

27<sup>th</sup> Annual Blood-Brain Barrier (BBB) Consortium Meeting

The Benson Hotel | Portland, OR | 309 SW Broadway, Portland, OR 97205  $\bf May$  15-16, 2025

Cultivating the next generation of translational scientists.



**Goals:** The primary goal of this meeting is to foster translational interactions between scientists and clinicians focused on the BBB, the neuro-vascular unit (NVU), and specialized neural barriers in central nervous system (CNS) diseases. The aim is to translate basic and preclinical research advances into clinical trials in neuro-oncology.

A related goal is to disseminate meeting findings to the scientific community. Previous meetings have resulted in publications in the *Journal of Cerebral Blood Flow & Metabolism*, *Nature Reviews Neuroscience*, and *Neuro-Oncology*, as well as a chapter in *Advances in Pharmacology*.

**Content**: This meeting will highlight advancements in BBB Consortium clinical research, including new treatment and neuro-imaging protocols, and the translation of research from the lab to the clinic. Presentations by experts in neuro-oncology, neuro-infectious disease, neuro-immunology, neuro-cognitive science, and neuroimaging will be followed by group discussions, panel discussions, and poster sessions.

#### **Objectives:**

- Breakdown of the NVU in Neuro-Oncology: Discuss preclinical, clinical, and safety data on techniques to enhance the delivery of therapeutic agents and systemic immune cell migration to brain tumors and the tumor microenvironment. This includes methods such as intra-arterial delivery and focused ultrasound.
- 2. Impact of the NVU in Neuro-Infectious Disease: Examine preclinical and clinical studies on neurological complications of systemic viral infections. Topics include improving delivery methods, novel therapeutic and imaging modalities, and the need for chemoprotection.
- **3.** Role of the NVU in Emerging Real-Life Scenarios: Explore the NVU's role in scenarios with significant human health impacts, such as weightlessness and space exploration, climate change, and microplastic pollution.

**Audience:** Academics, industry professionals, clinicians, physicians and researchers with programs in BBB, NVU, and neuro-oncology, with an emphasis on translational research.

**Mentorship Session:** The meeting will include mentoring sessions, providing young scientists and trainees with one-on-one time with senior mentors.

We are honored to welcome you and hope this meeting is both educational and engaging. We are grateful for your participation and look forward to many stimulating discussions.

### Registration Information

PROVIDENCE
Brain and
Spine Institute

The Benson Hotel | Portland, OR | 309 SW Broadway, Portland, OR 97205  $\bf May~15\text{--}16, 2025$ 

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The 27<sup>th</sup> Annual Providence Blood-Brain Barrier Consortium Meeting will take place in-person at The Benson Hotel from May 15-16, 2025. You may also register to view this event virtually via livestream on Zoom Webinar.

Take advantage of the early bird rate through Friday, March 28, 2025. Late registration is after March 28 will incur a \$25 increase.

**Location:** The Benson Hotel, 309 SW Broadway, Portland, OR 97205

#### Registration for the main scientific meeting includes access to:

- •All scientific and poster sessions
- •CME certificate / credit hours
- •Exhibit Hall
- Recorded presentations
- •Buffet Breakfast, Snacks, Buffet Lunch and all-day beverages.

Note - Registration does not include the Keynote Dinner Thursday evening. Tickets for the dinner must be purchased separately when registering for the event. **Tickets for the keynote dinner are \$50.00.** 

#### **Keynote Speaker Dinner**

The Keynote Dinner will also be held at The Benson Hotel. This special event will honor the contributions and life of Dr. Edward Neuwelt and include presentations on the Future of Translational Research and The Importance of Phase 0 Trials in CNS Targeted Drug Development.

#### **Registration Selection Instructions**

When registering, please select whether you would like to attend in-person or virtually. You may also choose to purchase a ticket to the Keynote Dinner. You must purchase a ticket for the Keynote Dinner in order to attend, so there is an accurate head count prior to the event.

**In-person:** In-person registration includes breakfast, lunch, refreshments and beverages on Thursday and Friday. No walk-in registrations will be available.

**Virtual:** You may attend this event virtually via Zoom Webinar. If you can not attend virtually on the day of, you may opt to view the recorded presentations after the event and still receive CME credit. Recordings will be available 2-3 weeks after the live event. Some options of the in-person event will not be available virtually, such as mentoring sessions / one-on-one meetings, nor the Keynote Dinner.

**Abstracts and posters** must be submitted by March 28, 2025. Please email Dr. Prakash Ambady, for more details and to submit and abstract or poster <a href="mailto:Prakash.ambady@providence.org">Prakash.ambady@providence.org</a>. (More details coming soon)

### Registration Information



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Registration Fees		
Attendance Type	Regular Rate (before 3/28)	Late registration (after 3/28)
IN-PERSON, Providence Employed	\$250	\$275
IN-PERSON, Non-Providence	\$325	\$350
VIRTUAL, Providence Employed	\$225	\$250
VIRTUAL, Non-Providence	\$300	\$325
Keynote Dinner	\$50	\$50
Students/Residents/Trainees	\$75	\$75

**Hotel Information**: The Benson Hotel is offering a discounted rate of \$159 per night for attendees of this event. Please note that the registrant is fully responsible for managing their own hotel reservation.

#### The Benson Hotel, Portland, OR

309 SW Broadway, Portland, OR 97205 Discounted rates from \$159 USD; Upgrades may be available To schedule your stay or for more room information call: (503) 228-2000

#### **Parking Information**

There is a discounted valet rate of \$42.00 for cars that will be staying overnight. Or a flat fee of \$20.00 per car for individuals only attending the meeting and not staying over night.

#### **Photo/Video Notice**

By registering you are acknowledging that you are entering an area where photography, audio and video recording may occur. By registering for the event, you grant permission to the meeting organizers to use photography, audio and video recording taken during the meeting for an indefinite period. If you do not want to have any photos/videos taken of you published, please email <a href="mailto:Desirae.parsons@providence.org">Desirae.parsons@providence.org</a> before attending.

#### **Cancelations and Refunds**

Registration is non-refundable (certain situations may be addressed on a case-by-case basis). If you cannot attend in-person, you may opt to transfer your registration to another person or attend virtually / view recordings.

**Questions?** For all registration questions or for additional information, please contact Desirae Parsons, desirae.parsons@providence.org or 503-943-9640





### THURSDAY, MAY $15^{TH}$ All times listed are PST



Cultivating the next generation of translational scientists.

7:45 AM	INTRODUC	TION AND WELCOME	Prakash Ambady, MD
8:00 AM – 9:00 AM UPDATES ON PRE-CLINICAL AND CLINICAL TRIALS FROM THE CONSORTIUM AND OUR COLLABORATORS			
Moderators:			<b>Sahramanov, MD   Neurosurgeon</b> rosurgery Specialists, Salem, OR
		The Oregon Cli	<b>Jane Ng, MD   Neurosurgeon</b> nic - Neurosurgery, Portland, OR
PCNSL Maintenance 0-N		<b>Prakash</b> e Brain and Spine Institute   Neuro-	Ambady, MD   Neuro-Oncologist Oncology Program, Portland, OR
Pembro + Ferumozytol II	maging Trials		onya, MD, PhD   Neuroradiologist Science University, Portland, OR
Update on IA/ BBBD Stu	dies – Final Analysis		of Biostatistics & Epidemiology Science University, Portland, OR
Review of Anesthesia Co	onsideration with IA/BBBS		sthesiologist, Vascular Surgeon Science University, Portland, OR
9:00 AM - 9:30 AM	Discussion		With all
9:30 AM - 9:45 AM		BREAK	
9:45 AM - 11:20 AM	IMAGING OF	THE NEUROVASCULAR UNIT (N	IVU)

Moderators:

Oregon Health and Science University, Portland, OR **Darshan Acharya, MD | Radiologist** 

arsnan Acharya, MD | Radiologist Providence, Portland, OR

Ramon Barajas, MD | Neuroradiologist

Advances in Imaging the Breakdown of the Neuro-Vascular Unit and its Practical Applications for Therapy Delivery

Peptide Amphiphiles Hitchhike on Lipoproteins for Blood Brain Barrier Penetration

Neuroimaging Approaches for Assessing Glymphatics in Humans

BOLD fMRI Presurgical Planning, Pearls and Pitfalls

Future Directions

Kazim Narsinjh, MD | Neurointerventional Radiologist University of California SF, San Francisco, CA

Adem Yildirim, PhD | Professor of Oncology Oregon Health and Science University, Portland, OR

Samantha Keil, PhD | Postdoctoral Associate Cornell Medicine's Brain Health Imaging Inst., NY, NY

Michael Regner, MD,MS; Pediatric Neuroradiologist Oregon Health and Science University, Portland, OR

**Ramon Barajas, MD; Neuroradiologist**Oregon Health and Science University, Portland, OR

With all

11:10 AM - 11:20 AM

Discussion

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Lunch   Poster Session		
1:00 PM – 2:35 PM NVU and	I BRAIN TRAUMA	
Moderators:	<b>Daniel Rohrer, MD   Neurosurgeon</b> Comprehensive Neurosurgical Consultants, Portland, OR	
	<b>Stephen Bowden, MD   Neurosurgeon</b> Memorial Sloan Kettering MC, New York, NY	
Impact of Radiation on Immunocompromised vs. Immnocompetent Models	Kathryn Blethen, PhD   Neuro-Oncology Post-Doc Associate Duke University, Durham, NC	
BBB Disruption Following Blast Related TBI: Importance Gyrencephalic Animal Models for Human Translation	of <b>Sujith Sajja, PhD   Principal Investigator</b> Walter Reed Army Institute of Research, Silver Spring, MD	
BBB as a Therapeutic Target in Neuro-Trauma	<b>Dominic Siler, MD, PhD   Neurosurgeon</b> University of Washington, Seattle, WA	
Modular Engineering of Brain Imaging Molecular Contras Using anti-Transferrin Receptor Nanobodies for BBB Transcyt		
Impact of Microgravity on the Gut-Brain Axis	sha Hammamieh, PhD   Director of Medical Readiness Systems Walter Reed Army Institute of Research, Silver Spring, MD	

2:35 PM - 2:45 PM	BREAK
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2:45 PM – 4:30 PM NETWORKING AND MENTORSHIP

5:00 PM - 7:00 PM **OPEN HAPPY HOUR - NETWORKING** 

### **KEYNOTE DINNER - Sponsored by Oregon Health and Science University**

	Moderator:	Prakash Ambady, MD; Portland, OR
7:00 PM – 7:15 PM	Hors D'oeuvres and Mingle	
7:15 PM – 7:35 PM	Presentation and Tribute to Dr. Edward Neuwelt	Leslie Muldoon, PhD; Portland, OR
7:35 PM - 7:50 PM	Dinner	
7:50 PM - 8:00 PM	Future of Translational Research (IBBBS)	Robert Thorne, PhD; South San Francisco, CA
8:00 PM - 8:15 PM	TBD	TBD
8:15 PM - 8:30 PM	Awards and Recognition	Prakash Ambady, MD; Portland, OR

**TBD** 

# **FRIDAY, MAY 16<sup>TH</sup>** All times listed are PST



 $Cultivating \ the \ next \ generation \ of \ translational \ scientists.$ 

7:45 AM	INTRODUCTION AND WELCOME	Prakash Ambady, MD
8:00 AM - 9:00 AM	FUNDING ROUNDTABLE	
Moderators:	<b>Praka</b> Providence Brain and Spine Institute   Neu	<b>ish Ambady, MD   Neuro-Oncologist</b> uro-Oncology Program, Portland, OR
		cobert Thorne, PhD   Neuroscientist erapeutics, South San Francisco, CA
Providence Foundation Funding		<b>Johnston   Director of Development</b> rovidence Foundation, Portland, OR
Providence Cancer Institute Fundin		<b>Kenneth Grossman, MD   Oncologist</b> Jence Cancer Institute, Portland, OR
Discussion and Q&A		All
9:00 AM - 10:00 AM	NVU in DEMENTIA and NEUROPSYCHIATRY	
Moderator:		<b>Amber Ruiz, MD   Neuro-Oncologist</b> uro-Oncology Program, Portland, OR
Claudin-5 Mediated Regulation of th	•	, <b>PhD, FTCD   Professor of Genetics</b> Trinity College of Dublin, Dublin, IRE
NVU in Dementia and Psychiatry		TBD TBD
NVU in Dementia and Psychiatry		sor of Psychiatry and Neuroscience ersity of Laval, Quebec City, Quebec
NIH BBB / Neuro Degenerative		TBD TBD
10:00 AM - 10:15 AM	BREAK	
10:15 AM - 11:15 AM	EPILEPSY AND BBB	
Moderator:	Seth Oliveria,	MD, PhD   Functional Neurosurgeon The Oregon Clinic, Portland, OR
Epilepsy and Seizures		<b>Evan Fertig, MD   Epileptologist</b> Trinity College of Dublin, Dublin, IRE
BBB and Novel Agents	Seth Oliveria,	MD, PhD   Functional Neurosurgeon The Oregon Clinic, Portland, OR
BBB and Novel Agents		, PhD   Professor of Neurosciences niversity of Kentucky, Lexington KY

4:15 PM - 4:30 PM

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Prakash Ambady, MD; Portland, OR

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44.47.44.40.00.74.4	Blood-Brain Borders: Philosophical, Physiol	ogical and Biological
11:15 AM 12:00 PM	Justification of a Proposed Change in Termi	Pahart Thorna DhD
12:00 PM - 1:15 PM	LUNCH AND POSTER PRESE	ENTATIONS
1:00 PM – 2:15 PM	NVU in INFLAMMATION AN	D INFECTION
Moderator:	Providence Brain and Spi	<b>Prakash Ambady, MD   Neuro-Oncologist</b> ine Institute   Neuro-Oncology Program, Portland, OR
TBD		Andrew Weinberg, PhD   Immunology Scientist Providence Cancer Institute, Portland, OR
TBD		<b>Nassar Yaghi, MD   Neurosurgeon</b> University of Michigan, Ann Harbor, MI
Neurotoxicity associat	ted with CAR T cells	<b>Eric Tran, PhD   Scientist</b> Providence Cancer Institute, Portland, OR
Killer T Cell Mediated [	Disruption of the BBB	<b>Aaron Johnson, PhD   Neurosurgeon</b> Mayo Clinic, Rochester, MN
Dexamethasone and t	he Blood Brain Barrier	<b>Stephen Bowden, MD   Neurosurgical Fellow</b> Memorial Sloan Kettering, New York, NY
2:15 PM - 2:30 PM	BREAK	
2:30 PM - 4:30 PM	NEURO-ONCOL	OGY
Moderators:	Providence Brain and Sp	<b>Prakash Ambady, MD   Neuro-Oncologist</b> ine Institute   Neuro-Oncology Program, Portland, OR
		<b>Robert Thorne, PhD   Neuroscientist</b> Denali Therapeutics, South San Francisco, CA
TBD		Michelle Pizzo, PhD   Senior Scientist Denali Pharmaceuticals, Durham, NC
Mets / Leptomenigeal		Adrienne Boire, MD, PhD; Neuro-Oncologist Memorial Sloan Kettering MC, New York, NY
Focused Ultrasound (1	Therapeutic Delivery)	<b>Bhavya Shah, MD   Neuroradiologist</b> UT Southwestern Medical Center, Dallas, TX
Using Surgical Tissue Bypass the Blood Brai	Flaps and Intra-Arterial Drug Delivery to n Barrier	<b>John Boockvar, MD   Neurosurgeon, Director</b> Lennox Hill Hospital, New York, NY
Improving Intra-Arteri	al Chemotherapy Piotr Walcza	uk, MD, PhD   Professor of Radiology & Nuclear Med. University of Maryland, College Park, MD
BBBD After LITT		<b>Jian Campian, MD, PhD   Neuro-Oncologist</b> Mayo Clinic, Rochester, MN

FINAL REMARKS - ADJOURN