State of the Department

David A. Schwartz, MD
We’re at an Inflection Point

- Fee-for-service
- Old NIH
- Service

- Value-based
- New research economy
- Education
Mission: Improve human health by fostering the development of outstanding interdisciplinary programs in patient care, education, and research that serve the community, region, and nation.
Departmental Vision

Vision: We will emerge as a top tier Department of Medicine by the year 2020
## Outstanding Departmental Leadership

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Committed to Alignment across the Medical Center
[DOM, SOM, UPI, UCH, and Health System]
State of the Department

- Accomplishments (over past 5 years)
- Strategic Approach
- Five Year Plan
Clinical Enterprise

• 5 Year Growth
  - 40% increase wRVUs (60% inpatient/25% outpatient)
  - 80% ($40M) increase in clinical income that is approaching $100M annually
  - 65% increase in clinical FTEs: FY11 (N=124) → FY15 (N=205)

• Hospitalists care for ≈30% of all patients admitted to UCH

• Non-proceduralist program: enhanced access, improved productivity, and improved profits for allergy, endocrinology, hematology, infectious diseases, renal, and rheumatology (↑wRVUs by 27% and productivity/efficiency by 15% in 2 years)

• Re-engineered established programs and created new programs
Re-Engineered Bone Marrow Transplantation

• 2011-2015
  □ Changed leadership, and joined BMT and Hematology
  □ Recruited 4 new faculty (lymphoma, myeloma, and cell therapy programs) and expanded roles of APPs
  □ Established survivorship program and outreach program
  □ Developed a BMT fellowship

• Outcomes
  □ Doubled inpatient volumes and doubled BMTs
  □ BMT survival rates in top 10% nationally
  □ Patient satisfaction >95%
Center for Lungs and Breathing

- Pulmonary, Allergy, Rheumatology, Oncology, Thoracic Surgery, and ENT
- Airway disease, advanced lung disease, lung cancer, pulmonary vascular disease, and allergy
- Programs in sleep and advanced bronchoscopy
- Link inpatient to outpatient to community
- Recruitment, marketing, and outreach

9% growth in out-patient volumes and wRVUs in Q1 FY16
Personalized Medicine
[DOM, SOM, UPI, UCHealth, Children’s Hospital, and UCD]

Genes and Molecules
• Define risk
• Identify new treatments
• Improve drug efficacy
Quality Improvement Program
Interdisciplinary Morbidity and Mortality

- Quarterly Medical Grand Rounds
- Interdepartmental MGRs: Emergency Medicine, Pediatrics, Psychiatry, and Radiology

Impact
- Debate and discussion
- Shared commitment to transparency and systems improvement
Education and Training

• 5 Year Growth
  - Medical student class has grown by 15% (160 → 184)
  - More UCD students are applying to our residency program (25% increase over last year)
  - Housestaff trainees increased by 25% (154 → 193)
  - Intern URMs trainees increased 10-fold (1 → 10)
  - NIH T32 training programs increased from 8 to 10, and trainees increased by at least 30% (120 fellows currently)

• Focus on career development and training pipeline
  - Dedicated mentorship with focus on career development
  - Physician-Scientist Training Program (2011)
  - General medicine team staffed by physician-scientists
  - Medicine-Pediatrics Training Program (2014)
  - Clinician-Educator track for subspecialty fellows (2015)
Diversity of our Housestaff

% Under-represented Minority Trainees

- 2011
- 2012
- 2013
- 2014
- 2015

- All Housestaff
- Intern
Colorado-Zimbabwe International Exchange (CoZIE) Program

- Collaboration between DOMs at Universities of Colorado and Zimbabwe

**Goals**
- Meaningful exposure to different approaches to healthcare
- Exchange of teaching methods
- Develop research collaborations

- Bidirectional exchange of housestaff and faculty (fellows added in the future)
Research

• 5 Year Growth
  - Overall research support has increased by 14% (FY15=$93M)
  - Federal support increased by 18% (FY15=$57M)
  - NIH support decreased by 9.7%/$5M (2nd to ARRA funds)
  - CU Foundation support increased by 45% (FY15=$12M)
  - DOM support increased by 80% (FY15=$8M) for division heads and recruitment/retention of faculty

• Career development, recruitment, and retention
  - Forum for Research: Research and Innovation Conference
  - Partner in Research: Outstanding Early Scholars, Bridging Research, Team Science, and Sabbatical Support Programs
  - Commitment to our investigators: $2.5M to retain 6 faculty

• Interdisciplinary research programs: lung cancer, geriatrics, palliative care, pulmonary vascular disease, obesity and CVD, women’s health, mucosal inflammation program, and early rheumatoid arthritis
Research Awards

2011-2015: ↑89%

GRECC not included
Outstanding Early Scholars Program

[$75K/year x 5 years]

Larry Allen, MD
Cardiology

Steven Bradley, MD
Cardiology

Brian Graham, MD
Pulmonary

Daniel Matlock, MD
Internal Medicine

Daniel Pollyea, MD
Bone Marrow Transplant

Mario Santiago, PhD
Infectious Diseases

Eric Schmidt, MD
Pulmonary

Sachin Wani, MD
Gastroenterology

Rachel Zemans, MD
Pulmonary
Finances

• 5 Year Growth
   DOM FY11→FY15
    ▪ ↑revenue: $48.7M (32%)
    ▪ ↑expenses: $38.2M (25%)
   Divisional FY11→FY15
    ▪ ↑profit margin: $5.4M (213%)
    ▪ ↑incentives: $3.1M (220%)

• Outstanding and dedicated faculty
• Sound fiscal stewardship
• Alignment with SOM, UPI, UCH, and Health System
• Diversified sources of revenue: patient income, research grants, state appropriations, UCH support, philanthropy, and contracts
FY15 Revenue and Expenses

Revenue ($202M)
- Research: 46%
- Clinical: 45%
- Education: 2%
- Other: 7%

Expenses ($193M)
- Research: 47%
- Clinical: 43%
- Education: 4%
- Other: 6%
Incentivize and Reward Faculty

Operating Profits: $8.0M (↑210%)
Profit Incentives: $4.5M (↑220%)
Endowed Chairs held by DOM Faculty

33 DOM Chairs (6 new chairs)
8 Non-DOM Chairs (2 new chairs)
$105M Endowed Funds (↑$20M)
## US News and World Report Rankings

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State of the Department

- Accomplishments
- Strategic Approach
- Five Year Plan
Principles and Values

• Recruitment, support, and retention of outstanding faculty
• Thoughtful approaches to career development
• Prioritize interdisciplinary programs
• Balanced growth while maintaining our mission, focus on career development, and commitment to innovation

• Collective values:
  □ Outstanding patient care
  □ Accomplishments of clinicians, educators, and investigators
  □ Diversity and equity
  □ Strong partnerships
  □ Transparency and accountability
Faculty Advancement

• Early career development and mentoring
  • Faculty orientation (≈100 new faculty each year)
  • Comprehensive mentorship program
  • Mid-course reviews with promotion/tenure training
  • Mentor Training Program (Greg Austin)

• Senior leadership development initiative

• Sabbatical support program

• Integration with campus resources
DOM Sabbatical Financial Aid Program
[$400,000/year]

- Goal is to enhance our expertise and competitiveness
- Support innovation among clinicians, educators, and investigators
- Application deadlines
  - March 1 for a January 1 start date
  - September 1 for a July 1 start date
- DOM financial support is considered in parallel with the standard SOM/CU Sabbatical Application

*Inaugural Recipient*
*Ernesto Salcedo, MD*

Multinational project for imaging guidance of structural heart disease interventions
Diversity and Equity

- **DREAM Program**: research training for URM medical students
- **AAMC year-in-rank benchmarking of salary improved gender-based salary inequity**

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<tr>
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<th>2011</th>
<th>2015</th>
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<tr>
<td>Interns</td>
<td>2.0%</td>
<td>16.7%</td>
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<tr>
<td>R1→R3</td>
<td>4.7%</td>
<td>13.6%</td>
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Female Faculty by Academic Rank

- Instructors: 76%
- Assistant Professors: 59%
- Associate Professors: 43%
- Professors without Tenure: 24%
- Professors w/Tenure: 16%
- Medical Faculty (All levels): 51%
Support Investigators to Focus on Research

Research Office

Sean Colgan, PhD
Vice Chair for Basic Research
Sean.Colgan@ucdenver.edu
303-724-7235

Marc Moss, MD
Vice Chair for Clinical Research
Marc.Moss@ucdenver.edu
303-724-6074

Chris Brands
Grants Manager
Chris.Brands@ucdenver.edu
303-724-5952

Sheryl Hartmann
Grants Coordinator
Sheryl.Hartmann@ucdenver.edu
303-724-1786

Jennifer Kemp
Grant Writer
Jennifer.T.Kemp@ucdenver.edu
303-724-9546

Grant Writing Assistance
Proposal development, writing, and editing support for early investigators and programs

Research Funding Programs
Outstanding Early Scholars Program, Bridging Research Program, Team Science Program, and Sabbatical Support Program

Clinical Research Support
Key resources and access to DOM-specific regulatory assistance

Divisional Grant Support
Pre- and post-award support augmenting divisional grant management

medschool.ucdenver.edu/ DOMResearch    DOMResearch@ucdenver.edu
Financially Committed to our Faculty

- $33M investments in faculty, DHs, and programs
- $12M of DOM operating margin
## Strong Partnership with UCH

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<tr>
<th>Division</th>
<th>FY 11</th>
<th>FY 12</th>
<th>FY 13</th>
<th>FY 14</th>
<th>FY 15 (Estimated)</th>
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<td>29,332</td>
<td>37,038</td>
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<td>Cardiology</td>
<td>2,316,029</td>
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<td>2,407,137</td>
<td>2,725,998</td>
<td>2,646,985</td>
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<td>Endocrine</td>
<td>86,731</td>
<td>141,111</td>
<td>236,405</td>
<td>183,000</td>
<td>196,000</td>
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<td>Gastroenterology/Hepatology</td>
<td>781,867</td>
<td>769,642</td>
<td>760,095</td>
<td>738,872</td>
<td>836,393</td>
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<td>General Internal Medicine</td>
<td>2,906,264</td>
<td>2,878,114</td>
<td>4,205,785</td>
<td>4,247,605</td>
<td>5,663,714</td>
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<td>15,000</td>
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<td>44,972</td>
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<td>Heme/BMT</td>
<td>1,120,742</td>
<td>1,352,306</td>
<td>1,296,470</td>
<td>1,574,793</td>
<td>2,097,894</td>
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<td>Infectious Disease</td>
<td>393,888</td>
<td>385,402</td>
<td>406,321</td>
<td>644,604</td>
<td>689,759</td>
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<td>Medical Oncology</td>
<td>1,867,797</td>
<td>2,226,742</td>
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<td>1,566,575</td>
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<td>506,226</td>
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<td>Rheumatology</td>
<td>41,020</td>
<td>50,000</td>
<td>80,000</td>
<td>97,600</td>
<td>91,315</td>
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<td><strong>Total Support</strong></td>
<td><strong>11,015,103</strong></td>
<td><strong>12,108,708</strong></td>
<td><strong>13,679,808</strong></td>
<td><strong>15,272,129</strong></td>
<td><strong>18,189,668</strong></td>
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State of the Department

- Accomplishments
- Strategic Approach
- Five Year Plan
Our Ambitions:  *Great to Awesome*

- High quality, patient-oriented, innovative care that improves the lives of our patients
- Train leaders in medicine
- High impact science that changes our basics concepts of disease, disease pathogenesis, and health care
Clinical: *improve the lives of our patients*

- Value the expertise of our clinicians
- Develop interdisciplinary programs, and integrate clinical growth with education and research programs
- Expand primary care in partnership with family medicine, the Health System, and the community
- Coordinate growth in DOM with other departments, UCH, and the Health System
- Enhance access to QI data and expertise, especially given shift from volume to value models of health care
- Maximize benefits with our affiliated medical centers
Education: train leaders in medicine

- Double down on what’s working: career development, growth of under-represented minorities, and recruitment of CU students into internal medicine
- Rebalance education and service activities in residency
- Grow clinician-educators from within to meet career goals of trainees and populate the DOM/Health System
- Find out what we could do better: external review of program to provide guidance for achieving educational goals and maximizing outcomes
Research:  *change our concepts of disease*

- Support and reward the spectrum of research
- Support career development through role modeling, mentorship, recruitment, retention, and sabbaticals
- Diversify sources of research support by supporting an entrepreneurial environment
- Expand interdisciplinary science
  - Integrate research with outstanding clinical programs
  - Recruit interdisciplinary investigators
  - Incent/support programmatic and team science
- Provide support for a sustainable component of the salaries of research intensive MD and PhD faculty
We will succeed through Your Accomplishment

- Enhance the lives of our patients
- Train leaders in medicine
- Change our basic concepts of disease
“To wrest from nature the secrets which have perplexed philosophers in all ages, to track to their sources the causes of disease, to correlate the vast stores of knowledge, that they may be quickly available for the prevention and cure of disease – these are our ambitions”, Sir William Osler