Provided by:

Penn Medicine
Continuing Medical and
Interprofessional Education

**CCEB Epidemiology Seminar Series
2018-2020**

CCEB Epidemiology Seminar Series "Large-Scale Nonlinear Machine Learning: AI Meets Health"
November 21, 2019
9:00 AM - 10:00 AM

Target Audience
This program has been designed for Anesthesiology, Dermatology, Family Medicine, Pediatrics, Internal Medicine - Interventional Cardiology, Neurology, Ophthalmology, Psychiatry, Public Health And General Preventive Medicine, Internal Medicine - Pulmonary Disease, Internal Medicine - Rheumatology, Internal Medicine - Gastroenterology, Internal Medicine, Internal Medicine - Infectious Disease, Internal Medicine - Nephrology

Series Educational Objectives
After participating in this regularly scheduled series, participants should be able to:
1 Select appropriate targets for intervention to improve public health, using the results of clinical/health services/public health outcomes studies and methodological studies
2 Implement statistical techniques (e.g. logistic regression) with appropriate understanding of limitations and assumptions made.
3 Choose appropriate disease management goals (eg. Blood pressure target) for their individual patients, using the results of clinical/health services/public health outcomes studies and methodological studies.

Session Educational Objectives
After completing this educational activity, participants should be able to:
1 Designing nonlinear machine learning models to learn the associations between genotypes and phenotypes
2 Developing deep learning models for longitudinal biomedical data analysis

Accreditation
In support of improving patient care, Penn Medicine is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

Designation of Credit
Physicians: Penn Medicine designates this live activity for a maximum of **1.00** *AMA PRA Category 1 Credits*^{TM}. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Nurses: This activity is not approved for nursing contact hours

Pharmacists: This activity is not approved for pharmacy contact hours

PAs: AAPA accepts certificates of participation for educational activities certified for *AMA PRA Category 1 Credit™* from organizations accredited by ACCME or a recognized state medical society. PAs may receive a maximum of **1.00** Category 1 credits for completing this activity.

Acknowledgement of Commercial Support*

For more information, please contact
Catherine Mulvaney
(215) 573-4866
cmulvane@pennmedicine.upenn.edu

Check your transcript online at https://upenn.cloud-cme.com

None

Disclosure of Relevant Financial Relationships and Unapproved Uses of Products

It is policy at Penn Medicine Office of Continuing Medical and Interprofessional Education for individuals who are in a position to control the content of an educational activity to disclose to the learners all relevant financial relationships that they have with any commercial interest that provide products or services that may be relevant to the content of this continuing education activity. For this purpose, we consider relationships of the person involved to include financial relationships of a spouse or partner.

The intent of this policy is to ensure that Penn CME/CE certified activities promote quality and safety, are effective in improving medical practice, are based on valid content, and are independent of control from commercial interests and free of commercial bias. Peer review of all content was conducted for all faculty presentations whose disclosure information was found to contain relationships that created a conflict of interest relevant to the topic of their presentation. In addition, all faculty were instructed to provide balanced, scientifically rigorous and evidence-based presentations.

The staff in the Office of Continuing Medical and Interprofessional Education (CME and IPCE), have disclosed that they have no relevant financial relationships with any commercial interests related to the content of this educational activity. Any peer reviewer with a potential conflict of interest will recuse themselves from the peer review process.

Name of individual	Individual's role in activity	Name of commercial interest/Nature of relationship
Catherine Mulvaney, N/A	Activity Coordinator	Nothing to disclose
Robert Gross, MD	Course Director	DSMB member-Pfizer, Inc.-inflammatory bowel disease
Douglas Wiebe, PhD	Course Director	Nothing to disclose
Jinbo Chen, PhD	Other Planning Committee Member	Nothing to disclose
Marcella Devoto, PhD	Other Planning Committee Member	Nothing to disclose
Rui Feng, PhD	Other Planning Committee Member	Nothing to disclose
Steven Kawut, MD-FCBC	Other Planning Committee Member	Nothing to disclose
David Margolis, MD, PhD	Other Planning Committee Member	Advisor or Review Panel Member-Johnson and Johnson-Psoriasis|Advisor or Review Panel Member-Sanofi-Aventis-Atopic Dermatitis|Advisor or Review Panel Member-SK Pharma-Seizure Treatment|Grants/Research Support Recipient-Valeant-Atopic Dermatitis|Grants/Research Support Recipient-Sunovion-Seizure medication|Advisor or Review Panel Member-Pfizer, Inc.-atopic dermatitis and leg ulcers|Advisor or Review Panel Member-neuroderm-skin issues in parkinson's
Mary Putt, PhD	Other Planning Committee Member	Nothing to disclose

| Heng Huang, PhD | Faculty | Nothing to disclose |

Relevant financial relationships are those relationships in which the individual benefits by receiving a salary, royalty, intellectual property rights, consulting fee, honoraria, ownership interest (e.g., stocks, stock options or other ownership interest, excluding diversified mutual funds), or other financial benefit. Financial benefits are usually associated with roles such as employment, management position, independent contractor (including contracted research), consulting, speaking and teaching, membership on advisory committees or review panels, board membership, and other activities from which remuneration is received or expected