

**RECOMB/ISCB
Conference on
Regulatory and Systems Genomics
with DREAM Challenges**



**NYU Langone Health
New York, New York**

December 8-10, 2018

Program Booklet

DREAM Schedule

Saturday - Day 1 – December 8, 2018

START TIME	END TIME	SESSION TYPE
REGISTRATION 8:00am - 5:00pm Location: Science Building, top of the stairs		
All DREAM Day talks to occur in Schwartz Lecture Hall		
8:40 am	9:00 am	Welcome and Introductory Remarks. Pablo Meyer and Gustavo Stolovitzky
Submitted Abstracts		
9:00 am	9:15 am	Mi Yang <i>Target functional similarity based workflows for drug synergy prediction and stratification</i>
9:15 am	9:30 am	Lenore Cowen <i>The Disease Module Identification DREAM Challenge: An Update</i>
9:30 am	9:45 am	Michael Banf <i>Enhancing gene regulatory network inference through data integration with markov random fields</i>
9:45 am	10:25 am	Keynote - Daphne Koller <i>A fireside chat</i>
10:25 am	10:55 am	Coffee Break with Posters Location: Smilow Cafe and Science Building 1st Floor
Challenge Updates		
10:55 am	11:10 am	Andrew Gentles <i>Tumor Deconvolution DREAM Challenge</i>
11:10 am	11:25 am	Pei Wang <i>A precision FDA NCI-CPTAC Multiomics Mislabeling Challenge</i>
11:25 am	11:40 am	Geoffrey Siwo <i>Malaria Challenge</i>
11:40 am	11:55 am	Anna Cichonska <i>IDG-DREAM Drug-Kinase Binding Prediction Challenge</i>
11:55 am	1:10 pm	Keyvan Farahani, Percio S. Gulko, David Gutman, Amber Simpson <i>The Challenge of Imaging Challenges: A Panel Discussion</i>
1:10 pm	2:25 pm	Lunch on Own
Multi-Targeting Drug DREAM Challenge		
2:25 pm	3:05 pm	Keynote - Ross Cagan <i>A Fly DREAM</i>
3:05 pm	3:25 pm	Challenge Overview Talk
3:25 pm	3:45 pm	Minji Jeon Best Performance Talk
3:45 pm	4:10 pm	Coffee Break with Posters Location: Smilow Cafe and Science Building 1st Floor
Single-Cell Transcriptomics Challenge		
4:10 pm	4:30 pm	Shengbao Suo <i>Revealing the critical regulators of cell identity in the mouse cell atlas</i>
4:30 pm	4:50 pm	Nikolaus Rajewsky Single-Cell Transcriptomics Overview
4:50 pm	5:00 pm	Pablo Meyer, Jovan Tanevski Best Performer Announcements and Scoring Approach
5:00 pm	5:20 pm	Thin Nguyen Best Performer Talk 1
5:20 pm	5:40 pm	Peng Qiu Best Performer Talk 2
5:40 pm	6:00 pm	Chang Shu, Xiaoyu Liang Best Performer Talk 3
6:00 pm	7:00 pm	Dream Reception and Posters Location: Smilow Cafe and Science Building 1st Floor

Abstracts are available at:

https://www.iscb.org/cms_addon/conferences/rsg2018/abstracts.php?trackname=dream

RSG Schedule

Sunday – Day 2 – December 9, 2018

START TIME	END TIME	SESSION TYPE
REGISTRATION 8:00am - 5:00pm Location: Science Building, top of the stairs		
All RSG Day talks to occur in Farkas Auditorium		
9:00 am	9:15 am	Welcome
9:15 am	10:00 am	Keynote - Aravinda Chakravarti
10:00 am	10:15 am	Anat Kreimer, Fumitaka Inoue, Tal Ashuah, Nadav Ahituv and Nir Yosef <i>Massively parallel characterization of regulatory dynamics during neural induction</i>
10:15 am	10:30 am	Tobias Zehnder, Philipp Benner and Martin Vingron <i>Predicting enhancers in mammalian genomes using supervised hidden Markov models</i>
10:30 am	10:45 am	William Lai, Kylie Bocklund, Kate Mistretta and B Franklin Pugh <i>Methods of defining "success" in ChIP-seq/exo experiments</i>
10:45 am	11:15 am	Coffee Break with Posters Location: Smilow Cafe and Science Building 1st Floor
11:15 am	11:30 am	Alireza Fotuhi Siahipirani, Rupa Sridharan and Sushmita Roy <i>Incorporating noisy prior networks for estimating latent transcription factor activities and inferring genome-scale regulatory network in yeast and mammalian systems</i>
11:30 am	11:45 am	Amir Alavi, Matthew Ruffalo, Aiyappa Parvangada, Zhilin Huang and Ziv Bar-Joseph <i>scQuery: a web server for comparative analysis of single-cell RNA-seq data</i>
11:45 am	12:30 pm	Keynote - Shirley Liu
12:30 pm	2:00 pm	Lunch on Own
2:00 pm	2:15 pm	Special Session Welcome
2:15 pm	3:00 pm	Keynote - Peter Kharchenko <i>Analysis of transcriptional dynamics with single-cell transcriptomics</i>
3:00 pm	3:15 pm	Florian Wagner and Itai Yanai <i>Moana: A Robust and Scalable Cell Type Classification Framework for Single-cell RNA-Seq Data</i>
3:15 pm	3:30 pm	Joseph A. Wayman, Diep Nguyen, Peter DeWeirdt, Bryan D. Bryson and Emily R. Miraldi <i>Benchmarked methods for transcriptional regulatory network inference from single-cell RNA-seq data</i>
3:30 pm	3:45 pm	Gunsagar Gulati, Shaheen Sikandar, Daniel Wesche, Anjan Bharadwaj, Anoop Manjunath, Francisco Ilagan, Mark Berger, Michael Clarke and Aaron Newman <i>Robust Reconstruction of Single Cell Differentiation Trajectories using CytoTRACE</i>
3:45 pm	4:15 pm	Coffee Break with Posters Location: Smilow Cafe and Science Building 1st Floor
4:15 pm	4:30 pm	Qian Zhu, Sheel Shah, Ruben Dries, Long Cai and Guo-Cheng Yuan <i>Decomposing spatially dependent and cell type specific contributions to cellular heterogeneity</i>
4:30 pm	4:45 pm	Nelson Johansen and Gerald Quon <i>Characterizing cell type-specific responses to stimuli using single cell RNA sequencing</i>
4:45 pm	5:30 pm	Keynote - Miriam Merad
5:30 pm	7:00 pm	Reception with poster viewing Location: Smilow Cafe and Science Building 1st Floor

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RSG Schedule

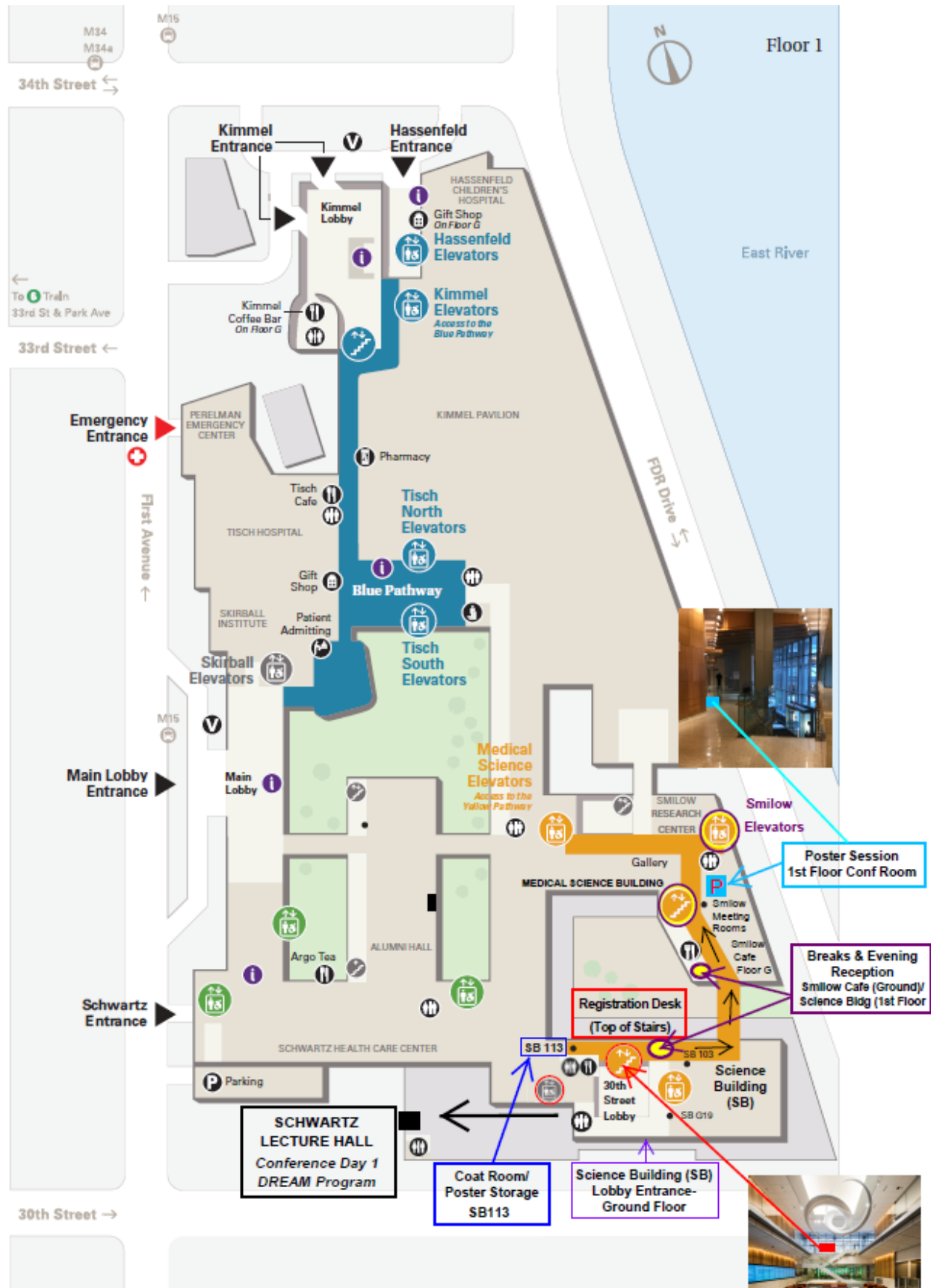
Monday – Day 3 – December 10, 2018

START TIME	END TIME	SESSION TYPE
REGISTRATION 8:00am - 5:00pm Location: Science Building, top of the stairs		
All RSG Day talks to occur in Farkas Auditorium		
9:00 am	9:15 am	Special Session Welcome
9:15 am	10:00 am	Keynote - Adam Siepel <i>An evolutionary framework for measuring epigenomic information and estimating cell-type specific fitness consequences</i>
10:00 am	10:15 am	Akpele Nordor, Martin Aryee and Geoffrey Siwo <i>Predicting interactions between small molecules and genome editing technologies</i>
10:15 am	10:30 am	Gregory Nuel, Flaminia Zane, Andrea Rau and Florence Jaffrezic <i>Clustering of Directed Acyclic Graphs in Systems Biology</i>
10:30 am	10:45 am	Peter Koo, Praveen Anand, Steffan Paul and Sean Eddy <i>Inferring Sequence-Structure Preferences of RNA-Binding Proteins with Convolutional Residual Networks</i>
10:45 am	11:15 am	Coffee Break with Posters Location: Smilow Cafe and Science Building 1st Floor
11:15 am	11:30 am	Jingyi Jessica Li, Guo-Liang Chew and Mark Biggin <i>Principles of cis-translational control by general mRNA features in a yeast, a plant and a mammal</i>
11:30 am	11:45 am	Svetlana Shabalina <i>Complexity and evolution of the mammalian transcriptome: the architecture of alternative transcription and splicing</i>
11:45 am	12:30 pm	Keynote - Itai Yanai <i>Single-cell and spatial gene expression analysis of tumorigenesis</i>
12:30 pm	2:00 pm	Lunch on Own
2:00 pm	2:45 pm	Keynote - Bing Ren <i>Functional Organization of the Human Genome</i>
2:45 pm	3:00 pm	Shahin Mohammadi, Jose Davila-Velderrain and Manolis Kellis <i>Systems biology of schizophrenia at single-cell resolution</i>
3:00 pm	3:15 pm	Federica Eduati, Ramesh Utharala, Patricia Jaaks, Mathew Garnett, Thorsten Cramer, Christoph Merten and Julio Saez-Rodriguez <i>Combining microfluidics and mathematical modelling for prioritisation of personalised cancer treatments from patient biopsies</i>
3:15 pm	3:30 pm	Lu Cheng, Siddharth Ramchandran, Tommi Vatanen, Juho Timonen, Niina Lietzen, Riitta Lahesmaa, Aki Vehtari and Harri Lähdesmäki <i>An additive Gaussian process regression model for interpretable probabilistic non-parametric analysis of longitudinal data</i>
3:30 pm	4:00 pm	Coffee Break with Posters Location: Smilow Cafe and Science Building 1st Floor
4:00 pm	4:15 pm	Jonathan Warrell, Daifeng Wang, Shuang Liu, Hyejung Wong, Xu Shi, Fabio Navarro, Declan Clarke, Mengting Gu, Prashant Emani and Mark Gerstein <i>Interpretable Deep-learning for Multilevel Models of Psychiatric Disorders</i>
4:15 pm	4:30 pm	Hatice Osmanbeyoglu, Fumiko Shimizu, Angela Rynne-Vidal, Tsz-Lun Yeung, Petar Jelinic, Samuel Mok, Gabriela Chiosis, Douglas Levine and Christina Leslie <i>Chromatin-informed inference of transcriptional programs in gynecologic and basal breast cancers</i>
4:30 pm	5:15 pm	Keynote - Ana Pombo
5:30 pm	7:00 pm	Reception with poster viewing Location: Smilow Cafe and Science Building 1st Floor

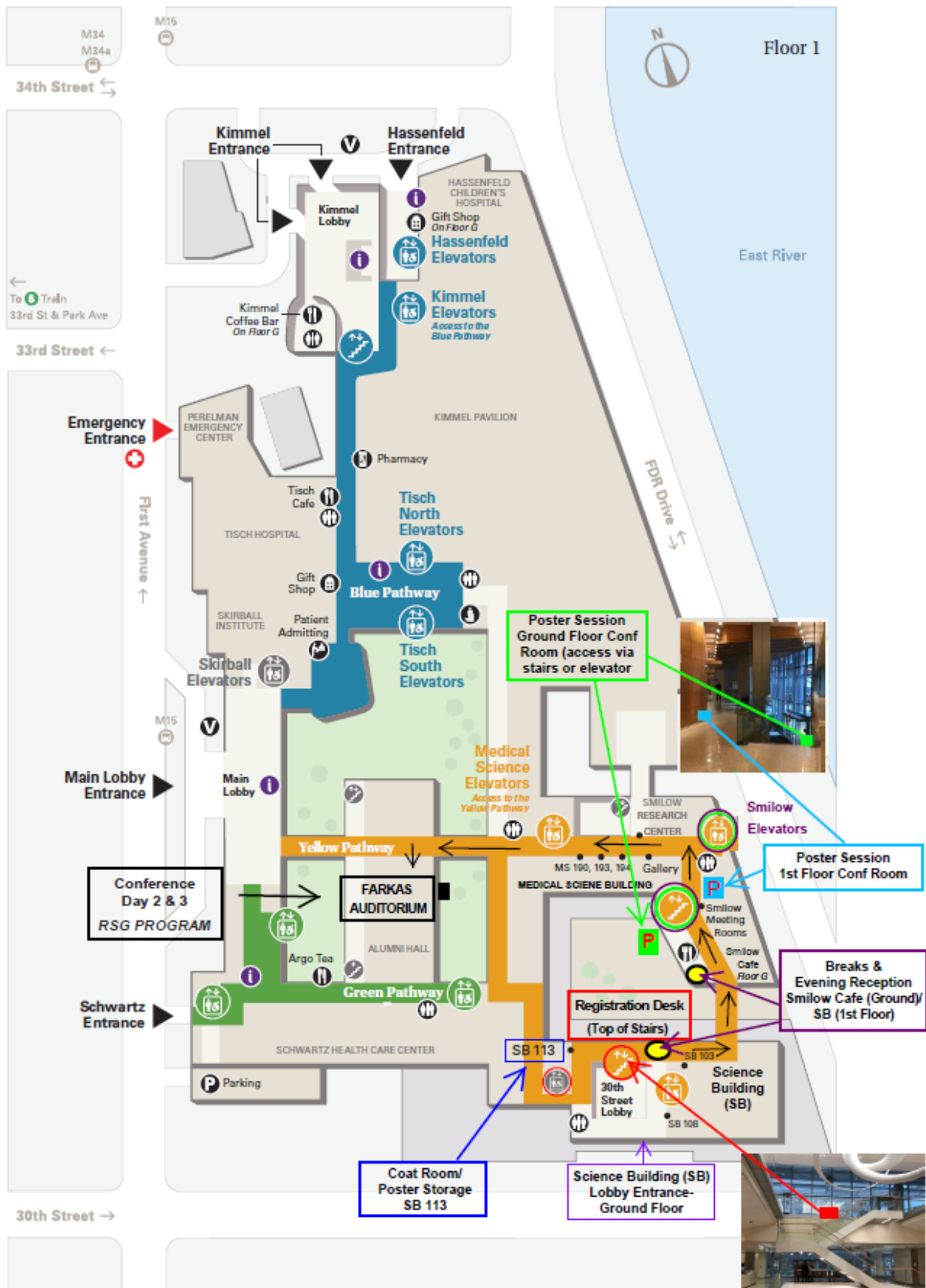
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DREAM DAY MAP



RSG DAYS MAP



WiFi Information

How to access the guest wireless network:

1. On your mobile phone, the user should select the “ NYULHguest” SSID to associate with the guest ssid.
2. If the user is not automatically redirected to the portal registration web page, have the user go to his internet web browser and type in any website url.
3. This should trigger a redirect to the “NYULHguest” ssid web Portal login/registration page.
- If the registration page doesn't open up automatically, please try to open a browser and try going to google.com or yahoo.com and it should redirect to the registration page
4. The user, if an employee, can either enter their NYULHealth Kerberos ID and password combination to login, or else register for a new guest account to login to NYULHguest SSID on this page. (See picture below)
5. Completely fill out the form presented on this page. Enter your cellphone number and the cellphone's carrier (i.e ATT, Verizon, Sprint. etc.). Please do not enter a landline phone number, as this won't allow you to receive your login credentials via text. A text message containing the username and password to login to “NYULHguest” SSID will be sent to you as a text message to the cellphone number provided, as well as to the email address provided.
6. Once you receive your account credentials, go back to the portal page and enter the username and password combination that was provided to you via the text message and or email in order to login into “NYULHguest” ssid.

Note: If you login successfully, you should now be redirected to the NYULHealth landing page.

7. From here, you can enter any website url to surf the Internet.
8. The guest network is restricted above the employee network; users will not be able to connect to any VPN network or might be blocked to certain website/work due to firewall restrictions. We can't change this or send in a request to change it.
9. If the user is an employee of NYU, make sure they connect to the LMCMobile wireless network instead to access the network/features.

Note: NYULHguest only allows the user to stay logged in for 30 days. They will automatically be logged off the network after that time period and will have to re-register.

If you can't resolve the issue, send the incident to the deskside team for assistance.

International Attendees – Please stop by the registration desk for a WiFi Login and password.

NOTES