## Faculty of the College of Agriculture, Food and Environment (CAFE)

## Faculty Size:

A significant down-sizing of the tenured faculty has occurred since 2004 (Table 1). Most of the loss of 22 positions coincided with budget-cutting years since 2008. In most cases, funding for these positions has been eliminated from the recurring university general fund budget. Approximately half of this faculty headcount loss has been replaced by non-tenure-track positions, mostly in the Lecturer Series.

Not all UK colleges have experienced faculty downsizing during this era; some have seen substantial growth. The most likely explanation is university level reallocation of resources to support high undergraduate enrollment, tuition generating segments of the university. Varying college budget models and strategies may also be relevant.

Table 1. Tenured/Tenure Track and Nontenure Track Comparison

|  | Tenured/Tenure <br> Track Faculty <br> (Regular TS, <br> Extension TS, <br> Special TS, <br> Librarian) | Nontenure Track <br> Faculty (Research <br> TS, Clinical TS, <br> Lecturer/Senior <br> Lecturer) | Total |
| :---: | :---: | :---: | :---: |
| FY 2004 | 267 | 8 | 275 |
| FY 2005 | 263 | 11 | 274 |
| FY 2006 | 264 | 11 | 275 |
| FY 2007 | 266 | 13 | 279 |
| FY 2008 | 266 | 15 | 281 |
| FY 2009 | 265 | 18 | 283 |
| FY 2010 | 258 | 20 | 278 |
| FY 2011 | 252 | 21 | 273 |
| FY 2012 | 249 | 20 | 269 |
| FY 2013 | 245 | 19 | 264 |

## Faculty by Title Series and Distribution of Effort:

Tables 2 and 3 provide a comparison of 2004 and 2013 with regard to distribution across title series. Reported are full-time faculty, not including phased-retirement and postretirement faculty. Department chairs are included in Administration totals. 2004 was the first year after the merger with the College of Human Environmental Sciences for which data are shown.

The change from 2004 to 2013 is:

| Total | Regular | Extension | Special | Research | Clinical | Lecturers |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| -11 | -3 | -14 | -5 | -2 | +4 | +9 |

Table 2. FY 2013 - Summary of faculty in the CAFE by title series

|  | Regular <br> Title | Extension <br> Title | Special <br> Title | Research <br> Title | Clinical <br> Title | Lecturer, <br> Senior <br> Lecturer | Librarian | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Administration | 14 | 5 |  |  |  |  |  | 19 |
| AEC | 13 | 8 |  |  |  | 1 |  | 22 |
| AFS | 20 | 13 |  |  |  | 1 |  | 34 |
| Ag Com |  |  |  |  |  |  |  | 0 |
| BAE | 7 | 7 |  |  |  |  |  | 14 |
| CLD | 9 | 4 |  |  |  | 2 |  | 15 |
| DHN (NFS) | 4 | 3 | 1 |  |  | 2 |  | 10 |
| ENT | 13 | 4 |  |  |  |  |  | 17 |
| FAM | 6 | 3 | 1 |  |  | 2 |  | 12 |
| FOR | 10 | 3 |  |  |  |  |  | 13 |
| HOR | 7 | 6 |  |  |  | 1 |  | 14 |
| LA | 3 | 1 |  |  |  | 1 |  | 5 |
| RTM (MAT) | 8 |  | 1 |  |  | 1 |  | 10 |
| PPA | 7 | 4 |  |  |  |  |  | 11 |
| PSS | 24 | 11 | 1 | 2 |  |  |  | 38 |
| VSC | 15 |  | 8 | 2 | 4 |  | 1 | 30 |
| Total | 160 | 72 | 12 | 4 | 4 | 11 | 1 | 264 |

Table 3. FY 2004 - Summary of faculty in the CAFE by title series

|  | Regular <br> Title | Extension <br> Title | Special <br> Title | Research <br> Title | Clinical <br> Title | Lecturer, <br> Senior <br> Lecturer | Librarian | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Administration | 15 | 4 |  |  |  |  |  | 19 |
| AEC | 11 | 10 |  |  |  |  |  | 21 |
| AFS | 25 | 12 |  |  |  |  |  | 37 |
| Ag Com |  | 3 |  |  |  |  |  | 3 |
| BAE | 10 | 7 |  |  |  |  |  | 17 |
| CLD | 8 | 6 | 2 | 1 |  |  |  | 17 |
| NFS (DHN) | 3 | 3 | 3 |  |  | 1 |  | 10 |
| ENT | 11 | 4 |  |  |  |  |  | 15 |
| FAM | 7 | 3 | 2 |  |  | 1 |  | 13 |
| FOR | 7 | 4 |  |  |  |  |  | 11 |
| HOR | 8 | 9 |  |  |  |  |  | 17 |
| LA | 4 |  |  |  |  |  |  | 4 |
| MAT | 3 |  |  |  |  |  |  | 3 |
| PPA | 8 | 4 |  |  |  |  |  | 12 |
| PSS | 28 | 15 | 1 |  |  |  |  | 44 |
| VSC | 15 | 2 | 9 | 5 |  |  | 1 | 32 |
| Total | 163 | 86 | 17 | 6 |  | 2 | 1 | 275 |

The changes in Special and Clinical appointments are largely off-setting both numerically and functionally; representing changed appointment strategies at the Veterinary Diagnostic Lab. The introduction of Clinical Title Series to the college was by design, to more appropriately classify faculty members at the UK Veterinary Diagnostic Laboratory (for whom the academic home is the Department of Veterinary Science).

The declines in the Extension Title Series and the increase in the Lecturer Series are noteworthy. The shift to more lecturers and fewer faculty in the Regular and Extension Title Series is based largely on budgetary circumstances. However, this and other data below suggest that decisions have been made at both the department and college level to prioritize commitments and needs for the instructional mission, more at the expense of extension than research.

The data in Table 4 are based upon Distribution of Effort (DOE) reporting (and therefore do not exactly match headcount data above). In response to a 28 percent increase in undergraduate enrollment, the instructional full-time equivalents (FTE) based on DOE have increased from approximately 54 to 59 faculty members from 2004 to 2013 . However, at the same time FTE in research and extension have decreased. Notably, the FTE in the Extension Title Series in 2013 were only $78 \%$ of the FTE in 2004. The administration FTE increase is associated with assignments in departments and interdepartmental units and initiatives, rather than full-time administrator headcount.

Table 4. CAFE Full-Time Equivalent (FY 2004 and 2013 Comparison)

|  | 2004 Fiscal Year | 2013 Fiscal Year |
| :---: | :---: | :---: |
| Full-Time Faculty | 274 | 254 |
| Instruction | 53.96 | 58.98 |
| Research | 118.94 | 110.77 |
| Extension | 92.20 | 71.46 |
| Administration | 9.77 | 12.79 |

While research FTE have decreased to $93 \%$ of 2004 levels, research productivity has increased or at least been sustained by most measures in most college departments. Increase in extramural funding would be one metric supporting that conclusion for the college as a whole. Several departments have increased refereed publication metrics as well. However, an increase in publication count has not been among the strategic goals for several departments, whose faculty were already publishing at the expected level. Multiple department reports in this self-study do note that further increases in funding or productivity are unlikely or impossible if research faculty numbers continue to decline.

The decline in extension FTE is probably a more immediate issue. Several key areas serving commercial production agriculture and diversified/sustainable farming are currently underserved or relying on post-retirement or staff-level extension specialists. Leaders of family and consumer sciences, community and economic development, and youth development extension perceive that these mission areas have always been underserved by state-level extension specialists and that much needed expansion has been thwarted.

Substantial increases in undergraduate enrollment have clearly been the major driver in the redistribution of faculty effort. Increasing numbers of extension faculty have modest, but significant teaching assignments. (Also, most or many extension positions that have been filled recently specify a minority research appointment, commonly 20\%. 100\% extension DOEs are now relatively uncommon.) Additionally, faculty vacancies associated with significant instructional needs have been more likely to be filled than those with predominantly research or extension assignments. Table 5 documents the increase in college undergraduate majors since the merger with Human Environmental Sciences (prior to the merger, College of Agriculture undergraduates numbered 1,100 to 1,250). The ratio of undergraduate majors to total faculty headcount has increased from 6.9 in 2004 to 10.1 in 2013. Ratios of undergraduate majors to instructional faculty FTEs has increased from 35.3 to 43.6 in the same period.

Table 5. CAFE Total Enrollment

| Total Enrollment |  | Fall Semester Enrollments |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{array}{\|l\|l} \hline 03- \\ 04 \\ \hline \end{array}$ | $\begin{aligned} & 04- \\ & 05 \end{aligned}$ | $\begin{aligned} & 05- \\ & 06 \end{aligned}$ | $\begin{aligned} & 06- \\ & 07 \end{aligned}$ | $\begin{aligned} & 07- \\ & 08 \end{aligned}$ | $\begin{aligned} & 08- \\ & 09 \end{aligned}$ | 09- | $\begin{aligned} & 10- \\ & 11 \end{aligned}$ | $\begin{aligned} & 11- \\ & 12 \end{aligned}$ | $\begin{aligned} & 12- \\ & 13 \end{aligned}$ |
| Agriculture | Bachelor's | 1,903 | 1,797 | 1,978 | 2,107 | 2,096 | 2,130 | 2,185 | 2,372 | 2,446 | 2,573 |
|  | Master's | 256 | 251 | 217 | 219 | 219 | 207 | 206 | 211 | 218 | 239 |
|  | Doctor's Degree Research/Scholarship | 168 | 169 | 167 | 161 | 175 | 178 | 188 | 187 | 198 | 199 |
|  | Post-Doctorate | 54 | 72 | 68 | 73 | 52 | 62 | 63 | 72 | 48 | 42 |
|  | Undergraduate Nondegree | 10 | 4 | 7 | 22 | 11 | 7 | 12 | 12 | 5 | 7 |
|  | College Total | 2,391 | 2,293 | 2,437 | 2,582 | 2,553 | 2,584 | 2,654 | 2,854 | 2,915 | 3,060 |

Faculty Demographics (http://www.uky.edu/IRPE/faculty/factbook.html): The 264 faculty of the CAFE in 2013 can be characterized as follows:

College
University

## Rank

130 (49\%) are Professors 31\%
72 (27\%) are Associate Professors 27\%
50 (19\%) are Assistant Professors 32\%
11 (4\%) are Senior Lecturers (2) or Lecturers (9). 7\%
0 are Instructors 2\%
Ethnicity
8 (3\%) are African-American 4\%
3 (1\%) are Hispanic 2\%
19 (7\%) are Asian 12\%
Gender
$74(28 \%)$ are women $38 \%$
189 (72\%) are men 62\%
University numbers (total 1,971 ) exclude College of Agriculture faculty. The greater fraction of full professors in the College than the rest of the university might be explained by: greater retention or career stability, more new recruitment and faculty growth in other colleges, or different strategies for faculty promotion to full professor.

Faculty diversity has been identified as a strategic priority and various measures have been implemented to directly address the challenge (for example, creation of a college-level
Office for Diversity). However, gaps remain with respect to both gender and ethnicity. Percentages remain lower than university representation, and below some national benchmark colleges.

Female faculty percentages have increased from approximately $21 \%$ in 2001, and this progress is being sustained through new hires. Examining gender by rank shows that at the assistant professor level, female and male faculty at the college and university levels is the same ( $46-47 \%$ ). At the associate rank, college females total $32 \%$ of the faculty body, while at the university level, females total $59 \%$, close to double. At the rank of full professor in the college, $13 \%$ are female, while at the university level $23 \%$ are female. These levels appear due primarily to the recent increases in women joining the faculty in our college.

Diversity by ethnicity remains a challenge in traditional agricultural fields. The increased emphasis on human and social sciences following the reorganization with Human Environmental Sciences may be relevant to future efforts to meet this challenge. It is remarkable that undergraduate minority representation in the college is approximately $11 \%$, the highest at UK. As is the case at many other benchmark colleges across the nation, women are now the majority (approximately $60 \%$ ) in our college. This provides reason for
optimism about diversity in the faculty pipeline for the future, yet it also underlines a potentially problematic difference between our student vs. our faculty population.

## Faculty Compensation:

Table 6 shows the average annual salaries by rank for Southern Region 1862 Land Grant Institutions for 2011-2012 (from the Southern Association of Agricultural Scientists (SAAS) Administrative Heads of Agriculture survey). The average salary of professors in the College of Agriculture at UK was $\$ 109,859$ for 2011-2012, which placed UK 8th out of 13 institutions. The average salary of associate professors at UK COA was $\$ 85,375$ which also placed UK $8^{\text {th }}$ out of 13 institutions reporting. The average salary of assistant professors at UK COA was $\$ 74,818$ which placed UK $6^{\text {th }}$ out of 13 institutions reporting.

Table 6. Average Annual Salaries by Rank of Southern Region 1862 Land Grant Institutions for 2011-2012 from Southern Association of Ag Scientists (SAAS). Administrative Heads of Agriculture survey. (Forestry schools, 1890 Colleges and Tuskegee University, and Colleges of Veterinary Medicine are not included.)


Table 7 shows average salary by gender effective July 1, 2012. The average is greater for men vs. women only in the full professor rank. At other ranks, the differential favoring women
is relatively small. Since the distribution by rank is so different for men and women this leads to a large difference in the overall average by gender, more than \$16,000 per person.

The largest fraction of this discrepancy, but apparently not all of it, can be accounted for by the gender difference in rank distribution. If an average salary for the entire faculty is projected using the rank distribution for total numbers, applying this to the salary distribution by rank for women would yield a projected college average about \$3,000 less that the college average predicted from the men's salary distribution by rank. Several factors may relate to this difference, for example, time in rank at full professor is greater for men than for women, market disadvantages for departments and fields with larger percentages of women, or gender differences in career advancement. The analysis suggests there may be a need for greater attention to both salary equity and career opportunities for post-tenure female faculty.

Table 7. Average salary for male and female faculty in CAFE by rank (without deans, chairs, school director, UKVDL director, phased retirees, and post retirement appointees)

| Academic Rank | Average Salary |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Female | Number | Male | Number |
| Professor | \$ 104,553.00 | 13 | \$ 113,127.00 | 102 |
| Associate |  |  |  |  |
| Professor | \$ 86,044.00 | 22 | \$ 85,078.00 | 49 |
| Assistant |  |  |  |  |
| Professor | \$ 76,790.00 | 25 | \$ 74,215.00 | 25 |
| Lecturer | \$ 65,316.00 | 10 | \$ 64,645.00 | 2 |
| Average, All |  |  |  |  |
| Ranks including |  |  |  |  |
| Lecturers | \$ 83,215.00 | 70 | \$ 99,396.00 | 178 |
| Average, All |  |  |  |  |
| Ranks excluding Lecturers | \$ 86,198.00 | 60 | \$ 99,791.00 | 176 |

