# Products & Technologies that Change People's Lives Assistive Technology

September 23, 2011 Hynes Convention Center, Boston, MA

in Massachusetts

### Change People's Lives: the Design Competition



There is a growing international trend toward creating products that anticipate diversity in function as an ordinary part of life. Whether it's the prevalence of new patterns of disability in young people (e.g., ADHD, Autism Spectrum Disorders) or addressing the needs of the largest global proportion of older people in human history, design matters more than ever.

It's an extraordinary moment to pair substantially unmet needs with an explosion of new techniques, materials and technologies. We invite you to invest your creative talent to design a new product or technology, either a product for the general market that works for the widest possible range of ability (Universal Design) or a specialized product tailored to the needs of individuals with functional limitations (Assistive Technology).



Focus on at least one of four life sectors - Home, Work, Life-long Learning or Fitness/Recreation/Sport

• Choose your target market, at least by choosing a broad category of functional ability that you've chosen to address: physical, sensory, brain-based. You can choose to be more specific (e.g., older adults with low vision, children with dyslexia, working adults with walking difficulties)





- Reflects good research into a specific existing market and fills a gap in that market.
- Illustrates esthetic appeal integrated seamlessly with function.
- Demonstrates innovative insights born of engaging representative users from the target market in the final design.
- Explains anticipated feasibility and cost-effectiveness of fabrication.
- Incorporates attention to environmental sustainability in materials and production.

#### **Definitions:**

Universal design...inclusive design...design-for-all...is a framework for the design of places, things, information, communication and policy that focuses on the user, on the widest range of people operating in the widest range of situations without special or separate design... or human-centered design of everything with everyone in mind.

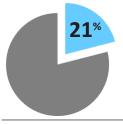
Assistive or Adaptive Technology commonly refers to "...products, devices or equipment, whether acquired commercially, modified or customized, that are used to maintain, increase or improve the functional capabilities of individuals with disabilities...", according to the definition proposed in the Assistive Technology Act of 1998. Assistive Technology products can enable people with disabilities to accomplish daily living tasks, assist them in communication, education, work or recreation activities, in essence, help them achieve greater independence and enhance their quality of life. Assistive Technology devices can help improve physical or mental functioning, overcome a disorder or impairment, help prevent the worsening of a condition, strengthen a physical or mental weakness, help improve a person's capacity to learn, or even replace a missing limb.



of all U.S. special ed students have brain-based conditions



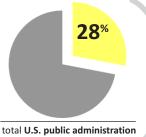
total U.S. professional & business total U.S. healthcare workers workers 55 years or older



55 years or older



total U.S. education workers 55 years or older



workers 55 years or older

#### **Eligibility:**

The competition is open to residents of Massachusetts (or current students in the state) who are enrolled in a degree granting 2-or 4-year undergraduate or graduate program, or young professionals residing in Massachusetts who are not more than ten years into their professional lives. Only teams are eligible with a minimum of two (2) people

see website for citations page 2 the U.S. Census **Bureau predicts that** 

will make up

## 20% of the



and up to a maximum of six (6) members. Multidisciplinary teams are strongly encouraged to apply. Due of the nature of the design competition, involvement with at least one 'user/expert'\* as a design team member or a meaningful resource in the development of the design is required and the judging process will factor favorably solutions that give evidence of this. \*'User/experts' are people with functional differences that vary from the norm who experience every day how design fails and who can help to provide guidance on solutions (Ostroff, 1997).

#### Submittal Criteria:

#### Written Documentation

Design Process - describe how the Team approached the challenge including market research, research about Universal Design and Assistive Technology and the engagement of user/experts. [maximum 300 words]

Description of the Design - degree by which the design efficiently facilitates or augments the users' ability and experience through the innovative, resourceful and appropriate application of design features. [maximum 300 words]

#### **Visual Presentation**

Diagrams, sections with scale figures, renderings, photos of models, photos of user/expert research, notations about materials, and details of some important features.

ages 5-17 with a disability in Massachusetts

ages 18-64 with a disability in Massachusetts ages 65 & over with a disability in Massachusetts

#### **Submittal Requirements:**

Entries for the competition must be submitted digitally on the Design Competition area of the conference website (www.ChangePeoplesLives.org) by September 2nd 2011 at 5:00 PM EST. The form of submission should be an electronic format (PDF) 20" X 30" printable sheets, two (2) sheets per entry plus PDF files of the two narrative sections.

Please complete the form on the event website to provide information about the team composition and detailed contact information for the primary contact.

Finalists will be notified on September 9th and invited to the awards program on September 23rd at the Hynes Auditorium in Boston. Event organizers will be responsible for printing the design boards of the finalists for display at the Hynes Convention Center on September 23rd.

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#### Schedule

September 2nd – Final deadline for submittals uploading.

September 15th – Finalists announced.

<u>September 23rd</u> – Exhibit of Finalists, Winners announced.

#### Awards:

The winner of the competition will be given the opportunity to have their design prototyped by a key design firm. In total, cash and other prizes totaling up to \$5000 will be given to the top finishers including product awards from a variety of corporate sponsors.

#### **How to Enter:**

Are you up to the challenge? Send an email to the address below to get added to the distribution list. competition@changepeopleslives.org

#### **Sponsors:**

This design competition is being hosted in conjunction with a set of events to be held on September 23, 2011 called Products and Technologies that Change People's Lives — Universal Design and Assistive Technology in Massachusetts. An Expo, Conference and invitational policy Summit are intended as catalysts for a new Massachusetts priority. Events are sponsored by the Commonwealth of Massachusetts Executive Office of Health and Human Services (EOHHS) and convened by the Institute for Human Centered Design (Boston, MA). The intent is to make the rising demand and opportunity for universally designed products and assistive technology part of the State's technology and innovation agenda. All the events of September 23rd will be at the Hynes Convention Center in Boston.





### Learn/Explore/Experience/Engage www.ChangePeoplesLives.org

#### **Competition Jurors:**

The multi-disciplinary jury will be chaired by: Ricardo Gomes, IDSA, Chair/Professor, Design & Industry, College of Creative Arts, San Francisco State University ricgomes@sfsu.edu

Professor Gomes is leader in the international Universal Design movement, a Massachusetts native and graduate of Massachusetts College of Art + Design. Additional jurors will include design and engineering practitioners and academics, as well as users. Jury members will be announced on the event website in June.