

to provide a minimum appearsherating Appearsherating Decocloping MSD to provide continuing advocation activities in speech-language paths and audiology. See course information for number of ASAH CEUs, and a course information and a course information and a course or the course of t

ACCREDITED WITH COMMENDATION

ACCME

genetic counselors, neuro-

This program is offered for up to 1.8 ASHA CEUs (Various level; Professional area)

for Neurodevelopmental Disabilities and has approved this program as part of a comprehensive self-assessment program, which is mandated by the ABMS as a The American Board of Psychiatry and Neurology has reviewed The Spectrum of Developmental Disabilines XL: The New Genetics. Implications

The Johns Hopkins University School of Medicine designates this live activity for a maximum of 18.25 AMA PPA (Category 1 Credits<sup>TIM</sup>, Physicians should claim

#### education for physicians.

with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of Johns Hopkins University School of Medicine and Kennedy Pellows Association. The Johns Hopkins University School of Medicine and Medicine and Medicine and Medicine and Medicine and Medicine and According to the ACCME to provide continuing medical education for physicians. This activity has been planned and implemented in accordance **ACCREDITATION STATEMENT** 

- Critically evaluate emerging targeted therapies.
- Interpret genetic testing using current research results
- **OBJECTIVES** therapists, psychologists, speech language pathologists, physical therapists,

child psychiatrists, educators, nurses, nurse practituoners, occupational

This activity is intended for

medicine, clinicians must become familiar with the tools and concepts needed to use of the wealth of data now available and to realize the promise. In order to make from testing into comprehensive care and counseling remains challenging. The Once a genetic variant is identified, incorporating rapidly evolving information

do not feel equipped to interpret results and articulate a need for further education difficult to interpret even for experienced clinicians. Many non-genetics clinicians Further, output of these complex tests produce results that can be unexpected and there remain significant financial and practical barriers to obtaining this testing evaluation for intellectual disability and autism spectrum disorder. Regardless, developmental disabilities. The potential benefits in identifying comorbidities allow identification of genetic etiologies in as many as 40% of patients with Genetics has rapidly become integral to the evaluation and treatment of a wide variety of neurodevelopmental disabilities. Modern techniques now

DESCRIPTION

## OTHER CREDIT

necessary component of Maintenance of Certification.

#### **WAINTENANCE OF CERTIFICATION**

only the credit commensurate with the extent of their participation in the activity.

## CREDIT DESIGNATION STATEMENT

- Counsel patients and families regarding results and implications of genetic
  - Identify and obtain appropriate genetic testing for children with developmental

After attending this activity, the participant will demonstrate the ability to:

developmentalists, developmental behavioral pediatricians, child neurologists pediatricians,

WHO SHOULD ATTEND navigate the new genetic information landscape.

over coming years. The advent and gaining utilization of even higher-resolution techniques such as whole-exome and whole-genome sequencing will further compound this problem prognostication, and counseling are clear, the American Academy of Pediatrics, American Academy of Neurology, and American College of Medical Genetics all now recommend high-resolution chromosomal microarray testing as first-line

**CENEBYT INFORMATION** 

## A \$50 late fee applies to registrations received after 5:00 p.m. ET on March 13, 2018. A handling fee of \$50 will be deducted for cancellation. An additional fee may LATE FEE AND REFUND POLICY

registrants will be notified as soon as possible.

the right to change the venue to a comparable venue. Under such circumstances registration fee but is not responsible for travel expenses. Additionally, we reserve due to unforeseen circumstances. In this event, the University will refund the The Johns Hopkins University reserves the right to cancel or postpone any activity submission of the post activity online evaluation.

apply for cancellation of other events, including workshops and social activities.

transcript of attendance will be available upon attestation of your credit hours and March 13, 2018, call (410) 502-9634 to confirm that you are registered. A You will receive a confirmation by e-mail. If you have not received it by

Printed Syllabus.....

materials, continental breakfasts, refreshment breaks and lunches. Methods of Payment: We require full payment prior to the start of the activity

https://HopkinsCME.cloud-cme.com/aph.aspx?P=5&EID=11139

provided. Johns Hopkins is smoke-tree. transportation for attendees staying at conference headquarters hotel will be parking is available in the nearby Rutland Garage. Complimentary round-trip Directions and campus parking information are available on our website under the Contact Us as at https://Hopkins/OME.cloud-cme.com. Handicapped The Turner Building is located on Rutland Avenue at Monument Street.

Thomas B. Turner Building, Johns Hopkins University School of Medicine, 720 Rutland Avenue, Baltimore, Maryland 21205

Monday, March 19, 2018 • 8:00 – 8:45a.m.

**LOCATION** 

**KECISTRATION** 

## Detailed disclosure will be made in the instructional materials.

speaker and provider globally disclose conflicts of interest. The Johns Hopkins University School of Medicine OCME has established policies in place that will identify and resolve all conflicts of interest prior to this educational activity. It is the policy of the Johns Hopkins University School of Medicine that the

#### POLICY ON SPEAKER AND PROVIDER DISCLOSURE tor non-physicians.

The Johns Hopkins University has approved this activity for 18.25 contact hours cation. Approval for the requested CEUs and Contact Hours is currently pending. (NGCC) for approval of Caregory 1 CEUs. The American Board of Genetic Counseling (ABGC) accepts CEUs approved by NSGC for purposes of recertifi-This event has been submitted to the National Society of Genetic Counselors

social workers in Maryland. Board of Social Work Examiners for continuing education credits for Incensed Hopkins University School of Medicine is an approved sponsor of the Maryland ducation for social workers and associates licensed in Maryland. The Johns meets the criteria for 18.25 credit hours of Category 1 or 1.8 CEUs of continuing The Maryland Board of Social Work Examiners certifies that this program State Board of Examiners of Psychologists as a provider of continuing education. The Johns Hopkins University School of Medicine maintains responsibility for this program. A certificate for 18.25 CEUs will be awarded upon completion of this activity. The Johns Hopkins University School of Medicine is authorized by the Maryland

18.25 AAPA Category 1 CME credits for completing this program. organizations accredited by ACCME. Physician assistants may receive a maximum of American Academy of Physician Assistants (AAPA) accepts certificates of participation for educational activities certified for AMA PRA Category 1 Credits Tim from

ACCME, Analysis of Credits in from organizations accredited by the American Academy of Nurse Practitioners National Certification Program American Nurses Credentialing Center (ANCC) accepts AMA PPA Category I Credits I'm from organizations accredited by the ACCME.

https://hopkinscme.cloud-cme.com/aph.aspx?P=5&EID=11139 For general information, please visit the activity webpage at

email: cmetechsupport@jhmi.edu Organization Code: HopkinsCME
For website and CloudCME mobile app technical difficulties, Check out our mobile app CloudCME.

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Register by Phone ₱£96-705 (0I₱) Register Online: https://hopkinscme.cloud-cme.com/aph.aspx?P=5&EID=11139

TO REGISTER OR FOR FURTHER INFORMATION

The Johns Hopkins University School of Medicine and Kennedy Fellows Association fully comply with the legal requirements of the ADA and the rules and regulations thereof. Please notify us if you have any special needs. AMERICANS WITH DISABILITIES ACT

## (410) 955-3673. Messages will be posted for participants.

On March 19-21, 2018, direct emergency calls to the Hopkins registration desk, EMERGENCY CALLS

## tearner's practice.

post activity to assist us in determining what impact this activity had on the An outcome survey will be sent to all physician attendees within two months your credits is May 5, 2018.

immediately available for print. The last day to access the evaluation and attest to Upon completion of the evaluation, the learner must attest to the number of hours in attendance. Credits earned will be added to the learner's transcript and activity and individual presentations and to identify future educational needs. Post activity, an online evaluation will be available to attendees to evaluate the

#### HOW TO OBTAIN CREDIT

provided. Check-in time is 3:00 p.m. Check-out time is 11:00 a.m. to receive the special group rate of \$179 for studio king or \$189 for a one bedroom double, plus tax. Complimentary roundtrip transportation will be provided Check is nigrated as the contraction of the c that you are attending the Johns Hopkins Developmental Disabilities group Make your reservation online at http://group.homewood-suites.com/ JohnsHopkinsDevelopmentDisabilies2018 or call the hotel directly and specify

will be available on a first-come, first-served basis. A limited block of sleeping rooms has been reserved for your convenience and

HOLEL RESERVATION CUT-OFF DATE: FEBRUARY 19, 2018

Baltimore, Maryland 21202 625 South President Street Homewood Suites by Hilton

FAX: (443) 392-9020

#### HOTEL AND TRAVEL INFORMATION

charge of \$20. Please indicate your attendance on the registration form. A complimentary reception for registrants and faculty will be held Monday, March 19, 2018, 5210 – 6:00p.m. Guests are invited to attend at an additional

#### **SOCIAL EVENT**

App prior to the activity.

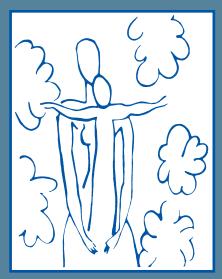
The syllabus will be accessible online and via your mobile device in the CloudCME print the syllabus. A printed copy may be ordered at the time of registration for an additional fee of \$35. The printed copy will be provided during activity registration. Cancellations or refunds for the printed copy will not be permitted. All registrants will receive a flash drive with the slides and paper for note-taking. This is included in the cost of your registration. A link to the syllabus will be provided via email shortly before the activity begins if you prefer to study or

in lieu of cancellation is not possible. Refund requests must be received by fax or mail by March 13, 2018. No refunds will be made thereafter. Transfer of registration to another Johns Hopkins activity in list of expellation is not possible.

## CONTINUING MEDICAL EDUCATION

# The 40th Annual

The Spectrum of Developmental Disabilities XL: The New Genetics: Implications for Neurodevelopmental Disabilities



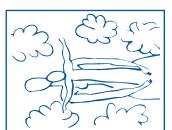
March 19-21, 2018 Johns Hopkins University School of Medicine Thomas B. Turner Building Baltimore, Maryland

Jointly Provided by Johns Hopkins University School of Medicine Division of Child Development, Department of Pediatrics

> Kennedy Fellows Association Kennedy Krieger Institute

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This activity has been approved for AMA PRA Category 1 Credits™.



Johns Hopkins University March 19-21, 2018 School of Medicine Baltimore, Maryland



The New Genetics: Implications for Neurodevelopmental Disabilities Developmental Disabilities XL: The Spectrum of Office of Continuing Medical Education 720 Rutland Avenue / Turner 20 Baltimore, Maryland 21205-2195



JOHNS HOPKINS

rk Your Calendar for **Pevelopmental Disabilities XLI** arch 18 - 20, 2019

March

Spectrum of De

M 1 M 1-	10, 2010	405 /50		2.25 / 12	AT 1 1 . LTS: Life.
Monday, March 1 Morning 8:00 - 8:45	Registration and Continental Breakfast	4:05 - 4:50	Genetic Counseling for NDD in an Evolving Theoretical Landscape Brenda Finucane, MS, LGC	3:25 - 4:10	Neurodevelopmental Disabilities in Neurofibromatosis Type 1: Bringing Genetic Research to Clinical Practic
8:45 - 9:00	Welcome with Conference Goals Bruce Shapiro, MD, Tina Cheng, MD, MPH and Gary Goldstein, MD	4:50 - 5:10	Questions and Answers All Afternoon Faculty	4:10 - 4:55	David H. Gutmann, MD, PhD  Sturge Weber: From the Clinic to the Gene
		5:10 - 6:00	Welcome Reception		Anne Comi, MD
FOUNDATION	S	Tuesday, March 20, 2018		4:55 - 5:25	Questions and Answers
Moderator: Brian I	Rogers, MD	Morning			All Afternoon Faculty
9:00 - 9:40	Genetics of NDD:	8:00 - 8:30	Continental Breakfast	Wednesday, Mar	ch 21, 2018
	It's Not as Simple as it Used to Be	NEURODEVELOPMENTAL DISORDERS:		Morning	
	S. Ali Fatemi, MD	GENETIC UND		8:00 - 8:30	Continental Breakfast
9:40 - 10:20	Genomics: Gateway to Individualized Medicine	Moderator: Mary Leppert, MB, BCh		CURE VS. MANAGEMENT:	
	Jonathan Pevsner, PhD	8:30 - 9:20	Epigenetics, Complex Traits, and Environment		AL OF GENETICS
10:20 - 10:40	Refreshment Break		Hans Bjornsson, MD	Moderator: Paul L	•
10:40 - 11:25	Genetics of Motor Disability:	9:20 - 10:10	The Genetics of Epilepsy	8:30 - 9:15	Hooking Up: Parent Support for Genetic and Rare Disorders
10:40 - 11:25	From DCD to CP	9:20 - 10:10	Ingo Helbig, MD		Sonal Desai, MGC, CGC
	Michael Kruer, MD	10:10 - 10:30	Refreshment Break	9:15 - 10:00	What's a Primary Care Provider to Do?
11:25 - 12:10	Newborn Screening in the Era of Medical	10:30 - 11:15	What Have We Learned From	7.17 10.00	Joann Bodurtha, MD, MPH
	Genomics Nicholas Katsanis, PhD		Syndromic Autism? Eric Morrow, MD, PhD	10:00 - 10:40	Tuberous Sclerosis Complex and Epilepsy: What's Next?
12:10 - 12:30	Questions and Answers	11:15 - 12:00	NDD Genetics: Molecular Pathways and		Kevin Ess, MD, PhD
	All Morning Faculty		Therapeutic Potential	10:40 - 11:00	Refreshment Break
12:30 - 1:30	Lunch		Michael V. Johnston, MD	11:00 - 11:45	Therapeutic Approaches to Genetic Disorder
Afternoon CLINICAL APPROACHES TO ETIOLOGY Moderator: Thomas Lock, MD		12:00 - 12:30	Questions and Answers All Morning Faculty	11.00 - 11.19	Symptomatic, Ameliorative, Curative Andrea Gropman, MD
		12:30 - 1:30	Lunch	11:45 - 12:30	The Kallikaks and the Jukes
1:30 - 2:15	Autism Behavioral and Endophenotypes:	Afternoon		11.4) - 12.50	Pasquale J. Accardo, MD
1.50 - 2.1)	Relevance for Specific Behavioral Treatment Strategies	NEW GENOMICS, OLD PHENOMICS		12:30 - 1:00	Questions and Answers
		Moderator: Scott Myers, MD			All Morning Faculty
	Travis Thompson, PhD	1:30 - 2:15	Fragile X: Linking the Clinical Manifestations	1:00	Adjourn
2:15 - 3:00	A Staged Evaluation to the Child With		Walter Kaufmann, MD	You will receive a	n email notification to complete the evaluation
	<b>Developmental Delay</b> Kristin Baranano, MD, PhD	2:15 - 3:05		form and to attest to the number of hours in attendance.	
3:00 - 3:20	Refreshment Break	George Capone, MD		The registration desk will remain open during conference hours.	
3:20 - 4:05	Unexpected Findings, Unknown Significance	3:05 - 3:25	Refreshment Break	The Johns Hopkins University School of Medicine takes responsibility for the content, quality and scientific integrity of this CME activity.  This schedule is subject to change.	
J.20 - 4:0)	and Informed Consent Julie S. Cohen, ScM, CGC				

#### ACTIVITY DIRECTOR

#### Bruce Shapiro, MD

Vice President of Training
Kennedy Krieger Institute
Arnold J. Capute MD, MPH Chair in
Neurodevelopmental Disabilities
Professor of Pediatrics
Johns Hopkins University School of Medicine

#### JOHNS HOPKINS AND KENNEDY KRIEGER FACULTY

#### Kristin Baranano, MD, PhD Assistant Professor of Neurology

Johns Hopkins University School of Medicine

#### Hans Bjornsson, MD

Assistant Professor of Pediatrics and Genetics Johns Hopkins University School of Medicine

## Joann Bodurtha, MD, MPH

Professor of Pediatrics McKusick-Nathans Institute of Genetic Medicine Johns Hopkins University School of Medicine

## George Capone, MD

Director, Down Syndrome Clinic Kennedy Krieger Institute Associate Professor of Pediatrics Johns Hopkins University School of Medicine

## Tina Cheng, MD, MPH

Director, Department of Pediatrics Given Foundation Professor of Pediatrics Johns Hopkins University School of Medicine Professor of Population, Family and Reproductive Health Johns Hopkins Bloomberg School of Public Health Pediatrician-in-Chief The Johns Hopkins Hospital

## Julie S. Cohen, ScM, CGC

Certified Genetic Counselor Kennedy Krieger Institute

#### Anne Comi, MD

Director, Hunter Nelson Sturge-Weber Center Associate Professor Neurology and Pediatrics Johns Hopkins University School of Medicine

#### Sonal Desai, MGC, CGC

Genetic Counselor Kennedy Krieger Institute

#### S. Ali Fatemi, MD

Director, Division of Neurogenetics and Moser Center for Leukodystrophies Kennedy Krieger Institute Associate Professor of Neurology and Pediatrics Johns Hopkins University School of Medicine

#### Gary Goldstein, MD

President and Chief Executive Officer Kennedy Krieger Institute Professor of Neurology and Pediatrics Johns Hopkins University School of Medicine

## Michael V. Johnston, MD

Blum Moser Chair for Pediatric Neurology Executive Vice President and Chief Medical Officer Kennedy Krieger Institute Professor, Neurology, Pediatrics and Physical Medicine and Rehabilitation Johns Hopkins University School of Medicine

## Mary Leppert, MB, BCh

Director, Center for Development and Learning Kennedy Krieger Institute Assistant Professor of Pediatrics Johns Hopkins University School of Medicine

## Paul Lipkin, MD

Director, Medical Informatics and Interactive Autism Network Kennedy Krieger Institute Associate Professor of Pediatrics Johns Hopkins University School of Medicine

## Jonathan Pevsner, PhD

Professor of Psychiatry and Behavioral Sciences Johns Hopkins University School of Medicine

## GUEST SPEAKERS

### Pasquale J. Accardo, MD

James H. Franklin Professor of Developmental Research in Pediatrics

Virginia Commonwealth University

#### Kevin Ess, MD, PhD

Associate Professor of Pediatrics and Neurology Gerald M. Fenichel Chair in Neurology Director, Pediatric Neurology Vanderbilt University Medical Center

#### Brenda Finucane, MS, LGC

Associate Director and Professor Autism and Developmental Medicine Institute Geisinger Health System

## Andrea Gropman, MD

Andrea Gropman, MD
Professor of Neurology and Pediatrics
The George Washington University School of Medicine and Health Sciences
Division Chief, Neurodevelopmental Disabilities and
Neurogenetics

## Children's National Health System David H. Gutmann, MD, PhD

Donald O. Schnuck Family Professor Vice Chairman for Research Affairs Department of Neurology Director, Neurofibromatosis Center Washington University School of Medicine

## Ingo Helbig, MD

Assistant Professor of Neurology and Pediatrics Perelman School of Medicine University of Pennsylvania and Children's Hospital of Philadelphia

## Nicholas Katsanis, PhD

Professor, Department of Cell Biology Director, Center for Human Disease Modeling Duke University School of Medicine

#### Walter Kaufmann, MD

Director, Center for Translational Research Ravenel Boykin Curry Chair in Genetic Therapeutics Professor of Neurology Greenwood Genetic Center Research Professor of Pediatrics University of South Carolina School of Medicine Adjunct Professor of Human Genetics Emory University School of Medicine

#### Michael Kruer, MD

Director, Pediatric Movement Disorders Program Barrow Neurological Institute, Phoenix Children's Hospital Associate Professor, Child Health, Cellular and Molecular Medicine, Neurology, and Genetics University of Arizona College of Medicine Phoenix

## Thomas Lock, MD Professor of Clinical

Professor of Clinical Pediatrics Director, Section of Developmental Pediatrics Indiana University School of Medicine Riley Hospital for Children

## Eric Morrow, MD, PhD

Associate Professor of Molecular Biology, Cell Biology and Biochemistry and Psychiatry and Human Behavior Brown University

## Scott Myers, MD

Clinical Associate
Professor of Pediatrics
Temple University School of Medicine
Neurodevelopmental Pediatrician
Autism and Developmental Medicine Institute

## Brian Rogers, MD

Professor of Pediatrics

Geisinger Health System

Professor of Pediatrics
Director, Institute on Development and Disability
Oregon Health and Science University

## Travis Thompson, PhD

Professor of Educational Psychology University of Minnesota

REGISTRATION FORM

Course Number 80044117/11139

The Spectrum of Developmental Disabilities XL • The I	lew Genetics: Implications for Neu	urodevelopmental Disabilities • <b>N</b>	March 19-21, 2018
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To Register: Online: https://hopkinscme.cloud-cme.com/aph.aspx?P=5&EID=11139

Fax: (866) 510-7088

Phone: (410) 502-9634

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Or mail this form to the Johns Hopkins University, Office of Continuing Medical Education, 720 Rutland

Avenue, Turner Room 20, Baltimore, Maryland 21205-2195. Include e-check or credit card information below. FULL PAYMENT IS REQUIRED PRIOR TO THE START OF ACTIVITY.

I am a Johns Hopkins speaker for this activity.

What do you hope to learn by attending this activity?\_\_\_ Please notify us if you have any special needs.\_\_\_\_\_

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city		state	ZIP + 4 code	country		
daytime telephone		fax number				
e-mail (required field)						
Check here if you wish to receive e-mail notices about upcoming CME activities.						
☐ I plan to stay at the Homewood Suites by Hilton in Baltimore, Maryland.						

Registration Fee:	\$545
Printed Syllabus:	\$35
The registration fee includes instructional materials at 5:00 p.m. ET on March 13, 2018, include a \$50 late	nd food and beverage. For registrations received after fee. On-site registrations are payable only by credit card.
	Total amount \$
Payment Type:	
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