC, an operative group of the ISS. The course is still under development. It is currently being developed in modular form. Modules planned at present include; ICU aspects of the Trauma Patient, FAST techniques, a Military module and a Third World module.

It is probable that in Australia, the course will eventually be targeted towards Advanced General Surgery Trainees in their final year of surgical training. It may ultimately have value at a slightly earlier stage than this but probably needs to be piloted with a group at about that level of surgical expertise. It may also have relevance for rural general surgeons and may have some value to general surgeon reservists in the ADF. It is also expected to be welcomed by general surgeons in major urban hospitals where the frequency of major trauma is relatively low.

## **COURSE DEVELOPMENT AND TESTING**

There have been many attempts to test the concept.

1. Dr Fingerhut's laparoscopic trauma surgical training course, which he had run for two previous years at the European Surgical Education Centre in Paris, was modified to incorporate these concepts. This two day course consisted of didactic sessions in the morning and animal laboratory sessions in the afternoon. Evaluation responses were excellent.
2. The Uniform Services University of Health Sciences, Bethesda, USA put on a course in August 1994. Dr Don Jenkins has now put over 100 military surgeons through the course in the US. He is working on bringing the course to Chile at present.
3. There was a Swedish Trauma Surgery Course which Drs Trunkey, Fingerhut and Champion attended in Sweden in November 1994. This was run by Dr Sten Lennquist. The course was four days of didactic teaching and one day of practical work.
4. In Sydney in May 1996 a very successful pilot course was organised at Prince Henry Hospital. The International Faculty at that course included Don Trunkey, Abe Fingerhut and Howard Champion. The local faculty was Stephen Deane, Peter Danne, Michael Sugrue and Phil Crowe. The course was a tremendous success. There were some issues identified by the faculty and registrants and these have been addressed for this course. In particular the didactic points in relation to organ support and patho-physiology have been placed in the manual.
5. The faculty for the courses in Melbourne and Sydney are very experienced in DSTC.

## **COURSE STRUCTURE**

A mixture of manual and lecture based learning, case discussion and surgical skills demonstration and practice.

- Manual addressing "Physiology and Organ Support", decision making in trauma surgery and surgical techniques.
- Two theory sessions addressing technical surgical strategies
- Two sessions addressing strategic thinking in Trauma Surgery
- Two practical session addressing technical surgical strategies
- One session on troubleshooting
- Pre course MCQ and in course MCQ

## **COURSE MATERIALS**

The course will be over two days with the following course materials:

- A manual to supplement the course content
- Standardised Slides
- Practical and technical skill stations
- Patient scenarios in acute trauma surgery
- Practical work laboratory, both animal and cadaver work (in some centres)
- Participant members vary from 16 to 32 in DSTC courses with a high faculty to participant ratio, allowing at least one faculty member to four participants in hands-on practical skill sessions.

## **SURGICAL PROCEDURES**

This session will provide hands on exposure to operative techniques in small group with a high faculty / participant ratio.

This will deal with Thoracic Abdominal and Neurosurgical Procedures.

## **ULTRASOUND PROCEDURES (LECTURE)**

This will be based on FAST principles

1. Precordium - assessment of possible pericardial effusion.
2. Upper abdomen - assessment of possible free fluid (blood) and views of liver, spleen and kidneys.
3. Pelvis - assessment of possible free fluid

# **DEFINITIVE SURGICAL TRAUMA CARE COURSE PROPOSED MANUAL**

<b>Chapter I</b>	<b>INTRODUCTION</b>	Michael Sugrue/Peter Danne
A1	Overview of DSTC	Ken Boffard
A2	Australian Perspective	Stephen Deane
A3	Swedish/USA Experience	Don Jenkins
<b>Chapter II</b>	<b>TRAUMA PATTERNS</b>	
B1	Patterns of Trauma in Australia	Erica Caldwell
B2	Trauma Scoring	Damien McMahon
<b>Chapter III</b>	<b>PRE-HOSPITAL</b>	
C1	Pre-Hospital Care & Its Implications	Michael Sugrue
<b>Chapter IV</b>	<b>INITIAL ASSESSMENT OF TRAUMA PATIENTS</b>	
D1	The Key to Better Practice	Peter Danne
<b>Chapter V</b>	<b>PHYSIOLOGY AND ORGAN SUPPORT</b>	
E1	Shock and Resuscitation	Don Trunkey
E2	Pathophysiological Perspectives in ICU	Bill Schwab
E3	Brain Injury	Mark Sheridan
E4	Respiratory Failure	Don Jenkins
E5	Renal Failure	Margaret Knudson
E6	Nutrition in Trauma	John Crozier
E7	Febrile Trauma Patient	Damien McMahon

**DEFINITIVE SURGICAL TRAUMA CARE COURSE  
PROPOSED MANUAL (CONTD.)**

<b>Chapter VI</b>	<b>STRATEGIC THINKING AND DECISION MAKING IN TRAUMA</b>	
F1	Key issues in process of decision making - unstable patient	Stephen Deane
F2	Emergency room surgery	Ken Boffard
F3	Blunt thoracic trauma – key strategies	Damien McMahon
F4	Penetrating chest trauma	Don Trunkey
F5	Blunt abdominal trauma	Margaret Knudson
F6	Penetrating abdominal trauma	Michael Sugrue
F7	Vascular injury - torso and limb	John Crozier
F8	Penetrating neck injuries	Bill Schwab
F9	Head injuries	Mark Sheridan
F10	Pelvic fractures – orthopaedic strategies	Ian Harris
F11	Flaws in surgical decision making	Bill Schwab
F12	Non-operative strategies in trauma	Damien McMahon
F13	Major facial bleeding	Don Jenkins
<b>Chapter VII</b>	<b>FOCUSED CONDITIONS IN TRAUMA</b>	
G1	The mangled limb	John Crozier
G2	Radiology in trauma	Lourens Bester
G3	F.A.S.T.	Margaret Knudson
G4	Haematuria	Don Jenkins
G5	Retroperitoneal Haematoma	Peter Danne
G6	Hypothermia	Michael Sugrue
G7	Trauma in Pregnancy	Michael Sugrue
G8	Combat/Disaster Surgery	John Crozier
G9	Abdominal Compartment Syndrome	Michael Sugrue
G10	Colonic Injury and Repair	Don Jenkin
G11	Fasciotomy	Peter Field
G12	Clearing the Cervical and Thoraco-lumbar spine	Karel Kolkman

**DEFINITIVE SURGICAL TRAUMA CARE COURSE  
PROPOSED MANUAL (CONTD.)**

**Chapter VIII SURGICAL TECHNIQUES**

H1	Thoracotomy	Ken Boffard
H2	Subclavian/neck exposure	John Crozier
H3	Liver injury	Don Trunkey
H4	Pancreas and duodenum	Bill Schwab
H5	Renal injury	Margaret Knudson
H6	Spleen	Peter Danne
H7	Complex pelvic injury	Michael Sugrue
H8	Craniotomy	Mark Sheridan
H9	Pelvic fixation	Ian Harris