

WOMEN IN MEDICAL PHYSICS

A PRELIMINARY ANALYSIS
OF THE WORKFORCE

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INTRODUCTION

Participation of women in STEM workforces widely discussed

IOMP commissioned a survey and published this year

- 7,024 respondents from 66 nations
- Covering 75+% of the international medical physics workforce
- Australia / New Zealand not included

ACPSEM perform a workforce survey every 3 years

- Gender is not included

Last analysis was radiation oncology workforce planning report in 2009, where female participation was 32.5% (ROMP only)

AIR and RANZCR include gender in workforce surveys

METHOD

Lists taken from ACPSEM

- Branch members
- Certified members
- Heads of department

Lists taken from APESM

- Preferred authors
- Invited and guest editorial authors
- Editorial committee

Lists taken from EPSM

- Preferred speakers
- Invited and keynote speakers

Gender assigned

- Known to us
- Known to colleagues
- Found on internet (LinkedIn, research databases, university profiles, etc.)
- Census- and sample- informed estimation (using gender-api and genderize.io services)

Names removed

- Gender unknown (1% to 4%)
- Located outside AU/NZ
- Presenting engineering work (inc. 'ABEC' sessions)

Cohort	Number	Male	Female
Branch members	629	72% (453)	28% (176)
Certified ROMPs	273	71% (193)	29% (80)
Certified DIMPs (Rad.)	35	77% (27)	23% (8)
Certified DIMPs (NM)	27	81% (22)	19% (5)
Chief ROMPs	38	79% (30)	21% (8)
Chief DIMPs	13	85% (11)	15% (2)

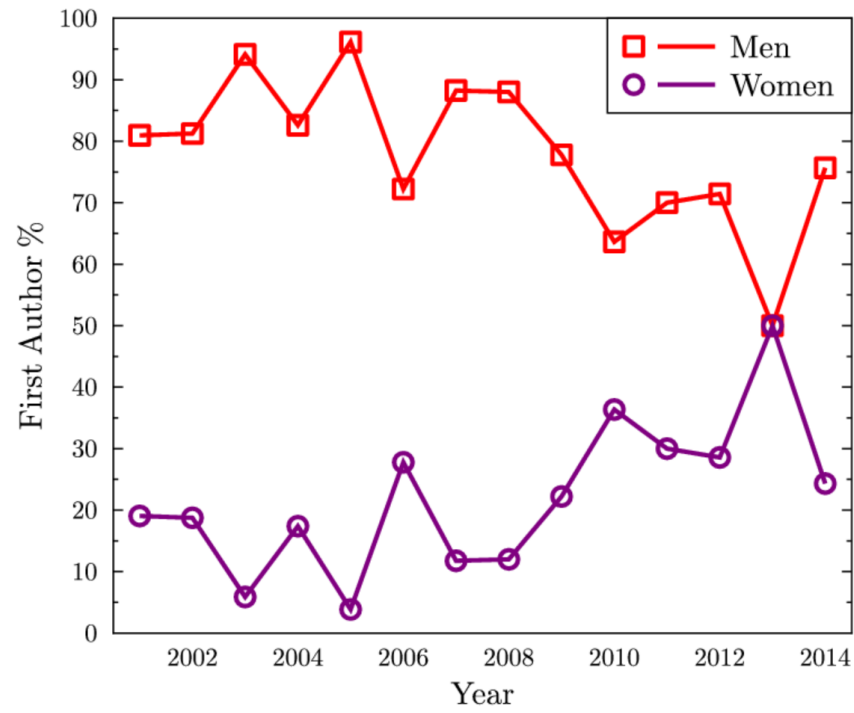
THE COLLEGE

Lists obtained from
acpsem.org.au

Cohort	Number	Male	Female
Proffered authors	312	78% (244)	22% (68)
Invited authors	31	81% (25)	19% (5)
Editorial board (c. 2015)	25	80% (20)	20% (5)

THE JOURNAL

Lists obtained from
APESM volumes
(2001-2014)



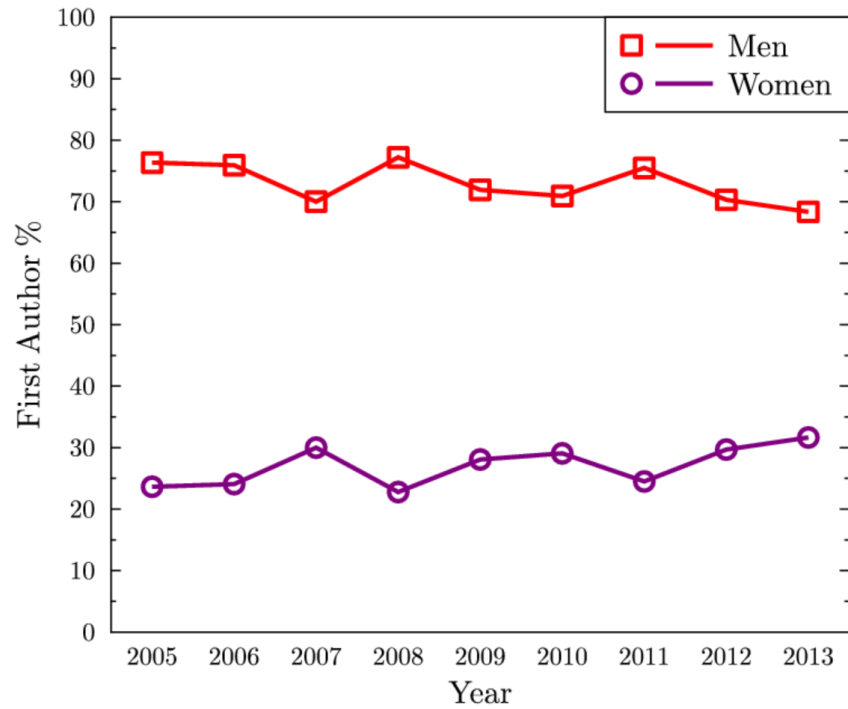
THE JOURNAL

Lists obtained from
APESM volumes
(2001-2014)

Cohort	Number	Male	Female
Proffered speakers	838	72% (607)	28% (231)
Invited speakers	24	88% (21)	13% (3)

THE CONFERENCE

Lists obtained from
APESM volumes
(2005-2013)



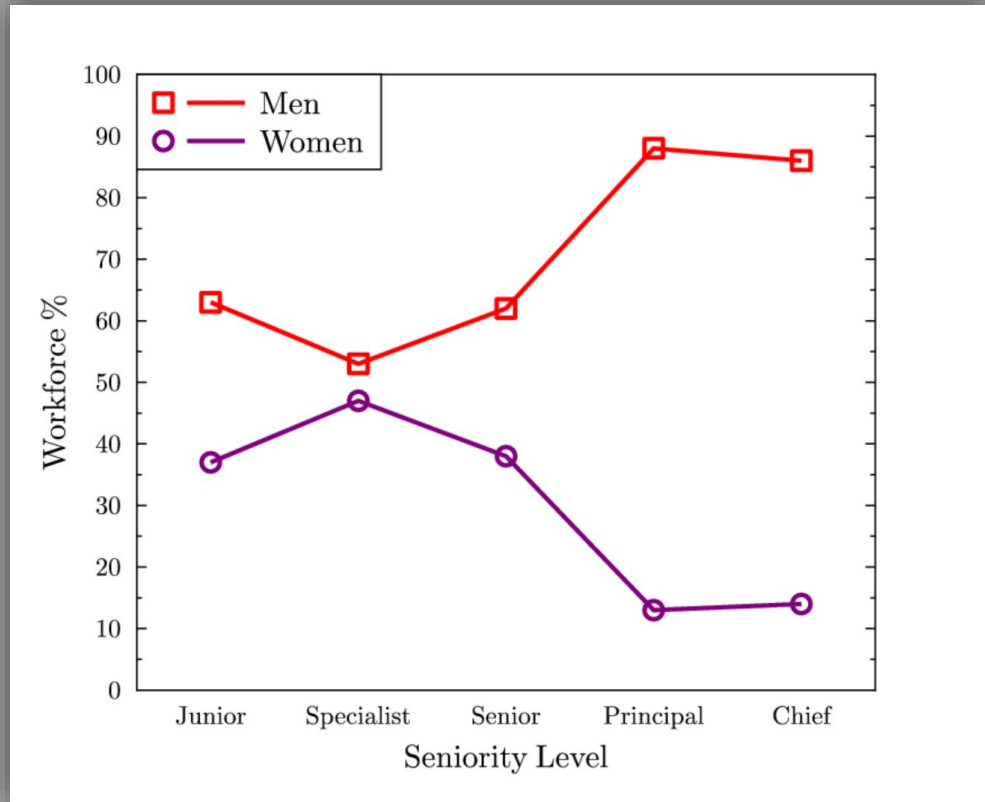
THE CONFERENCE

Lists obtained from
APESM volumes
(2005-2013)

Seniority	Number	Male	Female
Junior (~HP3)	19	63% (11)	37% (7)
Specialist (~HP4)	15	53% (8)	47% (7)
Senior (~HP5)	13	62% (8)	38% (5)
Principal, (~HP6)	8	88% (7)	13% (1)
Chief (~HP7)	7	86% (6)	14% (1)
Total	62	66% (41)	34% (21)

QUEENSLAND ROMPS

Lists obtained from
colleagues



QUEENSLAND ROMPS

Lists obtained from
colleagues

CONCLUSIONS

Women are under-represented at senior levels nationally

Women are under-represented at senior levels in Queensland

Queensland has higher female participation in workforce

- it has a larger number of junior physicists compared to other states too ...

The story is the same for conferences

- female participation (as preferred speakers) is similar to workforce figures
- women are even more under-represented in terms of invited and keynote speakers

The story is different for the journal

- little difference in terms of preferred vs. invited
- smaller female participation vs. workforce

Recommending future longitudinal study analysing correlations between age, period of service, seniority and gender

Acknowledgments:

Geoff Barbaro, Eva Bezak, Diana Binny, Kurt Byrnes, Paul Charles, Louis Fourie, Emma Inness,
John Kenny, Craig Lancaster, Tim Markwell, Johnny Morales, Steven Sylvander