

HISTORICAL PERSPECTIVES

Promoting the APS Chapter Program by sharing its history, best practices, and how-to guide for establishing new chapters

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Hopper MK. Promoting the APS Chapter Program by sharing its history, best practices, and how-to guide for establishing new chapters. *Adv Physiol Educ* 41: 000–000, 2017; doi:10.1152/advan.00122.2016.—Early establishment of physiological societies in Oklahoma and Ohio demonstrated the benefits of networking physiologists and paved the way for establishing the APS Chapter Program. Designed to promote the general objectives of the APS, the Chapter Program was officially launched in 1995, with Ohio being the first recognized chapter. There are 13 active chapters regularly engaged in numerous activities designed to advance physiology education and research. In the hopes that others will recognize the important offerings of state chapters and consider organizing one, the aims for this paper are to 1) share a brief history, 2) provide rationale for chapter initiation, and 3) describe the process involved in establishing a chapter. In light of current changes in American Medical Association and Liaison Committee on Medical Education guidelines, the present time may be critical in promoting chapters, as they play a vital role in sustaining recognition and support for the discipline.

American Physiological Society mission; chapter history; establish a nonprofit; annual meetings; chapter by-laws

THE APS CHAPTER PROGRAM, designed to promote the general objectives of the American Physiological Society (APS), was officially launched in 1995. From the beginning, the idea was to establish state chapters that worked independently yet received support and guidance from the APS.

There are currently 13 active chapters (Table 1). Annual chapter reports describe a number of vibrant and stellar examples of how chapters are successfully carrying out the mission of the APS. Chapters report a vast array of activities involving everyone from senior physiologists to elementary students participating in Physiology Understanding (PhUn) Week activities. Additionally, chapters report being successful in soliciting participation of APS physiologists who are not currently active nationally and additional physiologists who are not members of the APS.

As a founding chapter member who has maintained active participation in chapter activities as a council member and officer, I have witnessed the important role chapters play in promoting the discipline. The annual state chapter meeting is my favorite meeting each year, as it provides a mechanism for my students to present their data, network with other students and faculty, and learn more about the fascinating research conducted in the state/region. I advise all students that I mentor

to attend the chapter's annual meeting to learn first-hand what to expect from a professional meeting, and each year student feedback is immensely positive and energizing. As a faculty member, I enjoy the academic dialogue and the opportunity to meet colleagues that I may not encounter at larger meetings. Each year, I look forward to hearing new ideas that may improve my teaching and research. For those who are not currently experiencing the benefits of chapter participation, I would highly encourage you to 1) attend an annual chapter meeting close by or in a neighboring state and 2) consider initiating a chapter in your state. There are numerous chapters that will serve as a model, and the APS, through the Chapter Advisory Committee (CAC), will provide support.

In the hopes that others will recognize the important offerings of state chapters and, therefore, consider organizing one, my aims for this paper are to share a brief history of APS chapter development, provide rationale (and hopefully motivation) for starting an APS chapter, and finally, to offer support for growth of the chapter program by outlining the specific steps to establishing a chapter, sharing best practices, and providing solutions to common challenges. Information for this report was gathered from a survey distributed to chapter leaders, chapter annual reports, chapter archives made available through the APS office, and dialogue with members of the APS involved in the establishment of state chapters.

Brief History

Through the establishment of the Chapter Program, Dr. Martin Frank, Executive Director of the APS, hoped to enlist the cooperation of individuals within each state to promote the work of the Society in building professional networks, encouraging development of young scientists, and promoting continued excellence in education. The plan was for members within a state or region to initiate the process by petitioning the APS. Petitions would then be approved by the APS, and the chapter would be required to establish itself as an independent organization operating according to the rules and regulations of the individual state.

The first APS-recognized chapter was launched, in large part, due to the efforts of Dr. Peter Lauf. Dr. Lauf relocated to Ohio when named Chair of Physiology and Biophysics at Wright State School of Medicine. Around this time period, there was a “mini-chair revolution” with new physiology chairs being named at several institutions across Ohio. Dr. Lauf quickly developed closer ties with the other school's new physiology chairs and made plans to get everyone together to share ideas.

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Table 1. *APS state chapters*

State	Founded	Annual Meeting	Independent Website
Ohio	1995	Fall, 1 day	http://ohio-physiological-society.org/
Iowa	1995	Spring, 2 days	www.dmu.edu/event/17th-annual-iowa-physiological-society-meeting/
Midwest	1997		No longer active
Nebraska	1997	Fall, 1 day	www.unmc.edu/physiology/nps/
Oklahoma	1997	Fall, 1 day	None
Gulf Coast	1999	Alternate years	None
Arizona	2008	Fall, 2 days	www.u.arizona.edu/~sboitano/AzPS_2012/index.html
Indiana	2009	Spring, 1 day	www.usi.edu/conferences/ips
Puerto Rico	2009	Spring, 1 day	www.prps-aps.org/
Tennessee	2009	Fall, 2 days	www.the-tps.org/
Pennsylvania	2011	No meeting	None
Kentucky	2012	Spring, 1 day	http://web.as.uky.edu/Biology/faculty/cooper/KYPhysiologicalSoc/default.htm
Michigan	2012	Summer, 2 days	https://apsmichigan.org
Nation's Capital (Washington, DC)	2012	Spring, 1 day	https://dmvcaps.wordpress.com/
Missouri	2013	Joint with Iowa	None

If the exact date of APS recognition is unknown, chapters recognized in the same year are listed in alphabetical order.

In the fall of 1986, Dr. Lauf organized a Biomedical Science Symposium at Wright State and invited several eminent speakers. Dr. Frank, as the relatively new APS Executive Director, was in attendance. This was such a successful meeting that Dr. Lauf conceived the idea of establishing a more formally organized Ohio-based physiological society, the Ohio Physiological Society (OPS), as a vehicle to bring together all physiologists within the state. To make sure things would proceed smoothly, Dr. Lauf drafted rudimentary by-laws and asked faculty to support the idea of forming the OPS. With the support of the faculty, the first official meeting of the OPS at Wright State was assembled during the spring of 1987. Representing physiology faculty from big and small schools in Ohio, the number of attendees for the first meeting was approximately 60–80. At the meeting, the membership elected Dr. Lauf as the first president of the OPS.

Dr. Lauf's aims to promote and advance the discipline of physiology closely aligned with Dr. Frank's, and the two worked collaboratively to further develop the Chapter Program. After 7 yr of OPS annual meetings, Jackie D. Wood, then president of the OPS, wrote to Dr. Frank asking for APS chapter recognition. Ohio's request for chapter status was approved by council, and a favorable response was conveyed just prior to Ohio's 9th Annual Meeting in the spring of 1995.

Although Ohio was the first APS-recognized chapter, the idea of an organized state physiological society was not entirely new. In Oklahoma, Roger Thies recognized the value of collaboration and networking and coordinated a meeting of physiologists on September 26, 1980. This meeting aimed to share research and was attended by a group of physiologists from Oral Roberts University, the Oklahoma College of Osteopathic Medicine (OCOM), and the Oklahoma University Health Science Center. The following year, Oklahoma State University, Northeastern, and Tulsa University joined the group at a symposium focused on physiology education hosted by William Robertson at OCOM in Tulsa, OK. At this meeting, a planning committee was selected to develop a formal physiology society with by-laws and an annual meeting. Efforts of the group resulted in the First Annual Meeting of the Oklahoma Physiological Society on June 11, 1982, at Oklahoma State University. At this meeting, Jerald Killion of Oral Roberts University was elected president. This meeting was held approximately 4 yr prior to Ohio's first physiology meeting. It

was not until Oklahoma's 16th Annual Meeting in 1997 that membership decided to seek APS chapter status. The Oklahoma chapter recently held its 33rd Annual Meeting, and in doing so, it established itself as the physiology society within the US with the longest tenure.

After recognizing its first chapter, the APS would experience a relatively rapid expansion of the Chapter Program. Between 1995 and 1997, six chapters were recognized. Just a short time after recognizing Ohio, the APS recognized Iowa as its second chapter (Table 1). Dr. Gerald DiBona and Dr. Ulla Kopp provided the driving force in establishing the Iowa Chapter, which went on to hold its First Annual Meeting in April of 1996. The Midwest Chapter (no longer active), with membership from Wisconsin, Minnesota, and Illinois, was formally recognized as the third APS chapter in April 1997. During this time period, Irving Zucker at the University of Nebraska Medical Center formally petitioned the APS for chapter status on behalf of Nebraska. Nebraska was formally recognized as a Chapter in 1997, the same year as Oklahoma.

In 1999, Edward Inscho of Tulane University School of Medicine wrote to the APS seeking chapter status for the Gulf Coast region. The Gulf Coast Chapter, including members from Louisiana, Mississippi, and Alabama, received recognition from the APS in September 1999, but then an unexpected lapse in chapter growth occurred. Following approval of the Gulf Coast Chapter, a 9-year period passed in which no other state petitioned the APS for chapter status.

In 2008, APS President John Williams made note of the lack of chapter growth and took steps to rejuvenate the Chapter Program. Williams invited Dr. Lauf to become founding chair of an APS Chapter Advisory Council (CAC) in the hopes of revitalizing the Chapter Program. The CAC was challenged to 1) find ways to recruit new APS chapters, 2) review and support the development of chapter by-laws, and 3) assist chapters that experienced temporary inactivity.

The first chapter that Dr. Lauf and members of the CAC assisted was Arizona in 2008. The CAC was also intimately involved in aiding Tennessee, Puerto Rico, and Indiana as they became recognized Chapters in 2009. In the subsequent 2-year period, the APS received petitions from Pennsylvania in 2011 (not yet holding an annual meeting) and Kentucky, Michigan, and the Nation's Capital Greater Washington Area in 2012. The newest chapter to be approved was Missouri in 2013. In

all, 15 states have petitioned the APS to initiate chapters, and 13 of the chapters currently maintain active status (Table 1).

As the Chapter Program grew, the APS imposed a few specific obligations for the maintenance of an active chapter. To remain active, chapters are asked to conduct an annual meeting, elect chapter officers as outlined in their by-laws, and file an annual chapter report with the APS office. Chapters are also expected to address a core list of objectives established by the CAC. The original list of objectives established by Dr. Lauf and members of the CAC has been expanded to more accurately reflect updates and changes in the overall mission of the APS.

Chapter Objectives

The chapter objectives are as follows:

1. Strengthen through the chapters the common missions of physiology enshrined in its umbrella society, the APS.
2. Share research findings amongst the state's physiologists and advance collaboration.
3. Enthuse/induce younger generations from the high school to the college level to consider the discipline of physiology as a career.
4. Recruit and train Ph.Ds. at the postdoctoral and later junior faculty level to learn and teach the discipline of physiology.
5. Increase understanding of current cultural concerns such as research ethics.
6. Foster through collaboration with state government agencies and industry the direct and in-kind support of the discipline of physiology.
7. Disseminate research across societal strata and boundaries.
8. Strengthen programs to recruit, retain, and engage under-represented minorities and women in physiology.
9. Influence public policy impacting the discipline through advocacy.

Steps to Establishing a Chapter

Although steps for establishing a chapter are presented in sequence (Table 2), once the APS approves the petition, multiple processes can occur simultaneously. Although chapters are not required to operate as nonprofit corporations, it is highly recommended that they do so. Generally, a corporation is a business structure that insulates its owners from personal liability. A nonprofit corporation that focuses on a public cause can often additionally receive federal and state tax exemptions.

Although specifics of establishing a nonprofit corporation vary by state, the process is similar, and therefore, guidelines have been included. Once chapters are established as nonprofit corporations, they can file for tax exemptions both on a federal and on a state level.

This report is not intended to serve as legal advice, and chapters are highly encouraged to acquire legal assistance (if possible, pro bono) when writing by-laws and establishing a nonprofit organization.

The steps for establishing a chapter are included below.

Step no. 1: letter of intention sent to the APS. Individuals or groups of APS members interested in establishing a state chapter must initiate the process by submitting a brief letter to the Executive Director of the APS stating their intention to

Table 2. *Steps to establishing an APS state chapter*

Steps
1. Letter of intention sent to the APS; Executive Director will forward to CAC.
2. CAC provides contact information for all APS members registered in the state or region.
3. Contact APS members within the state/region to sign petition supporting the establishment of a chapter. <ol style="list-style-type: none"> a. 20 signatures required. b. Submit petition with signatures to CAC for approval.
4. Establish by-laws; forward to CAC for approval (CAC will present to APS Council). <ol style="list-style-type: none"> a. Sample by-laws at APS website. b. Pro bono legal counsel advised.
5. Elect officers and councilors; nonprofits require a minimum of 3. <ol style="list-style-type: none"> a. President, President-Elect, and Past President, typically 1-yr terms. b. Treasurer: extended term, 3 or more yr. c. Councilors: some chapters have 2–4 councilors in addition to officers; others do not.
6. Establish a nonprofit organization. <ol style="list-style-type: none"> a. File State Articles of Incorporation: Business Entity Report with Secretary of State. b. Obtain an EIN: IRS Form SS-4. c. Open a bank account (EIN required) d. File for Federal Tax Exempt Status: IRS Form 1023. e. File Application for Sales Tax Exemption: Forms specific to site. f. File as a charitable organization.
7. Establish chapter identity.
8. Plan first annual meeting. <ol style="list-style-type: none"> a. Contact APS to apply for Initiation and Strengthening Grant. b. Contact APS to request meeting support funds (awards and invited speaker).
9. Submit all annual reports. <ol style="list-style-type: none"> a. APS Annual Report: Meeting Summary and Data. b. State Business Entity Report. c. IRS Tax.

APS, American Physiological Society; CAC, Chapter Advisory Committee; EIN, employer identification number.

establish a chapter. The letter can be brief and needs only to state the intention of the APS member and the state he or she represents. The letter will be forwarded from the director to the CAC, and the chair of the CAC will be able to assist with each of the following steps.

Step no. 2: CAC provides names and contact information for all APS regular members registered in the state. The CAC, with assistance from the APS Executive Office, will provide the names and contact information for all APS members residing in the state or region. A means for communicating with APS members (likely e-mail or traditional mail) must then be established. In Indiana, a web-based chapter e-mail account was established, and a list-serve that included all Indiana APS members was compiled.

Step no. 3: APS members within the state are petitioned to support the establishment of a state chapter. The initiator for the chapter will distribute a petition that must be signed by 20 regular members of the APS (in good standing) who reside within the state or region. Although not required, it is best practice for the petition to be distributed to all APS members within the state or region. It is also advised that the 20 signatures come from members representing a variety of institutions. A name reflecting the proposed chapter's geographical location is specified on the petition. The signed petition is submitted to the chair of the CAC, who will discuss the petition with CAC members. If CAC members are in favor, the CAC

chair will then present the petition to the APS Council for approval (this can be done at any time and is not limited to the APS Council meetings). The APS Council will then put the petition up to a vote for approval. If approved (all chapters have thus far received approval), the initiator, the 20 petitioners, and all other interested individuals can begin to establish the APS chapter.

Step no. 4: establish a nonprofit corporation. The process for establishing a nonprofit corporation can be overwhelming. Several current chapters report that this task challenged the organization, as few members had prior experience. Even if chapters seek legal assistance, it is essential to effective communication that the process be generally understood. Therefore, brief descriptions of each step in the process are shared in this report. There are additional resources online, such as the Foundation Center for Nonprofit Organizations (<http://foundationcenter.org/getstarted/tutorials/establish/>) and the National Council of Nonprofits (<https://www.councilofnonprofits.org/tools-resources/how-start-nonprofit>).

FILE ARTICLES OF INCORPORATION. The first step in establishing a nonprofit corporation is to establish a recognized business entity within the state by filing Articles of Incorporation or other similar documents (generally referred to herein as “Articles of Incorporation”). This documentation is usually filed with the office of the Secretary of State, and state-specific forms (templates and instructions) are typically available online. Articles of Incorporation contain basic information such as the name of organization, registered agent (likely the president), address of the corporation’s principal office (president’s mailing address), and the names and contact information of all officers. The chapter will be required to regularly (typically annually or biannually) update their business registration information with the state (e.g., Indiana nonprofit corporations are required to annually file a business entity report).

DRAFT BY-LAWS. The CAC has published general guidelines for establishing chapters and a chapter by-law template is available at the APS website (<http://www.the-aps.org/mm/hp/Audiences/Chapters/BylawTempl-2>).

At this point in the process, it is advisable for chapters to seek legal counsel to assist in carefully scripting the by-laws in order to avoid future issues with establishing a nonprofit corporation or application for tax exemption. Each chapter writes its own specific by-laws since each state has slightly different requirements. To ensure that chapter by-laws do not conflict with the by-laws of the APS, chapter by-laws must also be submitted to the CAC for approval. Once approved by the CAC, the Chair presents by-laws to the APS Council for final approval necessary for formal adoption.

When scripting the by-laws, some chapters use the term “council,” whereas others prefer “board.” Regardless of preferred terminology, by-laws define how officers and councilors/board members will be elected and establish terms of office. By-laws will describe how the nonprofit organization will be managed and which staff and board members have authority and decision-making responsibilities. By-laws create a framework for the organization and aid in resolving internal disputes. Some chapters find it advantageous to describe committees that are responsible for specific functions such as membership and communications.

Although not immediately required, the chapter would be advised to write a mission statement, and develop both an

organizational policy handbook and a funding plan early in the planning stages. (<http://www.the-aps.org/mm/hp/Audiences/Chapters/chap-guidelines>). The organizational policy handbook outlines operating procedures for conducting meetings, filing minutes, record keeping, handling financial affairs, and other items appropriate for managing the chapter. A comprehensive funding plan will lay out an estimated budget and establish mechanisms for covering costs associated with both the annual meeting and additional chapter activities.

ELECT COUNCILORS (BOARD MEMBERS) AND OFFICERS. After by-laws have been approved by the APS, the chapter will proceed to elect its councilors (board members) to complete the incorporation process. States require that nonprofit corporations be governed by a board of directors (councilors). Councilors are either named in the Articles of Incorporation or separately named by the incorporator of the nonprofit organization (typically by written consent). The elected councilors will then hold their first meeting or approve by written consent the various organizational matters for the newly formed nonprofit organization such as appointment of officers, adoption of the by-laws, authorization of the opening of bank accounts, and application for an employer identification number (EIN). Typically, a nonprofit organization will have as officers a president, a secretary, and a treasurer. Including a president-elect and immediate past president can be valuable for continuity, as the immediate past president can assist and train the president, and the president can prepare the president-elect. It is also advisable to have the treasurer and secretary serve extended terms (≥ 3 yr) for continuity in record keeping and proper filing of business reports and taxes. In addition to officers, chapters will establish a board/council, with elected councilors serving terms as described in the by-laws. Council membership may include students.

OBTAIN AN EMPLOYER IDENTIFICATION NUMBER. Every nonprofit organization that will seek tax exemption, whether it will have employees or not, must apply to the Internal Revenue Service (IRS) for an employer identification number (EIN). The EIN is a nine-digit number the IRS uses to identify each organization. Chapters will use their EIN on all items sent to the federal government (including the IRS). Filing is relatively straightforward, there is no filing fee, and the process is usually complete in about 30 days or less. A copy of the application (IRS Form SS-4) can be located and submitted online (<https://www.irs.gov/pub/irs-pdf/fss4.pdf>) or by fax.

OPEN A BANK ACCOUNT. An EIN is also required to open a business checking account. It is recommended that two board members are processed for check signing and use of debit cards. However, all financial record keeping is managed by the treasurer.

Step no. 5: apply for tax exemptions. After officers are elected, the chapter is ready to begin the process of becoming a tax-exempt organization recognized by both the state and the federal government. It is important to note that obtaining an employer identification number (EIN) is required before filing for state or federal tax-exemption applications.

To obtain federal tax exemption, an organization must be organized for one or more tax-exempt purposes. Tax exemption under Section 501(c)(3) of the Internal Revenue Code is reserved for organizations whose purposes are religious, charitable, scientific, testing for public safety, literary, educational, to foster national or international amateur sports competition,

to promote the arts, or for the prevention of cruelty to children or animals.

Chapters that obtain federal tax-exempt status under Section 501(c)(3) are exempt from federal income taxes, often qualify for reduced state tax rates, receive reduced postal rates, are exempt from federal unemployment tax, and may be eligible to apply for public and private grants that are limited to nonprofit organizations. Also, contributions given to organizations exempt under Section 501(c)(3) are deductible by donors for income tax purposes.

APPLY FOR FEDERAL TAX EXEMPTION. There are two ways to apply for federal tax exemption. If a chapter anticipates receiving gross revenues of less than \$50,000/year and having less than \$250,000 of assets, it can file a streamlined, online application, Form 1023-EZ at <https://www.pay.gov/public/home>. The current cost of filing Form 1023-EZ is \$275. The IRS typically responds to straightforward applications within a few weeks. There is a checklist in the instructions for Form 1023-EZ online to determine eligibility at <https://www.irs.gov/pub/irs-pdf/i1023ez.pdf>.

If a chapter does not meet the requirements to file Form 1023-EZ, then it must file Form 1023, which involves providing the IRS with detailed narrative descriptions of what the chapter's planned activities will be and disclosing the chapter's directors and officers as well as any conflicts of interests that may arise out of them. Form 1023 also requires detailed projections of annual receipts and expenses, so chapters should be prepared with this information. The cost of filing Form 1023 is \$850. The IRS generally takes at least 6 mo to respond to a tax exemption application using Form 1023.

Whether a chapter applies using Form 1023-EZ or Form 1023, either the chapter will receive a Federal Determination Letter approving the application or the application will be denied (and the chapter will be asked to reapply). The IRS will often seek more information before approving or denying an application, which extends the process. Therefore, it can be helpful to ensure that the application is properly and thoroughly completed.

As long as the chapter submits its tax exemption application within 27 mo of filing its Articles of Incorporation (or similar document), if the application is approved, the effective date of the exemption will be back-dated to the date of incorporation, meaning contributions will be deductible to donors going back to the date of incorporation.

APPLY FOR STATE SALES TAX EXEMPTION. The Federal Determination Letter must be received before applying for state tax exemption. Requirements for state tax exemption vary by state, and chapters are advised to check with their state's Department of Revenue or Taxation to obtain necessary forms. The state tax exemption application is simpler than the federal and will save the chapter money on purchases made for the organization.

Step no. 6: register as a charity. Approximately 40 states require charities to register with the Attorney General or Department of Consumer Services before soliciting donations from the public. This ensures that all organizations requesting donations are in fact legitimate. Some localities impose additional registration requirements. States and localities also offer exemptions to the registration requirement, which may require a one-off exemption application to be submitted.

Many but not all states accept the Unified Registration Statement (URS) Charitable Registration, which is a multistate application. Some states that accept the URS also require an additional state-specific attachment. More information is available at <http://multistatefiling.org/>.

Step no. 7: establish chapter identity. Once the tax-exemption applications are submitted, officers and councilors can begin to focus on chapter activities. Developing a marketing plan will be important in establishing a recognized presence in the state. In Indiana, the process began with a logo design competition. The logo was then used for all correspondence, advertising materials, and the website banner. Advertisements and invitations to the first annual meeting were then sent via e-mail listserv to all APS members, and non-APS members listed as biology/physiology faculty on institutional websites throughout the state. Each year, the listserv is updated and used to distribute a "Save-the-Date" e-mail approximately 4–6 mo prior to the annual meeting.

Step no. 8: plan first annual meeting. Perhaps the best preparation in planning a chapter's first meeting is to send a few officers, councilors, and interested APS members to attend a nearby meeting to take notes and engage in conversation with meeting organizers. Developing a checklist for planning the meeting will be an effective way to get organized, divide tasks, and ensure continuity as new officers are elected and sites transfer. A few examples of important items to include on your checklist are located below.

- Identify all physiologists in the state who teach or do research at both graduate and undergraduate private and public institutions. Contact high school programs that may be interested in having students participate. Establish a database with contact information.
- Set up online meeting registration and abstract submission. Provide an incentive for "early bird" registration to get an early indication of attendance numbers essential to meeting plans, including number of meals and copying.
- Solicit volunteers to assist onsite before and during the meeting:
 - Registration table
 - Distribution and collection of name tags
 - Host for the keynote
 - Proctors for oral presentations
 - Technology and sound projection
 - Assistance with hanging/mounting posters
 - Runners
- Prepare an evaluation for meeting attendees to complete.
- Prepare a chronological PowerPoint presentation that guides the day's activities (includes introductions, time frame, location of events, etc.).
- Name a photographer to collect pictures throughout the day. Suggest getting a picture of each poster presenter. Share all pictures to a private web-based site for others to download.
- Send out thank you notes and donation receipts.
- Name a representative to gather meeting data and complete APS reports.

Annual meetings conducted at the state level report participation of between 60 and 180 individuals. Chapters should always collect attendance and award information (how many attending and/or receiving awards at each level: faculty, indus-

try, high school, undergraduate, doctoral, and postdoctoral) required for reporting to the APS.

Reporting Requirements (Government and APS)

Although reporting is at first tedious and time consuming, once the chapter is established, this task becomes relatively straightforward. Reporting is essential to keeping the chapter in good standing and includes the following.

Annual reporting to APS. The Annual Report provides APS with information regarding the administration, organization, and activities of the chapters. Meeting summaries should be written and submitted to the APS (these may include pictures). Meeting summaries will be published on the APS website and, upon request, can also be considered for publication in *The Physiologist*. Data report templates will be distributed to all chapters, and data accumulated from each chapter will be compiled by the CAC and circulated to all chapters.

State business entity report. Each chapter is required to regularly (typically annually or biannually) file an annual Business Entity Report with their state. After initial establishment of the chapter as a recognized business entity, subsequent reports can be filed online easily and require only updates.

Yearly tax forms. Chapters that have filed or intend to file a tax-exemption application within 27 mo of filing the Articles of Incorporation should file an exempt organization tax return from the first year of organization onward, even if they have not submitted the application yet (in which case the chapter should provide a cover letter to the IRS indicating that a tax exemption application will be filed at a later date to avoid rejection by the IRS's automated systems). There are three exempt organization tax returns, depending on the amount of gross receipts and assets: 990 (gross receipts \geq \$200,000 and/or total assets \geq \$500,000), 990-EZ (gross receipts $<$ \$200,000 and total assets $<$ \$500,000), and 990N (gross receipts normally \$50,000). Tax-exempt organizations that do not file tax returns for 3 consecutive yr will have their tax exemptions automatically revoked. States may have additional tax filing requirements, which may involve simply submitting a copy of the chapter's federal return.

Chapters with employees must also submit quarterly employment tax returns, Forms 940 and Form 941 (federally tax-exempt organizations are exempt from the requirement to file Form 940). It is important to file these forms as well as all Form W2s to employees, Form 1099s to independent contractors (chapters should be sure to obtain form W9 from independent contractors before paying them), and Form W3 to the Social Security Administration on time to avoid late filing penalties.

Charitable registration. Many states and localities that require registration by charities require annual filings. Chapters should confirm their local requirements.

APS Support and the Role of the Chapter Advisory Committee

From the earliest inception of chapters, the APS has offered support. Once a formal chapter program was launched, the APS recognized that there would be costs involved in starting and establishing each independent nonprofit organization. Therefore, the APS created an Initiation and Strengthening Grant in the amount of \$1,000/chapter. This grant is a one-time

financial support to help cover the costs associated with starting a new chapter. Approved chapters simply write to the APS Executive Director to request this support. The APS also supports each annual chapter meeting with \$500 for awards and \$1,000 toward costs related to hosting the invited keynote speaker.

In addition to financial support, APS has extended its support by hosting a web presence for each state (<http://www.the-aps.org/mm/hp/Audiences/Chapters>) and naming a chapter liaison within the APS Executive Office. More recently, the APS has enlisted the assistance of "advocacy speakers" and will cover costs for the speaker to attend and present at a chapter's annual meeting. The chapter can communicate their desire to include an advocacy speaker on their meeting agenda simply by writing to the APS Executive Director.

As mentioned previously, the Chapter Advisory Committee (CAC) was established to encourage communication and provide tactical support, mentoring, and self-monitoring of chapters. The CAC was established to support, not police, the chapters, but in order to secure viability and continuity, the CAC performs an annual review of chapter activities.

The CAC by-laws describe membership that includes a chair, a sage (immediate past president), a chair-elect, one CAC representative from each chapter, and the president of each chapter. The chapter president may simultaneously serve as both chapter president and chapter representative. Voting members include the chair, sage, chair-elect, and CAC representatives (all CAC members with a vote must be APS members in good standing).

All CAC members are asked to attend an annual CAC meeting convened as part of the APS meeting each year at Experimental Biology. A chapter representative for each chapter is also expected to attend the annual CAC meeting to report chapter activities and bring items for discussion. CAC representatives serve as conduits for information transfer between chapters and the CAC, and the elected chair of the CAC conveys chapter information to the APS Council.

Under the direction of Dr. Harald Stauss, the successor of Dr. Lauf as Chair of the CAC, the CAC established a competitive grant program in 2011. The Chapter Activity Grant Program was established with the primary aim of encouraging innovation in chapter educational outreach. Each year, the CAC encourages chapters to write for one of three awards with budgets not to exceed \$2,000. For example, the Nebraska Chapter received a grant to purchase equipment used in demonstrations at high schools in Nebraska.

Best Practices

There are numerous examples of "best practices" as described by chapters responding to a distributed survey (Table 3). There is ample evidence that local chapters are successful in carrying out the mission of the APS as they utilize unique ways to foster education, share scientific research, and nurture students interested in the discipline.

Solutions to Common Challenges

Hopefully, sharing of challenges, along with effective solutions, will help future chapter organizers avoid or manage pitfalls previously encountered by others. The most universally reported challenges include fundraising, establishing and main-

Table 3. *Best practices reported by chapters*

State	List of Best Practices
Arizona	<ul style="list-style-type: none"> • Host annual 2-day meeting with dinner and social hour on Friday night. • Select APS-sponsored national lecturer. • Include minute posters; students have 1 min to orally share their poster before traditional poster sessions. • Establish trainee talks and posters with awards.
Indiana	<ul style="list-style-type: none"> • Establish an email account for society communication. • Establish dynamic website and web master. Provide links and forms for meeting registration, abstract submissions, and nominations. • Host online registration both prior to and day of the annual meeting; plan to allow use of credit/debit card, ideal to avoid handling cash money. We've also found that approximately 95% of registration occurs in advance, ideal for meal and facilities planning. • Establish different meeting registration cost for students, faculty, and industry. Provide scholarships for students (primarily high school) that may find the cost prohibitive. • Develop online abstract submission with automatic e-mail to Society. <p>Submission requirements as to font, size, and format provide easy download and publication in meeting program.</p> <ul style="list-style-type: none"> • Organize a study section of volunteer postdocs and doctoral students to read and score abstracts using a rubric. Top scores invited for 1 of 8 available student oral presentations, all others invited to present posters. • Coordinate volunteer faculty judges and use a rubric to score all oral and poster presentations. Base awards on sum of abstract and presentation scores. • Include two 45-min poster sessions during the day to maximize interaction. Allow posters to include diverse topics related to the discipline. • Conduct council meetings once a month via distance (web-based) platform. Meeting minutes are recorded and distributed, and actionable items are highlighted. • Develop breakout sessions at annual meeting; target student's interest, career development, and education of the educator. • Establish a meeting theme each year; target keynote to match theme. • Rotate the annual meeting each year. Site location and meeting management is typically handled by the Vice-President (usually on the campus of the Vice-President). • Work closely with mentors for high school health and science programs. • Plan for transferring leadership. President-Elect is actively involved in the year prior to their term. Copies of all meeting minutes and other important documents are kept in a binder and transferred to the President. • Set the date for the annual meeting as early as possible (in Indiana, we select the next site at the first councilors meeting after the annual meeting). • Send "Save-the-Date" notices at least 4–6 mo prior to the annual meeting. • Write personal letters to any donors stating exempt status, the amount donated, and a sincere thank you. Share details for the next meeting. • File annually: APS reports, Business Entity report (state), and IRS tax statement. • Elect treasurer with extended term (3 yr); be sure to keep record of all financial transactions and reports.
Iowa	<ul style="list-style-type: none"> • Focus on APS goals at the state level. • Join forces when organizing. When IPS was founded in 1995, its organizers felt that the cause of physiology in Iowa could best be served by joining forces with the IAS. The current IPS President and President-Elect are elected to corresponding positions in the IAS Physiology & Health Section and chair the session at the annual IAS meeting. IAS has a large enrollment of precollege and undergraduate teachers. By joining forces with the IAS, close interdisciplinary contact is established between researchers, teachers, and potential young physiologists throughout Iowa. • Conduct elections according to by-laws. IPS Executive Board currently consists of a President (1-yr term), President-Elect (1-yr term), Past President (1-yr term), and Secretary/Treasurer (3-yr term). • Remember that all members have voting rights. • Invite any person who is presently engaged in physiological research or teaching in to become regular members. Students who engage in physiological work are eligible for student membership.
Kentucky	<ul style="list-style-type: none"> • Communicate via email often. • Visit each other's university to organize the annual meeting. • Make regular announcements (via email, faculty meetings) to get more involvement. • Provide service learning credits for students who attend the annual meeting. • Recruit students from many universities and high schools. Reach out to high school science teachers. • Give awards for the best presentations (trainee category, Post Doc, Graduate, Undergrad, High School). • Plan for both oral sessions and poster sessions. • Invite speakers (faculty) and include both research and educational focus.
Michigan	<ul style="list-style-type: none"> • Organize a website that can collect payments. This will save you a lot of work. • Establish a meeting site planning team. Have someone on site close by to work out details. • Identify every college and university with a physiology/biology department or program within the state and send a letter of invitation to every department/director/chair. • Identify a core group of about 5 dedicated members from multiple institutions that are willing to get a chapter off the ground. • Organize efforts to become a nonprofit. You can immediately become tax exempt with your state, but you need a year of financial expenditures to determine an approximate annual budget necessary to apply for nonprofit status with the IRS. • Plan to have individuals on site on the day/days of the event to run a registration booth, take pictures, set up poster boards, work with the caterer, and handle any last minute issues. This person typically does not take part in meeting/scientific activities. • Announce the following year's dates and location at the annual meeting. • Debrief council in a conference call following the annual meeting. Starting in the fall, have monthly, 1-h conference calls to plan the meeting. • Fundraise several months in advance from all academic institutions and industry sponsors to cover the costs for anticipated attendance.
Nebraska	<ul style="list-style-type: none"> • Hold monthly meetings to keep abreast of NPS activities. • Keep the chapter executive office stable at one university. Best advice to other chapters is to keep administration in one institution even if the President and council members change. • Centralize support; one university provides all administrative support for the chapter. • Plan for active and consistent outreach activities. • Recruit members from adjacent states. • Send out sponsorship letters. We usually get 4–5 sponsors for each meeting.

Continued

Table 3.—Continued

State	List of Best Practices
Ohio	<ul style="list-style-type: none"> • Agree on meeting locations more than 1 yr in advance.
Oklahoma	<ul style="list-style-type: none"> • Hold executive meetings quarterly. • Coordinate outreach PhUN activities with elementary schools. • Plan to include high school teachers and students.

IPS, Iowa Physiological Society; IAS, Iowa Academy of Science; NPS, Nebraska Physiological Society; PhUN, Physiology Understanding.

taining a dynamic web presence, soliciting volunteer leadership, record keeping, sustaining member participation, and establishing a nonprofit.

To address financial challenges, chapters find creative ways to cover costs of the annual meeting. Many chapters receive support in the form of low- or no-cost facilities. For example, Michigan has discovered differential pricing for within-institution reservations versus external bookings. To address the issue, the chapter asks the institution to house a portion of funds to use on institution-specific charges, thus allowing them to take advantage of discounts by booking “from within an institution.” Similarly, Indiana typically asks the president-elect to host the annual meeting, and the host is able to secure facilities at their institution for no or low cost. Another option is to host meetings at governmental locations or National Parks that are often willing to allow nonprofit organizations to use facilities for a nominal fee. The Iowa Chapter has successfully used this strategy and hosted two annual meetings at the Hoover Presidential Library close to Iowa City, IA.

Chapters also report seeking institutional support for services such as printing, web design and hosting, sponsorship of snacks and meals, awards, and general administration. For example, in Indiana, one member’s organization donates the printing of programs, another member provides web support and hosting, and others assist with finding support for awards and named sponsoring of coffee breaks. A variety of additional types of support come in the form of commercial and educational booth rental at the annual meeting, corporate sponsorships, and small grants. Although the APS Development Office is not directly involved with chapter fundraising, chapters can reach out for assistance in identifying potential support within the state and generating a letter of solicitation.

Although the APS provides a website for each chapter, the primary purpose of the site is sharing of by-laws and dissemination of the Annual Report. Although useful, the APS sponsored website is limited in scope. As a result, the majority of active chapters choose to develop and maintain an independent website despite the cost and expertise required. Chapters such as Indiana and Michigan have found ways to maximize the web presence by linking meeting registration (including payment of registration and membership fees) and abstract submission to the site. Online submissions allow for managed financial records, tracking of membership data, and formatting of abstracts that easily transfers to the meeting program.

Sustaining volunteer leadership can also be challenging. Nominating councilors agreeable to run for election requires a concerted effort of the membership. Chapters are encouraged to limit terms to 2 or 3 yr and continually look for ways to reach out to potential parties of interest. For example, moving the annual meeting to a new location each year will increase visibility of the chapter throughout the state and hopefully be advantageous when seeking volunteer leadership. At some

point, recruiting volunteer leadership gets easier as student participants find themselves employed within the state and willing to “give back.”

It can be perplexing to sustain the participation and interest of members. It will serve the chapter to continually encourage participation from all schools, both public and private, within the state or region (high school, undergraduate, and graduate). Making personal contact with individuals interested in the discipline of physiology (teaching and/or researching) has been a productive approach reported by several states. Leadership may wish to invite high school and undergraduate student organizations (science clubs, pre-professional health clubs, etc.) and look for ways to reduce costs and offer scholarships to partially or fully cover student attendance. Including “something for everyone” at the annual meeting is another strategy to maximize participation. For example, in Indiana, we have three breakout sessions, with each targeting a different demographic (high school and undergraduate students, educators, graduate students, and researchers). Soliciting feedback from the membership (evaluations distributed at the annual meeting) is another way to continually update and improve the offerings that will draw member participation.

Although somewhat problematic, keeping and transferring records is essential. It is highly suggested for chapters to keep paper and digital copies of all meeting minutes, correspondence, and legal documents in a safe (and backed-up) location. The incoming president of each chapter will benefit greatly from reviewing meeting minutes from the previous year. The treasurer will also need to have access to all records. Annual tax and business entity reporting will be much easier if organized records are kept.

Conclusions

Activities reported by active chapters provide ample evidence that the discipline of physiology is being effectively promoted and advanced through the chapter program. Chapters provide professional engagement opportunities not just for APS members but also for many students and faculty who may not (for various reasons) have the opportunity to engage elsewhere. Personally, being involved in the organization and continued activities of an APS chapter has been one of the most gratifying aspects of my career as a physiologist.

Additionally, current changes in American Medical Association and Liaison Committee on Medical Education guidelines eliminate physiology as a recognized course and instead promote inclusion as a subtopic of other courses. These changes may result in physiology as a discipline being less recognizable. Chapters may play a critical role in sustaining recognition and support for the discipline and promoting physiology as a scientific focus for students.

In the earliest stages of chapter development, the potential of having 50 state chapters was discussed. Although chapters are successfully carrying out the mission of the APS, growth of the program to date includes just 13 active chapters. It is hoped that by sharing the history, others can appreciate how just one person with a vision, enlisting the collaboration of others, can successfully establish a chapter. There are many reasons for establishing a chapter, and the APS, primarily through the CAC, is there to guide the process. Additionally, current chapter leaders are willing to give support and advice. Perhaps the most fitting closing comments are the words of wisdom shared by colleagues from other chapters:

Talk to state chapters that have been doing this for a while. If possible, visit another state's annual meeting to view (and perhaps even participate) in the day's events. The energy of the chapter meeting is infectious!

Organize a website that can do more than disseminate information. Have links to register meeting participants, collect payments, and manage abstract submissions. This will save you a lot of work!

Identify a core group of dedicated members from different institutions that are willing to get a chapter off the ground.

Work together, begin with identifying a large group of graduate, undergraduate, and K-12 educators as possible. If industry involvement is possible, then they should be included as well.

Locate legal assistance (hopefully pro bono) early in the process to help with timely submission of documentation. Keep copies of everything! Don't be afraid to make phone calls and ask questions!

Perhaps the best advice of all is this: Jump in and get started; get the 20 signatures. There will be support to do this!

If one were to set the goal of 20 active chapters by 2025, it would be of future interest to once again survey chapters to

determine whether this paper sharing the history, rationale, and how-to played a role in encouraging and supporting chapter program expansion.

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DISCLOSURES

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