

Icahn School of Medicine at Mount Sinai

DENNIS S. CHARNEY, M.D.
Dean

September 29, 2014



Icahn School of Medicine at Mount Sinai and Mount Sinai Health System



Formation of the Mount Sinai Health System provides exceptional opportunities for translational research and to develop therapies that can change the lives of our patients

As a fully integrated Health System with one of the most diverse populations, it offers a platform for developing new models of healthcare delivery to an urban population and a unique training experience for Medical Students and House Staff

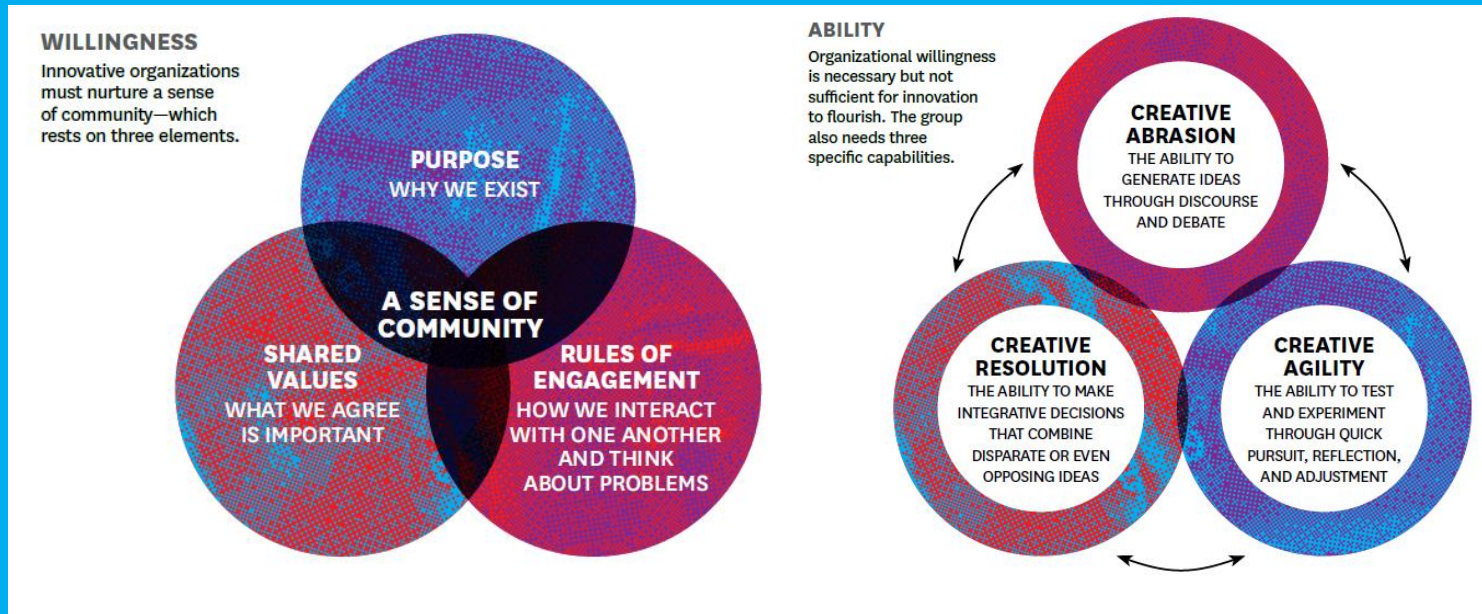
As one of the largest Healthcare Systems associated with a single leading Medical School, it could be a possible model for other Healthcare Systems in the nation

Together, ISMMS and MSHS are blazing a trail with innovative approaches to the current challenges in education, research and clinical care

A Culture of Innovation

“The question is not: ‘How do I make Innovation happen’ but ‘How do I set the stage for it to happen’.”

“Fostering the ability to innovate requires 3 organizational capabilities:
Creative Abrasion – *generate ideas through discussions/debate*
Creative Agility – *test and experiment new theories and adjust quickly*
Creative Resolution” – *combine disparate ideas into an integrated solution*



From Linda A. Hill, Greg Brandeau, Emily Truelove and Kent Lineback, Collective Genius, Harvard Business Review, June 2014

Fostering a Culture of Innovation by



Creating opportunities

- For students to LEARN
- For faculty to COLLABORATE
- For patients to obtain superior CARE
- For **INNOVATION**

Creating an organic organization that:

- INNOVATES** continuously
- GENERATES new ideas
- MOTIVATES teams to follow vision

Developing the next generation of LEADERSHIP who:

- Build the ability to **INNOVATE**
- Encourage bottom-up INITIATIVE
- Foster LEARNING & EXPERIMENTATION
- to

CREATE **COLLECTIVE GENIUS**

By Creating Opportunities



New Respiratory Institute to Advance Care and Research

The Icahn School of Medicine at Mount Sinai, and National Jewish Health, the nation's leading respiratory hospital, based in Denver, Colorado, have created a partnership to advance patient care and research in respiratory and related diseases. The Mount Sinai–National Jewish Health Respiratory Institute is expected to open on the Icahn School of Medicine campus in July.

“We are very excited to join with National Jewish Health in this endeavor,” said Dennis S. Charney, MD, Anne and Joel Ehrenkranz Dean, Icahn School of Medicine at Mount Sinai and President for Academic Affairs, Mount Sinai Health System. “This agreement brings together two of the country’s finest medical institutions in a partnership to advance respiratory care, not only in New York City but throughout the



Dennis S. Charney, MD, left, with Michael Salem, MD, President and Chief Executive Officer of National Jewish Health, at the signing ceremony creating the Mount Sinai–National Jewish Health Respiratory Institute

continued on page 2 >



Jo Ivey Boufford, MD, President, The New York Academy of Medicine with Dennis S. Charney, MD, Anne and Joel Ehrenkranz Dean, Icahn School of Medicine at Mount Sinai and President for Academic Affairs, Mount Sinai Health System

A New Affiliation with The New York Academy of Medicine

Icahn School of Medicine at Mount Sinai and The New York Academy of Medicine (NYAM) announced the formation of a new partnership to jointly study and address a number of significant health issues and policies that impact the lives of people who live in urban areas. NYAM is an historic and independent institution that has been advancing the health of people living in cities since its founding in 1847.

During a signing ceremony held at Mount Sinai on Monday, February 10, leaders from both institutions said that together they will address issues such as disease prevention and global health initiatives, health care policy, and the emerging field of genetics and genomics, among other topics.

By Creating Opportunities

Friends of Odysseus Hosts Mentoring Social

Faculty from throughout the Mount Sinai Health System joined residents, and medical and graduate students, at a recent social event sponsored by Friends of Odysseus, a black male mentoring program established in 2012 at the behest of Mount Sinai leadership to assist with the recruitment, retention, and promotion of black and Hispanic males in the sciences and medicine.



The event, held at Sylvia's Also catering hall, was co-sponsored by the office of Kenneth L. Davis, MD, Chief Executive

Learning About Health Care Through Internships

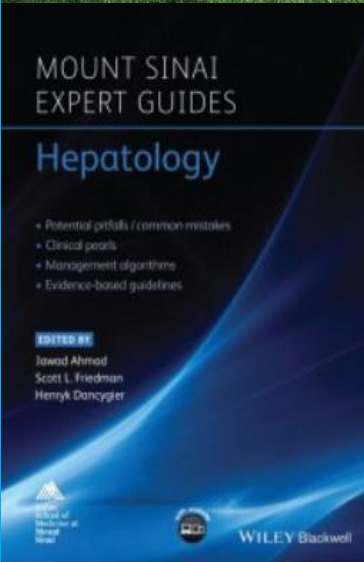


Fifteen high school, college, and graduate students who aspire to careers in the field of health care, participated this summer in internships throughout the [Mount Sinai Health System](#), in areas such as medical records, managed care, ambulatory care, scientific research, and real estate services.

By Generating Ideas-Leading the Conversations



Leading Conversations on the Future of Health Care at the Aspen Ideas Festival



The Message: 'Know Your Risk For Ovarian Cancer' Hits Toshiba's Big Screen In Times Square

Broadway Star Valisia LeKae Joins Dr. David Fishman to Raise Awareness about Mount Sinai's Ovarian Cancer Risk Assessment Program

Mount Sinai And The Atlantic Host Working Summit On Big Data In New York City

Thought leaders from top medical centers, academia, and private industry discuss ways to harness the information revolution in health care, and use this vital data to improve the quality of patient care.

NEW YORK – October 29, 2013 /Press Release/ —



Leaders from the Mount Sinai Health System which partnered with The Atlantic to host the Big Data

By Creating the Organizational Framework



New Institutes:

- Respiratory Institute in partnership with National Jewish Health
- Institute for Advanced Medicine
- Institute for Healthcare Delivery Science
- Clinical Diabetes Institute
- Primary Care Institute
- The Mirken Family Clinical Neuroscience Institute

New leadership:

- | | |
|--------------------------------|---|
| James Tsai, MD, MBA | President, NEEIMS & Chair of Ophthalmology, MSHS |
| Judith Aberg, MD, FIDA, FACP | Chief, Division of Infectious Diseases, MSHS |
| Percio S. Gulko | Chief, Division of Rheumatology, MSHS |
| Erik Lium, PhD | Executive Director, Mount Sinai Innovation Partners |
| Stephan A. Mayer, MD Director, | Institute of Critical Care Medicine |
| Mantu Gupa, MD | Director of Endourology & Stone Disease, MSHS |
| Michael Leitman | Senior Associate Dean, Graduate Medical Education, MSHS |
| Blasé Carabello | Site Chair, Cardiology, Mount Sinai Beth Israel |
| John Puskas | Site Chair, Cardiothoracic Surgery, Mount Sinai Beth Israel |

By Providing Global Leadership



A new field opportunity for PhD students via a two-week global health immersion program at our partner site in India

By Providing Global Leadership



- The Arnhold Global Health Institute established with a generous gift from the Arnhold and Mulago Foundations
- Mount Sinai Global Health was awarded the Innovation Award at the prestigious Emory Global Health Case Competition.
- Global Health became a part of the official Medical School Curriculum with the launching of the Global Health INFOCUS course for first year medical students.
- 50 students and 40 residents went on public health and research projects to over 25 countries.

The *Mount Sinai Journal of Medicine* revamped and launched as the ***Annals of Global Health*** with a focus on public health and policy issues



By Embracing Innovation



FAST COMPANY

MOST INNOVATIVE COMPANIES 2014

THE WORLD'S TOP 10 MOST INNOVATIVE COMPANIES IN BIG DATA

ACCORDING TO ONE PROJECTION, THE SALES OF BIG-DATA-RELATED PRODUCTS AND SERVICES GREW TO MORE THAN \$18 BILLION IN 2013.

5. MOUNT SINAI ICAHN SCHOOL OF MEDICINE

For embracing data scientists and supercomputers to build the hospital of the future. The New York City hospital is bringing on top Silicon Valley talent to build a facility that will map patients' genomes to predict diseases, reduce the number of average hospital visits, and streamline electronic medical records. (Its first hire was Jeff Hammerbacher, cofounder of big-data software company Cloudera who also launched Facebook's well-muscled data-science team.) At the heart of Mount Sinai's efforts are a \$3 million supercomputer named Minerva, which quickly processes gigabytes of health data, and BioMe, a database of genomic samples from more than 25,000 patients.

By Encouraging Entrepreneurship



CRAIN'S NEW YORK BUSINESS

REPORT HEALTH CARE

Six biotech startups to watch

Molecule to fight cancer

WHY IT'S HOT: A cure for cancer is the holy grail of biotechnology, and Dual Therapeutics is working on a molecule that could speed that quest.

The year-old company uses a new tactic against cancer: technology to reactivate tumor-suppressor genes that get turned off as a cancer grows and spreads. Better, it can hit multiple pathways that cancer uses to circumvent those genes. The technology is so promising that last year Dual Therapeutics, which has about 10 employees, won a \$250,000 BioAccelerate prize from the Partnership Fund for New York City.

"Traditionally, you hit one pathway or the other," said Dual Therapeutics co-founder **Michael Ohlmeyer**, an associate professor of structural and chemical biology at the Icahn School of Medicine at Mount Sinai. "Early on, we realized we could hit two pathways and inhibit multiple oncogenic signaling pathways. We know now [we can hit] more than two."

Born at Mount Sinai in the lab of geneticist and co-founder Dr. Goutham Narla (who is now at Cleveland Clinic), Dual Therapeutics is at Harlem Biospace. Dr. Narla said it has received additional funding, \$5 million, and a commitment for more, from BioMotiv, a venture-capital-backed drug-discovery company in Cleveland.

One of Dual's first targets is prostate cancer, where two of the major drugs in use have \$2 billion in sales but



BUCK ENNIS

DUAL THERAPEUTICS

Funding: More than \$5 million in prizes and venture dollars

Target: Cancer

CEO: Michael Ohlmeyer

extend overall survival by less than a year, as the disease tends to recur. Clinical trials could start as early as 2015.

What could cool prospects: "Are we testing these compounds in the right, best cancers, given their novel action?" asked Dr. Narla.

Expert opinion: BioMotiv's involvement gives the company a leg up. "They brought management, expertise and entrepreneurial talent ... to build and scale an early-stage company," said Maria Gotsch, CEO of the Partnership Fund. ■

By Recognizing the Results



National Institutes of Health Awards Mount Sinai Contract to Further Influenza Research

Award will support pandemic preparedness, advancing the understanding of flu biology.

NEW YORK – April 10, 2014 /Press Release/ —

Four Researchers from Icahn School of Medicine at Mount Sinai Among the 400 Most Highly Influential Biomedical Researchers in the World

Powerful researchers include Dr. Dennis S. Charney, Dr. Carlos Cordon-Cardo, Dr. Valentin Fuster, and Dr. Eric J. Nestler.

– November 25, 2013 /Press Release/ —

Mount Sinai Awarded 1.1 Million Grant to Investigate Kidney and Heart Disease in WTC Responders

Dr. Mary Ann McLaughlin to lead new study of the risks of kidney and heart disease among Ground Zero first-responders and volunteers exposed to the toxic dust-cloud.

– September 11, 2014 /Press Release/ —

The Mount Sinai Hospital First in the World to Offer Patients New FDA Approved Device for Severely Calcified Arteries

The Cardiac Catheterization Lab at The Mount Sinai Hospital launches United States' use of Diamondback 360® Coronary Orbital Atherectomy System to reduce severe arterial calcium prior to cardiac stents.

NEW YORK, NY – October 28, 2013 /Press Release/ —

Mount Sinai Research Team Leads NIH-Funded Project Examining the Mechanism of Human Tissue Assembly

The \$6 million, five-year grant awarded to the Dynamics Underlying Tissue Integrity project supports the collaborative research of a number of biomedical initiatives.

Icahn School of Medicine at Mount Sinai Receives Health Care Innovation Award from Centers for Medicare and Medicaid Services

\$9.6 million in funding to pilot Mobile Acute Care Team program to substitute acute care at home for traditional inpatient services

NEW YORK – May 23, 2014 /Press Release/ —

Icahn School of Medicine at Mount Sinai Awarded \$2.7 Million from NIH to Investigate Novel Therapy for Eczema

“Narrow Pathway”-Targeted Immune Therapy May Spare Patients from Side Effects

NEW YORK – May 13, 2014 /Press Release/ —

Society for Neuroscience Honors Rita Z. Goldstein, PhD, with the Jacob P. Waletzky Award

Mount Sinai Researcher Honored for Translational Addiction Research

Two Mount Sinai Physicians Elected to the Institute of Medicine

Diane E. Meier, MD and Pamela Sklar, MD, PhD, recognized for Outstanding Professional Achievement and Commitment to Service.

NEW YORK – October 24, 2013 /Press Release/ —

If you always do what you always did,
you will always get what you always got.

- Albert Einstein

Best Doctors in NY

263 Doctors in New York's Magazine's list (includes doctors in MSHS)

This represents 22% of the 1,198 in the list

Mount Sinai physicians featured in 59 of 63 specialties reviewed

US News & World Report Rankings

Medical School 2014 #18

NIH Funding Rank

#17 in Total NIH funding

Funding increased from 2013 by >15% from \$214M to \$247M in 2014 (despite NIH cuts)

AAMC Rank

U.S. Medical Schools (AAMC) 2014 #4 Research Dollars/Principal Investigator

Faculty appointments in MSHS

Faculty in the Health system previously affiliated with other institutions have opted to transfer to faculty positions in Icahn School of Medicine at Mount Sinai

	SINAI & AFFILIATES	NEW HEALTH SYSTEM	TOTAL-ALL SITES
FULL TIME	2,234	519	2,753
PART TIME	406	80	486
VOLUNTARY	2,054	304	2,358
TOTAL	4,694	903	5,597
"Sinai & Affiliates" captures UES campus, BVA, Elmhurst, Queens & MSHQ			

Appointment of >900 MSHS physicians to ISMMS faculty to date

Hundreds more System physician faculty appointments will be finalized by year-end (in preparation for migration to Mount Sinai Doctors Faculty Practice.)

Enhancements to appointment/promotion methodology

(to embrace increasingly diverse faculty backgrounds/roles/responsibilities)

Rolling out junior faculty mentoring programs to member hospitals

Medical Education Notable Accomplishments



First FlexMed class recruited

Year 2 of the new curriculum was implemented

McKinsey & Company partnership launched

Primary Care Scholars Program launched

Students won the Emory Global Health Innovation Award

Integrated several new teaching sites across the health system

Hosted national Summit on Pre-med Preparation, sponsored by a grant from Josiah Macy Jr. Foundation

Unveiled updated state-of-the-art lecture hall on Annenberg 12

EHHOP celebrated its 10th anniversary

Launched MacroMD, blog with student-generated content

New LGBT Health and Advocacy Scholarship Launched

MD Students-Matriculating Class of 2014



Columbia (13), U Penn (13), Yale(8), Dartmouth (7), Stanford (7), Harvard (6)

MD/PhD Students-Matriculating Class of 2014



Yale, Columbia, Stanford, Cornell, University of Chicago, Wash U, Cooper Union, Rhodes College, West Virginia Wesleyan College

Graduate Medical Education



All programs previously sponsored by Mount Sinai St. Luke's, Roosevelt and Beth Israel are now under the ISMMS as of 7/1/14-making it the largest GME program in US

There are presently 148 ACGME approved GME programs, 230 total programs and more than 2400 house staff under the ISMMS in our GME consortium

38 programs expected to undergo major changes this academic year

Strategic planning of GME programs to parallel strategic plans for the location of primary and specialty patient care services throughout the MS health system

There is now system-wide representation of Program Directors and house staff on all GME committees and subcommittees

GME programs are now reported in US News and World Report. MSH Internal Medicine Ranked in top 20 in US. Other rankings available this winter

Graduate School Notable Accomplishments



Launched several new courses to enable students to develop skill-sets needed in current Health Care landscape:

- New courses specifically directed at translation (e.g., Drug Discovery) and increased exposure of students to science and scientists from Pharma and Biotech.
- A course specifically designed for first year MD/PhD students, where innovative approaches to specific problems are discussed and debated with leading experts.
- Courses that teach programming at all skill levels – in recognition that computational skills is an essential tool for the modern scientist
- MD/PhD track that provides PhD training during residency/fellowship years.
- First RPI course physically taught at the RPI campus and available to graduate students at Mount Sinai through video conferencing.

Master's Program in Health Care Delivery first cohort started Fall 2014

PhD Training area in Design, Technology and Entrepreneurship(DTE)

Developed relationships with companies in finance to provide career opportunities beyond academia

Graduate School-Scientific Computing

New Masters degree in Translational Bioinformatics
Fall 2015

Graduates will learn computational and big data techniques to advance biomedical scientific research and answer clinical questions

- Curriculum emphasizes practical training and team science
- Concentration in genetics and genomics, structural and chemical biology, systems biology, digital health or design, technology, and entrepreneurship
- Students will complete a hands-on capstone project with
- Mount Sinai Medical Center, Janssen, IBM, GlaxoSmithKline, RPI, Intel and others
- Capitalizes on Sinai's leadership and investment in innovation and big data and commitment to workforce development

Translational Bioinformatics is the development of storage, analytic, and interpretive methods to optimize the transformation of increasingly voluminous biomedical data, and genomic data, into proactive, predictive, preventive, and participatory health- *American Medical Informatics Association (AMIA)*

Graduate School-Strategic Planning Goals



Revolutionize PhD training for the 21st century

Linking the excitement of basic science discovery to the real world impact of applied innovation to facilitate direct impact on human health.

- Discovery is exhilarating but follow through with translation is critical. What environment and curriculum develops students who can do both?
- Increase exposure of our students to human biology, clinical problems, and companies that turn biomedical discoveries into innovative solutions.
- Identify core knowledge for the PhD program and the best way to teach it.
- Incorporate some of the principles of educating engineers (e.g., problem solving and design) into all of our PhD training areas.
- Increase our ability to customize curricular offerings and thesis work opportunities to serve a more diverse group of incoming students, particularly students coming from backgrounds outside of biology.
- Develop courses and experiences for the MD/PhD students that facilitate their unique training as physician/ scientists throughout their training for both degrees.

Who do we want to be as a Graduate School in 5 years?

Graduate School-Strategic Planning



Process: Analyze all facets of PhD education

(e.g., core curriculum, qualifying exams, internships, options for thesis projects)

Nothing sacred except maintaining the highest scholarly standards for the thesis.

Phase 1: External Advisory Board review and comprehensive critique

Phase 2: Brainstorming sessions with all stakeholders

Generate new ideas without conventional constraints.

Phase 3: Review and “Mapping” of ideas from brainstorming sessions

Develop a strategic plan.

Phase 4: Implementation for launch in Fall, 2015.



PhD Students-Matriculating Class of 2014

- Number of Complete Applications 441
- Size of Class 36
- NY State Residents 27%
- Women 47%
- URM 11%
- Average GRE 318
- Median GPA 3.53
- Number of Undergraduate Schools 31

BU, CalTech, Cooper Union, Cornell, Hunter, Johns Hopkins, MIT, Peking U., Rutgers (2), University of Chicago, Michigan (2), Rensselaer Poly Tech

- **Enrolled first DTE class (QED 3.0) involving MD students, PhD students, MD/Phd students, MPH students, and post-docs**
 - DTE student team (via QED 2.0) won \$15,000 in the Columbia University Biomedical Engineering Venture Capital competition
 - DTE student team (via the Makers Studio I course) built a novel bioreactor to test/measure shear stress in tissue engineered heart muscle
- **MSIT Entrepreneurship Center - opens November 2014**
- **MSIT Prototyping Center – opens 4th Q 2014**
- **Daniel Seltzer recruited as the new Director of the Center for Technology, Innovation, and Entrepreneurship**

Mount Sinai Innovation Partner (MSIP)



Performance Metrics	2012	2013
Faculty, Staff, and Trainees Engaged:	325	394
Gross Licensing Proceeds in \$millions:	76*	41
Active Revenue Generating License Agreements:	77	72
Industry Research Funding in \$millions:	6.8	38.5
New Inventions (IP Disclosures):	69	104
New Patents Filed:	161	147
New Licenses & Options:	38	45
Collaborative & Sponsored Research Agreements:	49	79
Enabling Agreements (MTAs, CDAs, IIAs):	695	1101
Active Equity Holdings in Spinouts:	7	9

*Includes large litigation settlement with licensee Shire

Scientific Computing

\$2M NIH S10 grant awarded to Sinai (PI: Kovatch) Big Omics Data Engine

- Largest equipment grant ever awarded to Sinai
 - 2,500 Intel Haswell compute cores and 5 petabytes of disk for Scientific Computing to build a new, specialized supercomputer and data analysis engine
- Will support genomics-based research for the following diseases
 - Autism, insulin resistance in diabetics, schizophrenia and related behavioral disorders, cardiac care, the origins of drug addiction and depression, and cancer progression
- Will assist over \$50M in NIH funding in genomics-based research
 - 24 PIs at Sinai (listed below) and 55 external collaborating institutions

Christopher Basler	Judy Cho	Ravi Iyenger	Charles Powell
David Bechhofer	Robert Desnick	Robert Klein	Parekh Samir
Brian Brown	Joel Dudley	Miriam Merad	Eric Schadt
Emily Bernstein	Scott Friedman	Eric Nestler	Andrew Sharp
Joseph Buxbaum	Bruce Gelb	Matthew O’Connell	Harm van Bakel
Ross Cagan	Fatemeh Haghighi	Peter Palese	Yong Zhao

Significant scientific computing and data resources for researchers and clinicians

- Minerva supercomputer
 - Consists of over 12,000 compute cores, 60 terabytes of memory, 160 terabytes of flash and 10 petabytes of online storage
 - Assists over 600 users in 11 departments
- Mount Sinai Data Warehouse
 - Contains over 2 billion facts on over 2 million patients from the clinical, operational and financial data from patient care processes (over 20 transactional systems)
 - Users ran over 8,000 queries with the web-based, self-service cohort query tool
 - Over 41 departments requested over 200 custom queries for research and hospital quality assurance projects
- eRAP custom electronic data capture system for clinical trials
 - Supports over 1,600 users for 150 institutions in 21 countries with 200 active projects for 15 Sinai departments
- New *Introduction to Scientific Computing* course (BSR1015)
 - Taught hands-on computing and data skills to over 50 students, post docs, residents and faculty in one year

2013 Research Funding

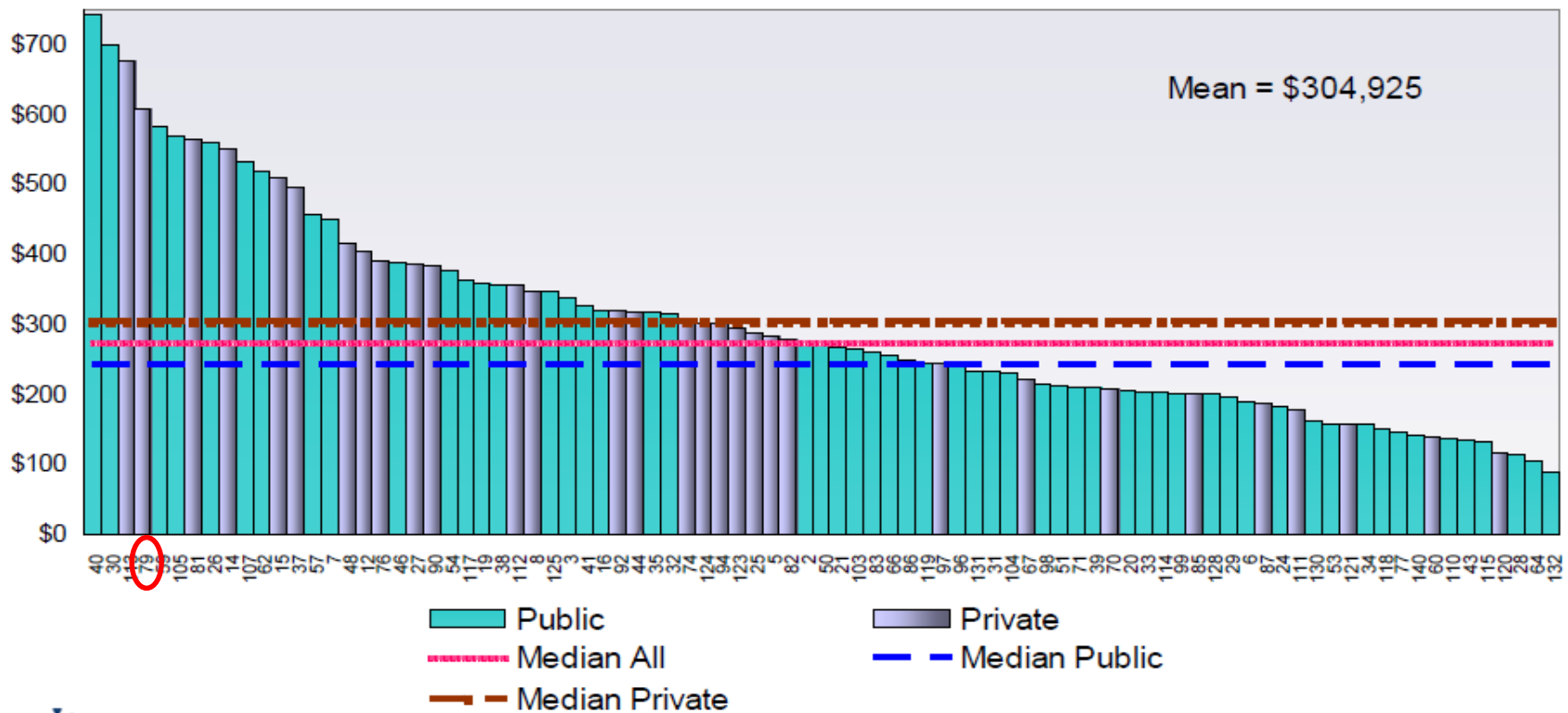
4: Sponsored Programs Direct Expenditures/PI

Purpose: Assesses research productivity of faculty engaged in research

Higher Number is Favorable

Formula: $\frac{\text{Sponsored Programs Direct Expenditures}}{\text{\# PIs Associated with Sponsored Programs Expenditures}}$

(In Thousands)



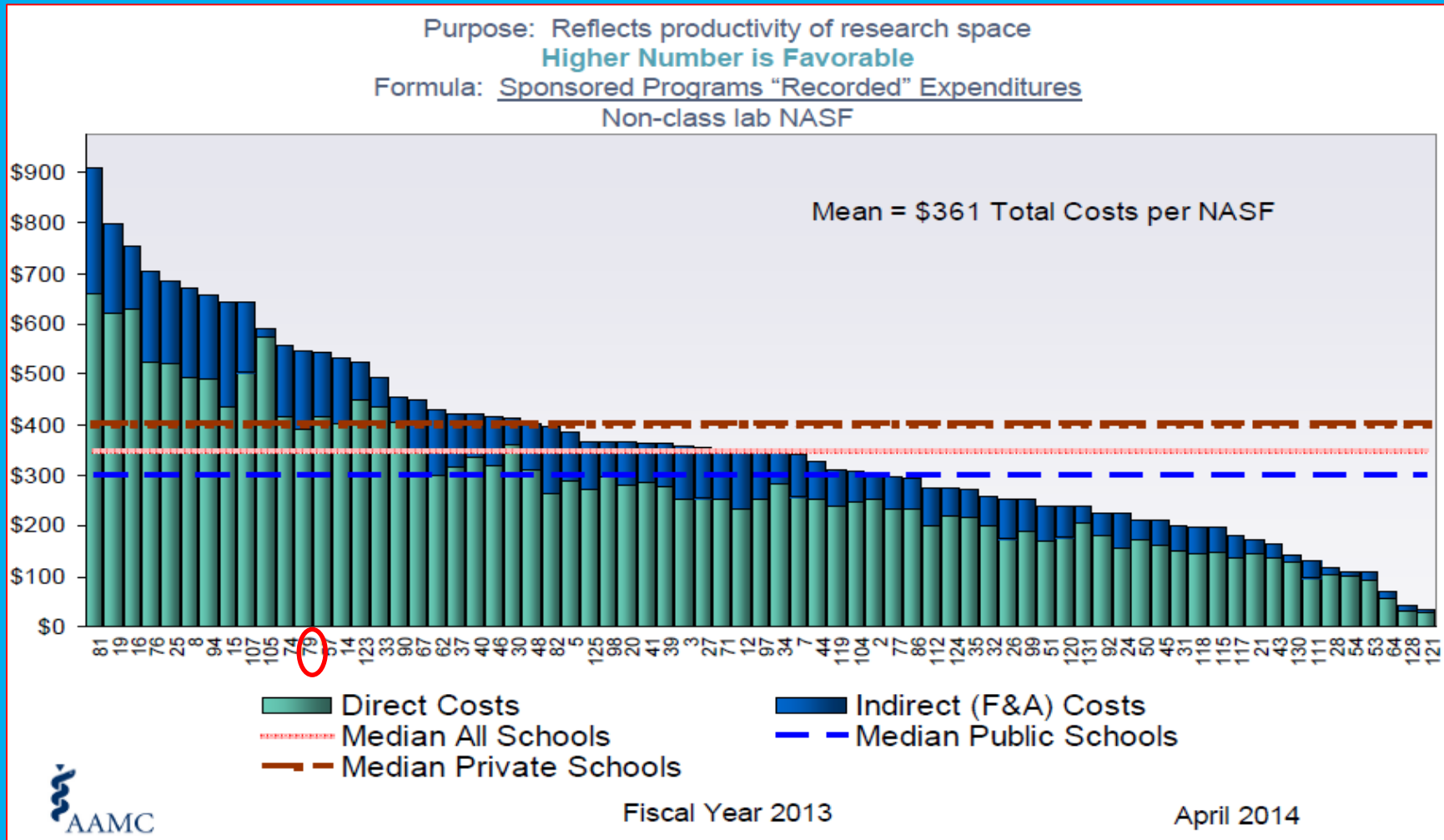
Fiscal Year 2013

April 2014

2013 Research Funding-space crunch eased by Hess



12: Sponsored Programs Expenditures/Net Assignable Square Feet



Research Strategic Plan



Targeted investments in several areas:

- Experimental Therapeutic Institute, including recruitments and capital investments in chemistry, screening, proteomics, monoclonal antibodies
- Novel technologies for therapeutic discovery-gene/cell therapies, vaccines
- Systems Biomedicine
- Molecular and Genetic Diagnostics, including testing lab in CT
- Device development
- Novel digital applications to healthcare
- High performance computing and big data analytics
- Population Health
- Global Health
- Strategic partnerships

Integration of MSHS with ISMMS



Recruitment of new leadership

Migration of faculty to ISMMS with appointments on the appropriate tracks.

Coordinated efforts in physician recruitment and retention

Collaborative opportunities for interdisciplinary and/or translational research

Integrate teaching programs

Shared planning and coordination of CME conferences/grand rounds

Enhanced branding and marketing of areas of excellence

Establishment of clinical standards and performance metrics across all practice sites (including at the satellite level)

Standardization of payment models in contracts

Exploration of new satellite/practice opportunities

Advancing Quality, Safety and Service across the Mount Sinai Health System



We intend 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

5-Year Goals



Domain	Regional Performance	National Performance
Risk Adjusted Mortality	#1	Top Decile
Risk Adjusted Readmissions	#1	Top Decile
Safety	#1	Top Decile
Value (Quality/Cost)	#1	Top Decile
Access To Care	#1	Top Decile
Inpatient and Ambulatory Patient Satisfaction	#1	Top Decile

2014 Priorities



- Avoidable Readmissions
- Inpatient Harm
 - All Hospital Central Line Associated Bacteremia
 - Catheter Associated UTI
 - Pressure Injury
 - C. diff
 - Surgical Site Infections
- Risk Adjusted Mortality
 - Sepsis
 - Moving palliative care upstream
 - Coding and documentation
- Inpatient Likelihood to Recommend

Mount Sinai Doctors Faculty Practice Accomplishments 2014



- Growth
 - 6.34% in 2013
 - 8.06% in 2014 YTD
- Contribution Margin
 - 2.3% in 2013
 - 1.4% in 2014 YTD
- Patient Experience
 - 55th percentile vs. national peers in Q2 2014 Press Ganey survey
- Columbus Avenue Urgent Care (as of June 2014)
 - FPA: 543 Visit Volume
 - Outpatient Referrals: 229 Visit Volume
 - Inpatient Admissions: 308 Visit Volume

Mount Sinai Doctors Faculty Practice

Ongoing Initiatives



- Faculty Practice Integration
 - Integrating over 400 providers from BISLR as of January 1
- Clinical Program Development and Oversight
 - Urgent Care
 - Columbus Avenue / Inwood (November 2014) / 85th Street (October 2015)
 - Non-Cancer Infusion
 - Services added at Beth Israel West
 - Weekend and expanded hours at Mount Sinai NCIC
 - Beth Israel Medical Groups, West Park, West Care
- Patient Satisfaction
 - Survey tools rolled-out to Health System's ambulatory sites
- Centralized Billing Office
 - Currently 26 Departments, adding 800 physicians with integration
- Centralized Call Center
 - 16 Departments by end of 2014, including Physician Referral Service
 - Superior performance (metrics)

Mount Sinai Doctors Faculty Practice Space Initiatives



Department	Current sq ft	New sq ft	Change
Spine Center	5,500	12,500	7,000
CAM IBD Center	1,800	5,000	3,200
GP 1 Cardiovascular Center	12,500	20,000	7,500
Diabetes/Bariatric Surgery	9,000	12,500	3,500
Tower 5 Respiratory Center	2,800	10,000	7,200
Urgent Care – Inwood	0	4,000	4,000
236 E 85 th Street	13,250*	47,500	34,250

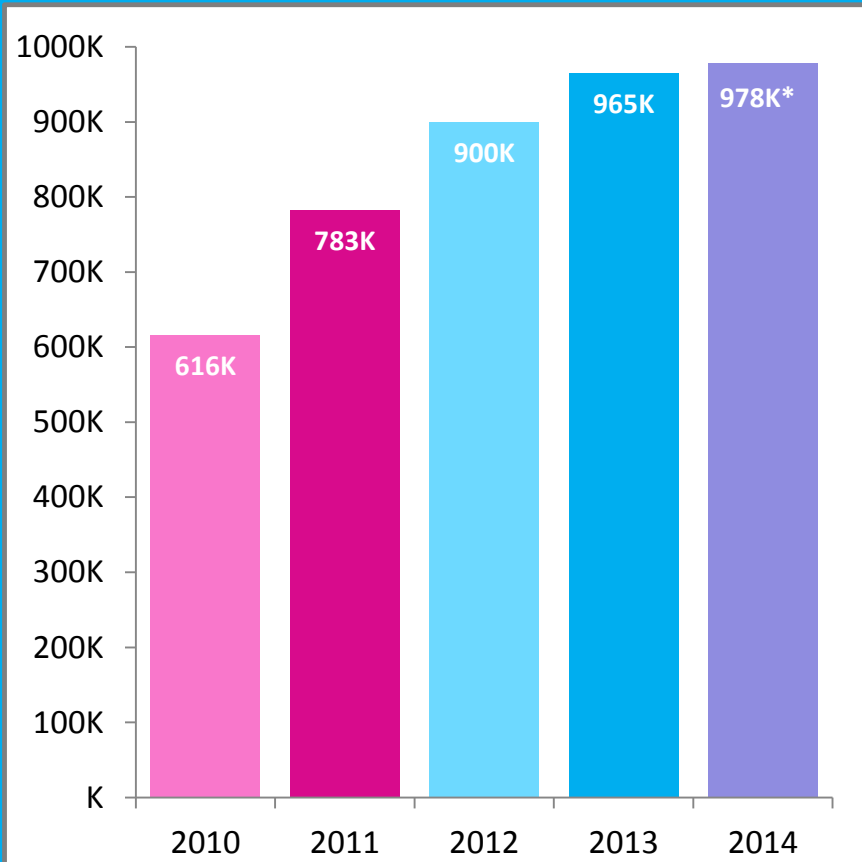
*Existing space for Departments moving to new space

Mount Sinai Doctors Faculty Practice

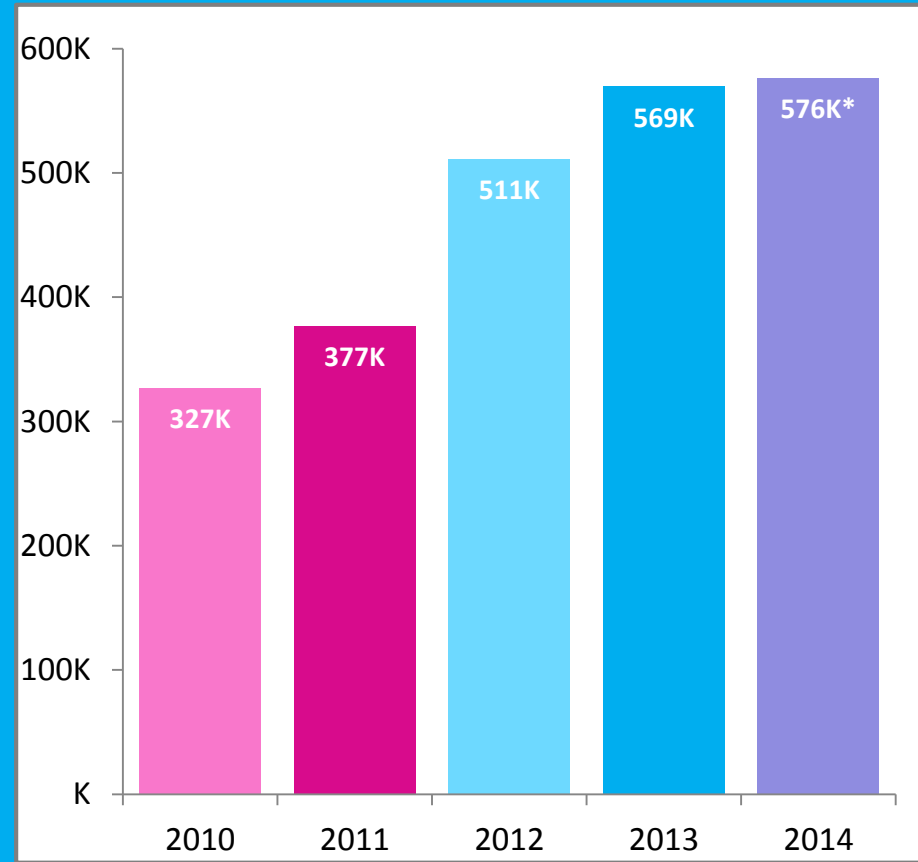
Current Positioning: FP Clinical Activity



Ambulatory Encounters 2010 – 2014



Outpatient Visits (On Campus) 2010 – 2014



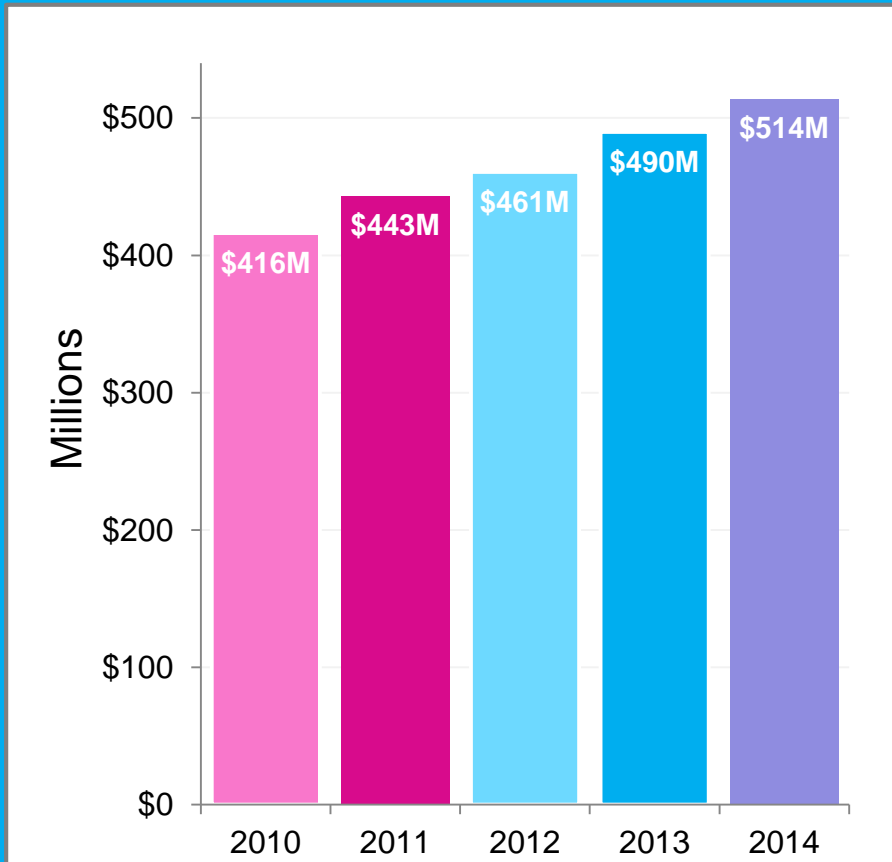
*Data annualized based on 7 months, with 1 month lag

Mount Sinai Doctors Faculty Practice

Current Positioning: FP Financial Performance

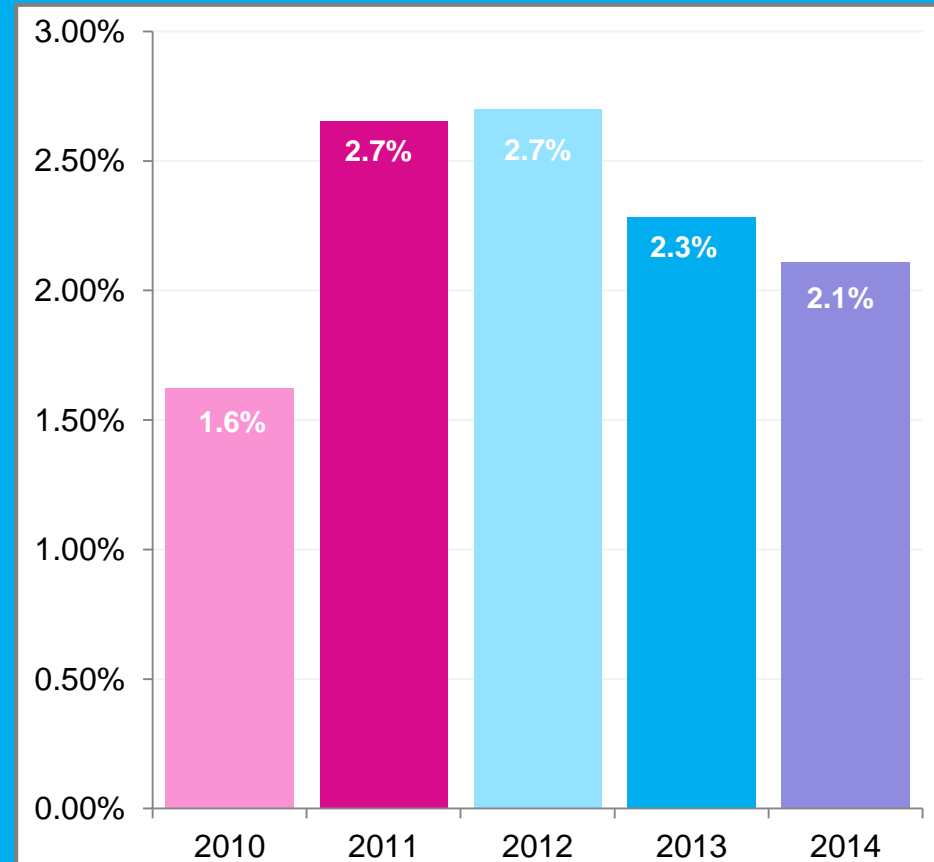


FP Annual Receipts 2010 – 2014



* Annualized based on July data

Annual Operating Margin (FP + Dept) 2010 – 2014



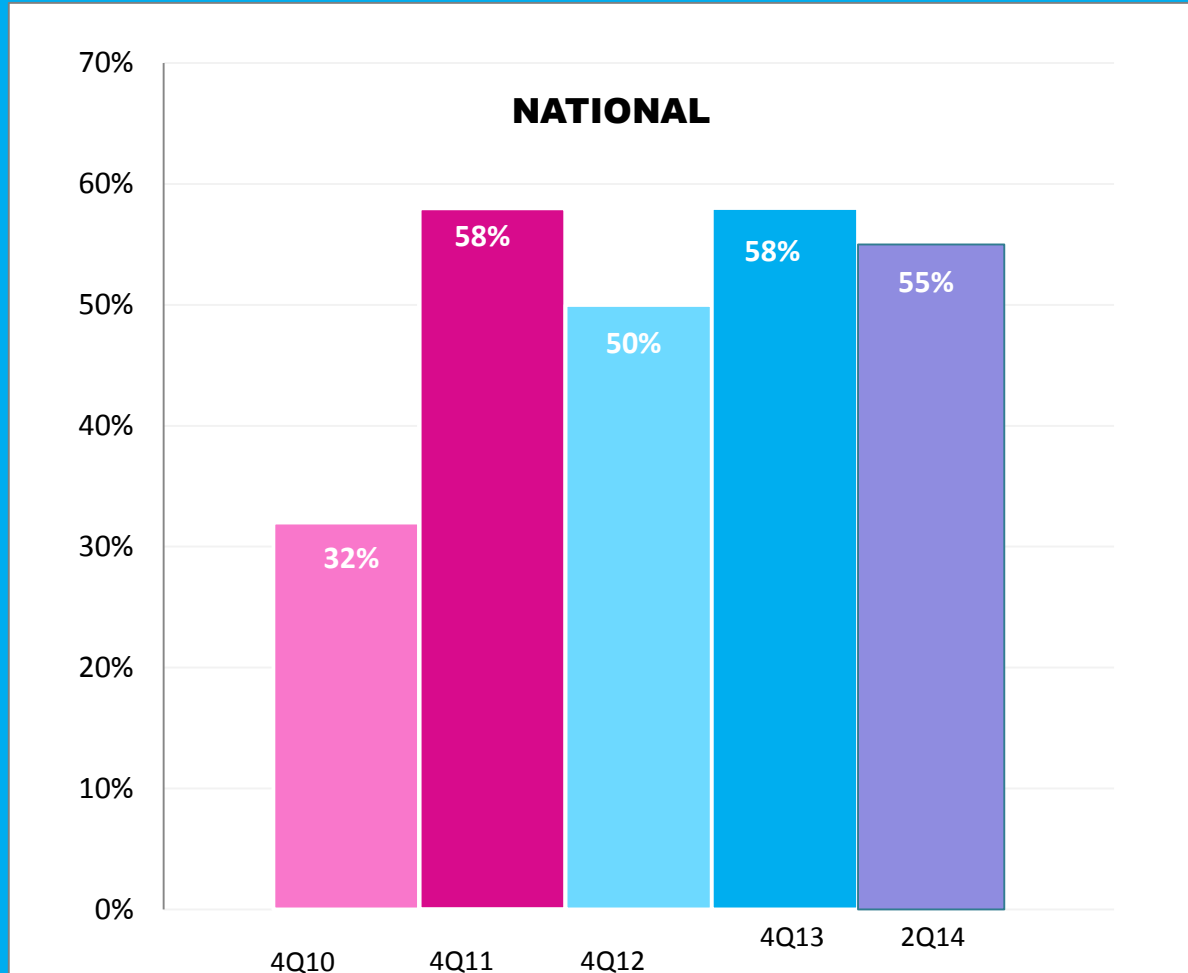
* Data as of July 2014, after adjustments

Mount Sinai Doctors Faculty Practice

Current Positioning: FP Patient Satisfaction



Press Ganey Percentile Ranking – Overall Satisfaction



Financial Results



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

Financial Operating Results:

	<u>Results</u>
2014 (Budget)	\$ Expect at least breakeven results
2013	\$ 77
2012	\$ 7,481*
2011	\$ 116
2010	\$ 286

* 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 from health care reform
 - Federal Budget issues
 - NIH Funding
 - More competition for fewer grants awards
- Timely integration of Member Hospital clinical and research operations.
- Growth in research grants necessary to help pay the annual operating costs (\$32 million) of fully operational HCSM Building.
- Capital Project Funding for existing school buildings.
- Revenue Diversification.

Action Plan to Meet Financial Challenges



- 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.
 - Realize clinical revenue growth opportunities from Member Hospital faculty joining the FPA. Practice integrations underway: OB/Gyn, Primary Care, Emergency Medicine, Radiology, Anesthesiology. Others to follow in 1st Qtr 2015.
 - Leverage the significant investment in new research recruits, HCSM and core facilities to increase grant volume.
 - Research and Clinical performance 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
 - Quality, productivity and outcomes goals integrated
 - Performance goals for each physician with regular reviews of actual results

Action Plan to Meet Financial Challenges



- Effective Space Utilization:
 - Administrative services consolidated at 42nd Street.
 - Fill remaining HCSM space to support education, research and clinical operations
 - Continue to expand Faculty Practice offsite locations (85th Street 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 (Next Gen, Precise MD)
- Philanthropy support for Strategic Plan and Capital Projects
- Continued Financial Discipline is Imperative:
 - Business Plans
 - Return on Investment
 - Continuous monitoring of financial results with timely corrective actions, if necessary

SINAInnovations

theme: Engineering and Medicine



Mark Your Calendars for **SINAInnovations** 2014

November 18 - 19, 2014

Icahn School of Medicine at Mount Sinai

1468 Madison Avenue

New York, NY 10029

The Icahn School of Medicine at Mount Sinai is hosting its third annual *SINAInnovations* conference. This year's theme "Engineering and Medicine" will include keynote addresses, short talks, lunchtime breakout sessions and demos in areas focusing on breakthroughs 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.

Watch for more information at

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Keynote Speakers:

Eric J. Topol
Director, Scripps Translational Science
Institute

Jun Wang
Director, Dept. of Bioinformatics, BGI-
Shenzhen

Miguel A. Nicolelis
Professor, Dept. of Neurobiology, Duke
University Medical Center

Andrew Conrad
Director, Google[x]

Shirley A. Jackson
President, Rensselaer Polytechnic Institute

Benedetta Piantella
Co-Founder, T4D Lab; Faculty, Interactive
Telecommunications Program, New York
University

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