

# Scipreneurship: Social Innovation with Science



Organization Logo

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# ASHOKA SEEKS SCIENCE PARTNERS

OUR GOALS	

Ashoka seeks to identify a number of vision partners – individuals and organizations – who deeply appreciate and understand what a crucially important role Science has to play in creating a world where Everyone is a Changemaker. With the aid and insights of ORGANIZATION NAME, Ashoka can develop an innovative sector of social entrepreneurs: Sci-preneurs.

As a part of Ashoka's effort to get the world to an Everyone a Changemaker "tipping point," we will catalyze a movement of Scipreneurship. Ashoka, among other things, will promote a global network of scientists who also identify as social entrepreneurs and who recruit from, and work alongside, an expanding talent pool of Changemaker-oriented, science-literate citizens.

WHY SCIENCE + SOCIAL ENTREPRENEURSH
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Science is rapidly outpacing the boundaries and dimensions of what is possible for Changemakers to readily adapt and launch. Climate change is just one example of a multi-dimensional and compounding problem, and Science is currently outpacing the number of Changemakers with ready solutions. Even in less headline-grabbing and established areas, such as the dissemination of Control Trials practices, more must be done to provide equal access

Ashoka has identified three areas in which it seeks co-leading partners who deeply share its vision of the crucial roof Science in the future of an "Everyone a Changemaker" world:

•A growing and carefully curated set of role models - people who move th

### PARTNERSHIP OPPORTUNITIES

science research "goalposts" and purposefully pursue advances in Science the drive systems change in the citizen sector.

- Examples of Ashoka fellows in this bridging role can be found on Page 4.
- An expanding global talent pool of young people ages 11-14 with vocational interests in Science and the mastery of Empathy, Teamwork, Leadership, and Changemaking.
  - A brief summary of these elements working in tandem in an ongoing collaboration between Ashoka and Anne Arundel County STEM teachers is included on Pages 5 and 6.

# - ASHOKA + ORGANIZATION

Ashoka wishes to create Social Scipreneurship as a field to bridge Science and the Citizen Sector. This venture has two key goals: it aims to bring Scientific methods, insights and discoveries and make them more accessible to citizens addressing social issues, beginning with parents and their children; it also aims to put in place the changes that launch a generation of Scientists who see their professional accomplishments equally in terms of innovation in their respective fields and effectively entrepreneuring those innovations in ways that create wide-scale social change.

### ASHOKA'S PROPOSAL TO ORGANIZATION:

HHMI commits to an initial investment of \$22.5 million that will allow us to simultaneously move along three pillars:

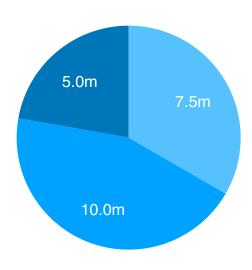
- 1. **Identifying the very best Social Scipreneurs across the world** and making effective investments in each of them to entrepreneur the social innovations that emerge from their purpose-driven research. **Goal:** Select 50 Social Scipreneurs, 10 each from North America, South America, Europe, Africa, and Asia.
- 2. Catalyzing the creation of "Social Scipreneur"-oriented curricula and related learning tools, beginning with parents' education and extending through children's primary, intermediate, secondary, college, graduate and post-graduate education.

Goal: Best practice solutions at each "learning level" for 2 countries in each of the five continents listed in 1 above.

3. **Creating innovative and workable solutions** to challenges posed by the global community through the aggregation of successful Scipreneurial applications, with success measured by their effects on tearing down walls and improving access to talent pools.

**Goal:** Curated network of 500-1,000 teams, the "Research and Take Action Trust" becomes the new paradigm for creating social change.

Pillars	Investment (\$ approximate)	Pillar Strategy & Goals
I	\$ 7.5 million	50 best emerging Social Scipreneurs (\$150k allotted to each Scipreneur)
II	\$10.0 million	Best Practice Learning tools adopted in 2 countries per continent
III	\$ 5.0 million	Research and Take Action Trust
Total	\$22.5 million	



# ASHOKA FELLOWS WHO ARE SCIENTISTS AND SOCIAL ENTREPRENEURS



**Dr. Ifeoma Okoye** (Nigeria, elected in 2008 as Ashoka Fellow), is a consulting radiologist who launched the All Africa Clinical Control Trials Association to raise clinical standards across the continent.



**Dr. Gary Slutkin** (United States, elected in 2009), is a University of Illinois School of Public Health epidemiologist who uses methods and strategies from the field of disease control to halt the spread of violence in cities across the US and around the world.



**Inge Missmahl** (Germany, elected in 2016), is an expert in psychosocial work transforming the field of intercultural mental health service delivery in Western and Central Europe.



**Liisa Petrykowska** (Sweden, elected in 2014), is a satellite and systems engineer who developed a highly reliable weather forecast methodology for near-equator areas and provide this service to farmers in Ghana.



**Dr. Gladys Kalema-Zikusoka** (*Uganda, elected in 2006*), is a veterinarian who launched Conservation Through Public Health and conducts inter-species disease monitoring and related research along the DRC/Uganda border.



**Anup Akkihal** (United States, elected in 2016), is a logistics and computer systems engineer ensuring effective vaccine delivery for all children, beginning in India.

# INTEGRATING CHANGEMAKING SKILLS WITH STEM: THE ANNE ARUNDEL STORY

Ashoka is involved in an ongoing collaboration with the Anne Arundel County Public Schools.

As a part of this collaboration, Ashoka, has worked with Dr. Kristina Gillmeister, the STEM coordinator for the schools. We recently interviewed Dr. Gillmeister and Laura Pinto, the Social Sciences Coordinator for the Middle Schools, about the impact on the surrounding communities. What follows are brief summaries of four student teams, and how these teams transformed the communities' attitudes about young people.

In the **Music Initiative**, a student team demonstrated the impact of music on dementia patients. Students on the team loaded MP3 players with generation-specific music for a County facility's residents. The availability of songs that defined a patient's generation has had a marked impact on the wellbeing of facility residents. This has transformed the way the County Department of Health and Aging views Middle School students: as full thought partners in co-creating new possibilities for service delivery. The Department has since rolled out the Music Initiative across the county for citizens living with dementia, promoted it to other County Departments of Health and Aging, and actively seeks additional

Another student team created the **Outdoor Classroom Initiative**, designed as a first step to create outdoor learning in the center of campus. The next step in this initiative is to undertake additional research to fulfill the vision of transforming the area around the school into a large-scale Center for Outdoor Learning. This student team has pulled in a range of experts to consult in their next steps, including County officials dealing with Education, Parks, and the Environment. The team solicited in-kind donations and fundraised to cover the additional costs of moving the Initiative forward.



With the **Bee Initiative**, a student team's initial research into the effects of pollutants on the local bee population quickly transformed into the establishment of a permanent Bee Lab at the school. The Lab is fully equipped with tools necessary for the project, including 3-D printers capable of printing honeycombs. These printed combs eliminate much of the bee labor required for comb creation, thus allowing bees to focus on pollination and honey gathering.

Finally, the **Portable Planetarium** project began with a student team's interest in designing and building a planetarium at the school and producing a presentation on Supernovas. This initial project quickly transformed after they sought out and learned from a similar effort underway by graduate students at Johns Hopkins that focused on the Planetarium shortage in the Global South. The student team at the Middle School identified a shortage of Astronomy in the curriculum of nearby primary schools, lobbied for its inclusion in the curriculum, and built a larger, more advanced version of the Planetarium that could host more students for Astronomy productions.

collaborations with student-led teams from the Middle School.

# ANNE ARUNDEL COUNTY'S MAP OF STEM VALUES

Anne Arundel County Public Schools

# **M VALUES**

Using all of your knowledge, resources & skills to solve problems and create opportunities in the world.



# & SYSTEMS THINKING

Through discovery, interpretation, ideation, experimentation and evolution our children can both understand and transform the systems they are a part of.

# RADICAL CURIOSITY & REVOLUTIONARY **IMAGINATION**

Make believe, create your own rules, improvise, and imagine the possibilities.

## PASSIONATE ABOUT PLAY

Play allows children to develop executive functioning skills for a lifetime, gives them a chance to move and shake, and underlies the experiences with the power of fun.

## **EMPATHY** 8. MINDFULNESS

Enhancing the ability to understand others and respond in a positive way allows children to build truly meaningful relationships with each other and the world.

## MAKING **8 CHANGEMAKING**

Capitalizing on their innate power to tinker, invent, & design allows for the child to "develop new solutions, mobilize others, and improve of society."

## **ETHICS & INTEGRITY**

honesty, honor, respect, authenticity, social responsibility, and the courage to stand up for what you believe is right.



Proposal To: (optional contact name) ORGANIZATION NAME

### Ashoka Team

Bill Carter, Leadership Group Member Vishnu Swaminathan, LGM, Planning and Partnerships Bob Spoer, LGM, Talent Kihoon Sohn, Major Gift Officer, Global Partnerships Katelyn Jones, Global Partnerships