

## **Primary Trauma Care Foundation / Mercy Ships**



### **PRIMARY TRAUMA CARE AND INSTRUCTOR COURSES, MARCH 16<sup>TH</sup> - 20<sup>TH</sup> 2015**

ON BOARD MV "AFRICA MERCY", TAMATAVE (TAOMASINA), MADAGASCAR

At the invitation of "Mercy Ships", a team of PTC instructors travelled to Madagascar to provide a standard package of courses consisting of a 2-day PTC course, from which we selected potential PTC instructors; after a 1-day instructor course the new instructors then delivered a further 2-day PTC course. On the first course we trained 18 participants in PTC, of whom 10 went on to train as instructors. These instructors then ran the second course, with minimal support from foreign faculty, on which a further 16 received PTC training. All courses were conducted in French.

Team members:

Prof Mpanjato (Malagasy, Professor of Anaesthesia, PTC instructor-trained in Rwanda 2005)

Dr Jeanne Frossard (UK consultant anaesthetist)

Dr Lando Ruhangande (PTC instructor, COSECSA/PTC courses organiser, Rwanda)

Dr Caroline Price (UK consultant anaesthetist)

Dr Mike Dobson (Course director, UK consultant anaesthetist)

Dr Michelle White (Medical Director, Head of Education Program, MV "Africa Mercy")

Details concerning the course participants, their origins, specialties, MCQ and confidence matrix results are in Annex 2

This is the second PTC course hosted by Mercy Ships – the first one having been in Congo (May 2014). During pre-arrival research they found that training in trauma management was at the top of the local doctors' list of requested training programs. In recent years the ship has added training to its amazing surgical and rehabilitative programme for which it is justly famous.

MV Africa Mercy has a crew of around 430 people, to support a hospital facility with 5 operating theatres and 80 inpatient beds. The fact that it takes 430 well-trained people to support a medical enterprise of this size indicates the difficulties faced by local hospitals, with just a tiny fraction of those resources. “Africa Mercy” is currently the largest civilian hospital ship in the world (Mercy Ships are commissioning a larger one!); it was formerly a train-carrying ferry operating in the Baltic.

### ***Programme***

The programme is attached in Annex 2. We followed the standard programme in the revised (2015) PTC teaching materials. The programme reproduced is actually that from the second PTC course – the one taught by instructors that we trained earlier in the week. Sometimes people doubt whether it is possible to achieve this rapid progression, so I thought I should include the evidence. Of course, we spoke a lot to the new instructors during Thursday/Friday, giving them individual feedback and support, but the first words spoken by foreign faculty to the whole group during the second course were at the closing ceremony. Our trainee instructors are intelligent, motivated, and they learn fast!

### ***Outcomes***

The following were achieved:

1. Training in PTC of 34 Malagasy doctors
2. Training of 10 new Malagasy PTC instructors
3. Establishment of a national PTC committee under the chairmanship of Prof Mpanjato
4. Plans in principle for further PTC courses with Mercy Ships during their next visit to Madagascar
5. Outline of a way of teaching PTC in modular form where there might only be one instructor in a region
6. The timing of the course was a spur to complete the translation of key elements of PTC training materials into French, including the PTC manual, instructor manual, instructor slides and some of the teaching resources including all 20 scenarios.



### ***Acknowledgements***

As before, we were overwhelmed by the efficiency of the ship’s administrative team, and by the warmth of our welcome.

The ship provided excellent, comfortable accommodation for us, of a standard much higher than that available for most of the volunteer crew. All our meals, and those of all the participants, were provided free of charge, as was our accommodation. This represents a cash equivalent amounting to several thousand pounds worth of services and goods. The ship’s administration also used their skill and local knowledge to arrange our flights.

We are grateful to the Association of Anaesthetists for a financial grant for fares for 3 faculty members, and to COOL/Oxford/Dfid for transport costs for Dr Lando to travel from Rwanda, both to teach and to gain experience of setting up PTC outside his own country.

## Annex 1 – *Course statistics*

### **Course 1**

18 Participants, all doctors, mixture of general duties doctors and “médecins urgentistes” (emergency physicians). Full details held by PTC HQ.

### **Instructor Course**

Names of instructors trained

TSARASATA Paulin  
RALAIVAO Jaona  
RANAIVOSON Abel  
LAPASOA RAHARIMANANA Toky Razarasoa  
RABESATA Judith Olga  
RAKOTOBÉ ANDRIAMAROJOHN Rijaso Hanitra  
RANDRIANARISON Claudio  
BOBA Eugene  
RANDRIANIRINA Andrimpitia  
ANDRIAMALALA Rivo Ambinintsoa

### **Course 2**

16 Participants, all doctors, mixture similar to Course 1 in specialty mix, but including four heads of departments. Full details held by PTC HQ.

Pre and post course outcomes:

	<b>MCQ score</b>		<b>Confidence matrix</b>	
	Pre course	Post course	Pre Course	Post Course
Course 1	<b>47%</b>	<b>71%</b>	<b>52%</b>	<b>78%</b>
Course 2	<b>29%</b>	<b>68%</b>	<b>45%</b>	<b>83%</b>

The MCQ’s and confidence matrices used were those of the PTC 2014 COSECSA version - 30 MCQ questions, and 8 written clinical scenarios in which participants rated their confidence levels of ability to manage such a case on a 1-5 scale.

#### *Comments:*

A very substantial improvement in both groups, in both knowledge and confidence.

The participants came from a variety of local and regional hospitals. It is clear that there are major shortages of medical equipment, and in these circumstances the PTC principle of “doing the most possible good with whatever resources you have” comes to the fore.

The exam and confidence results confirm our experience that those who attended underwent a very substantial increase both in knowledge and practical management skills.

Annex 2  
**Programme**

**Programme de la stage de PTC**  
jeudi et vendredi, les 19/20 mars

<b>Journée 1</b>		Animateur	Dr Eugène
8.30	30'	Introduction/Bienvenue + MCQ	Dr Abel
9.00	15'	Perspective locale de trauma	Dr Andry
9.15	15'	Introduction au PTC	Dr Tasneem
9.30	30'	ABCDE et évaluation primaire	Dr Eugène
10.00	10'	PAUSE	
10.10	40'	Voies aériennes et respiration	Dr Toky
10.50	35'	Circulation et choc	Dr Judith
11.25	35'	Trauma thoracique	Dr Claudio
12.00	45'	DEJEUNER	
12.45	4x20'	<i>Postes de techniques (chronometrage Mike)</i> <i>Voie aérienne essentielle</i> <i>Voie aérienne avancée</i> <i>Drainage thoracique</i> <i>Rachis</i>	Drs Andry/Judith Drs Paulin/Eugène Drs Claudio/Rivo Drs Toky/Abel
14.05	10'	PAUSE	
14.15	50'	Trauma abdominale, pelvienne & des membres	Dr Rivo
15.05	15'	Scénario démonstratif	Tous
15.20	80'	Scénarios ( 4 groupes) (Chronometrage Michelle) Groupes: Caroline, Lando, Mpanjato, Jeanne	Tous
16.40	5'	Résumé de la journée	Dr Abel

<b>Journée 2</b>		Animateur	Dr Eugène
8.30	45'	Trauma crânien & du rachis	Dr Andry
9.15	30'	Trauma en pédiatrie et de la femme enceinte	Dr Toky
9.45	30'	Les brûlures	Dr Paulin
10.15	15'	PAUSE	
10.30	4x20'	Ateliers (Chronometrage Jeanne) <i>Analgesie</i> <i>Transportation du malade</i> <i>Trauma pédiatrique</i> <i>Evaluation neurologique</i>	Drs Andry/Judith Drs Toky/Abel Drs Paulin/Eugène Drs Rivo/Claudio
12.00	30'	Evaluation secondaire	Dr Eugène
12.30	40'	DEJEUNER	
13.10	50'	Prise en charge des catastrophes	Dr Rivo
14.00	80'	Scenarios (4 groupes, chronometrage Jeanne)	Tous
15.20	10'	PAUSE	
15.30	15'	Examen MCQ	Drs Judith/Paulin
15.45	20'	Résumé, réactions & commentaires, évaluation	Dr Mpanjato
16.10	30'	Certificats, fermeture	Dr Dobson