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COMMENTARY

From Surviving to Thriving: The Role of Informal Mentorship for Early Career Inter and Transdisciplinary Researchers

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Abstract

Early career researchers (ECRs) are the future of inter and transdisciplinary research, yet they face unique challenges—from navigating divergent disciplinary norms to working within precarious academic environments—that can affect their personal and professional well-being and career success. While formal supervision plays a critical role in their development and success, we posit that informal mentorship offers a complementary form of support that can significantly improve the trajectory and well-being of ECRs. The value of informal mentorship, however, is often overlooked, with many ECRs not aware that it is available to them and the benefits it offers. Drawing on our lived experiences, this commentary describes the untapped value of informal mentorship for both the mentee and mentor. We share practical advice for finding and choosing an informal mentor, and building and managing successful mentor–mentee relationships. We conclude by arguing that informal mentorship is not transactional, but part of a gift economy that strengthens the fabric of academic life for ECRs and senior researchers alike, making it more accessible, inclusive, and rewarding for all.

1. Introduction

Early career researchers (ECRs) working in inter and transdisciplinary marine science face a uniquely complex landscape (Cosentino & Souviron-Priego, 2021; Kelly et al., 2019), with challenges that reach far beyond those associated with traditional academic training. For example, the steep learning curves, such as those associated with working across unfamiliar methods, diverse knowledge systems, and collaborative norms, are compounded by institutional structures that remain largely tethered to disciplinary siloes (Brodie et al., 2022; Deininger et al., 2021; Lucà et al., 2025). At the same time, access to appropriate training and support is also uneven, shaped by factors such as institutional priorities, funding availability, supervisory attitudes, and geographic location (Kaikkonen et al., 2024). These (and other) challenges and disparities can constrain ECRs' ability to engage effectively in inter and transdisciplinary work and erode their perceived credibility and legitimacy (Cvitanovic et al., 2019), while also compounding the pressures many already face, including mental health concerns, financial strain, and professional isolation (Cilli et al., 2023; Evans et al., 2018).

Against this backdrop, attention has turned towards how best to support ECRs navigating the demanding and often inequitable terrain of inter and transdisciplinary research (e.g., Andrews et al., 2020; Brasier et al., 2020; Cvitanovic et al., 2024; Penca et al., 2024; Rölfer et al., 2022). We believe that one promising, yet under-discussed, avenue of support is informal mentorship; relationships that offer guidance, support, and encouragement outside formal supervisory or institutional arrangements. Unlike formal mentorship (e.g., PhD supervisory team), which is typically mandated and structured around organizational/project goals, informal mentors typically emerge organically through shared interests, mutual respect, or serendipitous encounters at conferences, workshops, or via collaborative projects. Where formal mentorship offers accountability, structure, and oversight, informal mentorship often provides something less tangible but equally vital: a sense of psychological safety, mutual investment, and adaptability (beyond the immediate focal research project). We believe that, for ECRs working within the uncertainties of inter and transdisciplinary marine research, these relationships can (among other things to be discussed later) foster the confidence, perspective, and relational skills needed to collaborate across knowledge systems, build trust with diverse partners, and engage meaningfully beyond academia. Yet despite its potential to help ECRs, there is little guidance on how to seek, cultivate, or benefit from informal mentee–mentor relationships.

This commentary addresses that gap by exploring the role of informal mentorship in supporting ECRs working within inter and transdisciplinary marine research settings. Drawing on our lived experiences as mentors and mentees, we reflect on how informal mentoring relationships can help ECRs move from surviving to thriving in academic environments that are often complex and under-resourced. Specifically, our dual ambition in writing this commentary is to: (a) empower ECRs to identify, build, and sustain successful informal mentoring relationships; and (b) encourage senior researchers to recognize their potential as informal mentors and actively support the next generation of marine scientists. In doing so, we aim to spark broader conversations about how informal mentorship, understood not as a transactional exchange but as a relational practice, can strengthen the fabric of academic life, making inter and transdisciplinary research cultures more inclusive, accessible, and rewarding for ECRs and senior researchers alike.

In writing this commentary, we acknowledge that informal mentorship is not a universal need. Some ECRs are fortunate to have formal supervisors and networks who offer exceptional support, making additional mentorship unnecessary. Others may have wonderful formal mentors, but yet seek informal mentors to diversify their learning opportunities or extend their networks. And for those navigating difficult supervisory relationships, informal mentorship can offer a vital lifeline. We also note that while we explore the importance of informal mentorship within inter and transdisciplinary research settings, the advice provided in this commentary may be equally applicable to those working within the confines of a specific discipline. Thus, this commentary does not prescribe a single path, but rather seeks to highlight informal mentorship as one valuable and accessible avenue for professional and personal development for ECRs, and provide guiding principles on how to maximize those relationships should they be pursued.

2. Why Seek an Informal Mentor?

Informal mentorship can offer unique and often overlooked benefits for ECRs (Nemanick, 2000). Unlike formal supervisors, informal mentors are not bound by deliverables, institutional hierarchies, or performance assessments. They are neither your boss nor your project manager, but rather independent and trusted guides who can offer advice from a broader perspective. This distance can allow informal mentors to provide fairer, more candid insights, free from the conflicts of interest that can sometimes shape formal supervisory relationships.

For many ECRs, this distinction is critical. The power imbalance inherent in formal supervision can create environments where students feel pressure to perform, to appear competent, and to avoid vulnerability (Byrne et al., 2025). In such cases, ECRs are often reluctant to admit they are experiencing problems. In contrast, informal mentors can often provide a safer space to discuss insecurities, doubts, and personal challenges, without fear of judgment or professional repercussions. This is especially relevant when ECRs experience challenges within their formal supervisory relationships that may hinder their career progress and/or impact their personal wellbeing. As such, in our experiences, it is best to identify and cultivate an informal mentorship relationship as early as possible, to create a supportive foundation that ECRs can draw on if challenges emerge later.

Here, we share five key motivations that have led us, and others we have spoken with, to seek informal mentors. This list is not exhaustive, nor do we suggest that every ECR will relate to each point. Rather, it emerges from our collective experiences and conversations, and is offered to highlight the diversity of needs, pressures, and emotional landscapes that shape ECRs' journeys.

2.1. Navigating Inter and Transdisciplinary Complexity

Inter and transdisciplinary marine research often places ECRs in unfamiliar terrain, where disciplinary norms, methods, and expectations differ significantly. Formal training rarely prepares researchers to work across these divides (especially as most training programs are situated within a siloed institutional structure), leaving gaps in understanding, collaboration, and epistemological fluency. In such cases, informal mentors are often sought to help interpret unfamiliar structures, bridge methodological divides, and access siloed networks, especially when institutional pathways for interdisciplinary engagement are unclear or underdeveloped.

2.2. Seeking Emotional Support and a Sense of Belonging

Academic cultures frequently overlook the emotional toll of ECRs, particularly in inter and transdisciplinary spaces where ECRs may feel isolated or out of place. When formal environments are disengaged, indifferent, or even toxic, ECRs may seek informal mentors who offer psychological safety, validation, and care. These relationships can also model healthier communication practices, which are rarely explicitly taught or part of formal supervisory frameworks.

2.3. Exploring Careers Beyond Academia

Formal supervision often centers on academic progression, leaving ECRs with limited support for preparing/exploring careers in other sectors, or understanding how to make their research accessible to other sectors. Informal mentors are often sought to fill this gap, offering insights into alternative career pathways, helping translate academic skills to other contexts, and encouraging broader visions for life beyond the PhD.

2.4. Addressing Gaps or Conflicts in Formal Supervision

Not all formal supervision is reliable or sufficient. ECRs may encounter supervisors who are, for example, absent, misaligned, overly directive, or primarily invested in their own agendas. In these cases, informal mentors can offer a sounding board, alternative perspectives, and relational care, providing support that may be otherwise unavailable (e.g., guidance for how to navigate challenging supervisory relationships based on the mentors' previous experiences).

### 2.5. Creating Space for Reflection and Authenticity

Academic structures can, at times, constrain creativity and reflection, focusing instead on measurable outputs (e.g., number of published articles, number of students graduated, etc.). ECRs may seek informal mentors who create space for open-ended dialogue, intellectual stimulation, and personal exploration, especially when questions of purpose, identity, and innovation are sidelined in formal settings.

3. Finding the Right Informal Mentor

In this section, we turn to the question of how to find and choose a mentor who fits your needs. Informal mentorships often begin without a formal invitation or institutional structure, which can make them feel elusive or intimidating to pursue. They typically emerge organically through shared interests, proximity in research groups, or simply getting along well, but they can also be cultivated with intention and purpose.

Regardless of how they begin, choosing the right mentor is critical to the success of the relationship. Below, we outline six attributes to consider when seeking an informal mentor. The first three we consider to be foundational and non-negotiable: (a) personal connection and trust, (b) shared values, and (c) reputation. These form the base "pieces of the puzzle" (Figure 1). From there, ECRs can build out the rest of the picture based on their individual needs and circumstances, for example, by choosing mentors who (d) have relevant

experience beyond academia, (e) those who have complementary research interests, and (f) those with shared lived experiences.
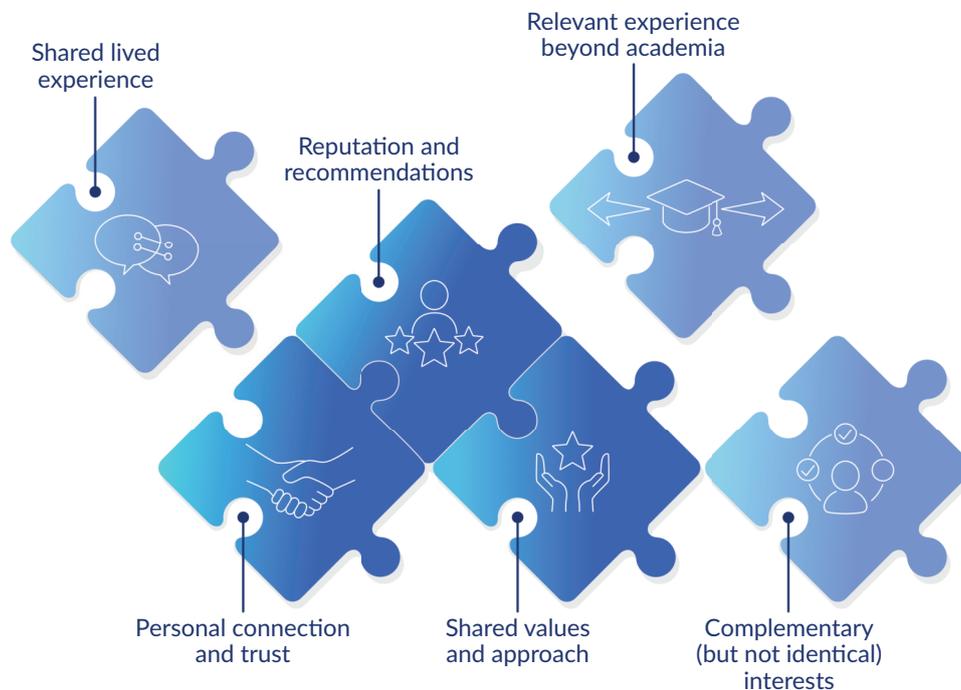
Figure 1. Key considerations for choosing the right informal mentor. Three of these are considered to be foundational and non-negotiable: personal connection and trust, shared values, and reputation; these form the base "pieces of the puzzle"; the remaining three are tailored to the ECR's individual needs.

3.1. Foundational Attributes: The Base Pieces of the Puzzle

3.1.1. Personal Connection and Trust

In our experience, a genuine human connection matters more than academic prestige. Informal mentorship thrives on mutual respect, ease of conversation, and a sense of psychological safety. If you feel comfortable being honest, asking questions, and sharing doubts, that's a strong sign of trust. This relational foundation allows informal mentorship to move beyond transactional advice into deeper, more transformative dialogues.

3.1.2. Shared Values and Approach

Look for someone whose way of working, thinking, and collaborating resonates with your own. This does not mean they must mirror your perspective; mentors who challenge your thinking can be incredibly valuable, but there should be alignment in how they approach research and collaboration. Shared values create a sense of coherence and help ensure that advice is relevant and meaningful to your context.

3.1.3. Reputation and Recommendations

Informal mentorships often rely on word-of-mouth. Asking supervisors, colleagues, or peers for suggestions can help you identify potential mentors who are known for being generous, thoughtful, and supportive.

Informal vetting, for example, through conversations, observations, or shared experiences, can offer useful insights into how someone shows up in mentoring relationships. A strong reputation does not always guarantee a good fit, but it provides a helpful starting point.

3.2. Tailored Attributes: Building the Rest of the Puzzle

Once the foundational pieces are in place, ECRs can shape the rest of the mentorship relationship around their specific and individual goals, contexts, and aspirations. These next three attributes are more flexible and will vary depending on what an individual mentee is seeking at a particular moment in their career.

3.2.1. Relevant Experience Beyond Academia

For ECRs considering careers outside the university/research sector, mentors with experience in policy, NGOs, consulting, or other applied areas can offer invaluable guidance. Because this experience is rarely obvious from academic publications alone, it often requires looking elsewhere, for example, at professional profiles (e.g., LinkedIn), research group webpages that list funding partners, or the organizations that appear repeatedly in their collaborative projects. These signals can help you identify mentors who have meaningful experience outside academia related to your own interests and goals.

3.2.2. Complementary (But Not Identical) Research Interests

Some overlap in research topics, methods, or disciplinary background can help ground the mentoring relationship in shared language and context. However, too much similarity may limit the diversity of perspectives. A mentor whose work complements, but does not mirror, your own can offer fresh insights, challenge assumptions, and help you think more expansively. This is especially valuable in inter and transdisciplinary settings, where intellectual cross-pollination is key.

3.2.3. Shared Lived Experiences

Sometimes, what matters most is not academic expertise but shared life experience. Mentors who have navigated similar personal circumstances, such as moving internationally, balancing caregiving responsibilities, or managing chronic illness, can offer empathy, practical advice, and a sense of solidarity. These commonalities can create a deeper sense of connection and understanding, especially when institutional cultures overlook or undervalue these dimensions of academic life.

3.3. Making the First Move: Initiating Informal Mentorship With Confidence

Initiating an informal mentoring relationship can feel daunting, especially for those unfamiliar with the concept. ECRs may fear being a burden, worry about stepping on a formal supervisor's toes, or feel anxiety about approaching senior academics (or those from outside of academia) and being ignored. For some ECRs, these challenges are amplified when they are already experiencing strained or harmful supervisory relationships. In these situations, the need for informal support is often greatest, yet confidence, networks, and psychological safety may be at their lowest, making the first move feel especially difficult. These feelings are valid, but they need not be barriers.

When you come across a potential informal mentor, it is important to first explore compatibility, starting small, such as asking for a casual coffee or brief chat, as a low-pressure way to introduce yourself. While many informal mentoring relationships develop organically from a few positive conversations, we believe it can also be empowering to be more explicit if the connection feels right. In these cases, a simple, direct request (i.e., asking whether they would be open to being an informal mentor) can help provide clarity for both parties and set clear expectations and boundaries (as detailed later in this commentary). If, on the other hand, the conversation feels forced or the connection is not there, it is okay to leave this as a single chat and not pursue the relationship further. Importantly, informal mentors do not need to be based in the same place. In our experiences, as well as published examples (e.g., Muir et al., 2023), many such relationships develop effectively across institutions or countries, supported by email and online interactions.

Conversely, a "no" from a potential mentor is rarely personal; some people may lack the time or confidence to mentor (even senior academics feel imposter syndrome). What matters most is recognizing your own value (as discussed later, informal mentorships are highly reciprocal). If someone does not respond or engage, that is a reflection *on them*, not on you. Finally, it should be noted that there is no "right" time to initiate an informal mentorship, but rather they can be pursued at any point in an academic career when they are needed.

4. Benefits of Informal Mentorship for the Mentee

Once an informal mentoring relationship begins, its impact can be immediate and long-lasting. The benefits vary depending on the nature of the relationship, the needs of the mentee, and the moment in their career. Some mentoring connections offer a brief but timely boost (e.g., once-off conversation about a certain topic), whereas others evolve into sustained sources of growth and transformation (e.g., monthly conversations over several years). Irrespective of the timeline and structure, here we briefly outline some of the benefits we have personally experienced through informal mentorship (summarized in Figure 2).

### 4.1. Emotional Safety and Support

Once trust is established, informal mentors often create a space where ECRs feel safe to share doubts, frustrations, and personal challenges without fear of judgment. This kind of support becomes especially vital during periods of burnout, conflict, emotional strain, or times when formal structures may be absent or unresponsive.

4.2. Validation, Empowerment, and Identity

Informal mentors help ECRs feel seen and valued, often restoring a sense of agency and self-worth that can be eroded in competitive or isolating workplace environments. These relationships encourage reflection on identity beyond academic roles and help normalize vulnerability, uncertainty, and failure as part of the research journey.

4.3. Practical Academic and Research Support

Beyond emotional support, informal mentors often provide hands-on guidance with writing, structuring papers, developing research narratives, and integrating interdisciplinary methods. They also help ECRs
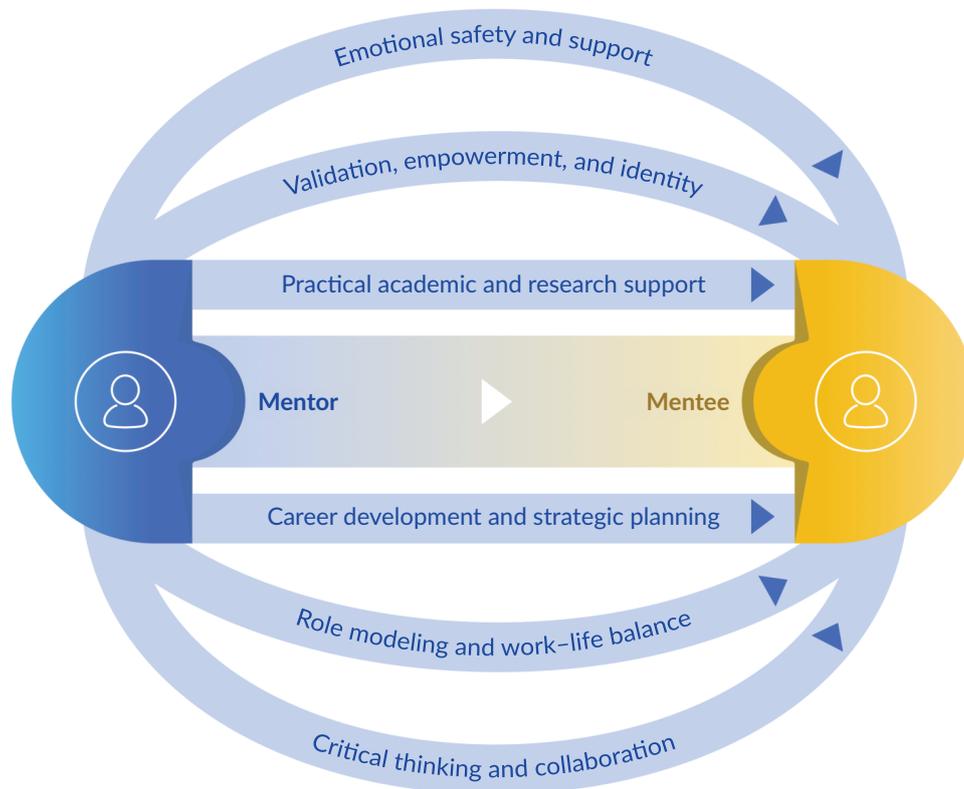
Figure 2. Key benefits that mentees receive through informal mentoring.

navigate institutional systems, offering strategic advice on managing relationships with formal supervisors and navigating bureaucratic hurdles.

4.4. Career Development and Strategic Planning

Informal mentors can be instrumental in helping ECRs think beyond the PhD. They offer advice on job applications, interviews, and career planning, especially for roles outside academia. Their insights help mentees build a longer-term vision for their professional lives, grounded in both personal values and practical realities.

4.5. Role Modelling and Work–Life Balance

Seeing mentors' model healthy professional behaviours, such as setting boundaries, prioritizing care, or balancing work with family, can be transformative. These examples remind ECRs that joy, fulfilment, and sustainability are possible within academic careers, even if they are rarely emphasized in formal settings.

4.6. Critical Thinking, Collaboration, and Broader Engagement

Informal mentors often challenge ECRs to think more critically and expansively (e.g., beyond the confines of the focal project). They can help ECRs to make difficult choices by acting as a sounding board and providing insights from their own experiences. They help develop skills for engaging with diverse actors in non-extractive

ways, and frequently open doors to new collaborations, networks, and opportunities that extend beyond the PhD.

5. The Mentor's Perspective

Informal mentorship is a two-way relationship. While much of this commentary has focused on the mentee's experience, it is equally important to consider what these relationships mean for mentors, who are people too, with their own pressures, values, families, and interests. Recognizing this humanity is essential to building mentor–mentee relationships that are respectful, reciprocal, and non-extractive. In this section, we reflect on the motivations, benefits, and challenges we have encountered while informally mentoring ECRs. We also share this perspective in support of the commentary's second aim: encouraging more senior researchers to see informal mentorship as both meaningful and manageable.

In reading this section, it is important to note the change in "voice." Other sections of this commentary have reflected the experiences of the entire author group. However, of the authors, only two have acted as informal mentors (Christopher Cvitanovic and Geoff Allen), and thus, this section reflects their experiences only.

5.1. Motivations to Mentor

Our commitment to informal mentorship stems from a sense of gratitude and responsibility. Throughout our own careers, we have been fortunate to receive generous support from informal mentors who offered us guidance, encouragement, and a space to grow. Informal mentorship feels like a way to honour that legacy and pay it forward to help foster a more caring and collaborative academic culture. We also hope that by modelling generosity and openness through mentorship, our mentees will one day do the same, creating a ripple effect of support and care in academia that extends across disciplines and generations.

We are also motivated by a desire to stay connected to the people and values that matter most in academic life. Mentorship offers a relational way to engage with our field, one that prioritizes care, curiosity, and shared learning over tokenistic engagement and outputs. Some of our motivation also stems from a broader commitment to the role of science in society. We care deeply about the value of scientific reasoning and evidence-informed decision-making, and mentoring ECRs is one way we contribute to strengthening that foundation. Through these relationships, we can support thoughtful engagement with complex issues and help support the next generation of researchers and their ability to engage beyond academia.

Ultimately, we mentor because we want to leave something meaningful behind, not in the form of accolades or outputs, but through relationships. The people we have supported, the ideas we have helped shape, and the culture we have contributed to. In our experiences, the benefits of informal mentorship significantly outweigh the costs (detailed in the coming sections), and we encourage other academics to take on this role with more regularity as a meaningful and manageable part of their professional practice.

5.2. Benefits of Informal Mentorship for Mentors

In this section, we reflect on the benefits we have experienced through informal mentorship (Figure 3). These relationships have become one of the most fulfilling aspects of our academic careers, not because

they are easy or predictable, but because they offer connection, purpose, and a sense of shared growth. While informal mentorship often begins as an act of generosity or responsibility, it brings with it a range of personal, intellectual, and professional rewards for the mentor that continue to sustain and enrich our work, as outlined here.
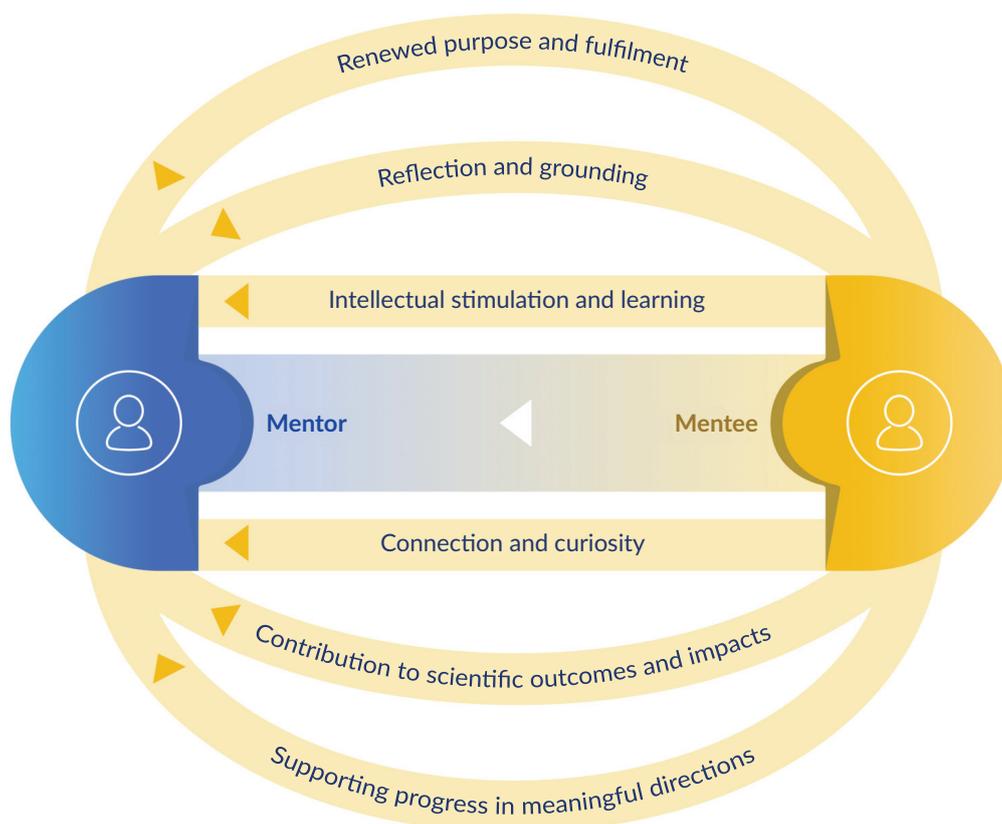
Figure 3. Key benefits that mentors receive through informal mentoring.

5.2.1. Renewed Purpose and Fulfilment

Supporting someone through their challenges and witnessing their growth is deeply motivating. These relationships offer a sense of making a real difference, reminding us why we entered academia and reconnecting us with its human side.

5.2.2. Reflection and Grounding

Informal mentorship often prompts us to reflect on our own careers, revisit past decisions, and navigate our own frustrations with greater clarity. These moments of introspection help us stay grounded and emotionally connected to our work.

5.2.3. Intellectual Stimulation and Learning

Engaging with ECRs expands our own knowledge base. Their questions, insights, and disciplinary perspectives challenge us to think differently about our own work and stay open to continuous learning.

5.2.4. Connection and Curiosity

Mentorship introduces us to new individuals and their motivations, interests, and aspirations. These connections foster curiosity and broaden our understanding of the diverse drivers and pathways within marine research.

5.2.5. Contribution to Scientific Outcomes and Impacts

Through mentorship, we help shape the development of ideas, technologies, and policy-relevant conclusions grounded in rigorous research. This indirect influence on tangible outcomes, whether through research outputs, collaborations, or policy engagement, is professionally rewarding and reinforces the value of sustained scientific inquiry.

5.2.6. Supporting Progress in Meaningful Directions

Mentoring allows us to engage with areas of research that reflect our values and long-standing interests. It is deeply satisfying to witness academic progress in directions we care about, such as advancing marine science, promoting science-informed public discourse, or encouraging thoughtful engagement with complex societal challenges.

5.3. Navigating the Challenges of Being an Informal Mentor

While informal mentorship can be deeply rewarding, it also comes with its own set of challenges. These relationships require time, emotional energy, and care, and they can be draining, especially when mentees share experiences of mistreatment, toxic environments, or personal hardship. There is a very real emotional weight to holding space for someone else's pain, particularly when we feel powerless to change their circumstances. We often carry these conversations with us long after they end, worrying about our mentees and hoping that our support is enough to help them navigate difficult terrain that we cannot influence.

Mentorship also invites vulnerability. We sometimes question whether our advice is useful or whether we have misunderstood what our mentees need. These doubts can echo (and have exacerbated) our own experiences of imposter syndrome, reminding us that mentorship is not just about offering wisdom; it is also about listening, adapting, and being honest about our limitations. There is no one-size-fits-all approach to mentoring which presents challenges; some mentees seek guidance, others need space to vent, and many are simply looking for someone to help them think through decisions and ideas. The key is to support them in ways that suit their needs best, even when we do not have all the answers.

Establishing trust is essential, and that trust depends on shared values, open and respectful communication, and a willingness to engage with differing viewpoints. Informal mentorship works best when expectations are clear, motivations are aligned, and there is a framework for interaction (as detailed in Section 6 of this commentary). It also requires a genuine time commitment.

5.4. Creating Space to Be a Mentor

In our experiences, many ECRs do not realise that informal mentorship is something they can seek out, or that senior researchers might be open to it. As mentors, we can help lower these barriers by signalling our availability through academic profiles, institutional pages, or professional networks. Even small gestures, like setting aside an hour each month for informal chats with ECRs in our own research centres, can make a meaningful difference. Digital tools also offer new ways to connect across institutions and geographies, expanding the reach and accessibility of informal mentorship. And while time is often framed as a scarce resource in academia, we believe it is worth reflecting on how we spend it. If we can find time for meetings that serve little purpose, surely we can make space for conversations that support someone's growth. In the spirit of the gift economy, we believe that informal mentorship is a way to invest time generously and have a meaningful and lasting impact for both the mentee and mentor.

6. Managing Successful Informal Mentor–Mentee Relationships

Like any relationship, informal mentorships need nurturing. They flourish when approached with care, clarity, and mutual respect. In this section, we distill our collective experiences into six overarching principles that we believe support the development of meaningful, ethical, and effective informal mentor–mentee relationships.

In doing so, it is important to acknowledge that not all mentorships are positive. Even well-intentioned relationships can become unbalanced or, in some cases, harmful over time, particularly when power dynamics are left unexamined or expectations are unclear. Mentors can misuse their influence, and mentees can feel trapped in extractive or one-sided dynamics. As such, recognising when a relationship is no longer serving its purpose, and having strategies to manage or exit that relationship, is a critical part of ethical mentoring practice.

Informal mentorships vary in duration and intensity. Some may involve a handful of conversations, others may evolve into long-term professional relationships. Setting expectations early about communication, boundaries, and the nature of the relationship can help avoid misunderstandings and ensure both parties feel respected and supported. Themes like transparency, reciprocity, and follow-through are foundational, and they appear across multiple principles, underscoring their importance.

Each of the six principles introduced is accompanied by specific actions for mentors, mentees, or both (Figure 4). Together, the principles and practices offer a starting framework for building informal mentorships that are not only effective but also grounded in care, accountability, and mutual growth.

6.1. Principle 1: Approach With Sincerity and Respect

Informal mentorship is a voluntary and generous act. Unlike formal supervision, it is not tied to institutional obligations or performance metrics. Approaching a mentor with sincerity shows that you value their time, experience, and perspective. It also sets the tone for a relationship built on mutual respect rather than transactional exchange. When mentees are thoughtful and intentional, mentors are more likely to invest meaningfully in the relationship.

Actions for Mentors	Actions for Mentees
1. Approach with sincerity and respect	
	○ Reflect on why you're seeking mentorship and why this person is a good fit.
	○ When reaching out, be clear and respectful: e.g., "I admire your work on X and would value your perspective on Y."
2. Build a safe and empathetic space	
○ Reflect on why you are willing to mentor and what you might have to offer.	○ Be honest about your challenges and uncertainties— vulnerability is not weakness.
○ Practice active listening and nonviolent communication.	○ Respect the emotional boundaries of your mentor and be aware of what your mentor is going through, have empathy for them as people.
○ Don't push your mentee too hard—proactively ask about, and respect, their boundaries.	○ Avoid extractive behaviour—don't treat your mentor as a resource to be mined.
	○ Respect your mentor's time by being flexible.
3. Establish clear expectations and boundaries	
○ In your early meetings, discuss goals, boundaries, and preferred communication styles and frequency of meetings.	
○ Discuss "What would a sucessful mentoring relationship look like for you?"	
○ Revisit expectations periodically as needs envolve. Is someone being taken advantage of?	
○ If expectations don't align, it's okay to step back—clarity is better than confusion—but do so kindly (don't ghost people)	
○ If unable to commit, respond kindly and clearly. A respectfil "no" still contributes to a supportive culture.	
4. Communicate thoughtfully and flexibly	
○ Be transparent about availability and scheduling constraints.	○ Agree on a regular meeting rhythm (e.g. monthly or quarterly), but stay flexible. Be open to the fact that mentor's schedule might sometimes need mentee to work with them.
○ When responding to a request, be clear and respectful. If you can't commit, explain why.	○ Send a short agenda or discussion points a few days before each meeting.
○ Acknowledge and emphasize the positive when giving feedback and advice.	○ Avoid excessive emails, set meetings and come prepared.
	○ If there's nothing pressing to discuss, suggest to skip the meeting and reconnect when needed.
5. Nurture the relationship over time	
○ Reflect on what you've learned—informal mentorship benefits both sides.	○ Recognize that your needs will shift, from PhD advice to career strategy and beyond.
○ Stay open to envolving the relationship into collaboration or continued support.	○ If the mentor is no longer needed (e.g. because you have changed career trajectory) let them know gently. Don't ghost them.
○ If supporting your mentee does not fit in your career path anymore (e.g. because you have changed career trajectory) let them know gently. Don't ghost them.	○ Be clear about temporal changes. Balance between setting a schedule and keeping informal.
○ Respect your mentee's time by being flexible.	○ Share updates even after formal mentoring ends, it keeps the connection alive.
	○ Celebrate milestones and successes with your mentor—they would love to hear from you and learn about your successes.
	○ Express gratitude regularly. A simple thank-you or acknowledgement goes a long way.
6. Make it reciprocal	
○ Acknowledge the value mentees bring fresh perspectives, new ideas, and energy. These intangible impacts are often the most rewarding but can easily be overlooked.	○ Also express gratitude for your mentors time and efforts—a quick and sincere thanks goes a very long way.
○ Encourage mentees to reflect on their growth and share their insights.	○ Be sure to ask your mentor about how they are doing as well, including their recent research interests.
	○ Share relevant articles, opportunities, or connections that might be of interest.

Figure 4. Experientially derived strategies for managing successful informal mentor-mentee relationships. The points listed under Section 3 (establish clear expectations and boundaries) apply to both the mentor and mentee, hence presented across both groups.

6.2. Principle 2: Build a Safe and Empathetic Space

ECRs often enter mentoring relationships with uncertainty, fear, or feelings of inadequacy. Creating a space where they feel safe to express doubts, ask questions, and share personal challenges is essential. Empathy and nonjudgmental listening help build trust and psychological safety. For mentors, this means being present and validating; for mentees, it means being open and honest. A safe space allows both parties to engage authentically and fosters deeper, more meaningful conversations.

6.3. Principle 3: Establish Clear Expectations and Boundaries

Informal mentorships can be wonderfully flexible, but that flexibility can also lead to confusion or mismatched expectations. Clarifying roles, goals, styles, and boundaries early on helps avoid misunderstandings and ensures that both parties feel comfortable and aligned (for a framework of guiding questions to help set clear expectations and boundaries, see Table 1). This is especially important when the relationship spans institutions, disciplines, or career stages. Revisiting expectations over time keeps the relationship responsive and relevant.

6.4. Principle 4: Communicating Thoughtfully and Flexibly

Good communication is the backbone of any mentoring relationship. Informal mentorships often rely on voluntary time and emotional labour, so being thoughtful about how and when you communicate is key. Regular check-ins help build momentum, especially early on, while flexibility ensures the relationship remains sustainable during busy periods, shifting workloads, and fieldwork. Clear agendas and respectful scheduling show that you value one another's time and are committed to making the most of it.

6.5. Principle 5: Nurture the Relationship Over Time

Mentorship is not static. As ECRs grow, their needs evolve, from technical guidance to career strategy, from emotional support to professional networking. Similarly, mentors' priorities shift as they take on new roles and responsibilities. A strong mentoring relationship acknowledges and adapts to these changes and can evolve to continue well beyond the initial phase. Long-term mentorships often become collaborations, friendships, or enduring professional connections. Nurturing the relationship ensures it remains relevant, rewarding, and resilient.

6.6. Principle 6: Make it Reciprocal

Informal mentorship is most powerful when it is mutually beneficial. While ECRs often gain knowledge, confidence, and clarity, mentors also benefit from fresh perspectives, renewed energy, and insights into emerging challenges and ideas. Reciprocity does not mean equal time or expertise, but it does mean mutual respect and appreciation. When both parties feel valued, the relationship becomes more sustainable and impactful.

Table 1. Framework of guiding questions for establishing shared expectations and boundaries in informal mentorships. We offer this as a starting point and note that other questions and prompts may also be necessary based on individual goals and circumstances (of either the mentor or mentee) and encourage readers to adapt this as needed; we also recommend that these questions be re-revisited periodically as part of the informal mentor-mentee relationship to understand temporal changes in the relationship and to ensure it continues to serve its purpose effectively.

Theme	Guiding questions	Best practice prompts
Roles and scope	How do each of us see the purpose of this mentorship? In what ways should this relationship differ from formal supervision or other professional roles?	Clarify overlap with supervisors; define whether the focus is career guidance, technical skills, emotional support, or networking (but noting this might change over time). Both parties articulate their role to avoid assumptions
Goals and needs	What are each of our hopes and expectations for this relationship? What kinds of support or outcomes would make this mentorship meaningful to us?	Identify short-term vs. long-term goals. Mentees share needs (confidence, skills, career navigation, etc.); mentors share what they hope to contribute and gain (e.g., fresh perspectives, connection)
Boundaries and ethics	What boundaries should we set around time, topics, and personal/professional overlap? How can we ensure the relationship remains balanced, respectful, and ethical?	Discuss confidentiality, sensitive areas, and limits. Acknowledge power dynamics. Agree on what is "off-limits" and how to raise concerns if an imbalance arises
Time and commitment	What level of time and availability feels realistic for each of us? How long do we imagine this mentorship lasting, and how might it evolve?	Decide on frequency of meetings, preferred communication channels, and relationship length. Consider workloads, fieldwork, or institutional constraints. Revisit commitments periodically
Communication style and preferences	How do we each prefer to communicate and give/receive feedback? What rhythms of check-ins or formats will help us stay connected?	Share preferences for tone, detail, and format (formal agendas vs. informal chats). Decide on synchronous vs. asynchronous communication. Respect each other's time by scheduling thoughtfully
Collaboration and opportunities	What kinds of opportunities or interactions would we like to explore together? How do we imagine this relationship contributing to our broader professional journeys?	Clarify whether collaboration—i.e., non-extractive mentorship—should not be premised on things such as whether co-authorship is desired, or if the relationship is primarily conversational. Both parties share what they value most from the connection
Exit and flexibility	How will we know if this mentorship is no longer serving us? What strategies can we use to pause, adapt, or respectfully end the relationship?	Agree on a "graceful exit" plan. Build in reflection points to revisit expectations. Normalize that needs evolve and ending a mentorship can be natural and healthy

7. Conclusions

Informal mentorship plays a vital yet often overlooked role in supporting ECRs, particularly those navigating the complexities of inter and transdisciplinary marine research. In our experiences, these relationships can offer emotional safety, strategic guidance, and a broader perspective that formal supervisory structures often cannot provide. They are not transactional, but relational. We believe that they are part of a gift economy built on generosity, trust, and shared experience.

For many ECRs, informal mentorship can make the difference between surviving and thriving in academia. It can be the quiet force that turns a faltering PhD into a successful career, or that helps an ECR rediscover their confidence, purpose, identity, and self-worth. By recognising, valuing, and actively cultivating these relationships, we can build a more humane, inclusive, and resilient research culture within the marine sciences—one chat at a time.

Conflict of Interests
In this article, editorial decisions were undertaken by Annette Breckwoldt (Leibniz Centre for Tropical Marine Research), Asha de Vos (Oceanswell/University of Western Australia Oceans Institute), Leonie Dziomba (Leibniz Centre for Tropical Marine Research), Salanieta Kitolelei (Leibniz Centre for Tropical Marine Research/University of the South Pacific), Sangeeta Mangubhai (Talanoa Consulting), and Denis Karcher (Royal Swedish Academy of Sciences).

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