

# Leverage Research

Annual Report 2019 - 2020



## **Executive Summary**

Leverage Research is a non-profit research institute dedicated to benefiting society by aiding scientific advance. Our work focuses on understanding and supporting early stage science—research conducted during the earliest stages of discovery—on the view that understanding this stage in the scientific process can contribute to more effective research. We research how advances were made in the history of science and support novel research in young or under-resourced fields.

Early stage science represents a new research focus for the institute, stemming from a strategic review undertaken in 2019. The review signifies an important turning point for the organization as we saw the opportunity to pursue a research avenue that increasingly seemed valuable, and at the same time improve the way the institute operated. To this end, we spent the latter half of 2019 gathering feedback and developing a strategy that would inform the institute's future direction, and 2020 putting our plans into action.

This 2019 - 2020 Annual Report details the work Leverage Research has done over the last year and a half since July 2019 to make this transition successfully, with our work centering around three main goals:

- (1) Research: Establish new research programs producing high-quality research in early stage science. Leverage Research formed three new research programs: Early Stage Science, Exploratory Psychology, and a Research Fellows program. We wrote a <a href="Program Introduction">Program Introduction</a> for our early stage science research, self-published <a href="two case studies">two case studies</a> in the history of electricity (with two more underway), investigated options for disseminating our exploratory psychology research, and ran our first research fellows program.
- (2) Engagement: Improve our accountability, collaboration, and outreach by communicating about our past and current research and engaging with external researchers.

We gathered feedback and used this to inform various communication efforts, including significant redesigns of our <u>website</u>, new quarterly organizational <u>updates</u>, outreach on social media, and podcasts and articles relating to our work. We shared our <u>first report</u> on previous research and built relationships with independent researchers and academic experts in relevant fields to aid, improve, and review our research.

(3) Organizational Structure: Build an organization capable of implementing our new mission. We spun out all of the projects previously part of or affiliated with Leverage Research, allowing the institute to focus on early stage science. We then implemented a new management structure and hired three new staff: a Program Manager for Early Stage Science research, a Public Engagement Specialist and Program Manager for our Research Fellows, and, towards the end of 2020, an additional Early Stage Science Researcher.

Read the full Annual Report for a message from our Executive Director, details of our work towards each of these goals, our accomplishments, the challenges involved, and our future plans.



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## A Message From Our Executive Director

Ten years ago, I brought together six volunteers to work on projects intended to have a large positive impact on the world. This initial effort became Leverage Research, which grew to be a forty-five person research collaboration exploring many difficult but important topics in the social sciences.

This joint effort lasted fruitfully for more than eight years. At the end of 2018, I saw various signs that our decentralized system of research—an experiment we began at our founding—had reached its limits. Whereas the decentralization had originally been extremely effective at encouraging the development of distinct but complementary lines of investigation, the research teams had now developed their own independent visions that relied less on internal collaboration. With growing strategic differences and insufficient internal support for efforts to unify the organization, in the following months I made the difficult choice to dissolve the collaboration.

After consulting with allies, critics, and continuing staff members, I decided on a new direction for Leverage Research. With respect to research, we narrowed our focus to early stage science, a topic we had touched on frequently in our previous work. For the organization itself, we adopted a much more traditional organizational structure, aiming to include many institutional elements that we had previously neglected, such as accountability, public engagement, and clearly defined organizational roles.

Early stage science was a natural and compelling choice. It is a crucially important topic, arguably central to understanding the scientific process. It also appears to be understudied and, accordingly, misunderstood. It is plausible that better science, including within the social sciences, will come from a better understanding of science. Thus we came to believe that early stage science may be a promising focal point for people who want to contribute to the good of society by aiding scientific advance. The institute is well-positioned to study this topic, as it has experience with early research from its history, and with early stage science in particular from its past study of research methodology.

We have devoted the past year and a half to developing our new programs and bringing our practices into greater accord with our new standards. It has been a serious challenge to switch from the freewheeling, unstructured environment of pure research to a *modus operandi* that includes official roles and functions, legible public engagement, and the timely presentation of our research in a way informed by professional standards. But this is a challenge that is necessary and beneficial, and it appears to already be bearing fruit. I am optimistic that we will meet and exceed these new standards and that this will better position us to succeed in our mission.

This difficult year of pandemic, with new dangers, and with new solutions brought by science, underscores the importance of science for the health and prosperity of our society. We believe that greater knowledge of the scientific process can only help. It is thus with hope that we look forward to this new year, and to a better understanding of humanity's attempt to forge a path into the future.

Geoff Anders
Executive Director



## Our Work 2019 - 2020

Over the last year and a half, the work of the institute has been geared towards our change in direction. The first stage of this process involved gathering feedback from neighboring research communities and previous employees through surveys and individual and group discussions, alongside in-depth strategic planning within the institute. This helped clarify the institute's research focus and identify the particular aspects to change about the organization's approach, ultimately resulting in three priority areas to focus on from the end of 2019 through 2020:

- 1. **Research:** Establish new research programs producing high-quality research in early stage science.
- 2. **Engagement:** *Improve our accountability, collaboration, and outreach by communicating about our past and current research and engaging with external researchers.*
- 3. **Organization:** Build an organization capable of implementing our new mission.

This section of the Annual Report discusses the work the institute has undertaken toward each of these goals and the accomplishments and challenges faced along the way.

#### Research

Early stage science is the idea that before sciences mature and develop standardized methods and advanced instrumentation, there is a crucial stage research commonly goes through. This earlier stage is often characterized by a period of greater uncertainty where data is less reliable, instruments are less precise, and the space of available hypotheses is broader. If the organization's assumptions are correct and this stage in the scientific process is meaningfully distinct, vital to a field's development, and poorly understood, additional research in this area could be valuable, particularly for improving research efficacy in nascent or stagnating fields.

The institute settled on three research programs which together combine different types of direct research with support for existing attempts at early stage science:

- 1. Early Stage Science Research Program: Historical analysis of factors driving scientific discoveries.
- 2. **Exploratory Psychology Research Program:** Disseminating early stage research for further study.
- 3. **Research Fellows Program**: Supporting promising researchers studying topics in nascent fields.

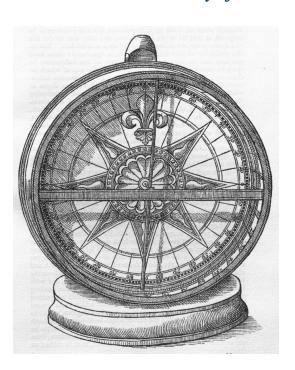


## **Early Stage Science Research Program**

Leverage Research's Early Stage Science Program investigates how research breakthroughs were made in the past and examines the context surrounding early shifts in scientific understanding. This program is the institute's current priority, occupying the majority of our researchers' time and attention. Researchers in this program produce in-depth, historical case studies to understand the factors driving important discoveries. Once enough initial research has been conducted, our researchers will use these case studies as data points in a broader analysis of the factors that contribute to early stage scientific advances.

Last year Leverage Research presented some of our initial hypotheses about early stage science in this <a href="Program Introduction">Program Introduction</a> and self-published two case studies in the history of electricity, with two more underway.

#### Case Studies in the History of Electricity



#### 1) William Gilbert and the Discovery of 'Electricks'

William Gilbert's 1600 work *De magnete* presents an account of electricks: things which attract in the same way as amber. This is widely considered to mark the discovery of the phenomenon of static electric attraction.

This case study provides a discovery-centric history of developments across multiple fields, including magnetism and astronomy, which begins in antiquity and culminates in Gilbert's discovery.

This case provides a useful example of early stage science as Gilbert's extensive experimentation and theoretical efforts to unify magnetism and cosmology led him to isolate static electric attractors.

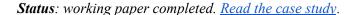
**Status**: working paper completed. <u>Read the case study</u>.

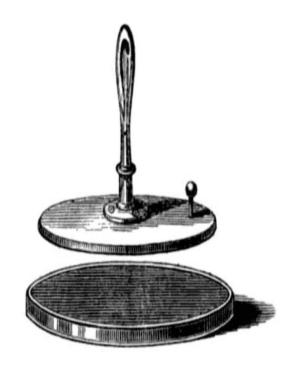


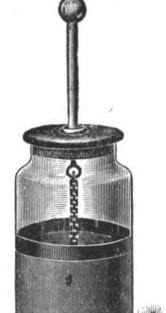
#### 2) The Reception of Volta's Electrophorus Among Eighteenth-Century Electricians

Alessandro Volta's invention of the electrophorus (1775) appears to have advanced the scientific consensus regarding attraction, repulsion, and the location of the electricity in a charged body. This happened despite Volta having no theory explaining the electrophorus and the phenomenon it displayed having already been shown by two of the best-known electricians of the era, Johan Carl Wilcke (1762) and Giambatista Beccaria (1772).

This case study provides a detailed account of how the scientific consensus changed between Benjamin Franklin's widely- accepted theory of electricity (1747-55) and the end of the eighteenth century. We then use historical accounts, original texts, and recreations of experiments to understand the impact of Volta's invention of the electrophorus (1775).







#### 3) The Discovery of the Leyden Jar

Accounts of the origin of the Leyden jar suggest it was discovered independently by two novice electricians—Ewald Jürgen von Kleist and Andreas Cunaeus—both entirely by accident. It is argued that it was precisely their lack of electrical knowledge, particularly ignorance of the Rule of Dufay, which enabled the discovery and led to established theory being overturned.

Our research provides greater context on the investigative strategies and motivations of early eighteenth-century electricians to show that while the Leyden jar was regarded as a surprise and marvel by electricians, it was not the theory-breaking accident portrayed by some older accounts. Instead, the device's discovery was a natural, perhaps even inevitable, result of an approach that focused not on theory but on gaining practical control over natural phenomena. We investigate this approach to gaining natural knowledge and its relationship to the modern notions of how scientific research ought to be conducted.

**Status**: first internal draft paper completed and being revised before seeking external feedback.



## 4) Hans Christian Ørsted and the Discovery of Electromagnetism

Existing literature on Hans Christian Ørsted's 1820 discovery that a current-carrying wire could deflect a magnetized compass needle generally offers one of three explanations. The discovery is characterized as either a fortuitous accident, as stemming from Ørsted's interest in German *Naturphilosophie* (especially the work of Schelling), or (less frequently) as stemming from Ørsted's earlier interest in Kant's views on the philosophy of science. The goal of the investigation is to evaluate these different explanations of the discovery.

Our research seeks first to establish whether it is necessary to posit anything unusual about Ørsted, investigating whether it was technically feasible for the discovery to have been made earlier, and studying prior failed attempts to find a connection between electricity and magnetism. Next, we examine the role of scientific and meta-scientific theories in influencing areas researchers investigate. We are interested in whether widely-discredited views like those of Schelling may nevertheless have contributed to Ørsted's important discovery and, if so, in what way.

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Status: research in progress.

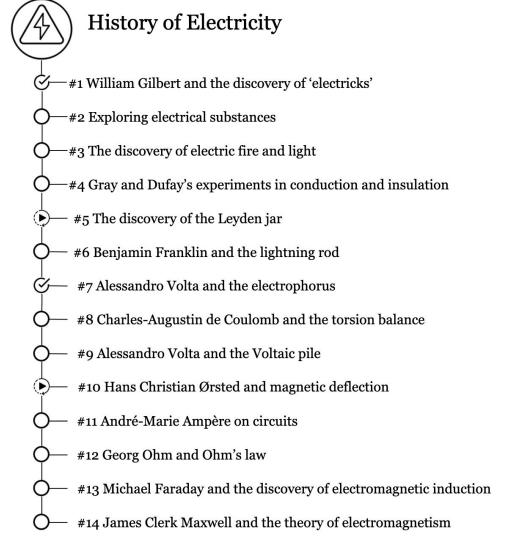
Once completed, these third and fourth case studies will be added to our History of Electricity series and shared on our website. Subscribe to updates from Leverage Research to be notified when we complete new case studies.

#### Planned Case Studies

In order to have enough data for a broader analysis of the factors that contribute to early stage scientific advances in general, we need to have investigated the history of discovery across a sufficient range of sciences. Therefore, the long-term goal of this research program is to conduct in-depth case studies spanning the early history of most successful modern fields.



Based on preliminary reviews of the history, we expect to produce approximately 14 case studies on the history of electricity. The following diagram represents an estimate of what these case studies might be, as well as their current status.



To ensure findings hold across fields and to build an understanding of the full history of early stage science, we also expect to produce case studies covering further fields including Astronomy, Magnetism, Mechanics, Chemistry, and Geology.

## Challenges

The main challenge within this program is to produce enough case studies for later analysis that meet a standard of academic rigor, while at the same time ensuring the ideas are comprehensible to researchers



without a background in the relevant scientific field or the history of science. We found it more difficult than anticipated to write case studies compatible with academic standards while being accessible in the relevant way, thus we did not produce as many of the planned case studies as initially expected.

To meet this challenge, we have worked to develop internal standards for documents and document formats. This year our researchers experimented with modifying the traditional academic journal format to make it longer, providing room for greater historical and other context. We also produced a research highlights document for one of our case studies to convey the core ideas in a more digestible form. While this has laid some of the groundwork, we expect that further refinement of formats and standards is needed.

Beyond these efforts, the institute hired a new researcher with experience publishing papers in the history and philosophy of neuroscience and psychology who will contribute to and inform our standards. The team has also built relationships with academics with expertise in relevant fields who have generously aided our research by answering our various questions.

#### **Exploratory Psychology Research Program**

The institute's Exploratory Psychology research program aims to disseminate key findings from our previous research on topics such as introspection and mental structure. By sharing these findings more broadly, we hope to encourage external researchers to conduct complementary research, ideally leading to the confirmation or disconfirmation of our results.

The dissemination of this research is included as one of the institute's early stage science-focused research programs since the research we conducted is closer to early research than late stage science and, if adopted, might qualify as an example of early stage science.

Over the past year, this program took two important steps. First, the institute determined which of our earlier findings would make the most sense to share initially. We decided to prioritize some of our core methods: techniques for producing introspective reports and protocols for organizing such reports. We made this decision on the belief that the external validation or invalidation of these methods would then facilitate the assessment of many of our other results related to understanding the mind.

Second, we gathered information about different potential routes for distribution, both inside and outside of academia. We corresponded with several academics, investigated successful and unsuccessful attempts to distribute other psychological methods and techniques, and later encountered evidence from our Early Stage Science research program about past attempts to introduce the scientific community to new methods, theories, and ideas.

New methods in academic psychology are typically introduced by having them validated in a therapeutic context by demonstrating their efficacy using a small-scale randomized controlled trial (RCT), benchmarked against a standard approach such as cognitive behavioral therapy (CBT). We received practical advice on how to approach running such an RCT, as well as information about possible alternate



routes to assessing our work. One correspondent's view was that new methods in psychology are rarely adopted without an RCT of this sort.

When it came to the distribution of other methods and techniques, we conducted investigations of varying depth into CBT, Internal Family Systems (IFS), Focusing, and Neuro-Linguistic Programming (NLP). Our primary conclusion from these investigations was that the distribution of new methods in psychology is not a trivial matter. More specifically, we learned having a <u>single small RCT</u> supporting claims of efficacy in therapeutic contexts is not always sufficient to lead to further study by the scientific community, as it was not in the case of IFS.

The institute suspended research into the dissemination of our exploratory psychology research in June 2020, due to staff and funding constraints, and uncertainty about the next steps. We resumed research in October 2020, after discovering the relevance of our historical case studies to the program.

In particular, Our Early Stage Science case studies introduced us to an option we had not previously considered: disseminating our past research through an experimental "starter pack," optimized for use by researchers interested in introspection. The <u>Gilbert case study</u> revealed that the early study of both electricity and magnetism was sparked by "starter packs" composed of descriptions of instruments, experiments, and results, created by Gilbert (electricity) and Peregrinus (magnetism) respectively. The <u>Volta case study</u> further showed that it was possible for a new instrument to cause scientific consensus to form where it previously had not and that the distribution of that instrument could be expedited by having the device be useful for purposes beyond research (e.g., public demonstration).

#### Challenges

Each of the routes for sharing our previous exploratory psychology research poses challenges. For dissemination through academia, we expect that further research would be needed to identify which standard therapeutic targets our techniques are best suited to, which is not something we investigated in the past. For dissemination through an experimental kit or starter pack, the challenge would be to navigate the difficulties associated with involving the public in research, something for which there is both support ("citizen science") and understandable concern.

Ultimately, the primary question is which of these avenues is more likely to succeed in seeing this research examined further, and in a timely manner, given our resource constraints. Our priority for the next year is to complete our exploration of options, select an initial dissemination strategy, and begin taking steps to execute it.



## **Research Fellows Program**

The aim of the institute's Research Fellows Program is to encourage early stage research by offering funding and other support to individuals conducting promising research in emerging fields.

We ran a 2019 - 2020 nine-month cohort soon after restructuring, supporting three research Fellows who had shown promise when collaborating with Leverage Research as part of the previous institute structure. They were provided with a stipend, regular feedback, and meetings with our Executive Director as a senior research advisor. During the program, one Fellow researched the development and impact of social technology, another studied physical practices that might provide feedback mechanisms allowing for more rigorous study of aspects of health, and our final Fellow wrote a political philosophy piece on GurSikh doctrine.

#### **Challenges**

Funding constraints followed by the onset of the global COVID-19 pandemic meant we did not run a subsequent fellowship. Future programs will depend on funding and will likely not resume until the Fellowship can be held in person since we expect Fellows to benefit from interactions with one another and our researchers.

For future cohorts, our new Research Fellows Program Manager plans to introduce more structure to the Research Fellows Program, including sharing research reports and running workshops for the Fellows on topics related to early stage science.

## **Engagement**

One of the most substantial changes to Leverage Research's approach following the restructure was to engage in significantly more communication and collaboration around our work. Our previous heads-down approach to research may have sped up research internally but came at the cost of external legibility.

This sentiment was echoed in the feedback we collected early on. Greater transparency about the organization's work, more communication about our research, and increased engagement with external researchers were some of the significant takeaways from both this feedback and the lessons learned from the early years of Leverage Research.

For this reason, alongside our research, the institute dedicated significant time to our engagement goal to improve our accountability, collaboration, and outreach by communicating about our past and current research and engaging with external researchers. Work in this area included writing up past research, sharing new research for discussion and feedback, and communicating our work and ideas to a broader audience.



#### **Research Communication and Academic Outreach**

Through communicating about our research, we seek to ensure the institute is accountable by giving researchers the ability to assess our work for themselves. With our current research, we also want to contribute to ongoing discussions surrounding meta-science and benefit from academic expertise in the relevant fields.

#### Sharing Past Research: Research Reports

Much of the institute's early research consisted of shallow explorations of promising research avenues in the social sciences to identify which seemed most likely to warrant further study and in-depth explorations of the most promising avenues identified. During this time, the institute prioritized research progress over external communication, so little of this research was collected in a publicly communicable form. Over the last year, we have begun reviewing our records and internal documents to enable us to write reports detailing the tentative findings from the institute's past research.

The first area of past research we reviewed concerns consensus, which was one strand of our early coordination research. When studying consensus, the institute investigated the effectiveness of various approaches to enabling groups to reach rational agreement.

The <u>first report</u> we have released covers one of the approaches in consensus research: argument mapping. The document discusses the more than 30 argument mapping software projects we reviewed, attempts to build our own argument maps, interviews with several argument mappers, and our takeaways on the value of argument mapping for reaching consensus.

Over this next year, we expect to publish further reports of this type. Since the first report is more informal than our current research, it is hosted on our Executive Director's <u>website</u> alongside other information about Leverage Research's history. The institute's initial plan had been to write an essay series outlining the institute's history and covering past research avenues but upon reviewing our past research we decided that it was worthwhile to present that research more completely. Once we have compiled further reports, we expect to create some form of research archive on the institute's website to display these appropriately.

## Academic Engagement

Over the last year, Leverage Research has been building relationships with academics, particularly in the History of Science and contemporary Psychology, to learn about academic standards of research, how to engage with academia, and to receive feedback that will help improve the quality of our work.

Under our Early Stage Science research program, we reached out to academics who had published much of the secondary literature in the history of electricity to discuss questions pertaining to our research and began building a network of researchers to provide feedback on our work. We are grateful for the generosity of everyone who contributed time and expertise to our research.



Within the Exploratory Psychology Program, we built relationships with academics studying psychology and individuals with experience developing and distributing similar psychological tools and methods. We are equally grateful to these researchers for being willing to share their experiences and recommendations.

#### Communicating About Our Research

Alongside academic outreach and efforts to create more visibility for our past work, Leverage Research also sought to help researchers engage with ideas from our current research and encourage discussions about early stage science and the scientific process.

For this purpose, we shared a write-up of some of the <u>Research Highlights</u> from our case study on Volta's Electrophorus to accompany the two case studies published so far.

Additionally, our Executive Director Geoff Anders has written five essays as part of an ongoing series on Research and Knowledge Accumulation, which discusses the importance of various ideas pertaining to early research and research effectiveness. These can be found on his new website and Medium. Geoff has also spoken about scientific progress and other topics related to our work on the Patterson in Pursuit and Clearer Thinking podcasts.

#### **Institute Communication and General Outreach**

While our Executive Director presented the ideas behind our new research focus, the institute also took steps to make our mission and day-to-day work more transparent and engage with relevant research communities.

#### Website Redesigns

We undertook a complete redesign of our website at the end of 2019 to communicate our new mission and focus as an organization, incorporating feedback from both a survey of individuals in our network and user testing. More recently, we updated our <a href="website">website</a> again to improve the design and provide clearer explanations of our mission and current work.

## **Quarterly** Newsletter

Towards the end of 2020, we began sending out quarterly updates about our work. You can read our past updates and subscribe to our newsletter on our website.

#### Social Media

Those interested in our work can now connect with Leverage Research on <u>Twitter</u>, <u>Facebook</u>, <u>LinkedIn</u>, and <u>Medium</u>. Having experimented with each of these social networks, the institute primarily posts on Twitter as this seems to be where most of the relevant research discussions occur.



#### **Engaging with Nearby Communities**

Following the initial rounds of feedback used to inform the institute's direction, we have continued to engage with individuals and organizations with overlapping research interests. In addition, the institute wrote a public update to a community with whom the organization previously interacted to discuss our change of direction and past mistakes.

## **Engagement Challenges**

Communicating the institute's work poses a series of related challenges. First, there is the challenge of presenting new ideas about science to audiences that care about the subject but may not be familiar with the history of science or the relevance of historical research. As is the case with communicating any new idea, this has required us to invest in developing a unique voice and materials for the institute. One particular challenge we face is writing in a way that illuminates the important ideas without simplification.

This challenge is joined by the difficulty of explaining our past work, both by itself and in relation to our present work. Early research is often hard to communicate, and our previous neglect of this activity only compounded the difficulty. Our desire to incorporate our history, which is an essential part of what has made the institute what it is today, requires us to both clearly present our previous work and display its relevance to our mission today.

We are pleased to have found a concept that helps to unify our past aims and present research—that of early stage science—and we are proud of the progress we have made on communication thus far. Nevertheless, there is still much work to be done. In 2021, we will build on the groundwork we have laid, communicating with relevant experts about our research while simultaneously publishing new and past research and keeping the interested public informed about our day-to-day work.

## **Organization**

The institute's third goal for this period was to build an organization capable of implementing our new mission.

To this end, we dismantled the previous research collaboration Leverage Research had conducted, leaving a centrally managed institute focused solely on early stage science. Many of our researchers decided to continue their lines of research independently.

Leverage Research then developed a much more centralized structure, with a team motivated by our mission to study and support early stage science. Early on, the institute hired Kerry Vaughan as the Program Manager for our Early Stage Science Program and Larissa Hesketh-Rowe as Public Engagement Specialist and Program Manager for the Research Fellows program. We were excited to welcome them to the team as, alongside their experience for the roles, both have experience managing small organizations,



particularly through transitionary periods. These additional hires contributed to our establishing more formal management structures and improving internal processes. Our latest Early Stage Science Researcher hire, Evan Pence, holds a Ph.D. in the History and Philosophy of Science from the University of Pittsburgh and previously published research in the history and philosophy of neuroscience and psychology. You can find out more about our staff on our <u>team page</u>.

## **Organization Challenges**

Overall we are pleased with the organizational transformation the institute has achieved over the last year and a half. We have taken large strides from our less structured research collaboration towards being an institute with official roles, practices, procedures, and legible internal standards. The remaining challenge is further effort refining each of these elements, continuing to learn and adopt the best practices of comparable institutions.

In 2021, Leverage Research intends to define roles and responsibilities further to ensure all projects are managed to the necessary standard and prioritized correctly. This means continuing to develop and formalize the institute's standards for conducting and communicating about our work and ensuring that we balance new projects with our commitment to sharing our past and present research. It will also require us to continue to improve our processes for everything from setting team priorities to producing finished research papers to reviewing communications. All of this will only be more important as the institute seeks to hire additional staff, ramp up research, and further improve engagement in 2021.



## Plans for 2021 and Beyond

Leverage Research will continue to develop our research, engagement, and organization throughout 2021. Many of the plans for existing programs have been discussed in the Challenges sections of our current work. This section briefly covers continued plans for existing programs, a potential new project for the coming year, and what Leverage Research could achieve with additional funding.

## **Research Programs**

We expect to complete the two ongoing History of Electricity case studies within the Early Stage Science research program in the coming months, after which we will move on to the other case studies we have planned. We expect to have completed enough case studies to begin analyzing them within the next few years.

In our Exploratory Psychology Program, we will continue to explore options for disseminating our methods for producing introspective reports and protocols for organizing such reports. Our aim is to select an initial dissemination strategy and begin taking steps to execute it. The details and timing of this will depend on which strategy we select.

Research progress in both programs is limited partially by the number of researchers the institute employs and thus on funding, which we discuss below. Similarly, whether or not we run another Research Fellows cohort this year depends on fundraising and how quickly COVID-19 vaccines become widely available.

## **Bottlenecks in Science and Technology**

Some of the challenges scientists encounter in their research may pertain to the sorts of difficulties researchers face in early research. As a result, one avenue to impact the institute sees for its early stage science research is in opportunities to help researchers in a variety of fields identify and overcome key bottlenecks.

One challenge is identifying what precisely the bottlenecks in a given field are. Recognizing this, at the end of 2020, we began conversations with interested parties about the possibility of organizing experts to produce reports on bottlenecks in different areas in science and technology. Conversations with funders and researchers found mutual interest, so as a next step, the institute is exploring the possibility of hosting or co-hosting a workshop in 2021 on this topic. Researchers interested in writing reports on bottlenecks in their fields of expertise should contact us at contact@leverageresearch.org.



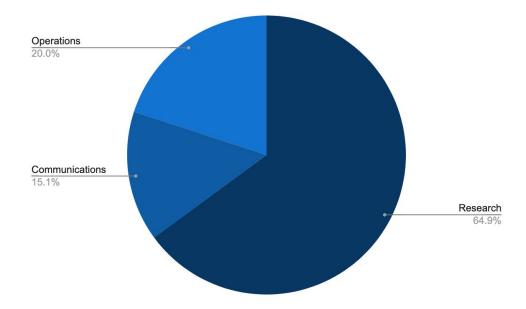
## Hiring

Leverage Research is currently looking to hire additional researchers, predominantly for our Early Stage Science Program, and a part-time operations manager. You can find out more about current openings on our website. If you or anyone you know might be a good fit for these positions, please contact us at contact@leverageresearch.org.

## **Finances**

## July 2019 - December 2020 Expenditure

Throughout the 18 month period discussed in this report, Leverage Research's total expenditure was \$370,842.89, which amounts to \$247,228.59 per year. This spending was divided across functions as follows:



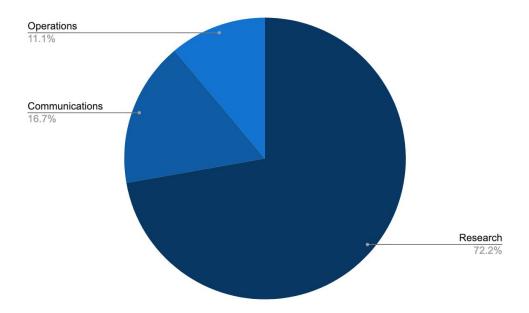
The bulk of the institute's spending on research and communications is on the staff compensation and benefits, with the breakdown based on rough estimates of how much time each person spends in their role within each area. The institute's operational expenses include office rent and utilities, office expenses, and various legal, accounting, and other fees.



## **2021 Budget Projections**

**Base Costs:** \$270,000.00

Leverage Research's baseline budget projection for 2021 is approximately \$270,000, which we would expect to spend as follows:



This projection assumes no increase in headcount, that the organization continues to operate remotely throughout 2021, and does not include funding a new cohort of Research Fellows.

#### **Additional Costs:**

There are several activities Leverage Research would undertake if the organization raised sufficient funding. Estimates for the cost of each activity are as follows:

- Recruit additional Early Stage Science Researchers: \$50,000 \$65,000 depending on experience.
- Recruit a part-time Operations Manager: up to \$30,000 depending on experience and hours.
- **Research Fellows Program**: costs are approximately \$30,000 per Research Fellow, assuming Fellowships are full time for six months. It is unlikely that we would choose to run the program with less than three Fellows, but the actual number of Fellows will depend on the availability of both funding and high-quality applicants.
- Office space for the second half of 2021: \$17,500. This expense is heavily dependent on the global COVID-19 pandemic situation.

Given a number of uncertainties, particularly around team location, these are all tentative estimates. These projections do not include funding related to the Bottlenecks in Science and Technology project as the project is too early in its development to make reasonable estimates.



## **Support Our Work**

If you are interested in supporting early stage science research, consider <u>donating</u> to fund our programs. Further funding will allow us to undertake some of the activities mentioned above, namely to hire researchers to expand our research efforts, improve our operational efficiency by hiring an Operations Manager, and support more promising researchers through our Research Fellows Program.

Leverage Research would like to take this opportunity to thank our existing donors for their generous support, especially through this critical stage in the institute's development over the last year and a half.

## **Get In Touch**

If you have any questions about the work discussed in this annual review or are interested in supporting our research, please contact us at contact@leverageresearch.org or connect with us on social media.