

## **Statement of Purpose**

Despite possessing the highest oral abstract publication incidence for any national foot and ankle society conference to date (76.9%), it remains unclear why almost a quarter of the oral abstracts accepted to the American College of Foot and Ankle Surgeons (ACFAS) conference fail to achieve journal publication. The purpose of the present study was to assess the publication barriers of oral abstracts from the ACFAS conference: 2010 to 2014.

## Introduction

The two largest professional societies currently representing foot and ankle surgeons (FAS's) in the United States are the American College of Foot and Ankle Surgeons (ACFAS), and the American Orthopedic Foot and Ankle Society (AOFAS). Several studies have assessed the publication incidence of oral abstracts presented at each respective societies annual meeting (ACFAS 76.9%, AOFAS 73.7%); which have served as indirect proxies for the quality of the content presented to conference attendees (1-4). The ACFAS oral abstract publication incidence from 2010 to 2014 (76.9%, 83/108) is currently the highest reported for any national foot and ankle society conference to date (4). Factors associated with the conversion of an oral abstract to a journal publication, and time to publication have been identified; however, it remains unclear why almost a quarter of the abstracts accepted by the ACFAS selection committee ultimately failed to achieve journal publication (4-6). The purpose of the present retrospective study was to assess the publication barriers of oral abstracts from the ACFAS conference from 2010 to 2014.

## **Patients/Materials and Methods**

From previous studies (4-5), databases containing information on oral abstracts (n=108) accepted for presentation at the ACFAS conference from 2010 to 2014 were procured. The first database included basic information originally compiled, and provided by the ACFAS office (author names, abstract titles, year of presentation), as well as information determined subsequently thereafter (publication incidence, meantime to publication, journal of publication, and publication within 3 years of conference presentation) for the purposes of the original study (4). The second database included abstract-and author specific variables for each of the 108 abstracts (5). Using the databases, all unpublished (prior to July 1, 2017) oral abstracts (n=25) from the ACFAS conference were identified, and verified. Questionnaires for each abstract (n=25) were then distributed in May, and June of 2018 to the primary authors (n=23) via email (ACFAS Membership Directory, or private email) to assess the current status of the projects (7). If a response was not obtained within 4 weeks of the initial query (n= 25), repeated attempts were made to contact the authors via email/telephone until communication was established, or 5 failed attempts. Abstracts that had since achieved publication (after July 1, 2017) were verified using the manual search methods described in the original study (4), and the appropriate statement recorded (Statement 1, Statement 2).

### Questionnaire

The primary authors were first asked to select one of the following statements: 1) the oral abstract has been published in a journal, 2) the oral abstract has been published outside of a journal, 3) the oral abstract has been accepted for journal publication (in-press), 4) the oral abstract is currently under peer-review by a journal, 5) the oral abstract was submitted, and rejected by a journal, 6) the oral abstract was submitted, but withdrawn prior to journal publication, and 7) the oral abstract was never submitted for journal publication. If an author responded with either: the oral abstract has been published outside of a journal (statement 2), or the oral abstract was never submitted for journal publication (statement 7); they were subsequently prompted to select one or more reasons (limit of 3) for why journal publication had not been pursued, or achieved. These reasons included: 1) insufficient time, 2) insufficient institutional support (financial, material, staff), or formal research mentorship, 3) low priority, 4) difficulty with co-authors, 5) responsibility tasked to another co-author, 6) poor results and/or outcomes, 7) low likelihood of perceived journal acceptance owing to methodological weaknesses, and 8) the study is still currently on-going.

# Publication Barriers of Oral Abstracts From the American College of Foot and Ankle Surgeons: 2010-2014 Calvin J. Rushing DPM, Steven M. Spinner DPM

Westside Regional Medical Center PMSR-RRA

## Results

A total of 25 oral abstracts (25/108, 23.1%), from 23 primary authors had failed to achieve journal publication prior to the previously established cutoff date of July 1, 2017 (4). Of the 23 primary authors surveyed, statements were recorded for 11 questionnaires; representing a response rate of 44% (11/25). Descriptive statistics are summarized in Table 1. At the time of the survey, 4 (16%) of the oral abstracts had since achieved journal publication, 1 (04%) had been published outside of a peer reviewed journal, and 6 (24%) had never been submitted to a journal for publication consideration (Table 2). Thus, the overall journal publication incidence for oral abstracts from the ACFAS: 2010 to 2014 increased from 76.9% (83/108) to 80.6% (87/108). Regarding the reasons for failing to pursue journal publication, the authors cited: an insufficient amount time for appropriate manuscript preparation (42%) difficulties with co-authors (30%), a low perceived priority (17%), and the responsibility to mature the abstract had been tasked to another co-author (8%) (Table 3).

Tables			
Table 1	Total Sample (n= 25)	Table 2.	Abstracts (n=25)
Institution type		Never submitted for journal publication	24% (6/25)
Academic	13 (52%)		
Non-Academic	12 (48%)	Published in a journal	16% (4/25)
Number of authors	3.9 (range, 2 to 8)	Published outside of a journal	04% (1/25)
Number of centers	2 (range, 1 to 4)	Response not obtained	56% (14/25)
Type of research			
Patient oriented	22 (88%)		
Basic/laboratory	3 (12%)	Table 3:	Reasons (n=12)
Study design			Reasons (11-12)
Case-series	9 (36%)	Insufficient time	42% (5/12)
Retrospective cohort	8 (32%)		+2/0(0/12)
Prospective cohort	2 (08%)	Difficulty with co-authors	30% (4/12)
Meta-analysis	2 (08%)		0070 (4712)
Laboratory study	2 (08%)	Low perceived priority	17% (2/12)
Cross sectional	1 (04%)		
Case-control	1 (04%)	Responsibility tasked to other co-authors	8% (1/12)
Funded			070 (1712)
No	25 (100%)		
ACFAS Regional Division			
Midwest	4 (16%)		
Great Lakes	4 (16%)	Table 4:	Recommendations
Gulf States	4 (16%)		
Southeast	3 (12%)		
Northeast	3 (12%)	Individual (4)	
Big West	2 (08%)	1. Allocate a realistic, and consistent amount of dedicated	research time (weekly, monthly) to complet
Pacific	2 (08%)	project within a pre-determined timeline; prior to the initiat	ion of a project.
Tri-State	1 (04%)	2. Clearly outline the specific roles and responsibilities rec	· •
Mid-Atlantic	1 (04%)	authorship, for both the abstract and manuscript; prior to t	he initiation of a project.
		3. Avoid including co-investigators who are not as commit	ted to the project to minimize intergroup cor
Level of training (primary author)		4. When developing close liaisons with outside institutions	s, preferentially select research focused FAS
Faculty	20 (80%)	gain indispensible mentorship, and a bulwark of support.	
Fellow	2 (08%)		
Resident	3 (12%)	Organizational (3)	
		5. Increase the availability of, and funding for Investigator	Initiated Research Grants
Number of prior journal publications (primary author)	5.24 (range, 0-16)	6. Establish a consortium to collect, and record the PROM	IS for various foot and ankle conditions
Research Degree		7. Recruit young, research oriented FAS's to the committe	es, and task forces of the college.
None	19 (76%)		
Masters	6 (24%)		

lete the

conflict AS's to

To the best of our knowledge, no prior study had assessed the publication barriers of oral abstracts from the ACFAS conference. For this purpose, we surveyed the primary authors of the 25 unpublished oral abstracts from the ACFAS conference: 2010-2014 (4-5). Of the 25 distributed questionnaires, 12 were completed (9 authors); representing a response rate of 44% (12/25). At the time of the survey, 4 oral abstracts had since achieved journal publication; resulting in an increase in the publication incidence for oral abstracts from the ACFAS to 80.6% (87/108). Of the remaining abstracts, 1 had achieved publication outside of a peer-reviewed journal, while 6 had never been submitted for publication consideration. The authors of these abstracts cited: an insufficient amount time for appropriate manuscript preparation (42%), difficulty's with co-authors (30%), and a low perceived priority (17%) as the three primary reasons for the failure to publish (Table 3).

Sprague et al (7) first identified the principal barriers to the full-text publication of abstracts presented at annual orthopedic meetings. An inadequate amount of time to prepare abstracts for paper publication (46.5%), the presentation of preliminary findings of larger on-going studies (31%), and the delegated responsibility of writing the manuscript to a co-author who had failed to produce a draft (19.7%) accounted for three most commonly citied reasons for the failure to publish. These barriers led to a series of recommendations by the authors, and the conclusion that "limiting acceptance to only completed research studies may improve the rates of subsequent publication" (7). However, of the three most commonly citied reasons, only an insufficient amount of time for manuscript preparation was identified in the present study as a principal publication barrier to the journal publication of oral abstracts from the ACFAS. Furthermore, in contrast to the previous study's findings, difficulties with co-authors, and a low perceived priority were the next most commonly cited reasons for the failure to publish; limiting the relevance of the formers recommendations, and conclusion. In the present study, we have identified the three principal barriers to the journal publication of

oral abstracts from the ACFAS conference: 2010-2014. Based on the modifiable factors identified, and considering factors known to be associated with the journal publication, and time to publication of the oral abstracts (5); we propose a series of recommendations to improve the future publication incidence (Table 4). The most important recommendation is that authors allocate a realistic, and consistent amount of dedicated research time (weekly, monthly) to complete a project within a predetermined timeframe; prior to its initiation. It is equally as important for co-investigators to do the same, and providing clear outlines regarding the roles, and responsibilities required for each to attain eventual authorship (abstract, manuscript) can assist in the process. It is important only co-investigators equally as committed to the project as the primary author be included; as intergroup conflict can create confusion, while threatening the shared constructive influences, and servant attitudes of the group. Although a collective benefit can certainly be gained from involving multiple co-investigators and institutions', minimizing difficulties that may potentially threaten the abstracts subsequent conversion to a full-text journal publication may become more problematic as the groups size increases. Therefore, when developing close liaisons with investigators at outside institutions; we recommend the preferential involvement of research focused FAS's, or those with considerable publication experience. These individuals may provide key insights, indispensable mentorship, and a bulwark of unexpected support; especially for nascent researchers. Finally, increasing the availability of, and funding for investigator initiated research grants, establishing a consortium to collect, and record the patient reported outcome measures for various foot and ankle conditions, and recruiting young, research oriented FAS's to committees, and task forces of the college are recommended from an organizational level (institution, professional society). In conclusion, the issue of how best to increase research productivity amongst FAS's remains a question of continued debate. In the present study, we identified the three principal barriers to the journal publication of oral abstracts from the ACFAS, and proposed a series of recommendations to improve the future publication incidence of oral abstracts following the annual conference.

orthopaedic meetings. J Bone Joint Surg Am. Jan;85-A(1):158-63, 2003.



## Discussion

## References

) Roukis TS: Publication Rates of Manuscript Presentations at the American College of Foot and Ankle Surgeons Annual Scientific Conference between 1999 and 2008. J Foot Ankle Surg. 50:416–419, 2011. 2) Bradley PA, Donnenwerth MP, Borkosky SL, Plovanich EJ, Roukis TS: Publication Rates of Poster Presentations at the American College of Foot and Ankle Surgeons Annual Scientific Conference between 1999 and 2008. J Foot Ankle Surg. 51:45-49, 2011

3) Williams BR, Kunas GC, Deland JT, Ellis SJ. Publications rates for podium and poster presentations from the American Orthopedic Foot & Ankle Society: 2008-2012. Foot Ankle Int 38:558–563, 2017. 1) Rushing CJ, Galan GP, Ivankiv R, Oxios AJ, Rathnayake VJ, Ramil MC, Chussid F, Spinner, SM. Publication Rates for Oral Manuscript and Poster Presentations From the American College of Foot and Ankle Surgeons: 2010 to 2014. J Foot Ankle Surg. 57(4), 2018.

(i) Rushing CJ- Factors Associated with the Journal Publication of Oral Abstracts From the American College of Foot and Ankle Surgeons: 2010 to 2014 (Manuscript submitted- J. Foot Ankle Surg., 2018) 6) Rushing CJ- A Formal Work Hour Analysis of The Resident Foot and Ankle Surgeon (Manuscript submitted- J. Foot Ankle Surg., 2018). 7) Sprague S, Bhandari M, Devereaux PJ, Swiontkowski MF, Tornetta P 3rd, Cook DJ, Dirschl D, Schemitsch EH, Guyatt GH. Barriers to full-text publication following presentation of abstracts at annual