

出國報告（出國類別：進修）

高級外傷救命術指導員 訓練課程

服務機關：臺中榮民總醫院急診部外傷醫學科

姓名職稱：鐘國禎 科主任

派赴國家/地區：美國佛羅里達州

出國期間：112 年 01 月 25 日到 112 年 01 月 29 日

報告日期：112 年 02 月 22 日

摘要

本次的課程在 2023/01/27 於 Orlando Regional Medical Center 的 Medical education center 舉行，為期一天。上課前須前到美國外科醫學會的 E-Learning platform 先預習本次指導員的上課內容，主要有課程設計理念和如何將學理應用在課程設計，指導員試教時的教案等等都要在上課前預習。正式上課是用 unfold discussion 的方式，所以如果沒有先念書就很難參與討論。訓練課程還有包括試教，這也是未來指導員最需要花時間熟悉的部分。的課程結束後兩天，E-Learning platform 通知已通過評核，成為「Instructor Candidate」，未來還要通過試教才能成為正式的高級外傷救命術指導員。

關鍵字：美國外科醫學會、高級外傷救命術指導員。

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一、目的

外傷處理是急重症醫師在臨床一線診治病人時必要的技能，培養外傷治療能力除了臨床學習外，一個有系統性、有醫學實證的教學能讓醫師在處理外傷病人時能更得心應手。高級外傷救命術就是本著這樣的理念，用系統性的教學方式，配合醫學的進步將知識傳遞給其他的醫師。高級外傷救命術從 1980 年於美國外科醫學會開始發展，於 2018 年改版到第 10 版，全球有 86 個家使用其教學方式。職於 2004 年進入外科專科訓練時開始接觸高級外傷救命術，發現其提供的知識對外傷處理有莫大的幫助，因此，除了當一位知識的使用者，也立志能當一個知識的傳播者。在經過多年的磨練，終於有機會參加高級外傷救命術指導員訓練，除了對自己外傷醫學知識能有所增長，也是對自我的一種肯定。

二、過程

依美國外科醫學(American College of Surgeons, ACS)會規定,外科醫師要取得高級外傷救命術(Advanced Trauma Life Support, ATLS)指導員有幾個步驟:在 ATLS 證照四年到期後,再取得 ATLS renew test 成績達 90 分以上,且在 renew course 時,六站的 skill test station 和 initial assessment test station 考官們一致同意可以成為 Instructor Potential(IP)。

台灣外傷醫學會
Formosa Association for the Surgery of Trauma
404 台中市北區育德路 2 號
Tel: 0988-922466 Fax: (886-4) 833-8218
E-Mail: fasty2k.atls@trauma.org.tw http://www.trauma.org.tw

鐘國楨 醫師 您好:

台灣參加 108 年 5 月 25 日 假 中山醫學大學附設醫院舉辦之 ATLS[®] 訓練課程, 依美國外科醫學會規定, 需通過筆試及術科考試, 方視為通過該課程; 恭喜您已完成美國外科醫學會所認定之 ATLS[®], 為此通知。

凡通過者請於 108 年 6 月 21 日 (星期五) 前繳交 ATLS[®] 證書費新台幣伍佰元整, 並請確認以下資料欄, 若有錯誤或未填寫之部份, 請直接修改並連同匯款收據張貼於張貼處或傳真回學會, 傳真後, 請來電確認是否傳真成功, 以利後續證書製作, 隨即盡速奉寄證書。
【聯絡電話: 0988-922466; 傳真電話: 04-8338218】

證書費繳費相關資訊可利用匯款或轉帳 (需提供帳號後五碼核對)

銀行別: 國泰世華銀行 (013) 新興分行 帳號: 052-03-500174-3
戶名: 社團法人台灣外傷醫學會 費用: 600 元 (證書費)

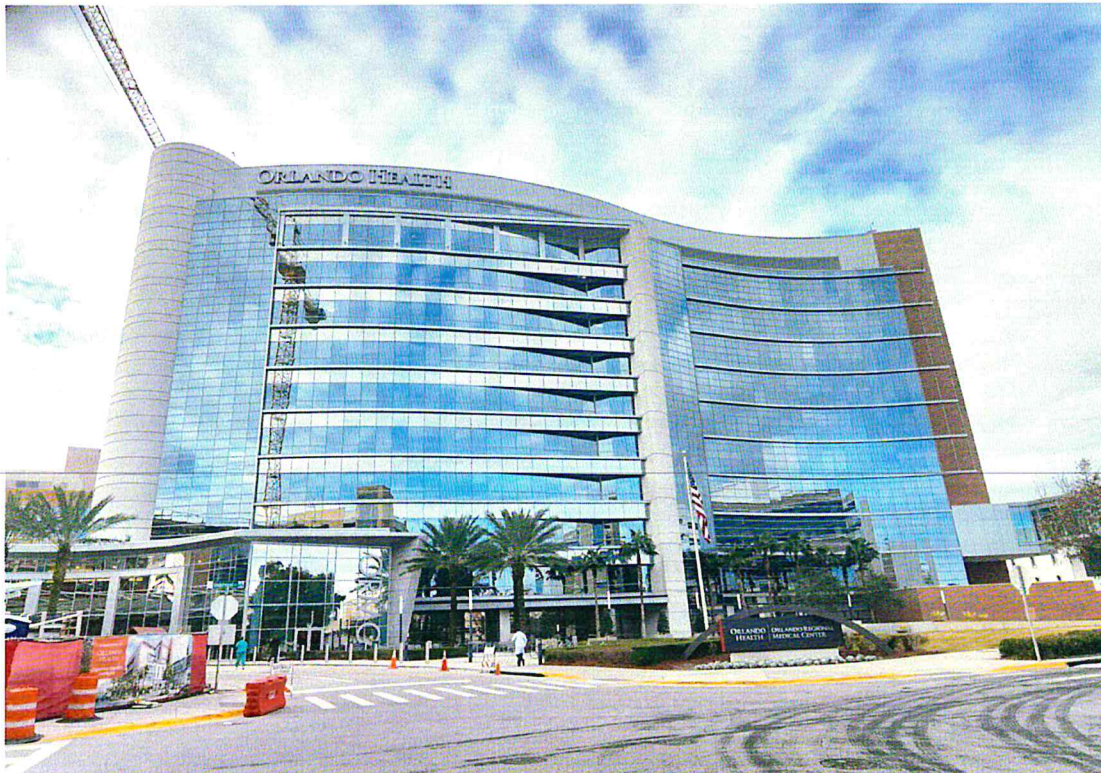
資 料 欄			
英文姓名	Chung Kuo-Chen	出生年月日	1979.02.20
身份證字號	P120863604	醫師字號	037552
服務機關	台中榮民總醫院		
服務科別	外傷醫學科	職 稱	主治醫師
E - M a i l	emoont@yahoo.com.tw		
筆試成績	92.5	術科成績	通過
		總成績	通過

敬祝 醫師 台灣外傷醫學會 敬啟

(圖表 1. 108 年 ATLS renew 成績單)

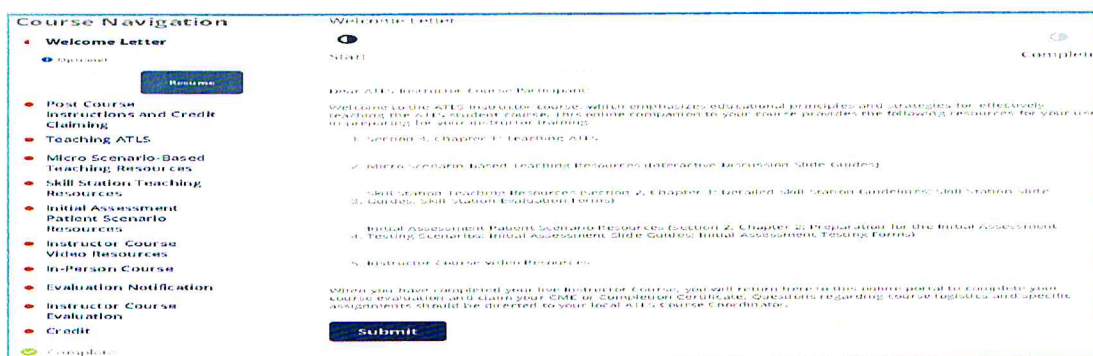
在有意願進一步成為指導員後,會由臺灣的 ATLS Program Director (羅崇杰醫師)登錄到美國外科醫學的系統中,羅崇杰醫師會評估目前臺灣指導員人數需求,都符合時就可以寫推薦信讓 IP 去報名「Advanced Trauma Life Support Instructor Course」。目前所有的訓練課程都在美國本土辦理,非常少到其他國家舉辦。報名的方式是先到美國外科醫學會的 ATLS Program and Courses 找適合的時間和訓練醫院,再和該院的 Course Coordinator 聯絡是否還有名額或是否可以接受外國醫師,因每次上課學員的容額很少,一般是 4 到 6 位,過程中被拒絕是很正常的,問到第七家醫院終於找到名額可報名。值得一提的是:在這幾年和美國外傷學會交流的過程中,發現他們很重視軍方醫師在外傷方面的訓練,在很多的會議都會有軍醫的保留名額或是只開放給 Military Sites Only,外傷的議程也一定會加入軍陣醫學相關議題。像去年美國外科醫學會就請烏克蘭的軍醫來演講實際的戰傷經驗等等。

本次的課程在 2023/01/27 於 Orlando Regional Medical Center (ORMC, Level One Trauma Center)的 Medical education center 舉行,為期一天。ORMC 是美國少數同時為成人和小兒都是 Level 1 trauma center 的醫院,是佛羅里達州重要的外傷訓練醫院。負責臨近的美國卡納維拉爾角空軍基地(Cape Canaveral Space Force Station)和甘迺迪航天中心(Kennedy Space Center, NASA)的軍方醫師訓練及醫療業務。



(圖表 2. 醫院的一角，ORMC 有很多建築和許多醫師的診所，像是個醫院城市)

在和本次 Course Coordinator：Ms. Krista Card (RN)連絡好可報名後，ACS 的 Trauma Education Programs 會寄一封報名成功的電子郵件，裡面有登入 E-Learning platform 的帳密，平台中有本次指導員的上課內容。Course Coordinator 要求在上課前要先研讀過。在經過近 24 小時的飛行、轉機後，終於到達目的地- ORMC。



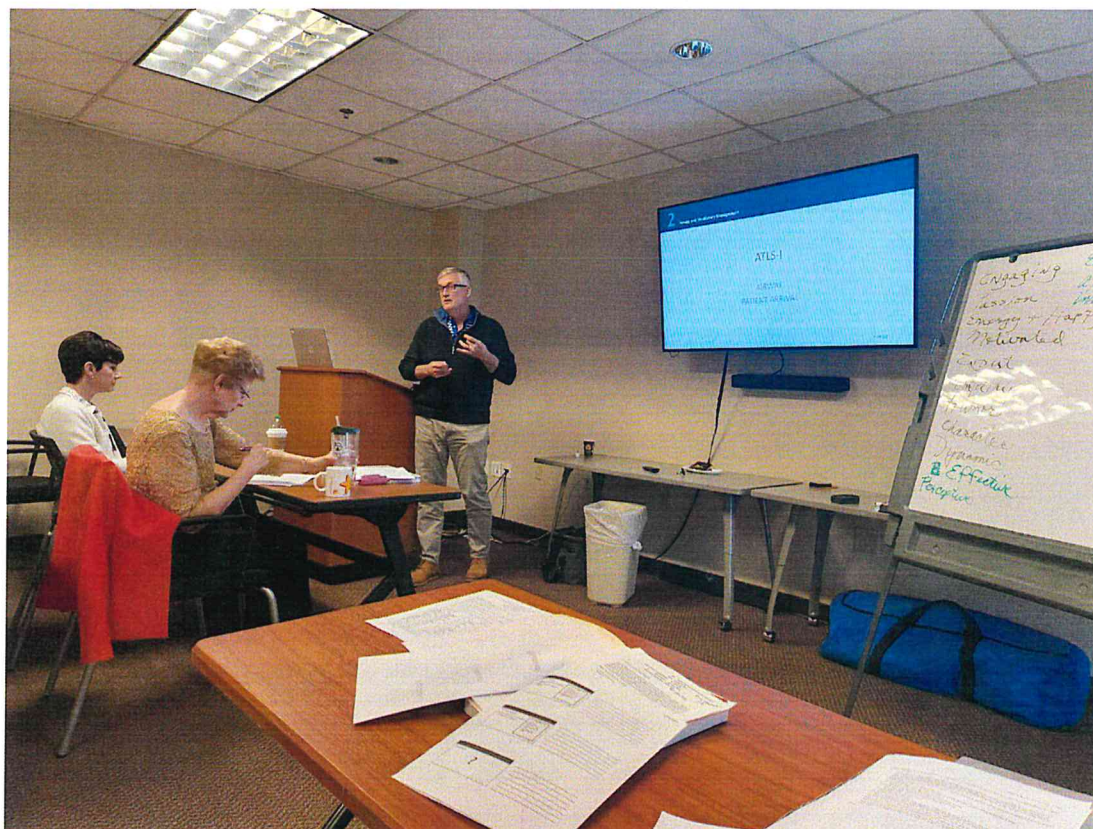
(圖表 3. ACS E-Learning platform，在實體課前要先自我學習)

本次的 IP 有 6 位，4 位是外科背景(GS、pediatric GS、NS、Acute care surgery)，另外 2 位是急診專科醫師。除了我之外其他都是 Orland 當地的醫師。

一開始由 Course Director：Dr. Tracy R. Zito 開場，Dr Zito 是 ORMC 的 trauma surgeon，同時負責 Trauma education。她簡單介紹本次的課程目的：不是上 ATLS，因為大家能坐在這裡表示對 ATLS 很熟悉了，而是講 ATLS student course 課程設計的理念和比較第 9 版 ATLS 和第 10 版上課的方式的改變。再來是 ATLS Educator：Janelda Minor (RN) 開始介紹 ATLS 的教育理念。Minor 上課的內容在上課前的 E-Learning platform 都有，上課就直接問學生念書的心得。這也是 ATLS

希望上課的方式，學生在上課前先準備好，用 unfold discussion 的方式，所以如果沒有先念書就很難參與討論。

本次訓練的重點是需要學員上台試教，帶領討論 Micro Facilitating scenario-based group discussion。每一個學員會被分到一個主題，例如我是講 Abdominal and Pelvic Trauma，就要從教學 slide 中 introduction， objection， Case Scenario， Discussion Question， Key Learning Points 一路講下來，中間也要停下來讓其他學員問題。最後再由 Dr. Zito 和 Minor 講解要改善的地方。除了要非常熟悉 Slide 中的內容，也要設計何時要讓學員問問題、如何讓學員問問題、如何回饋、等等。老師們會在臺下對你剛剛上課的方式加以講評。

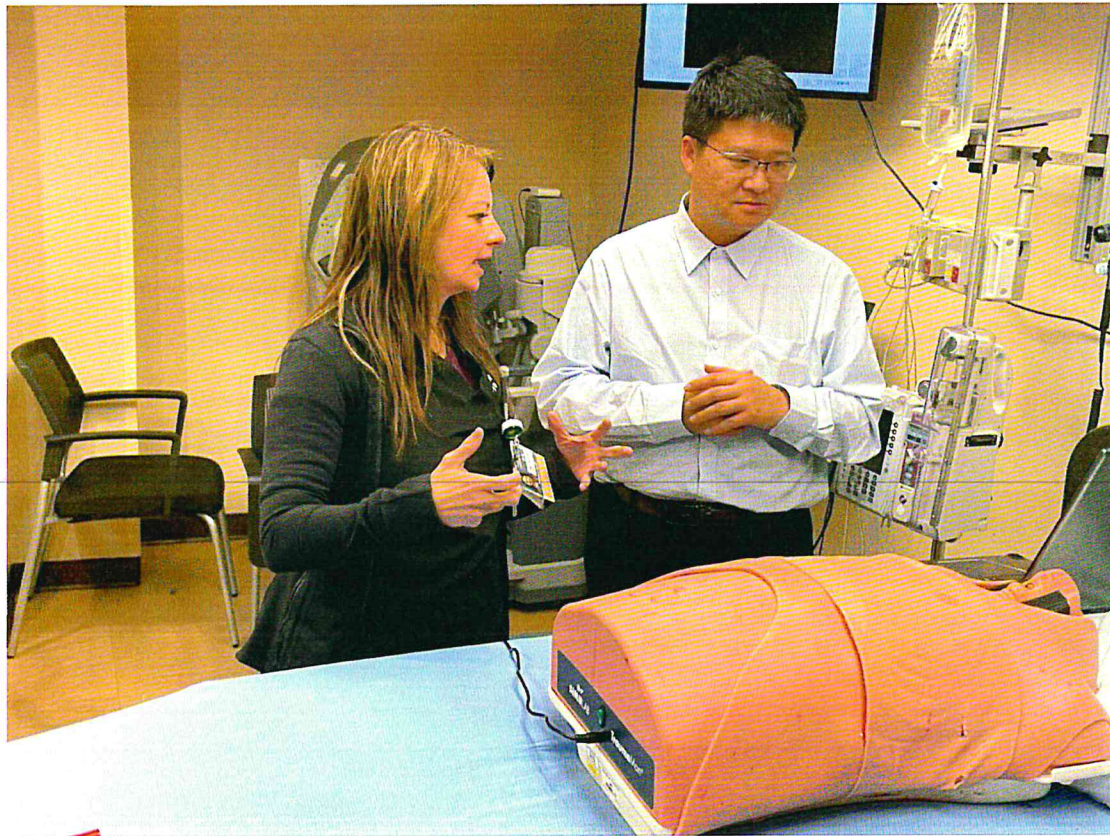


(圖表 4. 學員上課自在台上試教的情況)

下午的 Skill Station 是用兩兩互教的方式分站練習，每一站再派一位 ATLS Director 來指導當老師的技巧，大家討論起來，都有一個常犯的錯誤：就是常常講到後來，都是老師自己做示範，而不是請學生自己動手。指導員在課程設計中最重要的就是要照 the 5-step method，讓學生有口說和親自動手的練習。這些技巧在 E-Learning platform 上都有，也有示範的影片，但實際做起來還是會讓人顧此失彼，是很需要練習的教學方法。

The full ATLS model needs to be used when a skill is to be taught. Remember the 5 steps:

1. Real time run through (no commentary)
2. Instructor talk through the skill while Instructor does
3. Candidate talks instructor through doing the skill
4. Candidate performs (Practice)
5. Instructor gives Feedback



(圖表 5. Skill Station 兩兩試教的練習)


Initial Assessment Teaching Station 在 ATLS student course 上就是集所有知識的臨床模擬上課，考試時就如同 ACLS 的 Mega Code，在 ATLS student course 中就會要求標準病人要化重多外傷妝。這一站的標準教案有 22 個案例，本次指導員訓練會抽 2 位案例進行試教，雖然試教時可以允許 open book 看指引教，但事前還是要熟悉各個教案的內容。Initial Assessment Teaching station 很強調教案的設置，按照口訣 Environment, Set, Dialogue, and Closure (ESDC)，其中 Environment 和 Set 包括了解學生的背景，人數到教室光線，學員站位…等等都可以事前準備，對指導員比較大的挑戰是 dialogue 和 closure. 教學的過程學生可能會問天花亂墜的問題，是指導員無法預期的，所以要在合理的範圍內再把學員引導回教案所要傳達的內容，這點是我覺得本次指導員課程中最難的部分。Closure 一般是指 feedback，也是要指導員能臨場應變，根據學員的表現來回饋。


在 Initial Assessment Teaching Station 後，指導員課程也到達尾聲，最後 Dr Zito 勉勵大家要活用課程中學的技巧帶領學生，不光是教案要很熟悉，對於學生提出各種不同的問題都要有把握回答，當老師後更要多練習。



(圖表 6. 不免俗的來張大合照，左邊的一位是 Course Director : Dr Zito，中間紅衣者是 ATLS Educator : Ms Minor, 最右邊是 Course Coordinator: Ms. Card.其於是學員和分站的導師。)

課程結束後回到 E-Learning platform，要填寫心得回饋，再隔兩天 In-Person Course 中可以看到 "Your instructor has marked you as passed。" 就可以申請學習証明了。





Transcript

Kuo-Chen Chung

Start Date: 1/1/2021

End Date: 1/31/2023

ACS Verified CME Credit	8.00
ACS Verified Self-Assessment CME Credit	0.00
Self Reported CME Credit	0.00
Self Reported Self-Assessment Credit	0.00

Program	Awarded By	ACS Verified CME Credit	ACS Verified Self-Assessment CME Credit	Self Reported CME Credit	Self Reported Self-Assessment Credit	Date Granted	Credit to Address Regulatory Mandates
Advanced Trauma Life Support (ATLS)-10th Edition Instructor-1 Day Course	ACS	8.00	0.00			1/31/2023	0.00

(圖表 7. 上完課獲得美國外科醫學會的學分證明)

三、心得

這次的訓練最大的收獲是更了解 ATLS student course 教科書的設計方式，在指導員課程開始前的預習資料中，寫了很多教育理念的論文，讀起來實在有些枯燥乏味，但到上課時經由老師的解說才發現 ATLS student course 教科書的計設都有固定的模式，如在 Skill Station 就會以 the 5 steps 為引導模式，在 Initial assessment teaching station or Initial Assessment Test Station 就會以 ESDC structure 設置，這樣的理解讓未來的教學能更容易上手，就如同外傷病人處理的口訣 ABCDE，只要按照順序(指示)就不會出大問題。另外指導老師也特別強調指導員要很熟悉所有的教案和教科書的內容，這樣在帶領學生時才能得心應手，這也是我覺得在這次訓練後要花更多時間去學習的地方。

在通過 instructor course 後還不是真正的指導員，在 ACS 的定義是稱為「Instructor Candidate」。未來還要在一年內參加一次國內的二天的 ATLS Student course 進行試教，合格才能成為有資格的指導員。

四、 建議（包括改進作法）

1. 在進行教學時，可先提供教學檔或是相關的教材讓學生先研讀，上課時可以減少解說的時間，讓學生多發問。
2. 現代上課很多都以線上課程進行，但還是鼓勵參加實體課程，可以和各界的先進面對面，可以更輕鬆的和其他人交流。
3. 鼓勵各階級醫師或護理師培養對專業領域的鑽研，如原本都是學生的身份能夠進階為老師的身份。
4. 希望院方對各科部辦理研討會或教育訓練時能提供更充足的經費，讓科部辦理會議時無後顧之憂，除了可以藉此請到各領域的專家，同時也可讓院內員工擔任講師，有更多的舞臺發揮。

五、附錄

ADVANCED TRAUMA LIFE SUPPORT – 10th Edition

Location: ORMC Sim Lab/ Sim Lab Classroom

January 27, 2023

Instructor Course #71501

Course Director: Dr. Tracy Zito

ATLS Educator: Janelda Minor

Friday, January 27, 2023		
0730 - 0800	Registration/Breakfast	
0800 - 0815	Welcome, Introductions & Course Overview	Dr. Tracy Zito
0815 - 0845	Adult Learning / Teaching	Janelda Minor
0845 - 0925	Interactive Techniques	Janelda Minor
0925 - 0945	Questioning Techniques	Janelda Minor
0945 - 1010	Feedback	Janelda Minor
1010 - 1020	Preparation for facilitating a micro scenario-based teaching session	Janelda Minor
1020 - 1035	Preparation for Practicum	Janelda Minor
1035 - 1205	Micro Facilitating scenario-based group discussion	Janelda Minor
1205 - 1245	LUNCH	
1245 - 1315	Psychomotor teaching steps & scenario-based group discussions	Janelda Minor
1315 - 1345	Initial Assessment Teaching	Janelda Minor
1345 - 1355	Faculty Role Pre-Meeting (educator & faculty)	
1355 - 1415	Faculty & IP Review & Experiences (faculty & IP) see below	

Instructor Potentials (IP)

IP 1 – William Adamson	IP 2 – Kuo-Chen Chung	IP 3 – Shayne Gue
IP 4 – Sean Meiner	IP 5 – Debra Seoane	IP 6 – Christine Van Dillen

Time	Airway Skills Station	Breathing	Circulation Skills
Faculty	Dr. Latha Ganti	Dr. Ibrahim	Dr. Matthew Lube
1355 – 1415 (faculty discussion)	IP 1 - Adamson	IP 2 - Chung	IP 3 - Gue
	IP 6 - Van Dillen	IP 5 - Seoane	IP 4 - Meiner
1415 - 1435	Airway Skills Station	Breathing	Circulation Skills
(instructor)	IP 1 - Adamson	IP 2 - Chung	IP 3 - Gue
(student)	IP 4 - Meiner	IP 6 - Van Dillen	IP 5 - Seoane
1435 – 1455	Airway Skills Station	Breathing	Circulation Skills
(instructor)	IP 6 - Van Dillen	IP 5 - Seoane	IP 4 - Meiner
(student)	IP 2 - Chung	IP 3 - Gue	IP 1 - Adamson

Time	Patient A	Patient G	Patient N
Faculty	Dr. Latha Ganti	Dr. Ibrahim	Dr. Matthew Lube
1455-1515 (faculty discussion)	IP 1 - Adamson	IP 2 - Chung	IP 3 - Gue
	IP 6 - Van Dillen	IP 5 - Seoane	IP 4 - Meiner
1515 - 1540	Patient A	Patient G	Patient N
(instructor)	IP 1 - Adamson	IP 2 - Chung	IP 3 - Gue
(student)	IP 4 - Meiner	IP 6 - Van Dillen	IP 5 - Seoane
1540 - 1605	Patient A	Patient G	Patient N
(instructor)	IP 6 - Van Dillen	IP 5 - Seoane	IP 4 - Meiner
(student)	IP 2 - Chung	IP 3 - Gue	IP 1 - Adamson

1620 - 1645	Summative Student Assessment	Janelda Minor
1645 - 1700	Looking Back, Looking Forward	Dr. Tracy Zito
1700 - 1715	Course Summary, Closure & Evaluations	

1715 Adjourn

Site: Orlando Regional Medical Center, Orlando FL
Date: January 27, 2023

ATLS Instructor Course Director: Dr. Tracy Zito
ATLS Educator: Janelda D. Minor
ATLS Course Coordinator: Krista Card

Dear ATLS Instructor Course Participant:

We are looking forward to working with you in our upcoming ATLS Instructor Course on January 27, 2023. The ATLS Instructor Course emphasizes educational principles and strategies for effectively teaching the ATLS Student Course. We, the Course Director, and the Educator, want to familiarize you with the course and stress the critical nature of your pre-course preparation. The enclosed materials will assist you in organizing your responsibilities in this course. Thorough preparation for all your teaching assignments is essential for successful advancement to ATLS Instructor status. Since this is a one-day course, it is imperative, for optimal effectiveness and efficiency, that you prepare.

PRIOR to the start of the course, you should:

- Be familiar with the structure and content of the ATLS Student Course. Review your *ATLS Student Manual* to refresh your knowledge. You are required to bring your own *ATLS Student Manual* to the ATLS Instructor Course. Extra or replacement manuals will not be available on the day of the course.
- Carefully read Section 3, Chapter 1: "Teaching ATLS" in the *ATLS Course Administration and Faculty Guide*. The Instructor Course faculty assumes your familiarity with all lessons in Chapter 1 (353).
- Review the course agenda carefully. Identify your specific responsibilities and assignments in each section of the course.
- Review your assigned **"Micro scenario-based-facilitation of large group discussion"** session. You will lead an interactive discussion with an unfolding case scenario that fits in the allocated time. Please do not add or delete PP slides as this is a timed exercise. It mirrors the style of the interactive discussions in the provider course (i.e., scenario beginning, stimulus questions, scenario progression, stimulus questions, and scenario conclusion). Prepare to facilitate/lead an 8-minute interactive discussion on the selected topic, with the stated objectives, while utilizing the provided scenario. Your discussion must follow the provided course objectives and scenarios, so be sure you re-read the *ATLS Student Manual* chapter(s) on your assigned topic.
- Review your assigned **skill station**. Review the corresponding Skill Station Guide as provided. Study the Introduction, the *Instructor Guide*, evaluation forms, scenario(s), and skills related to your assigned station. Be familiar with the 5-step method for teaching skills as described in "Teaching ATLS". You will be responsible for conducting your skill station, in an unfolding scenario-based fashion, and employing the 5-step method, as it would be taught in an ATLS Student Course. Your first rotation will be with an experienced ATLS Faculty member to allow the experienced faculty to discuss his/her experience with the station.
- Review your assigned **Initial Assessment (IA)** session. Read and be thoroughly familiar with your assigned patient scenario. You will demonstrate your facilitation skills at an IA skills station. You will have time to review the station with a faculty member as well as review cues and strategies with your patient model before conducting the station. You will be responsible for demonstrating how this station should be conducted in an ATLS Student

Course. The student course assessment form for the IA skills station includes critical treatment decisions that you will use as a guide for conducting the station and for leading a discussion on the student's performance and is also attached.

Preparation for the micro scenario-based group discussion, the skills station practicum, and the initial assessment practicum **MUST** be done prior to attending the course. There will not be sufficient time during the course to do all the required preparation; you need to prepare in advance.

The ATLS Student Course is exceptional in its educational design. However, its full potential is achieved only when delivered by skilled facilitators. ATLS Instructor Course participants, who *prepare in advance* for the course, benefit the most from the Instructor Course, significantly improve their overall teaching skills, and develop into skilled ATLS Student Course facilitators. We look forward to meeting you and working with you at the course.

Instructor Course Director	Instructor Course Educator	Course Coordinator
Dr. Tracy Zito tracy.bilski@orlandohealth.com	Janelda D. Minor 407-448-5805 janelda53@gmail.com	Krista Card 907-250-3501 Krista.Card@orlandohealth.com

Documents attached:

- ATLS Instructor Course Agenda
- Section 3, Chapter 1: "Teaching ATLS" in the Faculty Guide
- Micro scenario-based group discussion slides
- Skill station assignment; skill station guide
- IA station assignment and patient scenario guide; IA assessment form

Tips for ATLS Instructors

INTERACTIVE DISCUSSIONS

The greatest change in the 10th edition is to the pedagogy – that is “how it is taught”. Interactive Lectures have been replaced by Interactive Discussions. The big difference is that in a lecture it is still focused on content delivery even though we have always encouraged the use of case scenarios and questions. The interactive discussion approach uses an unfolding case scenario/s with trigger discussion questions aimed at getting the participants to apply what they have learnt from reading the manual.

The following tips are important for making this pedagogical approach work:

- Make sure you are familiar with the case, the questions and the objectives of the session. Ensure that you can clearly see the link between the questions and the objectives that they are trying to achieve.
- Use the trigger questions. If the participants can't answer the question you need to ask additional questions to guide them to the response. Break the question down, examples are provided in the instructor notes.
- Use clarifying questions if the response is not what you expected. **AVOID AT ALL COSTS** providing the answer. This becomes more of a lecture.
- You will need to use active listening to gauge participant understanding
- You will need to use your group facilitation skills to ensure all participants are engaged and not the same person answering each question.
- Feel free to use your own case examples and experience but remember at all times you are trying to get the participants to **THINK** and to **APPLY** their knowledge not to just listen passively to you.
- Time will be your enemy!! I am expecting that these will take longer than anticipated. It will largely depend on how prepared the participants are and how quickly they come up with the answers. When you are preparing think about the timing – use the other faculty to give you warnings – let them know when you want to have time indicated to you.
- Avoid editorializing participant responses (expanding and padding out participant responses beyond just summarising the participant responses) so that it becomes a lecture
- It is important to summarize key points from the stimulus question before moving on, particularly if extraneous information has come out. E.g. “that's right so we are concerned particularly about the level of consciousness and facial fractures”.
- Things to avoid saying/doing.
 - “we'll move on because we are running out of time”
 - Adding important points from your perspective not covered in the interactive discussion – reverting to a lecture
 - Do not add in new information in the Closure section
- If participants raise an issue that you know is covered later in the interactive discussion, it is best to acknowledge the comment and then suggest that it is “parked” and address it at the

PREPARATION IS ESSENTIAL

SKILLS STATIONS

The 10th edition skills stations are now organised into ABCDE as per ATLS protocol. They use an unfolding case scenario/s with trigger questions and the skills to be learnt are identified by the participants as the

case unfolds and then taught at that particular point. The following tips are important for making the Skills stations work:

- Make sure you are familiar with the case, the questions and the skills to be taught. Some skills stations use multiple cases and have different students learning the skill on different cases. Other stations use one case and have all the students learning a particular skill at the same point in the case – you need to be aware of your own stations requirements
- Ensure that you are aware of which skills require teaching the full ATLS model (see below) and which are demonstration only.
- Again use the questions don't lecture.
- The full ATLS model needs to be used when a skill is to be taught. **Remember the 5 steps:**
 1. Real time run through (no commentary)
 2. Instructor talk through the skill while Instructor does
 3. Candidate talks instructor through doing the skill
 4. Candidate performs (Practice)
 5. Instructor gives Feedback
- When rotating participants through you can get participant 2 at step 4 to talk participant 1 through (after you have done steps 1 and 2 with whole group and step 3 with participant 1). Then when participant 2 is ready for step 4 get participant 3 to talk them through and so on
- If you are not clear on the rotation talk to me on the first morning and I will clarify for you.
- Ensure you have familiarized yourself with all the equipment prior to teaching
- Again time will be your enemy so you need to be well prepared and think about where you should be at what time – again ask for warnings if this will help you keep on track.

Notes: _____
