# Report of the Committee on Qualifications and Membership for the Year ending June 30, 2007

# I. Annual Meeting of the Committee

The Committee met on September 29, 2006 at the Sigma Xi Center in Research Triangle Park, NC. The committee's charge, articulated at the Society's 1996 annual meeting, is: to develop policy issues and make recommendations to the Executive Director and/or Board, with the objectives of strengthening the chapters and increasing the Society's membership while maintaining the tradition of honor in science and engineering.

# **Committee members present:**

Dr. Carol Beck, Thomas Jefferson University Chapter (CQM Chair)

Dr. Greg Buck, Texas A&M University-Corpus Christi

Dr. Elaine Davis, Howard University Chapter

Dr. Richard Guillory (Member-At-Large Constituency Director)

Dr. Linda Meadows, Ohio State University Chapter (North Central Regional Director)

Mrs. Cristina Paul, Agricultural Research Service, US Department of Agriculture

Dr. Andrew Velkey, Christopher Newport University

#### Committee Member Unable to Attend:

Dr. Pamela Willoughby, University of Alberta Chapter

Staff Liaisons: Ms. Kathy McLane, Administrator of Chapter Services and Membership Ms. Laura J. Nigro, Director of Membership and Chapter Programs

Staff Guests: Ms. Sharon Davis, Manager, Membership Services and Benefits Mr. Roger Harris, Manager, Chapter Relations and Support

#### II. Business and Activities of the Committee

- Prior to formally convening the annual meeting, Ms. Nigro reported on the following responses/results by Sigma Xi staff to selected recommendations by the FY06 CQM:
  - 1. Three SX Affiliate categories were created, along with a new brochure
  - 2. Proposed recognition of members achieving 50 or more years of membership through a special page of the SX Web site;
  - 3. Pilot project on institutional membership hit a dead end, due to change in administrative leadership at the pilot institution;
  - 4. A test letter designed to improve retention was sent to a sample of new initiates in March 2006, but latest results showed no effect compared to control group;
  - 5. Proposed adjustments to Chapter Good Standing were forwarded to the SX Board of Directors ultimately defeated by chapter votes (resurrected in modified form for voting at the 2006 Assembly of Delegates); 6. An automated audience-response system for the 2005 AMSRC was judged too costly to use.
- During its annual meeting, the Committee discussed the Society's persistent downward membership trends.
- The Committee recommended the following actions in response to these trends:
  - o Members must be tracked and accurately classified, based on available data.
  - Chapters should be alerted to new members in their area, and encouraged to communicate with them, and vice versa. We need to consider how to follow up with members who do not renew.

A motion was voted to recommend that SX staff contact chapters and encourage them to contact student members and involve them in chapter activities as well as maintain communication with them to keep them connected to SX.

- Data were presented to show that increases and decreases in chapter membership follow no clear pattern. However, some generalizations are possible, and these provide a framework around which to strategize. A motion was voted to request that Sigma Xi staff expand current data on chapter growth and decline and to analyze existing data to identify common patterns.
- The committee voted a motion to recommend that delegates at the 2006 AMSRC vote against a proposed language deletion imposing a "one size fits all" rule. A related vote moved that criteria for Good Standing status of Chapters be reviewed again in the future.
- Staff succeeded in helping Regional and Constituency Directors minimize redundancy among their 2006
  Caucus agendas, by communicating with the directors well in advance of this year's meeting. The
  Committee noted that the Directors would require some additional background information on certain
  agenda topics, such as Multi-Chapter Collaboration Grants. The Committee voted that discussion of funding
  of electronic archiving of American Scientist be struck from Caucus agendas, as plans and information
  were incomplete.
- The Members-At-Large are a highly heterogeneous Constituency Group. More data is needed to define its

characteristics to determine ways to invole and serve this group. Sigma Xi is moving towards a broader base, which may mean a less prominent role for chapters. MaL Constituency Director Dr. Guillory offered to help develop a virtual community for this cohort group. (NB: Since "chapter" has specific legal and categorical implications, per SX's Bylaws, the term "community" should be used in this context rather than "chapter.") The Committee voted to support: creating a virtual community for the members at large, and a survey these members.

- The Committee discussed the impact of Affiliates on chapters. How different chapters will relate to Affiliates, and vice versa, remains to be seen. The Committee voted to request an update at the FY08 Committee meeting on Affiliates and chapter experiences.
- The Committee discussed requests from chapters to waive their student dues plus initiation fees. Analysis
  of recent member data in fall 2005 revealed that retention rate does not vary by whether members pay all
  their own fees versus just some or none. The cost to the Society of waiving student dues and/or initiation
  fees would be prohibitive. However, chapters paying their students' initiation fees could be a means of
  recognizing their students' achievement. This issue will continue to be one in the hands of the individual
  chapters.
- Former Executive Director, Dr. Patrick Sculley, automatically elected (science) Nobel Prize winners to paid Life Membership in the Society. The Committee is in favor of continuing this practice. The Committee then discussed whether winners of other prominent prizes should be similarly considered. This was rejected due to multiple is sues related to decided which prizes were "prominent" in the many fields of research represented in Sigma Xi. This was confirmed by voted motion.
- The Membership and Chapter Programs Department was formally renamed to the Membership and Chapters Department.
- Mr. Harris presented a plan for communications strategies and techniques to support all manner of
  outreach to chapters and members, and between chapters and members. The presentation included
  models of a chapter's life cycle and information throughput; recommendations on member connectivity;
  technological solutions to persistent Society-wide problems; chapter communication tools; potential
  improvements to Sigma Xi's website; and the power of technology to create interactive, multi-contributor
  websites where any member could easily create content for a chapter website. There was agreement that
  Sigma Xi needed to look for ways to remain relevant to younger members.
- The Committee discussed existing mechanisms to recognize chapters and members who nominate the most new members. Nominating new members is crucial to maintaining future membership levels. Two obstacles to overcome are nominees who do not ultimately accept the invitation, and student members whose advising faculty are not members themselves. The Committee voted to continue the existing mechanism of recognition.
- The Committee voted to recommend a Chapter Session for SX's Annual Meeting that would address retention of members.
- The Committee voted to recommend that staff should make a special effort to track Postdoc members. One way to do this could be by adding a corresponding question/check box on the Membership Nomination Form, and a matching field in our database. Staff should also invite participants in SX's 2004 PostDoc Survey to membership right away (this could be facilitated by contacting their institutions and/or Postdoc associations).
- The Committee recognized Dr. Iacopino's diligent efforts to create Institutional memberships. Despite concerns about allowing an institution to purchase mass membership-and the possible consequences for the Society's control over election criteria-suitable opportunities for another pilot project of this type should be considered as they arise.
- The Committee commended Ms. McLane for spearheading successful chapter revitalization efforts. They also commended other key SX staff for facilitating chapter leadership transition.
- At-Large Constituency Director Dr. Richard Guillory proposed that a special committee be convened to
  explore cost and viability of Sigma Xi publishing a peer-reviewed inter-disciplinary journal. It was decided
  to refer the matter first to SX's Publications Committee, which advises the Board of Directors on all
  matters concerning the publications of the Society.

# III. March telephone conference Committee Meeting

The Committee held a telephone conference meeting on March 1, 2006 at the Sigma Xi Center in Research Triangle Park, NC.

## **Committee Members Participating**

Dr. Carol Beck, Thomas Jefferson University Chapter (CQM Chair)

Dr. Greg Buck, South Texas Chapter

Dr. Elaine Davis, Howard University Chapter

Dr. Linda Meadows, Ohio State University Chapter (North Central Regional Director)

Mrs. Cristina Paul, DC Chapter

Dr. Andrew Velkey, Tidewater Virginia Chapter

Dr. Pamela Willoughby, University of Alberta Chapter

## Committee Member Unable to Participate

Dr. Richard Guillory (Member-At-Large Constituency Director)

#### Staff Liaisons

Sharon Davis, Manager of Membership Services and Benefits

Mr. Roger Harris, Director, Membership and Chapters

Ms. Kathy McLane, Administrator of Chapter Services and Membership

# **Staff Guests**

Ms. Lana Barnwell, Chief of Staff Dr. Philip Carter, Executive Director

Ms. Jasmine Shah, Director of Finances

- After introductions, Dr. Carter announced staff changes in M&C and Programs. A hiring freeze will not
  apply in M&C due to the importance of this department to increasing member numbers. For example, M&C
  is expanding the experimental telephone campaign reaching out to lapsed members. Based on the
  previous success, M&C is preferentially hiring science students for this effort.
- Review will continue for the possibility for additional proposals at FY08 Annual Meeting. The upcoming chapter officer survey will include questions related to good standing.
- The Committee chair reiterated the offer of committee members' assistance in developing such surveys and other instruments related to understanding membership.
- The Committee voted to approve minutes from the FY06 CQM FY06 annual meeting.
- The Committee reviewed analysis of data prepared following request from CQM at FY06 meeting.
  - Qualitatively, there's not a lot of difference in performance between active and inactive chapters (Figure 1). It was clarified that active vs. inactive relates to whether the chapter has officers or not. CQM noted that this alone was not a valid way to sort chapter performance and requested that future data analysis take other factors into account.
  - o The Committee was interested in how turnover of chapter officers affects member numbers. This could go either way. On the one hand, short-term officers (Presidents for this analysis) may not carry cultural equity from year to year. On the other hand, long-term chapter officers may lose their edge. Including outliers, the data show that the chapters with either rapid turnover or little turnover of officers do worst, consistent with the rationale (Figure 2). Successful chapter often have officers who commit to several years and thus to not have major turnovers of officers every year. Other variables of interest include length of term of other officers, amount of chapter activity, and percent of officers that are the same year to year (i.e., rotation). The aim is to develop a set of best practices to help officers with managing chapters and with governance procedures. Other factors to investigate include whether officers who end their terms of office continue membership and how attendance at the Annual Meeting affects loss or gain of members from chapters. We could develop a knowledge base of what duties each office entails, but chapters divide work according to what suits them, so this may not be meaningful.
  - The Committee discussed whether chapters that focus on students "dilute" efforts for non-student members. The data show a positive correlation between changes in number of students versus nonstudents (Figure 3). Analysis of quadrants suggests that individual chapters may recruit students at expense of non-students, but generally this is not the case.
- The Committee reviewed and commented on the draft reporting procedure for multi-chapter grants. The aim is to have this as an online report.
- The Committee reviewed Kristen Greenaway's proposal on how to leverage interest and goodwill of Life
  Members and increase overall money from such. The Committee discussed the proposal's intent to offset
  projected increase in loss due Emeritus and Life Members because of the baby-boom demographic
  becoming eligible for these dues categories.
- Lana Barnwell noted that the bylaws allow Associate members to serve as non-voting members of
  committees. The Committee on Nominations has special regulations. In other cases, a committee chair
  may invite others as resources if necessary for discharge of a committee's mandate. These resource
  persons are without vote. Associate members cannot serve as a chapter delegate nor have voting
  privileges at the Annual Meeting. The present status of Associate members limits their level of participation
  as they would only be supplementing existing committee members. The request raises many issues and
  would need input from a range of sources.
- The income from dues does not cover cost of maintaining members. The endowment subsidizes each and every member about \$28 per member. The Committee noted that Sigma Xi operating expenses are a factor. More work needs to be done on this issue.

# III. Chapter Awards for FY2007 (July 1, 2005 through June 30, 2006)

A complete listing of chapter award winners with brief descriptions can be found at <a href="http://www.sigmaxi.org/chapters/winners/index.shtml">http://www.sigmaxi.org/chapters/winners/index.shtml</a>

## A. Chapters of Excellence

Certificates of Excellence were awarded to the following chapters for overall outstanding activity during FY2005. Nominees were chosen by the Constituency Group Directors based on Chapter Annual Reports, and winners were selected by the Committee on Qualifications and Membership as Chapters of Excellence.

Clemson University Washington College Alaska The University of Toronto SUNY at Oswego

## **B. Chapter Outstanding Program Awards**

Chapter Program Awards were given to the following chapters for organizing and/or hosting a single, outstanding program during the last year. Nominees were chosen by the Regional Directors based on Chapter Annual Reports and winners were selected by the Committee on Qualifications and Membership.

Charleston Chapter
Central Arkansas
National Institute of Standards and Technology
Mayo Foundation Chapter
Northern Michigan University
Marquette University
Texas A&M University
University of Texas at Arlington

# C. Chapter Outstanding Diversity Program Award

Diversity Program Awards were presented to the **Rockefeller University Chapter** and to the **University of California-Berkeley Chapter** for their outstanding programs promoting diversity within the science, engineering and research communities.

# D. Certificates of Recognition

Certificates of Recognition were awarded to the following 00 chapters, which initiated the most new members last year.

Princeton Chapter
Brown University
Claremont Colleges
Smith College
Swarthmore College
Oberlin College
McGill-Montreal
Bucknell University
Union College
Carleton College
Mount Holyoke College
Williams College
Washington University
University of Chicago
Delta

NB: Membership At Large had the greatest FY06 increase in members, at 1692.

#### IV. Approved New Chapters, Mergers and Name Changes

#### A. New Chapters

The following new chapters were installed:

SW840 University of Missouri at St. Louis FO841 Iberian Chapter (Spain)

#### **B. Name Changes**

The following name changes were approved by the Committee:

Four Corners Chapter (formerly Fort Lewis College Chapter)

University of Toledo Chapter (combined from former University of Toledo Chapter and Medical College of Ohio at Toledo Chapter)

University of Central Missouri Chapter (formerly Central Missouri State University Chapter)

# V. Membership of the Committee

For the year ending June 30, 2007, the Committee on Qualifications and Membership consisted of the following members:

Dr. Carol Beck, Thomas Jefferson University Chapter (CQM Chair)

Dr. Greg Buck, South Texas Chapter

Dr. Elaine Davis, Howard University Chapter

Dr. Richard Guillory (Member-At-Large Constituency Director)

Dr. Linda Meadows, Ohio State University Chapter (North Central Regional Director)

Mrs. Cristina Paul, DC Chapter

Dr. Andrew Velkey, Tidewater Virginia Chapter

Dr. Pamela Willoughby, University of Alberta Chapter

#### Staff Liaisons:

Roger Harris, Director of Membership and Chapters

Kathy McLane, Administrator, Chapter Services and Membership

# VI. Acknowledgments

The committee wishes to thank the two staff liaisons and other staff for their hard work and dedication to membership, chapters and programs. The committee also thanks Pamela Willoughby for her service on this committee.