



# ***ANNUAL REPORT 2023***

***AMERICAN SOCIETY OF BIOMECHANICS***

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# TABLE OF CONTENTS

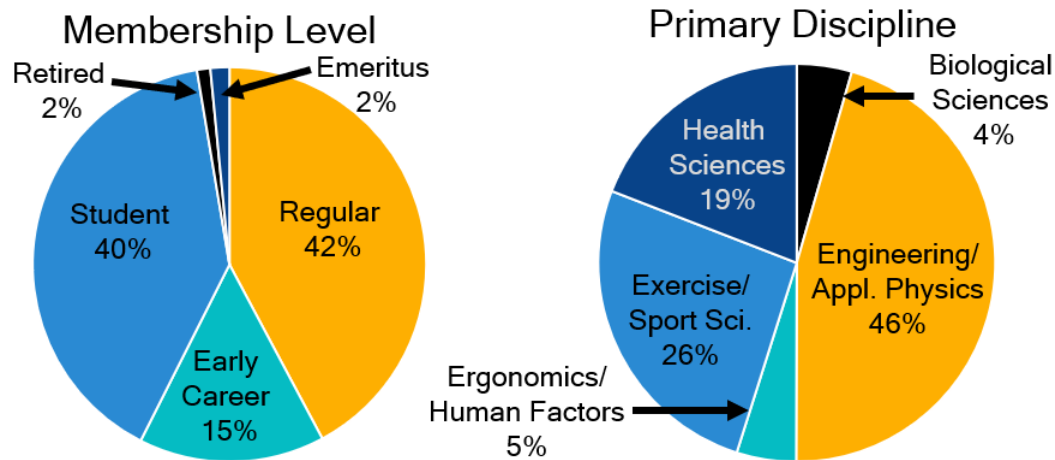
<i>Membership Report</i> _____	3
<i>Financial Report</i> _____	4
<i>2023 Annual Meeting Report</i> _____	7
<i>ASB Leadership, Staff, &amp; Volunteers</i> _____	11

**THE MISSION OF THE AMERICAN SOCIETY OF BIOMECHANICS (ASB)  
IS TO FOSTER THE ADVANCEMENT, COMMUNICATION, AND  
APPLICATION OF BIOMECHANICS TO BENEFIT SOCIETY.**

# MEMBERSHIP REPORT

In 2023, ASB offered Regular, Early Career, Student, and a new Retiree membership rate for individuals who have retired from professional employment. We continue to have select Emeritus members, which is a status granted by the Executive Board to long-standing members who made substantial contributions to ASB. Notably this year, student membership went up 30% from 2022! We are continuing to track recruitment and retention to help ASB focus future efforts in these areas. From 2022 to 2023, we retained 665 of our 1,076 members from last year\* (464 regular, 176 students, 23 students who switched to regular members, and 2 who did the reverse). While 287 members from 2022 did not renew in 2023 (150 regular, 137 students), we also had 105 former members rejoin ASB after a gap in their membership (76 regular, 29 students). An additional 306 new members (77 regular, 229 student) joined last year, so ultimately, we saw a net 13% membership increase in 2023 (1,076 members\*). *\*Emeritus Members are not included.*

## 1,093 Members in 2023



## Demographics

Race	Percent
American Indian or Alaska Native	1%
Asian	15%
Black/African American	4%
Native Hawaiian/Other Pacific Islander	<1%
White	72%
Other	3%
Don't Wish to Answer/Blank	5%

\*2% biracial

Ethnicity	Percent
Not Hispanic or Latino	88%
Hispanic or Latino	7%
Don't Wish to Answer/Blank	5%

Gender	Percent
Man	56%
Woman	42%
Non-Binary	<1%
Don't Wish to Answer/Blank	1%

Disability Status	Percent
No	93%
Yes	2%
Don't Wish to Answer/Blank	5%

\*Numbers may not add to 100% due to rounding

# ***FINANCIAL REPORT***

## **Summary:**

We saw a record number of awards given this year, highlighting the society's support of our membership. Additionally, we saw an increase in member donations. With the addition of the Development Committee, we hope to continue to foster a culture of support and giving back to our society.

## **Awards & Grants:**

We are grateful for the continued support of ASB from external partners of our society. This year a \$25,000 grant from Nike was used towards the \$36,000 B-SURE program. The society distributed 5 B-SURE awards this year and we hope this program continues and grows in 2024! Additionally, we are grateful for the support of the Up & Comer Award from the Asian American Institute for Research & Education and support of the Clinical Biomechanics and Journal of Biomechanics awards from Elsevier.

## **Looking forward:**

As we move into 2024, we will start the year by supporting 5 upcoming ASB Regional Meetings. We look forward to continuing to support the Development Committee and other strategic financial planning which will continue to set up ASB for success to grow the biomechanics community now and beyond!

# FINANCIAL REPORT

REVENUE		
JAN-DEC 2023	Budget	Actual
Membership	\$ 88,140.00	\$ 90,627.00
Donations	\$ 6,905.00	\$ 34,375.00
External	\$ 6,000.00	\$ 31,000.00
Member	\$ 905.00	\$ 3,375.00
Journal Subscriptions†	\$ -	\$ 3,165.00
Annual Meeting	\$ 549,933.86	\$ 513,745.79
Registrations	\$ 434,055.94	\$ 392,913.00
Grants	\$ 11,500.00	\$ 1,500.00
Sponsors & Exhibit Fees	\$ 95,500.00	\$ 99,010.00
Hotel Commission	\$ 8,877.93	\$ 20,322.79
Corporate Partnerships	\$ 18,250.00	\$ 17,000.00
Other		
NACOB Funds^	\$ -	\$ 11,105.37
Eblast Ads	\$ -	\$ 600.00
<b>TOTAL REVENUE</b>	<b>\$ 663,228.86</b>	<b>\$ 666,853.16</b>

† Journal subscriptions are a pass through

^reported for 2022, but received Jan 2023

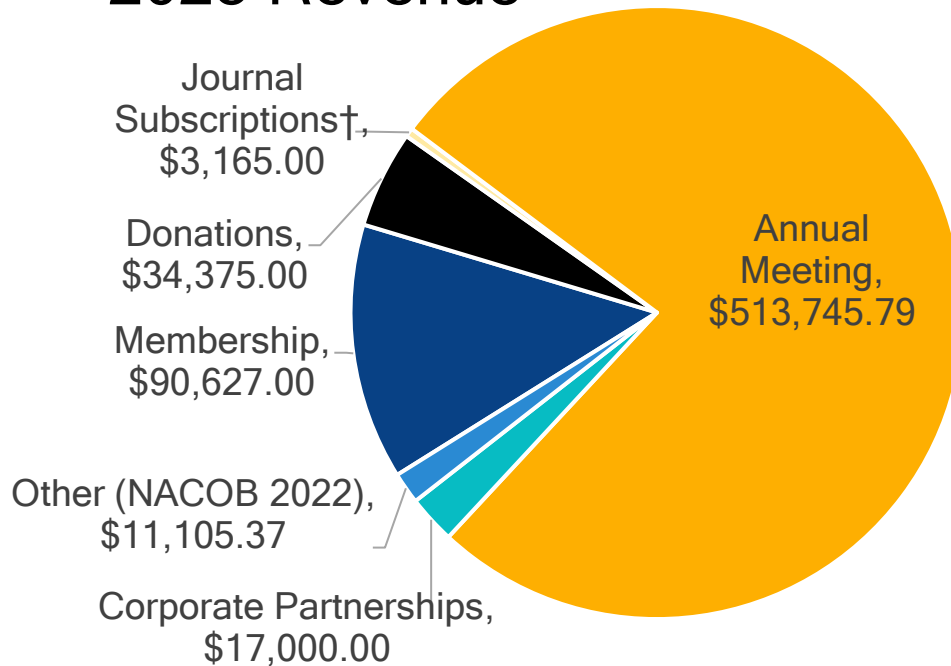
ASSETS DECEMBER 2023	
Podium Operating Account	\$ 33,072.45
ASB Checking Account	\$ 426,272.00
Investment Account	\$ 236,139.09
Accounts Receivable + Prepayment	\$ 51,349.62
Accounts Payable	\$ (8,939.87)
<b>TOTAL ASSETS</b>	<b>\$ 737,893.29</b>

EXPENSES		
JAN-DEC 2023	Budget	Actual
Boards & Committees	\$ 14,473.75	\$ 10,912.86
Marketing Communications*	\$ 2,791.00	\$ 4,005.56
Journal Subscriptions†	\$ -	\$ 3,165.00
Awards & Grants	\$ 75,775.00	\$ 92,856.46
B-SURE, GIA, Regional Meetings	\$ 38,000.00	\$ 53,930.99
Conference Awards & Grants	\$ 37,775.00	\$ 38,925.47
Annual Meeting	\$ 421,730.38	\$ 341,176.31
Meeting Delivery Podium	\$ 69,502.56	\$ 52,561.75
Program	\$ 18,725.00	\$ 24,054.84
Facilities & On-site Support	\$ 41,500.00	\$ 45,968.90
Sponsors, Exhibits & Posters	\$ 12,575.00	\$ 9,678.50
Registration	\$ 11,931.25	\$ 10,778.00
Entertainment	\$ 1,500.00	\$ 1,500.00
Food & Beverage	\$ 258,086.58	\$ 196,634.32
Other	\$ 7,910.00	\$ -
Administrative	\$ 60,159.38	\$ 87,199.74
Secretariat (Podium)	\$ 35,483.03	\$ 47,630.63
General Society Admin	\$ 10,085.00	\$ 18,517.58
Payment Processing	\$ 14,591.35	\$ 21,051.53
<b>TOTAL</b>	<b>\$ 574,929.51</b>	<b>\$ 539,315.93</b>

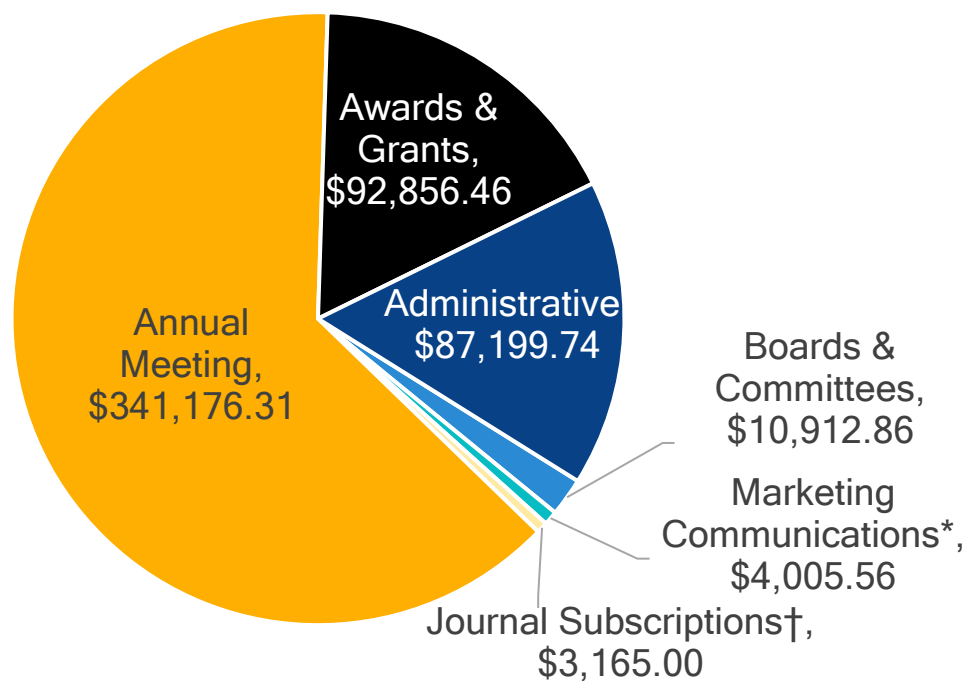
\*Includes Annual Meeting communications

# FINANCIAL REPORT

## 2023 Revenue



## 2023 Expenses



# 2023 ANNUAL MEETING REPORT

## Overview

- 109 abstract reviewers for over 700 submissions of posters, orals, symposia, and workshops
- 7 pre-meeting workshops and tutorials
- 32 concurrent podium sessions comprised of contributed oral talks, symposia, and award sessions as well as eight thematic poster sessions
- 2 poster sessions with posters up for one day and dedicated poster presentation sessions
- 1 Participant research study - Instrumented assessment of the influence of age on motor function and postural control
- New in 2023, a job market poster session for those seeking employment and those who will have openings in the near future

## Workshops

WS1: Developing engaged teaching strategies in biomechanics

WS2: Stroke grand challenge competition and NMSM Pipeline training workshop

WS3: Basic fractal analysis in movement science

WS4: Creating the future of biomechanics through comprehensive admissions practices

WS5: Federal funding for biomechanics research

WS6: Enabling large-scale biomechanics studies and data sharing using Opencap and AddBiomechanics

WS7: Writing a successful NIH R01 Proposal

## Symposia

Biomechanics research and development outside of academia

How to get involved with biomechanics education research

Introduction to an Open-Source approach to bi-plane videoradiography and multi-modal kinematic tracking

Turning towards real-world maneuvers to inform movement training paradigms

## Keynote Talks

**Inspiring tendon therapeutic strategies with developmental mechanobiology**

Catherine Kuo, *University of Maryland, College Park*

**The mechanics of cell movement within the tissue microenvironment**

Cynthia Reinhart-King, *Vanderbilt University*

## Contributed Sessions

Podium Session	Moderator(s)
ACL Reconstruction and Osteoarthritis	Riann Palmieri-Smith, Alexa Johnson
Ankle Muscles and Pushoff	Peter Adamczyk
Assistive Technology	Anne Martin, Collin Bowersock
Balance and Falls	Brooke Odle, Kim Bigelow
Clinical Movement Disorders	Lise Worthen-Chaudhari, Kristen Renner
Education and Outreach	Allison Altman-Single, Sara Arena
Ergonomics and Human Factors	Michael Madigan, Youngjae Lee
Exoskeletons for Ergonomics	Boyi Dai, Cameron Nurse
Foot and Footwear	Erica Bell, Chris Wilburn
Head Impact and Injury	Jaclyn Caccese, Peter Fino
Hip Mechanics, Dysplasia, and Pain	Michael Samaan, Erin Mannen
Imaging for Bone and Joint Health	Don Anderson, Joshua Johnson
Locomotion Energetics	James Finlay, Russell Johnson
Optimal Control Stimulation	Jill Higginson, Kayla Pariser
Osseointegrated Prostheses	Brad Hendershot, Ross Miller
“Real World” Biomechanics	Eni Halilaj, Nataliya Rokhmanova
Running Injury	Allison Gruber, Elizabeth Schmida
Shoulder Health	Meghan Vidt, Brooke Slavens
Skeletal Muscle Mechanics	Silvia Blemker
Spine and Lower Back	Dennis Anderson, Courtney Butowicz
Sports and Athletes	Glenn Fleisig, Kristin Morgan
Stroke Rehabilitation and Gait	Elisa Arch, Michael Lewek
Tendon Adaptation and Interaction	Katie Knaus, Lauren Welte
Women’s Health	Wendy Murray



## Contributed Sessions (continued)

Thematic Poster Session	Moderator(s)
Aging and Mobility	Sarah Roelker, Ricky Pimentel
Balance in Gait	Jeremy Crenshaw, Jenny Kent
Comparative and Animal Biomechanics	Greg Sawicki, Chris Arellano
Landing and ACL Injury	Robin Queen, Katie Collins
Lower Limb Loss and Prostheses	Karl Zelik, Cara Gonzalez
Mobility with Lower Limb Exoskeletons	Dan Ferris, Jennifer Leetsma
Running Performance	Patrick Corrigan, Zoey Kearns
Validity of Markerless Motion Capture	Josh Baxter, Scott Uhlrich

## Annual Meeting Report

The 2023 Annual Meeting of the American Society of Biomechanics was held in Knoxville, Tennessee at the Knoxville Convention Center from August 8 - 11, 2023. The meeting was organized by conference chair, Jeff Reinbolt, *University of Tennessee*, with support from program chair, Ross Miller, *University of Maryland*.

There were 835 delegates registered for the meeting following years of virtual or joint meetings and participated in a variety of podium, symposia, and poster presentations. The program included multiple social events, including the well-attended Women in Science event, multiple Affinity group gatherings and student focused events, in addition to a welcome reception, daily lunch and coffee breaks, two poster receptions, and the conference banquet, allowing delegates to network and exchange in informal settings. Delegates also had the opportunity to participate in the onsite research study throughout the meeting days. Of the registered delegates, 44% were students and 72% were ASB regular or student members.

There were 27 on-site exhibitors and sponsors covering the full gamut of services and technologies relevant and applicable to the field of biomechanics. Sponsored events/expenses included support of the Women in Science event, lanyards, the student night out evening, and coffee breaks. Additional financial support was provided by NIH through a R13 grant. This grant supported the travel awards program, providing financial support to 17 students and was managed and distributed by the University of Tennessee.

Following the meeting, a post-meeting survey was sent to all attendees. A total of 310 attendees completed the survey with 92% of respondents indicating they would recommend the meeting to a colleague, collaborator, or student. Of the PIs who responded to the survey, over half brought one or more students or post-doctoral fellows to the meeting, helping to ensure the continued success and future of the American Society of Biomechanics and the field of biomechanics. In addition to the importance of senior members of the community attending the meeting with their students, is the continued support of the society and the meeting of returning community members and new participants of the meeting. Over 40% of the survey respondents have attended an ASB meeting five or more times and just over 30% indicated they attended ASB 2023 for the first time. Highlights of the meeting, as noted by the respondents, include the poster sessions, the scientific quality of presentations, and the opportunities for networking with others in the field.

Further information regarding the sessions, award winners and more can be found in the archived program book on the website.

# **ASB LEADERSHIP, STAFF, & VOLUNTEERS**

## **Executive Board**

ASB Executive Board 2022-2023 - 47<sup>th</sup> Annual Meeting (2023) - Knoxville, TN

President	Rakié Cham
President-Elect	Sara Myers
Past President	Elizabeth T. Hsiao-Wecksler
Secretary/Membership Chair	Anahid Ebrahimi
Treasurer	Maria Pasquale
Program Chair	Ross H. Miller
Program Chair-Elect	James Finley
Meeting Chair(s)	Jeffrey Reinbolt
Education Committee Chair	Allison Altman-Singles
Communications Committee Chair	Srikant Vallabhajosula
Newsletter Editor	Cara L. Lewis
Student Representative	Anna Bailes
Diversity Chair	Ajit M. Chaudhari
Awards Chair	David B. Lipps

ASB Executive Board 2023-2024 - 48<sup>th</sup> Annual Meeting (2024) - Madison, WI

President	Sara Myers
President-Elect	Ajit M. Chaudhari
Past President	Rakié Cham
Secretary/Membership Chair	Anahid Ebrahimi
Treasurer	Maria Pasquale
Program Chair	James Finley
Program Chair-Elect	Robin Queen
Meeting Chair(s)	Peter Adamczyk
Education Committee Chair	Allison Altman-Singles
Communications Committee Chair	Srikant Vallabhajosula
Newsletter Editor	Cara L. Lewis
Student Representative	Anna Bailes
Diversity Chair	Christopher Wilburn
Awards Chair	David B. Lipps

## **Council of Fellows**

Chair	James Ashton-Miller
Vice Chair	Trey Crisco
Secretary	Chris Hass

## **Staff**

Cendrine De Vis, Podium Conferences  
 Michelle Smith, Podium Conferences  
 Agathe Deacon-Erasmus, Podium Conferences  
 Tori Lunden, Podium Conferences  
 Sebastien Lavoie, Podium Conferences  
 Hunter Fraser, Podium Conferences

## ASB 2022-2023 Committee Volunteers

### Awards Committee

David Lipps^ (Chair)  
*Standing Awards Committee*  
 David Lipps (Chair)  
 Dennis Anderson (Member)  
 Kim Bigelow (Member)  
 Hugo Giambini (Member)  
 Clare Milner (Member)  
 Missy Morrow (Member)  
 Kota Takahashi (Member)  
*Award Reviewers*  
 Ajit Chaudhari  
 Alison Sheets  
 Amy Lenz  
 Andy Karduna  
 Anne Martin  
 Antonia Zaferiou  
 Brooke Slavens  
 Carolin Curtze  
 Chris Haas  
 Chun-Kai Huang  
 Clark Dickerson  
 Craig Goehler  
 Don Anderson  
 Erica Bell  
 Evan Dooley  
 Farshid Guilak  
 Francesca Wade  
 Gu Eon Kang  
 Jaclyn Caccese  
 James Ashton Miller  
 Janet Dufek  
 Jean McCrory  
 Jenna Yentes  
 Jennifer Hogg  
 Jessica Allen  
 Jessica Goetz  
 Joaquin Barrios  
 Jocelyn Hafer  
 Josh Leonardis  
 Ke Song  
 Kevin Ford  
 Kharma Foucher  
 Kornelia Kulig  
 Kristen Renner  
 Kurt Beschorner  
 Lindsay Carroll  
 Matt McCullough  
 Meghan Vidt  
 Michelle Sabick  
 Omid Jahanian  
 Owen Beck  
 Pawel Golyski  
 Peter Fino

Rakie Cham  
 Ram Haddas  
 Rebekah Lawerance  
 Reed Gurchieck  
 Rick Lieber  
 Robert Catena  
 Saikat Pal  
 Sara Myers  
 Scott Monfort  
 Sheri Silfies  
 Stacie Ringleb  
 Tamara Reid Bush  
 Tarang Jain  
 Thomas Buchanan  
 Walter Herzog  
 Young-Hui Chang  
 Zac Domire

### Communications Committee

Srikant Vallabhajosula  
 (Chair)  
 Cara Lewis  
 Ana Ebrahimi  
 Seyedmojtaba Mohasel  
 (Photography)

### Diversity Committee

Ajit Chaudhari\* (Chair)  
 Jacqueline Cole  
 Alexa Johnson\*  
 Chris Wilburn  
 Stacie Ringleb  
 Ana Ebrahimi  
 Fran Sheehan Gavelli  
 Joan Bechtold\*  
 Deanna Schmidt\*  
 Emma Fortune Ngufor  
 Maria Pasquale  
 Missy Morrow  
 Robin Queen\*  
 Rob Creath  
 David Lipps  
 Kota Takahashi  
 Hugo Giambini  
*\*Members of the Incident  
 Response Team for Code of  
 Conduct violation reporting*

### Education Committee

Allison Altman-Singles  
 (Chair)  
 Sara Arena  
 Dustin Brueining  
 Craig Goehler

Gu Eon Kang  
 Brian Knarr  
 Ben Meyer  
 Scott Monfort  
 Timothy Reissman  
 Kristen Renner  
 Megan Toney-Bolger  
 JJ Wallace  
 Kristyne Wiegand  
 Wendi Weimar  
 Matt Wittstein  
 James Yang  
 Feng Yang

### Membership Committee

Ana Ebrahimi (Chair)  
 Benjamin Binder-Markey  
 Brooke Slavens  
 Feng Yang  
 Henry Wang  
 Jean McCrory  
 Juanita (JJ) Wallace  
 Ke Song  
 Lisa MacFadden  
 Maria Pasquale  
 Mathew Varre  
 Michael Harris  
 Noah Rosenblatt  
 Saikat Pal  
 Sarah Roelker  
 Shima Jalalian  
 Tarang Jain  
 Tim Burkhart

### Student Committee

Anna Bailes (student rep)  
 Jenny Leestma  
 Gouresh Powar  
 Danny Davis  
 Molly Shephard  
 Mitchell Tillman  
 Aaron Hellem  
 Natalie Bick  
 Fatemeh (Asal) Aflatounian  
 Chris Jadelis  
 Kayla Pariser  
 Nathan Conner  
 Morgan Dalman  
 Evan Dooley  
 Lauren Luginsland  
 Maximillian Diaz  
 Cabel McCandless  
 Emily Klinkman

**Nominating Committee**

Elizabeth Hsiao-Wecksler  
(Chair)  
Jaimie Roper  
Emmanuel Tetteh

**2023 Meeting Committee**

Jeff Reinbolt (Chair)  
Colleen Crouch  
Dustin Crouch  
Rachel Tatarski  
Joshua Weinhandl  
Songning Zhang

**2023 Program Committee**

Ross Miller (Chair)  
Dan Ferris  
Wendy Murray  
Chris Arellano  
Brooke Odle  
Erica Bell  
James Finley  
Sarah Kessler

***THANK YOU!***

