

OREGON HEALTH & SCIENCE UNIVERSITY BOARD OF DIRECTORS MEETING

Thursday, April 5, 2018 9:00 am – 11:15 am CLSB 3A002

9:00 am	Call to Order/ Chairman's Comments President's Comments Approval of Minutes (Action)	Wayne Monfries Joe Robertson, M.D. Wayne Monfries
9:15 am	Gene Repair in Human Embryos	Shoukhrat Mitalipov, Ph.D. Sanjiv Kaul, M.D.
9:45 am	President Search Update	David Yaden
10:00 am	FY18 February Financial Results	Lawrence Furnstahl
10:15 am	OHSU Healthcare Annual Quality & Safety Report	Renee Edwards, M.D.
10:30 am	Integrity Program Update	Tim Marshall
10:45 am	Performance Indicators	Dan Forbes Brian Gibbs, Ph.D.
11:15 am	Meeting Adjourned	



GENE REPAIR IN HUMAN EMBRYOS

Shoukhrat Mitalipov and Sanjiv Kaul



Center for Embryonic Cell and Gene Therapy Knight Cardiovascular Institute

Inherited (Genetic) Diseases

✓ There are over 10000 (known) monogenic disorders that can be passed down to children

✓ No cure

✓ Ultimate goal is to prevent genetic disorders!

Global Impact of Monogenic Diseases



Preventing genetic disorders

✓ Genetic counseling – explain inheritance and chances, adoption of children, embryos or gametes

✓ Preimplantation or Prenatal Genetic Diagnosis (selection or abortion)

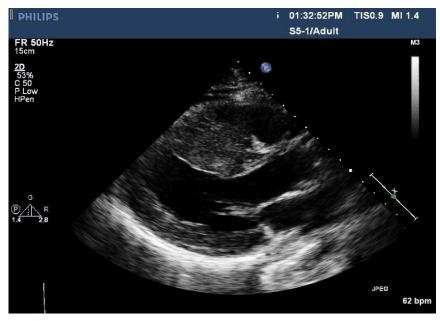
 ✓ Germline Gene Therapy (correcting mutations in gametes or early embryos)

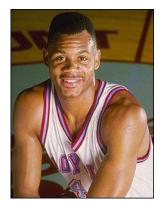
Sudden Death in Athletes

Control Patient



HCM Patient





Hank GathersBasketball all-star Loyola
Marymount University

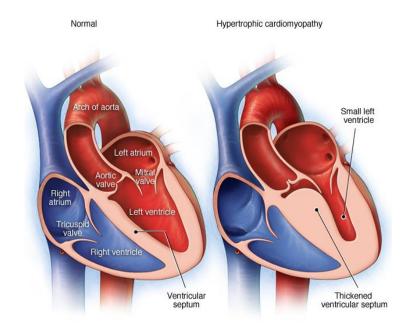
#1 CAUSE
of Sudden Death in Athletes



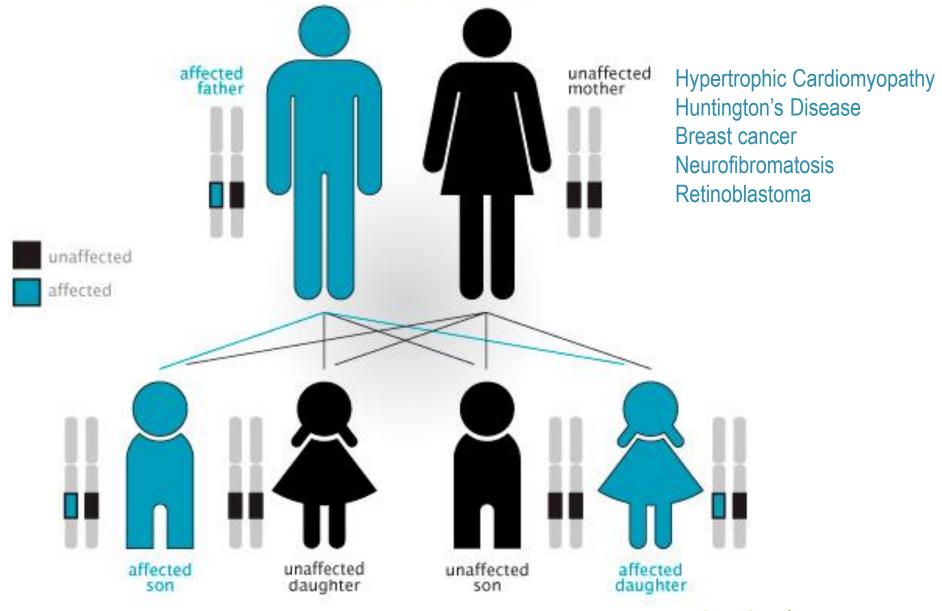
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MYBPC3 mutations causing Hypertrophic Cardiomyopathy

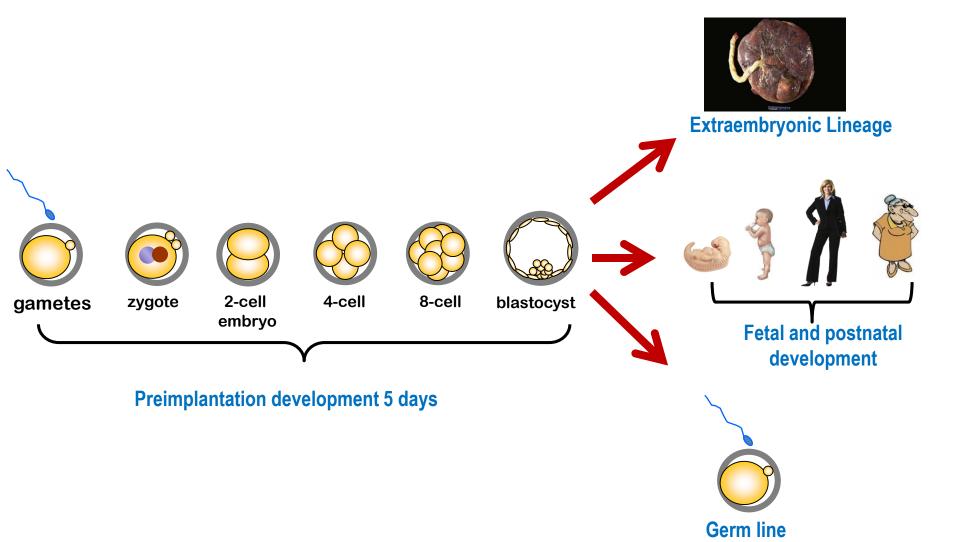
- ✓ Late onset, heterozygous dominant mutation (deletions)
- ✓ Responsible for hypertrophic cardiomyopathy (HCM), prevalence in general population is 1:500
- ✓ Deletions in MYBPC3 account for ~35% of all cases of HCM



Autosomal Dominant Inheritance



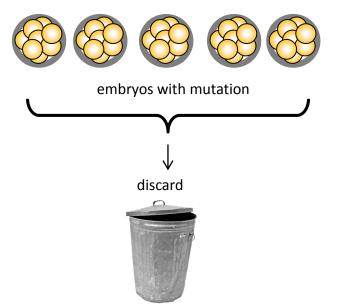
Peter Braude 2015 Summit on Human Gene Editing

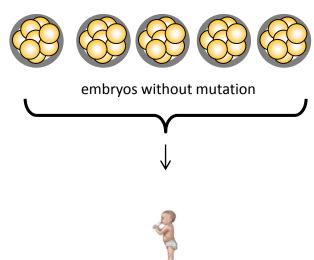


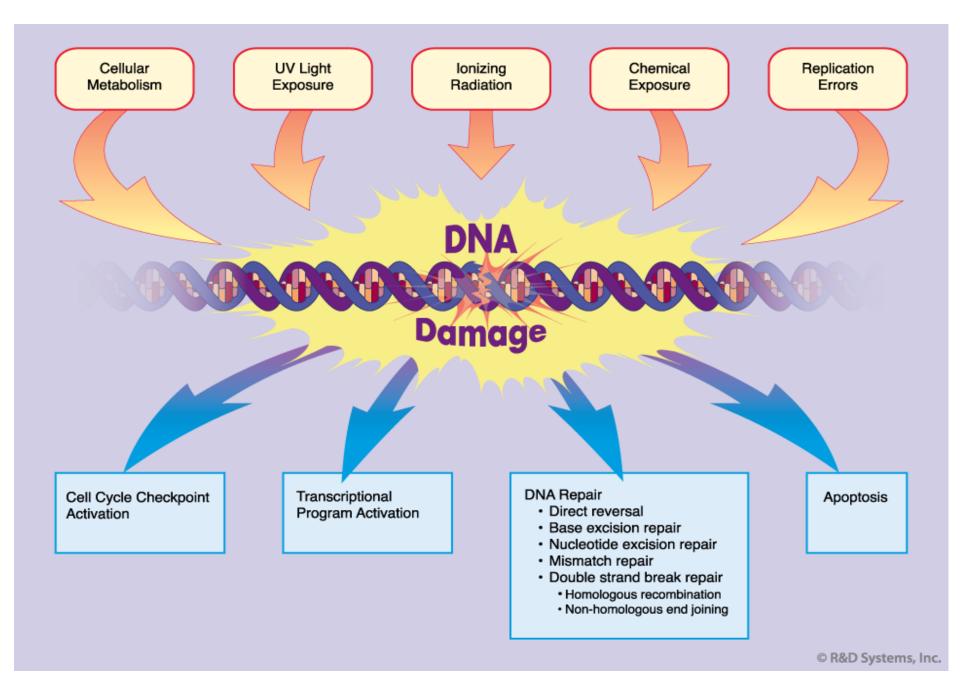
Preimplantation Genetic Diagnosis

(also known as embryo screening and selection)

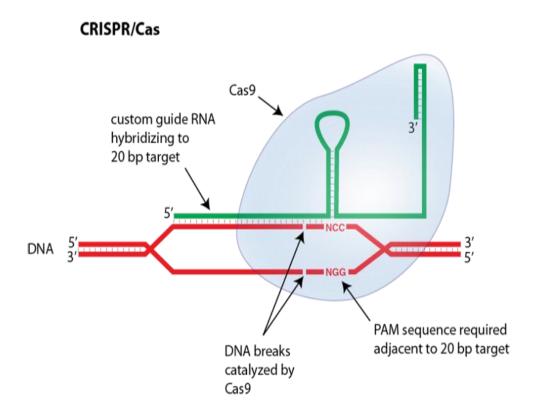




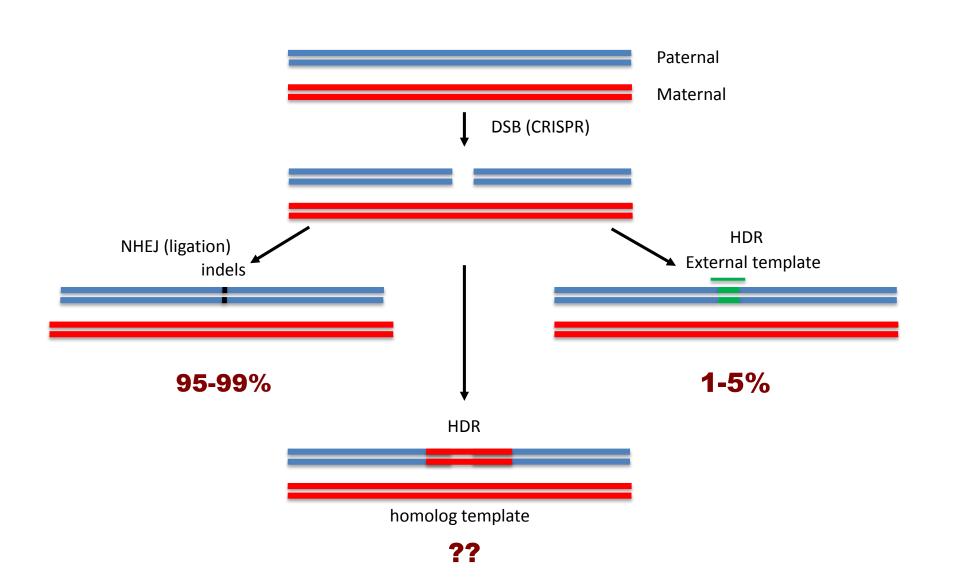




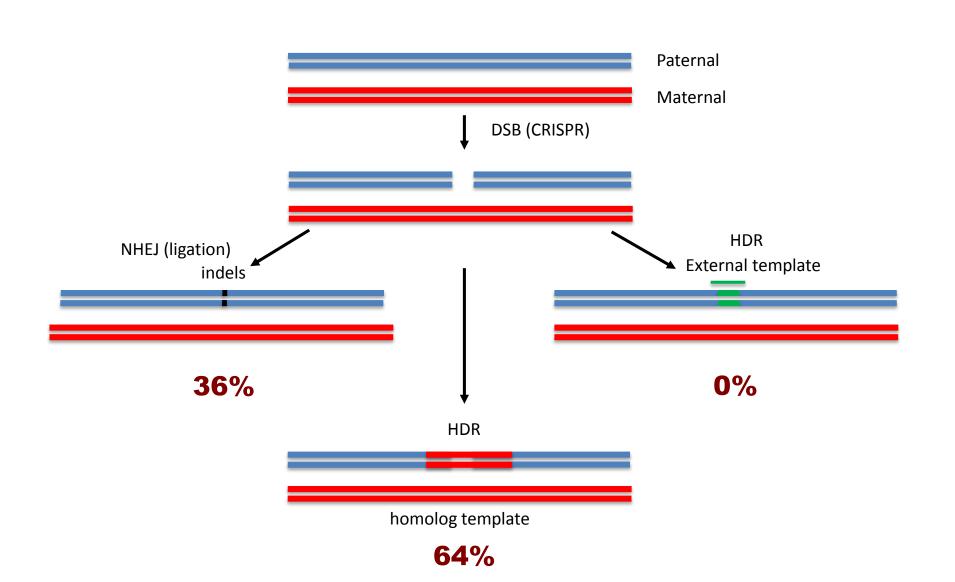
Genome editing tools to induce damage on mutant gene



Molecular Mechanisms of DNA Repair: expectations



Molecular Mechanisms of DNA Repair: reality

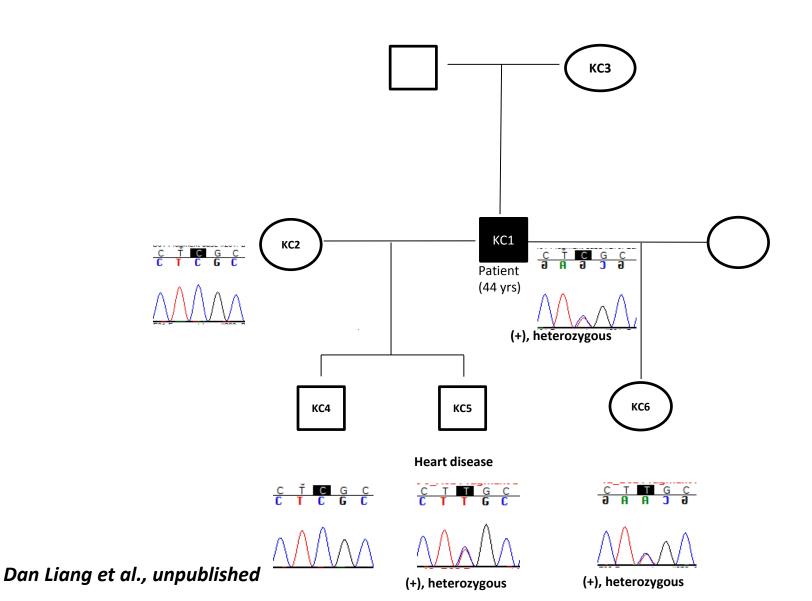


Independent validation of Interhomolog Repair

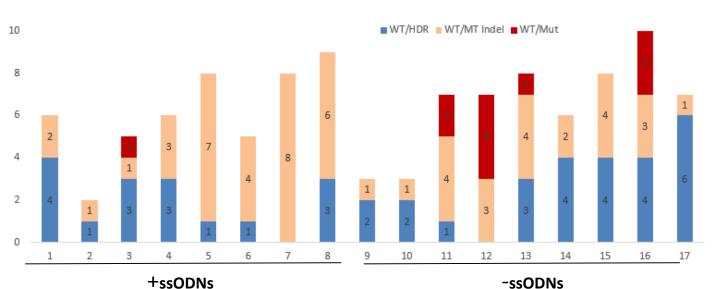
bioRxiv preprint first posted online Feb. 11, 2018; doi: http://dx.doi.org/10.1101/263699. The copyright holder for this preprint (which was not peer-reviewed) is the author/funder. All rights reserved. No reuse allowed without permission.

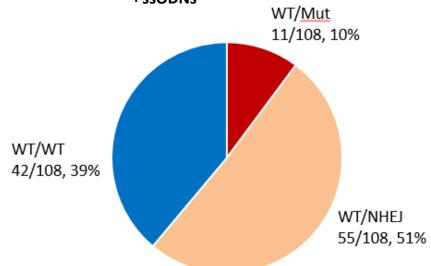
1	RAD51 Enhances Zygotic Interhomolog Repair
2	
3	Jonathan J. Wilde ¹ , Tomomi Aida ¹ , Martin Wienisch ¹ , Qiangge Zhang ¹ , Peimin Qi ¹ , and
4	Guoping Feng ^{1,2*}
5	
6	Affiliations:
7	¹ McGovern Institute for Brain Research, Department of Brain and Cognitive Sciences,
8	Massachusetts Institute of Technology (MIT), Cambridge, Massachusetts 02139, USA
9	
10	² Stanley Center for Psychiatric Research, Broad Institute of MIT and Harvard, Cambridge,
11	Massachusetts 02142, USA
12	
13	*Correspondence to G.F.: fengg@mit.edu
1/	

MYH7, myosin heavy chain, cardiac muscle, beta Mutation type: 15819 C>T (1bp substitution) Chromosome 14, Exon 22



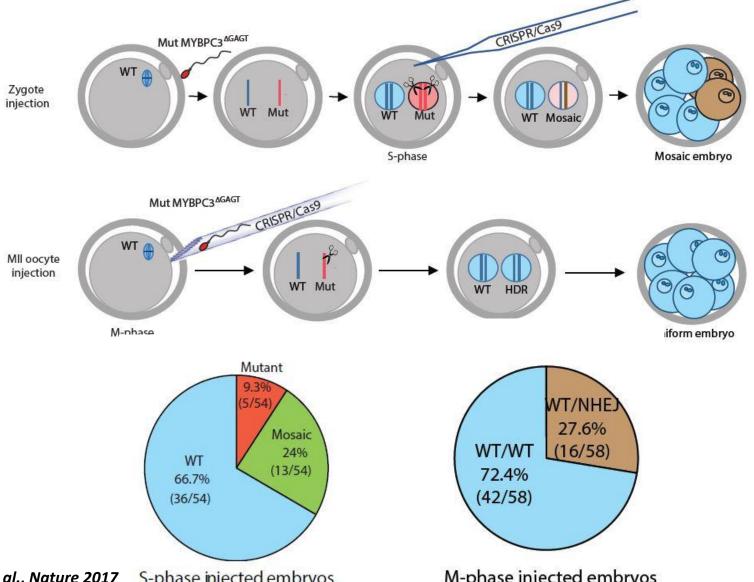
MYH7 editing: blastomere genotypes in mosaic embryos





Dan Liang et al., unpublished

Mosaicism: origin and prevention



Ma et al., Nature 2017

S-phase injected embryos

M-phase injected embryos

Gene correction highlights

√ High targeting efficacy (82-100%)

✓ High inter-homolog HDR efficiency (64%)

✓ Results are independently reproduced

✓ Mosaicism reduced

√ Advantage over conventional PGD

Germline Gene Therapy

Cons

PGD alternative is available

- Conventional treatments available
- Somatic gene therapy is more safe
- Imperfect repair with high NHEJ and possible off target effects

Pros

- Complements PGD by rescuing mutant embryos
- \$500K conventional HCM therapy vs. \$30K for GGT
- Targeting and repair of trillions somatic cells vs. one or two in embryos
- Efficiency and safety must be improved before clinical applications

Center for Embryonic Cell and Gene Therapy **REI-OBGYN**

Hong Ma **Nuria-Marti Gutierrez** Dan Liang **Amy Koski**

Paula Amato Dianna Wu **David Lee** Sacha Krieg **David Battaglia**

KCVI

Tomonari Hayama

Ying Li

Riffat Ahmed Crystal Van Dyken

Hayley Darby

Don Wolf Eunju Kang

Sanjiv Kaul

Yeonmi Lee Dongmei Ji

Stephen Heitner



The Salk Institute **Juan Carlos Belmonte**

Jun Wu

Keiichiro Suzuki

Center for Genome Engineering

Jin-Soo Kim

Sang-Wook Park

A.-Reum Park

Cincinnati Children's Hospital

Taosheng Huang Xinjian Wang

Institute for Basic Science

Daesik Kim

Sang-Tae Kim

Rowan University

Dmitry Temiakov

Karen Agaronyan

BGI

Jianhui Gong

Ying Gu

Xun Xu

IvGen

Cengiz Cinnioglu

Refik Kayali



FY18 February YTD Financial Update

FY18 February YTD Financial Results

- Financial results through the first eight months show operating income of \$57 million, nearly \$18 million above budget.
- However, within this result, OHSU Healthcare is now \$(8) million off target, yet \$3
 million above FY17. This gap is offset by gains elsewhere, some of which should be
 maintained and thus we have revised budget targets for FY18.
- OHSU revenues are up 7% year-over-year, reflecting higher casemix, surgical cases and ambulatory visits (offset in part by shift to Medicare) combined with solid growth in revenues from grants and tuition.
- We have received the first two months of enhanced IGT payments.
- Administrative & support areas continue to hold spending below budget, as Accelerate OHSU performance improvement efforts proceed.
- OHSU-held cash & investments are up approximately \$55 million reflecting stronger receivables management and a solid days cash on hand of 208 days.
- Consolidated net worth rose \$174 million or nearly 6% through February to over \$3.3 billion, on strong operations, the State grant to the Knight Cancer Challenge applied to construction of research facilities, and investment returns at OHSU and the Foundations.

February YTD Operating Income \$18M > Budget

February YTD (8 months) (millions)	FY17 Actual	FY18 Budget	FY18 Actual	FY18 - Budget	FY18 / FY17
Net patient revenue	\$1,298	\$1,357	\$1,388	\$31	6.9%
Medicaid R&E IGT	57	57	61	4	7.4%
Grants & contracts	268	280	285	5	6.4%
Gifts applied	64	71	59	(12)	-7.4%
Tuition & fees	47	49	50	1	6.6%
State appropriations	24	24	25	1	4.1%
Other revenue	80	85	90	6	12.6%
Operating revenues	1,837	1,922	1,958	36	6.6%
Salaries & benefits	1,080	1,145	1,151	6	6.6%
Services & supplies	520	567	578	11	11.1%
Provider tax	57	49	50	1	-13.4%
Depreciation	96	101	102	1	6.8%
Interest	22	21	20	(1)	-7.7%
Operating expenses	1,774	1,882	1,901	18	7.1%
Oper. income (budget basis)	63	40	57	18	-9.3%
OregonHeart investment	2		0		
Due from Salem Health	11		0		
State grant to KCC	29		68		
Total oper. income (pre-GASB 68)	\$105		\$125		



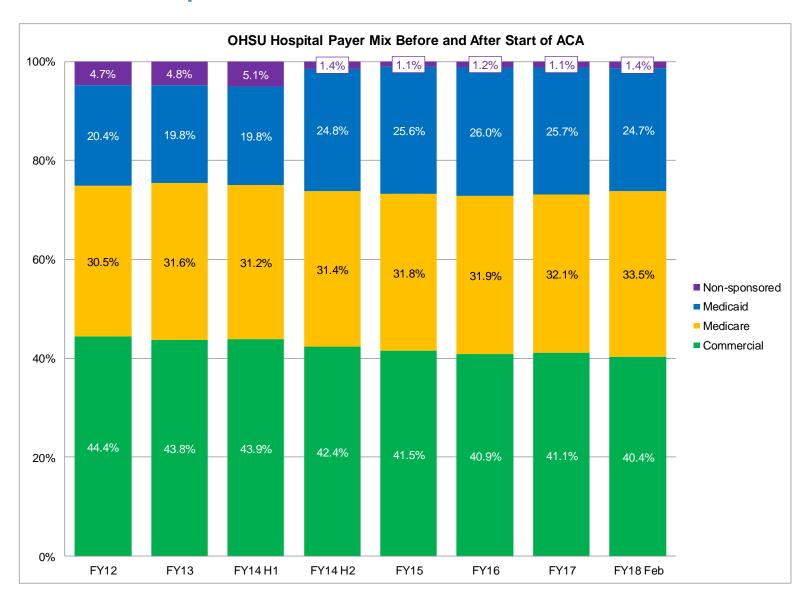
February YTD Budget Variance & Revised Targets

- We have revised budget targets for the various components of the University based on February
 YTD results in order to achieve the budgeted \$100 million operating margin for FY18
- Healthcare will hold their February YTD \$(8) million variance and All Other University will achieve a
 positive \$13 million variance by the end of the fiscal year
- This will be accomplished by implementing several Accelerate OHSU initiatives and reduced spending in administrative and overhead expense

Feb YTD Budget Variance (000)	Feb YTD	New Targets
OHSU Hospital	\$(6,435)	
Tuality / Adventist Healthcare	(1,891)	
Subtotal - healthcare	(8,326)	(8,000)
School of Medicine unrestricted	4,275	2,500
Other schools, centers & institutes	(381)	(1,000)
Administration & support	19,331	11,000
Restricted funds (mostly grants)	2,874	500
Subtotal - other university	26,099	13,000
Total OHSU	\$17,773	\$5,000



Medicaid Expansion + Shift Toward Medicare



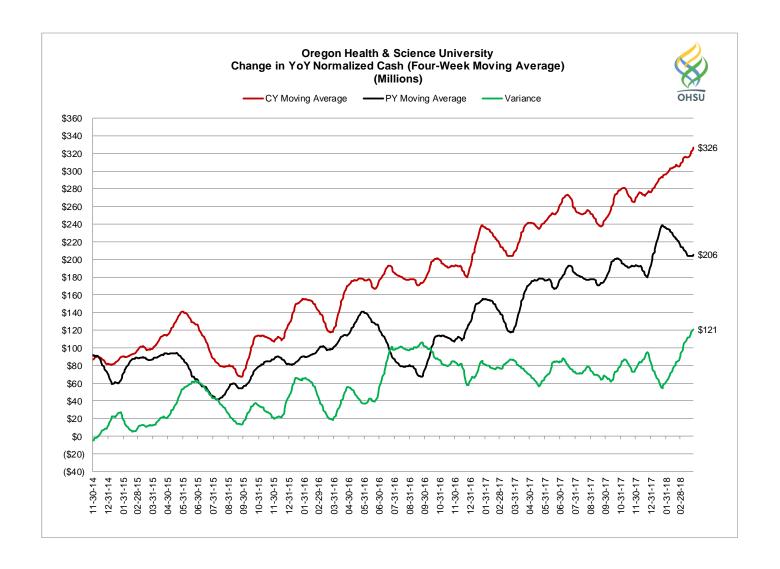


O/P Visits, Surgical & Casemix Drive Growth

OHSU Patient Activity	FY17	FY18	FY18	Actual /	Actual /
February YTD (8 months)	Actual	Budget	Actual	Budget	Last Year
Inpatient admissions	19,710	19,786	19,330	-2.3%	-1.9%
Average length of stay	5.99	6.00	5.93	-1.2%	-1.0%
Average daily census	474	477	462	-3.1%	-2.6%
Day/observation patients	24,235	24,649	26,363	7.0%	8.8%
Emergency visits	31,118	31,846	31,317	-1.7%	0.6%
Ambulatory visits	573,531	605,417	625,515	3.3%	9.1%
Surgical cases	21,911	22,901	23,417	2.3%	6.9%
Casemix index	2.06	2.07	2.18	5.3%	5.8%
Outpatient share of activity	48.8%	49.9%	51.1%	2.4%	4.7%
CMI/OP adjusted admissions	79,372	81,784	85,971	5.1%	8.3%



Normalized Cash Balance Up Year Over Year





Cash Up \$55M with Net Worth Up \$174M

Balance Sheet (millions)	6/30/17	2/28/18	Change
Operating cash & investments	\$825	\$872	\$47
Quasi-endowment funds	86	94	7
Moda surplus note, net	34	34	0
OHSU cash & investments	945	999	55
Trustee-held bond funds	19	19	(0)
KCC project fund	124	56	(68)
CHH-2 project fund	144	50	(94)
Total cash & investments	1,232	1,125	(108)
Net physical plant	1,742	1,901	159
Interest in Foundations	1,403	1,437	34
Long-term debt	(1,009)	(1,003)	6
GASB 68 pension items, net	(298)	(298)	0
Working capital & other, net	70	153	84
OHSU net worth	3,141	3,315	174
0	//		F-7

Oper. income (budget basis)	57
State grant to KCC	68
OHSU investment return	15
Gain (loss) from Foundations	34
Other non-operating items	(0)
Total change in net worth	\$174

FY18 Cash Flow (millions)	Feb YTD
Oper. income (budget basis) State grant to KCC Depreciation OHSU investment return CHH-2 project funds applied	\$57 68 102 15 94
Sources of OHSU cash	337
Regular principal repaid Capital spending Other working capital, net	(6) (261) (16)
Uses of OHSU cash	(283)
Sources less uses of cash	55
6/30/17 balance 2/28/17 balance	945 \$999





OHSU Healthcare Annual Quality Report

Creating a culture of performance improvement

FY17 Accomplishments

#12

VIZIENT ANNUAL QUALITY & ACCOUNTABILITY SCORECARD

Attained #12 ranking, placing OHSU in the top tier for academic medical centers across the nation

+0.0346%

VALUE-BASED PURCHASING (VBP)

Performed above average, resulting in a 0.0346% increase in base operating DRG payments for FY2018.

\$12.8 MILLION

HOSPITAL TRANSFORMATION PERFORMANCE PROGRAM (HTPP)

Met performance target on 8/11 metrics, earning a \$12,771,063 i ncentive payment from the state.



Achieved 4/5 stars in the CMS Star Rating, placing OHSU within the top 25 th percentile across the nation.

HAC REDUCTION PROGRAM

Performed above the 75th percentile cut-off, avoiding a financial penalty.

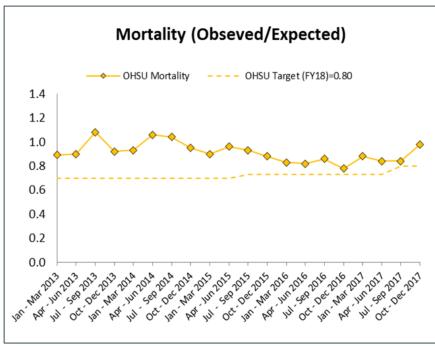
FY 2018 – Tier 1 Improvement Priorities

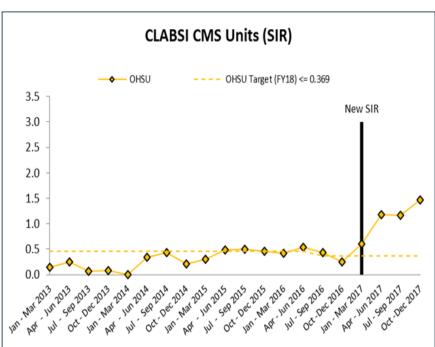
	SAFETY Zero preventable harm	QUALITY The right care at the right time	SERVICE Access to world class	AFFORDABILITY 10% cost reduction
Adult Inpatient	CAUTI C. Difficile SSI	Mortality O/E Medicaid 30-day Readmissions All-Cause 30-day Readmissions (All Patients)	experience	Length of Stay O/E
рсн	CLABSI SSI Serious Safety Events		Ambulatory Access Inpatient Discharge Prediction Children's Surgery Center Verification & Trauma Center Verification	
Ambulatory			Ambulatory Access Overall Patient Experience	

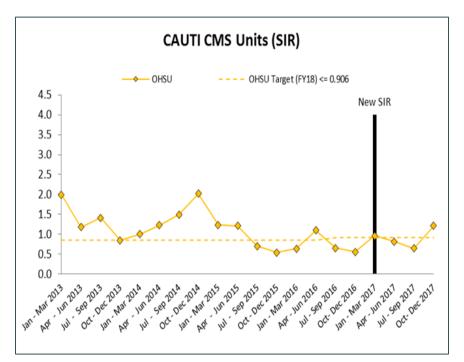
OHSU TIER 1 QUALITY & SAFETY PRIORITIES

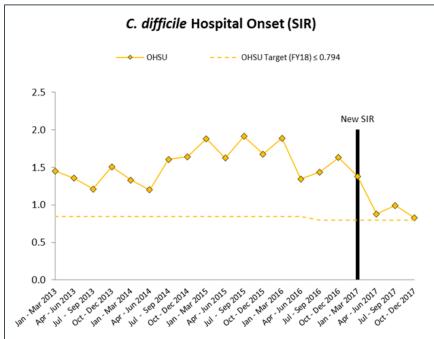
Improvement in all Tier 1 Quality & Safety Priorities.

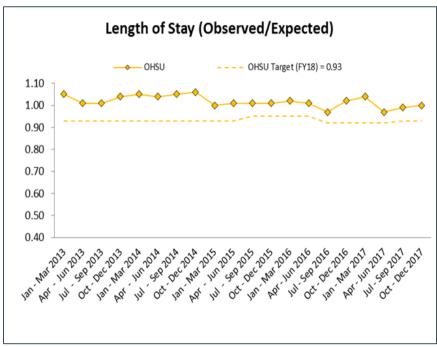
Safety	FY2016	FY2017
CLABSI (All Adult and Pediatrics rate per 1,000 central line days)	1.66	1.42
CAUTI (All Adults rate per 1,000 catheter days)	1.60	1.20
C. Diff (All Adults rate per 1,000 patient days)	1.25	0.97
Quality	FY2016	FY2017
Mortality O/E (Adult only)	0.91	0.85
Service	FY2016	FY2017
% New Patients Seen Within 14 Days*	43.2%	46.1%
Medical Practice Overall Patient Experience (Top Box)	76.6%	79.2%
Affordability	FY2016	FY2017
LOS O/E (All patients)	1.03	1.01

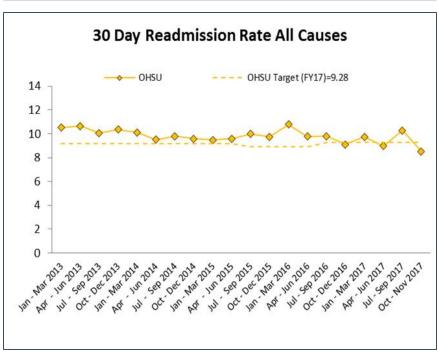


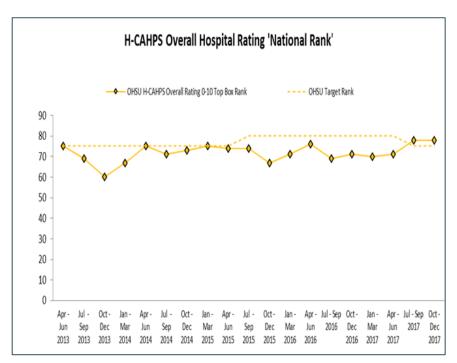


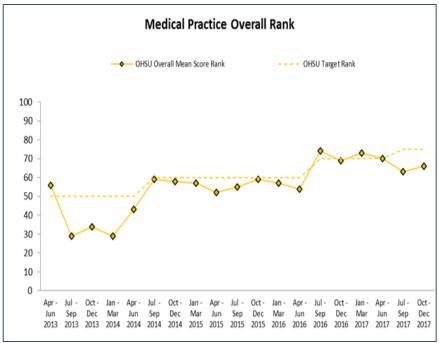












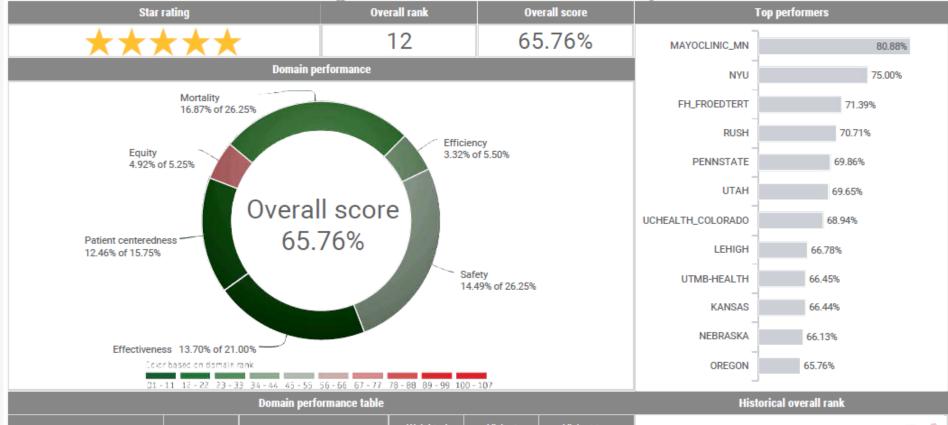
Surgical Site Infections

SSI	FY16	FY17
Adult Laminectomy	0.4%	0.2%
Total Hip	1.4%	1.9%
Total Knee	0.3%	0.3%
Abdominal Hysterectomy	3.7%	0.7%
Adult Colon	6.1%	3.3%
Adult Craniotomy	2.2%	1.2%
Adult Spinal Fusion	1.9%	2.4%
CABG	2.3%	0.6%
Pediatric Cardiac	-	2.5%
Pediatric Laminectomy	3.3%	0.0%
Pediatric Colon	6.3%	2.0%
Pedatric Spinal Fusion	_	5.9%
Pediatric Ventricular Shunt	1.7%	1.3%

Domain	Content/Areas of Focus				
Mortality 26.25%	O/E Ratios from Clinical Outcomes Report (COR)				
Effectiveness 21%	 30-Day Readmission Rate (all cause) for select services Excess Days for select service lines Process of Care/Core Measures (ED throughput & VTE-05) 				
Safety 26.25%	 5 AHRQ Safety Measures (Pressure Ulcers, Respiratory Failure, Hemorrhage/Hematoma, Iatrogenic Pneumothorax, Post-op Sepsis) CLABSI CAUTI C. difficile SSI (Colon Surgery and Abdominal Hysterectomy) VTE-6 THK Complications 				
Equity 5.25%	Process of Care/Core Measures by gender, race, and payer (socioeconomic class)				
Patient Centeredness 15.75%	9 HCAHPS Questions				
Efficiency 5.5%	LOS O/E for select service lines (Direct Cost removed for this year only)				

2017 AMC Quality and Accountability Performance Scorecard

Oregon Health & Science University



Domain	Rank	Weight Score		Weighted score	Vizient median	Vizient top performer			
Overall	12	100.00%	65.76%	65.76%	55.30%	80.88%]		
Mortality	29	26.25%	64.28%	16.87%	51.09%	93.41%			
Efficiency	44	5.50%	60.34%	3.32%	51.72%	93.62%			
Safety	48	26.25%	55.19%	14.49%	54.24%	76.68%			
Effectiveness	12	21.00%	65.24%	13.70%	49.84%	75.01%	68		
Patient centeredness	13	15.75%	79.10%	12.46%	51.37%	89.57%	5		
Equity	70	5.25%	93.75%	4.92%	94.44%	100.00%	2005		





Integrity Program Update Annual Report to the OHSU Board of Directors

Integrity at OHSU

Integrity: To commit to and remain true to a set of values and principles through our actions, with unwavering dedication to being upright and honest.

- OHSU Code of Conduct (Section 1.1)

Every OHSU Member, including the OHSU Board of Directors, is responsible for adhering to the highest ethical, organizational, and operational standards in the performance of duties and responsibilities at OHSU.

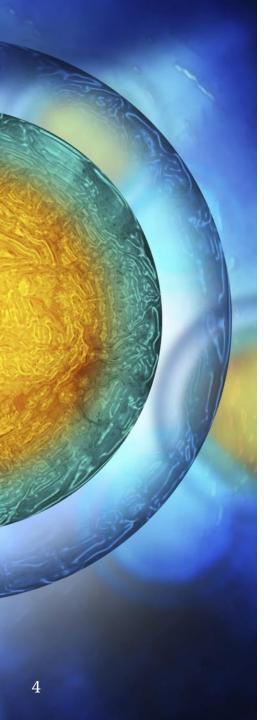
- OHSU Roles and Responsibilities guidelines

Roles and Responsibilities

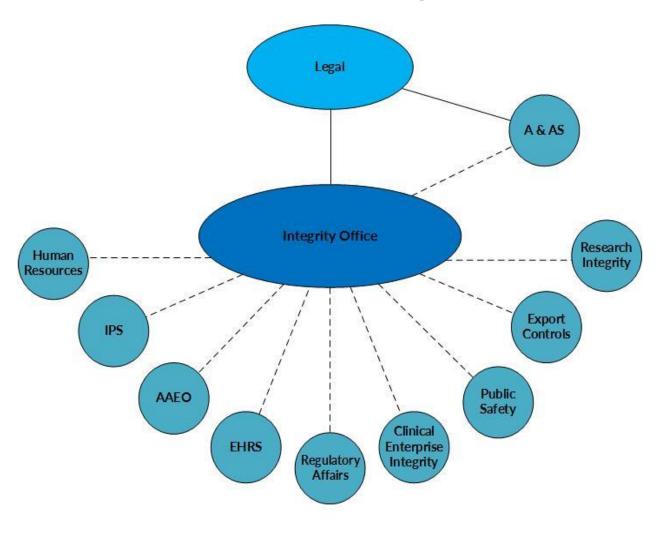
The Chief Integrity Officer is responsible for the development, coordination, and oversight of the Integrity program at OHSU. The Chief Integrity Officer serves as a knowledgeable resource for organizational and operational matters related to integrity issues and evaluates and elevates issues to appropriate personnel for review and resolution.

The members of the Board of Directors, President and Executive Vice Presidents are responsible for articulating the values, mission and vision of the institution; fostering high ethical, organizational and operational integrity; and ensuring compliance with policies, laws, regulations and other appropriate standards. Executive leadership is ultimately responsible for integrity at OHSU.

- OHSU Roles and Responsibilities guidelines



How do we accomplish this?



*This is not an all-inclusive list.

Compliance is an enterprise-wide responsibility



Program Effectiveness

To have an effective compliance and ethics program, an organization shall:

- (1) exercise due diligence to prevent and detect criminal conduct; and
- (2) otherwise promote an organizational culture that encourages ethical conduct and a commitment to compliance with the law.

Such compliance and ethics program shall be reasonably designed, implemented, and enforced so that the program is generally effective in preventing and detecting criminal conduct. The failure to prevent or detect the instance offense does not necessarily mean that the program is not generally effective in preventing and detecting criminal conduct.

-US Sentencing Commission Guidelines Manual (§8B2.1)



Program Effectiveness

The Office of Inspector General (OIG) defines effectiveness by these "Seven Elements of an Effective Compliance Program"

- 1. Written policies & procedures
- 2. Program oversight & governance, including:
 - a. Oversight by a governing authority
 - b. Assignment of overall responsibility to high-level personnel
 - c. Delegation of operational responsibility to specific individuals, allocation of resources
- 3. Training and communication
- 4. Monitoring and auditing
- 5. Hotline or other effective reporting mechanism
- 6. Disciplinary measures; appropriate corrective action
- 7. Prevention: Periodic risk assessment and modification of program to reduce risks

Effective Oversight and Compliance

Tone at the Top

- Board engagement and Executive support
- Lead by example

Tone in the Middle

Leadership, collaboration, facilitation

Compliance framework

- Code of Conduct
- Policies and procedures
- Education and outreach
- Auditing and monitoring
- Mechanism and process for issue-reporting
- Investigations

Internal mechanisms for preventing, detecting, and reporting offenses to optimally achieve business goals

Integrity Direct Operations

- Receive, review and recommend action on compliance matters to leadership, in collaboration with other compliance areas and Integrity programs
- Risk assessment and process improvement initiatives
- Lead Integrity Program Oversight Council (IPOC)
- Manage shared services
 - Code of Conduct support
 - Policy development and support
 - Education and training (Integrity Booster, Integrity Foundations, and support)
 - Integrity Hotline
- Participate in various compliance related committees
- Reporting and metrics

Integrity initiatives in FY18

- Integrity/Compliance Collaboration and Awareness
- Education and training program review
- Tuality Compliance oversight
- New Clinical Enterprise Integrity Healthcare Compliance course development
- Monitoring and Auditing





Questions



Fiscal Year 2018, Quarter 2

PEOPLE

TRANSPORTATION	ENGAGEMENT	UNCONSCIOUS BIAS	RECRUITMENTS
On track Plan complete	Survey spring 2018 4.14 rating	79 trained 2,600 individuals trained	86%

HEALTHCARE

ACCESS	MORTALITY	ADULT PATIENT SATISFACTION	PEDIATRIC PATIENT SATISFACTION	AMBULATORY SATISFACTION	TRANSFERS
7.3%	0.91	79.6	80.3	79	95.8%
15% increase	0.86	79.1	79.5	79.8	96%

RESEARCH

GRANTS SUBMITTED	GRANT \$	PUBLICATIONS	TURNAROUND TIME
753	\$202,442,000	1,379	136
1,976	\$420,000,000	2,874	90 days

EDUCATION

STUDENT RECRUITMENT	APPLICANTS	FIRST TIME PASS	DECREASE DEBT		
339 ✓	Due spring 2018	Due spring 2018	\$505,452 ✓		
296	9,759	Varies by degree	\$551,550		

FINANCE

EBITDA	PATIENT REVENUE	RESEARCH AND EDUCATION REVENUE	DAILY CASH ON HAND
9.60%	7%	1.8%	203
9.9%	5%	3.1%	200



Unconscious Bias Campus-Wide Initiative: A brief update

OHSU Board of Directors

What is the Unconscious Bias Campus-Wide Initiative (UBCI)?

- The UBCI is led by the Center for Diversity and Inclusion with support from executive leaders, the OHSU Board of Directors, Faculty and Staff.
- UBCI is based on findings from several campus-wide surveys, including two diversity climate surveys, an employee engagement survey and a faculty survey last year. They showed that more work needs to be done to build a culture of inclusion, equity and respect.
- The UBCI is one of many ongoing efforts to create a more inclusive OHSU community and to remove barriers to individual and group success in all mission areas.



Why we are measuring it?

- Fiscal Year 2018 Performance Indicators Goal to "Increase number of employees trained in unconscious bias - 2600 individuals trained."
- To effectively address climate and inclusion-related issues and promote equity among URMs and Women.
- To refine and improve training and post-training engagement opportunities to meet institutional aspirations that support our Vision 2020 goals.



How we are doing?

On track to have 2600 trained by May 31, 2018!!

- -We have a structure for rolling this out
- -We have 9 trained trainers
- Recruited and trained 200 Champions
- Hired a communications specialist
- -1600+ employees have been trained-to-date
- Building an Ambassador program to facilitate and sustain change through post-training engagement at the workstation or departmental level

How are we doing?: Departments Represented

Trained/Registered

- Food & Nutrition
- Campus Services
- Affirmative Action & Equal Opportunity
- Human Resources
- Environmental Services
- Facilities
- School of Medicine
- School of Nursing
- Department of Public Safety
- 14c/5a/5c Medicine
- Avel Gordly Center for Healing
- IT-G
- Transportation & Parking
- Care Management Social Workers
- I.P.O.C., OBGYN, Pediatrics
- Diagnostic Radiology
- Knight Cancer Institute
- Central Financial Services

In queue (*a sample)

- Department of Medical Informatics & Clinical Epidemiology
- Clinical Informatics
- Clinical Enterprise Integrity
- Casey Eye Institute
- Department of Surgery
- School of Public Health
- Family Medicine
- Information Privacy Security
- Integrity
- Library
- Neurology
- Academic Affairs
- Physician Assistant Program
- Patient Experience/Patient Business Services
- Psychology
- Emergency Department
- Research
- UCEDD
- Teaching and Learning Center
- Adult BMT
- Neonatal ICU
- South OR

UBCI Numbers Update

Unconscious Bias Projections (January-June 2018)									
Month	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun 18	Total	GOAL
Target Employees/Month *to reach goal by May 2018	N/A	434	481	684	592	592			2600
Employees Registered	N/A	224	372	925	729	344	125	2719	105%
Employees Trained	79	198	352	787	142			1558	60%
Remaining	2521	2323	1971	1184	1042				
Legend									
Below Montly Target									
Monthly Target Met or									
Exceeded									

Last revised April 3, 2018

UBCI Trainers



Crystal Roberts, Program Manager, Center for Diversity and Inclusion



Eric Annala, Center for Diversity and Inclusion



Erin Hoover Barnett, School of Medicine, Dean's Office



Mary Lind, MA, MS, Center for Workplace Enhancement



Octaviano Merecias-Cuevas, Center for Diversity and Inclusion



Dr. Shea Lott, Avel Gordly Center for Healing



Tatiana Grabowski, Food and Nutrition Administration



Dr. Trisha Wong, Department of Pediatrics



Why is this important?

• VIDEO (2 minutes)-

https://echo360.org/media/b068c1c8-865f-49ae-9828-d06eb4ec2055/public





Thank You