School of Medicine Reunion
May 3, 2014

Michael F. Collins, MD
Senior Vice President for the Health Sciences, UMass
Chancellor, UMass Medical School

Terence R. Flotte, MD
Provost, Executive Deputy Chancellor, Chief Research Officer &
Dean, School of Medicine
What was once empty farmland 50 years ago...
Is Now a Thriving Academic Health Sciences Center with a Mission...
To Advance the Health and Well-Being of the People of the Commonwealth and World Through Pioneering Advances in Education, Research and Health Care Delivery

Design Future Model of Health Care Delivery
Build Workforce of the Future
Design an Ideal Learning Environment
Translate Discovery into Practice
Be a High Performance Organization
Have a Significant Impact in the World
UMass 2020: A New Joint Strategic Plan
How Do We Integrate More Closely?
## 2014 – 2020 DRAFT Strategic Goals

**EDUCATION**

As a highly innovative, interprofessional community of students and educators, we will build a health care delivery and biomedical research workforce that makes a lasting impact on human health.

**BASIC RESEARCH**

Continuing to be a leader in Massachusetts’ life sciences research, we will enhance the basic science enterprise and drive intellectual excitement, potential new therapies and long-term sustainability through the engine of discovery, with special focus on areas of existing world-class strength.

**TRANSLATIONAL RESEARCH**

We will create a transformative research ecosystem that enables rapid development of products for clinical use, collaboration with the Clinical System as a laboratory for clinical and translational research, and partnerships with the community to drive improvements in individual and population health.

**HEALTH CARE DELIVERY**

We will become the best academic health system in New England based on measures of patient safety, quality, cost, patient satisfaction, innovation, education and caregiver engagement.
Establish an information technology environment that enables the best care and patient experience, educates the finest caregivers and scientists, and accelerates future therapies.

We will attract, inspire and cultivate outstanding talent in science, medicine and healthcare to become a leading Academic Health Sciences Center.

We will pursue success in our core missions by removing operational barriers and inefficiencies through the integration of shared support services across the joint enterprise.

We will provide a high value ecosystem that maximizes opportunities and optimizes outcomes for our patients who seek prevention, treatments and cures for cancer, our trainees who seek to become experts in all aspects of cancer and our researchers who seek new knowledge for the prevention, treatment and cure of cancer.
Entities
Share our Campus...
The Campus Now Includes Worcester’s Biotech Park
Academic Enterprise
SOM/GSBS/GSN/GME
<table>
<thead>
<tr>
<th>School of Medicine</th>
<th>GSBS</th>
<th>GSN</th>
<th>GME</th>
</tr>
</thead>
<tbody>
<tr>
<td>5th in Primary Care Education</td>
<td>36th in NIH funding</td>
<td>GEP students have 100% passage rate on NCLEX Exam</td>
<td>53 ACGME-accredited residency &amp; fellowship programs</td>
</tr>
<tr>
<td>484 MD Students (MA residents) &amp; 69 MD/PhD Students</td>
<td>World-class RNA community</td>
<td>Degree Programs received full accreditation in 2010</td>
<td>563 positions filled in 2013-2014</td>
</tr>
<tr>
<td>Learner Centered Integrated Curriculum</td>
<td>395 students from around the world</td>
<td>212 students</td>
<td>Average ACGME cycle is 4.3/5 years</td>
</tr>
<tr>
<td>LCME Accreditation</td>
<td>330 multidisciplinary faculty</td>
<td>208 faculty</td>
<td>Joint credentialing process with clinical partner</td>
</tr>
</tbody>
</table>
Research Enterprise
Growth of Research Enterprise

Note: The 2010 and 2011 research award figures include one-time ARRA funding via the NIH
Our Faculty Are World Renowned

- 2008 Lasker Award Winner
- 2006 Nobel Prize for Medicine
- 7 Howard Hughes Medical Institute Investigators
- 6 National Academy Members
- 3 Keck Award Winners
- 3 Presidential Early Career Award for Scientists/Engineers Winners
UMMS Faculty Member Named one of TIME Magazine’s TIME 100

“These three women are responsible for orchestrating an incredible breakthrough: functionally curing a newborn of AIDS”

Katherine Luzuriaga, MD
Celebrating Our World-Class Faculty

Distinguished Teaching

Distinguished Service

Clinical Excellence

Distinguished Scholarship

Catarina I. Kiefe, MD, PhD
Melvin S. and Sandra L. Cutler Chair in Biomedical Research

Silvia Corvera, MD
Endowed Chair in Diabetes Research

Dale L. Greiner, PhD
Dr. Eileen L. Berman and Mr. Stanley I. Berman Foundation Chair in Biomedical Research

Ellen M. Gravallese, MD
Myles J. McDonough Chair in Rheumatology
Commonwealth Medicine
A public, non-profit consulting organization of 1,200 employees and approximately $377 million in revenue in FY’13

Increases the value & quality of publicly funded health expenditures and improves access and delivery of care to at-risk and uninsured populations

$22 billion in cost avoidance initiatives and generating over $11 billion in revenue since 1995

Operates in 28 MA locations, 20 states and 27 countries
Located in Mattapan Neighborhood of Boston

Only publicly owned, non-profit FDA-licensed manufacturer of vaccines and other biologic products in the U.S.

Generates over $50 million in revenues

Since 1998, UMBL has developed 8 therapeutics, including 2 MABs to treat *C. difficile* diarrhea, 1 MAB for Rabies, 1 for SARS and 1 for HCV
Design Future Model of Health Care Delivery

Build Workforce of the Future

Design an Ideal Learning Environment

Translate Discovery into Practice

Be a High Performance Organization

Have a Significant Impact in the World
Approximately 4% of UMMS revenue comes from annual UMass state appropriation.
For The Commonwealth and the World
The campus has an increasingly global orientation

- Engaged in a number of meaningful global health initiatives (i.e. Liberia, India)
- Developing strategic partnerships with international partners to broaden global educational experiences for UMMS students
Building the Physician Workforce of the Future

2nd Year Oath Ceremony

Match Day

White Coat Ceremony
THEN...
NOW...Commitment to Creating an Ideal Learning Environment

- New Anatomy Lab
- iTLC
- Standardized Patient Program
- Learning Communities
- iCELS

University of Massachusetts Medical School
NOW...

While improving our learning environment on campus, we have expanded our roster of teaching affiliates to ensure diverse and rewarding clinical experiences for our medical students.

- BayState Medical Center
- Berkshire Medical Center
- Clinton Hospital
- Community Health Connections
- Day Kimball
- Edward M. Kennedy CHC
- Family Health Center of Worcester
- Greater Lawrence Family Health Center
- Harrington Memorial Hospital
- HealthAlliance Hospital
- Heywood Hospital
- Holyoke Medical Center
- Lahey Clinic Hospital
- Marlborough Hospital
- Mercy Medical Center
- Milford Regional Medical Center
- Providence Behavioral Health Hospital
- Reliant Medical Group
- RiverBend Medical Group
- Steward St. Elizabeth’s Medical Center
- Saint Vincent Hospital
- UMass Memorial Medical Center
- Wing Memorial Hospital
- Worcester State Hospital
UMMS applicants: 10.5% Admitted

Class of ‘18 = 1188 applicants
Average GPA by graduation year

- Science
- Non-Science

Graduation Year:
- 1988
- 1990
- 1992
- 1994
- 1996
- 1998
- 2000
- 2002
- 2004
- 2006
- 2008
- 2010
- 2012
- 2014
- 2016

Average GPA:
- 1988: 3.64
- 2016: 3.75
Class of 2017

- Average GPA = 3.75
- Average MCAT = 10.69Q
- UMass graduates = 20
- First generation college = 21
- Groups under-represented in medicine = 14
- 82 students in 2013 turn down multiple acceptances to matriculate at UMMS
"The UMW educational experience will inspire our future physicians to excel in patient care, innovation, discovery, leadership and service."

**Themes:** Integration, life-long learning, interprofessional teams, technology, independent study, critical thinking

**Competency driven:** Physician as scientist, clinical problem solver, professional, communicator, person, advocate

**Learning Communities:** academic homes for students

**Longitudinal** integration of clinical and basic sciences

**Pass-fail in Foundations of Medicine Years 1 & 2**
USMLE Step 1 - Total Score
Based on Annual Totals for 1st Time Test-Takers Only

<table>
<thead>
<tr>
<th>Year</th>
<th>UMMS</th>
<th>All Schools</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004 (n=99)</td>
<td>216</td>
<td>218</td>
<td>222</td>
</tr>
<tr>
<td>2005 (n=95)</td>
<td>217</td>
<td>218</td>
<td>222</td>
</tr>
<tr>
<td>2006 (n=105)</td>
<td>218</td>
<td>218</td>
<td>222</td>
</tr>
<tr>
<td>2007 (n=98)</td>
<td>221</td>
<td>221</td>
<td>228</td>
</tr>
<tr>
<td>2008 (n=95)</td>
<td>221</td>
<td>221</td>
<td>224</td>
</tr>
<tr>
<td>2009 (n=107)</td>
<td>220</td>
<td>220</td>
<td>222</td>
</tr>
<tr>
<td>2010 (n=116)</td>
<td>224</td>
<td>224</td>
<td>230</td>
</tr>
<tr>
<td>2011 (n=114)</td>
<td>227</td>
<td>227</td>
<td>230</td>
</tr>
<tr>
<td>2012 (n=126)</td>
<td>228</td>
<td>228</td>
<td>236</td>
</tr>
<tr>
<td>2013 (n=122)</td>
<td>228</td>
<td>228</td>
<td>236</td>
</tr>
</tbody>
</table>

Minimum passing scores
2004 - 2006: 182

LInC curriculum rolled out.
USMLE Step 1 - Percent Passing
Based on Annual Totals for 1st Time Test-Takers Only

Year Test Administered

<table>
<thead>
<tr>
<th>Year</th>
<th>UMMS</th>
<th>All Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004 (n=99)</td>
<td>97</td>
<td>92</td>
</tr>
<tr>
<td>2005 (n=95)</td>
<td>96</td>
<td>93</td>
</tr>
<tr>
<td>2006 (n=105)</td>
<td>99</td>
<td>93</td>
</tr>
<tr>
<td>2007 (n=98)</td>
<td>98</td>
<td>94</td>
</tr>
<tr>
<td>2008 (n=95)</td>
<td>98</td>
<td>93</td>
</tr>
<tr>
<td>2009 (n=107)</td>
<td>98</td>
<td>93</td>
</tr>
<tr>
<td>2010 (n=116)</td>
<td>95</td>
<td>94</td>
</tr>
<tr>
<td>2011 (n=114)</td>
<td>94</td>
<td>91</td>
</tr>
<tr>
<td>2012 (n=126)</td>
<td>95</td>
<td>91</td>
</tr>
<tr>
<td>2013 (n=122)</td>
<td>99</td>
<td>96</td>
</tr>
</tbody>
</table>

LInC curriculum rolled out.
Class of 2014 - Match Day Results

UMass Graduates - Percent PGY1 in Massachusetts

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>50</td>
</tr>
<tr>
<td>2013</td>
<td>48</td>
</tr>
<tr>
<td>2012</td>
<td>50</td>
</tr>
<tr>
<td>2011</td>
<td>50</td>
</tr>
<tr>
<td>2010</td>
<td>57</td>
</tr>
<tr>
<td>2009</td>
<td>56</td>
</tr>
<tr>
<td>2008</td>
<td>56</td>
</tr>
<tr>
<td>2007</td>
<td>60</td>
</tr>
<tr>
<td>2006</td>
<td>44</td>
</tr>
<tr>
<td>2005</td>
<td>49</td>
</tr>
</tbody>
</table>
Class of 2014 - Match Day Results

UMass Graduates - Percent PGY1 at UMass

- 2014*: 17%
- 2013*: 17%
- 2012*: 22%
- 2011*: 18%
- 2010*: 18%
- 2009*: 18%
- 2008*: 22%
- 2007: 22%
- 2006: 23%
- 2005: 27%

Percent

Class of 2014 - Match Day Results

UMass Graduates Entering Primary Care Disciplines

**Primary Care refers to the following: Medicine/Primary Care, Medicine/Pediatrics, Pediatrics/Primary Care,
Overall, I am satisfied with the quality of my medical education

AAMC Graduation Questionnaire

<table>
<thead>
<tr>
<th>Graduation Year</th>
<th>UMMS</th>
<th>All Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>55</td>
<td>39</td>
</tr>
<tr>
<td>2005</td>
<td>54</td>
<td>39</td>
</tr>
<tr>
<td>2006</td>
<td>58</td>
<td>40</td>
</tr>
<tr>
<td>2007</td>
<td>67</td>
<td>41</td>
</tr>
<tr>
<td>2008</td>
<td>64</td>
<td>43</td>
</tr>
<tr>
<td>2009</td>
<td>52</td>
<td>38</td>
</tr>
<tr>
<td>2010</td>
<td>69</td>
<td>41</td>
</tr>
<tr>
<td>2011</td>
<td>59</td>
<td>40</td>
</tr>
<tr>
<td>2012</td>
<td>72</td>
<td>42</td>
</tr>
<tr>
<td>2013*</td>
<td>59</td>
<td>42</td>
</tr>
</tbody>
</table>
The Alumni Survey (1974-2012)

- 59% obtained at least 1 license in MA (initial or current)
- 53% practicing in Primary Care (Family Med, Peds, General Internal Med)
- 65% practicing in Primary Care, OB or Emergency Med
93% of UMMS students receive financial aid and graduate with at least some debt

Average debt per graduating student: $114,559

Need more scholarships!
Thank You for Your Support!

Michael F. Collins, MD
Senior Vice President for the Health Sciences, UMass
Chancellor, UMass Medical School

Terence R. Flotte, MD
Provost, Executive Deputy Chancellor, Chief Research Officer &
Dean, School of Medicine