Women in Higher Education: Social Sciences at Land Grant Universities in the U.S.

Shida Rastegari Henneberry
Corinne Valdivia
Betty L. Wells

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Shida Rastegari Henneberry, Professor, Department of Agricultural Economics, Oklahoma State University¹

Corinne Valdivia, Assistant Professor, Department of Agricultural Economics, University of Missouri-Columbia²

Betty L. Wells, Professor, Department of Sociology Extension, Iowa State University

Introduction

Viewed nationally, the rapid entry rate of women into higher education in the U.S. during recent decades gives gender a special place among the categories of academic diversity to consider. Over the past 20 years the number of female faculty increased by

¹The assistance of La Dee Homm, Undergraduate Assistant at Oklahoma State University, in the compilation of data and text material is sincerely acknowledged. We also appreciate the input of many agricultural economists from the Committee on Women in Agricultural Economics, among them Lydia Zepeda and Laura Martin.

²The assistance of Debbie Mitchell from the College of Agriculture Food and Natural Resources at the University of Missouri is appreciated, as well as the information provided by Ann Patton of the Institutional Research Budget and Planning Office at the University of Missouri.
almost 50 percent; however this growth may be misleading. The purpose of this paper in this Conference of Women in Higher education is to present the numbers that provide a picture of the professional situation of women at land grant universities in U.S., with a special focus on the social sciences. Quisenberry and Leach (1998) present the situation of women in the biological sciences in the U.S. We review first the current trends of women in the work force. Second, we look at women’s access to education in U.S. universities, focusing on agricultural related fields. Next, we present the trends of women in faculty positions, and see how the overall figures correspond with those at land grant universities. We then elaborate on the opportunities reflecting access to university degrees in land grant institutions, and finally concentrate on the changes in the status of women faculty in Land Grant colleges, and the situation in social sciences departments.

Methodological considerations and caveats

Jacobs (1998) recommends that research on gender in higher education give separate consideration to access, process/experiences, and outcomes. Trends in these areas are often divergent, suggesting that separate processes may be at work. For example women represent a majority of students at nearly all levels of higher education and are not distinctly disadvantaged in terms of employment, but women remain a minority of the faculty at US universities, and are disadvantaged in terms of rank and institutional prestige.

Gender inequality in the United States is now less a matter of inequality in

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access, and more a matter of gender differentiation in educational experiences and, particularly, in outcomes. We intend to present the statistics of women in higher education, and concentrate on the situation of women in the social sciences at land grant universities. The paper presents access and outcomes information by gender (Jacobs, 1996), focusing on agricultural related fields. Experiences and processes are not easily captured by the numbers, and require more in-depth studies. Issues and concerns are raised in the last section, as well as possible approaches to improving the retention of female faculty.

**Women in the U.S. workforce**

Since 1970 the number of working women has doubled. The U.S. Department of Labor statistics shows that there were 63 million women in the labor force in 1997. This accounts for 46% of the total labor force participants, and is projected to be 47% in the year 2006. This represents roughly 60% of the female population 16 and over. Women's participation in the labor force changes with age, and differs with marital status and educational attainment. Fifty-one percent of the women between the ages of 16 and 19 participate in the workforce, while almost seventy-three percent of those between the ages of 20 and 24 participate. The age group of 25 to 54 has a participation rate of nearly 77%, while between 55 and 64 it drops to 51%. Almost 9% of the women over 65 participate in the labor force (U.S. Department of Labor).

Statistics in 1997 show that divorced women's participation rate is 74.5%, those never married is 66.8%, while those married with a spouse present is 62.1%. The presence
of children may also be a factor in participation, women with children under the age of 6 are 17% of the female workforce. (U.S. Labor Department).

It is interesting to note that, out of 60 million women that were employed in 1997, 41% were in technical, sales, and administrative support jobs. With respect to the participation of women in the labor force by education attainment, statistics show that women age 25 and over, with less than a diploma have a participation rate of 30.7% and an unemployment rate of 9.6%; women with high school degrees have a participation rate of 56.8% and an unemployment rate of 4.3%, while women with college degrees have a 75.5% participation rate and 2.2% unemployment rate. Managerial and professional jobs comprise 31.7% of the women employed in 1997. Women continue to earn less than men, those over the age of 25 earn in average 74% of what men do. Women with degrees in higher education earn the highest median salaries among women.

These numbers show that the participation of women continues to grow, and education, marital status and children are factors that shape this process. It also shows the importance of a higher education degree in terms of job security and level of earnings. Currently the numbers show that the long term prospects of men and women differ in terms of security. The relative proportion of women over 65 below the poverty line is more than double that of men, 13.6% compared to 6.8%.

These statistics highlight the importance of education as one factor that may improve long term security. It also indicates that many factors create an incentive for women to pursue higher education, and others are at play in their drive to participate.
The next section presents the access to education by gender, with a special focus on land grant universities.

**Land Grant Universities: Women Earning Degrees in Agriculture and Related Disciplinary Fields**

The land grant system has a distinctive history and is defined by some unique institutional arrangements. Three pieces of federal legislation - the first Morrill Act (1862), the Hatch Act (1887), and the Smith Lever Act (1914) - endowed the land grant colleges of agriculture with a three part mission of teaching, research, and extension (Colleges of Ag: 1996:14). Land grant universities constitute a unique organizational form born primarily in and for agriculture and the farm families.

Degrees awarded by gender based on data from the National Association of State Universities and Land Grant Colleges (NASULGC), show that access to education varies by the disciplinary degree being pursued, as well as by the type of the degree sought (baccalaureate through doctoral). In agricultural programs the percentage of student graduates by gender at the baccalaureate level is 60% male and 40% female based on a total of 17,835 in 1995 and 1996. In non agricultural programs at the same universities (Table 1) the proportion shifts, with women representing 79%.

Differences exist in the interests by specific fields within agriculture (agricultural sciences, resources, and forestry), with agricultural engineering and forestry capturing only 18% female graduates, in contrast with other areas such as education, communication and social sciences where participation increases to 47%, or biological

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and physical sciences where women are 51% of the total. In average, considering all academic areas, the proportion is 44% female and 56% male. The areas of higher female participation are animal sciences with 53%, and food science and human nutrition with 58% of the total (NASULGC, 1996). These numbers suggest that access to undergraduate programs is not a problem.

Trends in post graduate degrees diverge, increasing in the case of participation of female students at the masters degree level in the same categories specified above. In the same period masters degrees by gender show men receiving 34% and women 66%. This picture reverses at the doctoral level. The proportion of female students declines in all disciplines, with 69% of the degrees conferred to men and 31% to women (Table 1). This may have an effect on the access of women to higher education positions and land grant universities (Figure 1).

In terms of trends, enrollment of women in absolute terms increases at a greater pace between 1987 and 1996, which may be underestimated because the number of universities included in the census drops from 70 to 65. The area of natural resources has the highest enrollment growth. Enrollment grows 168% in natural resources, 86% in the biological sciences, 38% in education and social sciences, 34% in animal sciences. Overall, the growth in enrollment of women in agriculture related fields is 57% (Figure 2). Graduate degrees obtained by women are more prevalent in the food sciences area (Figure 3). Growth is also important in the biological sciences. The growth rate in social sciences, and in absolute numbers is smaller than in other fields. If the focus is only on the agricultural economics profession the numbers are actually
decreasing (Zepeda and Marchant, 1998). This may be due to the fact that land grant universities often have social sciences departments in the colleges of agriculture and arts and sciences. Zepeda and Marchant argue that lack of diversity may be one of the factors in this decreasing trends, not observed in other agricultural fields.

The numbers show that women are entering and graduating at the baccalaureate(Figure 2) and masters levels at increasing rates in the agricultural fields. The rate and proportion is not as high at the doctoral degree level, which will have impact on the access to academic positions at land grant colleges.

Women Faculty at Land Grant Universities

Women have entered the ranks of U.S. higher education during the past 20 years in record numbers, almost 100 percent. However, this progress bears careful analysis. During this time, the total number of female faculty members increased from 10 to 19%. However, the number of full time faculty members increased only by 25% (NEA update, 1998:5), where as the number of part-time faculty members nearly doubled. The dramatic increase in the number of women in academia is thus offset by women being more likely to be hired part time or on a temporary full time basis (Figure 1). The percentage of full time women faculty (tenure track) only increased by 3 % in the period 1976-1995 (Figure 1), from 17 to 20%. The new female faculty is slowly increasing representation in faculty positions, even with years of affirmative action legislation. Parity remains elusive. Is this national trend reflected in the land grant universities?

The data from NASULGC on land grant universities shows that the proportions of

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male graduates from doctoral programs are higher than females (Figure 3). Table 2 shows that these proportion favors males even more at the faculty level in each discipline. Those at the assistant professor level show lower female participation and it worsens at higher ranks. Some fields though have more female representation. For example food and nutrition disciplines have the highest proportion of female faculty, as do the natural resources and environmental fields.

The proportion of female faculty in the social sciences is low at these universities. The data from NASULGC (1996) show that the proportion of female faculty in agricultural economics is highest at the assistant professor level, 26%. At the associate professor level women comprise 8% of the faculty, and 3% at the professor level. In the area of sociology the statistics are more elusive. An overview of Sociology at MIAC (Mid-American International Agricultural Consortium) universities\(^3\) shows only one department of rural sociology, with only one female faculty recently hired (10%). The Sociology Department in the College of Arts and Sciences at the same university has four of 17, almost 25% representation. Other MIAC universities only have departments of sociology with some faculty and students involved in agriculture, as shown in table 2. The proportions at this department proportions reflect that national averages.

If we look at the total number of female faculty in sociology departments at MIAC

\(^3\)MIAC is the Mid-American Internation Agricultural Consortium, conformed by Iowa State University, Oklahoma State, University of Nebraska, Kansas State University and University of Missouri.
universities the proportion is almost 30% female to 70% male. These numbers are closer to the national trends, than to the trend in agricultural economics, discipline often housed in the colleges of agriculture. Analyzed by rank, the figures in sociology show a greater proportion at the assistant professor category, 60% (Table 2), though representation at the associate professor level is also greater when compared to agricultural economics. These numbers show that there is some representation in the social sciences, but other disciplines fare better in terms of representation within the colleges of agriculture. When comparing agricultural colleges with liberal arts colleges the later fare better in terms of women's participation in tenure track faculty positions. Social sciences in the colleges of agriculture are often small with a low proportion of female faculty, as rural sociology indicates. Agricultural economics departments at land grant colleges, have been traditionally for male professionals.

Representation of female faculty is not as high as access to the discipline, both the aggregate and specific cases show this. Our findings concur with those of Quisenberry and Leach in this conference (1998) for the biological sciences. In the case of Iowa State, the proportion of female students enrolled is 44%, with 40% enrolled in the college of agriculture, while 55% are in the College of Liberal Arts. In the department of Sociology women are almost 60 percent, and enrolled in graduate education almost 52%. Only 7% of the undergraduates in sociology are enrolled in the college of agriculture (ISU statistics for 1998). Female graduates in the college of agriculture represent 34%.

As stated before it is also important to look at what type of positions are growing
faster. The national figures show that temporary positions are growing at a faster pace, which also responds to the budgetary constraints faced in general by these colleges in the past ten years. Concerns are being voiced and debates are taking place on the effects of the growth of non tenure track positions on the quality of education (Leatherman, 1997). In terms of the quality and security of employment, the fastest growing segment of female faculty is in the non-tenure and part time categories.

Moreover, the ratios of female to male professors in terms of numbers in each academic rank and their salaries vary by discipline. For example, data for the fall of 1998 at Oklahoma State University shows that while in some of the university’s colleges there are vast differences between male and female faculty in salaries and numbers; in other colleges the gap is much narrower. While in the College of Agricultural Sciences and Natural Resources (CASNR), over fifty percent of women faculty (18 out of a total of 35 female faculty) are in non-tenure track and instructor level positions, in the College of Human Environmental Sciences (HES) only 3 percent of total female faculty (1 out of 31) are in non-tenure track positions.

For other colleges the ratio of non-tenure track female faculty to total female faculty are 31% (31 out of 100) for the College of Arts and Sciences (CAS), 24% (4 out of 17) for the College of Business Administration (CBA), 21% (9 out of 43) for the College of Education (CED). The College of Engineering (CEN) has no female non-tenure track faculty), but still far below the percentages for women. It is interesting to note that the number of non-tenure track male faculty as a percentage of total faculty is the highest in CBA, 7% (5 out of 71 total male faculty). For other colleges the ratio of
non-tenure track male faculty to total male faculty are 16% (32 out of 202 total male faculty) for CASNR, 15% (7 out of 48) for CED, 14% (40 out of 277) for CAS, 10% (11 out of 114) for CEN. The College of Human Environmental Sciences has no non-tenure track male faculty.

It is also interesting to note the percentage of female faculty in each rank. For example, in CBA and CASNR, nearly 50 percent of female faculty in tenure track positions are at the full professor rank. The percentage of male full professors in CBA and CASNR are 55% and 61%, respectively.

In terms of salary structure, in CAS the mean of women salary is less than 50% of their male counterparts at full professor rank. This gap closes at the associate and assistant professor ranks in CAS; the female mean salaries are very close to those of males. Female full professors' salaries as a percentage of their male counterparts are 85%, 91%, 103% in CASNR, CED, and CHES respectively. The salaries of male and female full professors are comparable in CBA, and CEN does not have any full female professors. In CBA the mean salaries of female are 102% and 106% of those of their male counterparts at the associate and assistant professor levels, respectively. In other colleges, at the assistant and associate levels, mean salaries of female faculty are very comparable if not higher than those of their male counterparts. However, one has to be cautious comparing mean salaries at each rank, as the qualifications such as years of service and teaching loads and research output may vary from one case to another. These are the most recent figures available from Oklahoma State University, but only reflect the situation of one year. These conclusions may differ from year to year.
If we look at University of Missouri, for which data is available, female faculty represent 22 percent of the male faculty in the campus (Figure 4). The numbers in terms of tenure and non tenure track professors in all ranks, show slightly differing trends (Figure 5). Non tenure track positions are increasing slightly, and the tenured positions are decreasing (from 1988 to 1997). The proportion of female faculty is also increasing though at a very slow pace. This trend coincides with the behavior presented at the beginning of the paper (Figure 1). Trends at the College of Agriculture Food and Natural Resources, show that temporary positions are growing at a faster pace than full time professors.

If this is broken down by rank and gender, most of the growth is taking place at the assistant professor level (figure 5) in the category of non tenure track males and females. Tenure track male assistant professors are decreasing while the ranks of tenure male associate professors are increasing. The category of female professors remains the same, at both the assistant and associate professor levels. The assistant and associate professor levels, and the non-tenure track male and female categories are increasing (figures 6 and 7), especially non regular faculty positions in the college, such as pos doctoral students, and research associates. Figure 6 show that the proportion of women in the social sciences grows faster in non tenure track. When the professors are being analyzed, women don't fare well in the social sciences within the college. The social sciences unit at MU do not have tenure track faculty (one is recently joining).

At the college level the proportion of female faculty, tenure track and non regular
is 4.8 % and 13.9% respectively. They represent 18.6 % of the total faculty, and mostly growing in temporal positions, which include all activities not only professorial ranks.

The trends at University of Missouri are similar (and sometimes worse) than those nationally. The representation of women in Colleges of Agriculture and specifically in social sciences is very low in proportion to the academic degrees granted. The area of growth for these women takes place mostly in non regular or temporary appointments (See Figure 1). Conversely, enrollment of graduate students in agricultural economics shows 8 of 22 at the PhD level, and 10 of 17 in at the masters level, clearly different from the situation of faculty in this department.

In terms of salaries, some finding and national statistics show that women earn less than men. A study conducted the Office of Institutional Research Budget and Planning at the University of Missouri, looked at different models to analyze if there were disparities in salaries and what was causing them. Two of the models that used salary as the dependent variable included gender as an independent variable; one also included academic department. In the worse case scenario the discrepancy is $2,850, while accounting for departments the discrepancy is $839. This study did not consider merit differences and the study suggests that this may be a cause of the difference. It is important to note that this study was done including some variables such as how many years in rank and how many years in the system. The coefficient on gender reflecting men was positive (Office of Institutional Research, Budget, and Planning, 1996).

Access and Outputs
The progress of women is thus less than it first appears as Allen appropriately points out (1998:29):

"Women faculty are more likely to be part-time employees, hold lower academic ranks, work at undergraduate teaching institutions, and pursue careers in traditional fields. Women also receive fewer professional rewards, are less likely to hold tenure, publish fewer refereed articles, and receive disproportionately lower salaries for all ranks and types of institutions in 1995-1996."

As mentioned before, according to Jacobs, research on gender in higher education should give separate consideration to access, outcomes and processes and experiences. Trends in these areas are often divergent. In our concentration on access we see that in terms of educational attainment gender is becoming less of a factor including the colleges of agriculture, while in terms of outputs, the number of female faculty by rank the picture is very different, indicating that there may be problems of access at this level.

Allen indicates that we cannot equate gender differentiation with discrimination without documenting the organizational processes mediating gender differentiation. For example, what accounts for gender disparities in faculty productivity (Allen, 1998:39)? Why are women disproportionately represented in part time, temporary or non tenure track positions? What are the contextual forces (departmental cultures, organizational structure, group dynamics, and others) that cause these patterned differences?

With the exception of the study carried out on factors affecting salaries of faculty at MU, the data as presented does not account for reasons explaining these

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differences. The measurements as recorded do not allow us to determine if there are
differences in promotion practices, and if there are differences in productivity that justify
the observed differences in salary by rank. This is why Jacobs (1996) recommends
that research on gender in higher education give separate consideration to access,
process/experiences and outcomes. Trends in these areas are often divergent,
suggesting that separate processes may be at work.

As we have seen, women represent a majority of students at nearly all levels of
higher education, and are not distinctly disadvantaged in terms of institutional position,
but women remain a minority of the faculty in the US, and are disadvantaged in terms
of rank and institutional prestige. Gender inequality in the United States is thus now
less a matter of inequality in access, and more a matter of gender differentiation in
educational experiences and particularly, in outcomes such as retention at secure
faculty positions.

As stated at the beginning, higher education positions are correlated with higher
salary levels and improved job security. In the case of agricultural economics (Zepeda
and Marchant 1998) enrollment is decreasing, and one of the reasons is that there is
low representation of women and minorities, which is not the case in other agricultural
fields. The suggest that lack of diversity is at the center of this decrease. This brings
us back to an initial statement, gender at the center of the future of academia, as an
element of diversity. The proportions of women entering the teaching ranks of higher
education must increase to have an impact on improving retention and access of
women at all levels in agricultural social sciences. This is especially true as mentoring

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is another important factor in retention of students and junior faculty (Quisenberry and Leach 1998; Zepeda and Marchant, 1998). This would have a positive effect on the outputs of women in the applied social sciences (agriculture). Quisenberry and Leach (1998) discuss central issues in the incorporation of women to higher education, and in their retention in the biological sciences, that hold true for the social sciences. As we strive to become diverse to serve a glowingly diverse population, the values of this diversity should also be incorporated in the way we value faculty towards tenure. This may improve retention, and increase the number of successful female and minority faculty at land grant universities.

A Conclusion
There has been progress, but it is not enough. There is need to improve entry and retention of women faculty, which requires new hiring techniques to reach and appeal to women in the social sciences of agriculture. The issues of job security are also central to women as they tend to occupy non tenure track positions at higher rates than men. Doctoral degree attainment is essential to increasing entry to faculty positions. Despite the existence of affirmative action, the profession in higher education has not scored well. Several factors have affected the process, among them decreasing core funded positions at land grant colleges, but also the belief by many that if women do not apply it is because of lack of interest. Retention and promotion are some other issues that should be analyzed further. Other central issues are addressed by Quisenberry and Leach later in the program.
It is essential to incorporate more women into the teaching and research ranks at colleges of agriculture, as a critical mass of female faculty as role models is needed to promote change, and diversify the face of the social sciences in agriculture. This also requires development of new concepts regarding the tenure process to incorporate the values that diversity bring to land grant universities.
References


NASULGC. 1996 Academic Year 1995/1996 Degrees Awarded in NASULGC/ACOP/APS Colleges of Agriculture Renewable Natural Resources and Forestry Classified by Degree Level, Gender and Academic Area. WWW. National Association of State Universities and Land Grant Colleges/Academic Committee on Organization and Policy/ Academic Program Section.

'Faculty in Academe'. NEA Update 4, 4, 1-6.


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Table 1: Degrees Awarded in NASULGC (National Association of State Universities and Land Grant Colleges)

Agriculture, Renewable Natural Resources and Forestry by Degree, Gender and Academic Area in 1995-1996.

<table>
<thead>
<tr>
<th>Academic Area</th>
<th>Two-Year Degrees Awarded</th>
<th>Baccalaureate Degrees Awarded</th>
<th>Masters Degrees Awarded</th>
<th>Doctoral Degrees Awarded</th>
<th>All Degree Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
<td>TOT</td>
<td>M</td>
<td>F</td>
</tr>
<tr>
<td>General Agriculture</td>
<td>27</td>
<td>5</td>
<td>32</td>
<td>362</td>
<td>149</td>
</tr>
<tr>
<td>Animal Science</td>
<td>78</td>
<td>62</td>
<td>140</td>
<td>1352</td>
<td>1509</td>
</tr>
<tr>
<td>Plant Science</td>
<td>24</td>
<td>26</td>
<td>50</td>
<td>568</td>
<td>200</td>
</tr>
<tr>
<td>Horticultural Science</td>
<td>334</td>
<td>65</td>
<td>399</td>
<td>903</td>
<td>429</td>
</tr>
<tr>
<td>Soil Science</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>85</td>
<td>37</td>
</tr>
<tr>
<td>Agricultural Business &amp; Management</td>
<td>59</td>
<td>21</td>
<td>80</td>
<td>1710</td>
<td>694</td>
</tr>
<tr>
<td>Education, Com. &amp; Soc. Sci.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>508</td>
<td>456</td>
</tr>
<tr>
<td>Natural Resources</td>
<td>21</td>
<td>10</td>
<td>31</td>
<td>2419</td>
<td>1530</td>
</tr>
<tr>
<td>Forest Science</td>
<td>40</td>
<td>5</td>
<td>45</td>
<td>738</td>
<td>158</td>
</tr>
<tr>
<td>Ag Engineering/Mech.</td>
<td>37</td>
<td>3</td>
<td>40</td>
<td>588</td>
<td>126</td>
</tr>
<tr>
<td>Food Science/Human Nutrition Sci.</td>
<td>6</td>
<td>13</td>
<td>19</td>
<td>438</td>
<td>619</td>
</tr>
<tr>
<td>Related Biological/Physical Sci.</td>
<td>0</td>
<td>5</td>
<td>5</td>
<td>1098</td>
<td>1165</td>
</tr>
<tr>
<td>Total (Ag. Sci., Ren. Res. &amp; For.)</td>
<td>626</td>
<td>191</td>
<td>817</td>
<td>10769</td>
<td>7066</td>
</tr>
<tr>
<td>Non-Agricultural Programs</td>
<td>15</td>
<td>0</td>
<td>15</td>
<td>421</td>
<td>1553</td>
</tr>
<tr>
<td>Total (ALL Academic Areas)</td>
<td>641</td>
<td>191</td>
<td>832</td>
<td>11199</td>
<td>8619</td>
</tr>
</tbody>
</table>

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Table 2: Undergraduate and Graduate Degrees Awarded by Gender In Agricultural Related Fields, and Faculty by Gender and Rank, in Percentages (NASULGC and MIAC Universities) 1995-1996.

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Bachelor Degree</th>
<th>M.Sc. Degree</th>
<th>Doctorate</th>
<th>Assistant Professor</th>
<th>Associate Professor</th>
<th>Professor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Natural Resources</td>
<td>61</td>
<td>39</td>
<td>58</td>
<td>42</td>
<td>73</td>
<td>27</td>
</tr>
<tr>
<td>Agricultural Economics</td>
<td>71</td>
<td>29</td>
<td>65</td>
<td>35</td>
<td>75</td>
<td>25</td>
</tr>
<tr>
<td>Food Sciences</td>
<td>42</td>
<td>58</td>
<td>32</td>
<td>68</td>
<td>48</td>
<td>52</td>
</tr>
<tr>
<td>Average from NACSLGC</td>
<td>60</td>
<td>40</td>
<td>58</td>
<td>42</td>
<td>69</td>
<td>31</td>
</tr>
<tr>
<td>Sociology at MIAC Univer.</td>
<td></td>
<td></td>
<td>40</td>
<td>60</td>
<td>68</td>
<td>32</td>
</tr>
</tbody>
</table>

Sources: National Association of State Universities and Land Grant Colleges/Academic Committee on Organization and Policy/Academic Committee on Organization and Policy/Academic Programs Section; MIAC Universities.
Table 3: Faculty at Oklahoma State University by Tenure and Gender in 1998.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CAS</td>
<td>CASNR</td>
<td>CBA</td>
<td>ED</td>
<td>EN</td>
<td>CHES</td>
</tr>
<tr>
<td>% Female temp. as total:</td>
<td>31%</td>
<td>51%</td>
<td>24%</td>
<td>21%</td>
<td>------</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>[31/100]</td>
<td>[18/35]</td>
<td>[4/17]</td>
<td>[9/43]</td>
<td>[0/4]</td>
<td>[1/31]</td>
</tr>
<tr>
<td>% Male temp as total:</td>
<td>14.4%</td>
<td>16%</td>
<td>7%</td>
<td>15%</td>
<td>10%</td>
<td>------</td>
</tr>
<tr>
<td></td>
<td>[40/277]</td>
<td>[32/202]</td>
<td>[5/71]</td>
<td>[7/48]</td>
<td>[11/114]</td>
<td>[0/9]</td>
</tr>
<tr>
<td>% Female in total female tenure track:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professor:</td>
<td>11.6%</td>
<td>47%</td>
<td>46%</td>
<td>15%</td>
<td>------</td>
<td>27%</td>
</tr>
<tr>
<td></td>
<td>[8/69]</td>
<td>[8/17]</td>
<td>[6/13]</td>
<td>[5/34]</td>
<td>[0/4]</td>
<td>[8/30]</td>
</tr>
<tr>
<td>Associate:</td>
<td>43.5%</td>
<td>29%</td>
<td>46%</td>
<td>56%</td>
<td>50%</td>
<td>33%</td>
</tr>
<tr>
<td></td>
<td>[30/69]</td>
<td>[5/17]</td>
<td>[6/13]</td>
<td>[19/34]</td>
<td>[2/4]</td>
<td>[10/30]</td>
</tr>
<tr>
<td>Assistant:</td>
<td>45%</td>
<td>24%</td>
<td>8%</td>
<td>29%</td>
<td>50%</td>
<td>40%</td>
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<td>[31/69]</td>
<td>[4/17]</td>
<td>[1/13]</td>
<td>[10/34]</td>
<td>[2/4]</td>
<td>[12/30]</td>
</tr>
<tr>
<td>% Male in total male tenure track:</td>
<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Professor:</td>
<td>42%</td>
<td>61%</td>
<td>55%</td>
<td>37%</td>
<td>50%</td>
<td>22%</td>
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<tr>
<td></td>
<td>[100/237]</td>
<td>[103/170]</td>
<td>[36/66]</td>
<td>[15/41]</td>
<td>[52/103]</td>
<td>[2/9]</td>
</tr>
<tr>
<td>Associate:</td>
<td>31%</td>
<td>24%</td>
<td>33%</td>
<td>46%</td>
<td>37%</td>
<td>45%</td>
</tr>
<tr>
<td></td>
<td>[74/237]</td>
<td>[41/170]</td>
<td>[22/66]</td>
<td>[19/41]</td>
<td>[38/103]</td>
<td>[4/9]</td>
</tr>
<tr>
<td>Assistant:</td>
<td>26.6%</td>
<td>15%</td>
<td>12%</td>
<td>17%</td>
<td>13%</td>
<td>33%</td>
</tr>
<tr>
<td></td>
<td>[63/237]</td>
<td>[26/170]</td>
<td>[8/66]</td>
<td>[7/41]</td>
<td>[13/103]</td>
<td>[3/9]</td>
</tr>
</tbody>
</table>

Source: Oklahoma State University, Office of Institutional Research
Figure 1: Faculty Members by Gender
And Status 1976 and 1995

1976
And Status 1976 and 1995

Women Part Time (10.00%)
Men Part Time (21.00%)
Women Full Time (17.00%)
Men Full Time (52.00%)

1995
And Status 1976 and 1995

Women Part Time (19.00%)
Men Part Time (22.00%)
Women Full Time (20.00%)
Men Full Time (39.00%)
Figure 2: Historical Summary of Baccalaureate Degrees Awarded to Women in Colleges of Agriculture, Renewable Natural Resources and Forestry Classified by Academic Area as Reported by NASULGCA/ACOP/APS Institutions, 1987-1996
Figure 3: Historical Summary of Graduate Degrees Awarded to Women in Colleges of Agriculture, Renewable Natural Resources and Forestry Classified by Academic Area as Reported by NASULGC/ACOP/APS Institutions, 1987-1996
Figure 4: Total Faculty by Gender
University of Missouri 1993-1997

Numbers

Male
Female

Years

Henneberry, Valdivia, and Wells
27
Figure 5: Tenure and Non Tenure Track Faculty by Gender at MU 1993-97
Figure 6: Faculty by Gender and Status
CAFNR Academic Units 1998
Figure 7: CAFNR Professors by Gender
Tenure and Non Tenure Track

[Bar chart showing the number of faculty by gender and tenure status across different academic units.]