Retention and Promotion of Under-represented Minority (URM) Faculty on the Tenure Track at North Carolina State University

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Questions
- Probability tenure track assistant professors exit before tenure
- Length of time to promotion from associate to full professor
- Overall attrition and retention

Probability Faculty Exit Before Tenure
Assistant Professors Appointed From 1997 - 2013

URM and non-URM faculty are equally likely to stay past tenure in the STEM colleges, but in the other colleges URM faculty are at higher risk of leaving without tenure. URM faculty are at highest risk of leaving after they have been assistant professors for 4 years.

Numbers of TT assistant professors
- STEM: Black: 17, Hispanic: 23, Other URM: 7; non-URM: 485
- Other: Black: 38, Hispanic: 15, Other URM: 5; non-URM: 345

Overall Attrition
Assistant Professors Appointed from 1997 - 2013

In the other colleges, 52% of URM faculty leave the institution by year 10, compared to 39% of non-URM faculty.

**Summary**
- The probability that assistant professors attain tenure, that associate professors are promoted to full professor, and that faculty stay at the university over the long term are all higher in STEM colleges than other colleges at this institution.
- URM faculty are at higher risk of leaving without tenure in non-STEM colleges
- As associate professors in the STEM colleges
- Over the course of a career in non-STM colleges
- In the STEM colleges, overall retention is similar for URM and non-URM faculty.

Overall, the probability of leaving is similar for URM and non-URM faculty in the STEM colleges.

Promotion from Associate Professor to Full Professor
Associate Professors Appointed from 1997 to 2013

About 65% of associate professors are promoted to full professor within 10 years in the STEM colleges, but in other colleges only about 40% are promoted within 10 years. There are no significant differences in promotion patterns between URM and other faculty.

Ignoring length of service, we find significantly different retention and promotion rates for URM and non-URM associate professors in the STEM colleges (p=.05), where twice as high a fraction of URM faculty have departed as other faculty.

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<thead>
<tr>
<th></th>
<th>STEM Colleges</th>
<th>Other Colleges</th>
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</thead>
<tbody>
<tr>
<td>N</td>
<td>Percentage Promoted / Still Associate / Departed</td>
<td>Percentage Promoted / Still Associate / Departed</td>
</tr>
<tr>
<td>URM</td>
<td>39</td>
<td>41% / 33% / 26%</td>
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<tr>
<td>Other</td>
<td>453</td>
<td>49% / 40% / 12%</td>
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