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"(HANGE THE SYSTEM, NOT THE WOMEN."

The RisingWISE programme and network has been created to address the inequities that affect University-based women researchers in STEM (Science, **Technology, Engineering and** Mathematics). We know that women in almost all professions still face huge challenges and disparities in achieving success and leadership roles. These issues are further compounded in STEM due to the gender gap and isolation in research teams at the Early Career Researcher level. There is a growing recognition that these problems exist at a global, systems level, and that meaningful change is long overdue.

Designed and delivered by women, for women¹, RisingWISE brings together Oxbridge ECRs in STEM subjects to meet and learn from others working in industry and commerce. The idea is to establish a foundation of support, knowledge and practical learning that offers participants wider possibilities for their future, both within and beyond academia. In this way we can start to effect the crucial systems changes in industry, academia and society as a whole that will move all of us forward.

"Participating in RisingWISE has broadened my perspective and sparked my imagination about future possibilities. The practical sessions on topics such as negotiation and leadership have helped me to get clear on what I want and need for future success."

Tugce Ayvali
Technology Lead HydSun
Global Impact Ventures

A UNIQUE OXBRIDGE COLLABORATION

The MPLS Enterprise team at Oxford have worked closely with the University of Cambridge to develop a unique collaborative programme, including working closely with industry to build mutual relationships. Rather than existing in competition with each other, the RisingWISE ethos is to foster an Oxbridge collaboration

that benefits participants from both institutions facing similar ecosystem challenges.

Participant feedback from postprogramme surveys has been consistently high, with 100% of attendees saying they would recommend participating to a friend or colleague, and an overall rating of 9.5/10 for the whole experience.

In 2021, RisingWISE was the winner of the MPLS Equality & Diversity Award and was also a finalist in the University of Oxford Vice-Chancellors' Diversity Awards for 2020.

Foreword

GILL AITKEN

Registrar, University of Oxford



The RisingWISE programme has been a fixture in my calendar since its inception, and it gives me great pleasure each year to contribute to the programme by joining a panel of women in senior roles to share our thoughts on leading authentically. I believe it is vital to support women in particular at this critical stage in their careers, where they have pursued and achieved academic excellence as postdoc researchers, and then find themselves at a crossroads, unsure whether to remain in academia, take a job in industry, begin a start-up or pursue other options.

Some of the key messages I try to convey to our exceptional STEM women participants are to learn

to use their courage so that it becomes natural; to follow and trust their instincts; and to know their purpose in terms of their values and central principles that can guide them. I emphasise how important it is to know both their strengths and weaknesses, and to surround themselves with people who complement their unique skill sets. In sharing the story of my own career journey with participants, I explain how following curiosity has been a key driver for me, and I encourage them to take the same approach, creating and using networks and volunteering to solve problems that they are curious about. RisingWISE is unique in that it provides all these important

aspects in one programme; it gives participants access to a lasting and supportive network, increases self-efficacy and presents them with a wide range of avenues to pursue so they know they have a multitude of options and that they can value the translational skills they have built during their academic lives.

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NIT - Grant pile.

Late - Paragraph

Annie - Paragr

I recall how hard I found it to break through at the beginning of my career. I feel sure that if I had had a group of like-minded women that I could have talked to and exchanged ideas with, that would have given me the courage that I needed then. RisingWISE is crucial in creating impact for our women STEM researchers and I always look forward to meeting each new cohort of incredible women participants.

Foreword

PROFESSOR KYLIE VINCENT

Associate Head of Department (People), Department of Chemistry, and previously Academic Champion for Women in Entrepreneurship, University of Oxford.

It has been a true privilege to meet each cohort of RisingWISE over the past 6 years - to share some fragments of wisdom gathered up along my own career journey, and to listen to the excitement, anxieties, passion and dedication of a new generation of inspirational early career women.

My own voyage into a blend of entrepreneurship and academia took off nearly 20 years ago when I attended an early enterprise training course for women in STEM. This opened my eyes to new opportunities, and steered my career in new directions. Although I have remained in academia, I held close the lessons learnt and the network of innovative women I had met on this course. Innovation has underpinned the ways in which I have built up my academic research group - from the creative research tools we develop for fundamental science to our applied biotechnology that has led to a suite of patents and our 2021 spin-out company, HydRegen.

The skills and confidence passed on to early career women attending RisingWISE will empower them in any profession, and each year it is wonderful to meet the alumnae of RisingWISE who return to share the many different directions their careers have taken. RisingWISE helps to break down misconceptions of narrow career paths, showing early career women the possibilities of



"BY EMPOWERING EARLY CAREER WOMEN AND GIVING THEM KEY CAREER SKILLS AND A STRONG PEER-NETWORK, RISINGWISE IS CREATING A CONFIDENT NEW GENERATION OF INNOVATORS"

squiggly, hopscotch careers, careers that build upon soft as well as hard skills, and that build bridges between university research and industry.

By empowering early career women and giving them key career skills and a strong peer-network, RisingWISE is creating a confident new generation of innovators. Skills and ways of thinking will stay with each cohort for years to come, as they did for me. Some will later start companies, and the benefits of diversity in founders and on boards is well-recognised, bringing new ways of thinking and leading. And importantly, the women who have attended RisingWISE will continue to provide a network to support each other.

THE PROGRAMME

RisingWISE delivers a highly practical and immersive learning programme, led by experts from academia and industry.

Over the six day course, participants are taken through a carefully tailored curriculum designed to:

 Provide useful/effective tools and techniques to help them think through their chosen path

- Expand their knowledge of industry and collaborative research & development
- Highlight opportunities beyond academia
- Create a forum to meet women who are working within industry and academia
- Develop their networking, mentoring and leadership skills

"I knew I had skills
as an academic,
but through the
programme I realised
I had masses of skills
that I could use in
many different ways."

Dr Michele Veldsman Neuroscientist, RisingWISE Participant 2019-20

THE COURSE COVERS SIX BROAD THEMES

Personal



Networking

Value propositions



Negotiation



Communicating your ideas

"The content and
the speakers are of
incredibly high quality,
which means that all of
us involved - participants
and facilitators alike
- are always learning
something new that
helps to move us
forward. Where else are
you going to get that?"

Linh Nguyen Slater
Facilitator, Head of Research,
NatWest Bank PLC

SESSIONS INCLUDE

- Exploring your values
- Building a networking strategy
- Leadership styles and attributes
- Negotiating for success
- Persuading others
- Managing effective collaborations
- Playing to your strengths

WHO IS IT FOR?

To date, over 200 accomplished Oxbridge women in STEM have passed through the RisingWISE programme, from disciplines as diverse as Engineering, Mathematics, Biochemistry and Earth Sciences. Many of them feel they have reached a crossroads in their career: should they stay in academia or explore different options? Could they apply for a job in industry, or maybe develop an entrepreneurial idea? And what does this actually mean or look like?

Regardless of their subject area, each of them knows that they'll need practical, tailored support in order to overcome these uncertainties and move forward. This is what RisingWISE offers, as well as connection to an active community, plus real-world examples of women in STEM who have been through the same journey and achieved success.

PARTICIPATION

Engagement has been strong: participants come from 56 different **STEM disciplines** across Oxford and Cambridge such as...



Biochemistry





Earth Sciences



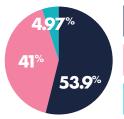








The total number of ECR women who have participated to date since RisingWISE first started: 257









The % split between **Oxford and Cambridge** and Industry participants: Oxford 53.9%, Cambridge 41%, Industry 4.97%

THE AMBITION





The shared vision for RisingWISE was developed and led by programme co-directors Dr Anne Miller (University of Oxford) and Dr Shima Barakat (University of Cambridge) in a unique and highly successful Oxbridge collaboration. Together, they have been instrumental in refining and leading the programme since its inception in 2018.

THE ORIGINS OF RisingWISE

Anne: A group of us from Oxford's MPLS division visited our counterparts at Cambridge, aiming to find out more about their enterprise training initiatives. We were particularly impressed with the EnterpriseWISE programme that Shima had established there for women in science, and she and I decided to collaborate and develop it as an Oxbridge-wide initiative in the same vein. That's how RisingWISE was born.

At the time, nobody was running an enterprise programme for women that involved inviting in people from industry, or investors, or showcasing women in business to provide the vision of what was achievable. We wanted to see how we could build something useful and exciting, and catalyse a different way of doing things.

"We're seeing the brightest women... some of the best scientists and engineers in the world, deciding that a future in science is not for them. Why is this not a space that can hold them? And how can we fix this?"

Shima: Part of the reason we started this work is to address the problem of the 'leaky pipe' of women leaving science. The numbers speak for themselves: we're seeing the brightest women from top-tier universities, some of the best scientists and engineers in the world, deciding that a future in science is not for them - and research doesn't even tell us where these women go. Why is this not a space that can hold them? What is repelling them? And how can we fix this?

Through RisingWISE, we aim to showcase a range of different STEM career paths to these women. We want to reconnect them with the joy of their subject, help them play to their strengths, and offer them all these other options: you can be a researcher, but you can also be so many other things, both in industry and in the academic world. You could create or join a startup, you could go into science communications, or science-related consultancy - just opening up and unfolding all these different pathways and routes to impact is so important at this stage.

"What missed opportunities will there be for our environment and society if these incredible women aren't even at the table? How are we going to make the world a better place without their significant contributions?"

There are those who question whether a programme for women is necessary - they point out that there are plenty of practical entrepreneurship programmes for researchers at both Oxford and Cambridge. But women's participation in them is consistently low - the women are put off joining these programmes initially, and that's because they seem very tech-focused and masculine in outlook and delivery. This matters at a macro level too: what missed opportunities will there be for our environment and society if these incredible women aren't even at the table? How are we going to make the world a better place without their significant contributions?

SETTING FOUNDATIONS

Anne: The academic rigour demanded of researchers at Oxbridge means that the traditional focus is nearly always on 'How far can I go? How high can I jump?' – that feeling of always needing to be on top and prove yourself. It's pretty paternalistic when you think about it. RisingWISE provides a safe, women-only space for people to take



a breath and bring their focus back to who they are intrinsically, and what they need for future fulfilment both professionally and personally. That's why we always start the programme with having participants reflect on their personal values.

Shima: Reflecting, reframing and highlighting the value that they bring as women in science is our main focus with this programme. It's also about encouraging women to push back against the nay-sayers, and to find ways to achieve what they want, instead of just accepting the established response of 'no, that's not possible', or 'no, that's not the way that things are done'.

We deliberately include the entrepreneurial competences framework in our learning sessions. This helps participants deal with ambiguity, uncertainty and even risk, because they're all at a point in their lives where they're thinking of making a change, and navigating the unknown can be daunting.

"We demonstrate how entrepreneurial competences are useful in every context, to become an effective researcher, a good manager, and a strong leader."

And in an uncertain world where organisational models are changing, these competences are becoming ever more valuable.





A (ONTINUOUS CIRCLE OF SUPPORT

Anne: The intention from the word go was not simply to create and deliver a course. We wanted to create an evergreen community whose members would lift each other up, support each other, and stay connected. This is a cornerstone of RisingWISE – the community and the giving back. We're delighted at how many alumnae continue to stay closely connected with each other, and also how they come back a few years later to speak and facilitate sessions for the latest cohorts. They give their time willingly because they know firsthand the value it brings.

Many participants on RisingWISE have told us they wish they'd had some of the learnings and perspectives earlier in their academic careers, and this is what prompted us to launch the sister programme, SeedWISE, for women DPhil students. And since we have so much rich content, and only a limited number of sessions and hours to deliver it, we've also added the popular GroWISE programme that provides more of a deep dive into areas such as negotiation, and design thinking, as well as a chance for people to make deeper connections. Our community is global, so we deliver some of the sessions online - we've even had participants waking up at 3am in California to join us for these!

The continued goal of RisingWISE is to ensure that more of these incredibly talented women feel able to continue their careers in science, whether in industry, academia or elsewhere. And as the community grows, we see the benefits that are created not just for the women who participate, but for those who work with them, learn from them and are led and inspired by them.



Dr Shima Barakat has held several posts at the University of Cambridge since 2007, including as the Director of the Entrepreneurship for Sustainability Programme and the Entrepreneurship Education Advisor at the OPdA (now Postdoc Academy) where she brings her particular interest and expertise in sustainability and gender to develop entrepreneurship training and support for the postdoctoral and ECR community.

Dr Anne Miller has been an academic and group leader in Environmental Sciences for over 25 years, developing and delivering numerous innovation-focused programmes in different institutions. Anne recently retired from her position as MPLS Enterprise Manager at the University of Oxford but remains involved with RisingWISE on a consultancy basis.

PROGRAMME DELIVERY HOW WE DO WHAT WE DO

RisingWISE is run as a hybrid programme that mixes online and in-person experiences including lectures, group work and workshops.

The in-person sessions take place in Oxford, with invited speakers and facilitators from academia and industry. Across the six weeks of the programme, women researchers from a multitude of STEM areas are brought together to learn, share experiences and connect.

To underpin the course content and to stimulate discussions amongst participants and facilitators, the course uses Canvas - an intuitive online platform that offers many opportunities for interaction and discussions.

The programme culminates in a final weekend where participants come together in-person to reflect on learnings, cement their connections and celebrate.

"RisingWISE encourages you to slow down for a couple of days, bring your focus back to yourself, and it provides a useful framework to think about what to do next,"

Heather Jefferey Bioinformatician and RisingWISE participant 2019

"Suddenly you see participants becoming aware of possibilities which have been illuminated for them through the programme. It's a delight to see them getting inspired, taking their careers into their own hands and say 'yes, this is what I'm going to do next!."

Dr Emma Williams

RisingWISE Speaker and Facilitator

"The continued goal of RisingWISE is to ensure that more of these incredibly talented women feel able to continue their careers in science. As the community grows, we see the benefits that are created not just for the women who participate, but for those who work with them, learn from them and are led and inspired by them."

Dr Anne Miller

Programme Co-Founder, University of Oxford

"RisingWISE was one of my very first experiences of entrepreneurship education. It contributed greatly to my learning journey, and introduced me to new ways of thinking."

Martine Abboud

Founder of Creo Incubator and RisingWISE participant 2019



THE PARTICIPANT EXPERIENCE

'Game-changing', 'eye-opening' and 'transformative' – these are just some of the ways that RisingWISE participants describe the significant impact that the programme has had on their lives. For some, it has been the jumping off point for adventures in innovation and entrepreneurship, while for others it has led to exploration of different pathways in policy, academia or industry.



Dr Kärt Tomberg was a RisingWISE participant in 2019-20, and she has subsequently returned to the programme as a speaker and facilitator. A geneticist by training, she has spent the last 15 years studying and working in different academic institutions across five countries. Having completed two postdoctoral fellowships at the University of Cambridge, she has co-founded and successfully spun out biotech company ExpressionEdits, where she is currently CEO.

"I was attracted to RisingWISE as it offered an initial introduction to entrepreneurship. As a postdoc, I was a little intimidated by that world, I didn't really believe it was for me. I think that postdocs are often very undervalued within Universities – their intensive work contributes directly to driving developments in scientific research, so from an enterprise point of view they are very valuable! RisingWISE helps you to learn more about this aspect, define your values and goals, and work out what kind of leader you are."



Dr Sofia D'Abrantes participated in RisingWISE in 2020-21. Following completion of her DPhil in Radiation Oncology at Oxford, Sofia joined clinical AI startup Sensyne Health, and is now Associate Director of Data Strategy & Solutions at AstraZeneca.

"RisingWISE is unique for so many reasons - not least because it sees two world-leading institutions delivering this programme for women researchers. But the people involved and the way it's led and delivered also make it fresh and inspiring. One of the key takeaways from the course for me, apart from the strong connections and network, has been learning how to negotiate. I applied these skills directly when negotiating a higher salary for my current role, and as a result I'm being paid what I'm worth and am now on a career path that's a level beyond where I would otherwise have been."



Dr Hannah Rana has a DPhil in
Astrophysics from the University of
Oxford, and is currently a postdoctoral
researcher at Harvard University and
the NASA Jet Propulsion Laboratory.
She has spent the last decade gaining
experience in the space industry, at
Caltech, Oxford, the European Space
Agency, CERN and working as a Project
Manager at Neutron Star Systems.
Hannah participated in RisingWISE
in 2020-21, and has subsequently
returned as a speaker.

"RisingWISE directly addresses the barriers and issues that accomplished competent women tend to face, particularly in STEM, and particularly in male-dominated fields. And then gives us not just the awareness of those issues, but the tools to combat and overcome them. Following RisingWISE, I felt equipped with the confidence and skills to pitch myself, put myself forward for the things I wanted to do. It made me recognise and value my existing skill set. When I applied to the NASA programme, I had to be able to demonstrate that I had the know-how and skills that no one else in the entire nation had, and thanks to RisingWISE I was able to do that."

OUR SPEAKERS

Every edition of RisingWISE is delivered by a carefully selected group of accomplished speakers and facilitators from academia, industry and enterprise. These women give their time willingly to be our speakers and facilitators, delivering high quality sessions on topics ranging from negotiation, collaboration and pitching ideas, to leadership, personal values and fierce compassion. Many RisingWISE alumnae have returned as speakers and coaches, as they know first-hand how valuable these learnings are, and are keen to stay connected and give back to the programme.



"The reason why I and the other speakers donate our time freely to this programme is because we can see how transformational it can be for the participants. We see them become conscious of their values, learning how to push back on entrenched behaviours or unconscious beliefs that may have been holding them back up until now. Through the programme, they recognise that whatever they decide to do, they can be the authors and drivers of change for themselves."

> **Kate Tapper** Leadership Coach



Placi Espejo Innovation & Technology Management Consulta and Coach



Atkin Professional facilitator



Paola Cuneo Head of Advisors 8 Investors, ELITE London Stock Exchange Group

Naily

Makangu

Director and Founder of

Athena Leaders



Kate **Tapper** Leadership Coach

Angie Russell

Professor of Medicinal

Chemistry, University of Oxford





Linh Nguyen Slater Head of Research at

Laboratory



Hannah Natacha Rana Harvard University and the NASA Jet Propulsion





Wilson Leadership Coach &



Aino Jarvelin Associate Director, Oxford Nanopore Technologies



Clarissa Rios Rojas Expert advisor for the OECD, UK parliament, and UNDRR



Katie Hannaford Development Manager



Graham Co-founder and CEO of



Dr Lesley Thompson Director, Academic & Government Strategic Alliance, Elsevier Publisher



Orsi Iĥasz Director, Cranfield Venture

INCLUDING INDUSTRY

The business case for gender-balanced workplaces is growing stronger all the time. When enterprises have an inclusive business culture and inclusive policies, the predicted probability of achieving:

Increased profitability and productivity is

63%

enhanced ability to attract and retain talent

greater creativity innovation and openness is

59%

enhanced company reputation

Source: ILO enterprise survey, 2018

By including speakers and facilitators from industry, RisingWISE showcases relatable examples of women who have moved from STEM research to the commercial sector. In sharing their experiences with participants, these women highlight pathways and possibilities for fresh cohorts of researchers who are considering their next important career decisions.

"Being part of RisingWISE means that you're surrounded by powerful, talented women who want you to succeed, It's an absolutely safe environment where no matter who you are or what you're experiencing, you can truly thrive and be uplifted. I'm honoured to be involved with the programme, and I think it's as enriching for me as it is for the participants."

Linh Nguyen Slater Head of Research at NatWest, RisingWISE Facilitator "The idea that women need to change and alter ourselves to fit into a male world is being called out and questioned. We have all that we need in ourselves to succeed, this is what we want to show these talented women researchers – you are more than enough, and you can do it your way."

Lucia Carassiti

Project Manager, Jaguar Land Rover, RisingWISE Facilitator



Organisations
whose employees
have contributed
their time and
insights to the
RisingWISE
programme include:





















Dr Sheen Gurrib completed a MEng in Materials Science at the University of Oxford and has a PhD in spinal research from the **University of Cambridge. Upon** leaving academia, she launched a not-for-profit consultancy, ReShape Co., and then joined the Oliver Wyman management consultancy group in Dubai as a strategy consultant, before becoming a COO for a media company. In 2021 Sheen **founded Project Access for Refugees** and she has given TedX talks on girls' education and the concept of having a 'squiggly career'. Sheen is the host of the podcast Dream, Girl, and she also advises start-ups and content creators on business decisions and strategy.

While I was doing my PhD in Cambridge, I got interested in exploring possibilities and pathways outside of academia. A friend told me that she had been part of this brand new Oxbridge programme called RisingWISE, and she recommended that I apply.

RisingWISE showed me the value of having a community of like-minded women who understand where you come from and the challenges you face as a woman researcher in STEM. Of

"EVERYONE IN MY RISINGWISE
COHORT WAS SO SUPPORTIVE,
OFFERING WORDS OF ENCOURAGEMENT
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I'D ONLY JUST MET THEM"

course you can talk about your career plans and future ambitions with your friends and family, but it also helps to have a trusted, safe space for shared experiences with peers, especially when you're dealing with tough times.

I recall that at the first residential weekend I was pretty downhearted: I was in year 3 of my DPhil, and I had just received job rejection letters from three different consultancy firms. But everyone in my RisingWISE cohort was so supportive, offering words of encouragement and helpful advice, even though I'd only just met them. And then I got talking to one of the programme facilitators from industry, who suggested that I come and intern at her biopharmaceutical company for a few months so I could get some practical experience of working as a strategic analyst. What an opportunity!

Since that starting point, I've had a variety of job roles both within and outside of consultancy, in the UK and the UAE. I'm an advocate of trying different things, building experience and iterating along

the way - a squiggly career. I've stayed involved with RisingWISE and SeedWISE myself, and have spoken on this very subject to new cohorts of women in STEM.

We often hear that around 85% of the jobs that will exist in 2030 haven't been invented yet, so I think it's really crucial for us to focus on developing our ability to be adaptable and resilient. And for that, we have to be confident in our skills, and learn how to apply them in different ways and situations. In STEM subjects, researchers already have so many transferable skills - project management, dealing with people, even accounting - but it's just a question of being able to see this and make use of them. For me, that's the definition of being enterprising.

Ultimately, I think the intrinsic value of the RisingWISE programme lies not only in the content of the learning sessions and the network of peer-to-peer support, but also the foundational resilience it builds in participants, so that they are equipped both practically and emotionally to build their future careers.

RisingWISE Alumna Story



Dr Stephanie Flude is a Geoscientist, researcher, freelancer, and artist. She has a PhD in Geology from the University of Manchester, and has held postdoc positions at the University of Oxford as well as the **Open University, Roskilde University** in Denmark, and the Universities of **Edinburgh and Strathclyde. Steph is** passionate about making scientific methods and knowledge more accessible to the general public through the use of scientific artwork, especially when the artwork helps to tell the Earth's history. She is a board trustee of the Scottish Geology Trust.

I had completed a succession of postdocs, but I was feeling that I needed a change and I was starting to consider a move out of academia. I knew I had an artistic side that had never had a chance to flourish, and I wanted to explore how to combine this with the bits of the science that I most enjoy. Shortly after I arrived in Oxford I attended the Careers Conference for Researchers. There was a session on the Arts industry, where I learnt that there are grants for science-focused art projects, and this made me think that my idea might be possible after all.

Soon after that I heard about RisingWISE, and even though I didn't feel like I was an entrepreneur or business-minded, I knew

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POINT FOR ME. I WENT FROM FEELING
UNCERTAIN AT THE PROSPECT OF LEAVING
ACADEMIA, TO FEELING EXCITED ABOUT
EXPLORING NEW POSSIBILITIES"

I needed to start thinking about the future and making a plan. The idea of making industry connections really appealed to me, as well as exploring some potential exit strategies from academia, so I signed up.

I went into the programme feeling a bit apprehensive and shy, wondering if it was really for me, but right away that disappeared as we dived into sessions on personal development and finding our style of working with others. And by the end of the second weekend I was thinking 'wow, maybe I am entrepreneurial after all.'-I became more comfortable with that label.

I started to develop the idea of turning my love of geology-based art, enabled by technology, into a potential business, and one of the coaches on RisingWISE helped me to think about making it a social enterprise which would benefit the local economy as well as being arts- and education-based. My group chose this idea for our final pitching session, and after all the hard work it was an amazing buzz to get up and pitch it in front of the

judging panel. The feedback was positive and helpful.

In addition to my research and my consultancy work, I'm now working towards creating unique jewellery designs, where each piece tells a geological story. My longer-term plan is to establish a hybrid geochemistry facility / art gallery that will help tell the story of Scotland's billions of years of geological history.

RisingWISE was a big inflection point for me. I went from feeling uncertain at the prospect of leaving academia, to feeling excited about exploring new possibilities. I wasn't scared any more. I stopped thinking that I wasn't enough for academia, and instead realised that academia was no longer enough for me! I have stayed connected to RisingWISE, and have been back as a facilitator and speaker, where I hope I can encourage women researchers who are experiencing the same uncertainties that I had to tap into their skills and talents and look at wider possibilities for their future careers.



Dr Pavandeep Rai is the Founder of Kuma Health, dedicated to supporting individuals with **Autoimmune Conditions. She is** currently also an Entrepreneur in Residence at Zinc, a venture builder with a focus on impact. With a background in Strategy Consultancy specializing in Healthcare and Life Sciences, Pavandeep's journey includes a tenure as a **Postdoctoral Research Scientist at** Oxford University and a PhD and **Masters in Neurological Diseases** and Drug Discovery. Pavandeep has collaborated with global pharmaceutical clients, biotechs, and healthcare providers. Her passion lies in propelling growth and fostering innovation, particularly in the realms of digital health and longevity.

I came to Oxford to do a postdoc in drug discovery, but I had the feeling that I didn't want to stay in the lab full time, and I wasn't sure of my options. So I joined RisingWISE, and that turned out to be a major turning point for me.

Through the programme, I was able to reflect and acknowledge the fact that I needed to make a change. The initial parts of the programme where you take a good look at personality types, your values and

"I FEEL THAT IT'S VITALLY IMPORTANT TO HAVE THOSE VISIBLE ROLE MODELS, TO SEE WOMEN WHO ARE SITTING IN THE (SUITE OR WHO ARE BUSINESS OWNERS AND (EOS"

your professional self were so helpful. I started to understand the value that I had as an individual and as a professional, and to consider a variety of different career paths that hadn't been apparent to me before.

Once I had opened up to the idea of exploring enterprise thinking, I threw myself into all the innovation-related training and programmes that I could find - and there were so many courses and opportunities around Oxford. I did the Ideas 2 Impact course via the Skoll Centre, and participated in a systems thinking competition. I did a course on strategy and innovation at Said Business School, and I also did some consulting through the University's Careers Service. All of this was an attempt to understand what I wanted to do next.

One of the courses I did focused on Design Thinking, and I met two people with whom I ended up working on my first healthtech startup, focused on dementia. Unfortunately COVID Just made it really difficult for us to progress as a business, and I decided I needed a bit more business experience, so I moved into management consulting. I did that for two years,

focusing on digital health and working with pharma companies, building my understanding of how you can implement digital health within bigger organisations.

Then last year I decided it was time to start something fresh again, so I applied to join the Zinc venture builder which connects like-minded people who are seeking to collaborate on new ventures to address big societal challenges in healthcare, education, finance and more. That led to the birth of Kuma Health, the health tech venture of which I'm a co-founder. We secured investment to move on to the Zinc accelerator program, where we're now in the process of building the MVP (minimum viable product) and launching the business.

It's important to me that I remain connected to RisingWISE as a speaker and facilitator, because there is still such a huge lack of female representation in the startup space. The needle is moving, but only very slowly. I feel that it's vitally important to have those visible role models, to see women who are sitting in the C suite or who are business owners and CEOs, when you're at a much more junior stage in your career.



Dr Martine Abboud is the founder of Creo Incubator, a learning platform that combines microlearning and gamification to deliver unique learning experiences in skills and entrepreneurship. With an MBA from Quantic and a DPhil in Chemical Biology from Oxford, Martine has been recognised as a Forbes 30U30 and Lindau-Nobel Laureate Fellowship awardee.

RisingWISE was one of my very first experiences of entrepreneurship, education. While I was doing my DPhil, I had started to notice a gap between the scientific and entrepreneurial worlds. I then became a Junior Research Fellow, and I started to explore programmes that focused on bridging the gap between research and industry. In 2019 I joined the RisingWISE programme, and this contributed greatly to my learning journey and introduced me to new ways of thinking.

Through RisingWISE we were exposed to a wide variety of speakers, from industry as well as academia. We visited innovation spaces and co-working labs in Cambridge - I remember the excitement of seeing my first 3D printers in action! Suddenly I realised that I didn't have to be purely lab-based, I could be contributing

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my skills to building a new venture, go into industry, or build something new for myself - it was an absolute eye-opener.

Because the programme is designed around the particular way that women tend to think and behave, with a very holistic approach, the learnings on subjects such as negotiation skills and techniques for networking really came to life. As a cohort and in our groups, we made strong connections and kept each other accountable and on track.

I continue to benefit from RisingWISE through the strong network it has established. The connections are multilayered: some of them are close and others looser. But by staying connected I am challenged to engage in thinking and conversation that inspires me and helps move me forward, and this is one of the most valuable parts of the programme. In more recent years I have continued to give back to RisingWISE as a facilitator and speaker, which again gives me opportunities to learn and get fresh perspectives.

I'm passionate about the educational sector, so the biggest impact I'd like to have is to contribute to changing the way education is delivered and experienced. I'd love to see school students learning practical skills such as first aid and cooking, and learning about the economic system, Al and blockchain, as this is what will equip them for the world we live in today and the world of the future.

It's not just about what they learn, but how they learn it. Curriculum-driven, single track, single speed education seems an outdated, broken concept. The classroom needs to be a more interactive and engaging place, and entrepreneurship education should be a big part of this. I'm interested in helping to ensure that everyone, regardless of background, has the opportunity to learn and prosper.



HEATHER JEFFEREY



In the winter of 2019 to 2020, I was approaching the end of my PhD, and I'd heard about RisingWISE from previous courses, and so I thought I'd try applying for it. At that time, one of my biggest dilemmas was whether I wanted to do a postdoc, and most of the other participants on the course were postdocs, so just having exposure to people a step ahead of me in the relevant fields provided some useful insights.

The RisingWISE course was pretty pivotal for me. After I completed it, quite a few people commented on how my confidence had improved, and I noticed that my general outlook became more positive as I started to consider wider possibilities for my future. I've been more adventurous with what I do, and this gave me greater ability to think about what I wanted to do next, and the confidence to, set some new career goals and move towards them.

The course introduced me to some inspiring people. It highlighted to me that

"I'VE BEEN MORE ADVENTUROUS WITH WHAT I DO... I GAINED THE CONFIDENCE TO SET SOME NEW CAREER GOALS AND MOVE TOWARDS THEM"

you can learn something from everyone. We all shared our experiences and gave and received practical advice and tips for different life situations. All of this gave me some clarity on which way next, and it even helped me to deal with the stress and worry of the pandemic and everything that came with it.

After I finished my DPhil in 2020, I decided that the postdoc route was not for me. Instead, I went straight into a bioinformatics R&D role at Oxford Nanopore Technologies, a wellestablished spinout company where I started off as a genomic applications clinical bioinformatician. After a year I was promoted and given more responsibility, and then in June 2023 I became the Genomic Applications Team Leader, which is the role I'm in now. I'm still a bioinformatician, but now I also manage a small team of lab scientists. The company itself has grown a lot since I joined. When I first started we were 600 people, now I think it's double that, with offices in the USA, China, Singapore and Japan.

I did a few training courses during my time at Oxford. I did a 3-day enterprise course as part of the interdisciplinary bioscience DPP program, and it comprised a general overview of entrepreneurship and team building.

I also did a public engagement course, which was run by the Medical Sciences division. That was a different kind of experience, focused on practising the communication of science. Then more recently I did some MPLS GrowWISE sessions, with a focus on practical skills like negotiation and collaborative working.

Last year I was honoured to be invited back to be a facilitator on RisingWISE, and it was actually useful, to be going through the same exercises and processes now that I'm a little further along my career path. I was glad to have the opportunity to apply the same critical thinking to my current situation, and to challenge myself again to think'What's next? What do I want for myself?'

All the training courses that I've done have helped to move me forward and develop my skills and self belief, but I'd say RisingWISE had the biggest impact; it was the longest-running and also the most intense, which meant that you invested more of yourself into it. And of course it's a community, so you remain connected to the people and the programme even after the core learning is finished, and that in itself is hugely valuable.

THE POWER OF THE NETWORK

Participants on the RisingWISE programme know that it doesn't just stop when the learning curriculum has concluded. Instead, they become the latest members of an established network that is global in nature and outlook. Most participants stay in contact with people from their cohort, having formed strong friendships and connections through their learning experiences on the course.

This same feeling of connection sees earlier alumnae coming back to deliver sessions for the latest generation of participants, and there is a highly active RisingWISE LinkedIn group where advice is sought and valuable experiences are shared, thus providing an ever-growing and self-sustaining network of support.

Dr Dragana Savic – Co-founder and CEO of INEA Biosciences, Visiting Scientist at MIT, RisingWISE participant and facilitator.

"I'm still in contact with everyone from my RisingWISE cohort, and it's incredible to see where everyone has gone. To reflect that we were once all in Oxford together, and now a few years later we're spread around the world, but still very much connected.

We help each other with advice and negotiations, and with decisions on our next positions. If somebody wants to explore working in a particular sector and someone else has held a similar position or has sector knowledge, we give each other the insights and guidance they need to move towards that goal. That's the beauty and the power of a strong network in action."





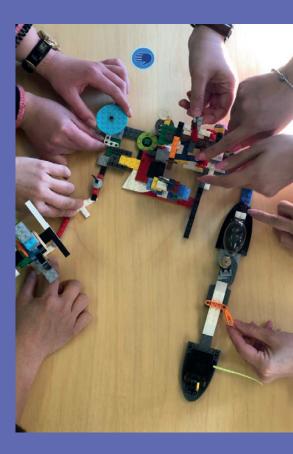
OUTCOMES

Newly equipped with the practical learnings from the course, and inspired by the experiences of their fellow researchers and the speakers and facilitators, our RisingWISE alumnae return to their research feeling ready to reframe their futures. What they previously saw as overwhelming challenges become exciting opportunities to be embraced and explored.

Some of them may decide to stay in academia or move into shaping policy, while others will look for opportunities in of industry or

begin exploring the world of venture creation and startups. Many will retain an academic connection as a visiting Fellow, even if they choose to explore life beyond academia.

While some may decide to step away from STEM altogether, the majority find a way to ensure that science is kept at the heart of what they do. The difference is that they have shed some of the perceptions and beliefs that were previously constraining them, and have had exciting career pathways illuminated for them.



REER PATHWAYS



Hannah Rana NASA Jet Propulsion Laboratory



Fernanda Duarte Associate Professor, University of Oxford



Sofia D'Abrantes Associate Director, Data Strategy at AstraZeneca



Aino Jarvelin Associate Director, Sample Technology Bioinformatics at Oxford Nanopore Technologies



Kart Tomberg Co-founder, ExpressionEdits



Dragana Savic Co-founder INIA Biosciences

















THE FUTURE

By continuing to offer the RisingWISE programme, we aim to ensure that women researchers in STEM are fully equipped to imagine and explore new career pathways, enabling them to step forward confidently into their futures and take on leadership roles in whichever sectors they choose.

It is clear that building strong inclusive networks within STEM is the key to this ambition. While the programme itself is delivered by and for women, we know that the advocacy of men and non-binary people from all STEM-related areas and industries is foundational to the programme's future success – there will be no systems change without it.



In response to feedback from participants who say they wish they'd had some of the learnings and perspectives from RisingWISE earlier in their academic careers, we have launched SeedWISE, an earlier stage sister programme for women DPhil students.



We've also added the popular GroWISE programme that provides a deep dive into areas such as negotiation, and design thinking, plus a chance for RisingWISE alumnae to make deeper connections and continue their learning, alongside other cohorts and the wider ecosystem.



THANKS TO ...

With thanks to all the speakers and facilitators who give their time so generously to the RisingWISE programme.

This programme was supported by funding from the Engineering and Physical Sciences Research Council Impact Acceleration Account (EPSRC IAA) Grant to the University of Oxford

To find out how to support RisingWISE, please contact enterprise@mpls.ox.ac.uk

For further information about the programme, visit www.mpls.ox.ac.uk/risingwise

INNOVATION FUNDING SPOTLIGHT: DR WINOK LAPIDAIRE

RisingWISE alumna Dr Winok Lapidaire is a Principal Investigator at the Radcliffe Department of Medicine, University of Oxford, and now leads her own research group focused on Brain Health Vascular Imaging.

The device they have developed in collaboration with Dr Elliot Bentine, the Vascular Imaging Tool for the Auricle (VITA), aims to make early diagnosis and continuous check-ups for vascular diseases accurate, affordable, and accessible for everyone. They are particularly interested in women's and global health topics, including improving understanding of the impact of hypertensive disorders of pregnancy on the brain.

EPSRC IAA Technology funding, awarded in 2021, enabled the team to greatly improve the performance and capabilities of the early device, and to subsequently file a patent for it. The funding was essential in allowing the team to develop the device's performance to a Technology Readiness Level where human studies on a larger scale are possible.

"RisingWISE helped me to get really clear on the next steps both for me personally and for the device I was involved in developing. It was a unique environment for us to reflect on current challenges and help one another to identify our goals and next steps. The IAA funding supported one of these critical steps in developing the VITA device."



Rising WISE DELIVERY TEAM

Dr Anne Miller

Anne retired from her position as MPLS Enterprise Manager at the University





Louisa Trevail Enterprising Women Programme Manager

Manager

Louisa has a background in education and has worked as a senior teacher in schools for a number of years, including roles in leadership. Before completing her Postgraduate Certificate of Education she worked as a Conference Manager for events agencies and for Oxfam GB. She now works in the Training and Researcher Culture Development Team at the University of Oxford for MPLS (Maths, Physics and Life Sciences division)

delivering the ambitious Enterprising

Women programme of activities.



Sally Charles Enterprise Programme Manager



Sally is the divisional lead for Enterprise Training and Events curated for the Researcher community within MPLS. She has responsibility for the running and strategic development of a portfolio of programmes and initiatives that support the growth of mindsets and skillsets for Innovation, Impact, Enterprise, and Entrepreneurship. Prior to joining the team at Oxford, Sally was Innovation Learning Manager at Robert Gordon University in Aberdeen. She has published on the subject of Entrepreneurship Education and Pedagogy and is a Fellow of Advance HE (FHEA).

Dr Shima Barakat

Shima is the founder and CEO of Cambridge BAST Ltd. Until spring 2024 she was an

Associate Professor and Director of the Entrepreneurship for Sustainability Programme at the University of Cambridge. She has personally supported over 200 start-ups and 450 entrepreneurial women. Her work for the last 25 years has focused on helping organisations 'start right' or develop their practices to embed sustainability at the heart of what they do. Shima is an experienced board member and chair, including as a Trustees of the Institute of Small Business and Entrepreneurship in the UK and currently sits on the EPSRC Strategic Advisory Team (SAT) for Engineering.



Annabel is partner and Impact Programmes Manager at Cambridge



BAST Ltd. She worked for University of Cambridge for several years, as Impact Programmes Coordinator for women's enterprise and entrepreneurship programmes, and previously as PhD Administrator. In the Centre of Development Studies. She works on the EIT Food We Lead Food programmes, for professional women leaders working in the sustainable food sector, and collaborates with University of Oxford colleagues on the RisingWISE programme for women early career researchers working in STEMM.









