

# The Pediatric Orthopaedic Society of North America: Where Are We Now?

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## Introduction

The Pediatric Orthopaedic Society of North America (POSNA) is excited to celebrate 50 years of the subspecialty of pediatric orthopaedic surgery in North America. While POSNA as an organization was not formed until 1984, its roots can be traced back to the Pediatric Orthopaedic Society (POS) and Pediatric Orthopaedic Study Group (POSG) founded in 1971 and 1974, respectively.

In 1996, Dr. Hugh Watts, POSNA historian from 1992 to 1999, wrote a detailed and personal account of the first 25 years of the pediatric orthopaedic societies in North America (1971-1996).<sup>1</sup> This manuscript offers a fascinating glimpse into the early generations of pediatric orthopaedic surgeons in North America, particularly their goals and visions for this organization.

The current members of POSNA's History & Archives Committee have sought to expand on this historical account, with notable updates from the past 25 years (1996-2021). These highlights are certainly not comprehensive but seek to touch on POSNA's missional pillars of membership, education, research, patient care, and advocacy. In addition to Dr. Watts, we would like to acknowledge and thank POSNA's past historians, Drs. David Sutherland, Dale Blasier, Matthew Bueche, Jay Shapiro, and William Shaughnessy.

## Structure & Governance

As POSNA has grown over time, its leadership and administrative structures have also evolved. At the first POSNA meeting in 1984, the Board of Directors consisted of seven members: president, presidentelect, past president (the last POS president), secretary, treasurer, and two members-at-large (Figure 1).

Over the years, the administrative and management framework has evolved to meet the growing needs of the society and the desire of POSNA members to be more involved. This growth has included an increasing number of voting and ex-officio members of the Board of Directors, a robust volunteer committee system, the





*Figure 1.* Photo of the inaugural meeting of the Pediatric Orthopaedic Study Group (POSG) and Pediatric Orthopaedic Society (POS) to form the Pediatric Orthopaedic Society of North America (POSNA). Photo: Crawford, A., Price, C., & Phillips, D. (2021). Mihran O. Tachdjian, MD. JPOSNA®, 3(2).

addition of council chairs to help manage the growing number of POSNA committees, and the establishment of what is now an independent POSNA executive management staff.

As POSNA rapidly grew, so did the number of members in the leadership structure. In 1988, a third member-at-large was added which mirrored the growing number of members. In 1989, the board added positions for representatives to the American Academy of Orthopaedic Surgeons (AAOS), the American Academy of Pediatrics (AAP), and the Council on Musculoskeletal Specialty Societies (COMSS). COMSS later morphed into the Board of Specialty Societies (BOS). This was how the Board of Directors remained until 2002. All the while, many volunteer working committees were formed within POSNA to help the society meet its strategic goals. As Drs. Chad Price and Baxter Willis recall, up until 2002, each committee reported directly to the president, who developed annual charges and communicated directly with each committee chairperson. From 2000 to 2005, the number of committees increased as membership expanded. Keeping up with the many active and productive committees became too grueling for the president to manage personally. In 2002, POSNA followed the example of AAOS in establishing a council structure

starting with the Education Council chair and the Health Care Delivery Council chair. Over the next 17 years, more councils were added, including the Research Council (2004), Communications Council (2004), History Council (2005), Finance Council (2005), and QSVI Council (2019) (Table 1). Along the way, in order to best represent POSNA membership, the number of members-at-large increased from three (1988) to four (2006), to five (2010), and finally to the current number of six (2016). There are now 13 voting members and nine ex-officio members on the Board of Directors (Figure 2).

As Dr. Watts described in his original manuscript, the AAOS Division of Specialty Societies assumed the managerial duties for POSNA in 1986. Hildegard Klemm was the first POSNA manager. Klemm was followed in this role by Karen Jared and then Sheril King. These managers did not work full-time for POSNA, as they had other duties through the AAOS. Due to the growing membership and needs of the society, it was determined around 1996 that POSNA needed a full-time executive director. A search committee made up of Drs. Chad Price (member-atlarge), Michael Goldberg (president-elect), and Jim Beaty (secretary) chose Sharon Goldberg as the first full-time executive director. Teri Stech was hired



# Table 1. Current POSNA Councils and Committees

Education Council	Core Curriculum
	Educational Courses
	e-Editorial
	IPOS®
	Pre-Course
	Program
	Traveling Fellowship
Research	Evidence Based Practice
	Micro Grants
	Research
Health Care Delivery Council	Pediatric Orthopaedic Global Outreach (POGO)
<u> </u>	POSNA/SRS Pediatric Device
	Practice Management
	Trauma Prevention & Disaster Response
Communications Council	Advocacy
	JPOSNA®
	Publications
	Public Education & Media Relations
	Resident Communications
	Technology Oversight
QSVI Council	PSSP (POSNA Safe Surgery Committee)
	QSVI Hand/UE
	QSVI Hip/LE
	QSVI Spine
	QSVI Sports
	QSVI Trauma
	QSVI Neuromuscular
Finance Council	Development
	Industry Relations
	Treasurer
History Council	History & Archives
	Hall of Fame
Secretary's Council	Bylaws
	Ethics – Conflicts of Interest
	Membership



	Mentorship
	Nominating
	Wellness
President's Council	Awards
	Diversity
	Fellowship Accreditation Oversight
	Fellowship Match Grievance
	Fellowship Training/Qualification for Practice
	Long Range Planning

#### Table 1. Current POSNA Councils and Committees Continued



Figure 2. The 2021-2022 POSNA Board of Directors: (front row, left to right) Michelle Caird, MD; Stephen Albanese, MD; Michael Vitale, MD, MPH; Mininder Kocher, MD, MPH; Jeffrey Sawyer, MD; Dan Sucato, MD; Julie Samora, MD, PhD; (second row, left to right) Emily Dodwell, MD; Brian Brighton, MD, MPH; Matthew Oetgen, MD, MBA; Eric Edmonds, MD; Unni Narayanan, MD, FRCSC; Sumeet Garg, MD; Suken Shah, MD; (third row, left to right) Theodore Ganley, MD; Henry "Chip" Iwinski, MD; Corinna Franklin, MD; Scott Rosenfeld, MD; Bryan Tompkins, MD; Donald Bae, MD; Rachel Goldstein, MD.

as society assistant. In 2008, Stech became POSNA executive director, a position that she still holds today. From 2008 to 2018, Stech led a POSNA managerial team that grew to nine members including society coordinators, meeting and education coordinators, membership and marketing coordinator, accounting assistant, and communications coordinator (Figure 3).

Although AAOS had served POSNA well in providing society management, POSNA had grown to the point where having greater control over societal direction,





*Figure 3. Current POSNA staff members: (left to right) Lily Atonio, Jeanne Mulay, Natalia Eicker, Tara Long, Teri Stech, Kaitlyn Petrando, Erica Linskey, Lisa DuShane.* 

priorities, finances, and decisions was attractive. Thus, in 2018, POSNA leadership began to consider alternative management options. The exploratory process was led by Drs. Steven Frick (then president) and Stephen Albanese (president-elect); and Teri Stech. During the September 2018 meeting of the Board of Directors, three options were considered for societal management moving forward. First, POSNA could continue under AAOS management as it had for the previous 32 years. This relationship had many advantages including continuity, integrated, support services, established facilities, professional staff development, and experienced financial management. Alternatively, POSNA could transfer to another management company and did, in fact, consider proposals from five management companies. Finally, POSNA could take the relatively unprecedented step of moving to self-management as a completely independent pediatric orthopaedic society. Drs. Frick and Albanese recall the following points of consideration in making this decision. As POSNA matured, the society had developed its own identity as a group of pediatric specialists which had unique goals and priorities. Thus, it now needed the freedom to nurture that identity to best meet the needs of its membership. Dr. Frick noted that POSNA now "had a very seasoned, experienced executive leadership

team" to help navigate the course moving forward. To that end, the leaders felt that they needed to be able to maintain this seasoned managerial staff and have control over staffing needs and numbers, compensation, benefits, and office space. POSNA could also better meet the needs of its membership by controlling its own focus of activities, especially around educational courses. In particular, the ability to control strategic and business decisions for meetings like the International Pediatric Orthopaedic Symposium (IPOS®) and AAOS Specialty Day were major considerations. At the May 2019 meeting, the Board of Directors considered these management options and voted to approve the transition to independent POSNA management. On February 3, 2020, POSNA moved into its new offices at 1 Tower Lane in Oakbrook Terrace, Illinois, to begin its journey under independent management.

# Membership

## Total Membership

As Dr. Watts previously described, the POS began in 1971 with 12 founding members (Figure 4). The POSG held its first meeting in 1974, with invitations extended to 15 individuals and nine in attendance.

Each organization grew steadily and at the time of their merging into POSNA in 1984, there were 244 active and senior members. By the time of Dr. Watts' original manuscript in 1996, the 25<sup>th</sup> anniversary of the pediatric orthopaedic community in North America, POSNA membership had reached 505 members. In the 25 years since then, POSNA membership has continued to expand and diversify in many ways. Total membership in 2022 reached a record high of 1520 individuals.

## Membership Categories

POSNA's membership categories have evolved over time, contributing to a wider diversity in its membership. In keeping with the traditions of POS and POSG, POSNA originally had active, senior, corresponding, and honorary members. In 1987, the society began to offer associate membership as well.





Figure 4. The second annual meeting of the POS at the Mayo Clinic in 1972: (front row) Douglas McKay, MD; Bill Green Jr., MD; Anthony Bianco, MD; George Lloyd-Roberts, MD; Burr Curtis, MD; Dean McEwen, MD; Robert B. Winter, MD; Howard H. Steel, MD; (back row) William F. Donaldson, MD; Sherman S. Coleman, MD; Arthur M. Pappas, MD; Wood W. Lovell, MD; John E. Hall, MD; Mihan O. Tachdjian, MD; Frank H. Stelling III, MD.

Currently, the society's members are divided into the following categories:

- Active: pediatric orthopaedic surgeons who reside and practice within the United States or Canada
- Affiliate: pediatric orthopaedic surgeons from a country other than the U.S.A. or Canada
- Associate: MDs, DOs, or PhDs, who are actively engaged in a profession that directly relates to pediatric orthopaedic surgery either clinically or in the field of research
- Adjunct: advanced healthcare providers (nurse practitioner or physician assistant) or researchers with master's level education (or greater) who are actively engaged in a profession that directly relates to pediatric orthopaedic surgery

Since most membership categories require board certification and an active orthopaedic practice, there are also membership options for trainees who are not yet fully certified. These include the candidate active, candidate affiliate, and candidate associate categories. From 2010 to 2020, active members comprised 50-60% of the total membership, with active and candidate active members comprising 70-75% of the total membership (Figure 5).

Emeritus membership status may also be requested by an active, affiliate, associate, or adjunct member who has retired from active clinical practice or for medical reasons is fully and permanently disabled from clinical duties regardless of age. Honorary membership may be conferred by the Board of Directors to honor an individual who has made significant contributions to pediatric orthopaedics. Figure 6 shows the international representation of POSNA members from 46 countries around the world.

## Membership Requirements

Since the days of POS and POSG, the society has always sought to cultivate orthopaedic surgeons with specific interests and expertise in pediatric orthopaedics. Thus, they created the requirement that





Figure 5. POSNA membership by year and membership category.



Figure 6. Map highlighting countries with POSNA members (red).

75% of a surgeon's practice must be related to pediatric orthopaedic surgery (50% for candidate members). This requirement is still in place today, although there is an alternate prerequisite of completing a full year clinical pediatric orthopaedic fellowship. Furthermore, members must attend the POSNA Annual Meeting or IPOS<sup>®</sup> meeting once every 3-5 years, depending on their membership category. Emeritus and honorary members are exempt from meeting attendance requirements or annual dues.



## Membership Benefits

Members of the society have access to a wide variety of opportunities in education, research, mentorship, and networking. Educational opportunities for residents and fellows include online study guides, video tutorials (POSNAcademy), and discounted registration at IPOS<sup>®</sup> and POSNA annual meetings. Surgeons have access to the latest in education and research through the annual meeting, peer-reviewed publications (discounted access to the *Journal of Pediatric Orthopaedics [JPO*], and *Journal of the Pediatric Orthopaedic Society of North America* [*JPOSNA*<sup>®</sup>]), online webinars, and traveling fellowships.

The society offers robust research networking and mentorship opportunities, in addition to over \$400,000 in research grants each year. Participation in the Committee Appointment Program (CAP) allows members to get involved on a societal and national level. There are currently approximately 460 members serving on 55 councils and committees.

## Diversity

POSNA is proud to be one of the most diverse orthopaedic specialty organizations. It is noted in Dr. Watts' manuscript that the POSG had three female orthopaedic surgeons among its original 15 members (Dr. Virginia Badger of St. Louis, Dr. Liebe Sokol Diamond of Baltimore, and Dr. Maureen Malloy of Boston). At the time Dr. Watts wrote his manuscript in 1996, he noted that there were 38 female POSNA members (8%). Dr. Laura Tosi was the first female member of the Board of Directors in 1990 (member-at-large). Dr. Lori Karol was the first female president of POSNA in 2015.

While POSNA has not kept official records of member demographics, a recent publication by Singleton et al.<sup>2</sup> involved data collection from POSNA directories from 2010 to 2020. The authors reported that female members comprised 15% of all active members in 2010, 18% in 2015, and nearly 24% in 2020. Data from the POSNA organization from 2019 to 2020 showed not only the increased proportion of female active members to 24% but an increased proportion of female candidate active members to 42% (Figures 7 and 8).

This data suggests that the proportion of female active POSNA members will continue to increase in the next several years. By comparison, AAOS reported 6.5% female membership in 2017.<sup>3,4</sup> Singleton et al. also reported increases in the percentage of Asian (7.4%



*Figure 7.* Largest gathering of women pediatric orthopaedic surgeons at the 2017 EPOSNA meeting in Barcelona, Spain.







B Candidate Active Members 2020



**Figure 8.** A) Proportions of active POSNA members by gender in 2020, F = female, M = male. B) Proportions of candidate-active POSNA members by gender in 2020.

to 11.2%), African American (1.6% to 1.8%), and Hispanic/Latino/South American (2.5% to 2.9%) active membership from 2010 to 2020.

POSNA's efforts to improve diversity and inclusivity began with the broadening of membership to include international affiliate members as well as professionals other than orthopaedic surgeons as associate and adjunct members. In 2021, the Justice, Equity, Diversity, and Inclusion (JEDI) Committee was created with several goals including improving diversity within POSNA mentorship and leadership, providing more educational opportunities within the organization and to the community at large, and collaborating with other specialty societies related to this topic.<sup>5</sup>

## **Education**

#### **Fellowships**

Dr. Watts described the development of formal pediatric orthopaedic fellowships and accreditation as did

Dr. Dennis Wenger and the POSNA History Committee in their publication in 2006.<sup>6</sup> Formal year-long fellowship training emerged in the early 1970s and by 1990, 57 pediatric orthopaedic fellowship positions were offered. A match system for accredited fellowships was introduced in 1989 but not widely utilized. Dr. Vernon Tolo noted that in 1995, "there were somewhere between 15 and 20 applicants that went through the match for around 30 fellowship places that stayed within the match." This placed an undue burden on applicants who were often asked to accept a fellowship position without the benefit of interviewing widely. The San Francisco Match has been utilized since 2011 by all North American pediatric orthopaedic fellowship programs and applicants to create a more equitable and streamlined process. In 2021, there were 45 North American fellowship programs offering 73 positions, of which 60 were filled.

Fellowship accreditation has been maintained by the Accreditation Council for Graduate Medical Education (ACGME) for many years. However, not all pediatric orthopaedic fellowship programs were ACGME certified due to the somewhat onerous process involved. In 2016, the POSNA Fellowship Committee introduced an alternative pathway for fellowship accreditation. The goal was to outline the minimum criteria for the pediatric orthopaedic fellowship training process. This included a minimum operative case volume, experience at a pediatric trauma center, a 2:1 ratio of faculty members to fellows, and a comprehensive educational curriculum tailored for pediatric orthopaedic fellows. All 44 current pediatric orthopaedic fellowship programs are now accredited by either POSNA, the ACGME, or both.

## **IPOS<sup>®</sup>** Transition

The Tachdjian Course, founded by Dr. Mihran Tachdjian in 1972, was originally a pediatric orthopaedic review course for residents studying for the board examination.<sup>7</sup> It was also an opportunity for international faculty to connect and bring more awareness to the growing subspecialty. As Dr. Watts wrote: "While this 'for profit' undertaking provided good food for the faculty, it also provided instruction for generations of young



orthopaedic surgeons (many of whom were in the throes of terror due to impending board examinations). But perhaps its most important feature has been less recognized that of its influence on internationalizing American pediatric orthopaedics."

Today, the Tachdjian Course lives on as the International Pediatric Orthopaedics Symposium (IPOS<sup>®</sup>). After Dr. Tachdjian passed away in 1996, Dr. Chad Price took over management and production of the course from 1998 to 2004. The course was initially funded by Nemours, then AAOS, and ultimately POSNA. Its mission is "to provide the highest quality pediatric orthopaedic education to learners and practitioners of all levels," though pleasant meals and camaraderie remain consistent characteristics. The 17th annual event was held in 2021. The original faculty size of 28 has grown to 75 members from eight countries in 2019. The format offers concurrent breakout sessions for topics in general orthopaedics/trauma, hip, hand and upper extremity, spine, sports, neuromuscular and cerebral palsy, foot, syndromes, dysplasias, and genetic conditions, POPS (Pediatric Orthopaedic Practitioner Society), lower extremity and deformity, and essentials of pediatric orthopaedics. Resident and fellow professional development and mentorship have become hallmarks of the meeting. Scholarships are available for trainees who wish to attend, and awardees are invited to participate in a case competition. A career planning session and mentorship breakfast are also highlights of IPOS<sup>®</sup>, surpassed only by the Top Gun resident and fellow surgical skills competition.

IPOS<sup>®</sup> represents the best of POSNA and its members. Veteran and future members gather to teach, learn, and create lasting relationships that enable them to provide the highest level of care for pediatric patients. Few meetings tackle the breadth and complexity of orthopaedic conditions in such a collegial and welcoming atmosphere.

## **Online Educational Resources**

In 1996, Dr. Watts noted that "with the rapid growth in availability and interest in technology, an electronic bulletin board was started for POSNA members in November 1993. The progress has been slow to catch on as the average pediatric orthopaedic surgeon, while well versed in computer use of word processing and spreadsheets for research, appears to be moderately terrified of electronic telecommunication. The number of postings now average approximately 40 to 50 each month." Any aversion to telecommunication by today's average POSNA member has been replaced by a full embrace (if not an overindulgence) of the medium. The electronic bulletin board has evolved into POSNA.org, which provides a central messaging platform and database of the various educational initiatives of the society.

A core curriculum that outlined a standard body of knowledge of pediatric orthopaedics for residents was developed under the leadership of Dr. Richard Gross. In 2012, the POSNA Core Curriculum Committee was established. The first chair of that committee, Dr. Young-Jo Kim, was tasked with reviewing and expanding Dr. Richard Gross' curriculum for orthopaedic surgery residency programs. The goal was to update the Core Curriculum so that it can serve as a standalone, up-to-date, comprehensive learning tool for residents and fellows training in pediatric orthopaedics. The result of that effort is what is now known as the "Study Guide," which remains published in the Physician Education section of the POSNA website. As of 2022, there are 102 topics categorized by anatomical location or pathophysiology.

The Study Guide is part of a robust Physician Education section on the POSNA website, which includes subsections for IPOS<sup>®</sup>, POSNAcademy, Evidenced Based Orthopaedics, the POSNA Quality, Safety, and Value Initiative (QSVI), the Resident Review, Pediatric Orthopaedic Global Outreach (POGO), and Position Statements from relevant pediatric professional societies.

POSNAcademy was established in 2014 and has become the central repository of audiovisual educational content for POSNA. Though it is difficult to measure the impact, POSNAcademy is enormously popular. In 2021, the site contained 704 videos and witnessed 83,835 video plays (~7000/month) for a total of 473,530 minutes viewed. POSNAcademy continues to grow each year as content from IPOS<sup>®</sup>, the annual meeting, and webinars are added.



## Table 2. International Pediatric Orthopaedic Societies Affiliated with POSNA

Sociedad Argentina de Ortopedia y Traumatologia Infantil (SAOTI)
Australian Paediatric Orthopaedic Society (APOS)
Belgian Orthopaedic Pediatric Society (BAPO)
Sociedade Brasileira de Ortopedia Pediátrica (SBOP)
British Society for Children's Orthopaedic Surgery (BSCOS)
Sociedad Chilena de Ortopedia y Traumatología Infantil (SCHOT)
Egyptian Pediatric Orthopaedic Society (EGPOS)
Société Française d'Orthopédie Pédiatrique (SOFOP)
Pediatric Orthopaedic Society of the German Speaking Countries
Paediatric Orthopaedic Society of India (POSI)
Iranian Pediatric Orthopaedic Association (IPOA)
Israeli Pediatric Orthopedic Society (IOA)
Società Italiana di Ortopedia e Traumatologia Pediatrica
The Japanese Pediatric Orthopaedic Association (JPOA)
The Korean Paediatric Orthopaedic Society
ASEAN Paediatric Orthopaedic Society (APOS)
Sociedad Mexicana de Ortopedia Pediátrica (SMOP)
Paediatric Orthopaedic Society of New Zealand (POSNZ)
Norwegian Pediatric Orthopaedic Society
Polish Pediatric Orthopaedic Society (PPOS)
South African Paediatric Orthopaedic Society (SAPOS)
Sociedad Española de Ortopedia Pediátrica (SEOP)
Swedish Pediatric Orthopedic Society
Taiwan Pediatric Orthopedic Society (TPOS)
Thai Pediatric Orthopaedic Society
Turkish Society of Children's Orthopedic Surgery (TSCOS)
Ukranian Association of Pediatric Orthopaedics
Continential Alliance Partners
Asia Pacific Paediatric Orthopaedic Society (APPOS)
European Paediatric Orthopaedic Society (EPOS)
Middle East Pediatric Orthopaedic Society (MEPOS)
La Sociedad Latinoamericana de Ortopedia y Traumatologia Infantil (SLAOTI)



# International Fellowship and Educational Outreach Efforts

POSNA has established three traveling fellowships in collaboration with La Sociedad Latinoamericana de Ortopedia y Traumatologia Infantil (SLAOTI), the European Paediatric Orthopaedic Society (EPOS), and the Asia Pacific Paediatric Orthopaedic Society (APPOS). Each year, three POSNA fellows and three fellows from an allied society participate by presenting research, exchanging techniques, and strengthening international ties.

To further facilitate international connection and education, POSNA maintains an alliance with 31 pediatric orthopaedic societies across the world (Table 2). Membership and the Board of Directors of the Alliance Society and POSNA must approve partnerships. There are no special annual dues.

Recognizing the need to improve access to orthopaedic care worldwide, POSNA established Children's Orthopaedics in Underserved Regions (COUR) in 2007, now named the Pediatric Orthopaedic Global Outreach (POGO) committee. The International Scholars Program provides scholarships for international orthopaedic surgeons to visit U.S. host sites and attend IPOS<sup>®</sup> and POSNA annual meetings.<sup>8</sup> The committee also hosts a special symposium at the annual meeting, facilitates outreach missions to underserved regions by the POSNA membership, and collaborates with alliance societies to sponsor educational courses in underserved regions.

# Research

Dr. Watts noted that up until the mid-1990s, attempts at combined clinical research within POS, POSG, and POSNA had been "lukewarm." As POSNA continued to hone its mission and purpose, there was a renewed focus on promoting and funding research. Prior to adopting the council structure, board members had short terms and limited resources to follow through on such initiatives. The POSNA Research and Education Fund was started in the early 1990s. The original POSNA research grant alone has provided \$1.82M from 1996 to 2021. Starting in the late 1990s and early 2000s with the development of the Research Council, initially headed by Dr. Ben Alman, research funding became a larger focus for the organization. POSNA's roots as a forum in which clinicians could exchange ideas grew into what is now the annual meeting, engaging its members in the most innovative and rigorous research in the field of pediatric orthopaedics.

In 1991, the St. Giles Foundation inaugurated the Arthur H. Huene Memorial Award. The funding arose in 1977 from the charitable organization of the House of St. Giles the Cripple in Brooklyn, New York, and is named after one if its long-serving presidents. This award has granted over \$850,000 to 31 applicants since its inception. In 2000, the St. Giles Young Investigator Award expanded giving from the Foundation and has provided \$350,000 in funding to 22 applicants, three of which have gone on to receive further named awards.

In 2003, a third named award, The Angela S.M. Kuo Memorial Award, was established. Initially funded through the Orthopaedic Research and Education Fund (OREF), Dr. Ken Kuo established this endowed grant in memory of his late wife, Angela. This award recognizes an outstanding young POSNA investigator and provides funds to help promote a long-term research career for that individual. The management of the endowment has since shifted from OREF to POSNA. This award has offered approximately \$491,000 in support since 2003 to 19 applicants (two of which have also received the Huene award).

Industry supported grants began to be distributed through POSNA in 2008, including named grant sponsors DePuy (2008-2015), Globus (2012-2015), and Zimmer Biomet (2009-2021), for a total of \$675,000 in support. With the expansion of monies available for research, additional grants have been designed for specific purposes, such as the clinical trials grant (\$210,000 from 2011 to 2021), startup grants (\$230,000 from 2011 to 2021), directed research (\$800,000 from 2014-2021), and registry grants (\$450,000 from 2017 to 2021). In 2017, the concept of microgrants was offered to assist in kicking off smaller projects with funding of \$1,000 (70 awarded to date).



It has been noted by the current research committee chair, Dr. Raymond Liu, that the funding for research support has grown significantly since 1996, offering a rich combination of POSNA budgeted funding, endowed funds, and outside sponsorship. Research continues to be one of the most important components of the POSNA mission. As Dr. Mininder S. Kocher wrote in his "Message from the President" in the February 2022 edition of JPOSNA®, "The importance of research to POSNA is reflected in the budget. For 2022, POSNA will award nine research grants for a total of \$440,000. Research represents 12% of the POSNA budget." Those that receive awards are generally expected to give reports, follow-up, and/or present e-Posters at the annual meeting. In the future, the committee is planning to provide a more consistent review of outcomes of its research funding. Dr. Ben Alman points to the amount of pediatric orthopaedic support through the National Institutes of Health (NIH) as a marker of the vigorous, high-quality research being performed. In 2021, 28 clinical orthopaedic surgeons received NIH funding. Pediatric orthopaedics has received the most of any orthopaedic subspecialty (\$2.8 million, followed by trauma at \$1.7 million).

POSNA's relationship with the publishing industry has evolved over time as well. As described by Dr. Watts, JPO published its first issue in 1981. This represented the first journal focused on the specialty of pediatric orthopaedics. There was a longstanding informal affiliation between JPO and POSNA. This relationship was made formal with JPO becoming the "official" journal of POSNA in 2017. In 2019, in order to complement the current offerings for publishing pediatric orthopaedic research such as JPO and the Journal of Bone and Joint Surgery (JBJS), then-President Dr. Steve Frick and the POSNA Board of Directors commissioned the development of an electronic journal managed by POSNA members. In November 2019, under the leadership of Editor-in-Chief, Dr. Ken Noonan, the first issue of JPOSNA® was released. JPOSNA® is an open access online journal focusing on pediatric orthopaedic conditions, treatment, and technology. As Dr. Noonan wrote in

his Editor's Note in the inaugural issue, "an electronic journal that is managed by our society would allow us to present visual media such as surgical techniques and publish content that current journals don't have room for. This includes Current Concept Reviews, Panel Discussions, Proceedings from the annual meeting and IPOS<sup>®</sup>, to name a few. In addition, *JPOSNA*<sup>®</sup> will serve as way to highlight the direction of POSNA and the accomplishments of our volunteer society." Initially, due to POSNA's pre-existing relationship with *JPO*, *JPOSNA*<sup>®</sup> was restricted from publishing any original research. However, in January 2022, *JPOSNA*<sup>®</sup> released its first issue containing original scientific research.

# Patient Care & Advocacy

Patient advocacy has been a core element of POSNA's effort since the beginning. In fact, POSNA's mission statement highlights "the promotion of education, research, and quality care" and the vision of "optimal musculoskeletal health for all children." In one of the early communications between POS members, Dr. Eugene Bleck stated: "I thought the objective of forming a special pediatric orthopaedic society was to have an opportunity once a year to talk over with one's colleagues in the field various problems in pediatric orthopaedics *in the hope that a candle or two might be lit toward their solution.*" Over the years, POSNA has become a leader in advocacy for children's musculoskeletal health.

## Patient and Family Education/Children's Safety

The majority of POSNA's advocacy work has been through education. In order to better protect children and advocate for their musculoskeletal well-being, POSNA has prioritized raising public awareness through patient and family education. The society works closely and maintains a high-level of collaboration with AAOS and AAP to ensure that education and awareness can reach as many families as possible on a national and international level. This combined effort has often produced clinical practice guidelines that promote the best practices within pediatric orthopaedics, such as recommendations for screening of developmental dysplasia of the hip.<sup>9</sup> In addition, position statements on safe practices, such



as sports injury prevention, trampoline safety, and lawnmower safety have been published to help families take precautions and prevent significant injury to their children. OrthoInfo and OrthoKids are additional online resources for children and their parents to learn about many musculoskeletal conditions and familiarize themselves with the treatment options.

While many POSNA initiatives are directed at improving our understanding and treatment of musculoskeletal conditions, some initiatives specifically focus on patient safety. The Quality, Safety, and Value Initiative (QSVI) aims to enhance the value-based healthcare delivery in pediatric orthopaedics. This is achieved through providing the needed clinical tools to ensure safety, supporting research projects that focus on safety, and maintaining continuous education of the society members in the fields of quality, safety, and value. The Safe Surgery Program is another initiative that aims to support POSNA members and their affiliated health systems to provide ideal care for children, which involves the best possible outcomes with zero harm. This program includes not only surgeons but expands the framework to include the entire clinical team that participates in the child's surgery.

# Summary

As we reflect on the past 50 years of the specialty of pediatric orthopaedic surgery in North America, we are grateful for the many pioneers and visionaries who have led POSNA to where it is today. While this overview only lists a handful of the numerous contributions from its leaders and members, the History & Archives Committee plans to expand on several of the events and topics mentioned in this article. The committee welcomes any additional contributions from POSNA members, including oral and written accounts, photos, documents, and physical artifacts.

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# Disclaimer

The authors have no conflicts of interest to disclose.

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