



2015 Progress Report

STEM Education Advocacy Group: a developing science advocacy think tank

Fanuel Muindi, PhD

SUMMARY

This short progress report details our development as a science advocacy think tank over the last year. The current mission, current progress, and future directions are summarized and discussed accordingly.

OUR MISSION

Our mission is always evolving as we continue to grow. At the present, the STEM Education Advocacy Group is devoted to conducting high-quality analysis and advocacy on science education initiatives around the world. We believe that education with a strong foundation in science is one of the keys towards global economic growth, social advancement, and ultimately, global peace. As a science advocacy think tank, our group seeks to identify, analyze, share and promote programs, proposals, organizations, and original ideas which advance science education around the world. Additionally, we also share our own personal experiences in science in an effort to positively influence and inspire the next generation of trainees.

In the end, our mission is to be a powerful voice in advocating for science initiatives and trainees around the world, particularly in developing countries.

WHO WE ARE

We are a globally focused small group of volunteers comprised of graduate students, postdocs and professionals that is passionate about science. Our advocacy efforts are currently focused on writing and publishing articles in high impact magazines, journals, and our own website. We also utilize social media platforms to connect and share our ideas.

PROGRESS

Online

We are on Twitter (@STEMadvocacy) and have a Facebook group (STEM Education Advocacy Group). We use these platforms to promote our articles and ideas. We also have a website (www.stemadvocacy.org) which hosts our blog. This website was initially launched in January 2015 and remodeled in December 2015. We are actively tracking its use by visitors.

Publications

We have been very active this year with our publications. A total of 3 articles were published in both Science and Nature by our members with a roughly 4-month spacing in between publications. The most recent publication was by Dr. Jessica Tsai in December in Science. An additional article in Global Health was also recently published by another of our members. Please see 'Future Directions' to learn more about this aspect of our work. In total, the number of our publications thus far is 9. Figure 1 displays some additional details on our publications.

CURRENT PROJECTS

We are currently looking into cataloguing STEM initiatives across developing countries in Africa and South America. This is a long term project that we started a year or so ago. There is currently no central database keeping track of initiatives and projects across Africa. In order to gather the data, we are slowly scouring the individual websites of each of the organizations and initiatives we find in order to learn more about what they do, how they do it and the impact they have had thus far. We think this cataloguing is a step in the right direction towards the creation of a platform where STEM organizations could collaborate and also share strategies.

FUTURE DIRECTIONS

Another aspect of our interest is in Global Health. One cannot ignore this when thinking about science education especially in the developing world. This is an area one of our members (Moytrayee Guha, MPH) is slowly developing. She has recently published an article in the International Journal of Emergency Medicine. We are also hopeful to attract new members to our group as we continue to refine our goals and mission. It is our hope to have a core group of members that are actively conducting analysis on STEM ideas, programs and organizations around the world. In 2016, it is our hope to (1) create an advisory board to help in directing our growth, (2) recruit a project assistant to help manage our online presence and assist in ongoing projects, and (3) raise funds to aid in maintaining the website.

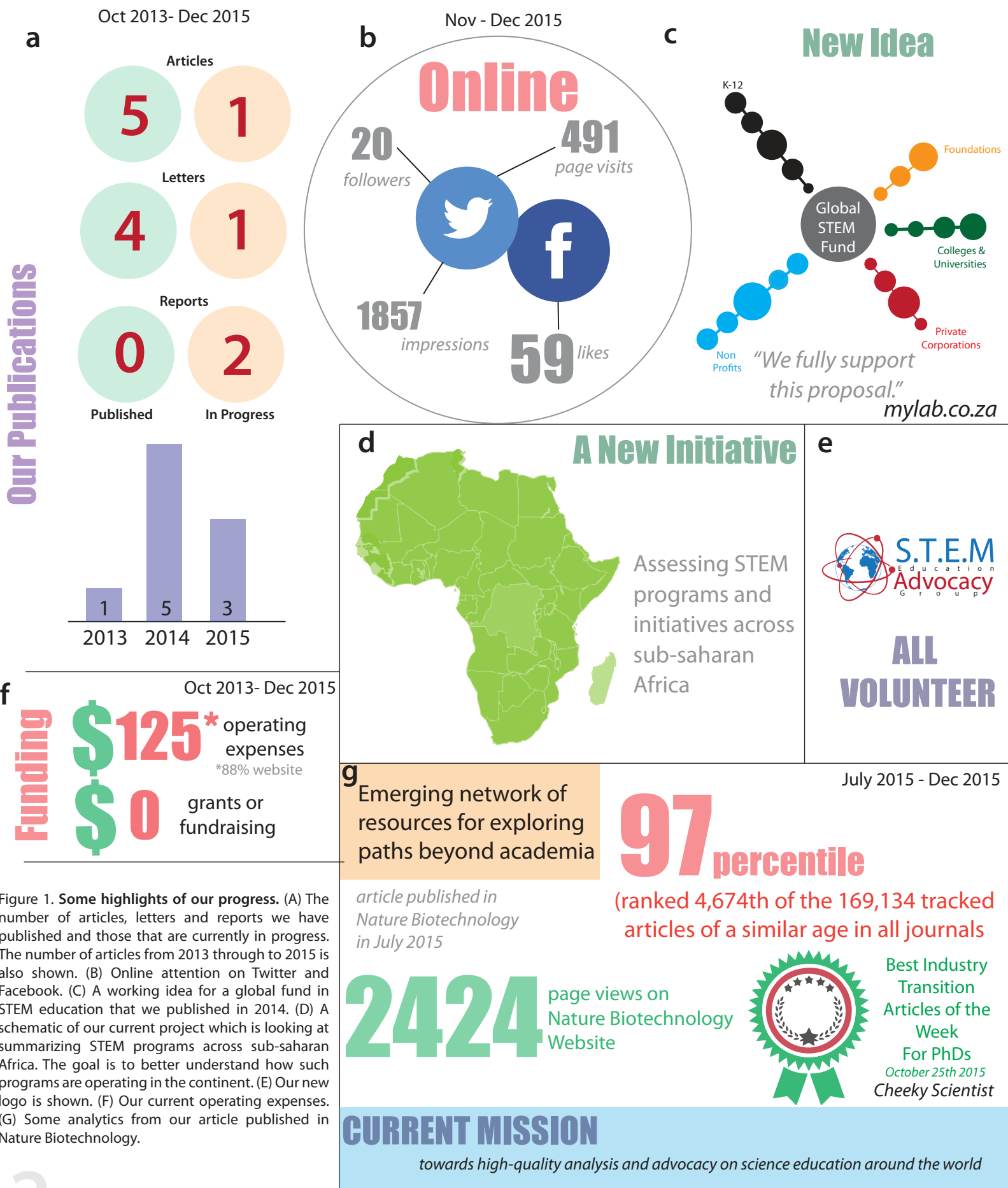


Figure 1. **Some highlights of our progress.** (A) The number of articles, letters and reports we have published and those that are currently in progress. The number of articles from 2013 through to 2015 is also shown. (B) Online attention on Twitter and Facebook. (C) A working idea for a global fund in STEM education that we published in 2014. (D) A schematic of our current project which is looking at summarizing STEM programs across sub-saharan Africa. The goal is to better understand how such programs are operating in the continent. (E) Our new logo is shown. (F) Our current operating expenses. (G) Some analytics from our article published in Nature Biotechnology.

Science
Technology
Engineering
Mathematics

