

MSPGH Mentoring Program Review Project

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1. Background

The Melbourne School of Population and Global Health (MSPGH, the School) intends to establish a mentoring program for staff (academic and non-academic). In September 2020, key MSPGH leaders and staff conducted a series of meetings and brainstorming sessions which led to a consensus on the need for an evidence-based formal mentoring program for staff.

Among the first steps identified in this process is a review/environmental scan of mentoring programs to identify key elements of success and inform the development of the MSPGH mentoring program.

1.1 Objectives

This review was commissioned by the School to:

- Conduct a rapid review of mentoring evidence and approaches to mentoring
- An environmental scan of well-designed mentoring programs in settings similar to the MSPGH
- Discussions with MSPGH staff and individuals associated with select programs to identify needs and expectations from a future MSPGH mentoring program and insights into good practice.

1.2 Scope

This review provides recommendations for establishing a mentoring program for staff at the MSPGH, based on rapid review of mentoring-related literature, an environmental scan of similar programs and consultations with key informants and staff.

Creating a fully-formed mentoring program, ready for roll-out is not in scope of this report.

2. Mentoring – an overview

Mentoring as a concept is widely recognised as a tool for personal and professional development across all sectors of work and academic disciplines. However, it can be understood quite differently by people based on their backgrounds and roles (professional and personal). The definition of traditional mentoring (or its variations) by Kram (1985) is commonly cited in mentoring literature:

“Mentoring is a relationship between an older, more experienced mentor and a younger, less experienced protégé for the purpose of helping and developing the protégé’s career.”
(1)

The definition above relates to the traditional understanding of mentorship, which has evolved substantially since 1985. Modern mentoring encompasses a range of approaches as described in the following section, and does not necessarily conform to this dyadic definition, based on a difference in seniority.

It should also be noted that mentoring is often conflated with coaching and sponsorship, which are closely related yet distinct approaches. Coaching can be described as a periodic, iterative process, where the coach works with the “coachee” to achieve a predefined goal, which can be to develop, or achieve proficiency in a certain skill, ultimately improving or enhancing the coachee’s job performance (2). Sponsorship on the other hand differs from mentoring and coaching in a key aspect, which is that it has a strong element of advocacy. The sponsor not only performs roles of career development similar to a mentor, but also advocates for their protégé in leadership circles, thus enhancing opportunities for career advancement more actively. Evidence from settings such as medicine and the corporate world indicates that sponsorship can provide a much greater benefit in addressing under-representation from groups experiencing inequity based on gender, race, disability, or other factors (2-4). This difference is captured in the following quote by KH Hanna, managing partner at KPMG USA:

“A coach tells you what to do, a mentor will listen to you and speak with you, but a sponsor will talk about you.”(5)

For the purposes of this review, sponsorship and coaching approaches are out of scope. However, it is worth noting that the skills required for establishing sponsorship and coaching relationships such as advocacy, active listening, powerful questioning, and the ability to establish collaborative relationships are very relevant to establishing strong mentoring relationships.

2.1 Types of mentoring relationships

There are multiple ways in which mentoring relationships can be described, based on:

- Roles of the participants or models (mentor-mentee dyad, peer-mentoring, group mentoring, multiple mentors)
- Nature of the mentoring relationship (formal vs informal)
- Career stage of the mentee (graduate/undergraduate mentoring, post-doctoral mentoring, faculty mentoring).

Mentor-mentee dyad

The mentor-mentee dyad is the traditional concept of mentoring and is the most commonly occurring model in both formal and informal contexts. This is often a top-down approach, with the mentor taking the mentee “under their wing”, with knowledge transfer occurring from the mentor to the mentee. The

mentor is in a senior position, in terms of organisational position, professional status and experience compared to the mentee.

Peer mentoring

Peer mentoring is characterised by both the mentor and mentee being typically at the same organizational level and/or holding an equivalent professional status. Research suggests that organizations with an emphasis on continuous learning may be more conducive to the development of peer mentoring, sustained over the medium to long-term (6). A benefit of peer mentoring for an organisation is that peers can be easier to identify and connect with compared to a traditional mentor-mentee dyad. Other benefits include a high degree of psychosocial support and fostering a sense of belonging (7). However, peer mentors may not offer the same degree or type of career support that traditional mentors provide, as peers may not have the same degree of professional status, experience, and domain knowledge as traditional mentors.

Group mentoring

Huizing (2012), in their literature review of group mentoring recognised the diversity of definitions for group mentoring. However, at its core they defined it as “a polyad mentoring relationship of more than two people in which the interactions were simultaneous and collaborative” (8). This includes approaches such as:

- “One-to-many mentoring”, where one mentor is responsible for multiple mentees and may allow for elements of peer-mentoring
- “Many-to-many mentoring”, where one or more mentors are identified in that role, and are responsible for mentoring the group, as against peer mentoring, where the role of mentor is shared between the members of the group (8).

Multiple mentors or “mentoring constellation”

de Janasz and Sullivan (2001) applied findings from studies in the corporate sector to academia and argued against the traditional dyad approach of mentoring, stating that it is unlikely that one person can fulfill the mentoring needs of academic staff across the various projects, functions and learning environments experienced by them (9). Instead, they recommend that a mentee should have multiple formal mentors for different needs or skills, some of whom may be external to the department, college, even university and as a way of minimising conflict of interest (a mentor who the mentee may directly report to in the organisational hierarchy, for instance) (9). The benefit of having such a “mentoring constellation” is the synergistic effects of multiple mentors on the mentoring experience, if these relationships are managed well.

2.2 Informal and formal mentoring

Informal mentoring relationships tend to form spontaneously, are more reliant on mentor-mentee initiative, are often longer lasting and are more common compared to formal mentoring (10). Informal mentoring is often spoken about in the same terms as the traditional mentor-mentee dyad, where a senior, more experienced mentor helps the mentee navigate the organisation and its systems (10, 11). This is in addition to providing other benefits such as skill sharing and development for the mentee, socioemotional support, a source of career guidance/professional development, domain knowledge and even an ally who can use their status to help advance the mentee’s career (10). However, given how these relationships develop, it is often challenging for under-represented minorities, such as those from

refugee or migrant backgrounds, women, disability, and Aboriginal and Torres Strait Islander people to access these mentoring opportunities due to systemic and relational issues (11-14).

Formal mentoring, on the other hand, refers to defined relationships, instituted after a due matching process, and commonly seen in organizational mentoring programs. Several studies have identified the characteristics of formal mentoring programs which are designed well, namely, clearly defined goals, expectations, scheduled tasks or meetings, training (for mentors and mentees), and evaluation (1, 11, 15-17).

2.3 Virtual mentoring or remote mentoring

Virtual mentoring relationships are developed and/or maintained via the internet/telephone and are also known as remote mentoring. Such relationships may informally develop in person and then be maintained remotely, as can often happen at large networking events such as conferences, when the mentee and mentor may not be working in the same institution, or even in the same city or country. This mentoring may exist entirely through electronic communication. This approach has been used successfully in the healthcare sector, where remote mentoring was seen as the solution to building the capacity of healthcare professionals in rural and remote areas, and as a solution to workforce shortages (18, 19).

A major advantage of remote mentoring is the possibility of connecting with good mentors with highly relevant experience and skills with whom the mentee would not have connected in the absence of technology. Remote mentoring is especially relevant in the current COVID-19 pandemic response and recovery context, given travel and workplace restrictions globally. As hybrid, flexible models of working emerge with greater freedom to choose remote or in-person working, it is expected that increasingly mentoring will take on this hybrid nature as well.

2.4 Career stage

It is established that mentoring needs change over a person's career, irrespective of whether they work in academia or in any other professional capacity. As a result, the form of the most ubiquitous type of mentoring at universities – undergraduate mentoring, will be quite different to that taken by mentoring for early career researchers and professionals (20). This is due to the changes in mentees' needs, for instance, students (graduate/undergraduate) may be more interested in exploring the various facets of their chosen field of study or understanding career pathways and securing a paid role. On the other hand, early career researchers and professionals may be more interested in learning skills necessary for success as well as opportunities for collaboration and for progressing their career (20, 21).

de Janasz and Sullivan have illustrated this progression or evolution in the following table, where they have mapped "knowing" or career competencies (knowing why, knowing how and knowing whom), across academic career stages (9).

Figure 1-1: Mapping knowing competencies across career ranks

Career ranks	Knowing why	Knowing how	Knowing whom
Doctoral Student	Is this what I want?	Need to amass technical skills (to do research)	Need to network with professional colleagues to obtain first job
Assistant Professor	Did I make the right choice? What changes should I make?	Increase skills in non-research areas, such as teaching, service	Network with members of the organization to learn through whom decisions are made and how work gets assigned
Associate Professor	How can I balance my life and work after obtaining tenure?	Increase skills in administration and coaching others (e.g., junior faculty, doctoral students), increase skills in new technologies and pedagogies	Network with professional colleagues for collaboration and job change opportunities
Full Professor	What is my legacy?	Increase skills in development and community service	Network with junior colleagues to provide them mentoring and benefit from their newly developed skills

Extracted from de Janasz and Sullivan (2004, p269) (9)

3. Methods

A rapid review of mentoring literature and relevant mentoring programs was conducted. The review was conducted in three phases:

- Desktop review
- Consultations
- Reporting

Given the snowball approach used to identify relevant programs, the desktop review and consultations phases overlapped to a large extent. Findings were then collated and triangulated to identify key themes and provide recommendations.

3.1 Desktop Review

A rapid review of mentoring literature was conducted using the University of Melbourne's Discovery database to identify key literature and concepts pertaining to mentoring, various approaches and any evidence of effectiveness.

This was followed by identifying mentoring programs within the University of Melbourne (particularly for staff). Key informants involved with these programs were consulted with and additional programs were identified along with program design documents and evidence of effectiveness (such as evaluation reports).

3.2 Consultations

Consultations with key informants were conducted, primarily to identify successful programs, but also to discover definitions/indicators of success, key components of successful programs among other learnings.

Consultations were also conducted with staff from the MSPGH with additional questions:

- What is the best sort of program you could envision for the MSPGH?
- What would you hope the School and program participants would get out of it (outcomes)
- What would success look like?

3.3 • Reporting.

Reporting, which consists of regular reporting arrangements, a draft final report, and the final report.

4. Findings

Twelve programs were identified as most relevant from various sources:

- 8 were based in university settings (of which 6 were from the University of Melbourne)
- 4 were administered by professional organisations.

All programs were examples of formal mentoring, and represented a variety of approaches. Programs were analysed based on their target mentee cohort and selection process, approach to mentoring, frequency and duration, goal(s), as well as evaluation processes if any.

The findings from this analysis are presented in *Table 3-1*.

Table 3-1: Review of mentoring programs in academic/quasi-academic settings

Program name	Target cohort and selection	Mentoring approach	Frequency and duration	Goal (s)	Evaluation
Academic Women in Leadership Program (University of Melbourne)	Academic women employed at University Level C or Level D who have been: • Employed for two or more years • Reached a stage in their careers where they are seeking increased knowledge and understanding of University management, leadership and decision making • Identified that their career direction may incorporate a leadership role	Hybrid approach, with elements of dyadic mentoring (including shadowing a senior leader), peer/group mentoring (project group activities) and career coaching	• Annual program • 6/7 months in duration, with clearly defined and structured activities, phases and meetings	That women employed at level C and level D : • Enhance their understanding of leadership in the University context • Affirm and enhance existing strengths, leadership and management skills, and abilities • Increase organisational knowledge of the university; • Extend networking opportunities; • Facilitate engagement with both internal and external senior role models • Explore University systems and processes through a gender frame of reference.	Annual evaluations and occasional qualitative studies.

Program name	Target cohort and selection	Mentoring approach	Frequency and duration	Goal (s)	Evaluation
Australian Academy of Health and Medical Sciences Mentoring Program	• Associate Professors and new full Professors (Level D and early Level E appointments) • Demonstrated credentials as an emerging leader in the health and medical sciences. • Received national or international recognition for their work, including awards, competitive grants and evidence of academic excellence. • Authored research papers extensively, including first author papers and grants, and supervised PhD students.	• One-to-one dyadic approach, with mentees being paired with established Academy Fellows • Elements of networking and peer mentoring, as selected mentees are enrolled as Associate Members of the Academy	• Annual program • Three years in duration, with frequency of meetings decided mutually by mentees and mentors. • Mentors commit to meeting up to four times per year.	• Enabling mentees to navigate higher levels of leadership and research • To provide a very experienced 'sounding board', someone with a broad scope of vision who may challenge the assumptions which mentees may have made. • To expose or enable the mentees to discover the range of options potentially available to them.	• Annual mentorship workshop for mentors and mentees. • Feedback sought from mentees such as: – Brief notes regarding their experience. – Ways in which they have benefited from the relationship. – Suggestions or proposals to improve the program
Australian Health Promotion Association's National Mentoring Program	• Individuals interested in or working in the field of health promotion	• One-to-one, dyadic mentoring by a health promotion practitioner with 4 years of experience as a minimum. • Option of participating in group-mentoring and peer activities for mentees (2021 onwards)	• Annual Program • Time commitment of up to two hours per month	• To build mentees' professional and personal skills, and to grow and develop in the process. • Group mentoring to provide greater networking options, diversity in thinking and practice, and allows mentees to support each other	• Close-out survey of mentees.

Program name	Target cohort and selection	Mentoring approach	Frequency and duration	Goal (s)	Evaluation
Australian National University Professional Mentoring Program	- Professional staff employed in ongoing, fixed-term or continuing contingent funded positions - Mentors and mentees must be available and prepared to participate for the full duration of the program. - For mentees, ANU classifications up to and including Level 8 - For mentors, ANU Level 6/7 or higher - Mentors and mentees chosen to ensure participants are drawn from across ANU	- One-to-one, dyadic, with a mentor at a higher professional level than mentee. - Peer mentoring and group mentoring elements, with regular group workshops for mentors and mentees.	- Annual program - Six months in duration - Monthly meetings preferred	- To enable mentees to receive support from experienced senior staff. - To increase mentees' skills and confidence - Enable both mentors and mentees to build and expand networks. - Allow mentees to navigate their career goals more effectively at ANU	- End of program feedback survey - Virtual feedback session
Melbourne Indigenous Professional Employment Program (MIPEP) Mentoring Program	- Professional staff employed under the MIPEP - Specifically targeting Aboriginal and/or Torres Strait Islander staff - Indigenous and non-Indigenous staff eligible to mentor. - Academic staff members Level B and above with a minimum two years of service - Professional staff members targeted at PSC 6 and above:	- One-to-one, dyadic, with a mentor at a higher professional level than mentee. - Structure program of workshops with elements of group mentoring	- Annual program - Runs for the duration of the mentee's MIPEP contract - Meetings preferred once every three weeks.	- Provide a platform for mentees to communicate openly about their challenges and successes in the MIPEP contract. - To enable definition of short to long term career goals - Support the development and importantly retention of Indigenous staff.	Written post-program brief from mentees regarding their experience and suggestions for improvement.

Program name	Target cohort and selection	Mentoring approach	Frequency and duration	Goal (s)	Evaluation
	– Employed at PSC 6 - minimum three years of service – Employed at PSC Level 7 and above - minimum two years of service.				
MSPGH Student Mentoring Program (now the MDHS Mentoring Program)	• Final year students • Competitive selection of mentees (students), based on number of mentors available • Mentors are experienced graduates of the University with experience in areas of mentee interest	• Dyadic, one-to-one mentoring. • E-mentoring from 2021	• Annual program • 8-months in duration	• Relationship building between alumni and students. • To help graduating students transition from university to the workforce. • Career advice and opportunity to gain insights into area of interest for graduating students.	• Pilot programs trialed in the Melbourne Dental School and MSPGH • End of program surveys of mentors and mentees • Annual Evaluations Reports and mid-program review.
Nossal Institute Limited Mentoring Program	• Two-streams, one for academic and one for professional staff at the Institute • Opt-in program, with mentees endorsed for participation by their supervisors • Mentees may choose their mentor from an approved panel of mentors	• Dyadic, one-to-many mentoring. • One mentor may have multiple mentees (up to a maximum of five, one per 0.2 FTE) • Mentors possess a higher level of experience and/or expertise than the mentee. • The mentor must be from a different primary Unit	• Annual program • A minimum of 6 meetings over the year (bi-monthly)	• Skills development (professional and interpersonal) • The academic stream - to maximise the future academic potential of mentees • The professional stream - to maximise the future management potential of mentees • Mentee's objectives and activities that are identified as part of the mentoring program must be aligned with their role in the organisation; and be part	Biannual review of the program and guidelines

Program name	Target cohort and selection	Mentoring approach	Frequency and duration	Goal (s)	Evaluation
		(department) as the mentee.		of their day-to-day job responsibilities	
Public Health Advocacy Institute of Western Australia Mentoring Program	- Public health, health promotion, health research or allied health professionals. - Emerging leaders outside the health sector, provided their work is related to health and wellbeing. - Clarity of career goals and objectives and interest in public health advocacy are key criteria - Preference given to: - Indigenous candidates - Those working with vulnerable populations - Those working in rural and remote areas.	- E-mentoring, one-to-one, dyadic by a senior professional experienced in public health advocacy. - Elements of peer-mentoring through a mentee blog, to which all mentees are expected to contribute.	- Annual program 9 months in duration - Mentees are expected to complete 9 activities, assessed by program administrators	- Building advocacy skills among younger or early career health professionals - Building public health leadership skills	- Regular feedback on activities to mentees and mentors - Monitoring of mentee activities on the mentee blog - Regular updates from mentees to PHAIWA about progress towards goals
Public Health Association of Australia National Mentoring Program	- Open to current individual members of PHAA - AND who are either: - Postgraduate or final year undergraduate students studying public health or in a related field - Early career public health practitioners/researchers seeking mentorship	- One-to-one, dyadic, with a mentor at a higher professional level than mentee. - Mentors are senior current individual PHAA members with a minimum of 3 years' experience working in public health	- Annual program 6 months in duration - A minimum of 6 meetings expected (once per month)	- To build the capacity of student and early career PHAA members - Achieved by mentors and mentees jointly identifying mentees' mentoring needs. - Allow mentees to meet with an expert in their field of interest to seek guidance and advice regarding career ideas, build networks as well as professional and interpersonal skills.	End of program evaluation forms for both mentors and mentees.

Program name	Target cohort and selection	Mentoring approach	Frequency and duration	Goal (s)	Evaluation
	Professionals transitioning within their career or seeking professional development				
School of Biomedical Sciences (SBS)-Early-Mid Career Researchers Association (EMCRA) Inter-Departmental Mentoring Scheme (University of Melbourne)	- SBS Level A and B postdoctoral staff - Matching based on one of the following mentoring goals from the mentee: - Work/life balance - Career planning/developing research independence - Professional skills - Laboratory/people management	- One-to-one, dyadic, with a mentor at a higher professional level than mentee. - Preferentially from different departments within SBS.	- Annual program 9 months in duration, with a minimum of three meetings expected	- Achieving growth for the mentee towards their specified goal - For mentors, leadership and career satisfaction benefits - To broaden horizons for mentors and mentees, while fostering a culture of cross-departmental cooperation.	Surveys for mentors and mentees conducted twice during the program
Supporting Women in MDHS (SWiM) Program (University of Melbourne)	Any woman identified or non binary person employed by the MDHS preparing for promotion to level D or E in the subsequent calendar year.	- One-to-one, dyadic, with a mentor at a level D or E, and one who is familiar with the MDHS promotions process - Tailored mentoring and workshops for mentees	- Annual program 6/7 months in duration, with a minimum of four meetings expected - Two workshops for mentees	- To promote gender equity and support academic promotion of women in the Faculty of Medicine Dentistry and Health Sciences (MDHS) - Mentors help mentees draft and refine their applications for promotion, with tips from workshops	- Two phase evaluation process - Phase 1, at program close – debrief with participants - Phase 2, 4/5 months after program completion – promotion outcome assessment.

Program name	Target cohort and selection	Mentoring approach	Frequency and duration	Goal (s)	Evaluation
Women's mentoring program (Monash University)	- Female professional and academic staff in ongoing or fixed-term employment - Clarity of mentoring goals and developmental needs - Alignment between mentoring goals and expected outcomes - Clarity in articulating the anticipated benefits of program participation - Preference for staff who have not participated in the program previously	One-to-one, dyadic, with a more experienced mentor from within the University.	- Alternate years (next in 2022) 8 months in duration	- Growing leadership capabilities - Reflecting on and building professional skills - More effectively navigating Monash - Enhancing potential for career progression	N/A

4.1 Key attributes

The programs assessed for this review revealed several attributes which were common to most of them. These are described briefly in this section.

Clarity of purpose

All programs demonstrated a clarity of purpose and direction, which manifested in one or more of the following ways:

- Clearly defined eligibility criteria for mentees and mentors.
- Explicitly stated aims and objectives for the program, with examples of what these would look like in practice.
- A defined approach (one-to-one mentoring, peer mentoring, etc.) with their descriptions and/or instructions for creating the relationship.

Population groups of interest

Several programs were aimed at certain populations of interest in alignment with organizational diversity and representation commitments. This was particularly true for programs run in university/quasi-academic settings. Most commonly, programs targeted female and/or female-identifying staff, and in one instance each, Indigenous (MIPEP Mentoring Program) as well as non-binary staff (SWiM program) were also targeted. No programs reviewed were aimed specifically at individuals from refugee and/or migrant backgrounds or for those speaking a language other than English. These populations are substantially underrepresented in academic settings (13, 22, 23), with evidence indicating that they experience significant barriers in accessing mentoring support such as bias, discrimination and isolation (24).

Specificity of goals

The programs included in our review distinguished themselves from career or life-coaching programs by stating clear goals and objectives that mentees could expect achieving through participation. This is a hallmark of formal mentoring programs, which often experience resource (inadequate funding, mentor/mentee ratio) and time constraints. As a result, clearly defined goals are necessary not only to achieve program success, but also to demonstrate this success through monitoring or evaluation. Salient examples include the SWiM program at the University of Melbourne, which is aimed at female employees at the university intending to enter a promotions process, as well as the Academic Women in Leadership program also at the University of Melbourne.

Clarity of expectations

Complementing the specificity of goals, all reviewed programs were characterized by clear, detailed guidelines. These guidelines provided:

- Program duration, and recommended frequency of meetings between mentors and mentees.
- Defined selection criteria and process for both mentors and mentees to promote transparency from the commencement of the program.
- Clearly articulated expectations from:
 - Mentees (being respectful of mentors' time and wisdom, responsibility for driving the relationship, creating a development plan with outcomes in collaboration with the mentor and seeking assistance when needed to implement it)

- Mentors (providing a sounding board for the mentee, guidance and specific advice when requested in a non-judgmental and supportive manner, as well as taking an interest in the mentee's growth)
- Program administrators (defined role of the program administrators, supports available to mentors and mentees, as well as overview and guidance related to any activities such as workshops, group sessions available to participants).

Monitoring and Evaluation

Programs identified through this review demonstrated monitoring and evaluation mechanisms for program improvements, such as:

- Regular check-ins with mentees by program administrators, opportunities for mentees and mentors to raise issues at events such as workshops and group sessions.
- Checks built in to help relationships that are at risk of “fading away” to be revived. As an example, Mentees and mentors are encouraged to meet regularly for the MIPEP Mentoring Program. Mentees are required to contact their designated Indigenous Employment Officer (IEO) and provide a rating out of 5 (5 being Excellent) after each meeting. If the rating falls below 2.5, the IEO calls the mentee to check if they are alright.
- Written briefs from mentees, and in some instances, mentors about their experiences, any issues encountered and suggestions for improvement.
- Post-program or close-out surveys which allowed for gathering feedback in a structured manner with both quantitative and qualitative data.
- Formal evaluations in some instances, with pre-defined indicators of success, such as mentee and mentor satisfaction rates, assessment of progress against mentee objectives, qualitative responses regarding barriers experienced, successes, as well as other feedback.
- Programs such as SWiM and the ANU Mentoring Program allowed for a form of longitudinal tracking, through mechanisms such as reporting on promotions process outcome (SWiM) and a follow-up virtual feedback session 6 -months to 1 year after program completion (ANU Mentoring Program).

A commitment to monitoring and evaluation was identified through consultations and review of program materials to be a key determinant of successful and sustainable programs. This is due to the opportunities to learn, respond to feedback and improve on each iteration of the program that evaluation affords.

4.2 Key informant consultations (mentoring program administrators)

Consultations were conducted with key informants associated with the following programs:

- PHAA National Mentoring Program
- SBS-EMCRA Mentoring Program
- SWiM Program
- MSPGH Student Mentoring Program (Pilot for the MDHS mentoring program)

These were semi-structured consultations, one-on-one, or with a small group (up to three). The following questionnaire was used to guide the conversation:

- Please provide an overview of the mentoring program
- Who are the mentees and mentors being targeted (students/ professionals/academics)? What are the selection criteria?
- Are you aware of other comparable programs?
- Definitions of success for the program and indicators of success (if any)
- Key attributes of a sustainable mentoring program in your experience.

Key themes from these conversations pertaining to program success and attributes mirrored findings from the desktop review of mentoring programs provided in the previous sections. Additional themes and quotes are as below.

A ground-up approach with inter-departmental/inter- “work area” buy-in

Respondents believed that a mentoring program, when built with input from potential mentees and mentors, in response to an expressed or identified need has a better chance of success than a top-down, reactive approach. A quote from one of the key drivers of the PHAA National Mentoring Program illustrates this,

Our program was derived from the PHAA South Australia mentoring program. We got a lot of requests from all chapters to provide mentoring support as they were experiencing very high demand. The SA model was very successful, we shared it with chapters, who were happy with it and we scaled it up. Demand for the program has continuously grown since then. (PHAA National Mentoring Program)

The respondent for the SBS-EMCRA program echoed this sentiment and added that for them, inter-departmental cooperation was another crucial enabler and contributor to success. In response to expressed need for mentoring, six departments in the SBS bought into the idea of creating opportunities for greater cooperation between Level A and Level B researchers across the School, and committed seed funding to it. The inter-departmental membership and collaborative function of the EMCRA was key to ensuring continuity of the program once it was established, and in promoting a mentoring culture in the SBS.

The EMCRA association has been a good source of continuity for baking in mentoring culture. (SBS-EMCRA Mentoring Program)

Well-designed matching processes

Respondents reported that matching of mentees and mentors was consistently rated as one of the major contributors to program success by mentees participating in their program. This was also corroborated by evaluation report for the SBS-EMCRA Mentoring Program and findings from evaluations of other programs reviewed. A diversity of matching approaches were used, even within the same program, such as random matching, tailored matching (career goals, development needs, gender or background – refugee/migrant, Indigenous, etc.) or mentee choice.

The SWiM Program and AWiL Mentoring Program use a software system (Chronus) for matching mentees and mentors based on their responses to application forms/expressions of interest. Consultations indicate that using a software system speeds up the process while allowing for individual variations in matching (some mentors/mentees may have specific expectations about the person they are matched with). It may also help in removing conscious or unconscious biases in the matching process.

Need to have a clear understanding of the Mentors and Mentees you are targeting (skills offered and needs, respectively). Getting a good mix of backgrounds and goals is critical, besides including students who might face issues accessing mentors through other avenues. This is why we excluded PPU students as they were already getting this support through their placements. (MSPGH Student Mentoring Program)

Despite the diversity of approaches used, respondents were unanimous that for a matching process to work, three ingredients are necessary:

- Specific information about mentee needs, background and aspirations/goals, as well as mentor strengths and backgrounds
- Selection and matching criteria aligned to program goals (e.g. if a program intends to develop leadership and management skills among professional staff, matching criteria should primarily be aligned to this, among other considerations such as diversity of backgrounds or career pathways)
- Matching processes must be assessed and refined for each iteration, based on mentor and mentee feedback, especially those who experienced challenging relationships.

Clear guidance for participants

Respondents were unanimous in acknowledging that providing guidance to mentees and mentors through means such as program guidelines, workshops for mentors and mentees, mentoring skills development workshops, guides and lectures.

In addition to reinforcing program purpose and goals, this approach can help establish roles and expectations for mentees and mentors. Helping develop practical mentoring skills, especially in establishing the mentoring relationship and the interpersonal skills such as constructive feedback, active listening and building rapport were also considered valuable for program success.

Last year we held a workshop for mentors and mentees to kick-off the program. The idea was to provide program context, talk about goal-setting and mentoring skills as well as to set expectations for both groups. This was based on feedback from the year before. Feedback from this year has been very positive about the benefits of this workshop. (SBS-EMCRA Mentoring Program)

Linking programs to specific, strategic goals

For program longevity, sustainability and success, key informants indicated that program goals should be aligned with long-term strategic organizational goals. In the case of the MDHS, the faculty under which the MSPGH sits, these values are:

- Collaboration & Teamwork
- Compassion
- Respect
- Integrity
- Accountability.

This finding is linked to the first theme in this section - *A ground-up approach with inter-departmental/inter- "work area" buy-in*. Long-term strategic goals could be related to diversity (SWiM program is aligned with the MDHS faculty diversity target of achieving 50% female representation within

senior academic staff), staff retention (MIPEP program) or other specific targets related to research output or career progression.

Informants reported that this link is crucial for program longevity and sustainability, by helping establish a mentoring culture, that becomes part of the organizational culture. Organisational strategic targets can also help in this process by enabling organisations to make mentoring part of staff position descriptions or core competencies.

The SWiM program is guided by the MDHS diversity target for female representation in academic leadership positions. We have always had strong representation in junior academic staff, but this is completely flipped at senior levels, even more so for female staff from under-represented minorities. SWiM's indicators of success include measuring progress against these diversity targets, and we have made significant progress over the years. (SWiM Program)

4.3 Professional staff consultations

A group consultation was conducted with 15 professional staff from the MSPGH, who had expressed interest in being part of discussions related to mentoring. This was a semi-structured discussion, and was guided by the following questionnaire:

- Are you aware of any current mentoring programs in the School, Faculty and University?
- Are there any programs available to staff through professional associations?
- What are some of the best programs in Australia and/or New Zealand or elsewhere?
- What is the best sort of program you could envision for the School?
- What would you hope the School and program participants would get out of it (outcomes)?
- What would success look like?

Key themes from this discussion are presented below:

Need for a staff mentoring program

There was unanimous agreement among all attendees that a mentoring program for staff was needed at MSPGH. Attendees related their experiences when they started working for the School, and that they had all felt the need for ongoing support from someone more experienced, not just in terms of skills but also navigating the organisation and building networks. The orientation process was inadequate over the medium to long-term.

Attendees were also unanimous that any program must be available to staff at all levels, irrespective of their length of service. Senior staff, with years of experience at the School, still face novel challenges as well as opportunities and reported feeling unsupported, especially if they did not want to escalate the issue.

When I started working at MSPGH, I had more than 15 years experience working in similar roles in Australia and overseas. However, I would have loved to have mentoring when I started. Without that support, it felt very foreign when I started in this role and isolating, and wouldn't wish it on anyone. (Manager at MSPGH)

Awareness and promotion of current programs

A substantial number of attendees reported that they had never participated in any mentoring program since starting work at the University, explaining that they weren't aware of any programs available to them. Navigating the Mentoring page on the University of Melbourne website was described as being very confusing, with the majority of content aimed at students. Staff also reported a similar experience with the intranet.

Promoting any proposed program to all eligible staff was seen as being very important, in addition to having a central resource directory where staff could access information about existing mentoring program at University or elsewhere. This was considered vital to avoid duplication of effort and to ensure that mentors are not overburdened.

Expectations from a program

Expressed expectations from a future program were as follows:

- Clearly communicate the benefits of mentoring to all staff to promote greater buy-in. Mentoring, coaching and regular supervision are commonly confused, and this confusion can contribute to non-participation
- Any mentoring program should have goals that are clearly defined, and easily understood by both mentees and mentors
- Important to match based on specific needs of mentees and strengths of mentors (professional as well as soft skills), rather than just mentee CVs and other background information. Collect information from mentees about their career goals and expectations from the program
- Respondents recommended that the mentoring program be opened to all levels of staff, irrespective of length of service. They also expressed a preference for allowing professional mentees to be paired with mentors working as academics and vice-versa.
- The program should be structured, with workshops or seminars for mentors and mentees (a kick-off session was deemed critical, followed by optional skill-building sessions based on interest and need)
- Mentor training was considered valuable, with a respondent remarking, "Some mentors are born with the skills, can take on the role and be successful in it, but others need training."

5. Discussion

Substantial evidence exists identifying the benefits of mentoring in health (18), teaching, academic research(9, 24), and the corporate sectors(25, 26). These benefits have been documented for mentors, mentees, and ultimately organisations and primarily drive efforts to establish mentoring programs, and more broadly, a mentoring culture within organisations.

5.1 Mentoring benefits

As mentioned earlier, mentoring benefits mentees, mentors and organisations. There is some evidence that informal mentoring provides higher benefits than formal mentoring, which has been attributed to factors such as greater self-efficacy among mentees engaging in informal mentoring, self-selection of mentors, and broader networks of mentors built by such mentees (25). However, evidence exists that establishing informal mentoring is difficult for individuals who do not have access to pre-existing networks or may lack the means to build these networks due to systemic inequities or challenges with interpersonal skills (11, 12, 15, 22, 23).

For mentees, benefits include tangible and intangible benefits such as:

- Greater upward mobility in their career demonstrated through promotions and higher salary outcomes
- Greater satisfaction levels with their roles and the organisation
- Feeling more confident and better supported in the organisation
- Higher productivity (27, 28).

For mentors, benefits include:

- Improved productivity through mentoring (29, 30)
- Development of management and leadership skills (29, 30)
- An elevated organisational profile leading to tangible career benefits (29, 30)
- Organisational recognition and recognition by co-workers for mentoring efforts (29, 30)
- Mentoring as a personally rewarding experience (passing the torch) (31)
- Developing a network of supportive peers, as well as senior and junior staff through these mentoring efforts (29, 30).
- A way of ensuring that mentors who are in senior positions remain in touch with staff “on the ground” as well as a means of intelligence gathering especially from other departments/areas.

Organisational benefits include lower staff turnover, higher productivity, and greater staff cohesion, besides acting as a factor attracting potential staff (31, 32). More intangible benefits include, building organisational and staff resilience as well as a robust long-term corporate culture, capable of adapting to change over time(31).

5.2 Mentoring stages, barriers and enablers

Kram (1983, 1985) described the mentoring relationship in four phases:

- Initiation (when the mentoring relationship is in its formative stages, goals/objectives, expectations, processes, and “rules” are being defined)
- Cultivation (the relationship is formed, and depending on the quality, it may deliver expected benefits, or may flounder)
- Separation (described as the natural distancing between mentors and mentees that occurs in informal mentoring as the mentee grows more comfortable and autonomous in their role, or the pre-defined end of a formal mentoring relationship)

- Redefinition (a stage that may or may not occur - based on the experiences of the mentors and mentees with the relationship. Here, it may take the form of renewed occasional contact between the two as a loose, senior-junior relationship, or as a friendship between peers) (1, 33).

Barriers and enablers to formal mentoring may be examined in relation to these stages and a mentoring program designed accordingly.

Sambunjak et al in their 2010 systematic review of literature related to mentoring in academic medicine identified common barriers and enablers encountered in mentoring relationships. Barriers identified by them include:

- Lack of confidence and/or courage in the mentee to initiate and maintain the relationship, while making effective changes
- Insufficient drive on the part of the mentee to develop the relationship, or a passive approach to the relationship
- Insufficiently developed mentoring skills for the mentor
- Lack of, or breakdown of effective communication between mentee and mentor
- Issues of mentor and mentee “fit”
- Differences in terms of personal attributes such as race, gender or ethnicity affecting the ability to find common ground
- Mentors and mentees having unrealistic or transactional expectations from the relationship such as mentees expecting promotions or a new role, while mentors may expect unquestioning obedience or control over mentee’s career (21).

More insidious or serious behaviours on part of the mentor, reflecting the power dynamic may include:

- “Stealing credit” for a mentee’s work (34, 35)
- Sexual harassment by mentors
- A controlling or authoritative relationship in competition to the mentee’s regular lines of reporting, creating undue job-related stresses (workload, competing priorities) (35).

Enablers of an effective mentoring relationship identified through various sources include:

- Clearly defined program goals, mentor and mentee expectations and timelines (16)
- Facilitated matching and regular monitoring (36)
- Opportunities to develop mentoring skills for mentors (36)
- Broad support from organisational leadership for mentoring as a strategy (16, 37)
- Targeted training and networking opportunities for mentees and mentors (36, 38)
- Linking mentoring programs to broader organisational strategies to facilitate sustainable cultural change (26).

5.3 Snapshot of mentoring within the University of Melbourne

In response to poor attendance at a cross-discipline mentoring workshop for early-mid career researcher in the Science, Technology, Engineering, Mathematics, and Medicine (STEMM) fields, a snapshot survey to identify the current engagement and understanding of staff mentoring among all staff in these faculties was conducted. The results from the survey (n=276 respondents) closely mirror those of the professional staff consultation carried out as part of this review (*section 4.3*). Key findings were:

- Only 30% of respondents had ever participated in formal mentoring
- 90% of respondents were unaware of mentoring support or resources available to university staff
- Key barriers to engaging with mentoring programs were lack of information about mentoring programs, followed by low numbers of available places, the effort and time required to be accepted in available programs (39).

The study inferred that the low numbers of staff involved in formal mentoring, combined with the articulated barriers to engagement indicated an absence of mentoring infrastructure and culture across the STEMM faculties.

To address these issues, the report made three recommendations:

- Establishment of a central hub for mentoring programs, information and skills training
- Extensive promotion of mentoring benefits and programs for all staff (academic as well as professional) by embedding mentoring expectations in professional development review processes at all levels
- Creation of a mentoring culture through broad engagement and training across STEMM faculties (39).

The recommendations of our review are aligned with the recommendations made by the STEMM mentoring survey report, directed towards the creation of a mentoring program for MSPGH staff.

6. Recommendations

To facilitate greater mentoring support for MSPGH staff, we propose the development of a mentoring program based on the following recommendations, which are derived from our review of good practice literature, mentoring programs in similar contexts and discussion with professional staff.

A co-ordinated, School-wide approach to mentoring

The School's executive team should ensure that a broad consensus is reached on:

- The need for mentoring support for all staff
- Agreement on mentoring as a strategy for staff development and retention, distinct from supervision or performance management
- Commitment from all business units and departments of their support for the mentoring needs of staff.

This approach will enable a coordinated approach to mentoring, and may open avenues for greater inter-departmental co-operation, pooling of resources (human and other resources) and expertise.

Staff input in program design

Similar to the previous recommendation, staff input in the design and implementation of a future MSPGH staff mentoring program is critical to ensure awareness, buy-in and sustainability of the program. Staff members will be the end users of such a program, as mentees and mentors, and their needs and aspirations must inform the program's design.

The brainstorming sessions and meetings by MSPGH leaders and staff in September 2020, which led to this review, as well as the consultation with professional staff conducted as part of this review have revealed a wealth of information. These sessions can act as a reference point for future engagement.

Dyadic program with group mentoring elements

Findings from this review, as described in *sections 2.1, 4.1 and 4.2* indicate that dyadic programs (traditional mentor-mentee relationships) are the most common approach to mentoring, with variations based on mentor availability such as group mentoring (one to many or many to many) or purely dyadic mentoring. Evidence exists to support an approach which allows where mentees are matched to a group of mentors, with one mentor as their primary. This is in response to findings which indicate that one mentor might be insufficient in meeting the developmental and other mentoring needs of a mentee (professional skills, interpersonal relationships, organisational dynamics).

As a result, it would be prudent to design a program which allows for this approach of many-to-many mentoring (one mentor would have multiple mentees, and a mentee can have multiple mentors). This "constellation of mentors" occurs naturally in informal mentoring and contributes to the relatively greater efficacy of informal mentoring compared to formal approaches (15).

Such an approach would also lend itself to reinforcing the program with peer mentoring elements through skills training workshops (for mentees and mentors, based on the competencies that the program aims to develop), regular meetings and online fora for peer support and networking.

Finally, as a step to breaking down the barriers between professional and academic staff, the program should be open to both cadres. This was unanimously supported by the professional staff consulted, who recommended allowing professional mentees to be matched with academic mentors and vice-versa, ideally from a business area/department other than their own. This may allow greater "cross-

pollination” of ideas and discovery of synergies between individuals and departments, further breaking down siloes. A final advantage of this approach is that in modern universities, the traditional dichotomy of professional and academic staff is steadily eroding. As a result, staff require the development of both, professional (resource and personnel management) and academic (writing grants, reports, research design documents) skills.

Clarity of vision, purpose with purposeful matching

As part of program design, clear guidelines should be developed, containing:

- Defined, specific goals of the mentoring program.
- Potential benefits for mentees and mentors.
- If the program offers limited places, selection criteria for mentees and mentors.
- Program approach (one-to-one mentoring, group mentoring, etc.).
- An outline of the program structure and duration, with expected time commitments, preferred frequency of meetings and a timetable of workshops/meetings if any.
- Clear expectations from mentees (“duties”) and mentors
- Supports available for both mentees and mentors.
- Program evaluation details.
- Application instructions.

In addition, this clarity of vision should also extend to clearly articulated links between the program’s goals and expected outcomes and organisational values. In the case of the MDHS, the faculty under which the MSPGH sits, these values are:

- Collaboration & Teamwork
- Compassion
- Respect
- Integrity
- Accountability.

The application instructions should include an EOI, which could take the form of an online survey or document with questions designed to gain a more holistic understanding backgrounds, and of mentees’ needs and aspirations, as well as mentors’ skills, strengths and motivations. This information can be used to match mentees more effectively with mentors, than by simply relying on curriculum vitae (Section 4.2 and Chapter 5).

Guidance and training for mentors

Mentoring involves specific skills, such as active listening, providing constructive feedback, setting career goals, negotiating expectations, addressing diversity and role modelling among others (40). As discussed previously, these skills can be gained by anyone if proper training is available. Within the University of Melbourne itself, training resources have been created for programs such as the SWiM, AWiL and most recently, the MDHS Student Mentoring Program. These should be adapted or used as a resource to develop training workshops or online resources for mentors participating in any future programs. This approach was widely supported by key informants as well as professional staff consulted for this review.

Establish mentoring relationship management mechanisms

Facilitating the mentoring relationship, especially in the initiation and cultivation phases as per Kram’s work (1983, 1985), is vital to program success. It is recommended that in addition to regular workshops/seminars as mentioned above, mechanisms such as regular check-ins with mentees and dedicated program liaisons be instituted, similar to the MIPEP Mentoring Program at the University of

Melbourne. These mechanisms also present an opportunity for preventing or managing the risk of predatory and/or exploitative relationships developing between mentors and mentees.

Build a robust evaluation system

A robust evaluation system is one of the hallmarks of successful mentoring programs. Evaluating the program will allow for assessing whether the program is achieving its goals and allow changes to be made in response to any gaps or unmet needs. It can also add to the evidence base in support of mentoring programs. Evaluation of long-term impacts can be challenging, especially for short, time-bound programs, given the issues with attribution(16).

Nevertheless, an evaluation approach must be defined when the program is rolled out, along with a theory of change and theory of practice, based on the stated goals of the program, to help structure the evaluation. Data should be collected from both mentors and mentees, in addition to other specific outcomes data (such as promotions outcomes for the SWiM program). This data at the very least could include:

- Mentee experience (quantitative - rating scores, qualitative)
- Mentor experience (quantitative - rating scores, qualitative)
- Identified gaps (from both groups)
- Suggestions for improvement.

The onus of conducting and reporting on the evaluation lies with the program administrators, and the evaluation may be conducted in-house, or externally. Good practice indicates that results must be made available to all interested parties, especially the mentors and mentees (41).

Build a mentoring culture

Finally, the mentoring program should be the means, not an end, the ultimate result being an organisational mentoring culture. Culture change requires time, effort and a series of interlinked changes to manifest and endure (42). For mentoring to become part of the MSPGH staff culture, it will need to be “baked into” the policies and procedures governing staff at the School. This could take the form of clearly defined mentoring competencies as part of position descriptions and performance review processes, particularly the leadership and service elements of performance review. Other means of fostering a mentoring culture include facilitating opportunities for informal mentoring through regular networking and speed-mentoring events for staff (professional and academic together). A well-designed mentoring program can act as a first step towards achieving this, by demonstrating the tangible benefits of mentoring to mentees, mentors and the broader organisation.

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