Icahn School of Medicine at Mount Sinai

DENNIS S. CHARNEY, M.D. Dean

October 1, 2015





Growth in Faculty

2013:



The full-time faculty has grown by 56% since creation of the Mount Sinai Health System in

	Full	Time Faculty	Counts	
Year	2013	2014	2015	Increase 2013-2015
Count	2,042	2,753	3,178	+1,136

889 physicians and scientists at Mount Sinai Beth Israel, Mount Sinai Roosevelt, Mount Sinai St. Luke's, New York Eye and Ear at Mount Sinai are now on the ISMMS full-time faculty.

Continued faculty growth is expected in 2016:

- Hundreds of additional member hospital physicians will join Mount Sinai Doctors Faculty Practice
- Faculty recruitment for all locations will continue



New Appointments

Deans:

Dean for Academic Development & Enrichment Dean for Translational Biomedical Research

System Chairs:

Neurology Orthopedics Preventive Medicine

Institute Directors: Clinical Diabetes CONDUITS Global Health Personalized Medicine Primary Care Institute Systems Biomedicine Translational Epidemiology

SINA Innovations



Lakshmi Devi, PhD Rosalind Wright, MD

Barbara G. Vickrey, MD Leesa Galatz, MD Robert Wright, MD

Ronald Tamler, MD Rosalind Wright, MD Prabhjot Singh, MD Judy Cho, MD Roy Cohen, MD Ravi Iyengar, PhD Emanuela Taioli, MD PhD



Quality



Best Doctors in NY

241 Doctors in New York's Magazine's list (includes doctors in MSHS)
An additional 34 physicians from affiliated hospitals were also on the list
The 275 doctors represent 21% of the 1,282 on the list
8 specialties within the MSHS were ranked in the Top 25

NIH Funding Rank

Funding increased from 2014 by >7% from \$247M to \$265M in 2015

AAMC Rank

U.S. Medical Schools (AAMC) 2015 #2 Research Dollars/Principal Investigator

Major Awards/Grants:

- Tisch Cancer Center is now NIH-NCI Designated Cancer Center
- NIH Clinical Translational Science Award (CTSA) for Institutes for Translational Sciences

ISSMS received **2015 Higher Education Excellence in Diversity (HEED) Award** from *INSIGHT Into Diversity* magazine-the oldest and largest diversity-focused publication in Higher Education

SINA Innovations

MD Students-Matriculating Class of 2015



•	Number of Complete Applications	4,860
•	Number of Interviews	771
•	Size of Class	140
•	MD/PhD	13
•	Early Assurance	33
•	Women	52%
•	Under-represented in Medicine	19%
•	Median MCAT	35
•	Median GPA	3.82
•	Number of Undergraduate Schools	58



MD/PhD Students-Matriculating Class of 2015



•	Number of Complete Applications	326
•	Size of Class	13
•	Women	23%
•	URM	13%
•	Median MCAT	37
•	Median GPA	3.90
•	Number of Undergraduate Schools	11



Medical Education Notable Accomplishments

Icahn School of Medicine at Mount Sinai

- Year 3 of the curriculum redesign rollout
- Google Life Sciences partnership
- Deloitte Partnership
- Recruited inaugural class of Primary Care Scholars Program
- The Arnold P. Gold Foundation adapted and expanded a compassionate care program created by ISMMS students into a national program:
- ISMMS students created EHHap, an app to improve care, flow of information and training in EHHOP (app is being adopted in other departments as well)
- Launched task force on addressing bias and racism in the school and the health system

Recognition Awards:

Gary Butts, MD chosen by City and State Reports to receive a *Corporate Social Responsibility Award* for his efforts to diversify the healthcare workforce



Graduate Medical Education – MSHS Integration



Health System-wide programs in:

- Dermatology (1st program to be merged)
- Interventional Radiology
- Urology
- Plastic Surgery (Integrated)
- Child and Adolescent Psychiatry
- Sleep Medicine
- Hospice and palliative medicine
- Neuroradiology (MSBI/MSSLR)
- Clinical cardiac electrophysiology (MSBI/MSSLR)
- Neurosurgery
- **Pending applications in:**
- Geriatric Medicine
- Hematology and Oncology (MSBI/MSSLR)

Highlights:

- Integrated programs have required rotations at each of our Manhattan campuses
- A delegated Credentialing system created to allow residents to rotate anywhere in the system

Due to these changes <u>500 residents</u> based at one of our system hospitals were permitted to rotate to another system hospital

SINA Innovations

PhD Students-Matriculating Class of 2015

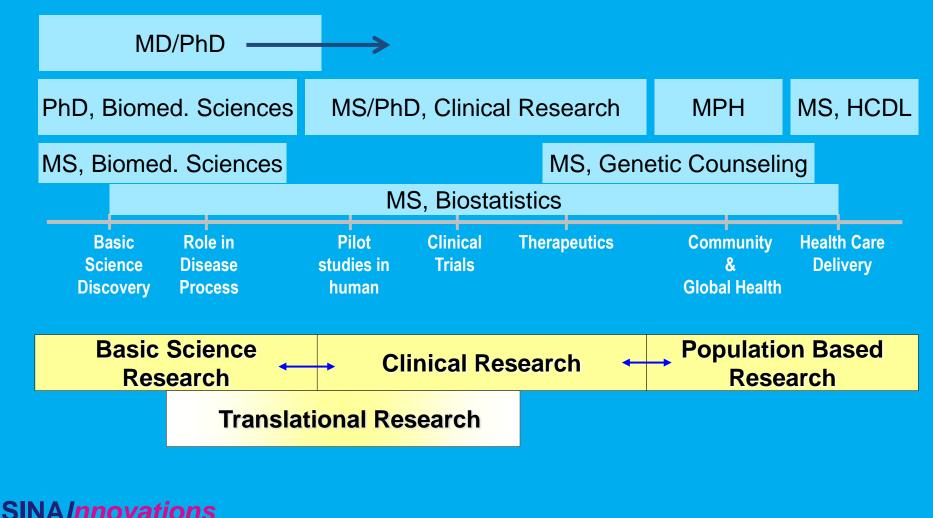


•	Number of Complete Applications	453
•	Size of Class	44
•	Women	70%
•	URM	24%
•	Median GRE	318
•	Median GPA	3.55
•	Number of Undergraduate Schools	38



Graduate School of Biomedical Sciences





Icahn School of Medicine at

Mount

Sinai

Graduate School Notable Accomplishments

- New Grad School Core sequence specifically for the MD/PhD students
- Recruited first full class of PhD in Design, Technology & Entrepreneurship (DTE)
 - KiiLN, launched by post-docs taking the course the first year it was offered, won the <u>first</u> Growth Accelerator Fund Competition awarded by the US Small Business Administration –winners announced at the White House.
- Expansion of MS Programs now 7 programs:
 - MSHCL* reached its target class of 25 matriculants in its 2nd year
 - Will also launch a second cohort of 30 students from China.
 - The new MS in Biostatisitics admitted its first class
 - The MS in Biomedical Informatics has been approved by the state and will be launched in the Fall, 2016.
- Affiliations with Apple, IBM, JPMorgan to offer internship opportunities, thesis work and training
- Expansion of non-academic liaisons and career counseling for PhD graduates
 - Opportunities in Pharma, Biotech etc
- Process of establishing guiding principles consistent with NAS to enhance the experience of >650 post-docs

cahn School

Μοιιη

Sinai



11

Graduate School



John Morrison, PhD leaving Mount Sinai after 25 years at Mount Sinai and 9 years as Dean of Basic Sciences and The Graduate School of Biomedical Sciences at Icahn School of Medicine at Mount Sinai.

Notable accomplishments:

- Redesigned the PhD tracks to align with Institutes and Strategic Plan
- Full integration of Graduate School into the parallel efforts of the institution in Translational Sciences and Innovation:
 - Enlarged Masters degree programs from 1 to 7
 - Launched opportunities for innovation with new courses in Design, Technology and Entrepreneurship with prestigious prizes
 - Developed opportunities with industry and partnerships with IBM, Apple, JP Morgan and RPI
- Incorporated the Masters programs into the academic and administrative fabric of the Graduate School
- Improved the academic credentials of PhD and MD/PhD classes while increasing diversity

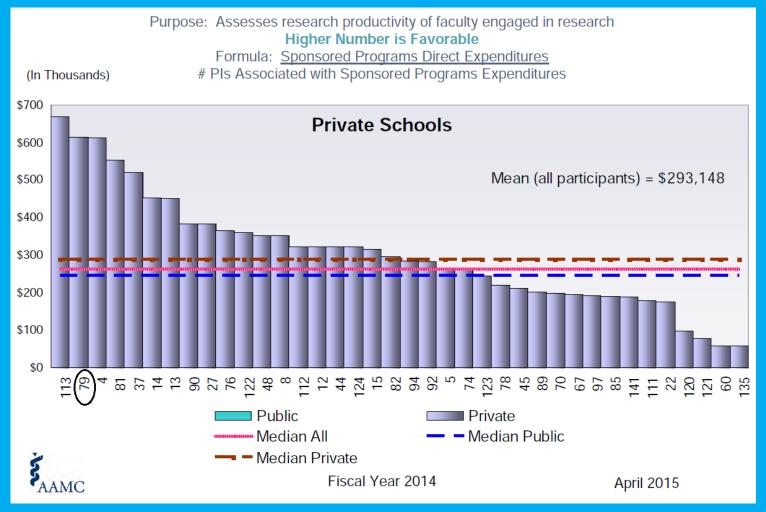
ISMMS Dean has formed a Search Committee to recruit a new Dean of Basic Sciences and The Graduate School of Biomedical Sciences

SINA Innovations

2014 Research Funding



2: Sponsored Programs Direct Expenditures/PI

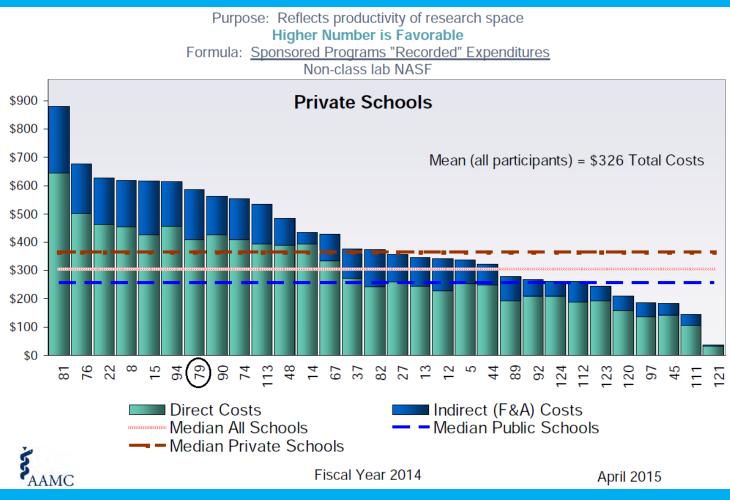


SINA Innovations

2014 Research Funding



7: Sponsored Programs Expenditures/Net Assignable Square Feet Hess space almost filled; density increased from #12 to #7



SINA*Innovations*

2014 Research Funding



5 – Growth of Sponsored Programs from all sources Purpose: Measures growth over time **Higher Number is Favorable** Formula: Three-year annualized growth rate 15% Private Schools 10% Mean (all participants) = -3.2% 82 113 85 123 79 90 122 44 78 5% 37 45 76 70 27 13 48 121 0% 111 124 74 14 67 5 4 15 -5% 94 92 81₁₁₂ -10% 60 135 120 87 141 Public Schools Private Schools -15% Median All Schools Median Public Schools Median Private Schools -20% Ś Fiscal Year 2014 April 2015 AAMC

Major awards: CTSA (\$5.25M), NCI-Cancer Center(\$1.695M), CHEAR (\$19.4M) & NYSTEM (8.8M)

SINA Innovations

ISMMS-RPI Affiliation



Research:

- 7 co-Funded Collaborative seed projects (300k\$) resulting in grants and publication
- Additional research collaborations on:
 - Artificial Pancreas,
 - Machine learning & semantics (K grant scholars) in emergency medicine,
 - 3D printing of multiscale vasculature,
 - ObGyn sensor technologies
 - Spine research (orthopedics)

Grants

CHEAR Center for Data Sciences- Children's Health Exposure Analysis Resource (CHEAR): Data Repository, Analysis and Science Center (U2C)

• Pl's :

Dr S. Teitelbaum, Dr P. Kovatch (Mount Sinai)

Dr. D. McGuiness (RPI)

Award value 11M\$

NY state high performance computing consortium

• Training grant (U54) Gaming Theory & training

SINA Innovations

Arnhold Global Health Institute



New Director: Prabhjot Singh, MD

Vision and Goals:

Study the impact of environmental/external factors on individual's lives and the optimal way to address them.

Recommend policy changes that address the impact of major external factors like rapid urbanization, access to healthcare, growing inequity and climate change.

Find inter-relationships through field studies, data collection and analysis

- Partner with groups like UN to conduct field studies in places like Ghana and India
- Collect study data from multiple sources and countries
- Partner with firms like Google on data analysis
- Hire data scientists to create models and develop scenarios

Design effective, scalable care models across MSHS with focus on primary care and high need patients

SINA Innovations

Institute for Translational Epidemiology (ITE)



New Director:

Emanuela Taioli, PhD

Vision & Goals:

- Expand the portfolio in Training, education, and health inequalities, and make it an integral part of the research portfolio.
- Integrate genetic and genomic data with social and environmental factors and large clinical databases to predict individual disease risk, response to treatment, and prognosis.
- Create Concentration Areas within ITE:
 - Chronic Disease Epidemiology
 - Infectious Disease Epidemiology
 - Mental Health
 - Occupational Epidemiology
 - Epidemiologic Methods
 - Life Course Epidemiology
 - Molecular and Genetic Epidemiology

SINA Innovations



Mount Sinai Innovation Partner (MSIP)

2012	2013	2014
325	394	519
76*	41	47
77	72	97
5.6	38.5	20.1
69	104	121
161	147	155
38	45	52
49	79	99
695	1101	1224
7	9	6

Performance Metrics

Faculty, Staff and Trainees Engaged:
Gross Licensing Proceeds in \$millions:
Revenue Generating License Agreements:
Industry Research Funding in \$millions:
New Inventions (IP Disclosures):
New Patents Filed:
New Licenses & Options:
Collaborative & Sponsored Research Agreements:
Enabling Agreements (MTAs, CDAs, IIAs):
Active Equity Holdings in Spinouts:

*Includes large litigation settlement with licensee Shire

SINAInnovations Leading a New Era of Discovery

2015 Faculty Development Initiatives



Lakshmi Devi, PhD – Dean for Academic Development and Enrichment

FOSTERING MENTORING

 Addition of Associate Dean of Academic Development: Elizabeth Howell, MD, MPH

PROMOTING COLLABORATION

• Faculty Idea Prize: Awarded to two junior faculty investigators

BUILDING NEW LEADERS

Seminars and workshops: leading research teams, mentoring graduate students

WELCOMING NEW FACULTY

• Networking lunches and informational breakfasts

New family-friendly policy: Academic Clock Flexibility Added to Investigator Track

SINA Innovations

Research Integration with MSHS



Integrated research administration structure to support research across the Mount Sinai Health System (MSHS). Co-location with ISMMS colleagues.

- Reliance Agreement established that allows IRBs at each MSHS site to recognize each other's approved research projects.
- All research and service projects submitted through the School and all other MSHS sites now comply with Mount Sinai's FCOIR policy

Standardized policies and processes :

- Grants and Contracts
- Policies for animal research
- All animal procurement for the MSHS has been centralized through the Center for Comparative Medicine and Surgery (CCMS).
- All animal research protocols at ISMMS are now submitted through Ideate, and human subject protocols will be incorporated into this new unified system in Q4 2015.
- ORS centralized the process for registering studies on <u>ClinicalTrials.gov</u>
- Reliance Agreement established that allows the ISMMS Biosafety Committee to review and oversee all research
- The existing patents and related intellectual property (IP) at each MSHS site have been catalogued and consolidated. Mount Sinai Innovation Partners

SINA Innovations

Mount Sinai Doctors Faculty Practice Accomplishments 2015



- Growth
 - 10.2% in 2014
 - 7% through 2015 June YTD
- Operating Margin
 - 1.4% in 2014
 - 2.2% in 2015 YTD July
- Contribution Margin
 - 80.1% in 2014
 - 79.8% in 2015 YTD July
- New Sites
 - GP 1 Center
 - 59th Street Men's Health
- Urgent Care Growth
 - Columbus Avenue: 38 Average Visits/Day
 - Opened New Sites: Inwood, Brooklyn Heights, Hewlett

SINA Innovations

Integration of the Faculty Practice Plan *Timeline*



Complete	e 2015 January		January 2016		Date TBD		
Department	Count	Department	Count	Department	Count	Department	Count
Ob/Gyn	68	Radiation Oncology	10	BI Anesthesiology	41	ENT	12
SLR Anesthesiology	25	UMPA Phase 1	30	BI Medicine	116	NYEEI	36
Emergency Med	127			BI Urology	6		
Radiology	48			Cardiology	55		
Primary Care	123			СНН	15		
Pediatrics	59			Cardiovascular Surgery	2		
				Dermatology	12		
				Medical Oncology	16		
				MSQ ED	21		
				Neurology	44		
				Neurosurgery	11		
				Orthopedics	22		
				Pathology	23		
				Psychiatry	87		
				Rehab Medicine	7		
				Surgery	53		
				Thoracic Surgery	2		
				UMPA Phase 2	79		
Total	450	Total	40	Total	612	Total	48

SINA Innovations

Mount Sinai Doctors Faculty Practice Ongoing Initiatives



- Faculty Practice Integration
 - ~450 providers BISLR integrated to date, 500+ providers integrating as of January 1, 2016
- Clinical Program Development and Oversight
 - Urgent Care
 - ightarrow Future Sites: BI Phillips Ambulatory, BI Brooklyn, Queens West
 - \rightarrow City MD Affiliation
 - Beth Israel Medical Groups, West Park, West Care
 - Brooklyn Heights and Hewlett (WestMed Transition)
 - East 85th Street Multispecialty opening November 2015
- Patient Satisfaction
 - Survey tools rolled-out to Health System's ambulatory sites
- Centralized Billing Office
 - Currently 18 Departments, adding over 900 physicians with integration
- Centralized Call Center
 - Currently 13 Departments/Groups, 13 new by Q3 2016
 - Moving to new site at 555 West 57th Street

SINA*Innovations*

Mount Sinai Doctors Faculty Practice Space Initiatives



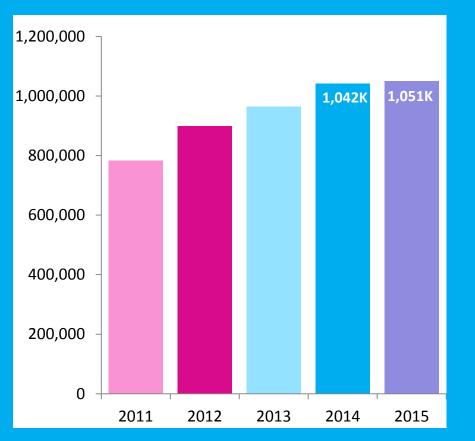
Department	New sq ft	# of Physicians	Project Status
Spine Center	12,500	13	Complete
CAM IBD Center	5,000	19	Complete
GP 1 Cardiovascular Center	20,000	40	Complete
Diabetes/Bariatric Surgery	12,500	21	Complete
Tower 5 Respiratory Center	10,000	TBD	In Process
Inwood Urgent Care	4,000	5	Complete
Brooklyn Heights	66,000	31	In Process
236 E 85 th Street	47,500	45	In Process



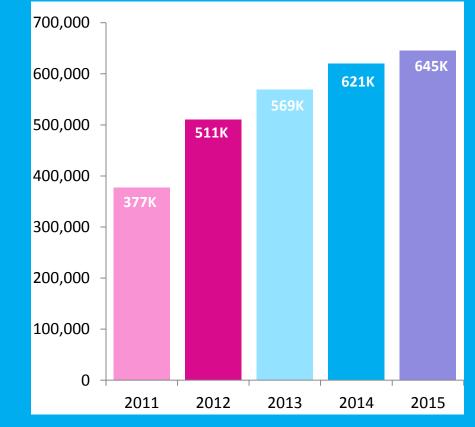
Mount Sinai Doctors Faculty Practice Current Positioning: FP Clinical Activity



Ambulatory Encounters 2011 – 2015



Outpatient Visits 2011 – 2015

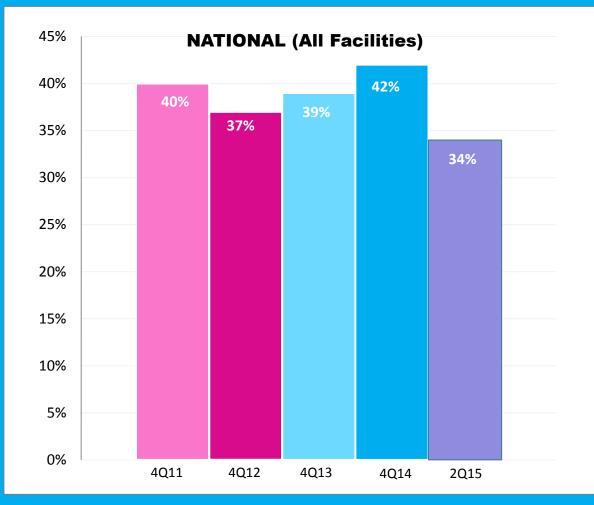


*2015 Annualized based on June YTD

SINA Innovations



Press Ganey Percentile Ranking – Overall Satisfaction



SINAInnovations Leading a New Era of Discovery

Mount Sinai Doctors Faculty Practice



Improving Patient Satisfaction

Guiding Principles:

- Create a warm and welcoming environment.
- Initiate communication and anticipate needs.
- Communicate with care, concern, and respect.
- Ease navigation and access.
- Regularly use patient feedback to inform improvement efforts.
- Reward and recognize publicly those behaviors that support our values; coach and counsel in private.

Ongoing Activities:

- Improve Patient Access
- Improve Patient Flow
- Increase Transparency
- Sharing of best practices across MSDFP
- Improve Communications Skills for Physicians
- Align incentives for Physicians for Patient Experience (ongoing in a number of Departments)

Every physician's patient satisfaction scores will be shared with other physicians and departments



Mount Sinai Doctors Faculty Practice



Phillips Ambulatory Care Center (PACC) / Mount Sinai Doctors South

PACC INITIATIVES:

- Full EPIC Rollout--Fall 2016 completion
- MSD-FP Call Center--Fall 2015 start
- PACC Lobby Renovation--Late 2015 start
- Operations Analysis
- Staff Training
- Revenue Cycle Improvements

PACC STRATEGIC GROWTH PLAN:

- Integration of Faculty into MSD-FP
- Active Clinician Recruitment
- Ambulatory Program Growth
 - --Ambulatory Surgery
 - --Infusion (Cancer/Non-Cancer)
 - --Interventional Radiology
 - --Endoscopy
 - --Imaging/MRI
 - --Increased Marketing

SINA*Innovations*

Mount Sinai Health System-Healthcare Trends

- **Transparency**: patients, payers and regulators will have increasing access to healthcare performance data at the system, entity and physician level:
 - Quality
 - Safety
 - Service
 - Access
 - Cost
- Payment will be based on these performance domains and
- Payment will be for managing populations rather than for managing episodes of care

In response,

Health System must evolve to produce the safest care, the best outcomes, the highest satisfaction, and the best value of any health system or provider in the New York Metropolitan area

SINAInnovations Leading a New Era of Discovery

Road Ahead: Population Health Timeline (2015 – 2019)

Icahn School of Medicine at Mount Sinai

Where Mount Sinai Health System is going

By the end of 2019, the Mount Sinai Health System will have over 750,000 lives under a value-based contract



Significant progress over the first 2 years of the merger Sinai

- Recruitment and development of population health leaders and infrastructure
- Growth in population health analytics
- New relationships with government and commercial payers as well as with unions and employers
- Improvements in quality, safety and service...



Population Health – New Leadership



Niyum Gandhi - Chief Population Health Officer:

- -Leading the development and execution of the Health System's transition from a primarily FFS model to one inclusive of risk-based population health
- -Focused on aligning Mount Sinai's clinical and economic transformations towards population health

Andy Snyder, MD - Chief Clinical Integration Officer:

- -Overseeing the clinical aspects of Mount Sinai's population health and value-based care transformation.
- -Focused on building the clinically integrated network and driving effective performance across that network.

Jeff Farber - SVP and CMO for Population Health:

-Leading clinical mode design, practice transformation, and ambulatory clinical improvement within population health

-Overseeing ambulatory care management and its integration with patient's care teams.

Ed Lucy - Chief Administrative and Contracting Officer for Mount Sinai Health Partners: -Managing contracting and payer relationships across the Health System and clinically integrated network.

-Developing novel reimbursement and contracting models to support the Health System's economic transition.

SINAInnovations Leading a New Era of Discovery

Financial Results



The School continues to meet its overall goal of positive financial operating results.

Financial Operating R	esults:
	<u>Results</u>
2015 (Budget)	Plan is at least breakeven results
2014	\$ 85
2013	\$ 77
2012	\$ 7,481*
2011	\$ 116

* Includes benefit from one time licensing settlement

Research and FPA growth are major contributors to the School's financial success



Financial Challenges to Continued Success

- Financial challenges for both Clinical and Research Programs continue:
 - Clinical reimbursement constraints, particularly for out of network reimbursement.

Sinai

- Federal Budget issues
 - NIH Funding is flat in Federal fiscal year 2015
 - More competition for fewer grants awards
- Full integration of Member Hospital clinical operations on 1/1/16.
- Growth in research grants is necessary to help pay the annual operating costs (\$32 million) of HCSM Building.
- Support for the full cost of Medical Education and Graduate School operations.
- Capital Project Funding for existing school buildings.
- Philanthropy support for Strategic Initiatives.
- Revenue Diversification.

SINA Innovations

Action Plan to Meet Financial Challenges

Icahn School of Medicine a Mount Sinai

- Continue successful Financial Goals
 - School's financial operating results must be positive using only the 5% endowment spending rate investment income.
 - Department's must consistently achieve positive financial results.
 - Clinical Depts minimum 2.5% margin.
 - Basic Sciences, Research Institutes achieve budget targets.
 - Incentive plans encourage revenue and margin growth.
 - Significant financial improvement in MSSL, MSR and MSBI integrated faculty practices (Faculty productivity, Incentive based compensation models, Cost effective operations).
 - Continued growth in federal grants.
 - Growth of Masters Programs.
 - School Bond refinancing helps to support capital projects funding for Annenberg
 - Research and Clinical performance continue to be guided by metrics.



Action Plan to Meet Financial Challenges

- Principles of Department Compensation Models consistently followed:
 - 100% of compensation tied to performance.
 - Compensation must be covered by Teaching, Research and Clinical Revenue.

Sinai

- Quality, productivity and outcomes goals integrated.
- Performance goals for each physician with regular reviews of actual results.
- Productivity Standards.



Action Plan to Meet Financial Challenges



- Effective Space Utilization:
 - Administrative services consolidated at 42nd Street.
 - Maintain research density (grants/sq.ft.).
 - 85th Street faculty practice initiative.
 - Efficient use of Member Hospital clinical practice space.
- Clinical and Research Growth from:
 - New recruits,
 - Faculty productivity,
 - Efficient, cost effective operations,
 - Enhanced Core facilities,
 - Diagnostic testing investment (Sema 4 (Genomics), Precise MD).
- Philanthropy support for Strategic Initiatives
- Continued Financial Discipline is Imperative:
 - Business Plans.
 - Return on Investment.
 - Successful 2016 Budget process.
 - Continuous monitoring of financial results with timely corrective actions, if necessary.

SINA Innovations

Major Marketing Initiative-print ads

Icahn School of Medicine at Mount Sinai

Major new Mount Sinai advertising campaign focusing on reputational excellence and our expanded presence throughout the New York region.

- Includes three ads focusing on ISMMS, emphasizing innovation, leadership and entrepreneurship.
- Digital and social media promotion complement the print campaign.

SERIOUS STUDENTS

OF MEDICINE SHOULD BE REQUIRED

TO STUDY THE ANATOMY OF MOUNT SINAI.

Data sub sello, luma a laterar a, compara sel tayo. Internativa della, luma a laterar a, compara sel tayo. Internativa della d

tores, to consude that contants and the contant of the contant of

Gras granda eman in dolor aligon, spor assugar ana conreso. "Nodo-Jun, filomo, quan in matta carase. Protein bender, and analyzing and analyzing and analyzing and anon parent insula, inclusion and analyzing and a non parent insula. In Apeser product and support support and proteometan genes. Data filos ano parte insula ana. Protein formemena genes. Data filos ano parte insula and. Ji, kanis useba genese la pista valore quan traise and. Ji, kanis useba genese la pista valore quan traise





We don't like to toss around the word revolutions; But in this particular case, it happens to be the right word. The Mount Sinal Health System is a revolutions; we model for the delivery of exemplary behilvare. Gone are departments that work in isolation. Gone are destors and researchers whose paths never cross and whose lates never cross-pathments. Mount Sina is now those lates never cross-pathments. Mount Sina is now institutes: The end is better outcomes in particular and improved with being in general. The means is the erration of imageneed east tunn, which are definitioned to the comprehensione area of patients with womplet disease. This imageneed, collaborative approach is exemplified by Rown Sinzi, Nuodi in glove relationship with the fashes School of Medicine at Means Sinai. Reaching across the course to Siloro Viller for importantion, it's principles that have changed proplet to help use them. Thus the embrace of a movimum. The medical communit source belows in the matrix of the medical community of the the scenarios. In fact, the community of the the scenarios of the the scenarios ereing, computational biology and c. By working in tunders. Meant Sinst 1, BOO, MD, SINAL



A medical schedul besitze in Silicon Valler formore interval a semicle accomplicit syntaxics Weil system, which is not planar any model was remarable - as model accomplicities comparison is fillion Valler. The semicle accomplicities of the semicle accomplicities comparison is a silicon Valler. The semicle accomplicities comparison is a silicon Valler accomplicities of the semicle comparison is a silicon Valler accomplicities of the semicle comparison is a silicon Valler accomplicities of the semicle complexities of the semicle accomplicities of the semicle comparison is a silicon Valler accomplicities of the semicle comparison is a silicon Valler accomplicities of the semicle comparison is a silicon Valler accomplicities of the semicle complexities of the semicle accomplication of the semicle complexities of the sem

y soch Bur rather than going step by step, the goal it to make bold, cooperpuil leys, ranguitance its virtue. Fulure is an integral part of success, and no journey is a exhibitating as going out on a lumb. Nuturally, see hired some of Silicon Valley's key players: mathematicians, engineers, and computer

are primed to challenge convention and change the world of modulate. So let's give credit where credit is due. In order to rewrite the book on medicine, we took a page out of

e hired some of Silicon Valley's key naticians, engineers, and computer ists. In that same spirit, we satirely alented, multifaceted students who



SILICON VALLEY

IS SO INNOVATIVE, WE'VE ADOPTED THEIR PRINCIPLES AND

RECRUITED THEIR PRINCIPALS.

E Contraction

SINAInnovations Leading a New Era of Discovery

Digital Marketing - New ISMMS Website

In 2015, we embarked on a transformational project to build a new state-ofthe-art website that is easier to use and features more compelling editorial content and photos. The new site is optimized for mobile devices, incorporates Social Media feeds that update automatically, offers markedly improved selfservice, and includes a host of unique features such as an online events calendar.

- The new site is being launched in phases, continuing through the end of 2016.
- To date, we have launched a number of sections, including a dramatic homepage, main landing pages for all major areas (Education, Research, About the School, and Patient Care), Medical Education, and a new digital home for SINAInnovations.
- Select preliminary metrics for the new website (Q3 2015 vs Q3 2014):
 - Web traffic increased 11 percent
 - 59 percent of traffic is new visitors
 - Visits to the new mobile-friendly site from mobile devices/tablets increased 215 percent

SINAInnovations Leading a New Era of Discovery

40





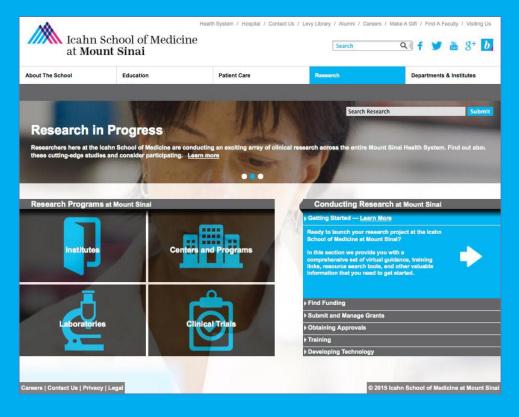
Digital Marketing – New Research Portal



We built and launched a Research Portal to help investigators beginning research to find funding, submit and manage grants and sponsored projects, obtain necessary approvals, commercialize discoveries, and get access to required training.

Features/Highlights:

- Intuitive, easy to navigate, sleek design.
 Responds to the needs of our investigators, research staff, and trainees.
- The Research Portal averages more than 1,500 visits per month.



Digital Marketing-New Laboratory Websites



To meet the growing needs of our research community, we developed and launched a new digital platform that allows principal investigators to quickly and efficiently update and maintain their websites.

- These robust sites contribute to our ongoing, collective efforts to publicize the exciting and innovative research at ISMMS.
- To date, we have developed nearly 150 templates and launched more than 30 unique sites.



The Cho Lab investigates the genetic and immunologic factors associated with Crohn's Disease and Ulcerative Colitis, collectively known as Inflammatory Bowel Diseases (IBD). We are part of the Department of Genetics and Genomic Sciences, at the Icahn School of Medicine at Mount Sinai, NY.

A major focus of our research is understanding the prevalence of IBD in the Ashkenazi Jewish population. We are working on further identifying rare disease associated variants in Ashkenazi Jewish population by Exome Chip technology as well as the biological function of those identified genes. Dr. Cho's research has contributed to defining the pathophysiologic mechanisms of IBD by identifying associations to NOD2, IL23R, and 163 loci to IBD. With new findings our research is evolving to now looking at the function of lipid mediators and their related cytokines in innate immune cells, and the full transcriptome of enteroids, the intestinal epithelial stem cells.

Furthermore, we investigate the relationship between environmental factors and IBD by examining how hosts (humans) interact with gut microbes and how the interaction may lead to IBD susceptibility and/or maintain IBD pathogenesis. By dissecting the relationship between IBD genetics, immune response, and microbes, we would have a better chance to develop treatment for blocking pro-inflammatory proteins, inflammatory pathways, or immune cell entry into intestine. The integration of our research with the clinical research for IBD has areat obstrained for the future of IBD treatment.

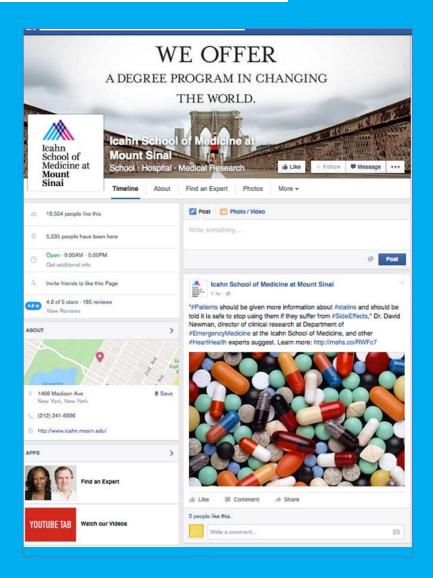


Digital Marketing – Social Media



- The ISMMS Facebook page has experienced rapid growth in 2015, reaching a "10,000 Like" milestone in April.
 - On track to surpass 20,000 likes by the end of the year.
- 45 percent increase in ISMMS YouTube views and Twitter followers.
- Graduate School Facebook Advertising Campaign generated 33,876 visitors to the Graduate school website, more than five times the number in 2014.

SINA Innovations



Doximity

Icahn School of Medicine at Mount Sinai

Doximity is a free, online network that functions as a LinkedIn for physicians.

- Includes more than 60 percent of U.S. doctors as registered, verified members. It is the largest online community of physicians in the U.S allows physicians to:
 - Stay connected with colleagues and classmates & earn CME credits
 - Use their iPhone, iPad, Android device, or computer to securely connect and collaborate with other doctors about patient treatment, identify appropriate experts for patient referrals, and manage their career.
 - Rate residency programs and vote in the annual U.S. News & World Report ranking.
- ISMMS has encouraged all current faculty to join and vote in annual surveys
- ISMMS Alumni Office is working with department chairs for residency alumni to participate in ranking using the Residency Navigator Tool on doximity.com.



SINAInnovations theme: Digital Medicine





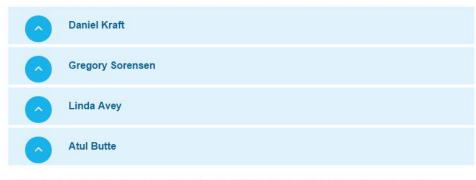
SINAInnovations 2015

The Icahn School of Medicine at Mount Sinai hosts its fourth annual SINAInnovations conference on October 27-28, 2015. This year's theme is "Digital Medicine." The conference will include keynote addresses, short talks, lunchtime breakout sessions and demos in areas focusing on discoveries in material science, nanotechnologies and imaging; advances in genomics technologies; mobile application development and wearable technologies; cultivating how medicine and engineering interface and how advances in engineering are transforming medicine, biology, and global health.

Keynote Speakers

SINA Innovations

Leading a New Era of Discovery



Event Organizers: Scott L. Friedman. Joel Dudlev. Ashish Atreia. Kumar Chatami. and Debroah McGuiness

- View Program Schedule
- Register For SINAInnovations
- Register For Trainee Forum

SINAInnovations 2015

Program Schedule - Day One

Program Schedule - Day Two

Trainee Forum and Networking Reception

Mount Sinai Inventor of the Year Award

2015 Speaker Bios

http://icahn.mssm.edu/about/sinainnovations

2016 – Develop a new Strategic Plan for ISMMS



Review of 2006 Strategic Plan and analysis of goals vs outcomes • Implementation challenges & lessons learned

Objective assessment of educational, clinical and research missions:

- Medical and Graduate School education programs
- Residency and Fellowship programs
- Quality of Clinical programs and related patient satisfaction
- Institute and Department research programs

Recommend future investments in order to continue to build:

- Most competitive MD, PhD, Masters and Residency/Fellowship programs
- Highest quality patient care with excellent patient satisfaction
- Research programs leading to innovations and medical breakthroughs

SINAInnovations Leading a New Era of Discovery



The new strategic plan needs to be **forward-looking** and **challenging** It will be hard and require a great deal of effort from all

It will need philanthropy to enable strategic investments



"We choose to go to the Moon in this decade and do the other things, not because they are easy, but because they are hard."

SINAInnovations Leading a New Era of Discovery John F. Kennedy Rice University September 12, 1962