



The Society for
Integrative &
Comparative
Biology

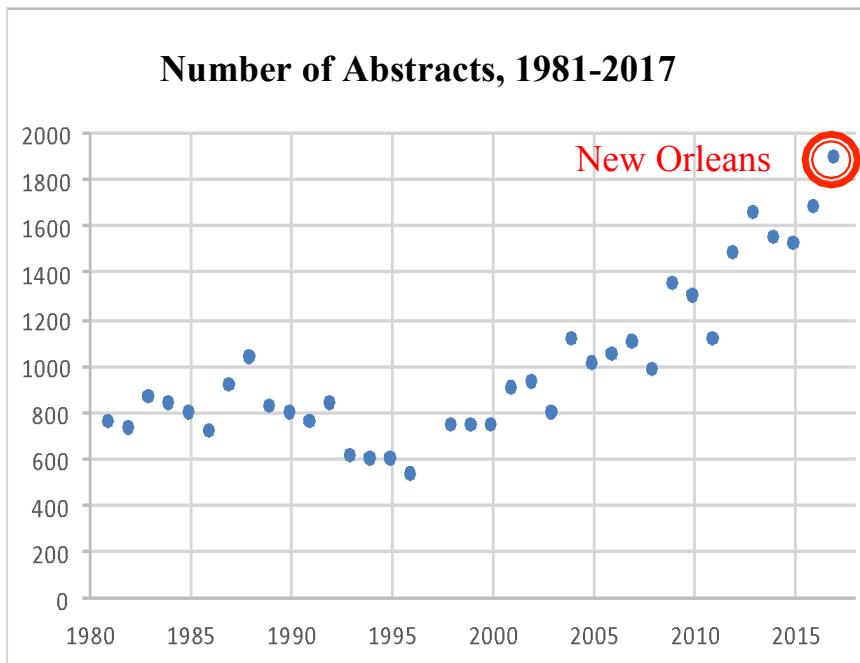
Business Meeting Minutes

7 January 2017, 5:45 – 6:30 p.m.

Convention Center, Rooms 208, 209, 210

New Orleans, Louisiana

1. The meeting was called to order by SICB President Peter Wainwright.
2. The minutes of the 6 January 2016 SICB Business Meeting were approved as distributed (posted on the SICB website at <http://www.sicb.org/resources/minutes.php3>).
3. Officer Reports
 - a. Program Officer's Report – Rick Blob
 - i. The following statistics were presented for the 2017 New Orleans meeting:



- 1917 Submitted Abstracts, the most ever
- 146 Oral sessions (1097 talks)
- 11 Symposia (122 talks)
- 790 Posters
- 2240 Pre-Registrants
- 2341 Total Registrants
- ~30 Cancellations

- ii. The Program Committee was thanked for their dedication and service in putting together a strong program. Members of the Program Committee: Rick Blob (Program Officer), Sherry Tamone (Past Program Officer), Allison Welch (DAB), Jake Socha (DCB), Ignacio Moore (DCE), Jason Podrabsky (DCPB), Yui Suzuki (DEDB), Sarah DuRant (DEDE), Chris Tracy (DEE), Bruno Pernet (DIZ), Chuck Derby (DNB), Todd Oakley (DPCB), Manny Azizi (DVM), Elizabeth Davis-Berg (AMS), and John Zardus (TCS). In addition, this year's committee was assisted by Carol Fassbinder-Orth (DEDE Chair) and Wes Dowd (DCPB Program Officer-Elect).
 - iii. The organizers of the symposia presented at the meeting were thanked for their diligence and hard work. Symposium organizers: Alex Gunderson, Jonathon Stillman, Brian Tsukimura, Tony Williams, Shaun Killen, Ryan Calsbeek, Jill Schneider, Caroline Williams, Gregory Ragland, Kathleen Lynch, Scott MacDougall-Shackleton, Ariel Chipman, Doug Erwin, Simon Lailvaux, Jerry Husak, Ben Dantzer, Dustin Rubenstein, Thomas Stewart, Stuart Newman, Günther Wagner, Andres Garm.
 - iv. The staff of Burk and Associates, Inc., the SICB management company, were acknowledged for their exceptional efforts and dedication to making the meeting a success:
 - Brett Burk
 - Lori Strong
 - Jennifer Rosenberg
 - Jill Drupa
 - Heide Rohland
 - Ruedi Birenheide
 - v. The student helpers, who were supported by Mangum funds, were thanked for their efforts as photographers, journalists, concierges, technical assistants, etc.
 - vi. Symposia for the 2018 San Francisco meeting were highlighted:

Behavioral and physiological adaptation to urban environments
Organizers: Jenny Ouyang & Davide Dominoni

Measuring biodiversity and extinction: present and past
Organizer: Julia Sigwart

Sensory feedback and animal locomotion: perspectives from biology and biorobotics
Organizers: Brett Aiello, Jessica Fox & Gary Gillis

Understanding the evolution of endocrine system variation through large-scale comparative analyses
Organizers: Maren Vitousek, Jerry Husak & Michele Johnson

Evolution in the dark: unifying understanding of eye loss
Organizers: Megan Porter & Lauren Sumner-Rooney

Inside the black box: the mitochondrial basis of life-history variation and animal performance
Organizers: Karine Saline & Wendy Hood

Story and Art in Science Communication
Organizers: Sara El-Shafie, Stuart Sumida & Bram Lutton

Integrative Biology of Sensory Hair Cells
Organizers: Duane McPherson & Billie Swalla

Science in the Public Eye: Leveraging Partnerships
Organizers: Martha Merson, Nick Hristov & Louise Allen

From small and squishy to big and armored: Genomic, ecological and paleontological insights into the early evolution of animals
Organizers: Erik Sperling & Kevin Kocot

Spatial scale and structural heterogeneity in skeletal muscle performance
Organizers: David Williams & Natalie Holt

- vii. The call for Symposia for the 2019 meeting in Tampa was announced. SICB members, including students and postdocs, were encouraged to plan interesting symposia, and to contact members of the Program Committee to discuss ideas.

b. Treasurer's Report – Karen Martin

- i. The Society continues to be financially healthy and the overall financial picture is stable. The operating expenses budget was in the black. The total assets of SICB increased in FY 2016, even though there was a loss of \$51,000.
- ii. The operating expenses of the Society are met by three different sources of revenue: 1) the dues to support administrative expenses, which fall far short of the actual expenditures, 2) the annual meeting, which more or less breaks even in most years, and 3) the journal *Integrative and Comparative Biology*, which provides significant net income.
- iii. For FY 2016 we projected an income from membership dues of \$150,000, but the actual audited revenue was \$136,248. Interest and other income for the administrative section was a little over \$4,000 instead of the \$16,000 projected. Therefore, the total revenue in this sector was \$140,440, or \$25,560 less than anticipated in the budget. The total for all administrative expenses in FY 2016 was \$328,146. The difference between revenues (\$140,440) and expenses (\$328,146) was \$187,706 in the red. This component of the budget typically results in a negative balance.
- iv. In FY 2016 the annual meeting in Portland brought in revenues of \$393,972. With meeting expenses of \$367,198, the 2016 meeting resulted in a net income of \$26,774. For 9 of the past 12 years, the annual meeting has finished in the black; the exceptions are Orlando in 2006, Phoenix in 2007, and West Palm Beach in 2015.
- v. The third source of revenue, the journal *ICB*, provided an income of \$338,151 in FY 2016, against total expenses of \$159,748 which in FY 2016 were higher because of continued restitution for underpaid subscription fees in previous years. The total net revenue realized from FY 2016 from the journal was \$178,403, which was \$52,000 less than anticipated in the budget.
- vi. SICB investments totaled \$1,344,054 at the end of FY 2016. Of this amount, \$1,125,778 is committed to the named endowment funds. Even though the operating funds were able to balance revenues against expenses, and numerous donations were made to the named funds (donations totaled \$52,050 in FY 2016), stock market

losses and investment management fees combined to result in the net loss of \$51,000 over the past fiscal year for the Society.

- vii. SICB provided a total of \$100,500 in FY 2016 for student support of all types.
 - viii. A balanced budget will be presented to the Executive Committee for approval for FY 2018 for the fourth year in a row. The proposed budget for operating expenses includes an increase in meeting registration fees of \$10 across the board for the meeting in San Francisco in January 2018. This is the first such increase in 7 years. The additional funds will be used to support students and symposia. Membership dues will not be changed, and have been stable for the past 11 years.
- c. President-elect Lou Burnett presented a summary report on the 2016 Member Survey (see summary below). The last member survey was completed in 2009. The 2016 survey was developed over ~one year with input from committee chairs and the Executive Committee. The survey was available online in March 2016 and included 48 questions on different topics. There were 614 responses, 60% of the respondents were full members, more than 2/3 of which have been members for \geq 10 years. These surveys provide useful information to SICB leadership for planning.
4. Editor's Report for the Journal, *Integrative and Comparative Biology* – Marty Martin
- a. The importance of strong symposia to the success of the journal, and thus for SICB's success, was emphasized.
 - b. In 2015 and 2016, 121 and 120 papers were published, respectively. The projected number for 2017 is 125 symposium papers plus some invited papers.
 - c. The final deadline for paper submissions is March 31.
 - d. Some statistics about paper processing were presented. For 2016, it took an average of 65.6 days from submission to final decision for papers in ICB. Almost all papers were accepted, as would be expected.
 - e. The ICB Editorial Board currently consists of the Editor-in-Chief, 4 Associate Editors, 11 Divisional Board Members, and 8 Associate members.
5. Development Committee Report – Bob Roer
- a. The members of the Development Committee were acknowledged: Bob Roer (Chair), Karen Burnett, Dar Jorgensen, Karen Martin (Treasurer), Rachel Merz, Brian Tsukimura, and Brett Burk (*ex officio*).
 - b. A summary of donations to the named funds for FY 2016 and for FY 2017 to date was presented, as well as the number of donations from FY 2014 to FY 2017. There were ~50 donors. These funds are very important for SICB, especially for student support. The Development Committee is continuing to recognize donors with ribbons attached to their meeting badges and by acknowledging all donors in the Spring SICB Newsletter, and honoring those who have made large donations at a special reception at the annual meeting.
 - c. The Development Committee's initiatives for 2017 include continued promotion of planned and annual giving, sponsoring the Lori Strong Pub Crawl, sales of polo and T-shirts at the annual meeting, and an online store for apparel and other items with the SICB logo.

6. New Business – Peter Wainwright

- a. The Search Committee for the Editor-in-Chief for a new SICB Open Access Journal was announced. Members are Peter Wainwright (Chair), Beth Brainerd, Rich Satterlie, Ken Halanych, Marty Martin.
- b. The new SICB Meeting Code of Conduct was rolled out for the 2017 annual meeting. Feedback was solicited from all SICB members and meeting attendees.
- c. SICB recently signed onto an AIBS letter to President-elect Trump about the importance of research in the biological sciences. See full text below.
- d. Student support:
 - For the second year, a total of \$40,000 of SICB funds was provided for GIAR/FGST awards.
 - Thanks to Wiley-Blackwell for again supporting all divisional Best Student Paper awards by providing funding and a one-year subscription to one of their journals, relevant to each division. The Wiley-Blackwell representative was asked to stand to be recognized and thanked.

7. Recognition of Lecturers and Awards

Lectures:

- **Howard Bern Lecture – David Crews, University of Texas at Austin,** “*We Have Soiled Our Nest, Now What?*”
- **John A. Moore Lecture – Rosalind Reid, Council for the Advancement of Science Writing,** “*Only Converse? A Journalist Sizes Up the Problem of Science Communication*” (January 8th at 3:45-4:45 p.m., in this room) ; members were encouraged to attend.

Awards:

- **George A. Bartholomew Award – Michael Sheriff, Pennsylvania State University,** “*Integrating Physiology, Behavior, and Ecology to Understand the Mechanisms that Regulate and Limit Animal Populations*”
- **Carl Gans Award – Brooke Flammang, New Jersey Institute of Technology**
- **M. Patricia Morse Award for Excellence and Innovation in Science Teaching – Chris Gillen, Kenyon College;** this award will be presented at the Moore Lecture on Jan 8th
- Devaleena Pradhan, member of the **Dorothy M. Skinner Award** Committee, presented the 2017 award (a plaque and check) to **Martina Müller, Nagoya University**. The members of the committee – Jennifer Burnaford (Chair), Roslyn Dakin, April Hill, and Devaleena Pradhan – were thanked for their service.
- The **2016 Libbie H. Hyman Scholarship** awardees – **Eric Moore, Bowling Green State University, and Rachel Shoop, San Diego State University** – were acknowledged.
- Ryan Earley, Chair of the Student Support Committee, announced the winners of the **Grant In Aid of Research (GIAR) and Fellowship of Graduate Student Travel (FGST) Award Winners**

8. Recognition of Service

A. Committee members completing their service (*each received a certificate*):

- o Members rotating off the **Educational Council**
 - **Michele Johnson**
 - **James Murray**
- o Members rotating off the **ICB Editorial Board**
 - **Matt Grober (DAB)**
 - **Diana Hews (DAB)**
 - **Michael Sears (DEE)**
 - **Anna Ahn (DCB)**
- o Members rotating off the **Student Postdoctoral Affairs Committee**
 - **Eric Riddell (DEE)**
 - **Amanda Kahn (DEDB)**
 - **Jenna Moore (DIZ)**
 - **Morgan Burnette (DVM)**
- o Members rotating off the **Public Affairs Committee**
 - **Tonia Hsieh**
 - **David Hu**
- o Members rotating off the **Development Committee**
 - **Darwin Jorgensen**
 - **Brian Tsukimura**
- o Members rotating off the **Broadening Participation Committee**
 - **Rita Mehta**
- o Members rotating off the **Membership Committee**
 - **Jeanette Yen, Chair**

B. Recognition of **Divisional Secretaries** whose terms end, by SICB Secretary Kathy Dickson (*each received a certificate*):

- o **Sarah Woodley, DCE**
- o **Gregory Davis, DEDB**
- o **Travis Wilcoxen, DEDE**

C. Recognition of **Divisional Program Officers** whose terms end, by SICB Program Officer Rick Blob (*each received a certificate*):

- o **Allison Welch, DAB**
- o **Jason Podrabsky, DCPB**
- o **Sarah DuRant, DEDE**
- o **Bruno Pernet, DIZ**
- o **Charles Derby, DNB**
- o **Manny Azizi, DVM**

D. Recognition of **SICB Executive Committee Members** whose terms end, by SICB President-Elect Lou Burnett (*each received a plaque*):

- o **Peter Wainwright, President**
- o **Patricia Hernandez, Member-at-Large**
- o **Melina Hale, DCB Chair**
- o **Michael Sears, DEE Chair**
- o **Callum Ross, DVM Chair**

2016 SICB Member Survey – Executive Summary

The 2016 SICB Member Survey was developed over the course of one year with broad input from SICB Committees, the SICB Executive Committee, BAI Management Staff and other SICB officers. Information gathered from the survey is used by the leadership of the SICB to better plan for the future of the Society. The survey was made available online to SICB members in March 2016 for over one month with several reminders to members to complete the survey.

The survey was similar in design to the 2009 SICB Member Survey and consisted of 48 questions over 12 pages. The survey was designed to track answers to questions using the different categories of membership (e.g., Full Members, Postdoctoral Members, Graduate Student Members, and Student-in-Training Members). The questions were divided into different categories as outlined below. There were 614 responses.

Some demographics of the respondents

Summary. These data are similar to those provided by the 2009 SICB Member Survey. There was a robust response from the Full Members of the Society and significant responses from the other member categories. More than two-thirds (68.1%) of the Full Members who responded have belonged to the Society for more than 10 years; this is an increase from 33.9% in the 2009 survey. Academic institutions are overwhelmingly on the semester system and this was true of the membership in 2009. Slightly less than half of the Full Member respondents come from large academic institutions with greater than 20,000 students. The degree programs (undergraduate and graduate) of respondents reflect degree offerings for undergraduates, masters, and doctoral students. But there are significant numbers from purely undergraduate institutions (20.9%) and institutions offering undergraduate and masters degrees (17.6%). Full Member respondents indicated a significant balance in expectations between teaching and research (52.1%). While 20.4% have expectations primarily in research, only 16.4% have primary expectations in teaching.

Responses from the different member categories are as follows.

- Full Members (includes full members, life members, emeritus members) = 370 (60.3%)
- Postdoctoral Members = 59 (9.6%)
- Graduate Student Members = 147 (23.9%)
- Student-in-Training Members = 38 (6.2%)

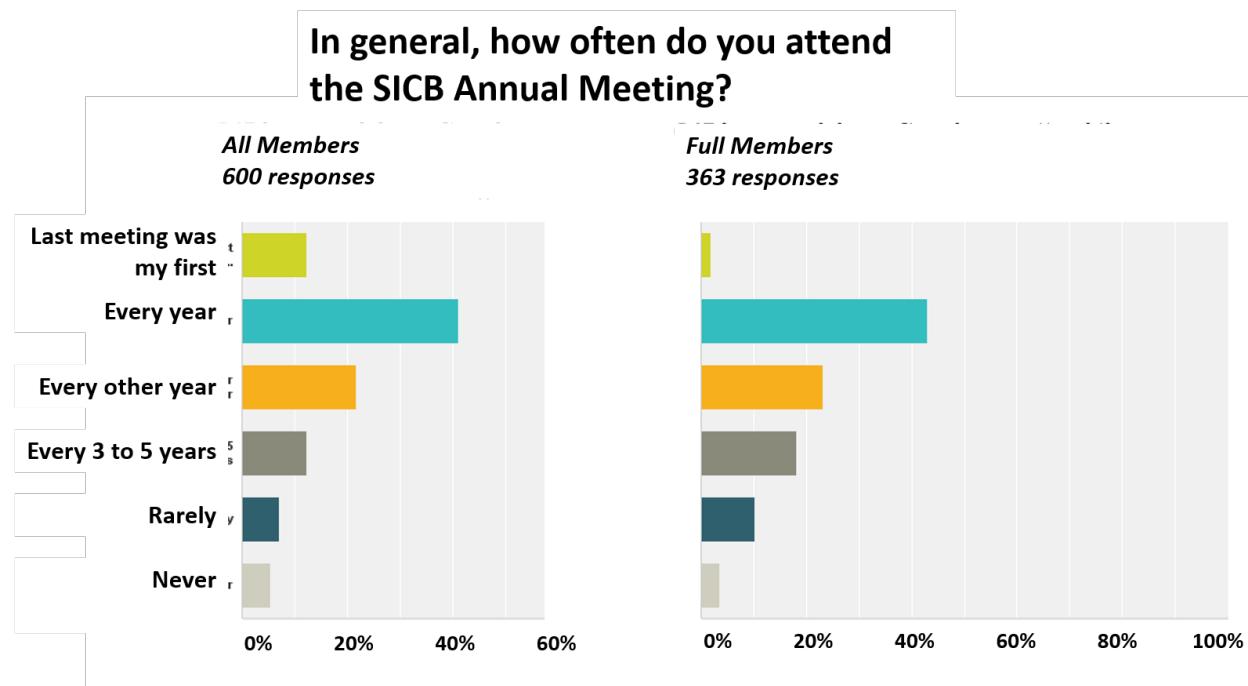
Gender of respondents

- Female – 45.6%
- Male – 53.9%
- Other – 0.5%

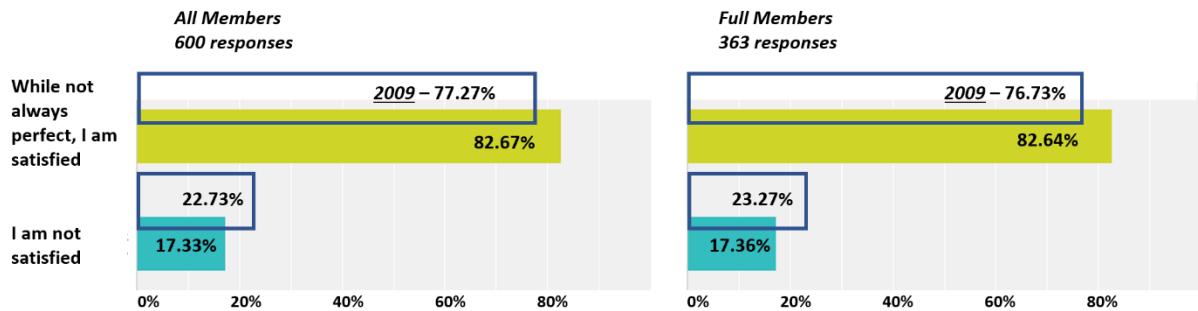
The summary of the results of the survey are available on the SICB Website under the Resources tab >> Member Surveys >> Results of the 2016 Member Survey (or <http://sicb.org/resources/SICB%20Member%20Survey%202016%20Summary.pdf>).

HIGHLIGHTS OF THE SURVEY

Annual Meetings. Most members of the Society attend the annual meeting regularly (41.2% of all members attend every year and 21.7% of all members attend every other year). First-time attendees were 12.3% of the respondents. The timing of the annual meeting meets a number of strategic needs of the Society, including, but not limited to the timing of the various academic calendars, affordable venues, and venues convenient to get to. The affordability is a significant factor since the SICB Annual Meeting attracts many students and postdocs; more than 50% of the attendees are students and postdocs (58.1% at the 2016 Portland meeting). The data shown below reflect responses from all members (Full, Postdoctoral, Graduate Student, Student-in-Training) and Full Members. Overwhelmingly, SICB members are satisfied with the current timing of the annual meeting (82.6% in the current survey and 76.0% in the 2009 survey). The monthly breakdown of preferences for the timing of the meeting is consistent with the overall desirability of the currently established meeting time in early January. Meeting location was somewhat to very important to more than three quarters of all members.

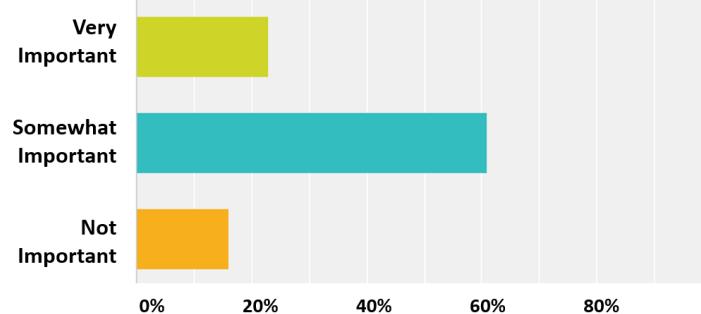


**Position on present timing of the annual meeting.
2009 and 2016 results**



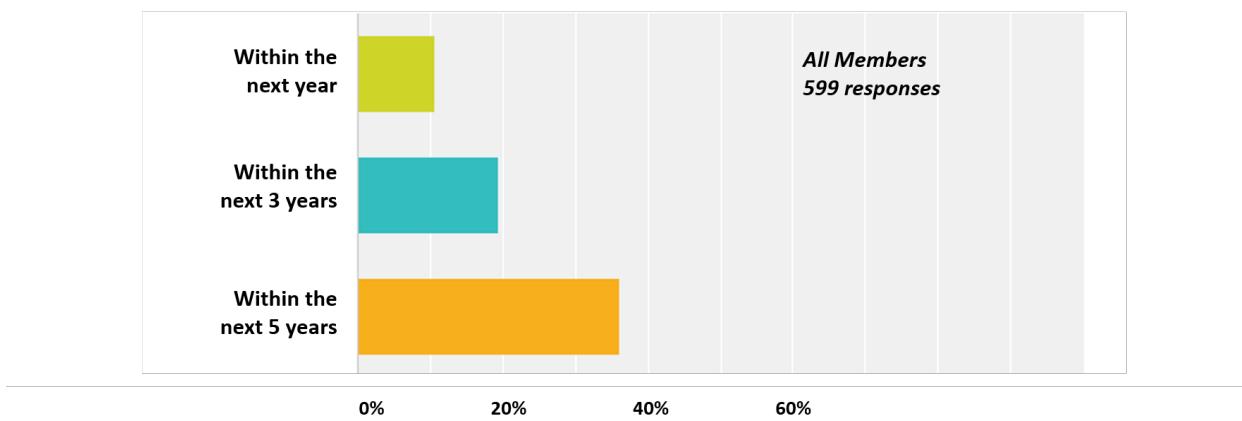
Meeting location.
How important is the location of the meeting in deciding whether or not to attend?

All Members
599 responses



Development Activities of SICB. The leadership of SICB has been very active in recent years in making sure that the various funds of the Society are well-managed and that the funds are appropriately serving their stated goals. The SICB Development Committee has been particularly helpful in thinking strategically about ways to enhance the Society's endowment to insure the financial stability of the organization. These funds help to keep the cost of the annual meetings and the cost of membership low. The funds also provide important funding sources to support symposia and student research. The results of the survey revealed a growing participation of SICB members in giving to the various funds that support the programs of the Society, but that more needs to be done to educate the membership on the funds, especially the funds that support students and symposia, and to encourage members to give back to the Society through these funds.

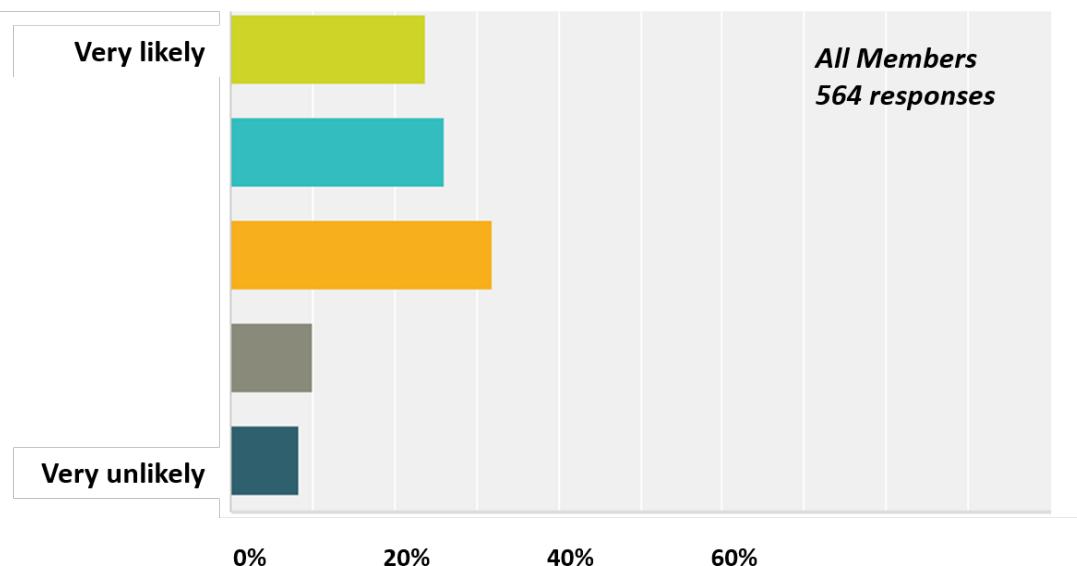
**Intend to make a financial contribution
to one or more of SICB funds**



Research and Educational Resources (RER). The SICB Educational Council received feedback on its efforts to revive and enhance the resources offered to members in the areas of teaching and research. The former “digital library” of SICB has been replaced by RER.

Research and Educational Resources (RER)

The Educational Council has begun upgrading a part of the SICB website devoted to teaching and research materials. How likely would you consult/use this material?



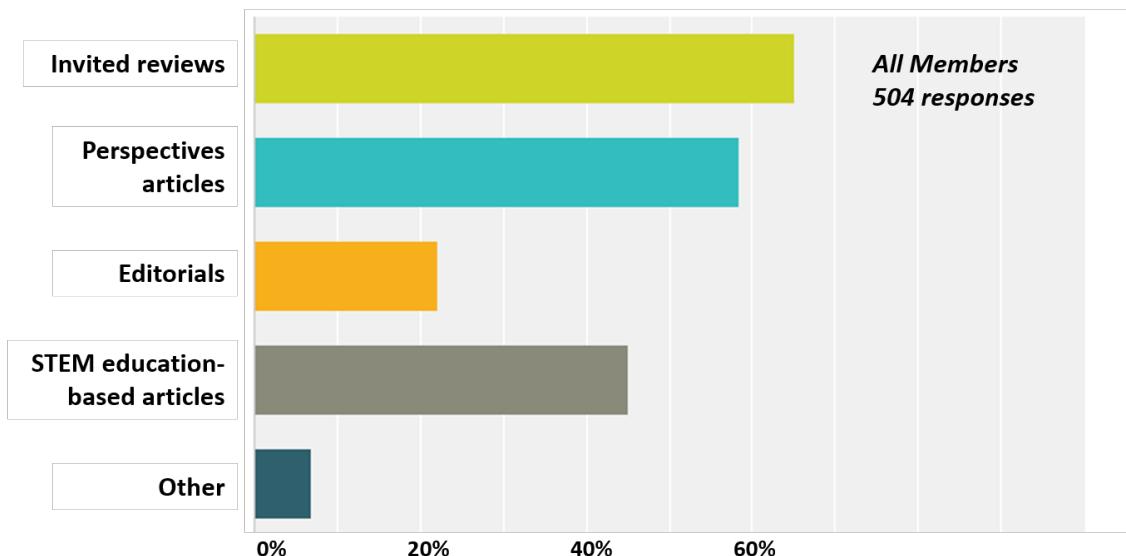
SICB Journal – Integrative and Comparative Biology. The journal of the Society is Integrative and Comparative Biology. The new editor-in-chief Marty Martin and the Editorial Board solicited feedback on the strengths and weakness of the journal and on what members wished to see as the new leadership considers a number of new initiatives.

Here is a breakdown on what members would like the editorial board to consider.

- invited reviews – 65.1% all members; 65.6% Full Members
- perspectives articles – 58.3% all members; 62.7% Full Members
- editorials – 22.2% all members; 26.1% Full Members
- STEM education-based articles – 45.0% all members; 46.2% Full Members
- Other – 6.9% all members; 8.3% Full Members

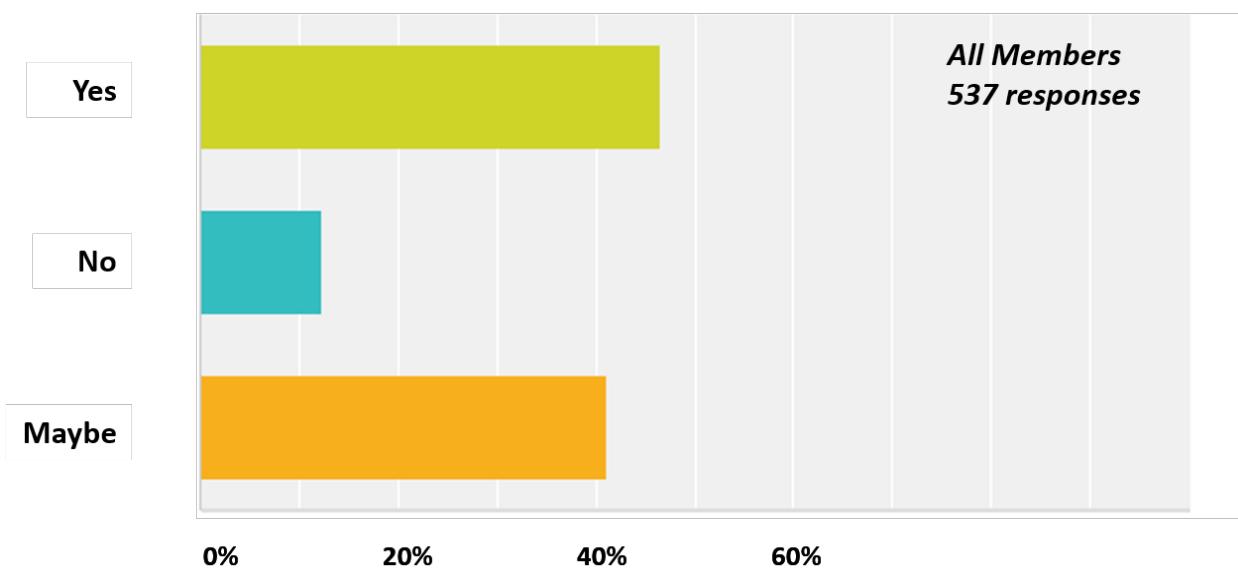
SICB Journal – *Integrative & Comparative Biology*

What new things would you like to see in the journal?



A New SICB Open Access Journal. Feedback was also solicited on the possibility of SICB establishing a new open access journal in integrative and comparative biology that would allow authors to submit traditional research articles. Based on the responses, the SICB Executive Committee is taking first steps toward establishing such a new journal by endeavoring to identify an editor-in-chief.

Do you think there is a place for a new open-access journal sponsored by SICB?



December 22, 2016

Dear President-elect Trump:

As leading scientific organizations in the biological sciences, we write to encourage you to make scientific research and education a priority during your administration. Part of what makes America great is our capacity to generate new knowledge and ideas that spur innovation and drive the development of new economic opportunities for all Americans.

We respectfully request that you take swift action to:

- 1) Make scientific research a budget priority
- 2) Appoint a Presidential Science Advisor with strong scientific credentials
- 3) Direct your administration to use peer-reviewed scientific information to inform decisions

Biology is the science of life. Every day, discoveries arising from biological research contribute to improved human health and economic security. Biology is a foundational science from which we build new antibiotic and antiviral medications, translate findings from genetics laboratories into the development of more drought tolerant food crops, and develop new materials inspired by biological compounds and structures. Biological diversity surveys, for example, provide us with the information we need to identify and model diseases, such as Ebola and Zika, which can jump from wild animal populations to humans. Insights derived from our investigations into the human microbial biome are improving our understanding of various health conditions and diseases, such as food allergies, Crohn's and Inflammatory Bowel Disease, among many others. Biological research enables us to make more informed decisions about natural resource management and stewardship. When we understand how ecological systems function, we can prevent and better mitigate disruptions to important environmental processes that provide us with clean air and water.

Research is an important engine that powers our economy. Over the past 50 years, roughly half of our nation's private sector economic growth has resulted from research and development. One analysis of the return on the federal government's \$12 billion investment in the Human Genome Project found that it generated an estimated \$800 billion in economic return. Other economic analyses of investments in agricultural research have estimated a \$10 return on every \$1 the federal government invests. These are just some examples and others may be found in a recent report from the American Institute of Biological Sciences (see https://www.aibs.org/public-policy/resources/AIBS_Biological_Innovation_Report.pdf). In short, taxpayer support of scientific research pays dividends.

The federal government provides more than half of the funding for basic research in the United States. Indeed, industry counts on the federal government to support fundamental discovery so that the private sector may target its resources to new product development. For example, 80,000 patents awarded over a 10-year period were based on research initially funded by the federal government's National Science Foundation.

Although the United States has long been a global leader in science, our leadership is waning. Foreign countries are allocating growing shares of their Gross Domestic Product to research and development. New investments in federal research agencies must be a priority if we are to be a global power.

Science is a rapidly advancing field that builds on itself. One scientific discipline borrows from another. Thus, it is important that federal agencies coordinate and strategically leverage their research portfolios. One of the ways in which the federal government coordinates its scientific priorities is through the President's Science Advisor and the White House Office of Science and Technology Policy. A strong and respected science advisor can provide the honest and timely analysis you will require to make informed decisions on threats to public health, national security, and environmental incidents that can threaten the well-being of people for years into the future. The Office of Science and Technology Policy can also help to ensure that federal research programs are responding to the needs of the scientific community and the nation. We encourage you to work with the National Academies of Science and professional scientific associations such as the undersigned to identify a highly qualified individual who can provide you with the highest caliber scientific advice and counsel.

Science has not been, nor do we think it should be, a partisan issue. Rather, it is a public benefit. We request that upon taking office you provide clear and immediate guidance through the White House Office of Management and Budget and the Office of Science and Technology Policy to all federal department and agency heads directing them to seek and use peer-reviewed scientific information as the basis for decision-making. Many federal programs have established scientific advisory boards and committees. These panels should be filled and staffed by qualified scientists. To do otherwise will call into question the credibility of any government actions taken on matters of health, security, or environmental stewardship.

We stand ready to work with you, your transition team, and your administration to move forward programs and policy that advance science for the benefit of the nation. Please contact Dr. Robert Gropp at rgropp@aibs.org or 202-628-1500 x 250 if we can provide any assistance to you and your administration.

Sincerely,

American Arachnological Society
American Institute of Biological Sciences
American Malacological Society
American Ornithological Society
American Society of Agronomy
American Society of Ichthyologists and Herpetologists
American Society of Mammalogists
American Society of Naturalists
American Society of Parasitologists
American Society of Primatologists

Animal Behavior Society
Annis Water Resources Institute, Grand Valley State University
Association for Tropical Biology and Conservation
Association of Southeastern Biologists
Belle W. Baruch Institute for Marine and Coastal Science, University of South Carolina
Berkeley Natural History Museums
BioQUEST
Botanical Society of America
Coastal and Estuarine Research Federation
Crop Science Society of America
Delaware Museum of Natural History
Entomological Society of America
Great Lakes Research Center of Michigan Technological University
Harbor Branch Oceanographic Institution at Florida Atlantic University
Harvard Museum of Comparative Zoology
Hatfield Marine Science Center
Helminthological Society of Washington
Herpetologists' League
Human Anatomy and Physiology Society
iDigBio
International Association for Bear Research and Management
Kewalo Marine Laboratory, University of Hawaii at Manoa
Moss Landing Marine Laboratories
National Association of Biology Teachers
National Association of Marine Laboratories
National Tropical Botanical Garden
NC State University/Center for Marine Sciences & Technology
Oregon State University Herbarium
Organization of Biological Field Stations
Paleontological Society
Phycological Society of America
Sam Noble Oklahoma Museum of Natural History
Society for Conservation Biology North America
Society for Integrative and Comparative Biology
Society for Mathematical Biology
Society for the Study of Amphibians and Reptiles
Society for the Study of Evolution
Society of Environmental Toxicology and Chemistry
Society of Systematic Biologists
Soil Science Society of America
Southwestern Association of Naturalists
State University of New York College of Environmental Science and Forestry
The Field Museum of Natural History
University of California Davis Bodega Marine Laboratory
University of North Carolina at Chapel Hill Institute of Marine Sciences
University of Wisconsin - Madison, Department of Botany

US Regional Association of the International Association of Landscape Ecology
Whitney Laboratory for Marine Bioscience, University of Florida
Wisconsin State Herbarium