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编者按：2024浦江创新论坛——科技青年论坛暨《麻省理工科技评论》“科技创新35人”亚太区发布仪式以“Atlas Pulse群星脉动”为主题，来自中国、新加坡、马来西亚、印度等世界各地学术界领军人物、青年科技英才和投资机构翘楚，围绕前沿科技趋势展开深入研讨，分享创新经验。本期专报对科技青年论坛的嘉宾观点进行梳理，供参考。

Editor's note: With the theme of "Atlas Pulse", the 2024 Pujiang Innovation Forum - Youth Technology Forum and the Release Ceremony of MIT Technology Review "35 Innovators Under 35" Asia Pacific invited academic leaders, young scientific and technological talents, and outstanding persons of investment institutions from around the world, including China, Singapore, Malaysia, and India, to conduct in-depth discussions on cutting-edge technology trends and share innovative experiences. This special report synthesizes the viewpoints of the guests at the Youth Technology Forum for your information.

2024 浦江创新论坛专报之二十二

Special Report 22 of the 2024 Pujiang Innovation Forum

发掘青年科技人才　引领世界科技创新未来

Recognize and Cultivate Young Scientists and Technologists, and Lead the Future of Global Technological Innovation

在全球科技竞争日益激烈的大背景下，各国纷纷将人才培育政策的重心放在青年科技人才上，给予青年人才更多的信任、更好的帮助、更有力的支持，鼓励青年人才挑大梁、当主角，在本国科技创新与产业发展中发挥更多更重要的作用。**与会嘉宾一致认为，要以引领世界未来为愿景，支持杰出青年人才打破学科与技术壁垒，积极参与国际创新合作，肩负起推动科技进步、造福全人类的使命。**

In the broad context of increasingly fierce global technological competition, countries around the world have set the focus of their talent cultivation policies on cultivating young scientific and technological talents, giving them more trust, better assistance, and stronger support, and encouraging them to take the lead, play the leading role, and make greater contributions to their respective countries' scientific and technological innovation and industrial development. **The guests present unanimously agreed that we should take leading the world's future as our vision, and support**

outstanding young talents to break down disciplinary and technological barriers, to actively participate in international innovation cooperation, and to shoulder the mission of promoting technological progress and benefiting all mankind.

一、以引领世界未来为愿景，探寻杰出青年人才

1. With the vision of leading the world's future, identify outstanding young talents

面向未来愿景，引导青年人才立志高远。为打造多元化创新生态系统，推动跨国界、跨区域合作创新，**《麻省理工科技评论》**专门设立亚太地区 35 岁以下科技青年人才的 TR35 评选，致力于寻找应对全球性挑战，对科技未来充满信心的年轻人才，帮助他们以实际行动诠释创新力量。**北京清华工业开发研究院院长、上海合成生物学创新中心战略发展委员会主席金勤献**指出，围绕无限能源、无限寿命和无限智力等全人类共同面临的重要议题，TR35 科技青年人才评选鼓励打破科学研究国界，将来自不同国家和地区的科创新星发掘出来，弘扬敢于挑战、勇于创新和积极开放的青年人才特质。

Taking a future-oriented vision, and guiding young talents to aim high. For the purpose of building a diversified innovation ecosystem and promoting cross-border and cross-regional collaborative innovation, **MIT Technology Review** has specially established the selection of young scientific and technological

talents -"Innovators under 35" (TR35) Asia Pacific, with commitment to identifying young talents who are able to meet global challenges and are full of confidence in the future of science and technology, and helping them interpret the power of innovation with practical actions. **Jin Qinxian, President of the Beijing Tsinghua Industrial R&D Institute and Chairman of the Strategic Development Committee of the Shanghai Synthetic Biology Innovation Center,** pointed out that centering on important issues faced by all mankind such as infinite energy, infinite lifespan, and infinite intelligence, the selection of TR35 young talents encourages breaking the national boundaries of scientific research, identifying new scientific and technological innovation stars from different countries and regions, and promoting the characteristics of young talents who stand up to challenges, dare to break new ground, and are proactive and open-minded.

“把尺子做细”，鼓励青年人才各展所长。《麻省理工科技评论》TR35 从“影响力、创新力、进取力、未来潜力和沟通力”五个维度出发，评选范围除基础研究和技术创新外，还关注技术应用、产品转化、社会影响等方面的贡献，最终形成“远见者、先锋者、发明家、人文关怀者、创业家”5 大科技青年人才榜单。

Continuously optimizing the selection criteria, and encouraging young talents to show their own strengths. The **MIT Technology Review** TR35 selects young scientific and

technological talents from five dimensions: "influence, innovation, ambition, future potential, and communication". In addition to basic research and technological innovation, the selection scope also focuses on young talents' contributions in technology application, product transformation, social impact, and other aspects. The finalists form five lists of young scientific and technological talents: "Visionaries, Pioneers, Inventors, Humanitarians, and Entrepreneurs".

二、青年科技人才需加强向外链接，提升自身跨界融合能力

2. Young scientific and technological talents should strengthen outward connections and enhance their cross-border integration capabilities

一是积极开展跨学科协作交流，加快向科技前沿进军。悉尼科技大学副校长、2024 年国际人工智能联合会大会主席张成奇指出，跨领域技术合作更有利于产生直接价值，比如东京电力集团与悉尼科技大学联合开发的机器蜘蛛，降低了人工爬电塔检修的风险。**前新加坡国立大学 N.1 健康研究所数字医疗创新负责人 Agata Blasiak** 指出，通过解决数字跨境传输、数据标准等问题，在数字健康融合方面加强跨学科研究合作，可以更好治疗病人。**杜克大学和昆山杜克大学研究员 Dominika Wiczok** 指出，科研过程中坦诚公开研究目标，积极与他人分享知识，是推动科技进

步的关键。**浙江大学百人计划研究员李炫祯**指出，跨领域合作的关键在于理解对方的话语体系和思维方式，通过沉入不同领域的知识体系来加深跨学科理解能力，打破学科和领域边界。

The first is to actively carry out interdisciplinary cooperation and exchanges and accelerate the march towards the frontiers of science and technology. Zhang Chengqi, Vice President of the University of Technology Sydney and Chairman of the International Joint Conferences on Artificial Intelligence (IJCAI) 2024, pointed out that cross-sector technological cooperation is more conducive to generating direct value. For example, the machine spider jointly developed by the Tokyo Electric Power Company Holdings, Inc. and the University of Technology Sydney, can reduce the risk of manual tower climbing for maintenance. **Agata Blasiak, former head of Digital Health Innovation at the N.1 Institute for Health at the National University of Singapore,** pointed out that by solving problems such as cross-border digital transmission and data standards, and strengthening interdisciplinary research cooperation in digital health integration, patients can be better treated. **Dominika Wilczok, Research Fellow at Duke University and Duke Kunshan University,** pointed out that being candidly open about research goals and actively sharing knowledge with others during the scientific research process are the key to driving technological

progress. **Li Xuanzhen, Research Follow of Zhejiang University "Hundred Talents Program",** pointed out that the key to cross-sector cooperation lies in understanding the other party's discourse system and way of thinking; we can deepen our interdisciplinary understanding ability by immersing ourselves in knowledge systems from different fields, and then we can break down disciplinary and sector boundaries.

二是主动开展跨区域合作交流，推动科技创新共同进步。新加坡国立大学教授、中国工程院外籍院士 Seeram Ramakrishna 指出，科学无国界，不分性别和种族，尤其在探索新领域时，跨区域合作能够加速科技进步，应当努力破除技术封锁和保护主义，共同应对人类未来挑战。**厦门大学医学院教授、研究员王乐韵**指出，在国内区域合作方面，科技发展需要依靠“引进来”、“走出去”，引进国际优秀人才，挖掘本土优势人才。

The second is to actively carry out cross-regional cooperation and exchanges to promote common progress in scientific and technological innovation. Seeram Ramakrishna, Professor at the National University of Singapore and Foreign Academician of the Chinese Academy of Engineering, pointed out that science knows no borders, regardless of gender or race. In particular, when exploring new fields, cross-regional cooperation can accelerate technological progress, and efforts should be made to break down technological blockades and protectionism, for the

purpose of jointly address the challenges to the future of humanity. **Wang Leyun, Professor and Research Fellow of School of Medicine at Xiamen University,** pointed out that in terms of regional cooperation in China, technological development needs to rely on "bringing in" and "going global", introducing international outstanding talents and tapping into local advantageous talents.

三是持续开展跨文化理解沟通，提升科研竞争力与影响力。首尔大学工程学院副院长、教授高承焕指出，在国际合作项目中，要尊重和理解文化差异，保持耐心，最有效的方式就是面对面沟通，而不是简单的线上沟通。**香港大学高级研究员、香港长寿医学中心主任、Quantum Life 创始人兼首席执行官黄园**指出，要以开放思维与各个国家、不同文化背景的人沟通，通过分享项目信息和科学观点，合力解决科学难题。

The third is to continuously carry out cross-cultural understanding and communication and enhance the competitiveness and influence in scientific research. Seung Hwan Ko, Vice Dean and Professor of the College of Engineering at Seoul National University, pointed out that in international cooperation projects, it is necessary to respect and understand each other's cultural differences and maintain patience, and the most effective way is face-to-face communication, rather than simple online communication. **Christine Huang Yuan, Senior Research Associate at the University of Hong Kong; Director of HK**

Longevity Medical Center; and Founder and CEO of Quantum Life, pointed out that we should communicate with people from different countries and cultural backgrounds with an open mind, and by sharing project information and scientific perspectives, work together to solve scientific problems.

三、青年科技人才需加强向内沉淀，强化自身创新开拓能力

3. As it takes a good blacksmith to forge good steel, young scientific and technological talents should enhance their own capabilities of breaking new ground

一方面，脚踏实地夯实基础，强化创新开拓能力。张成奇指出，作为青年科学家，要规划好自己的人生。应扬长避短，充分发挥自己的优势；目标明确，在专业领域长期积累；适度冒险，保持开拓进取精神；屡败屡战，在自己赛道里持之以恒。Dominika Wiczok 指出，年轻研究者进入领域时充满热情，但往往会发现进展比预期缓慢，要保持耐心、潜心科研，直到取得突破。**远见科技（苏州）有限公司创始人兼 CEO 丁也**认为，应保持学习心态，在面对新问题时需具备快速学习的能力和坚韧的决心。

On the one hand, young scientific and technological talents should take concrete actions to consolidate the foundation for their work, and enhance their own capabilities of breaking new ground. Zhang Chengqi pointed out that as young scientists, they

should carefully plan their own life. They should play up strengths and avoid weakness, fully leveraging their strengths; they should have clear goals and make long-term accumulation in professional fields; they should take risks moderately and maintain a pioneering spirit; and they should fight on despite repeated setbacks, persevering in their own arenas. Dominika Wiczok pointed out that when just entering their fields, young researchers are really passionate about their work, but they usually find that progress is slower than they have expected. It is important for them to maintain patience and focus on their research until breakthroughs have been achieved. **Ding Ye, Founder and CEO of Yuanjian Technology (Suzhou) Co., Ltd.,** also believes that young scientific and technological talents should maintain a learning attitude, and have the ability to learn quickly and the determination to persevere when facing new problems.

另一方面，面向未来立志向，勇担创新发展先锋。金勤献指出，青年人才须具备国际化视野、开放包容心态，方能成为国际化领军人才。朱美芳寄语青年科技人才，要做到四个“度”：高度，具有全球视野，人可比山高，脚可比路长；广度，具有更广的知识领域，实现跨专业、跨领域创新；深度，具有专注的研究深度，具备原创思维；气度，具有带学科、带团队的广阔胸怀。

On the other hand, young scientific and technological talents should have a future-oriented ambition, and be

determined to be pioneers in innovative development. Jin Qinxian pointed out that only when young talents have an international vision and an open and inclusive attitude can they become international leading talents. **Zhu Meifang's** message to young scientific and technological talents is that they should meet four "requirements": In terms of height, they should stand tall and look far with a global vision, as people can taller than mountains, and feet can be longer than roads; in terms of breadth, they should acquire a wider range of knowledge areas, and achieve interdisciplinary and cross-sector innovation; in terms of depth, they should have dedicated research depth and original thinking; and in terms of magnanimity, they should have a broad mind to lead disciplines and teams.

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