

# THE HAMLYN WALKER CHALLENGE

# WITH PRIESTMANGOODE

#### Introduction

Lady Helen Hamlyn, Patron of the Helen Hamlyn Centre for Design at the Royal College of Art has described the walking frame or 'walker' as "the most degrading object that we can give to anybody". Committed to changing the perception of these stigmatised mobility aids, Lady Hamlyn has commissioned the Design Age Institute at the RCA to launch The Hamlyn Walker Challenge to students and recent alumni of the Royal College of Art. The challenge is:

To redesign the walker as an engaging and desirable product that supports and promotes active mobility and brings independence, confidence and joy to those who use it.

<u>The Design Age Institute</u> (DAI) is the UK's national strategic unit for design and the healthy ageing economy. Funded by Research England, our mission is to support the design and development of inclusively designed products and services that will help all of us to age happier and healthier.

#### Walker definition

For the purpose of this brief a walker is defined as a walking frame with wheels, known as a rollator. The solution should not be a static, tubular metal frame commonly known as a 'Zimmer' frame, it could be a combination of static feet and wheels, or a frame that transforms into a rollator, or vice versa.

### Career-defining prize and full-time, paid internship at PriestmanGoode

The winner of the Hamlyn Walker Challenge will receive £2,000 and the opportunity to develop their prototype during a full-time, paid, six month internship at <a href="PriestmanGoode">PriestmanGoode</a>, recognised global experts in transport design. There will be further cash prizes of £1,000 each for up to three runner-up entries.

#### Who can enter?

This exciting challenge is open to final year students and recent alumni of the Royal College of Art who are or were enrolled on the following postgraduate degree courses; Design Products, Industrial Design Engineering, Global Innovation Design, Intelligent Mobility and MRes Health + Design, MRes Design. It is also open to final year students and graduates of other courses at the RCA who have the technical and design skills to respond to this brief. Entrants must be prepared to take up the six month placement at PriestmanGoode, this is a requirement of entry as it is the mission of the DAI to get products to market.

# Background / context

The current, standard-issue walking frame appears to suggest that as we reach a certain age our opinion about aesthetics ceases to matter. Devices that are provided by public or charitable organisations are only required to fulfil functional requirements which can stigmatise the person using them.

The goal of this project is to rethink the walker and recreate it as a desirable and joyful product; an item that people are proud to use in their home or show off to their friends on the street. A walker that is robust yet elegant, effortless and fun to use and makes daily life better for everyone who struggles with their mobility.

# Key ambitions: pitch a design;

- To challenge the perceptions associated with walkers so that people are encouraged to use them without feeling embarrassed or stigmatised.
- To create a walker that meets an individual's mobility needs and gives them a sense of safety and security.
- To produce a product of the highest quality design, through a progressive approach or use of materials and beauty of form that evokes delight.
- To create an age-friendly product that appeals to all ages.
- To keep the price point as accessible as possible, mirroring current price points should be the aspiration as this is perceived to be the number one barrier to market.

# Challenge Process: how will this work?

#### Launch

The Hamlyn Walker Challenge will be launched at 4pm on Thursday 24th March 2022 at a briefing event one week before the Easter break, providing an opportunity for Q&A for students and tutors. Submissions will be due one week after the break on Monday 2 May, with winners announced two weeks after that week beginning 16th May.

### Research with user groups

There will be an opportunity for students to consult with older people with mobility issues through the membership of the University of the Third Age (U3A), with whom the DAI has a network connection via their 'This Age Thing' community.

### **Judging Process**

Students' design pitches will be evaluated by an expert panel of judges against the **judging criteria below**. The panel will include a diverse range of expertise from the DAI's network related to the brief topic and the design industry.

Once the panel has assessed all the pitches, they deliberate and select the winner who will receive £2,000 prize and a full-time, paid, 6 month internship at PriestmanGoode. Up to three runners-up will each receive £1,000 prize.

# Judging criteria

## 1. Desirability:

- Is your design desirable? How does it engage and delight the eye? How are your insights grounded with real people?
- What did you consider in order to make the aesthetics striking and memorable to the target audience?
- How is your idea different from existing solutions?
- Have you designed this at a price-point that is desirable to NHS/healthcare providers, distributors, retailers, and end-users?

# 2. Usability:

- Have you considered and uncovered the everyday lived experience and needs of people who use mobility aids?
- Have you considered the ergonomics of your proposal to support a user's grip and balance?
- Have you introduced new features or removed unnecessary pre-existing features of walkers?
- How did you get feedback and incorporate new ideas through user-testing, prototyping and iterating?

#### 3. Usefulness:

- How does your proposal improve the mobility of users and enhance their quality of life?
- Have you considered the different contexts of use in resolving your proposal's usefulness?
- Have you added any functionality or removed it to optimise its' usefulness?
- Is your solution feasible in terms of manufacturing a saleable product, is the route to market resolved?
- Have you considered the product's end of life, use of sustainable materials and or adaptability?

### **Submission requirements**

- Minimum of 3 x A3 PDF images that brings your concept to life.
- Written submission of a minimum of 1 x A3 PDF page that considers the points in the judging criteria and describes the process you went through to resolve the brief.
- Supply your name, contact details, MA Course name, Course Tutor, Year of Graduation.

# Eligibility

- 1. Royal College of Art Postgraduate students in their final year of Design Products, Industrial Design Engineering, Global Innovation Design, and Intelligent Mobility are eligible to enter. It is also open to final year students and graduates of other courses at the RCA who have the technical and design skills to respond to this brief.
- 2. Recent eligible graduates can also enter.
- 3. For non-UK entrants, internships are subject to the entrant's right to work in the UK.
- 4. We accept entries that have been developed as college 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 be the original work of the entrants.
- 6. Entrants may only submit one application.
- 7. Candidates who are contracted to work for a company after graduation may not be eligible for the internship.

# **Submitting work**

All entries must be submitted by Monday 2 May by email to Ruzina Choudhury, Administrator, Design Age Institute: <a href="mailto:ruzina.choudhury@rca.ac.uk">ruzina.choudhury@rca.ac.uk</a>

# **Intellectual Property**

The intellectual property rights (patents, registered designs, unregistered design right, copyright, etc) of all designs submitted in the challenge 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. The DAI reserves the right to retain designs for exhibition and publicity purposes and to reproduce them in any report of its work, the online announcement and other publicity material (including the DAI website).

In the case of work carried out during the full-time, paid internship at PriestmanGoode, different conditions may apply. An IP share between all partners will be discussed and agreed. Candidates should note that certain intellectual property rights (e.g. patents) may be irrevocably lost if action to register them is not taken before any disclosure in exhibitions, press material etc.

# Supporting information: resources and research

- Rollator Walker Market size and growth
- Are older people putting themselves at risk when using their walking frames?
- Objective measures of rollator user stability and device loading during

- different walking scenarios
- Some <u>research on stability of older people using walking aids</u> by Eleonora Costamagna from a thesis submitted for a Doctor of Philosophy degree, School of Health Sciences, University of Salford 2018
- <u>Designing for Mobility: examining how design can help improve the</u>
   <u>mobility and quality of life among the elderly</u> by Lisa Frodadottir Haugen,
   <u>Dept Product Design, Norwegian University of Science and Technology.</u>
- Which guide on walking frames and rollators
- BS list and any medical classification
- List of factors to assess the desirability of the walker?

# Our research identified the following challenges / unmet needs / potential opportunities

- 1) Many older people resist getting a walker until they have a fall. This is largely due to the stigma associated with using one. The medical or institutionalised appearance can emphasise a person's frailty and therefore draw attention to their vulnerability. Abandonment, non-use or avoiding and postponing the acquisition of a beneficial walker is an acknowledged issue by Allied Health Professionals. A desirable walker would help to negate a negative stigma, encourage greater use of these devices and prevent future falls.
- 2) It is common for users to have several walkers to meet their different needs, to navigate different environments and acquire new models as their abilities change. A product with a modular system could reduce the need to acquire new models.
- 3) There are a few elegant and effective frames on the market which, due to their materials and manufacturing process, can make their cost prohibitive and inaccessible to the majority of users. **There is potential to develop new 'benchmark' frames to be less expensive.**
- 4) Walking frames can inadvertently cause falls. Our research found that some people were using them inappropriately to get out of their seats. They would lose balance when using them causing them to tip over, or the frame rolled away. **Redesign the walker to safely meet people's needs.**
- 5) How can people gain access to and test the best walkers on the market? The prescription and provision of mobility aids needs a re-think. The design solution could include a campaign, film or service opportunity, to **identify** the premier walkers and give people the opportunity to test and use the aids that are best suited to their needs and wants.

# Considerations for RCA students submitting a proposal:

- Demographic shift, financial time bubble and tech proliferation
- Physical and cognitive impairments that can impact day to day life particularly in housing that can often be inadequate or unsuitable.
  Consider use in care homes, multi-generational homes, and outdoors.
- Age-friendly design: attractive and appealing to all regardless of ages
- Future-proof devices for long term use, consideration of sustainability of

- materials and longevity, recycling, potential for adaptability and adjustments as people age
- Considerations of how the market is segmented
- What is behind market failure? Are current solutions too complicated to use, poorly prescribed, institutional, medical appearance, failure to understand users' wants and needs, too costly to manufacture and distribute resulting in unattainable price point or inadequate profit?
- Consider other products that are enabling and universal yet once had a negative image or stigma; spectacles, prosthetic limbs, mobile phones.

#### Potential barriers to consider and overcome

- Legacy processes and current production capabilities in existing manufacturers
- NHS procurement processes recognising that not all of the market comes through the NHS
- Safety guidelines and BS legislation; we have a list of relevant British Standards in our toolkit. The devices will be <u>categorised at Class 1</u>.
- Cost parameters; aim to develop a solution that is accessible to as many people as possible. (What % under the existing top-end is acceptable?)

# For illustration only, viable responses could include:

- A walker that de-stigmatizes users by utilising the dynamic aesthetics, language and materials of positive active mobility e.g. from parallel industries including automotive design, bicycles, skateboards
- Double-duty device; a product that serves more than one purpose to assist daily living, converts to a shopping buggy, seat or table top.
- A modular walker designed for adaptability that could reduce the need to acquire new or alternative models. Take insights from parallel markets baby seats/buggies for instance - in terms of modularity and product system architecture and the folding and locking mechanisms.
- Development of a new 'premium' walker that could be accessible to people on lower incomes.

# For further information please contact:

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