

出國報告（出國類別：短期研習）

約翰霍普金斯醫院眼科臨床實習

服務機關：國立陽明交通大學醫學系 113 級

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派赴國家：美國巴爾的摩

出國期間：2023/11/16 -2023/12/15

報告日期：2024/01/28

摘要（含關鍵字）

大六外調期間，有幸前往約翰霍普金斯醫院眼科臨床實習。期間感受到美國多元文化的融合與有別於台灣的醫病互動模式，讓我印象深刻。兒童眼科醫師將工作與興趣結合展現專業與熱忱，啟發我對未來生涯規劃的更多可能性。晨會與年終研討會深入淺出的教學活動更引領我從更宏觀的角度了解眼科學當今進展。同時，也觀察到開放市場下的健保制度如何影響民眾醫療可近性；自由競爭的職場環境又如何影響國外醫生的職場工作與生活型態。

關鍵字：眼科、約翰霍普金斯、臨床實習



本文

一、 目的

一直懷抱著出國開拓視野的夢想。有幸在醫學系最後一年，獲得前往約翰霍普金斯醫院實習的機會，並於隔年完成漫長資料審核，如願至眼科臨床實習。期許此行能對美國醫療環境更加了解，並藉此了解觀察國外醫生的工作與生活型態。同時也策勵自己能勇於和不同文化背景的人交流，增廣見聞，進而發掘另一種生涯規劃的可能性。

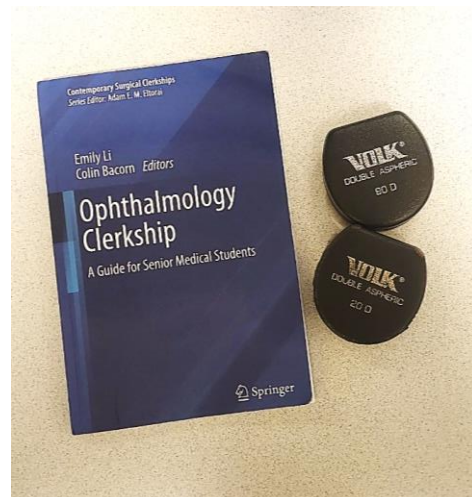
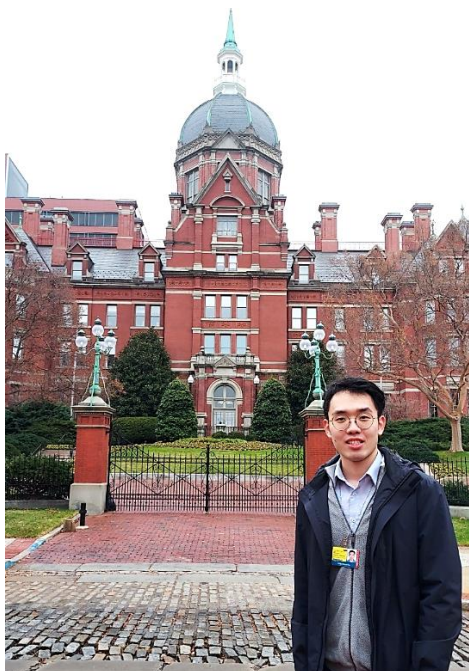
二、 過程

升大五的暑假，於校內選拔中獲得前往姊妹校實習的機會，並依照錄取順位選擇實習機構。隔年二月開始準備自傳、推薦函、成績單、在學證明與疫苗接種證明供對方審查；五月開始申請實習科別，自申請書送出到對方回復需二到四週不等，直到第三次申請(約八月時)才確定十一月中旬能前往眼科臨床實習，並開始訂購機票與準備出國相關事宜，由於是四位同學中最晚前往美國的，租屋方面是續租十月實習同學的住處。於實習開始前夕，購買醫療保險、醫療疏失險與繳納學雜費，並完成入院前線上教育訓練。

三、 心得

能到約翰霍普金斯醫院眼科臨床實習是彌足珍貴的體驗。

第一天得到一本實習手冊、透鏡與課表。科主任 Dr. Kolker 親自教授眼科常見疾病與基本檢查，包括裂隙燈和眼底鏡的實作技巧。第二天起，則被安排到不同診間與手術室見習。



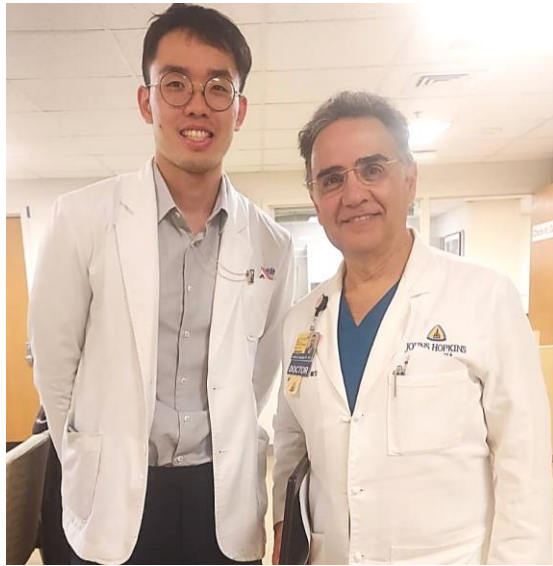
門診實習

門診項目依據次專科分類，除了青光眼、白內障、葡萄膜炎，還有兒童眼科、神經眼科和整合門診。或許是專科性質或風土民情差異，他們的看診模式與台灣截然不同。病人前往醫學中心看診的頻率並不高，大約是半年到一年回診一次，每次看診時間約為半小時到一小時。病人在診間等候，主治醫師則在二至四個診間中穿梭。病人首先由技師問診和理學檢查，接著由住院醫師初步診斷，最後主治醫師才進入診間看診。嚴密的看診過程，不僅幫助我深入了解病患的病程，也讓我對各式疾病的問診與眼科檢查有更深入的認識。

跟診時，有許多使用裂隙燈或眼底鏡觀察疾病特徵的機會，並觀摩許多門診處置，例如注射 anti-VEGF、SLT、punctal plug insertion...等。期間也協助消毒、遞物與病人引導。由於霍普金斯醫院內員工與病人民族開放多元，多語言服務格外重要，隨著主治醫師擅長語言不同，其對應患者的文化背景也不盡相同，而對於特殊語言甚至能透過電話向翻譯員取得即時翻譯服務。與不同族裔實際互動的過程，以及聆聽主治醫師解釋疾病時所展現的溝通藝術是相當特別的體驗。

另外，也觀察到看診過程特別重視醫病關係的建立，與精進病人對自身疾病的認識。病人自我意識高，但也非常熱情，充分自我介紹後都十分樂意讓我進行相關檢查。他們會私下查詢疾病相關資料並於就診時勇於發問，實習期間恰逢感恩連假，問診之餘病患也十分樂於分享自己的假期規畫與生活趣事。除了看病，主治醫師與病人感覺更像老朋友相聚。

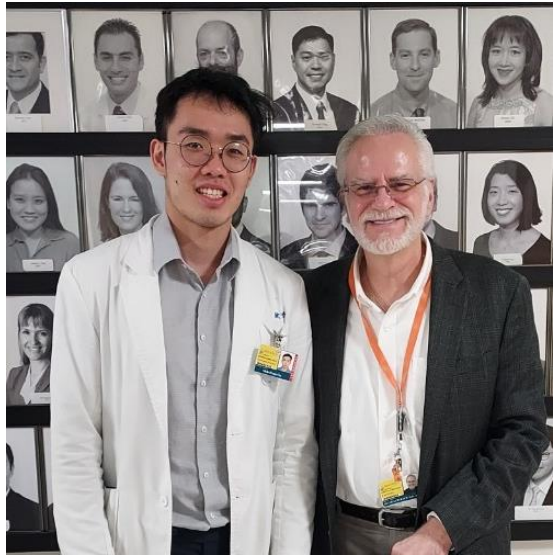
此外，這裡看診幾乎沒有午休時間，所有的技術員與住院醫師都很有努力地盡速將事情完成。而看診結束後即使下班時間已過，他們仍會來到診間與主治醫師熱烈討論當日遇到的特殊個案與所觀察到的臨床問題，充分展現其工作熱忱。



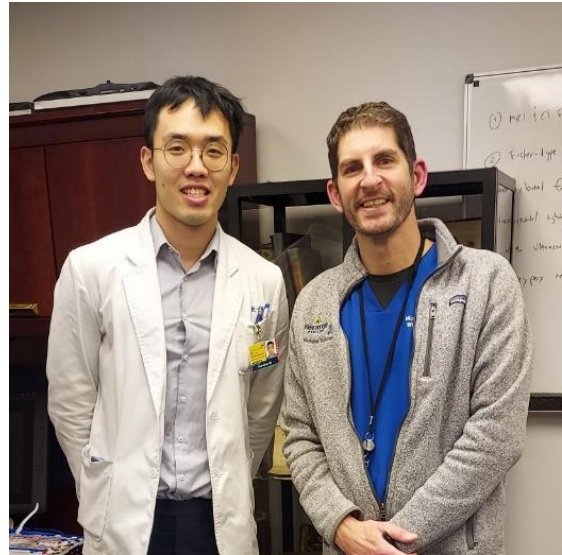
Comprehensive clinic (Dr. Behrens)



Cornea clinic (Dr. Srikumaran)



Retina clinic (Dr. Gehlbach)



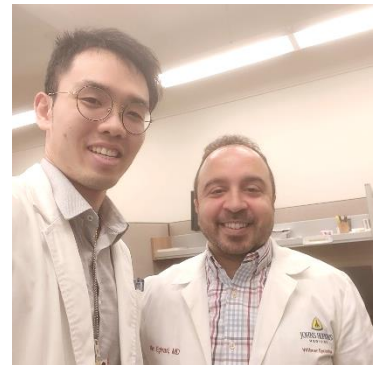
Oculoplastic clinic (Dr. Mahoney)



Glaucoma clinic (Dr. Pitha)



Cornea clinic (Dr. Yiu)



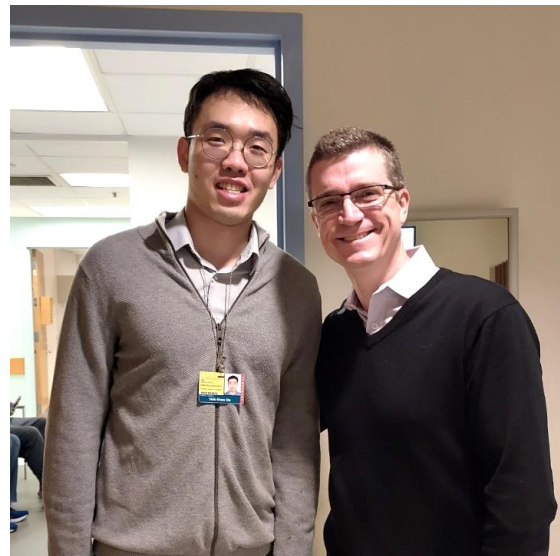
Cornea clinic (Dr. Eghrari)

小兒眼科跟診

小兒眼科實習尤其令人印象深刻，跟診期間讓我看見該科醫師除擁有醫學專業外，亦有其他專才：在跟隨 Dr. Kuwera 看診的過程中，看見小兒眼科醫師最生動活潑的一面，其看診族群主要為斜視嬰幼兒，與老師一搭一唱共同完成各式檢查，令人格外有成就感。Dr. Collins 則同時為一名生物倫理學家，致力推動兒童視力檢查與早期矯正，以巴爾的摩當地學校為據點推廣視力檢查並給予學童合適眼鏡，以維護其學習權。而 Dr. Doyle 則是我在實習期間最尊敬的老師，不只是個溫柔有耐心的英倫紳士，也是名基因學家，從事 Marfan syndrome 相關臨床試驗與探討 pediatric myopia 的致病基因，跟診期間除了對各式眼科罕病有更具體的認識，也交流研究心得，期許自己將來也能將工作與興趣結合，成為和他一樣優秀的醫師科學家。



與 Dr. Kuwera 合影



與 Dr. Doyle 合影

手術室實習

除了門診實習，也有進入手術室實習的機會，觀摩白內障、青光眼、斜視矯正、角膜移植和眼部整形手術。老師和手術護理師非常熱心地解說，我也有機會協助手術部位消毒、備物與練習 intravitreal injection。



Johns Hopkins Wilmer Eye Institute 手術大樓留影

教學研討會

每週四上午有晨會和教學活動。晨會主要由住院醫師分享有趣的臨床個案，接著再由主治醫師專題演講。很幸運的是實習期間適逢眼科年終研討會(Wilmer Current Concepts)：各地名醫共襄盛舉，活動為期三天，依據次專科分類，每個人以十五分鐘的時間簡短報告。內容包羅萬象，包含臨床心得分享、新藥介紹、基礎研究與臨床試驗結果報告，也觸及社區福利與國家公衛政策議題，令人獲益良多。



Wilmer Current Concepts 會場

省思

在實習的前幾週，我看見了美國醫療制度光鮮亮麗的一面，然而在最後一週，則逐漸觀察到醫療保險相關的議題：經常聽到青光眼病患抱怨保險公司總是不願意給付他們真正需要的藥物；也從主治醫師口中得知，手術費用的給付方式分為術前給付、術後給付，和術後才個案評估是否給付三類。醫療決策實則受到健保給付方式與病人經濟因素牽制。

和我一起實習的同學分別是拉丁美洲與亞裔。課餘時間，我們也深入了解彼此學制的不同，以及醫學訓練過程的激烈競爭。不同於台灣國考僅須通過即可，在美國，國考成績排名是畢業後醫院申請的重要依據，而不同於其他醫學院，由於霍普金斯實習成績只顯示通過與否，臨床教師的評語更顯重要，所以他們每天都要積極表現以爭取好的評價。同理，住院醫師與研究醫師(fellow)也需在職場上展現最好的一面以獲得前輩青睞。

總體而言，來到約翰霍普金斯眼科實習，其特別的醫病互動模式與晨會深入淺出的教學活動讓我獲益良多，除了感受到蓬勃朝氣與多元文化氛圍外，也拓展了我的國際視野，並對美國健保制度與醫療環境有初步的認識。深切體認到得之於人者太多，無論如何懇切的言詞都無法表達內心的感激。竭誠感謝師長的諄諄教誨，也特別感恩校內獎學金的資助，使這趟難忘的奇幻之旅得以成行。

附錄

一、課表

Shih-Hsun Ou (VISMED)				
Mon	Tue	Wed	Thu	Friday
Nov 13	Nov 14	Nov 15	Nov 16	Nov 17
			9:15 a.m. Orientation 10:00am: Dr. Richard Kolker Introduction to Ophthalmology interactive lecture, Wilmer 401 11:30 – 2:00 p.m: Tutorial w/Dr. Kolker: Intro to the Ophthalmic Exam and Testing, Cornea	8:30 a.m. Meghan Berkenstock (Uveitis clinic) 3 rd flr
Nov 20	Nov 21	Nov 22	Nov 23	Nov 24
8:30 a.m. Dr. Jef Doyle (PACE) basement	8:00 a.m. Dr. Henry Jampel (Glaucoma clinic) basement	8:30am Dr. Alvin Liu (Retina clinic) 2 nd flr	*****HOLIDAY***** *****OFFICE CLOSED*****	*****HOLIDAY***** *****OFFICE CLOSED*****
Nov 27	Nov 28	Nov 29	Nov 30	Dec 1
Bendann Surgical Pavilion Wilmer OR – Smith Building 7:30am: Dr. Samuel Yiu	8:30 a.m. Dr. Divya Srikumaran (Cornea clinic) 3 rd flr 1:30 p.m. Dr. Samuel Yiu (Cornea clinic) 3 rd flr	8:30 a.m. Dr. Megan Collins (Peds clinic) 2 nd flr	Wilmer Current Concepts Turner Concourse	Wilmer Current Concepts Turner Concourse
Dec 4	Dec 5	Dec 6	Dec 7	Dec 8
Bendann Surgical Pavilion Wilmer OR – Smith Building 7:30 a.m. Dr. Jithin Yohannan	8:30 a.m. Dr. Edward Kuwera (Peds clinic) 2 nd flr	8:30am: Dr. Allen Eghrari Cornea clinic, 3 rd fl	Grand Rounds/Resident Lectures (7:30 –8:30 am) 8:30 a.m. Dr. Ian Pitha (Glaucoma clinic) basement	8:30am: Dr. Amanda Henderson Neuro-ophthalmology clinic, 2 nd fl
Dec 11	Dec 12	Dec 13	Dec 14	Dec 15
Bendann Surgical Pavilion Wilmer OR – Smith Building 7:30 a.m. Dr. Fasika Woreta	8:30 a.m. Dr. Peter Gehlbach (Retina clinic) 2 nd flr	Bendann Surgical Pavilion Wilmer OR – Smith Building 7:30am: Dr. Nicholas Mahoney	Grand Rounds/Resident Lectures (7:30 –8:30 am) 8:30 a.m. Dr. Nicholas Mahoney	8:30 a.m. Dr. Ashley Behrens (Comprehensive clinic) 1 st flr

二、Wilmer Current Concepts 研討會流程表

PROGRAM

Thursday, November 30, 2023

7:00 - 8:00 Registration and Opportunity to Visit Live and Virtual Exhibit Halls

General Session

8:00 - 8:05 **Welcome and Conference Goals**
Neil Bressler, MD

8:05 - 8:15 **An Eye Institute Approaches 100 Years**
Peter McDonnell, MD

Cornea, Cataract, and External Ocular Diseases

Chair: Yassine Daoud, MD

8:15 - 8:25 **Beyond Descemet Membrane Endothelial Keratoplasty (DMEK)**
Albert Jun, MD, PhD

8:25 - 8:35 **Fungal Keratitis: Challenges and Controversies**
Nakul Shekhawat, MD, MPH

8:35 - 8:45 **Refractive Surgery Considerations in 2023**
Isa Mohammed, MD

8:45 - 8:55 **Managing Complex Cataract Surgery in the Setting of Zonular Weakness**
Yassine Daoud, MD

8:55 - 9:05 **Questions and Answers / Discussion**
Moderators and Faculty

9:05 - 9:15 **Current Management of Keratoconus**
Uri Soiberman, MD

9:15 - 9:25 **Impression-based Scleral Shell Prosthetics for Ocular Surface Disease**
Lee Guo, OD

9:25 - 9:45 **Questions and Answers / Discussion**
Moderators and Faculty

9:45 - 10:15 Break and Opportunity to Visit Live and Virtual Exhibit Halls

Cornea, Cataract, and External Ocular Diseases

Chair: Shameema Sikder, MD

10:15 - 10:25 **Preventing Endophthalmitis following Cataract Surgery: An Evidence Based Approach**
Fasika Woreta, MD, MPH

10:25 - 10:35 **Artificial Intelligence in Cataract Management**
Shameema Sikder, MD

10:35 - 10:45 **The Management of Dry Eyes: New Treatments and New Challenges**
Samuel Yiu, MD, MS, PhD

10:45 - 10:55 **Questions and Answers / Discussion**
Moderators: Yassine Daoud, MD, Shameema Sikder, MD and Faculty

10:55 - 11:30 **Interesting Cases**
Moderators: Yassine Daoud, MD; Shameema Sikder, MD; David Lu, MD; Morgan Fredell, MD; Perla Ibrahim, MD and Anterior Segment Faculty

Oculoplastic Surgery

Chair: Ashley Campbell, MD

11:30 - 11:40 **Neurosurgical Approaches to the Orbit**
Nicholas Mahoney, MD

11:40 - 11:50 **Evolving Treatments in Thyroid Eye Disease**
Fatemeh Rajaii, MD, PhD

11:50 - 12:00 **Management Options for Eye Removal**
Shazia Dharrsi, MD

12:00 - 12:10 **Orbital Cellulitis Evaluation and Management**
Emily Li, MD

12:10 - 12:20 **Update on the Management of Sebaceous Carcinoma**
Ashley Campbell, MD

12:20 - 12:30 **Questions and Answers/Discussion**
Moderator: Ashley Campbell, MD and Faculty

12:30 - 1:45 Lunch Break and Opportunity to Visit Live and Virtual Exhibit Halls

Challenging Cases for the Anterior Segment Surgeon

Chair: J.Fernando Arevalo, MD, PhD and Neil Bressler, MD

1:45 - 2:30 **Continued Interesting Cases: Anterior Segment Observations and Retina Challenges in the Anterior Segment Clinic**
Anterior Segment and Retina Faculty

2:30 - 3:00 Break and Opportunity to Visit Live and Virtual Exhibit Halls

Neuro-Ophthalmology

Chair: Amanda Henderson, MD

3:00 - 3:10 **Radiation-Induced Optic Neuropathy**
Andrew Carey, MD

3:10 - 3:20 **Optic Neuritis**
Neil Miller, MD

3:20 - 3:30 **Visual Snow Syndrome**
Michael Carper, MD

3:30 - 3:40 **Giant Cell Arteritis**
Colin Kane, OD

3:40 - 3:50 **Optic Pathway Glioma in the Setting of Neurofibromatosis Type 1**
Amanda Henderson, MD

3:50 - 4:00 **Panel Discussion to Follow Each Case Presentation**
Panelists: Andrew Carey, MD; Michael Carper, MD; Amanda Henderson, MD; Colin Kane, OD

Optometric Session

Concurrent with Socioeconomic Session

Chair: Jack Prince, OD

- 4:00 - 4:10 **Herpes Zoster Ophthalmicus**
Jack Prince, OD
- 4:10 - 4:20 **Ophthalmic Manifestations of Parkinson's Disease**
Kelly Seidler, OD
- 4:20 - 4:30 **Glaucoma Laser Therapy Considerations**
Corinne Casey, OD
- 4:30 - 4:40 **Current Management for Keratoconus**
Bradley Salus, OD
- 4:40 - 4:50 **Update on Ophthalmic Medications**
Bryce St. Clair, OD
- 4:50 - 5:00 **Questions and Answers / Discussion**
Moderator: Jack Prince, OD and Faculty

Socioeconomic Session

Concurrent with Optometric Session – in Collaboration with The Maryland Society of Eye Physicians and Surgeons

Chairs: Lawson Grumbine, MD and David Glasser, MD

- 4:00 - 4:05 **Welcome and Session Goals**
Lawson Grumbine, MD
- 4:05 - 4:15 **Co-Management and Anti-Kickback Statutes**
Allison Shuren
- 4:15 - 4:25 **Prior Authorization Challenges**
Brandy Keys, MPH
- 4:25 - 4:35 **How Does the Cataract Cost Measure Work?**
David Glasser, MD
- 4:35 - 4:45 **Coding Updates for 2024**
Michael Repka, MD, MBA
- 4:45 - 4:50 **Introduction of the David Worthen Memorial Lecture**
Jasdeep Sabharwal, MD, PhD and Neil Bressler, MD
- 4:50 - 5:15 **David Worthen Memorial Lecture: Surgical Glaucoma Challenges – with or without a Fellow by your Side**
Joseph Panarelli, MD
- 5:15 - 5:25 **VA Supremacy Project and Scope of Practice**
Rebecca Hyder
- 5:25 - 5:35 **Maryland Legislative Update**
Lawson Grumbine, MD

2:18 - 2:35

Question and Answers / Discussion

Moderators: Megan Collins, MD, MPH and Michael Repka, MD, MBA

Panelists: Jefferson Doyle, MBBCh, MHS, PhD; David Guyton, MD; Courtney Kraus, MD; Edward Kuwera, MD; Cody Richardson, MD

Uveitis

Chair: Bryn Burkholder, MD

- 2:35 - 2:45 **Top 10 Mistakes in the Systemic Treatment of Posterior and Panuveitis**
Jennifer Thorne, MD, PhD
- 2:45 - 2:55 **Update on Regional Steroids in the Treatment of Non-infectious Uveitis**
Bryn Burkholder, MD
- 2:55 - 3:05 **Antibody Drug Conjugate Toxicities: Optimizing Patient Management and Outcomes**
Meghan Berkenstock, MD
- 3:05 - 3:15 **Persistent or Recurrent Uveitic Macular Edema: What Treatment is MERITed?**
Doug Jabs, MD, MPH

Glaucoma

Chair: Ian Pitha, MD, PhD

- 3:15 - 3:25 **Utility of Home Tonometry in Clinical Practice**
Jasdeep Sabharwal, MD, PhD
- 3:25 - 3:35 **Rho-kinase Inhibitors in Ophthalmology: Pressure Reduction and Beyond**
Ian Pitha, MD, PhD
- 3:35 - 5:00 **Glaucoma Challenges 2023**
Moderator: Ian Pitha, MD
Panelists: Mona Kaleem, MD; Pradeep Ramulu, MD, PhD; Jithin Yohannan, MD, MPH
- 5:00 **Adjourn**
You will receive an email notification to complete the evaluation form and to attest to the number of hours in attendance.

The registration desk will remain open during conference hours.

The Johns Hopkins School of Medicine takes responsibility for the content, quality and scientific integrity of this CME activity.

The schedule is subject to change.