WHO SHOULD ATTEND

Physicians, physician assistants, nurse practitioners, nurses, residents, fellows, students, researchers, radiologic technologists, and engineers interested in advancing their understanding of how harmonizing art, science, and medicine can lead to implications on the diagnosis and management of CSF disorders as well as improving the outcome of the surgical profession.

This comprehensive program will include topics of interest to healthcare professionals who specialize in gastroenterology, genetics, neurology, neuropsychology, neuroscience, neurosurgery, nutrition, pain management, pediatrics, physical therapy, primary care, pulmonology, radiology, rehabilitation, rheumatology, and urology.

LEARNING OBJECTIVES

At the conclusion of this activity, participants should be able to:
1. Describe the clinical manifestation of CSF disorders and implications on health and medicine
2. Discuss the concept of medical illustration in the traditional concept of arts in medical surgery
3. Promote and describe the concept of Arts & Healing and its potential to improve surgical outcomes
4. Promote the teaching aspects of artistic(al) medicine and management of health
5. Discuss the concept of 3D artwork and 3D printing and the potential of disease modeling, surgical planning and outcome and teaching

Register today: cme-learning.brown.edu/CSF-2019
### From Canvas to Clinic — *Artistic(al) Management of Cerebrospinal Fluid Disorders*

**Saturday, June 15, 2019**

**7:30–8:30 AM**  
Registration, Breakfast, and Visit Exhibits

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#### FROM CANVAS TO CLINIC:  
**Painting the Landscape**

**8:30–9:15**  
Welcome & Introduction  
Ziya L. Gokaslan, MD, FAANS, FACS  
Chair, Department of Neurosurgery  
Petra M. Klinge, MD, PhD  
Francois Luks, MD, PhD  
Albert S. Woo, MD, PhD  
Course Directors  
Dorothy Poppe  
Executive Director  
Chiari & Syringomyelia Foundation

**Presentation of Arts From a Patient with a History of Cerebrospinal Cyst in Infancy—The Aspiring Artist!**  
Nancy Gaucher-Thomas  
Ellen T. Matesanz, MHA, MBA  
Directors, Art League Rhode Island  
Julianne Ip, MD  
Associate Dean of Medicine

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#### FROM CANVAS TO CLINIC:  
**The Rhode Island Perspective(s)**

**Moderated by: Petra M. Klinge, MD, PhD**

**9:15–9:35**  
The Rhode Island Arts and Health Network (RIAHN)  
Steven Boudreau

**9:35–9:55**  
The Healing Arts and Medicine—Bridging the Gap  
Kyle McDonald, C-IAYT, MFA

**9:55–10:15**  
Prospectus of Arts and Medicine from a Physician Perspective—3D Printing of Pathology  
Albert S. Woo, MD, PhD

**10:15–10:30**  
Break and Visit Exhibits

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#### FROM CANVAS TO CLINIC:  
**The Physician(s) Perspective(s)**

**Moderated by: Francois Luks, MD, PhD**

**10:30–11:00**  
The History of Medical Illustration in Surgical Medicine with Focus on CSF Disorders  
Ian Suk, Bsc BMC, FAMI

**11:00–11:15**  
Cerebrospinal Fluid Pathologies  
Petra M. Klinge, MD, PhD

**11:15–11:30**  
Craniofacial Disorders and Syndromes  
Albert S. Woo, MD, PhD

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#### FROM CANVAS TO CLINIC:  
**The Engineering Perspectives(s)**

**Moderated by: Albert S. Woo, MD, PhD**

**1:15–1:45**  
The Art and Science of Medical Simulation  
Linda L. Brown, MD, MSCE

**1:45–2:15**  
Transforming the Patient Experience Through Virtual Human Modeling  
Karl D'Souza, MS, MBA & Victor Oancea, PhD

**2:15–2:45**  
Advances in 3D Shape Capture, Visualization and Processing Technologies  
Gabriel Taubin, PhD, MS

**2:45–3:15**  
Break and Visit Exhibits

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#### FROM CANVAS TO CLINIC:  
**The Artist(s) Perspectives(s)**

**Moderated by: Petra M. Klinge, MD, PhD**

**3:15–3:30**  
Arts and Healing at Hasbro Children’s Hospital—A Perspective From a Cartoonist  
Steve Brosnihan, BA

**3:30–3:45**  
Artists and Perspectives in Disease with Focus on CSF Disorder  
Victoria Guerina, MFA

**3:45–4:00**  
Understanding My Complex Health Through Art  
Tracy Coval, BS

**4:00–4:15**  
Creativity and Healing: An Artist’s/Patient’s Perspective  
Dennis O’Brien, MA, BFA

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**Adjourn**

*Petra M. Klinge, MD, PhD  
Francois Luks, MD, PhD  
Albert S. Woo, MD, PhD*
From Canvas to Clinic — *Artistic(al) Management of Cerebrospinal Fluid Disorders*

### Course Directors

**Petra M. Klinge, MD, PhD**  
Professor of Neurosurgery | Warren Alpert Medical School of Brown University  
Director, Division of Pediatric Neurosurgery  
Director, Center for CSF Disorders of the Brain and Spine  
Rhode Island Hospital & Hasbro Children's Hospital  
Providence, RI

**Francois Luks, MD, PhD**  
Professor of Surgery | Professor of Pediatrics  
Professor of Obstetrics and Gynecology  
Director, Brown Program in Fetal Medicine  
Warren Alpert Medical School of Brown University  
Chief, Division of Pediatric Surgery | Pediatric Surgeon-in-Chief  
Rhode Island Hospital & Hasbro Children's Hospital  
Providence, RI

**Albert S. Woo, MD**  
Associate Professor of Surgery  
Associate Professor of Pediatrics  
Associate Professor of Neurosurgery  
Warren Alpert Medical School of Brown University  
Director, Craniofacial Program | Chief, Pediatric Plastic Surgery  
Rhode Island Hospital & Hasbro Children's Hospital  
Providence, RI

**Karl D'Souza, MS, MBA**  
Director, Life Sciences | Dassault Systèmes | Providence, RI

**Nancy Gaucher-Thomas**  
Founder, Art League Rhode Island  
Acting President, Providence Art Club | Providence, RI

**Ziya L. Gokaslan, MD, FAANS, FACS**  
Gus Stoll, MD Professor and Chair, Neurosurgery  
Warren Alpert Medical School, Brown University  
Neurosurgeon-in-Chief  
Rhode Island Hospital & The Miriam Hospital  
Clinical Director, Norman Prince Neurosciences Institute  
President, Brown Neurosurgery Foundation | Providence, RI

**Victoria Guerina, MFA**  
Victoria Guerina Art | Providence, RI

**Julianne Ip, MD**  
Associate Dean of Medicine  
Clinical Professor of Family Medicine  
Clinical Professor of Medical Science  
Warren Alpert Medical School of Brown University | Providence, RI

**Ellen T. Matesanz, MHA, MBA**  
Executive Director, Art League Rhode Island | Providence, RI

**Kyle McDonald, C-IAYT, MFA**  
Health Arts Coordinator | Lifespan | Providence, RI

**Dennis O'Brien, MA, BFA**  
Owner, Maps and Wayfinding, LLC | Mystic, CT

**Victor Oancea, PhD**  
Mechanics Technology Director  
Dassault Systèmes | Providence, RI

**Dorothy Poppe**  
Executive Director  
Bobby Jones Chiari & Syringomyelia Foundation  
(Bobby Jones CSF) | New York, NY

**Ian Suk, Bsc BMC, FAMI**  
Professor, Department of Art as Applied to Medicine  
Medical Illustrator, Spine Center  
Johns Hopkins University School of Medicine | Baltimore, MD

**Konstantina Svokos, DO, MS**  
Assistant Professor of Neurosurgery  
Assistant Professor of Pediatrics  
Warren Alpert Medical School of Brown University  
Pediatric Neurosurgeon  
Hasbro Children's Hospital | Providence, RI

**Gabriel Taubin, PhD, MS**  
Professor of Engineering | Professor of Computer Science  
School of Engineering, Brown University | Providence, RI

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### Faculty

**Steven Boudreau**  
Chief Administrative Officer  
Rhode Island Department of Health  
Co-Chair, Rhode Island School of Arts & Health | Providence, RI

**Steve Brosnihan, BA**  
Freelance Cartoonist | Bristol, RI  
Resident Cartoonist, Hasbro Children's Hospital | Providence, RI

**Linda L. Brown, MD, MSCE**  
Associate Professor of Emergency Medicine  
Associate Professor of Pediatrics  
Warren Alpert Medical School of Brown University  
Director, Medical Simulation Center  
Hasbro Children's Hospital & Rhode Island Hospital  
Providence, RI

**Tracy Coval, BS**  
Motivational Speaker, Artist, Writer | Norton, MA

**Curtis Doberstein, MD**  
Professor of Neurosurgery, Clinical Educator  
Director, Neurosurgery Residency Program  
Warren Alpert Medical School, Brown University  
Director, Cerebrovascular and Skull-Base Surgery  
Executive Vice-Chair, Clinical Operations  
Rhode Island Hospital | Providence, RI
Program Description
The 2nd and 3rd CSF Disorders Symposia in 2017 and 2018 introduced the intersection of Art, Science and Medicine for disorders of the cerebrospinal fluid. Artwork on display has illustrated visually the transformative manifestations of CSF disorders, such as connective tissue disorders, Chiari malformation, hydrocephalus, syringomyelia and others.

This initiative was supported by the Art League Rhode Island. Historically and traditionally, art has been applied to medicine and to surgery through surgical illustrating. However, there is “medical arts’ beyond this, and the Rhode Island State Council on Arts in collaboration with the Rhode Island Department of Health and RISD, have promoted the powerful role that the arts can play in health and healing, and have expanded the engagement of the arts in health in the state of Rhode Island. Artists, through their ability to create a visual impression, will foster in the compassionate physician and the engaging patient a deeper understanding of the suffering behind a disease. Beyond this, visual arts can support the “designing” of surgical strategies.

Painting and sculpting are two forms of the visual arts. Through the development of 3D models and 3D printing techniques, visual impressions and concepts will aid in surgical planning and “designing” surgical strategies and outcomes. Predicting the details of surgical findings can be clearly illustrated, and the potential outcome of an elected surgical procedure can be envisioned through sculpture and 3-dimensional artwork.

The 2019 symposium will address the above outlined “artistic(al)” potentials and the implications on the diagnosis and management of CSF disorders as well as improving the outcome of the surgical profession. This includes enhanced education and teaching of medical students & surgical trainees.

Conference Location and Parking
Warren Alpert Medical School of Brown University
222 Richmond Street, Providence, RI 02912

Parking will be available in the parking garage connected to the Medical Building, located on the corner of Richmond and Elm Streets. Enter through the Elm Street entrance.

Registration Information — Register Online At:
cme-learning.brown.edu/CSF-2019

Registration Fees:
$75.00 Healthcare Professionals
$0.00 Researchers, Residents, Fellows and Students
Pre-registration is required as space is limited.

Conference registration fee includes: breakfast, breaks, lunch, access to an online syllabus, and on-site parking.

Accreditation
This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of the Warren Alpert Medical School of Brown University and Department of Neurosurgery at Rhode Island Hospital. The Warren Alpert Medical School of Brown University is accredited by the ACCME to provide continuing medical education for physicians.

Credit Designation
Physicians: The Warren Alpert Medical School of Brown University designates this live activity for a maximum of 6.25 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Physician Assistants/Nurse Practitioners: Participants will receive a Certificate of Attendance stating this program is designated for 6.25 hours AMA PRA Category 1 Credits™. This credit is accepted by the AAPA and AANP.

Nurses: This activity has been submitted to the Northeast Multi-State Division for approval to award contact hours. The Northeast Multi-State Division is accredited as an approver of continuing nursing education by the American Nurses Credentialing Center’s Commission on Accreditation. Maine, New Hampshire, New York, Rhode Island, Vermont Nurses Associations are members of the Northeast Multi-State Division of the American Nurses Association.

Cancellation Policy
Cancellations/substitutions must be made in writing to the Brown CME Office no later than May 31, 2019. A $25.00 administrative fee will be charged for all refunds (no refunds for “no shows”). There will be no additional charge for substitutions. This conference is subject to change or cancellation.

For More Information, Contact the Brown CME Office
233 Richmond Street, Box G-R156, Providence, RI 02912
Ph: 401.863.2871 | F: 401.863.2202 | Email: CME@Brown.edu

Hotel Accommodations
To book hotel reservations with the current Brown University rate: http://www.campustravel.com/university/brown/