



*Status and Initiatives  
of the APS*

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# APS – The Early Years

**Founded:** December 30, 1887 at the Physiological Laboratory, Columbia University College of Physicians and Surgeons.

**Founders:** Henry Pickering Bowditch, S. Weir Mitchell, Henry Newell Martin, John Green Curtis, & Russell H. Chittenden

**Primary focus** – Scientific meetings. Founded to participate in the Congress of American Physicians and Surgeons, September 1888.



# APS – The Early Years

- **A Journal is Born** – 1898, William Townsend Porter agreed to publish the *American Journal of Physiology* on behalf of the Society.
- **Diversity Leads to Division** – American Society of Biological Chemistry (1906) and American Society for Pharmacology and Experimental Therapeutics (1908) split from APS. FASEB founded in 1912 so the 3 societies could meet together. American Society of Experimental Pathologists (1913) joins FASEB.
- **Headquarters** – APS has been based in Bethesda, Maryland, since 1954, the year APS purchased the Hawley Estate and turned it over to FASEB.



# APS Today

- **Membership**
  - Approximately 11,000 scientists and trainees
  - **APS Fellows Program** – Launched in 2015
  - Twelve disciplinary sections, 9 interest groups – discipline specific communications platforms (APS Connect)
- **Award Programs (focused on member opportunities)**
  - Focus on students, postdocs and early career investigators, emphasis on URM
  - Outreach Internationally
    - International Opportunity Program
    - International Early Career Investigator Awards
  - Career Enhancement Awards for Research and Teaching
    - Award amount increased significantly - \$10,000 for Teaching, \$20,000 for Research
  - **Research Support \$715,000** (in 2015)
    - Derived from APS funds (\$258,000), the federal government (\$244,000), individual donors (\$107,000), and foundations (\$106,000).



# APS Today - Publications

- **Publications – free access to APS members**
  - 15 journals covering the field of physiology
  - *Physiological Reports*, APS-TPS OA journal
  - *Comprehensive Physiology*, with Wiley
  - *Monographs*, with Springer
  - Free color for APS members (1<sup>st</sup> or last author)
  - Consolidated TOC for all journals (<http://www.the-aps.org/mm/Publications/Journals/Current-TOC.pdf>)
  - New fee structure for author manuscripts in subscription journals (no submission fees, reduced color charges)



# APS Today - Meetings

- Experimental Biology (multi-society meeting-APS, ASBMB, ASPET, ASN, ASIP, AAA) – April 22-26, Chicago
- International Outreach 2017
  - IUPS 38<sup>th</sup> World Congress “Rhythms of Life”, August 1-5, Rio de Janeiro
- APS conferences for 2017
  - Cardiovascular Aging, New Frontiers and Old Friends – August 11-14, Westminister, CO
  - Physiological Bioenergetics: Mitochondria from Bench to Bedside – August 27-30, San Diego, CA
  - Physiology and Pathophysiology of Sickle Cell Disease – November 6-8, Washington, DC



# APS Today - Education

## APS Education Programs Overview

### • Improving Education

- Professional Development Programs (Online & Summer Research)
- Workshops at APS annual meeting and national teacher meetings
- **Increasing STEM Career Interest**
- Physiology Understanding Week
- Student workshops at APS annual meeting
- Minority outreach fellowship
- **Recognizing Excellence**
- National and Local Science & Engineering Fair Awards

K-12



### • Improving Education

- Physiology Education Community of Practice (PECOP)
- Institute on Teaching and Learning Biannual Conference
- APS Teaching Section
- LifeSciTRC Scholars Online Professional Development
- Professional Skills Training Course: Becoming an Effective Teacher
- **Research Experiences**
- Five programs supporting ~80 students annually
- 60% of awards targeted for underrepresented students
- All programs include online professional development
- **Recognizing Excellence**
- National and local undergraduate research awards
- Student video awards
- Faculty mentoring and educational innovation awards

Undergraduate



### • Developing critical skills

- Professional Skills Training Courses
- Meeting and online career symposia
- **Recognizing Excellence**
- Trainee research awards
- Mentoring and professional service awards
- **Increasing Diversity**
- Porter graduate fellowship
- Minority travel awards

Grad/Postdoc



# APS Today – Science Policy

- **APS Works Collaboratively with our Sister Societies in the DC Area**
  - FASEB, AAMC, Research!America, Americans for Medical Progress, NABR, SfN
- **Areas of Emphasis**
  - Federal funding for biological research
  - Humane use of animals in research
  - Strengthen relationship with funding agencies such as NIH and NSF
  - Sex as a biological variable
  - Publications access
  - Peer review
  - Research Reproducibility





# APS/ACDP Cooperative Efforts

- ACDP Salary Survey – 1980s
- APS/ACDP Survey of Recent Doctoral Recipients - 1998
- Medical Physiology Core Curriculum Objective Project – 2002
- Professional Skills for Physiologists and Trainees – 2003
- Animal Usage in Physiology Education
- Medical Physiology Course Directors web site
- Helping APS expand its Chapter Program
- Graduate Program Directors Meeting



# Our Challenge in 1985

- “Physiology has been described as the gross anatomy of the '80s. For others, the dissatisfaction is with the image of physiology projected by APS, not with the discipline of physiology. No doubt, whether physiology and/or APS “are alive and well” will be debated again and again in the pages of *The Physiologist* and the corridors of the departments.”
- “The future of physiology is not an issue that APS can address alone. For physiology to grow, prosper, and fulfill its future potential, the support of all interested parties is needed.”

Does Physiology Have a Future? *The Physiologist* 29(1):1, 1986



# Addressing the Challenges Thru Planning

- Strategic planning and introspection are not foreign to the APS.
- 1958 – Ralph Gerard’s book, *Mirror to Physiology*, explored the health and viability of the discipline.
- 1990 – APS Long Range Planning Committee reported on the discipline of physiology and the Society, and made multiple recommendations.
- During my tenure , APS has held four strategic planning retreats – 1992, 2000, 2006, and 2011



# 2011 Strategic Priorities

## Five key strategic priority areas:

1. Increase efforts to ensure awareness of, and advocacy for, the discipline of Physiology
2. Actively work to attract, meet the needs of, engage and retain membership subgroups
3. Develop strategies to strengthen the Society's publications in a changing world
4. Enhance opportunities for scientific interaction and exchange
5. Increase the visibility of physiology in life sciences and health sciences education



# Strategic Planning has been Successful!

- The Society has meet the goals, objectives, and action items set forth in these plans.
- The Society's programs and activities have expanded.
- The APS has grown to nearly 11,000 members and an annual budget of \$20 million. (1985 – 6,100 members and an annual budget of \$4 M).
- *In spite of the Society's success, questions remain!*



# What MYB heard me say...

“Physiology is experiencing a ‘Rodney Dangerfield’ moment—‘We don’t get no respect.’”

“We would love to see, in an ideal world, where physiology is important, when our own members realize it and when physiology is referred to in the news. Communication is key and we know that changing perceptions will take time.”

“The constriction of academic resources, the changing academic environment, and the fact that today we can’t count on the NIH either – there are a lot of PhDs leaving the lab.”

“Today APS has 11,000 members of which about 25% are international and 27% are female. We have many senior members too.”

“In our database we have little or no tracking of member behaviors, and overall our data is sporadic.”

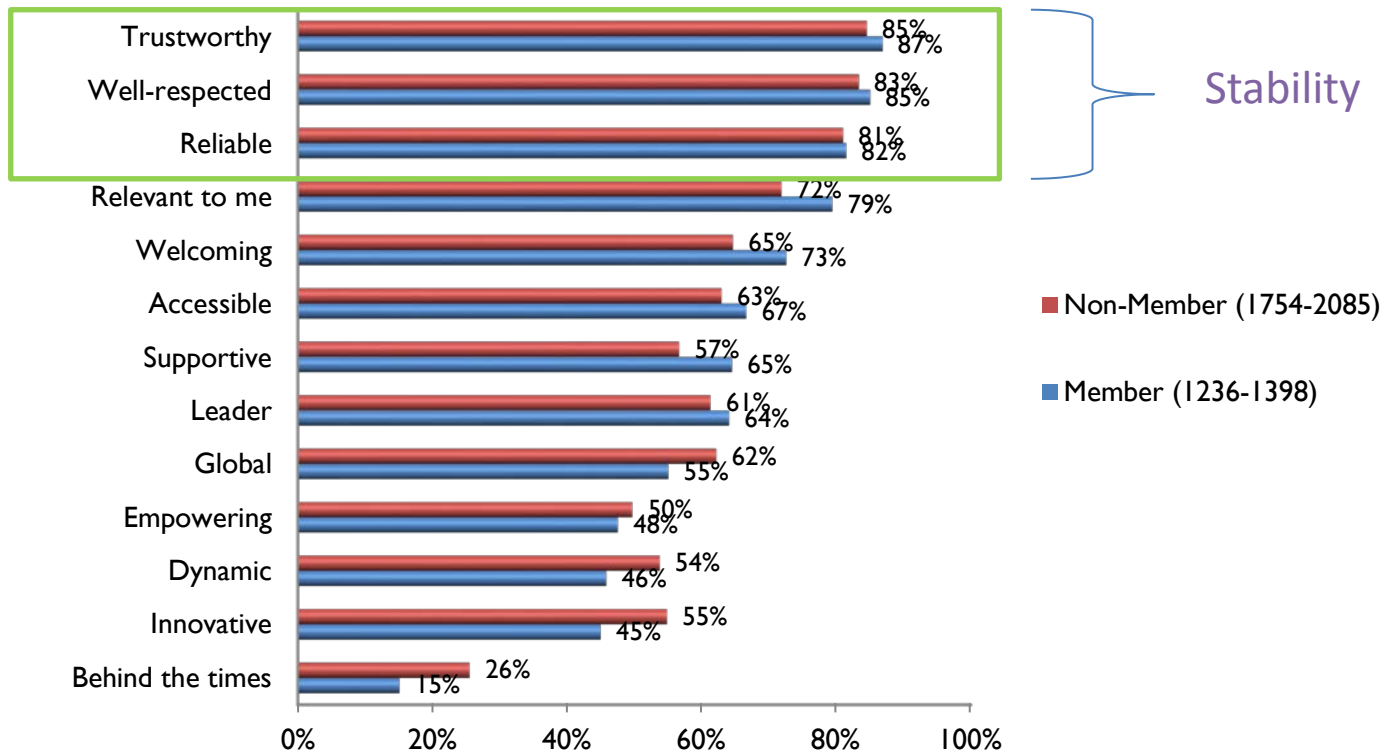
“We are putting our 2016 strategic planning meeting on hold because we feel that getting a communications strategy together will inform our overall strategic planning discussions.”



# Situation Analysis

## First, some very good news

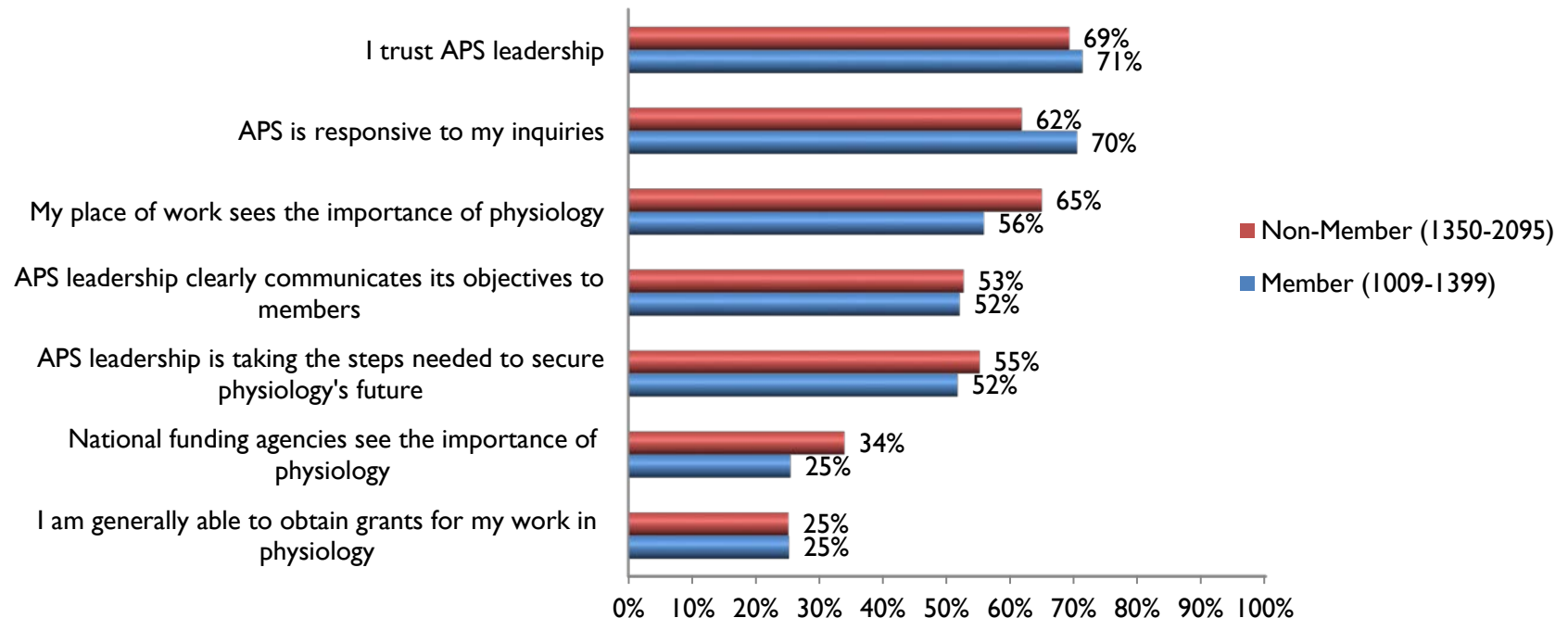
Based on our research of members and non-members, the strongest areas of the APS brand (trustworthiness, well-respected, reliable) indicate a high-level of stability.



# Situation Analysis

## APS has stakeholder trust and is equipped for change

Most members and non-members trust APS leadership and many members feel the society is responsive to inquiries. Areas for concern include clarity of communication and APS's role in securing physiology's future.



Additionally, through our discovery process which included many discussions with key stakeholders, we found that APS has a dedicated leadership team and the necessary financial resources to respond to the challenges it is facing.



# Situation Analysis

## APS Pain Points Include

- **Science is evolving (to physiology's detriment)**
- **Publishing model is changing**
- **Membership growth is stagnant**
- **Brand promise is missing**
- **Communications need modernization**



# Situation Analysis – Science

## Science is evolving (to physiology's detriment).

1. Specialization within the disciplines
  - Losing the physiological approach
  - Cross-disciplinary teams of specialized experts answer complex problems
2. The momentum of translational research
  - Brings together multi-disciplinary teams to translate basic science to clinical applications and transfer of clinical insights back into the laboratory
  - Threat of decreased basic funding
3. Technology and a molecular focus
  - Losing the physiological approach

*“It is easy now to get a narrow focus in physiology. But you have to look at the problem at a global level, from the big picture to the cell level. This is a catch 22 because there are not traditional physiologists anymore, but as long as physiologists retain ability to see things from the 30,000 ft. view as well as the 5 ft. view, physiology can remain relevant.” – stakeholder interview*

# Challenges for the Coming Year!

- February 2017 – MYB engagement for APS strategic planning meeting
- “Blow-up” the APS Annual Meeting to re-structure it and eliminate one day
- Plan for the Experimental Biology meeting in the absence of ASN (2018 and beyond) & new meeting management



# Challenges! – continued

- Migration of APS journal content from HighWire Press to Atypon
- FASEB in Transition – strategic planning, governance review, recruitment of new Executive Director
- Sale of the Beaumont Campus and the need for APS to find a new home



# Challenges! – continued

- FY 2017 Continuing Resolution and the uncertain support for biomedical science in the Trump Administration
- Expansion of development efforts in order to increase Foundation support for APS minority programs
- Celebration of the APS Porter Program's 50 year focus on the training of minority scientists





Thank you! Any questions or comments?

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