Outline

• UCF’s Strategic Plan
• CECS Current State
  – Enrollments
  – Degrees
  – Research
• CECS’s 2020 Promises
• USNews and World Report
• CECS’s Moving Forward Plan
• New UCF Budget Model
• Specific CECS Interests
UCF’s Strategic Plan
Our Impact, Our Promise

• **Our Impact**
  – We use the power of scale and the pursuit of excellence to solve tomorrow’s greatest challenges and to make better future for our students and society. Through learning, discovery and partnerships, we transform lives and livelihoods.

• **Our Promise**
  – Harness the power of scale to transform lives and livelihoods
  – Attract and cultivate exceptional and diverse faculty, students and staff who collective contributions strengthen us
  – Deploy our distinctive assets to solve society’s greatest challenges
  – Create partnerships at every level that amplify our academic, economic, social and cultural impact and reputation
  – Innovate academic, operational, and financial models to transform higher education
UCF’s Strategic Plan

Goals that Guide us

**Goal 1 (Undergraduate Education):**
Offer the best undergraduate education available in Florida.

**Goal 2 (Graduate Study, Research):**
Achieve international prominence in key programs of graduate study and research.

**Goal 3 (International Emphasis):**
Provide international focus to our curricula and research programs.

**Goal 4 (Be Inclusive and Diverse):**
Become more inclusive and diverse.

**Goal 5 (Partnerships):**
Be America’s leading partnership university.
UCF’s Strategic Plan

Impact = Scale x Excellence
# UCF’s Strategic Plan

**Metrics, Strategies**

<table>
<thead>
<tr>
<th>Key Metric</th>
<th>2015</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Year Retention Rate</td>
<td>89%</td>
<td>92%</td>
</tr>
<tr>
<td>Six-Year Graduation Rate</td>
<td>70%</td>
<td>75%</td>
</tr>
<tr>
<td>Number of Graduate Students</td>
<td>8,029</td>
<td>10,000</td>
</tr>
<tr>
<td>Post-Doctoral Research Appointees</td>
<td>52</td>
<td>200</td>
</tr>
<tr>
<td>National Academy Members</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Percentage of Tenured or Tenure-Track Faculty</td>
<td>62%</td>
<td>65%</td>
</tr>
<tr>
<td>Research Awards</td>
<td>$133M</td>
<td>$250M</td>
</tr>
<tr>
<td>Endowed Professorships and Chairs</td>
<td>64</td>
<td>80</td>
</tr>
<tr>
<td>Alumni Giving Donors</td>
<td>15,000</td>
<td>30,000</td>
</tr>
<tr>
<td>UCF Foundation Endowment</td>
<td>$151M</td>
<td>$175M</td>
</tr>
<tr>
<td>Other Metrics: % of population with BS degrees</td>
<td>2(^{nd}), 9(^{th})</td>
<td>1(^{st}), 5(^{th})</td>
</tr>
<tr>
<td>Other Metrics: GPA, SAT of FTICs/# of National Merits Rank</td>
<td>4.0; 1850/11</td>
<td>4.0; 1870/Top 10</td>
</tr>
</tbody>
</table>
## UCF, CECS Enrollments

**CECS 2016:** 8,838 (UG), 786 (MS), 630 (Ph.D.), 2118 (Juniors), 3,521 (Seniors), 5,639 (Juniors + Seniors)

**CECS 2015:** 8,238 (UG), 706 (MS), 619 (Ph.D.), 1992 (Juniors), 3,462 (Seniors), 5,454 (Juniors + Seniors)

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Fall 2016</th>
<th>Fall 2015</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts &amp; Humanities</td>
<td>5,785</td>
<td>5,377</td>
<td>7.59</td>
</tr>
<tr>
<td>Business</td>
<td>8,920</td>
<td>9,018</td>
<td>-1.09</td>
</tr>
<tr>
<td>Education</td>
<td>5,420</td>
<td>5,757</td>
<td>-5.85</td>
</tr>
<tr>
<td><strong>CECS</strong></td>
<td><strong>10,276</strong></td>
<td><strong>9,573</strong></td>
<td><strong>7.34</strong></td>
</tr>
<tr>
<td>Grad Studies</td>
<td>146</td>
<td>109</td>
<td>33.94</td>
</tr>
<tr>
<td>Health &amp; Public</td>
<td>10,241</td>
<td>9,893</td>
<td>3.52</td>
</tr>
<tr>
<td>Medicine</td>
<td>3,529</td>
<td>3,422</td>
<td>3.13</td>
</tr>
<tr>
<td>Nursing</td>
<td>2,788</td>
<td>2,736</td>
<td>1.90</td>
</tr>
<tr>
<td>Optics</td>
<td>223</td>
<td>205</td>
<td>8.78</td>
</tr>
<tr>
<td>Hospitality</td>
<td>3,075</td>
<td>2,934</td>
<td>4.81</td>
</tr>
<tr>
<td>Sciences</td>
<td>11,595</td>
<td>11,053</td>
<td>4.90</td>
</tr>
<tr>
<td>UG Studies</td>
<td>1,629</td>
<td>1,698</td>
<td>-4.06</td>
</tr>
</tbody>
</table>

**Underrepresented UG:** 3,157 (34%)
**Female UG:** 1,497 (17%)
**International UG:** 268 (3.15%)

**Underrepresented G:** 249 (32%)
**Female G:** 321 (22.3%)
**International G:** 620 (43.1%)
## CECS Degrees

<table>
<thead>
<tr>
<th>Degrees</th>
<th>14-15 AY</th>
<th>15-16 AY</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>BS</td>
<td>1239</td>
<td>1356</td>
<td>+7.9%</td>
</tr>
<tr>
<td>MS</td>
<td>328</td>
<td>388</td>
<td>+18.3%</td>
</tr>
<tr>
<td>Ph.D.</td>
<td>77</td>
<td>89</td>
<td>+15.6%</td>
</tr>
<tr>
<td>Total G</td>
<td>405</td>
<td>477</td>
<td>+17.8%</td>
</tr>
<tr>
<td>Total UG+G</td>
<td>1644</td>
<td>1833</td>
<td>+10.3%</td>
</tr>
</tbody>
</table>
CECS Research Funding Profile
New Funding

$18,735,017
$22,133,534
$22,887,714
$22,488,172
$28,186,201
$35,642,689

### CECS 2020 Promises

<table>
<thead>
<tr>
<th>Measure</th>
<th>2015</th>
<th>2020</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS Numbers</td>
<td>700</td>
<td>1000</td>
<td>+43%</td>
</tr>
<tr>
<td>Ph.D. Numbers</td>
<td>600</td>
<td>750</td>
<td>+25%</td>
</tr>
<tr>
<td>Percent Thesis + Dissertation</td>
<td>32%</td>
<td>35%</td>
<td>3%</td>
</tr>
<tr>
<td>1st Year FTIC Retention</td>
<td>88.4%</td>
<td>90%</td>
<td>1.6%</td>
</tr>
<tr>
<td>FTIC 6-Year Graduation</td>
<td>67.4%</td>
<td>72%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Annual New Funding</td>
<td>$24M</td>
<td>$40M</td>
<td>43%</td>
</tr>
<tr>
<td>Metric</td>
<td>Ind. Score</td>
<td>Compo. Weight</td>
<td>UCF’s CECS 2016/2017</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>------------</td>
<td>---------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>1. Mean GRE Quantitative Score</td>
<td>x .675</td>
<td>0.1</td>
<td>#99 (160)/#97 (159)</td>
</tr>
<tr>
<td>2. Acceptance Rate</td>
<td>x .325</td>
<td></td>
<td>#99 (43.0%)/#97 (38.3%)</td>
</tr>
<tr>
<td>3. Research Expenditures (2-year average)</td>
<td>x .6</td>
<td>0.25</td>
<td>#79 ($32M)/#81($31M)</td>
</tr>
<tr>
<td>4. Expenditures Per Faculty (2-year average)</td>
<td>x .4</td>
<td></td>
<td>#79($250k)/#81($247k)</td>
</tr>
<tr>
<td>5. Peer Assessment</td>
<td></td>
<td>0.25</td>
<td>#87 (2.4)/#96 (2.3)</td>
</tr>
<tr>
<td>6. Recruiter Assessment</td>
<td></td>
<td>0.15</td>
<td>#106 (2.7)/#86 (3.0)</td>
</tr>
<tr>
<td>7. Ph.D. Student/Faculty Ratio</td>
<td>x .3</td>
<td>0.25</td>
<td>#58 (4.1)/#54(4.2)</td>
</tr>
<tr>
<td>8. MS Student/Faculty Ratio</td>
<td>x .15</td>
<td></td>
<td>#58 (2.5)/#54(2.6)</td>
</tr>
<tr>
<td>9. Percentage NAE</td>
<td>x .3</td>
<td></td>
<td>#58 (0.80%)/#54(0.80%)</td>
</tr>
<tr>
<td>10. Ph.D.’s Granted</td>
<td>x .25</td>
<td></td>
<td>#58 (83)/#54(77)</td>
</tr>
<tr>
<td>Ranking 2016/2017</td>
<td></td>
<td></td>
<td>85/82</td>
</tr>
</tbody>
</table>
CECS’s Plan Forward
The 3-Legged Stool

- STEM Innovations
  - Pockets of Excellence

- Increase Quantity
  - Quality of Graduate Students

- Partnerships

- Bigger, Better
  - Research Enterprise
### CECS’s Plan Forward

#### CECS T/TE Hires

<table>
<thead>
<tr>
<th></th>
<th>Fa 12</th>
<th>12-16 New</th>
<th>Fa 16</th>
<th>17-18 New</th>
<th>Total by 18</th>
<th>New 12-18</th>
</tr>
</thead>
<tbody>
<tr>
<td>T/TE</td>
<td>127</td>
<td>45</td>
<td>149</td>
<td>41</td>
<td>186</td>
<td>86</td>
</tr>
<tr>
<td>I/L</td>
<td>18</td>
<td>17</td>
<td>28</td>
<td>0</td>
<td>28</td>
<td>17</td>
</tr>
</tbody>
</table>

### Notes

- **T/TE**: Tenure and Tenure Earning Faculty
- **I/L**: Instructor and Lecturer Faculty
- **Fa 12**: Faculty at beginning of Fall 2012
- **12-16 New**: Faculty Hires that arrived from Fall 12 to Fall 16 (the reason that 127 + 45 is not equal to 172 T/TE (it is equal to 149) is that there were faculty terminations (faculty left or retired) during the same time period; same for I/L numbers)
- **Fa 16**: Faculty at beginning of Fall 2016
- **17-18 New**: Faculty hires expected to arrive by Fall 18 (includes all commitments made by the Provost (estimates for FCI 1.0) and replacement hires promised by Fall 18)
- **Total by 18**: Expected Faculty at the beginning of Fall 2018
- **New 13-18**: Number of Faculty Hires that arrived from beginning of Fall 12 to the beginning of Fall 2018 (6 year time-period)
CECS’s Plan Forward
Impact = Scale x Excellence

UCF’s Strategic Plan

CECS’ Impact

UCF’s Budget Model

- 5,000+ juniors + seniors
- 2,500+ graduates
- 200+ faculty

Increased National Visibility
Workload = Increase or Decrease in SCH. Funding will be distributed over two years, to smooth budget impact.

- $95 (approximately 70% of base tuition) per UG SCH and $288 per Grad SCH

- SCH will:
  - reflect teaching assignments (by September 30)
  - include funded and unfunded SCH (including regional web courses and UCF Online)
  - exclude market rate, cost recovery, and GAA
Available funding will be allocated in three areas of performance:

1. **Degree Efficiency**
   - Improvement and Excellence Points (the best of each)
   - Allocated to top 5 based on beginning of year base budget

2. **Endowed Faculty Support**
   - $40,000 per $1 million of new endowed funds

3. **Research Growth**
   - Increase in research awards (minimum $350,000)
   - Allocated to top 5 based on share of Top 5’s total growth
CECS Specific Pursuits
(DAB Fellows)

• Retain Quality TE Assistant Professors and Instructors Lecturers (I/L)
  – Introducing the **DAB Faculty Fellow** and **DAB Instructor/Lecturer Fellow**; these are 3-year, $5k, per year, awards
  – Intent: To retain outstanding junior faculty and committed instructor lecturers at UCF
    • Faculty Fellow (5 awards):
      – Strong scholarly and funding record
      – Received national/international recognition for their research
    • Instructor/Lecturer Fellow (1 award):
      – Strong teaching record
      – Contributed to UCF’s national visibility through their teaching, service accomplishments

• **Help from DAB:** Raise funds for **12 more of these awards**
CECS Specific Pursuits (Endowed Professorships)

• CECS has **hired 45 faculty** in 2014-2016
• CECS plans to **hire another 40+ faculty** in the next 2 years
• Some of these faculty are **regular hires**, others are **Faculty Cluster Initiative** hires for: Cyber, Power Systems and Smart Grid, Genomics and Bioinformatics, Coastal Research, Catalysis and Propulsion, and Smart Prosthetics
• The effort to bring quality junior and senior faculty at UCF will benefit significantly from the availability of endowed professorships
  – Junior Professorships ($250k)
  – Senior Professorships ($1M+)
• **UCF’s new budget model** matches the endowed support
• **DAB Request:** Provide support for **endowed professorships** in CECS
CECS Specific Pursuits (Infrastructure Support)

• CECS has hired **45 faculty** in 2014-2016
• CECS plans to hire another **40+ faculty** in the next 2 years (2017-2018)
• Some of these faculty are **regular hires**, others are **Faculty Cluster Initiative** hires for:
  – Cyber,
  – Power Systems and Smart Grid,
  – Genomics and Bioinformatics,
  – Coastal Research,
  – Catalysis and Propulsion, and
  – Smart Prosthetics
• As we try to recruit the best 40+ faculty, our efforts will be more successful if we enhance the infrastructure support allocated for these hires
• **DAB Request:** Provide **infrastructure support** (cash donations, hardware (in-kind), software (in-kind)) to enhance the infrastructure support of FCI cluster efforts
CECS has demonstrated (last few years) that it encourages creativity and innovation amongst its student groups. Examples of this creativity and innovation are:

- UCF Programming Team (30 years of excellence)
- UCF Cyber Defense team (4 years of excellence)
- Limbitless Solutions (2 years of excellence)

These pockets of excellence do not only influence their student participants but also encourage excellence for other students and student groups within CECS and UCF.

**DAB Request:** Support these student teams in terms of **cash donations** (scholarships, travel), as well as **in-kind support** (hardware, software, other)
>>>Opportunity Starts Here