

# *A STRATEGIC PLAN FOR SURVIVAL*

*Department of Animal Science  
The University of Tennessee, Knoxville  
August 2006*

**Executive Summary:** Tennessee's food animal industries generated almost \$1.3 billion in farm cash receipts in 2004 and continue to be an important segment of the state's economy. Tennessee's leading food animal farm enterprises were cattle and calves at \$514 million, poultry and eggs at \$475 million, dairy at \$193 million and hogs at \$43 million. The total number of cattle and calves in the state was 2.17 million. An average of 75,000 milk cows on Tennessee farms produced 1,155 million pounds of milk. Tennessee's total hog and pig inventory was 215,000 head. There were 196 million broilers that yielded 999 million pounds of meat valued at \$440 million, and 2.40 million chickens. In addition, the value of Tennessee's 210,000 equine on January 1, 2004 was estimated at \$565 million, equine income from sales and related activities was \$259 million, and equine-related expenses totaled \$597 million. Almost 47,000 4-H youth were enrolled in beef, dairy, horse, poultry, sheep and swine projects in 2005. Thus, animal agriculture in Tennessee continues to play an important role in the states economy, vitality, and in youth development.

Our last strategic planning process in 2000 following the reorganization of the Department of Animal Science culminated in a plan that strategically positioned the department to take advantage of future opportunities to improve operational efficiency, enhance external funding, and strengthen our collective programs. We made the best use of our core competences to meet priority needs of our primary constituencies.....students and the animal industries of Tennessee. Many of the recommendations from that process were implemented and are in place today.

The challenges that face us continue to be many, varied and significant....finite resources, flat and/or reduced state and federal budgets, heightened expectations and accountability, rapidly changing communication and scientific technologies, and an increasingly diverse clientele who expect rapid responses to emerging issues.....to name just a few. To assist us in meeting these daunting challenges, we engaged in another comprehensive strategic planning process that began in the Fall of 2005. Throughout the process, the focus was on opportunities and critical issues that will help/facilitate our extension, research and teaching programs to be recognized throughout Tennessee, regionally, nationally and internationally.

**Brief Description of the Planning Process:** The process started in June 2005 and is currently ongoing.

1. Meeting 1 - June 2005. A faculty retreat facilitated by Bob Lash, Jr. of Strategic Resources, Inc. was held at Fall Creek Falls. Objectives of the retreat were to:
  - ✓ Develop the basic framework for completing a comprehensive strategic plan
  - ✓ Begin to establish consistency and unity among teaching, research and extension faculty
  - ✓ Understand the planning process, components of the plan, and steps to insure completion after the retreat

2. Meeting 2 - December 2005. A faculty retreat facilitated by Bob Lash, Jr. of Strategic Resources, Inc. was held at the Marriott Hotel in Knoxville. Objectives of the retreat were:
  - ✓ To continue working on the department's overall strategic plan and build on previous work from session one
  - ✓ To provide the department with direction, purpose, focus, priorities, and clarity in problem solving, decision making and resource allocation
  - ✓ To align and coordinate activities and resources toward meaningful outcomes
  - ✓ To create an "umbrella" for the department that coordinates and integrates teaching, research, and extension programs
  - ✓ To establish a flexible framework and roadmap for the future
  - ✓ To incorporate ideas and input from various stakeholders
3. Meeting 3 - May 2006. A faculty retreat facilitated by Bob Lash, Jr. of Strategic Resources, Inc. was held at the Marriott Hotel in Knoxville. Objectives of the retreat were:
  - ✓ Perspective process check
  - ✓ Goal setting
4. July 2006. A committee composed of Lannett Edwards (Chair), Gina Pighetti, Fred Hopkins, and Steve Oliver was formed by the Department Head. The committee was given the charge of summarizing outcomes of our discussions/deliberations, and preparing a document to be distributed to faculty for further discussion.
5. August 2006. Document distributed to faculty for further discussion.
6. Winter 2006. Continued faculty discussion and completion of strategic planning document outlining our goals and objectives, and a plan to evaluate our progress.

**Brief Synopsis of Discussions/Deliberations:** Thus far, the strategic planning process has confirmed that we must more fully engage our principal clientele (students; producers; and commodity, industry, state and federal partners), stay abreast of their goals and related needs, and focus our limited resources on those identified program areas that are of high priority, in which we have expertise and ability, and are most likely to make a positive impact. Within these program areas, there should be a mix of basic/long term investment research; multi-disciplinary, system-level applied/short term outcome research; and progressive up-to-date educational and outreach programming. We should be deliberate in transferring research results and new technologies to end-users in an effective and timely manner, and do a much better job of assessing our impact. To accomplish this with finite resources will require a substantial increase in effort to obtain external funding from both traditional and nontraditional sources. Greater use of computer-assisted communication and information technology is essential. The infrastructure to achieve this exists. Full adoption of existing and future technology should greatly enhance internal and external communication, business efficiency, and program delivery and will be key to improving our image and enhancing our visibility. Last but certainly not least, we must become more engaged, focused and deliberate in communicating and promoting the nature and

impact of our collective programs to the university at large, our clientele, our alumni, and to state and federal legislators.

**Our Vision:** The Department of Animal Science, internationally recognized for its excellence and innovation in teaching, research, and extension, develops leaders in the animal industries and provides the solutions and technologies that improve the quality of life for all our stakeholders and promote the well-being of animals.

**Our Mission:** Serving state, national, and global animal industries, the Department of Animal Science, through the generation and dissemination of science-based knowledge, educates and inspires students, producers, industry, and the public to achieve their personal and professional goals.

### **Our Core Values**

- ✓ ***Excellence:*** Recognition of superior performance in teaching, research, and extension by students, peers and clientele.
- ✓ ***Integrity & Moral Soundness:*** Unbiased truthfulness in generating new knowledge for presentation and dissemination to our students, peers and clientele.
- ✓ ***Responsiveness:*** The ability to change direction in programs and activities as a result of changes taking place in the industries and discipline in which we serve.
- ✓ ***Innovation:*** Pursuit of original ideas and approaches in teaching, research, and extension.
- ✓ ***Teamwork:*** Collaboration of individuals with diverse expertise to effectively address goals, issues, and/or problems.

**Current Assessment of Our Department:** Identification of external threats and opportunities, and perceived strengths and weaknesses was a necessary first step towards identifying priorities, delineating key strategies, identification of goals, and development of an effective departmental strategic plan for the next three years.

**External Threats:** External threats to our survival included potential loss/reduction of USDA formula funding, changes in animal agriculture, shrinking agricultural constituency, increased competition for finite resources, lack of oversight and access to animals, increased competition for students by other animal science and agricultural programs in the State, a more diverse student population, and heightened expectations and accountability from an ever changing university administration.

**External Opportunities:** Despite the enormity of potential external threats described above, faculty identified several external opportunities. Among these were diverse grant and contract funding sources including traditional and non-traditional funding sources highlighting use of farm animals for biomedical research, and increased efforts of faculty to obtain external support of their teaching/research/outreach programs. Other external opportunities that were identified include our

diverse student population, our alumni, volunteers, animal availability within the experiment station network, outside collaborations, nonagricultural constituencies, and exciting new technologies. All of these external opportunities will enhance our collective programs in serving our state, national and global animal industries through generation and dissemination of science-based knowledge.

**Internal Strengths:** Several internal strengths including diversity and depth of faculty, the large number of quality undergraduate students, availability of scholarships, quality instruction and student advising by engaged faculty allowing for acquisition of reliable information and development of important problem solving skills were identified. Additional strengths included some strong competitive research programs, some solid extension and youth programs, availability of animals for research and teaching, technical resources, information technologies, state networks, and opportunities to enhance existing programs through retirements that will likely occur in the near future.

**Internal Weaknesses:** Faculty identified the following internal weaknesses: dependency on funding by state and federal formula funds for supporting the majority of teaching, research and extension programs; less than optimal communication/collaboration among departmental faculty; location of faculty in different buildings on campus and throughout the state; limited use of extension faculty for teaching and research; outdated facilities and equipment; lack of oversight of animal resources; low number of graduate students and graduate student class offerings; student to advisor ratio for undergraduates; no plan in place to replace faculty lost to retirement, ratio of prevet students to students interested in production agriculture; less than optimal effort to recruit students interested in agriculture; faculty recruitment/retention; and a less than optimal mechanism for promoting the nature and impact of our collective programs to the university at large, our clientele, our alumni, and to state and federal legislators.

Clarification of the first External Threat is of immediate concern since a reduction of USDA formula funding would likely result in drastic changes in departmental staffing that would impact every program area. Elimination of USDA formula funding would likely result in more drastic consequences. Addressing this concern and others will no doubt require a unified effort of the faculty to commit to stated priorities and key strategies, and to take action to implement specific plans and assess progress as outlined below.

Assessing real progress towards stated goals will be dependent on identification and use of measurable outcomes. To this end, the committee made an attempt to acquire information from 2000 to present regarding graduate and undergraduate student enrollment; grant and contract activity to support teaching, research, and extension efforts.....among other things. The intent was to derive baseline information similar to what was included in our strategic plan for 2000-2005 that will be needed for future comparisons to assess real progress towards stated goals. However, after critical review of information obtained from various sources, it became obvious that data necessary for generating baseline information pertaining to past and current departmental accomplishments was not readily available in a user-friendly format for inclusion in this report. Given the importance of establishing baseline information for determining real progress towards stated goals and objectives, the committee felt that it is imperative that additional effort be put forth to acquire the necessary information conveying our past activities from 2000 – 2006 to establish baseline data for the department. Probably the best mechanism to accomplish this is for departmental committees to request relevant information from faculty, collate data, share these data with faculty, and update and maintain this information annually to

evaluate our programs and to assess progress. For information relevant to undergraduate and graduate students, the Undergraduate Committee and Graduate Committee are logical choices for compiling necessary information. For our efforts to promote research, develop a plan of action to secure diverse sources of funding for strengthening research, teaching and extension efforts, and to recruit and retain quality personnel that match the vision of our department, an additional committee will likely need to be formed. An important initial assignment of this committee should be to establish necessary baseline information from faculty, collate data, share these data with faculty, and update and maintain this information annually to evaluate our programs and to assess progress.

## **Identified Priority Areas**

- ◆ Promote research
- ◆ Transfer knowledge & technology to students & beyond
- ◆ Advance agriculture & animal well-being

## **Our Key Strategies**

- I. Promote communication to enhance recognition of the Department of Animal Science, dissemination of knowledge, learning experiences for students, and opportunities for research.**
- II. Develop and secure diverse funding sources that will strengthen research, teaching, and extension programs.**
- III. Develop a program for strategic recruitment and training of high quality, agriculturally-oriented undergraduate and graduate students.**
- IV. Recruit and retain quality personnel that match the vision of the Department of Animal Science.**

The following information describes our action plan to attain our goals and objectives, and a plan to evaluate our progress. Please read this over carefully and be prepared to discuss this at a departmental retreat to be held in the near future. Hang in there.....the end is near.....happy reading.....

## **Action Plan**

As a first step towards implementing our key strategies, an ‘Executive Committee’ should be established to provide oversight of our strategic plan; to promote research; develop a plan of action to secure diverse sources of funding for strengthening research, teaching and extension efforts; and to recruit and retain quality personnel that match the vision of our department. This committee should be formed immediately to aid in establishing and monitoring appropriate measures by coordinating efforts with other committees and individuals.

# Department of Animal Science

***Our Mission:*** Serving state, national, and global animal industries, the Department of Animal Science through the generation and dissemination of science-based knowledge, educates and inspires students, producers, industry, and the public to achieve their personal and professional goals.



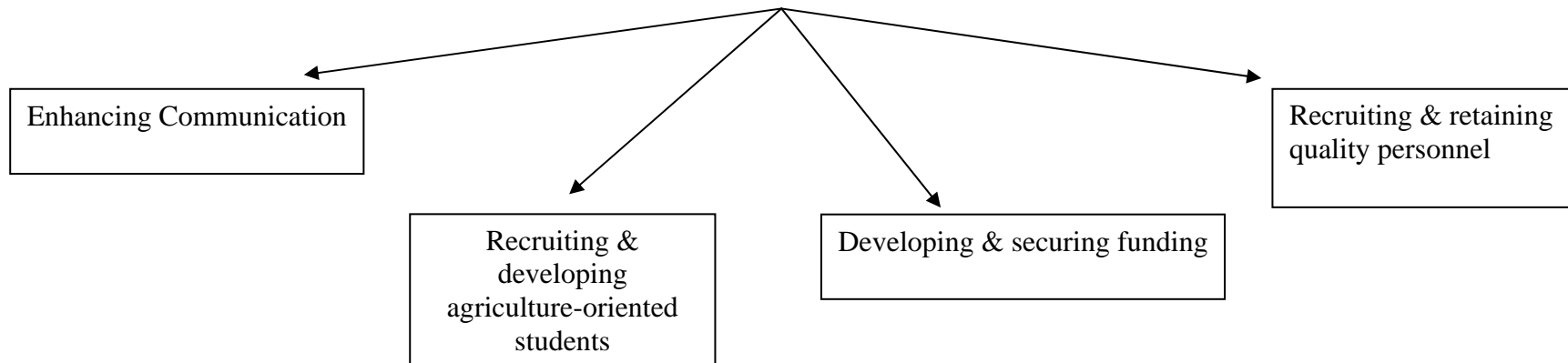
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## ***Our Priorities***

- ◆ Promote research ◆ Transfer knowledge & technology to students & beyond ◆ Advance agriculture & animal well-being ◆

## ***Key Strategies***



**Strategy I. Promote communication to enhance recognition of the Department of Animal Science, dissemination of knowledge, learning experiences for students, and opportunities for research.**

**A. Internal Communication**

**Year 1**

<b>Goals</b>	<b>Objectives</b>
<ol style="list-style-type: none"> <li>1. Establish a Communications Committee.</li> <li>2. X% of faculty has participated in at least X activities and events (collaborative projects, publications, seminar series, etc.)</li> <li>3. X% of faculty and staff are more aware of and understand activities and involvement of colleagues.</li> <li>4. X% of faculty and staff report that communication has improved within the Department.</li> </ol>	<ol style="list-style-type: none"> <li>1. Develop and administer survey to establish baseline participation, awareness, and communication.</li> <li>2. Develop and implement strategy to encourage collaboration and participation in activities/events.</li> <li>3. Develop method to monitor and report participation.</li> <li>4. Administer survey at end-of-year to evaluate improvement</li> <li>5. Share results</li> </ol>

**Year 2**

<b>Goal</b>	<b>Objective</b>
<ol style="list-style-type: none"> <li>1. Increase participation, awareness, and communication by X% from year 1.</li> </ol>	<ol style="list-style-type: none"> <li>1. Evaluate year 1 data to identify most effective means of communication.</li> <li>2. Identify barriers to communication and develop strategies to minimize.</li> <li>3. Identify, evaluate, &amp; implement new ways to increase communication and participation.</li> <li>4. Administer end-of-year survey to evaluate improvement.</li> <li>5. Share results.</li> </ol>
<ol style="list-style-type: none"> <li>2. The 3 units will participate in at least X new collaborative projects and/or activities.</li> </ol>	<ol style="list-style-type: none"> <li>1. 'Executive Committee' aids in identifying activities/projects that would benefit with inter-unit collaboration.</li> </ol>

	2. Activities/Projects selected and outcomes of effort determined. 3. Initiate activities and/or projects. 4. Evaluate activities and/or projects for effectiveness, value, outcomes.
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**Year 3**

<b>Goal</b>	<b>Objective</b>
1. Awareness, participation, and communication have increased by X% from year 2.	1. Evaluate effectiveness of priority in increasing internal communication. 2. Has successful completion of this goal had a positive effect on attaining our vision?
2. Collaborative events and activities between the 3 units have increased by X% from year 2.	

**Recommendations**

(1) As a group, discussions should be open and objective so that we can effectively move our department forward by identifying and capitalizing on our strengths and minimizing/eliminating our weaknesses. Those who choose not to participate will lose their opportunity to join in this constructive process.

(2) More productive faculty meetings – Establish a ‘theme’ or discussion topic for the meeting that will address an issue to the department. Include committee reports (if committee not reporting – indication of inactivity should be addressed).

(3) Establish a faculty retreat that occurs at the same time each year. Use this time to review/evaluate progress in our strategic plan. This retreat should include a written summary report of our achievements.

(4) Resurrect community calendar for all student, extension, and research events related to the department. This will aid individuals in planning to attend/participate in various events.

**B. External communication (Communications Committee)**

**Year 1**

<b>Goal</b>	<b>Objective</b>
1. Establish Communications Committee	

1. The Department will reach and connect with X% of its clientele on a regular basis.	<ol style="list-style-type: none"> <li>1. Identify target clientele groups.</li> <li>2. Identify &amp; implement methods to reach target groups.</li> <li>3. Establish baseline data.</li> <li>4. Develop evaluation method.</li> <li>5. Conduct evaluation and share results.</li> </ol>
2. Establish image and identity we want to project.	<ol style="list-style-type: none"> <li>1. Develop process for department input.</li> <li>2. Collect input.</li> <li>3. Analyze input and communicate results.</li> </ol>
3. Evaluate perception of DAS by clientele.	<ol style="list-style-type: none"> <li>1. Develop process to assess clientele perception of DAS.</li> <li>2. Survey clientele and share results.</li> </ol>

## Year 2

Goal	Objective
1. The DAS will reach and connect with X% of its clientele on a regular basis.	<ol style="list-style-type: none"> <li>1. Identify effective measures of communication based on year 1 survey.</li> <li>2. Identify, evaluate, &amp; implement new methods for communication.</li> <li>3. Expand clientele base.</li> </ol>
2. X% of faculty will participate in at least X outreach activities with clientele.	<ol style="list-style-type: none"> <li>1. Faculty members set individual goals and time frames for activities.</li> <li>2. Establish consistent and periodic method for reporting.</li> </ol>
3. Incorporate DAS image and identity in all promotional/marketing/outreach materials.	<ol style="list-style-type: none"> <li>1. Communications committee contacts UT marketing.</li> </ol>
4. X% of clientele able to accurately reflect image and identity of DAS.	<ol style="list-style-type: none"> <li>1. Re-assess clientele perception of DAS.</li> <li>2. Share results.</li> </ol>

## Year 3

Goal	Objective
1. DAS image and identity understood by X% of clientele.	<ol style="list-style-type: none"> <li>1. Evaluate effectiveness of priority in increasing external communication and</li> </ol>

	<p>enhancing the identity of the Department in the community.</p> <p>2. Has successful completion of this goal had a positive effect on realizing vision?</p>
2. Outreach efforts have increased by X% from year 2.	

### Recommendations

(1) The priority will require objective review of our strengths and weaknesses to develop the direction and image we want to project.

(2) Web access is the primary mode of obtaining information. This aspect needs to be made a priority for both internal and external communication. Basic web guideline/development sheet, so that faculty/staff who are willing can update their own pages.

### Key Strategy II. Develop and secure diverse funding sources that will strengthen research, teaching, and extension programs.

#### Year 1

Goal	Objective
1. Increase proposal submissions by 10% (all funding sources)	<p>1. Identify current status of proposal and contract submissions (PI and co-PI).</p> <p>2. Develop process for central reporting /tracking of submissions and awards.</p> <p>3. Identify people who have participated on grant panels (research, teaching, or extension) and initiate round-table discussions at least once each year.</p>

#### Year 2

Goal	Objective
<p>1. Increase proposal submissions by another 10% from previous year.</p> <p>2. Increase grants and contracts funded by 20% from beginning of year 1.</p>	<p>1. Assess number of grants/proposals submitted &amp; funded relative to Research/Teaching/Extension FTE. Report information every 6 months.</p> <p>2. Round-table discussion with those who have been successful with obtaining commercial funds.</p>

#### Year 3

Goal	Objective
1. Increase proposal submissions by another 10% from previous year.  2. Increase grants and contracts funded by 25% from beginning of year 1.	1. Assess number of grants/proposals submitted & funded relative to Research/Teaching/Extension FTE. Report information every 6 months.  2. Round-table discussion with those who have been successful with obtaining commercial funds.

**Recommendations**

(1) Developing our own sources of funds is critical for our survival. Therefore, ALL individuals need to be involved in this process in order for DAS to succeed.

(2) During our meetings, time also was spent discussing being more proactive in development of alternative funding sources from private and public sectors. This effort would best be achieved by continued coordination with the Institute of Agriculture Development Board. To facilitate this interaction, an individual within the DAS can serve as a liaison between our groups.

(3) Develop a process that would aid development of research/teaching/extension grant applications.

**Key Strategy III. Develop a program for strategic recruitment and training of high quality, agriculture oriented undergraduate and graduate students.**

**A. Undergraduate**

**Year 1**

Goal	Objective
1. Establish a Recruitment Committee to develop and implement a comprehensive, coordinated recruitment strategy.	1. Evaluate current recruitment process & material.  2. Target students identified.  3. Determine faculty involvement and responsibilities.  4. Revise/Develop recruiting material.  5. Design methods of tracking.

**Year 2**

<b>Goal</b>	<b>Objective</b>
1. Agriculturally-oriented students will comprise at least 10% of the undergraduate population.	1. Recruitment committee activities continue to focus on identifying students, faculty involvement in recruiting, and evaluating and refining efforts.

### **Year 3**

<b>Goal</b>	<b>Objective</b>
1. Agriculture-oriented students will comprise at least 15% of the undergraduate population.	1. Assess student satisfaction with program thus far.  2. Evaluate the effectiveness of successful completion of the goals and objectives with meeting priority of increasing recruitment of agriculture-oriented students.

### **B. Graduate (Graduate Committee)**

#### **Year 1**

<b>Goal</b>	<b>Objective</b>
1. Assess and update graduate program.	1. Identify current number of students, programs, and student applications.  2. Develop and administer an exit survey to assess graduate program ability to meet student needs.  3. Revise/update graduate program to match DAS vision.  4. Identify potential funding sources.

#### **Year 2**

<b>Goal</b>	<b>Objective</b>
1. Increase graduate enrollment in DAS program by at least XX%.  2. Submission of at least 1 graduate training proposal.	1. Graduate committee continues to focus on identifying students, refining curriculum, faculty involvement and evaluating results.  2. Assess student satisfaction with updates to the graduate program.

#### **Year 3**

<b>Goal</b>	<b>Objective</b>
1. Increase graduate enrollment in DAS program by at least XX% (1/3 MS, 2/3 PhD)	1. Assess student satisfaction with program.
2. At least XX% of the students report the program is meeting their needs and expectations.	2. Evaluate the effectiveness of successful completion of the goals and objectives with meeting priority of increasing recruitment of agriculturally-oriented students.

### **Recommendations**

(1) Include individuals in post-doctoral positions in this analysis because this group receives advanced research training in our labs. This allows them to further develop their careers and be competitive for future positions which often require this type of experience.

### **Key Strategy IV. Recruit and retain quality personnel that match the vision of the Department of Animal Science.**

#### **Year 1**

<b>Goal</b>	<b>Objective</b>
1. Develop proactive process to fill all future available/vacated positions.	1. Executive committee establishes process to identify departmental faculty/staff needs each year. 2. Develop process to identify upcoming retirees and other vacancies. 3. Design strategy to keep/justify vacated positions.
2. Establish standardized procedures to be used by search committees.	1. All current procedures evaluated. 2. Identify most effective practices, methods, timing, and communication channels.

#### **Year 2**

<b>Goal</b>	<b>Objective</b>
1. Assess department faculty and staffing needs.	
1. A minimum of X faculty actively involved in every recruiting effort.	1. Identify opportunities for faculty involvement.
2. Overall, X% of faculty is consistently engaged in some way with recruiting.	2. Establish process for coordinating efforts and matching faculty with recruits.

	3. Create method for reporting, tracking, and evaluating faculty involvement.
3. Design and implement a comprehensive and formal retention package.	1. Identify components of package. 2. Determine method for developing and incorporating each component. 3. Develop process for determining effectiveness of each component.

**Year 3**

<b>Goal</b>	<b>Objective</b>
1. Assess department faculty and staffing needs.	
1. Successful recruit & hire X% of candidates of our choice. 2. All new faculty report X level of job satisfaction, needs meeting expectations, etc. 3. All established faculty report all new hires meet needs of DAS.	1. Assess whether goals have helped to meet priority of recruiting and retaining quality personnel. 2. Assess whether priority has made progress towards vision.

**Recommendations**

(1) To effectively grow our department, we need to be in position not only to respond rapidly to administrative requests but also actively promote our choices as to the types of positions that will advance our department in keeping with our vision. Once again, this will require active, open, and objective discussions as to the future direction of our department.