



Online Sciathon 2020 / Group Elmiger

ANANSI Webinars

Global Webinar Platform

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ANANSI Webinars: Global Webinar Platform

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GOAL

In the era of lockdown and social distancing due to the coronavirus, many universities had to cancel or dramatically **reimagine research seminars**. Speakers have been unable to travel, and local researchers have been unable to assemble. Nevertheless, one positive trend that has come to light is the transition to online seminars, or webinars. This transition raises an important question about who the audience should be for academic dissemination. For online seminars, **geography and cost is no longer a barrier to attendance**, and the audience is **limited only by how widespread awareness of the event can be spread**.

These times of crisis enable a **fundamental change in the culture of seminars** within research institutions - including prestigious institutions in the developed world - changing the *status quo*, and considering **open access seminars** to be the default option, unless a speaker has a specific reason for a more focused audience. We propose to establish an **international webinar platform**, which will help us to establish a global standard for sharing state-of-the-art research worldwide.

1 THE LINDAU GUIDELINES

The guidelines initiated by the Lindau Community in 2018 [1] aim to “develop and support a new approach for global, sustainable and cooperative open science”. Our initiative aligns closely with these goals. Open access webinars provide opportunities to **share knowledge and have equal access to top-notch research from all over the world**. This helps to establish trust and collaboration between institutions based on shared research interests, enhance the reputation of well-established universities as homes of academic leaders, and allows every researcher with internet access to overcome geographical and social barriers. In particular, researchers from developing countries will benefit from connecting with world-class researchers worldwide. This could lead to cross-border collaboration between research groups and also to internships, doctoral and postdoctoral appointments, hence **support universities in attracting talent worldwide**.

Open access webinars allow young scientists, who are striving to become experts, to educate themselves, and learn how world-class researchers approach problems. Thus, they will play an **important role in the education of both undergraduate and graduate students in developing countries**. Overall, these features will support sustainable, global and cooperative open science into the future.

2 A GLOBAL WEBINAR LISTING: ANANSI WEBINARS

One central location for sharing and finding open access webinars from all over the world is crucial to match speakers with the right audience. Our **first prototype** of such a platform - **Anansi Webinars** - demonstrates how such a global listing of webinars could look (see [2] and Fig. 1). Our project has been

inspired by existing websites offering webinar listings for certain disciplines, such as *AnywhereChemistry* [3-4] and *labroots* [5], but aims at taking this idea to a larger scale by including various fields of research and promoting the platform to a broader audience.

Anansi Webinars collects information about upcoming webinars, and organizes it into a table (Fig. 2). Users of our platform can search the table by discipline, date, or any other category, to find the webinars of interest. Future versions will allow users to search by keywords in titles and abstracts.

Our webpage will allow webinar organizers to **fill in a form** to get their webinars listed. In addition, an email address has been set up so that webinar organizers can subscribe to an **invitation mailing list**, and future versions will allow for an automated extraction of relevant information from emails. At present, the database is updated manually. Another feature will be a hashtag on Twitter (*#AnansiWebinars*) that webinar organizers can use to get webinars listed, and that attendees can use to find out about upcoming events.

3 IMPLEMENTATION

Anansi Webinars is a slim platform, and the **implementation is straightforward from a technical point of view**, requiring only a web domain, a database and hosting. Our prototype is based on free tools, which have some limitations (see Fig. 1). The next version will require a web designer and a database engineer. Once online, it will require minimal managing efforts by volunteers.

The main challenges are **funding and promotion of the website**. Ideally, we could obtain sponsorship from a renowned academic institution. This institution could be either a **university, a research institute, or a foundation dedicated to support research**. The reputation of an established institution would add credibility and ensure its promotion. Our project is highly relevant and feasible, and the costs of a website are rather moderate, when compared to the many benefits. Convincing a potential sponsor of our platform, and addressing any concerns regarding reputation would be key to obtaining funds.

Crowdfunding from the scientific community could also be explored to support the project [6]. Since the costs are not too high and the project is very important to scientists, raising sufficient funds would be likely. This option would require more work to make the platform become accepted. The Lindau Alumni Network would be invaluable in helping to raise awareness for the platform.

A third option would be to **approach a company** that has the know-how and resources to implement the platform in a more sophisticated way ¹. Any partnership would guarantee all researchers access at no cost by offering a free basic version, but might develop more sophisticated scheduling or search features or advertisements, which could be monetized. The number of potential paying customers would be limited in the scientific community, but building such a platform might open up possibilities to offer similar services to businesses. Finally, additional financial support can be achieved by applying to **public or philanthropic funding sources** dedicated to scientific communication and open science [7-11].

¹For example Triplt is a company that designs apps that create travel itineraries out of emails users are sending to them, and they have partnered with LinkedIn in the past - a company that could easily promote the platform.

4 PROMOTING PARTICIPATION

We have identified all the key stakeholders of our project, and advantages and disadvantages they have from participating in our initiative (Fig. 3). This will be the basis to pitch our project to potential hosts and organizers and convince them of our project.

For **institutions that already host seminars online**, the technical requirements for participation in *Anansi* are minimal, as can be seen in Fig. 2. Organizers simply have to submit the seminar details to our platform and otherwise proceed normally. Sharing access will allow them to **increase the impact of their seminars and help consolidate their global reputation**.

For **institutions not hosting seminars online yet**, *Anansi* asks hosting institutions to consider the added value of participating. During times of social distancing, institutions should **consider inviting external speakers to present virtually**, which has been found to be **effective in education** [12-14], and also **reduces travel time, cost and carbon dioxide-emissions** [15]. In many universities in the developed world, webcam facilities already exist to facilitate remote learning; taking advantage of these facilities would even allow the sharing of more traditional seminars going forward.

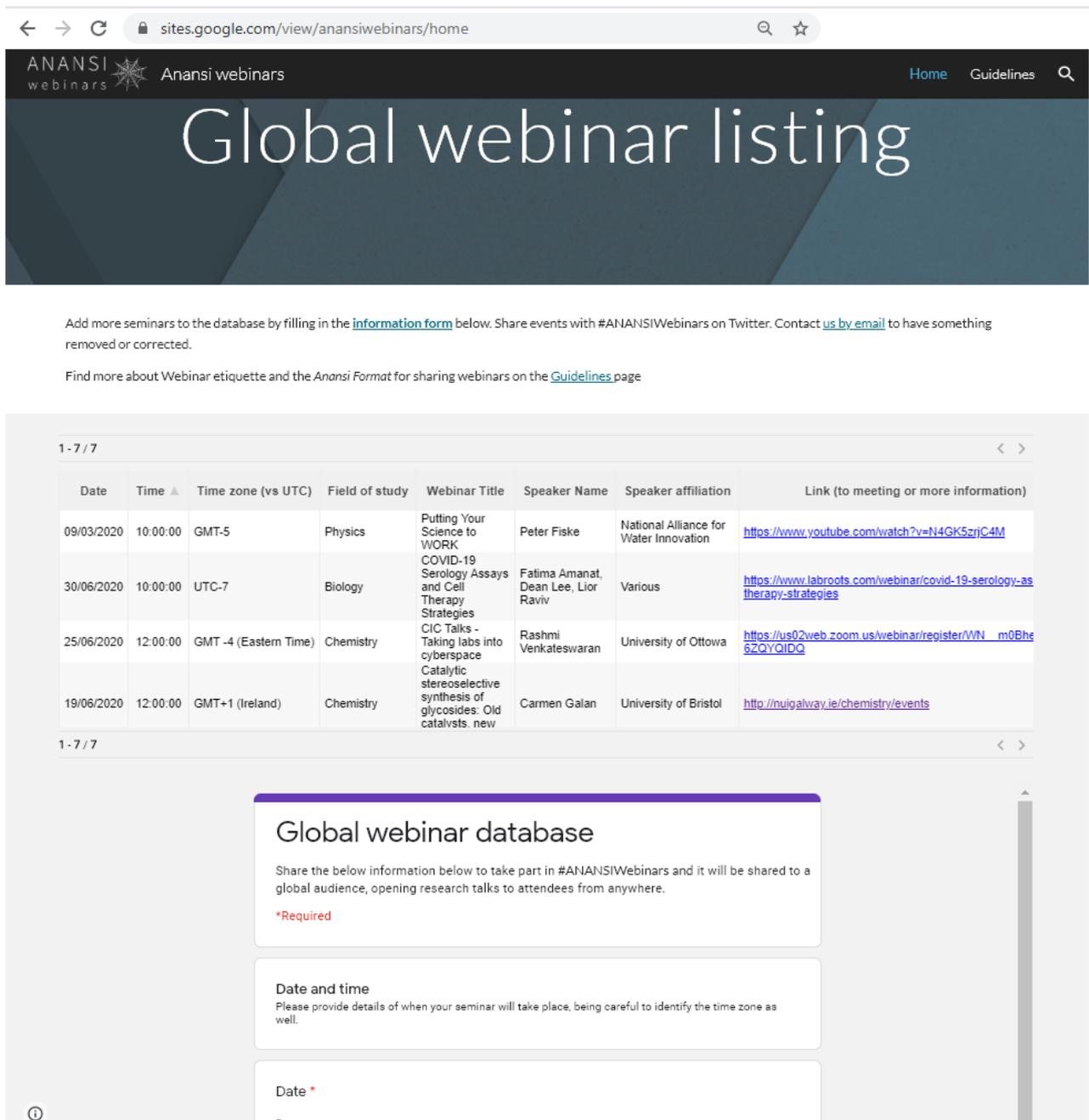
For speakers, **participating in *Anansi* is another step towards open access**. Many funding agencies are mandating funded researchers to publish without paywalls [16] and they are frequently asked to report on the reach of their research. Our platform will allow them to amplify this impact globally. Furthermore, researchers will be sharing their results with people with diverse perspectives and backgrounds, thus receiving feedback that can take projects in new directions. We acknowledge that some speakers might have concerns about sharing particularly unpublished results with a large audience. This could disadvantage early-career researchers in particular. Hence, explicit and informed consent of the speaker is necessary to store a webinar in a database.

Attendees at our seminars will benefit greatly from **increased access to cutting-edge developments in their field**, directly from leading figures. They will gain exposure to renowned research institutions and **learn to present** their own results. Participation will offer **career advantages**, particularly to attendees in the developing world, that usually require travelling to international conferences. Overall, this change in seminar culture will have **beneficial effects on scientists around the globe**. We will promote our platform through word-of-mouth, networks, media platforms and ambassadors across different fields and countries, in order to ensure widespread participation of stakeholders.

CONCLUSIONS

We believe that this **international webinar platform** will get us one step closer to a more **open and cooperative science community**, dismantling economical and geographical barriers in order to **share knowledge, educate and support talent worldwide**.

FIGURES



The screenshot shows a web browser displaying the ANANSI webinars website. The page title is "Global webinar listing". Below the header, there is a navigation bar with "Home" and "Guidelines" links. The main content area features a large heading "Global webinar listing" and two paragraphs of text: "Add more seminars to the database by filling in the [information form](#) below. Share events with #ANANSIWebinars on Twitter. Contact [us by email](#) to have something removed or corrected." and "Find more about Webinar etiquette and the *Anansi Format* for sharing webinars on the [Guidelines](#) page".

Below the text is a table listing four webinars. The table has columns for Date, Time, Time zone (vs UTC), Field of study, Webinar Title, Speaker Name, Speaker affiliation, and Link (to meeting or more information).

Date	Time	Time zone (vs UTC)	Field of study	Webinar Title	Speaker Name	Speaker affiliation	Link (to meeting or more information)
09/03/2020	10:00:00	GMT-5	Physics	Putting Your Science to WORK	Peter Fiske	National Alliance for Water Innovation	https://www.youtube.com/watch?v=N4GK5zrjC4M
30/06/2020	10:00:00	UTC-7	Biology	COVID-19 Serology Assays and Cell Therapy Strategies	Fatima Amanat, Dean Lee, Lior Raviv	Various	https://www.labroots.com/webinar/covid-19-serology-assays-therapy-strategies
25/06/2020	12:00:00	GMT -4 (Eastern Time)	Chemistry	CIC Talks - Taking labs into cyberspace	Rashmi Venkateswaran	University of Ottawa	https://us02web.zoom.us/webinar/register/WN_m0Bhe6ZQYQIDQ
19/06/2020	12:00:00	GMT+1 (Ireland)	Chemistry	Catalytic stereoselective synthesis of glycosides. Old catalysts. new	Carmen Galan	University of Bristol	http://nuijalway.ie/chemistry/events

Below the table is a registration form titled "Global webinar database". The form includes a text box for sharing information, a section for "Date and time" with instructions to provide details of when the seminar will take place, and a "Date" field with a red asterisk indicating it is required.

FIGURE 1: Prototype website for [Anansi Webinars](#), displaying a list of webinars, guidelines on sharing webinars and a web form allowing visitors to add events to the listing. Events can be sorted by a number of categories. The website is a proof-of-concept made in 48 hours with free tools, including Google Forms, Google Sheets and [Awesome Table](#), and hence has some restrictions, such as the maximum number of times the page can be viewed.

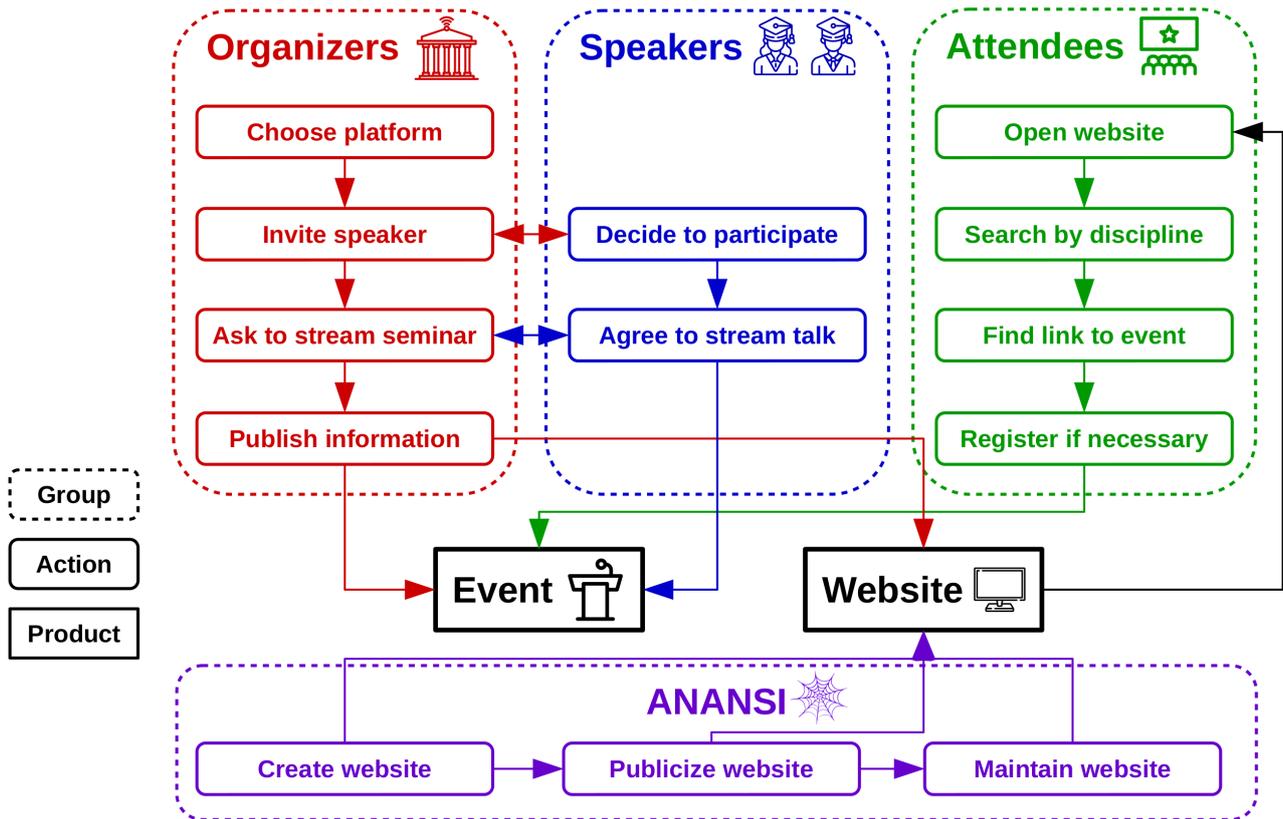


FIGURE 2: Flowchart of the interaction of all participants of one webinar. Icons made by [Freepik](#), [xnimrodx](#) and [srip](#) from www.flaticon.com and <https://www.svgrepo.com/>.

Stakeholder	Advantages / Disadvantages
Hosting Institution 	<ul style="list-style-type: none"> ⊕ platform to attract talent, improve international reputation, flexibility ⊖ choose platform, additional planning, infrastructure and personnel
Seminar Organizers 	<ul style="list-style-type: none"> ⊕ easy to participate, flexibility, international visibility and impact ⊖ more responsibility, more organization
Speakers 	<ul style="list-style-type: none"> ⊕ increase impact, feedback, ideas, reduce traveling, choice of format ⊖ more public audience, risk of technical difficulties
Attendees 	<ul style="list-style-type: none"> ⊕ access to seminars, opportunities for collaboration ⊖ reduced attention span, participant limit, technical requirements
Funding Agencies 	<ul style="list-style-type: none"> ⊕ global visibility and impact of funded research, reduce travel costs ⊖ adapt evaluation criteria of researchers
Society 	<ul style="list-style-type: none"> ⊕ climate friendly, promote talent, diversity and scientific engagement ⊖ limited attendee numbers, limited internet access

FIGURE 3: Stakeholders in our project and a detailed list of their advantages and disadvantages. Icons made by [Freepik](#), [xnimrodx](#) and [srip](#) from www.flaticon.com.

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