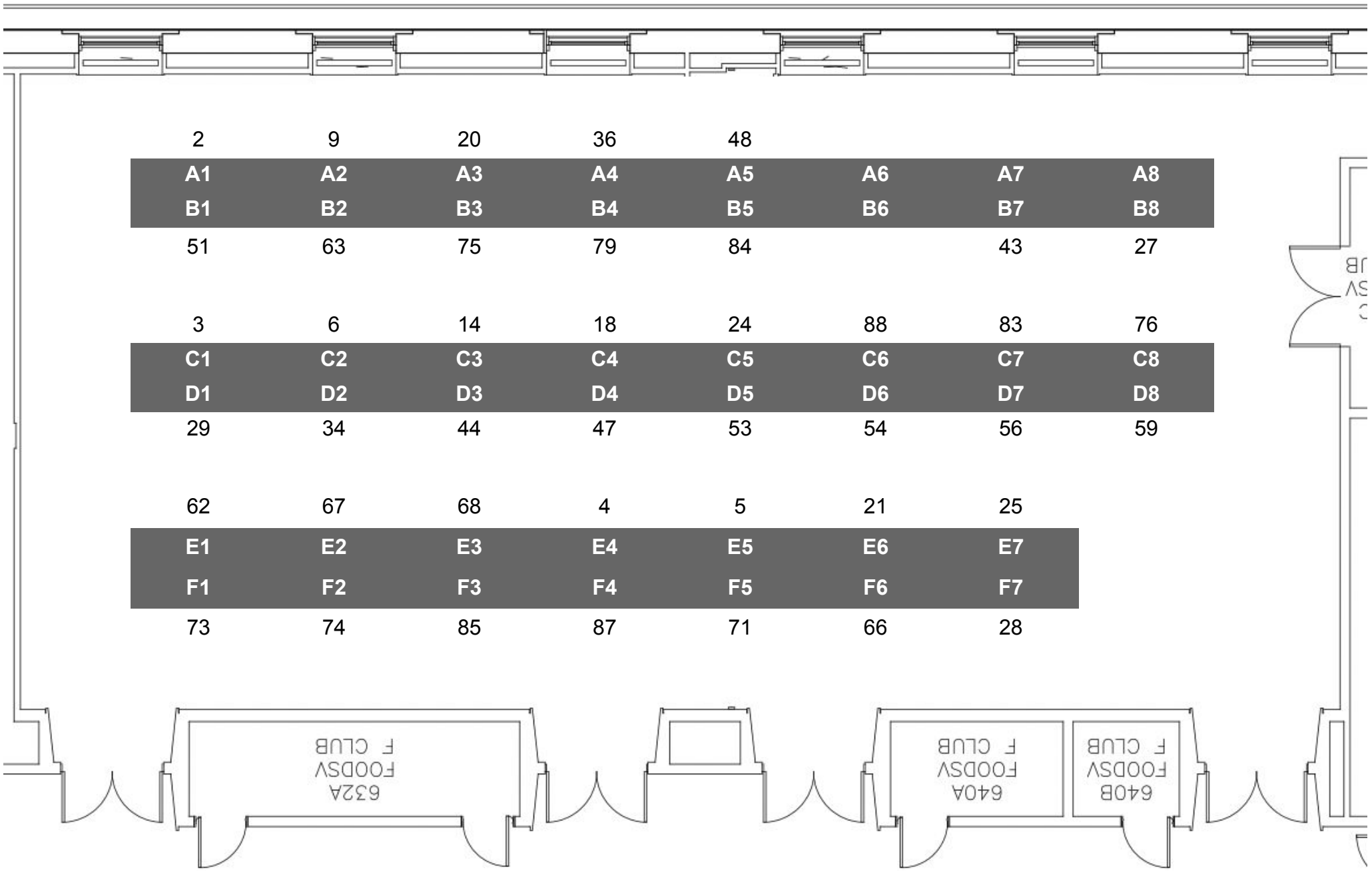
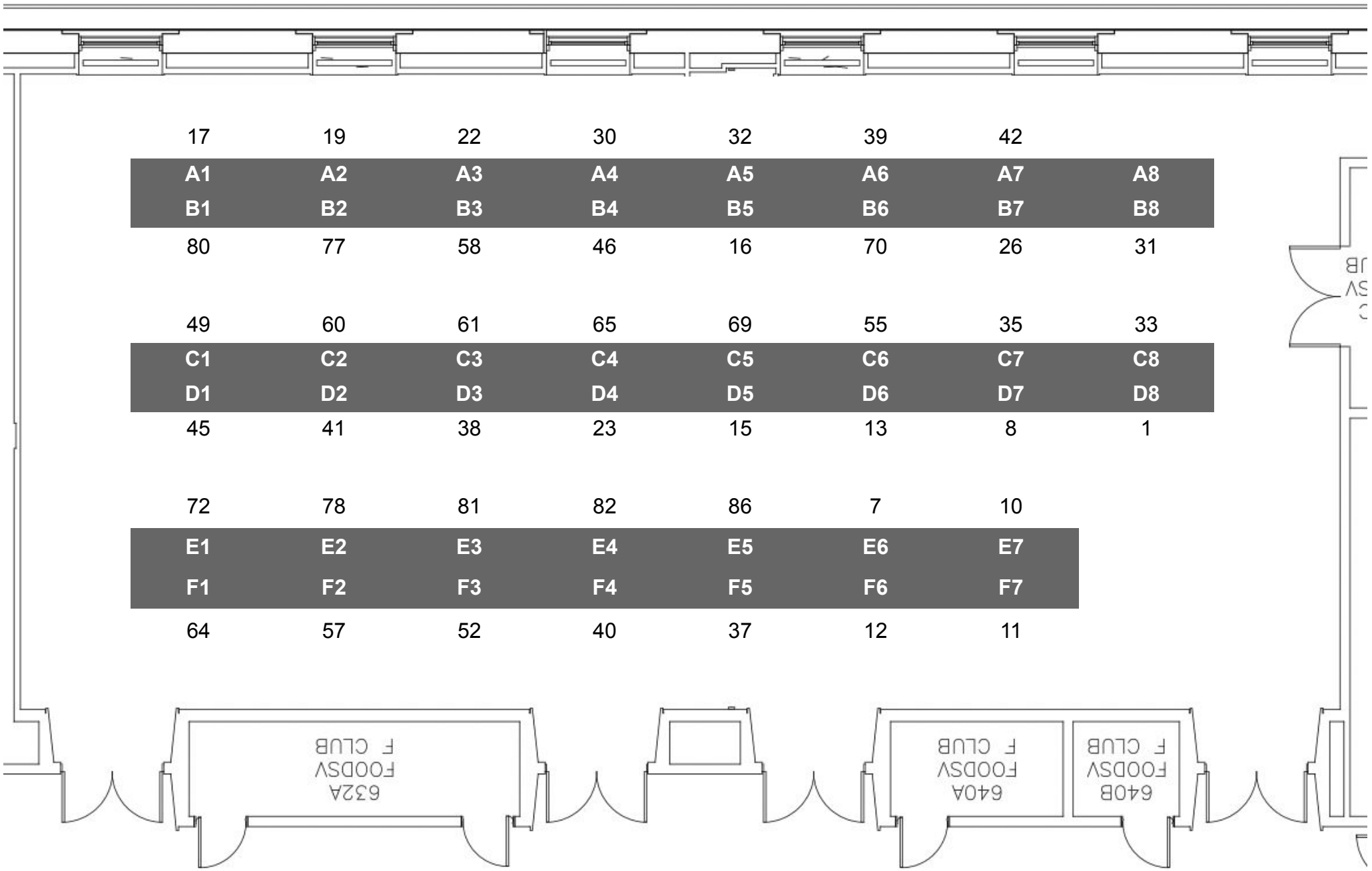
Block 1



Dining Rooms 3 and 4

Block 2



Dining Rooms 3 and 4

Block 1: Poster Booths

Poster ID	Booth	Title	Group
2	A1	A Cross-Modal Autoencoder Framework Learns Holistic Representations of Cardiovascular State	Adityanarayanan Radhakrishnan, Sam Freesun Friedman, Shaan Khurshid, Kenney Ng, Puneet Batra, Steven Lubitz, Anthony Philippakis, Caroline Uhler
3	C1	A Deep Autoencoder Model to Denoise Visual Fields in Glaucoma	Vishal Sharma, Lucy Shen, Tobias Elze, Min Shi, Louis Pasquale, Mengyu Wang
4	E4	A machine learning toolbox for breast oncology patients to better understand their clinical notes	Mercy N Asiedu, Irbaz Riaz, Niklas Mannhardt, Daniel Ajayi, Katie Liu, Alejandro Buendia, David Sontag
5	E5	A smart compression sleeve for lymphedema treatment	Joseph DelPreto, Elizabeth Hausman, Brooke Juhel, Amanda Jung, Cheryl Brunelle, Alphonse Taghian, Daniela Rus
6	C2	Affective Medical Estimation and Decision Making via Visualized Machine Learning	Mohammad Eslami, Solale Tabarestani, Ehsan Adeli, Glyn Elwyn, Tobias Elze, Nazlee Zebardast, Nassir Navab, Malek Adjouadi
9	A2	An Artificial Intelligence (AI) Model for Screening Computed Tomography (CT) Imaging for Thyroid Eye Disease and Optic Neuropathy	Soomin Jeon, Paul Zhou, Lisa Y. Lin, Jonathan Lu, Synho Do, Nahyoung Grace Lee
14	C3	Automated Segmentation of Sacral Chordomas and Surrounding Muscles Using Deep Learning Ensemble	Léonard Boussioux*, Yu Ma*, Nancy Thomas, Dimitris Bertsimas, Yen-Lin Chen, Nadya Shusharina, Jennifer Pursley, Thomas DeLaney, Jack Qian, Thomas Bortfeld

18	**C4**	Clustering Interval-Censored Time-Series for Disease Phenotyping	Irene Y. Chen, Rahul G. Krishnan, David Sontag
20	**A3**	Computer Software Modeling of Biomechanical Stress – Detailed Analysis of The Spine/ Hip Complex	Zacharia Isaac MD, David Binder MD, Danielle Sarno MD, Jay Zampini MD
21	**E6**	Decoding speech from human motor cortex using an intracortical brain computer interface	Daniel B. Rubin, Tommy Hosman, Anastasia Kapitonava, Ziv M. Williams, John D. Simeral, Sydney S. Cash, Leigh R. Hochberg
24	**C5**	Deep learning to evaluate metabolic risk in people with HIV	Jen Manne-Goehler, Tzu-Ming Harry Hsu, Peter Szolovits, Alex Goehler, Janet Lo
25	**E7**	Detecting Overwriting in Handwritten Digits	Angela Li, Randall Davis, Dana Penney
27	**B8**	Detection of OOD Clinical Notes with Local Manifold Smoothness	Nathan Ng, Neha Hulkund, Marzyeh Ghassemi
28	**F7**	Endomicroscopy with AI and physics-assisted design	Li-Yu Yu, Sixian You
29	**D1**	Enhancing patients' care using routinely collected single cell blood data: learning a joint distribution from marginals	Veronica Tozzo; John Higgins

34	**D2**	Falsification before Extrapolation in Causal Effect Estimation	Ming-Chieh Shih, Mike Oberst, Zeshan Hussein
36	**A4**	Generation of protein structures with deep learning	Jason Yim, Brian Trippe, Doug Tischer
43	**B7**	Improving the Fairness of Chest X-ray Classifiers	Haoran Zhang, Natalie Dullerud, Karsten Roth, Lauren Oakden-Rayner, Stephen Robert Pfohl, Marzyeh Ghassemi
44	**D3**	Inadventent Multimodal Signals As Indicators of Cognitive Health	Dana Penney, Randall Davis
47	**D4**	Integrated multimodal artificial intelligence framework for healthcare applications	Luis R. Soenksen, Yu Ma, Cynthia Zeng, Leonard D.J. Boussioux, Kimberly Villalobos Carballo, Liangyuan Na, Holly M. Wiberg, Michael L. Li, Ignacio Fuentes, Dimitris Bertsimas
48	**A5**	Integration of Spatial Transcriptomics with Chromatin Images Using Graph-Based Autoencoder Identifies Joint Biomarkers for Alzheimer's Disease	Xinyi Zhang, Xiao Wang, GV Shivashankar, Caroline Uhler
51	**B1**	Learning geometric motifs for fast protein-ligand screening	Menghua Wu, Wengong Jin, Regina Barzilay, Tommi Jaakkola
53	**D5**	Leveraging serial MRI radiomics and machine learning to stratify risk of radiation necrosis in patients with brain metastases managed with stereotactic radiation and immunotherapy	Hesham Elhalawani, Lubna Hammoudeh, Daphne Haas-Kogan, Ayal Aizer

54	**D6**	Leveraging Time-Irreversibility With Order-Contrastive Pretraining	Monica Agrawal, Hunter Lang, Michael Offin, Lior Gazit, David Sontag
56	**D7**	Machine Learning Delivers an Objective, Sensitive, and Accurate Measure of Itch and its Impact on Sleep	Michail Ouroutzoglou, Mingmin Zhao, Hariharan Rahul, Asima Badic, Brian Kim, Dina Katabi
59	**D8**	ML-driven antimicrobial stewardship for uncomplicated urinary tract infection	Sanjat Kanjilal, Michael Oberst, Sooraj Boominathan, Helen Zhou, David C Hooper, David Sontag
62	**E1**	Multimodal Learning of Prognostic Biomarkers in Sepsis	Wei Liao, Ching-Yun Ko, Tsui-Wei Weng, Luca Daniel, Joel Voldman
63	**B2**	Neural Pharmacodynamic State Space Modeling	Zeshan Hussain, Rahul G. Krishnan, David Sontag
66	**F6**	Optimizing Mental Healthcare for Older Adults: The Technology and Aging Lab at McLean Hospital	Hailey Cray M.P.H., Rebecca Dickinson B.S. B.A., Ipsit Vahia M.D.
67	**E2**	Predicting clinical outcomes associated with Sepsis to inform resource allocation in the ICU	Angela Lin, Omar Skali Lami, Dessislava Pachamanova, Georgia Perakis, Lien Hong Le
68	**E3**	Predicting Future Lung Cancer Risk with Low-dose Chest Computed Tomography	Peter G. Mikhael, Jeremy Wohlwend, Adam Yala, Justin Xiang, Angel K. Takigami, Patrick P. Bourgouin, PuiYee Chan, Sofiane Mrah, Lecia V. Sequist, Florian J. Fintelmann, Regina Barzilay

71	**F5**	Real-Time Arrhythmia Detection in Intensive Care Unit Using a Hybrid Convolutional Neural Network Approach	Sandeep Chandra Bollepalli, Rahul K. Sevakula, Wan-Tai M. Au-Yeung, Mohamad B. Kassab, Faisal M. Merchant, George Bazoukis, Richard Boyer, Eric M. Isselbacher, Antonis A. Armoundas
73	**F1**	Sensor-Based Characterization of Depression Studies: A collaboration between the MIT Media Lab and MGH Depression Clinical and Research Program	Szymon Fedor, Rosalind W. Picard, Paola Pedrelli
74	**F2**	Spurious Signal Correction in Medical Images with Disentangled Latent Space Generative Models	Qixuan Jin, Marzyeh Ghassemi
75	**B3**	Studying RNA Binding Proteins with Machine Learning	Felix Faltings, Jon Henninger, Ozgur Oksuz, Michael Yaffe, Rick Young, Regina Barzilay, Tommi Jakkola
76	**C8**	Syfer: Neural Obfuscation for Private Data Release	Adam Yala, Victor Quach, Homa Esfahanizadeh, Rafael G. L. D'Oliveira, Ken R. Duffy, Muriel Médard, Tommi S. Jaakkola, Regina Barzilay
79	**B4**	Tensor Based Framework for the Analysis of Tumor Microenvironment	Neriman Tokcan, Vignesh Shanmugam,Caroline Uhler, Todd Golub
83	**C7**	Understanding and Addressing the Usability Challenges of Machine Learning In Child Welfare Decision Making	Alexandra Zytek, Dongyu Liu, Rhema Vaithianathan, Warren Wang, Laure Berti-Equille, Kalyan Veeramachaneni
84	**B5**	Using Machine Learning to Understand Proteomic Subtypes of Medulloblastoma	Maxwell P. Gold, Veronika Pister, Noel Park, David Ghasemi, Raul Saurez, Andrew Masteller, Tobias Ehrenberger, Kristian Pajtler, Jennifer Cotter, Jill Mesirov, Scott Pomeroy, Robert Wechsler-Reya, Michael Taylor, Shawn Davidson, Ernest Fraenkel

85	**F3**	Utilizing Machine Learning for Risk Stratification of Intraductal Papillary Mucinous Neoplasms and associated cancer	Yasmin G. Hernandez-Barco, Avinash Kambadakone, Itamar Chinn, Ignacio Fuentes Ribas
87	**F4**	Wireless Seismocardiography: Enabling Long-Term Non-Contact Cardiovascular Monitoring	Unsoo Ha, Sohrab Madani, Fadel Adib
88	**C6**	Write it like you see it: Detectable differences in clinical notes by race lead to differential model recommendations	Hammaad Adam, Ming Ying Yang, Kenrick Cato, Charles Senteio, Marzyeh Ghassemi

Block 2: Poster Booths

Poster ID	Booth	Title	Group
1	**D8**	A Computational Approach to Cognitive Disease Diagnosis Through Delayed Recall Performance	Evan Kim, Randall Davis, Dana Penney
7	**E6**	AI-informed real-time speech prosthesis for neurological voice and speech disorders	Stefan K. Ehrlich, Kristina Simonyan
8	**D7**	An AI system to diagnose ischemic heart disease from reduced-lead electrocardiogram data	Hui Ren, Qiong Zhou Huang, Jeongwan Koh, Dufan Wu, Quanzheng Li, Dimitrios Pantazis
10	**E7**	An Artificial Intelligence-based Surgical Guardian System	Yutong Ban, Jennifer A. Eckhoff, Guy Rosman, Daniel A. Hashimoto, Ozanan Meireles and Daniela Rus

11	**F7**	Artificial Intelligence Detects Parkinson's Disease and its Severity from Nocturnal Breathing	Yuzhe Yang, Yuan Yuan, Guo Zhang, Hao Wang, Ying-Cong Chen, Yingcheng Liu, Christopher G. Tarolli, Daniel Crepeau, Jan Bukartyk, Mithri R. Junna, Aleksandar Videnovic, Terry D. Ellis, Melissa C. Lipford, Ray Dorsey, Dina Katabi
12	**F6**	Assessing Parkinson's Disease at Home: Contactless Monitoring of Disease Severity, Progression, and Medication Response Using Radio Signals	Yingcheng Liu, Guo Zhang, Christopher G. Tarolli, Rumen Hristov, Stella Jensen-Roberts, Emma M. Waddell, Taylor L. Myers, Meghan E. Pawlik, Julia M. Soto, Renee M. Wilson, Yuzhe Yang, Timothy Nordahl, Karlo J. Lizarraga, Jamie L. Adams, Ruth B. Schneider, Karl Kieburtz, Terry Ellis, Ray Dorsey, Dina Katabi
13	**D6**	Augmenting existing deterioration indices with chest radiographs to predict clinical deterioration	Emily Mu, BSE, MEng; Sarah Jabbour, BSE, BBA; Adrian V. Dalca, PhD; John Guttag, PhD; Jenna Wiens, PhD; Michael W. Sjoding, MD, MSc
15	**D5**	Biologically Interpretable Representation Learning Algorithms for Characterizing and Predicting Cancer Immunotherapy Resistance	Ifrah Tariq, Bracha Laufer-Goldshtein, Ernest Fraenkel
16	**B5**	Calibrated Selective Prediction	Adam Fisch, Tommi Jaakkola, Regina Barzilay
17	**A1**	Capturing Brain Disease Mechanisms within Genetic and Environmental Diversity	Philippe Habets, Aarti Jajoo, Constantinos Daskalakis, Nikolaos Daskalakis
19	**A2**	Computational approaches to identify ALS disease signatures from multi-omic data in a heterogeneous patient population	Stanislav Tsitkov*, Velina Kozareva*, Answer ALS Consortium, Ernest Fraenkel
22	**A3**	Deep learning for identifying new synergistic drug combinations	Wengong Jin, Jonathan M Stokes, Richard T Eastman, Zina Itkin, Alexey V Zakharov, James J Collins, Tommi S Jaakkola, Regina Barzilay

23	**D4**	Deep learning MRI-based model for prediction of clinically significant prostate cancer	Keyan Salari, Harrison Le, Janice Yang, Peter Mikhael, Mukesh Harisinghani, Regina Barzilay
26	**B7**	Detecting the Effects of Proxies on Bias in Clinical Algorithms	Vinith M. Suriyakumar, Marzyeh Ghassemi
30	**A4**	EquiBind: Geometric Deep Learning for Drug Binding Structure Prediction	Hannes Stärk*, Octavian Ganea*, Lagnajit Pattanaik, Regina Barzilay, Tommi Jaakkola
31	**B8**	Evaluating Machine Learning for “Loophole” Detection and Decisions in Healthcare Settings	Aparna Balagopalan, Tom Hartvigsen, Marzyeh Ghassemi
32	**A5**	Evolution Prediction by Deep Generative Model	Wenxian Shi, Ryan Tso, Jonathan Stokes, and Regina Barzilay
33	**C8**	Fair Organ Allocation	Hammaad Adam, Rene Bermea, Mingying Yang, Leo Celi, Marzyeh Ghassemi
35	**C7**	Finding Regions of Heterogeneity in Decision-Making via Expected Conditional Covariance	Justin Lim, Christina X Ji, Michael Oberst, Saul Blecker, Leora Horwitz, David Sontag
37	**F5**	Graphene-Lined Porous Gelatin Glycidyl Methacrylate Hydrogels: Implications for Tissue Engineering	Sina Sharifi, Hannah Sharifi, Ali Akbari, Claes H Dohlman, Eleftherios I Paschalis, Miguel Gonzalez-Andrades, Jing Kong, James Chodosh

38	**D3**	High Fidelity Medical Image-to-Image Translation with Spatial-Intensity Transforms	Clinton J. Wang, Natalia S. Rost, Polina Golland
39	**A6**	Hyperbolic graph embedding of magnetoencephalography brain networks to study brain alterations in patients with subjective cognitive decline.	Cole Baker, Isabel Suarez-Mendez, Fernando Maestu, Dimitrios Pantazis, Mengjia Xu
40	**F4**	iBOCA: iPad App for Cognitive Testing	Kalyan Veeramachaneni, Seth Amarasinghe, Sana Chowdhry, Alexandra Zytek, Frances Hartwell
41	**D2**	Identifying Metabolite Spectral Patterns that Reflect Outcome after Cardiac Arrest Using Machine Learning	Marcia Sahaya Louis, Jong Woo Lee, Huijun Vicky Liao, Ajay Joshi , Rohit Singh , Alexander Lin
42	**A7**	ImageOmicsNet: Linking Imaging with Genomics through Machine Learning	Koseki J. Kobayashi-Kirschvink, Charles S. Comiter, Aviv Regev, Jian Shu
45	**D1**	Inferring pulmonary capillary wedge pressure from minimally invasive measurements	Aniruddh Raghu, Daphne Schlesinger, Eugene Pomerantsev, John Guttag, Collin Stultz
46	**B4**	Influence of auditory brainstem implant (ABI) position on perception: a multi-center study	Alejandro Garcia, MD; Sonja Poe; Afash Haleem; Victor Adenis, PhD; M. Christian Brown, PhD; Barbara S. Hermann, PhD; Daniel J. Lee, MD, FACS
49	**C1**	Learning Dynamic Treatment Regimes from Observational Health Data	Li-wei Lehman, Zach Shahn

52	**F3**	Learning-based high-speed programmable light source for label-free in vivo imaging	Tong Qiu, Artem Gazizov, Sixian You
55	**C6**	Local Explanations for Clinical Risk Scores	Yuria Utsumi, Hussein Mozannar, Irene Chen, David Sontag
57	**F2**	Machine Learning Driven User Interfaces for Electronic Health Records	Monica Agrawal, Luke Murray, Divya Gopinath, Steven Horng, David Karger, David Sontag
58	**B3**	Machine Learning Tools for Analyzing the Development of Cellular-scale Neuronal Networks in Health and Disease	Susanna B. Mierau, Erik Hemberg, Una-May O'Reilly
60	**C2**	Multi-Task Partially Convolutional Networks for Artifacts Imputation in Retinal Nerve Fiber Layer Thickness Maps	Min Shi, Lucy Shen, Tobias Elze, Vishal Sharma, Louis Pasquale, Mengyu Wang
61	**C3**	Multimodal Artificial Intelligence for Chest Pathology Diagnosis	Luis R. Soenksen*, Yu Ma*, Cynthia Zeng*, Léonard Boussioux*, Kimberly Villalobos Carballo*, Liangyuan Na*, Holly M. Wiberg, Michael L. Li, Ignacio Fuentes, Dimitris Bertsimas
64	**F1**	omop-learn: An open-source library for deep contextual clinical prediction on longitudinal medical data	Alejandro Buendia, Hunter Lang, Neil Dixit, Rohan Kodialam, Rebecca Boiarsky, Justin Lim, Aditya Sai, David Sontag
65	**C4**	Online Patient Operational Characteristics Predictions with Integrated Multimodal Machine Learning Frameworks	Luis R. Soenksen, Yu Ma, Cynthia Zeng, Leonard D.J. Boussioux, Kimberly Villalobos Carballo, Liangyuan Na, Holly M. Wiberg, Michael L. Li, Ignacio Fuentes, Dimitris Bertsimas, Ali Haddad-Sisakht, Kyle Maulden, Yi Wang, Yiwen Zhang, Barry Stein, Daniel Kombert, Andrew Castiglione, Melissa Boisjoli-Langlois, Maram Khalifa, Pooja Hebbal

69	**C5**	Quantifying Common Support between Multiple Treatment Groups Using a Contrastive-VAE	Wangzhi Dai, Collin M. Stultz
70	**B6**	Quantifying Inequality in Underreported Conditions	Divya Shanmugam, Emma Pierson
72	**E1**	RHCnet: A deep learning model for inferring elevated pulmonary capillary wedge pressures from the 12-lead electrocardiogram	Daphne E. Schlesinger, Nathaniel Diamant, Aniruddh Raghu, Erik Reinertsen, Katherine Young, Puneet Batra, Eugene Pomerantsev, and Collin M. Stultz
77	**B2**	T-cell Target Prediction Guiding Disease Detection and Monitoring	Nitan Shalon, Jeremy Wohlwend, Regina Barzilay
78	**E2**	Teaching Humans When To Defer to a Classifier via Exemplars	Hussein Mozannar, Arvind Satyanarayan, David Sontag
80	**B1**	Torsional Diffusion for Molecular Conformer Generation	Gabriele Corso, Bowen Jing, Regina Barzilay, Tommi Jaakkola
81	**E3**	Towards Development, Validation, and Clinical Translation of Automated Segmentation for Vestibular Schwannomas	Krish Suresh MD, Ryan Bartholomew MD, Bradley Welling, MD PhD, Matthew Crowson MD MPA MASc FRCSC
82	**E4**	Uncovering the important acoustic features for detecting vocal fold paralysis with explainable machine learning	Daniel M. Low, Vishwanatha Rao, Gregory Randolph, Phillip C. Song*, Satrajit S. Ghosh*

86	**E5**	Validating Clinical Dead-ends Across Multiple Sites	Taylor Killian, Marzyeh Ghassemi