

AI 100



Award

There is one award available for this brief:

Philips Award of £2,000

The judging panel may decide on more than one winner and will allocate the award accordingly. In addition, the judging panel may award commendations.

Brief

How might we use AI to support people to reach a happy, meaningful and productive one hundred year life?

Background

- Global life expectancy has risen by more than seven years since 1990. We are living longer than ever before but chronic diseases are now the leading cause of death worldwide. The World Health Organization states that 60 percent of all deaths are due to chronic illnesses, such as heart disease, stroke, cancer, chronic respiratory diseases and diabetes.
- These chronic illnesses are a growing issue across the world; they require ongoing management over a period of years, decades even, and threaten to overwhelm existing healthcare systems, societies and economies. Furthermore, according to the Association of American Medical Colleges the US will face a shortage of more than 100,000 doctors by 2030.
- Artificial Intelligence (AI) is defined as a computer system that can undertake tasks requiring human-level intelligence. AI is increasingly a part of our health ecosystem in areas such as:
 - Prevention and early detection: AI can help prevent chronic diseases by giving people control of their health and wellbeing through proactive management of healthy lifestyles. It can also help doctors to provide better guidance by tracking patterns and understanding people's needs. AI can also help detect diseases in earlier, more treatable stages.
 - Decision making and treatment: Advances in AI, combined with a growing abundance of health data, are generating new insights on how to treat previously intractable conditions. This is leading to better clinical decision-making, personalised medicine and new forms of treatment, for example therapeutic robots.
 - End of life care: AI is enabling people to remain independent for longer, preventing long-term stays at hospital and care homes, as well as exercising the brain, for example through virtual companions.
- However, like any technology at the peak of its hype curve, the study of the implications of AI surfaces dilemmas about ethics and morality. There are concerns around clinicians

relying too heavily on these systems, and the challenge of explaining algorithmic results. There is also the danger of failed technology and the risk of 'false diagnosis' where a patient's disease is not spotted. Consider also that healthcare, because of its intimate connection with our lives and deaths, is subjected to strict social scrutiny.

How should you approach this brief?

- There have been several attempts to innovate in the area of prevention and chronic care management: from plates that weigh what you eat and give 'healthy suggestions' to intelligent cameras that promise to monitor people and make sure they are safe. Think beyond those ideas and ask yourself: Would I want this for myself when I get older? Would I want it for my loved ones?
- Make sure you talk sensitively to people living with chronic conditions, understand their challenges and ambitions. Try to talk to professionals, informal experts and care-givers too. Frame a real problem you want to solve and define a clear insight and opportunity based on those learnings.
- Understand the products and services that they really like. Why do they like them? Translate those insights into drivers for your design proposal.
- Go beyond single touchpoint proposals and think of the service element enabled by artificial intelligence. What would a meaningful service be in this context?
- Try to test your ideas early and get feedback, from both the target group and from experts. Be creative in the way you test ideas, and include any learnings in your submission.

For the purposes of illustration only, viable responses could include:

- A service that enables support among seniors living with similar chronic conditions and guides the community to support those in most need.
- A product-service-system that provides physiotherapy sessions to patients at home.
- The redesign of a healthcare experience that brings it outside of medical centres.
- A service that matches personal interests and encourages people to do healthy activities together.

... and many more are possible.

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Early bird
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deadline (£25)

11 Mar 2020
Final submission
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Mar-May 2020
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shortlisting and
interviews

Jun 2020
Awards
Ceremony

Submission criteria

Your entry should demonstrate a design thinking approach to the brief and clearly communicate the following principles:

- **Social and environmental impact:** How does your proposal make a positive difference for people and/or the natural world in your chosen context? How is your approach empowering people? Have you considered effective use of resources including materials and processes?
- **Rigorous research and compelling insights:** How have you combined your own first-hand research with a review of existing research and wider trends? How can you show a clear path between your key insights and your proposal? How are your insights grounded in people's needs and desires? How did you get feedback and incorporate new ideas through prototyping and iterating?
- **Systems thinking:** What's the bigger picture? How have you considered the root causes of the challenge you're exploring? How does your idea connect to a wider set of issues? What might be some unintended consequences of your proposal?
- **Viability:** Have you considered potential models for how your proposal could work in the real world? How could it be funded and sustained financially? What are potential barriers? How would you measure success?
- **Creativity and innovation:** How is your idea different from existing interventions? Are there unexpected or surprising elements in your proposal?

Your work will be assessed based on this criteria, which forms the basis of the evaluation tool used by the judging panel.

Key dates

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4 pm GMT, Wed 12 Feb 2020
– Deadline for Early Bird submission at reduced entry fee of £25

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Mar-May 2020 – Judging (2 stages: shortlisting + interviews with finalists)

Jun 2020 – Awards Ceremony

Partner information

Philips

Royal Philips is a leading health technology company focused on improving people's health and enabling better outcomes across the health continuum, from healthy living and prevention, to diagnosis, treatment and home care. Philips leverages advanced technology and deep clinical and consumer insights to deliver integrated solutions. Headquartered in the Netherlands, the company is a leader in diagnostic imaging, image-guided therapy, patient monitoring and health informatics, as well as in consumer health and home care. Philips' health technology portfolio generated 2017 sales of €17.8bn and employs approximately 74,000 employees with sales and services in more than 100 countries.

See Entry Rules and Guidelines on page 26.

Entry Rules and Guidelines: RSA Student Design Awards 2019/20

The RSA Student Design Awards is a competition run by the RSA, a registered charity in England and Wales (212424) and Scotland (SC037784). By entering the competition, entrants agree to comply with these rules.

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Eligibility

The competition is open to currently enrolled students and new graduates from anywhere in the world.

- 1 Undergraduate and postgraduate students from any higher education institution, college or university are eligible to enter.
- 2 New graduates can enter within a year of graduating – anyone who has graduated in or after March 2019 is eligible.
- 3 Entries are accepted from both individuals and teams. Teams can comprise students from different courses and universities, and there is no set number of people that can be part of a team – but generally team entries comprise two or three people.
- 4 We accept entries that have been developed as college/university coursework, and we also accept projects that have been developed independently (outside of coursework) as long as the entrant meets eligibility criterion 1 or 2 above.
- 5 Entries must respond to one of the 2019/20 RSA briefs and must be the original work of the entrants
- 6 Entrants may only enter one brief, but may submit more than one response per brief. Each response is considered to be a separate entry and will require completion of a separate submission form and payment of the relevant fee.
- 7 Candidates who are contracted to work for a company after graduation may not be eligible for some Industry Placement Awards.

Submission requirements

All entries must be submitted through our online entry system. The competition will open for entries via sda.thersa.org on 20 January 2020, and the final deadline for entries is 11 March 2020 at 4pm GMT.

If you are unable to submit online, please contact us by email at sdaenquiries@rsa.org.uk As you prepare your submission, please ensure that:

- you do NOT include your name, university/college or other identifying marks anywhere on your submission
- none of your submission files exceed 10MB – this is the maximum size for each individual file / board when you submit online

For all briefs EXCEPT the Moving Pictures brief, the submission requirements are:

- **1 x A3 PDF Hero Image with 1 Sentence Description** – A singular 'poster image' that conveys the essence of your project, and includes your project title plus a 1 sentence description. For example: 'Bare Technology: a product and service design proposal to convert old computers (e-waste) into simpler, more straightforward, accessible computers for older people'. Your hero image should aim to bring your concept to life – make sure it is vibrant and engaging.

– **1 x A3 Written Summary** – A single A3 PDF page that summarises your big idea using the following format:

- **Problem (50 words max)** What is the specific problem you identified within the brief topic? Who experiences this problem, and how does it impact them?
 - **Process (75 words max)** How did you investigate this issue – what were your key insights? What journey did you go through to get to your final proposal?
 - **Proposal (50 words max)** What is your proposed intervention? How will it address the problem?
- **4 x A3 PDF Boards Outlining Your Proposal**
– 4 pages describing your proposal and demonstrating that you have considered the 5 principles described in the submission criteria. Each board should include a heading. Number each board in the top right hand corner, in the order they should be viewed by the judges.
- **4 x A3 PDF Pages of Supporting Material**
– Up to 4 A3 pages of additional material illustrating your development process – this could include scanned pages of your sketchbook or computer modelling/sketches (if applicable).

For details on the submission requirements for the Moving Pictures brief, please see the Additional Eligibility and Entry Guidelines for Moving Pictures. Please note that late submissions will not be accepted and all entrants are encouraged to submit their work in good time before the deadline.

Entry fees

There is an entry fee for submitting work to the RSA Student Design Awards. This fee is charged per entry, so it does not cost more to enter as a team. Entry fees should be paid online through our submissions form, via PayPal, credit or debit card.

- **Early Bird Rate** – for entrants submitting their work before or on 12 February 2020, the entry fee is charged at the reduced early bird rate of £25 per entry.
- **Standard Rate** – after 12 February 2020 and until the final submission deadline on 11 March 2020, the entry fee is £35.
- **Voucher Codes** – universities have the option pay for students' entries. In order to do this, tutors should visit the Tutor page on our website and complete the web form to request a voucher code. It is the responsibility of the tutor to distribute the voucher code to students, which they should then enter at the payment point when completing the online submission form.

The RSA is under no obligation to refund payments except under the circumstance of technical error where refunds will be made at the RSA's discretion.

Competition process

There are six stages to the RSA Student Design Awards competition.

1 Briefs released – August 2019

There are a range of RSA Student Design Awards briefs to choose from, each focusing on a different social, economic or environmental issue. You can view all the 2019/20 briefs in the 'Design briefs' section of the RSA Student Design Awards website.

2 Register your interest – from August 2019

Once you've registered your interest, you will receive key updates and information from us. We'll remind you about deadlines, keep you informed on the judging process and shortlisting, and let you know when the winners are announced. We'll also send you invitations to free events and materials we offer participants to help you with your projects and your longer-term career development.

3 Develop your project – from September 2019

When you've decided which brief to enter, as a starting point we recommend you review the supporting materials in the online toolkit for your chosen brief. You can find the toolkit from the individual briefs pages on our website.

4 Submit your work – January to March 2020

Once you have finished your project, submit your completed work to the competition through our online entry system. Make sure you submit it before the final deadline: Wednesday 11 March 2020 at 4pm GMT. You will receive a confirmation email when we receive your submission.

5 Judging – March to May 2020

Your work will be judged in a two-stage process by a curated panel of judges which may include practising designers, Royal Designers for Industry, and industry experts including sponsors. Submissions are judged according to the brief that they entered. During the first stage, 5 to 10 projects will be short-listed for each brief. If your project is short-listed, you are invited to an interview with the panel to further discuss your work, your design process and your ambitions. Once the panel has interviewed all short-listed students, they deliberate and select the winner/s.

6 Winners announced and Awards Ceremony – May to June 2020

The winners of each brief will be announced publicly by the RSA in May 2020. Winners will also be invited to attend an Awards Ceremony at the RSA House in central London in mid-to-late June, and their work will be displayed in the 'Showcase' section of the RSA Student Design Awards website. If a paid placement at a company is awarded as the prize, this will take place over the following months, but it is up to you to arrange a time that works for you and the company.

Judging and awards

Each RSA brief is judged by a different panel of relevant experts comprising practicing designers and representatives from industry, including representatives from the sponsoring organisation/s.

Judging sessions

The judging of each project takes place over two non-consecutive sessions: shortlisting and interviews.

At the shortlisting session, the judging panels view all the submissions anonymously and draw up a short-list. Short-listed candidates are invited for interview (in person if possible, or via video conference) at which they will discuss their competition entry and some of their other work with the judging panel.

We welcome entries from candidates outside the UK but additional funding is not available to pay for travel and accommodation costs where overseas candidates are short-listed for interview. We will pay up to the amount of £80.00 if travelling within the UK, or £120 if travelling from other countries (inclusive of VAT) for short-listed entrants to come to the RSA in London for interview. Where travel to London is not possible for short-listed students, we will arrange interviews by video conference.

The RSA reserves the right to withhold or divide any of the awards offered, and the panel may also award commendations. In all cases the judges' decision is final and no correspondence will be entered into by the RSA.

Placement Awards

Some awards enable winning candidates to spend time working in a consultancy or in industry on design related projects. Placement Awards offer paid work experience and can be a valuable introduction into different fields, sectors and industries. Details of these awards are available on each brief and on the website. For students applying internationally, Placement Awards are subject to the entrant's right to work in the UK.

Cash Awards

Cash Awards allow the winning student to use their prize towards funding further study, travel to research design in other countries, equipment, business start-up costs or any other purpose agreed with the sponsor and the RSA. All awards must be claimed within six months of award and winners are required to write a short report for the RSA detailing how they used their award.

Awards Ceremony

All winners will be invited to attend an Awards Ceremony at the RSA – this is a large, celebratory event that includes a keynote talk by a high profile figure, a presentation of the awards, and a drinks reception.

Fellowship of the RSA

All candidates who win an award through the RSA Student Design Awards programme will be offered complementary Fellowship of the RSA valid for one year from the time it is activated. RSA Fellowship enables winners to connect to the RSA's global network of Fellows, engage with RSA events and projects in their local area, access the RSA's Catalyst Fund and crowdfunding platform on Kickstarter, and to make use of the restaurant, bar and library at the RSA House in central London. More information about RSA Fellowship can be found at www.thersa.org/fellowship

Intellectual Property

The intellectual property rights (patents, registered designs, unregistered design right, copyright, etc) of all designs submitted in the competition remain with the candidate. If any sponsor wishes to make use of the work submitted in the competition, a license or transfer must be negotiated with the candidate. Whilst the RSA claims no intellectual property rights, it does reserve the right to retain designs for exhibition and publicity purposes and to reproduce them in any report of its work, the online exhibition and other publicity material (including the RSA Student Design Awards website).

In the case of work carried out during a Placement Award, different conditions will apply. Candidates should note that certain intellectual property rights (eg patents) may be irrevocably lost if action to register them is not taken before any disclosure in exhibitions, press material etc.

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