EFSPI

European Federation of Statisticians in the Pharmaceutical Industry

Promoting Professional Standards in Europe

12th EFSPI Stat Leaders Meeting

Date: Wednesday, 30th June 2021

Topic: Career Development and Leadership Skills for Biostatisticians

Break-out session

Day 1 Break-out session

Group A	Group B	Group C	Group D	Group E
Frank Fleischer - notetaker	Chrissie Fletcher	Bruno Boulanger	Anna Karina Trap Huusom	Armin Schueler
Frank Langer	Daniele Compagnone - notetaker	David Wright - notetaker	Annamaria Muraro - notetaker	Giacomo Mordenti
Maria Dilleen - presenter	Emmanuel Zuber	Katrin Kupas	Christoph Gerlinger - presenter	Hans Ulrich Burger
Maylis Coste	Jens-Otto Andreas - presenter	Mette Milsgaard - presenter	CRAIG MCILLONEY	Michael O'Kelly
Rene Kubiak	Justine Rochon	Roland MARION-GALLOIS	Lars Endahl	Olavi Kilkku - notetaker
Stefan Driessen	Mark Whitlock	Tina Christiansen	Simon Cleall	Torsten Westermeier - presenter

GROUP x

Career Development and Leadership Skills for Biostatisticians

What should we do more of to enhance statistical leadership skills?

- *Please add your notes…*

How can EFSPI support?

- *Please add your notes…*

Other reflections

- *Please add your notes…*

Questions for the panel

- …

Back-up material
Survey Results: Statistical Leadership

1. Number of employees in your global Biostatistics function?
2. What are currently the main development activities for statisticians in your organisation?
3. Which activities for statisticians would you like to emphasize more in your organisation?
4. How does your organisation approach ‘statistical leadership’?
5. Did the EFPSI Statistical Leaders discussions / slides from 2019 help in your efforts to nurture ‘statistical leadership’?
6. Would you like EFSPI to support future development of leadership skills for statisticians?
7. Any other comments or thought around leadership development among statisticians you would like to share?

1. Number of employees in your global Biostatistics function?

Please select one of the following.

	Response Percent	Response Total
0 - 25	26.09%	6
25 - 50	17.39%	4
50 - 100	4.35%	1
> 100	52.17%	12
	Answered	23
	Skipped	0

2. What are currently the main development activities for statisticians in your organisation (this can be in terms of courses, self-learning etc.)?

Please select those that are applicable.

	Response Percent	Response Total
Statistical methodology & application	91.30%	21
Statistical Leadership	78.26%	18
Communication skills	52.17%	12
Therapy area understanding	47.83%	11
Decision making skills	47.83%	11
Regulatory interaction	43.48%	10
Influence skills	43.48%	10
Organisational understanding	39.13%	9
General pharma business understanding	34.78%	8
Project management skills	34.78%	8
Presentation skills	34.78%	8
Agile methodology	34.78%	8
Machine learning	34.78%	8
Negotiation skills	30.43%	7
Storytelling	30.43%	7
Artificial intelligence	26.09%	6
Networking skills	21.74%	5
Other (please specify):	17.39%	4
	Answered	23
	Skipped	0

Other (please specify):	
1	Innovative designs, statistical consultancy, simulation, specification preparation for programmers
2	intrapeneurial mindset
3	Integrated Evidence generation strategies e.g. integrating RCT with RWD, accelerating clinical development plans etc Quantitative methods used to inform decision making, e.g. probability of success (assurance), probability of technical and regulatory success; Portfolio analytics statistics support, e.g. deriving eNPV based on attributes of the target product profile; Business Development consultation skills Model informed drug development (MIDD) in partnership with Clinical Pharmacology and Modelling and Simulation experts Translational statistics and developing prediction models between pre-clinical and clinical disease models Personalised medicine and identifying and assessing potential biomarkers
4	Leadership (general)

3. Which of the below development activities for statisticians would you like to emphasize more in your organisation?

Please select three topics.

	Response Percent	Response Total
Statistical Leadership	73.91%	17
Influence skills	52.17%	12
Communication skills	47.83%	11
Decision making skills	30.43%	7
Regulatory interaction	26.09%	6
Presentation skills	26.09%	6
Negotiation skills	21.74%	5
General pharma business understanding	17.39%	4
Storytelling	13.04%	3
Organisational understanding	8.70%	2
Other (please specify):	8.70%	2
	Answered	23
	Skipped	0

Other (please specify):	
1	Basic medical/therapuetic area knowledge, basic knowledge in biology/physiology
2	Therapy area understanding

4. How does your organisation approach 'statistical leadership'?

Please select those that are applicable.

	Response Percent	Response Total
We offer individual courses to stimulate statistical leadership	43.48%	10
We encourage listening to relevant podcasts, attending conferences etc.	43.48%	10
We send people to external programs focusing on leadership skills	39.13%	9
We have a career development programme for statisticians focusing on leadership skills for specialists	17.39%	4
We have not yet launched any statistical leadership initiatives	17.39%	4
Other (please specify):	17.39%	4
	Answered	23
	Skipped	0

Other (please specify):	
1	We have many soft skill trainings in place and as well as specific onboarding to leadership roles we look to mentor staff on projects
2	internal mentoring
3	We are in the process of developing a statistical leadership program. We would support sending individuals to an external program, e.g. EFSPI, to encourage external networking, sharing experiences and best practices
4	We leverage the ASA statistical leadership programme, among others, as part of our internal programme

5. Did the EFPSI Statistical Leaders discussions/slides from 2019 help in your efforts to nurture 'statistical leadership'?

https://www.efspi.org | Please, select one of the following.

	Response Percent	Response Total
Yes, a lot	18.18%	4
Yes, a little	27.27%	6
No, not really	22.73%	5
No, we have not yet launch any statistical leadership initiatives	18.18%	4
No, we are not aware of the above mentioned discussions/slides	13.64%	3
	Answered	22
	Skipped	1

6. How does your organisation approach 'statistical leadership'?

Please select those that are applicable.

	Response Percent	Response Total
Yes, via courses	56.52%	13
Yes, via inspirational podcasts or seminars	82.61%	19
No, we don't see a need for that	4.35%	1
If yes, what is your personal commitment to support it?	47.83%	11
	Answered	23
	Skipped	0

If yes, what is your personal commitment to support it?	
1	Happy to help participate, create material and present
2	Willing to invest time into this
3	Consider to set up SIG which would allow engagement of experienced statistical project leads
4	I will continue to champion this approach internally
5	Our organisation can offer speakers
6	Fully committed, we cannot contribute to drug development and support decision making without leadership
7	Happy to support both both ends. 1) Motivating the internal colleagues to attend and listen to these materials, 2) Providing some material by my colleagues or myself
8	Courses are US driven. EFSPI just not considered a source.
9	- To make this obligatory part of the statisticians development program. - To have more discussions with the statisticians to get them ""out the box""
10	PSI have run a 'fireside' lunchtime chat where 2 leaders shared their statistical leaders stories as a motivation to others. This was well received and perhaps could be something EFSPI considers.
11	Sharing some of our materials or recordings (if possible)

7. Any other comments or thought around leadership development among statisticians you would like to share?

	Open-Ended Question
1	It's essential to move statisticians out of the number cruncher corner
2	Stat leadership is key to drive change and innovation, reduce business risks and increase probability of success. Leadership trainings / mentoring programs should be part of the stat development from first steps.
3	Very important topic which is essential for 1) improving our role, standing and influence within the broader organisation 2) steering in a reasonable fashion our work regarding content and amount. Statisticians are often by training not very familiar with these topics (and sometimes also not comfortable). Management within Stats needs to fully support this and also have a clear intent towards this direction of pusing for statistical leadership. This may also mean that other topics in particular regarding operational aspects have to be de-prioritized.
4	as Kenneth Blanchard said: ""key to successful leadership today is INFLUENCE, not AUTHORITY"". In the agile working environment, more is possible for the individual statistician to be influential without being a leader, but then one should also have the right skills, so training that becomes even more important nowadays.
5	Everyone can be a leader, this is a key skill to develop, nuture and continue to advance throughout a career. Whilst there are many key principles about leadership that are fundamental to understand, the context and Pharma world is dynamic so the application of leadership skills needs to reflect this changing environment. Effective leadership goes hand in hand with many of the skills listed above e.g. communication skills, influencing skills, networking etc.
6	Develop further 1) some technical skills which are key to statistical leadership, such as good graphical practices, data visualization tools, good data science practices, causal thinking 2) the corresponding specific communication skills (how to use and leverage those tools to lead by content, how to make content accessible cross-functionally, how to lead interactive cross-functional data exploration, how to explain bias, variability, confounding, etc...) 3) listening skills and ownership: developing the understanding that statisticians have to understand the needs and thinking patterns of their partners, and they have to be aware, own and be proud of their specific and unique value (scientific rigor; structured approach to issues; ability to bridge science, technology, data, and decision making; etc...)