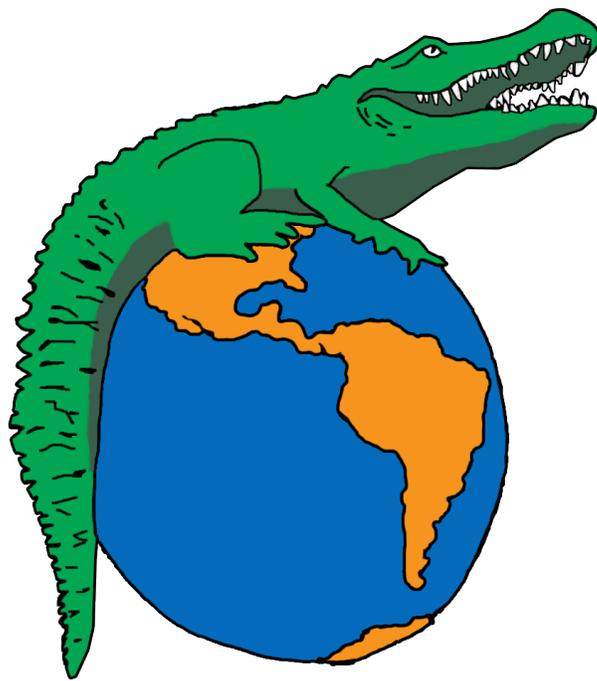


# GatorMUN XVI

## Background Guide



## Economic and Social Council

Dear Delegates,

As the Director of the ECOSOC committee, I welcome you all to GatorMUN XVI with great pleasure. My name is Thu Kim, and I am in my second year at the University of Florida studying Biochemistry with a minor in Biomolecular Engineering. Most of the time, you will find me at Sisler Hall, working on my organometallic chemistry research or reading some field literature. Model United Nations is my creative outlet, an escape from the world of STEM. My first involvement with MUN was during my junior year of high school. During college, I have continued to participate in MUN both competitively and staffing our conferences. With all the knowledge that I have gained from those conferences, I decided to direct my own committee to spread more knowledge on the topics that I am passionate about while creating a fun experience for all of those who are competing.

My interest in the microbe world first sparked when I learned that bacteria communicate with each other through multiple signaling pathways. With this premise in mind, I set out to find a potential new antibiotic by impeding the signaling mechanism. However, the more I delved deeper into the topic, the more I realized how difficult it is to develop any type of novel antibiotics. Specifically, due to certain laws, companies are required to provide an additional five years of researching data about a potential drug before it can pass FDA regulation. As a result, companies are expected to invest over \$1.5 billion dollars into research and development over a decade. Antibiotics will soon cost more to produce, yet will be less effective as they can be resisted by pathogens within the first three months of release. As superbugs grow more prevalent, the future of patients with bacterial infections may progress to hopelessness. Thus, this committee is expected to come up with crucial alternative solutions to the growing resistance dilemma that could potentially cut down the cost of research and development processes while assuring public safety.

As I was gathering information for the previous topic, another problem arose. I particularly had a hard time acquiring information due to the fact that most articles on websites, such as Scholar, EBSCO, or ResearchGate, all required me to pay to access them. Without the help from my university student account, I would not have been able to obtain this necessary information. Freedom of access to information has always been a controversial topic of debate due to the rise of Wikileaks and Hacktivism, while companies are making profits by privatizing certain information. Freedom of information is an extension of freedom of speech, a fundamental human right that is recognized by international laws. The committee will be establishing a basis that outlines Internet regulations globally without infringing on a country's sovereignty at the same time.

**Position papers are required for this committee.** Feel free to ask any questions through email at [gatormun@gmail.com](mailto:gatormun@gmail.com). I look forward to great, civil committee sessions where you can contribute diverse perspectives and come to solutions that will potentially shape the world in a near future.

Best regards,  
Thu Kim  
Director, ECOSOC

# Rules of Procedure

## Quorum

A majority of voting members answering to the roll at each session shall constitute a quorum for that session. This means that half plus one of all voting members are present. Quorum will be assumed consistent unless questioned through a Point of Order. Delegates may request to be noted as “Present” or “Present and Voting.”

## Motion to Open Debate

This opens the floor for debate, allowing other points or motions.

## Motion to Set the Agenda

This motion determines the order in which the topics of a committee will be debated. Permission to speak will be accorded to one speaker for and one speaker against, and a two-thirds majority is required for the motion to pass.

## Motion to Open the Speaker’s List

Opening the Speaker’s List requires a simple majority to pass. A delegate may only be present on the Speaker’s List once, but may re-enter after he/she has spoken. If the Speaker’s List expires, debate then closes.

## Motion to Set Speaking Time

Speaking Time must be indicated by this motion from the floor before any members of the body may speak on the Speaker’s List. This motion must also accompany any motion for a Moderated Caucus. In a Motion to Set Speaking Time for the formal Speaker’s List, a delegate may also specify a number of questions or comments to automatically affix to the Speaking Time. These designated questions or comments may also have Speaking Time or Response Time (in the case of a question) limits, but these are not required. The Director may rule any Motion to Set Speaking Time dilatory. This motion requires a simple majority. Any delegate may make this motion between formal speakers in an effort to change the Speaking Time.

## Motion to Close the Speaker’s List

The Speaker’s List may be closed upon a motion from the floor. Permission to speak will be accorded to one speaker for and one speaker against, and a two-thirds majority is required for the motion to pass.

## Motion to Suspend the Rules for the Purpose of a Moderated Caucus

This motion must include three specifications:

- a. Length of the Caucus
- b. Speaking time, and
- c. Reason for the Caucus.

During a moderated caucus, delegates will be called on to speak by the Committee Director. Delegates will raise their placards to be recognized. Delegates must maintain the same degree of decorum throughout a Moderated Caucus as in formal debate. This motion requires a simple majority to pass.

## Motion to Suspend the Rules for the Purpose of an Unmoderated Caucus

This motion must include the length of the Caucus. During an unmoderated caucus, delegates may get up from their seats and talk amongst themselves. This motion requires a simple majority to pass. The length of an unmoderated caucus should never exceed twenty minutes.

## Motion to Suspend the Meeting

This motion is in order if there is a scheduled break in debate to be observed. (ie. Lunch!) This motion requires a simple majority vote. The Committee Director may refuse to entertain this motion at their discretion.

## Motion to Adjourn the Meeting

This motion is in order at the end of the last committee session. It signifies the closing of the committee until next year's conference.

## Motion to Table the Topic

If a delegate believes that the flow of debate has become stagnant, he/she may make this motion. To Table the Topic is to halt debate on the present Topic, save the speakers' list and all draft resolutions, and move on to the next Topic on the Agenda. The delegate making this motion may also choose to specify a previously tabled Topic. This motion requires a two-thirds vote to pass. The Topic may be returned to at any time by tabling the present Topic and adding the phrase "for the purpose of returning to Tabled Topic \_\_\_\_," to this motion. If no Topics have been previously tabled, debate must follow the established Agenda. This motion is to be used sparingly.

## Points of Order

Points of Order will only be recognized for the following items:

- a) To recognize errors in voting, tabulation, or procedure,
- b) To question relevance of debate to the current Topic or
- c) To question a quorum.

A Point of Order may interrupt a speaker if necessary and it is to be used sparingly.

## Points of Inquiry

When there is no discussion on the floor, a delegate may direct a question to the Committee Director. Any question directed to another delegate may only be asked immediately after the delegate has finished speaking on a substantive matter. A delegate that declines to respond to a question after a formal speech forfeits any further questioning time. The question must conform to the following format:

Delegate from Country A raises placard to be recognized by the Committee Director.

Committee Director: "To what point do you rise?"

Country A: "Point of Inquiry."

Committee Director: "State your Point."

Country A: "Will the delegate from Country B (who must have just concluded a substantive speech) yield to a question?"

Committee Director: "Will the Delegate Yield?"

Country B: "I will" or "I will not" (if not, return to the next business item)

Country A asks their question (it must not be a rhetorical question.)

Country B may choose to respond or to decline.

If the Delegate from Country B does not yield to or chooses not to answer a question from Country A, then he/she yields all remaining questioning time to the Committee Director.

## Points of Personal Privilege

Points of personal privilege are used to request information or clarification and conduct all other business of the body except Motions or Points specifically mentioned in the Rules of Procedure.

Please note: The Director may refuse to recognize Points of Order, Points of Inquiry or Points of Personal Privilege if the Committee Director believes the decorum and restraint inherent in the exercise has been violated, or if the point is deemed dilatory in nature.

## Rights of Reply

At the Committee Director's discretion, any member nation or observer may be granted a Right of Reply to answer serious insults directed at the dignity of the delegate present. The Director has the ABSOLUTE AUTHORITY to accept or reject Rights of Reply, and the decision IS NOT SUBJECT TO APPEAL. Delegates who feel they are being treated unfairly may take their complaint to any member of the Secretariat.

## Working Papers and Draft Resolutions

Once a Working Paper has been submitted, approved, distributed, and formally introduced to the body, it can and will be referred to as a "Draft Resolution." In order for a Working Paper to be submitted to the Committee Director, it must be in correct format and bear the names of a combination of a number of Sponsors and Signatories necessary to introduce, as determined by the Committee Director.

Sponsors are the writers of the Working Paper, and agree with it in its entirety. They should be able to vote 'yes' for the paper during voting procedure. Signatories are those delegates interested in bringing the Working Paper to the floor for debate, but do not necessarily agree with its contents.

A delegate can motion to discuss the working paper during a moderated caucus or unmoderated caucus. A delegate can also motion for an author's panel, which is essentially a moderated caucus moderated by the authors. It is the chair's discretion on the maximum amount of authors allowed on the author's panel.

## Friendly Amendments

Friendly Amendments are any changes to a formally introduced Directive that *all* Sponsors agree to in writing. The Committee Director must approve the Friendly Amendment and confirm each Sponsor's agreement both verbally and in writing.

## Unfriendly Amendments

Unfriendly Amendments are any substantive changes to a formally introduced Directive that are not agreed to by all of the Sponsors of the Directive. In order to introduce an Unfriendly Amendment, the Unfriendly Amendment must have the number equivalent to 1/3 of Quorum confirmed signatories. The Committee Director has the authority to discern between substantive and nonsubstantive Unfriendly amendment proposals.

## Plagiarism

GatorMUN maintains a zero-tolerance policy in regards to plagiarism. Delegates found to have used the ideas of others without properly citing those individuals, organizations, or documents will have their credentials revoked for the duration of the GatorMUN conference. This is a very serious offense.

## Motion to Close Debate and Voting Procedures

A motion to close debate may only pass with a two-thirds majority. Once this motion passes, and the committee enters Voting Procedure, no occupants of the committee room may exit the Committee Room, and no individual may enter the Committee Room from the outside. A member of the Dias will secure all doors. No talking, passing notes, or communicating of any kind will be tolerated during voting procedures.

Once moving into voting procedures chair can only accept these motions:

- A point of order to correct an error in procedure
- An appeal of the decision of the chair
- A motion for division
- A motion for roll call vote
- A motion for adoption by acclamation

Each Draft Resolution will be read to the body and voted upon in the order which they were introduced. Any Proposed Unfriendly Amendments to each Draft Resolution will be read to the body and voted upon before the main body of the Draft Resolution as a whole is put to a vote. The Committee will adopt Directives and Unfriendly Amendments to Directives if these documents pass with a simple majority. Specialized committees should refer to their background guides or Committee Directors for information concerning specific voting procedures. Unless otherwise specified by the Secretariat, each Committee may pass as many resolutions as it agrees are necessary to efficiently address the Topic

Delegates who requested to be noted as “Present and Voting” are unable to abstain during voting procedure. Abstentions will not be counted in the tallying of a majority. For example, 5 yes votes, 4 no votes, and 7 abstentions means that the Directive passes.

## Roll Call Voting

A counted placard vote will be considered sufficient unless any delegate to the committee motions for a Roll Call Vote. If a Roll Call Vote is requested, the committee must comply. All delegates must vote: “For,” “Against,” “Abstain,” or “Pass.”

During a Roll Call vote, any delegate who answers, “Pass,” reserves his/her vote until the Committee Director has exhausted the Roll. However, once the Committee Director returns to “Passing” Delegates, they must vote: “For” or “Against.”

## Voting with Rights

During a Roll Call vote delegates may vote “For with Rights” or “Against with Rights.” Delegates will be granted 30 seconds to explain their reasons for voting for or against a draft resolution. This time will come after the tabulation of votes.

Delegates should use this option sparingly. It is meant for delegates who feel that their vote may seem off policy, despite it being correct. The acceptance of rights is up to the director’s discretion. If a speaker goes off topic during their allotted time the director will rule their speech dilatory and move to the next in order.

## Accepting by Acclamation

This motion may be stated when the Committee Director asks for points or motions. If a Roll Call Vote is requested, the motion to Accept by Acclamation is voided. If a delegate believes a Directive will pass without opposition, he or she may move to accept the Directive by acclamation. The motion passes unless a single delegate shows opposition. An abstention is not considered opposition. Should the motion fail, the committee will move directly into a Roll Call Vote.

# Committee Description and Background

---

The Economic and Social Council (ECOSOC) was established by the United Nations (UN) Charter in 1946 as one of the UN's six main organs. The council serves as the central mechanism for coordinating policy review, dialogue, and recommendations to member states on economic, social, humanitarian, and cultural activities carried out by the UN, as well as implementing development goals. As the largest and most complex subsidiary body of the UN, ECOSOC consists of 54 members in total. Seats on ECOSOC are allocated based on geographical region, with 14 seats allocated to Africa, 11 to Asia, 6 to Eastern Europe and 13 to Western Europe and Other Areas. Since 1998, the council has held one seven-week session each year in July, and an annual meeting in April with finance ministers who head key committees of the World Bank and the International Monetary Fund (IMF).

ECOSOC serves as the primary body within the UN to discuss economic and social issues pertinent to the entire world. The mandate and duties of ECOSOC include formulating studies on said issues and generating resolutions, recommendations, and conventions that are sent to the UN General Assembly for consideration. Most of ECOSOC's work is performed in functional and regional commissions. This includes committees on topics including human rights, the status of women, narcotics, and science and technology, as well as bodies that focus on specific regions such as Europe, Latin America and the Caribbean, and Asia and the Pacific. The work is guided by an issue-based approach, and there is an annual theme that accompanies each cycle, ensuring a sustained and focused discussion among multiple stakeholders, which include policymakers, parliamentarians, academic groups, foundation, business sector representative, and over 3,200 nongovernmental organizations (NGOs).

ECOSOC also covers issues such as universal access to information through subsidiary bodies. Many initiatives have been formed, often through public-private partnerships, to bring awareness to the issue. Furthermore, in 2015, the United States Agency for International Development worked with ECOSOC to organize a hackathon to design and improve protective suits for medical professionals fighting the outbreak of the Ebola virus. At the center of the UN development system, ECOSOC's collective solutions should advance sustainable development and advocate for progress while agreeing with global norms. ECOSOC's primary goal is to bring countries and people together in order to address problems collectively and work towards furthering sustainable development.

# Topic I: Freedom of Information

---

## Introduction

Freedom of information is an essential element of the freedom of expression; as stated by multiple UN resolutions and Article 19 of the Universal Declaration of Human Rights, the right encompasses to “seek, receive, and impart information and ideas through any media and regardless of frontiers” (UN Rule of Law). Internet innovation and connection have grown rapidly in the recent years. However, as of 2015, 57% of the world is offline. Therefore, access to information and communications technology (ICTs) is a part of the Sustainable Development Agenda, which commits to “significantly increase access to ICTs and strive to provide universal and affordable access to the Internet in least developed countries by 2020” (Goal 9.c). In order to exchange data between users freely, these networks of information need to connect with one another. Internet access depends on reliable, efficient, and cost-effective interconnections between networks. The interconnections are achieved by voluntary and independently negotiated agreements between network operators. As a result, national regulators are faced with the question of how to regulate ICTs amid increasing pressure by operators. The economic model of connectivity has also been challenged, as developing countries often find it difficult to build Internet infrastructure with limited resources, and may have a disadvantage in the Internet economy because of this. As a society, people aspire to innovate because that process drives improvements in standard of living. With that note in mind, in 1989, Sir Tim Berners-Lee introduced the world to the World Wide Web, or more commonly known as www, free of charge. No permission is needed from a central authority to post anything on the web, there is no central controlling node, and so no single point of failure, and more importantly, there is no “kill switch” for the Internet. This also implies freedom from indiscriminate censorship and surveillance. This committee expects participating countries to pursue their citizens’ best interests and create solutions that push for universal access to the Internet and information globally without discrimination.

## History

Freedom of information (FOI) refers to a citizen’s right to access information that is held by their state. In many countries, this freedom is supported as a constitutional right. FOI was established to promote transparency, government accountability, education, and general public protection against mismanagement and corruption. FOI is an integral part of the fundamental right of freedom expression and civil liberties, as recognized by Resolution 59 of the UN General Assembly adopted in 1946, as well as by Article 19 of the Universal Declaration of Human Rights (1948).

In addition, the International Covenant on Civil and Political Rights in 1966 was adopted and opened for signature, ratification, and accession by the General Assembly. Article 19, Part III clearly stated that “everyone shall have the right to freedom of expression; this right shall include freedom to seek, receive and impart information and ideas of all kinds, regardless of frontiers, either orally, in writing or in print, in the form of art, or through any other media of his choice.” The American Convention on Human Rights in 1969 was set out and in agreement with the statement above. The guideline specified that, “the right of expression may not be restricted by indirect methods or means, such as the abuse of government or private controls over newsprint, radio broadcasting frequencies, or equipment used in the dissemination of information, or by any other means tending to impede the communication and circulation of ideas and opinions.” Moreover, during the World Summit of the Information Society, the central focus of the conference was to recondition freedom of expression and establish inclusive access to knowledge for society (“Freedom of Information”).

The Communication and Information guidelines also includes the following information:

“FOI legislation reflects the fundamental premise that all information held by governments and governmental institutions is in principle public and may only be withheld if there are legitimate reasons, such as privacy and security, for not disclosing it. Over the past 10 years, the right to information has been recognized by an increasing number of countries, including developing ones, through the adoption of a wave of FOI laws. In 1990, only 13 countries had adopted national FOI laws, whereas there are currently more than 90 such laws adopted across the world.”

The relevance of FOI has also been highlighted in the Brisbane Declaration on Freedom of Information: The Right to Know (2010), the Maputo Declaration on Fostering Freedom of Expression, Access to Information and Empowerment of People (2008) and the Dakar Declaration on Media and Good Governance (2005), all emerging from UNESCO’s annual celebrations of World Press Freedom Day.” (“Freedom of Information”)

## Key Issues

One of the key provisions of FOI is likely to be the scope of any exemption for civil service advice. Some policy advice and internal discussion may need to be confidential in situations where disclosure may genuinely interfere with the government’s ability to develop policy. However, much other internal discussion can be disclosed without harm - and with real benefits to public understanding. Examples of what may need to be kept private include frank assessments of how key players (such as other ministers or outside bodies) are likely to react to particular proposals and the tactics for handling them. Such assessments are unlikely to be given, at least in writing. Similarly, early policy discussions may involve raising unformed and untested proposals. The prospect of exposing these to critical public scrutiny, before those involved have decided for themselves whether the proposals are even feasible or desirable, is likely to raise more civil awareness and further strengthen the trust between the people and a transparent government.

However, the release of other kinds of internal discussion would be unlikely to undermine policy development. There may be no difficulty in releasing considered assessments of the implications of a particular option, or professional analysis of scientific or technical findings or suggestions for the most efficient way of implementing a publicly announced policy. Disclosure may lead to greater appreciation of the complexity of the government’s approach to an issue previously seen in simplistic terms. It may also improve the quality of the advice. The knowledge that officials’ analysis may later be exposed to outside scrutiny may encourage a more rigorous and balanced approach, which better anticipates the potential objections to a potential course of action.

Furthermore, FOI also expands to the world of academia. According to journalist Kate Murphy, “journal publishers collectively earned \$10 billion last year, much of it from research libraries, which pay annual subscription fees ranging from \$2,000 to \$35,000 per title if they don’t buy subscriptions of bundled titles, which cost millions. The largest companies, like Elsevier, Taylor & Francis, Springer and Wiley, typically have profit margins of over 30 percent, which they say is justified because they are curators of research, selecting only the most worthy papers for publication. Moreover, they orchestrate the vetting, editing and archiving of articles. “The prices have been rising twice as fast as the price of health care over the past 20 years, so there’s a real scandal there to be exposed,” said Peter Suber, Harvard director of the office of scholarly communication.” (Murphy, 2016) The situation poses major economic and education barriers to those who are not in an educational institution or an occupation that offers said services.

One cannot achieve FOI without universal Internet access. In digital communications media, the vast majority of participants are active creators of information as well as recipients. This type of symmetry has previously only been found in media like the telephone. But while the telephone is almost entirely a medium for private one-to-one communication, computer network applications such as electronic mailing lists,

conferences, and bulletin boards, serve as a medium of group or ‘many-to-many’ communication. The new forums within computer networks are the great levelers and reducers of organizational hierarchy. Each user has, at least in theory, access to every other user, and an equal chance to be heard.

## Regional Context

Big data is sometimes regarded as the new oil of the twenty-first century. Government companies and civic organizations are increasingly interested in the potential role of data in development. The United Nations Secretary-General’s Independent Expert Advisory Group on a Data Revolution for Sustainable Development argues that a grassroots-based data production initiative could have a relevant role in monitoring the achievement of the Sustainable Development Goals. Citizen-driven data is a practice that uses available data or processes new data to create reliable information in relation to issues such as climate change, environmental pollution and inclusive development. Citizen-driven data generally relies on cheap, flexible tools, such as participatory workshops, web-based forms, mobile telephone applications, and low-cost sensor and social networks, to collectively gather and distribute data with the help of engaged citizens. As data activism generally crowdsources information through voluntary contributions from the public and uses open-source tools, the practice can potentially be replicated and adapted by small organizations for a low cost.

One of the best examples of data activism is the Technology-Enabled Girl Ambassadors (TEGA) project in Nigeria. TEGA empowers adolescent girls to conduct research via innovative mobile technology to provide safer, faster, and authentic research into young people’s lives around the world. As stated on the TEGA website “insight collected by TEGAs help organizations better understand the reality of girls’ lives, meaning better designed, more targeted development programs that have real impacts.” (TEGA) Currently, the project actively operates beyond Nigeria, extending to Ethiopia, India, Indonesia and Rwanda. Ultimately, TEGA contributes to Goal 5 of the Sustainable Development Goals through the analysis of gender-specific data and provision of digital skills that can enhance girls’ employment opportunities.

Similarly, in Kenya, the company Ushahidi is striving towards a future where everyday people have total access to all information. More information about Ushahidi mission can be found on their website, which is quoted partially in the following:

“Ushahidi, which translates to “testimony” in Swahili, was originally started to provide information regarding post-election violence in 2008. The company utilizes an open-source program that allow users to crowdsource crisis information via their mobile phones. Since then, thousands have used the technique of crowdsourcing to “raise their voice.” With its headquarters in Nairobi, the enterprise provides software and service to numerous economic sectors and civil society around the world to help improve the bottom up flow of information.” (“About Ushahidi”)

## Case Study 1: Aaron Swartz and The Fight for Universal Access to Information in the United States

Under the United States’ Freedom of Information Act, the American public can have access to federal and judicial records under federal supervision. In most cases, one needs to be physically present in the process in order to obtain the wanted documents. As the Internet advances, the records are available online through the system called Public Access to Court Electronic Records, or PACER. However, all registered agencies or individuals are charged a user fee. As of April 2012, access to the web-based PACER system is \$0.10 per page. The PACER system soon gained public attention as access to legal information has become a business worth \$120 million dollars yearly. (Lee) Essentially, the PACER system has become a poll tax to access justice records. The law is the operating system of the American democracy, thus the idea of paying defies the

definition of a democratic system. Due to this increasing frustration towards closed access to court records, an American technologist, Carl Malamud, created a non-profit corporation dedicated to publishing and sharing public domain materials in the United States and worldwide free of charges through the website [Public.Resource.Org](http://Public.Resource.Org).

As [Public.Resource.Org](http://Public.Resource.Org) was unveiled, another software developer named Aaron Swartz was also on the rise in the open access realms. Swartz started his career around the age of 14 when he invented the iconic RDF Site Summary, or RSS, that allowed people to compile information from multiple websites into one feed. As he continued along his career, he created Creative Commons, the Markdown publishing format, and co-founded one of the most popular social medias of today's time, Reddit. Swartz's intention was to bring public access to public domain. Working with World Wide Web inventor Tim Berners-Lee, Swartz played an essential part in developing and popularizing standards for sharing data on the Web. Nevertheless, this computer genius soon was investigated by the FBI when he first got involved in the [Public.Resource.Org](http://Public.Resource.Org) project. Aligned with Malamud's goal of public access, Swartz supported the movement by improving a code that allowed parallel downloading and uploading of over 2.7 million court documents to the site. However, no charges were filed against Aaron, and the court had to change its policy on public records.

Nonetheless, the battle for universal information accessibility was just getting started for Aaron Swartz. Swartz always disliked the idea of paying licensing fees to read scholarly journals. Academic journals contain much of the wealth of human knowledge, yet one must pay up to \$2,500 annually for the means of entry. Ultimately, Aaron Swartz took the matter into his own hands, which consequently resulted in his arrest in 2011. According to a federal indictment, in an effort to provide free public access to JSTOR, he broke into computer networks at the Massachusetts Institute of Technology (MIT) by means that included gaining entry to a utility closet on campus and leaving a laptop that signed into the university network under a false account. He eventually uploaded over 19,000 scientific papers to the internet for free in protest of the "war against knowledge," causing JSTOR to lose millions of dollars in profit. After the event unfolded, Mr. Swartz turned over his hard drives with 4.8 million documents, and JSTOR declined to pursue the case. On the Wednesday of that week, JSTOR decided to open its archives for 1,200 journals to free reading by the public on a limited basis. Although many did not approve of Swartz's actions, they all agreed that "access to knowledge and access to justice have become all about access to many, and Aaron tried to change the world for the better, that should never have been considered a criminal activity," said Lester Lawrence Lessig III, a Harvard professor and attorney. (Schwartz)

Regardless of the fact that MIT and JSTOR did not bring any charges against Swartz, U.S. Attorney Carmen M. Ortiz charged him with two counts of wire fraud and eleven violations of the Computer Fraud and Abuse Act, with a maximum penalty of \$1 million dollars in fines, 35 years in prison, asset forfeiture, restitution, and supervised release. Aaron Schwartz faced more jail time than nearly any federal crime on the books, all for giving knowledge to the world for free. On the evening of January 11, 2013, Aaron Swartz was found dead in his Brooklyn apartment, where he had hanged himself.

The fight for Freedom of Information continues long after the death of Aaron Swartz. His mentor, Lawrence Lessig, wrote a bill called Aaron's Law which amended the Computer Fraud and Abuse Act, exclude terms of service violations from the wire fraud statutes. The Fair Access to Science and Technology Research Act emerged and mandated that public release of taxpayer-funded research should never be hidden behind a paywall. Although most of the bills are stalled due to corporate financial interests, his legacy inspired people such as Alexandra Elbakyan, who created Sci-Hub, which contains over 50 million academic articles and allows readers to read without passing through a paywall. On August 3, 2013, Swartz was posthumously inducted into the Internet Hall of Fame to commemorate his legacy.

## Case Study 2: Net Neutrality

Net neutrality is the central topic when come to shaping policies that govern the world wide web. The Internet should be accessible for all the people without any discrimination. Small businesses should not be hindered by big corporations in innovating and improving the Internet. The pro-net neutrality community strongly believes that Internet should be open and free to everyone in order to promote innovation, freedom of expression, and the freedom of information with little interference from the government and corporation. (“Network Neutrality”) Abolishing net neutrality would take away the fundamental human right to educate oneself. The consequences of violating net neutrality principles are not only economic. The Internet has become one of the key pillars of modern society linked to basic human rights, including access to information, health, education, and freedom of expression. Endangering Internet openness could thereby impact fundamental rights. In addition, the ability to manage network traffic based on origin or destination, on service or content, could give authorities the opportunity to filter Internet traffic with objectionable or sensitive content in relation to the country’s political, ideological, religious, cultural, or other values. This opens possibilities for political censorship through Internet traffic management.

Nonetheless, there is a small minority advocating for policies against net neutrality. The main argument comes from the National Cable and Telecommunications Association, the main lobbying group against net neutrality. The association claims that the government enforcement of net neutrality is going against the country’s business model of a free market (Wasserman). The argument is further echoed by David Cohen, the EVP for Comcast, who is the main proponent for the recent changes in net neutrality in United States. According to Mr. Cohen, “People who use more should pay more, and people who use less should pay less” (Wasserman).

An important to study from Norway, who is implementing and regulating its new changes to the net neutrality policies. Norway implements a soft-law approach by proposing slight amendments to existing laws to further promote network freedom. (“Network Neutrality”)

In 2003, Norwegian Communications Authority (Nkom) to specifically set out a guideline for net neutrality. In the bill its mission clearly stated that “Safeguarding net neutrality is essential in order to ensure good, future-oriented electronic communications services for users throughout Norway and foster industrial development and innovation, and is a prerequisite for further economic, social, cultural and democratic development in modern society. The goal of the work on net neutrality is to ensure that the internet remains a well-functioning, open and non-discriminatory platform for all types of communication and distribution of content” (Sørensen).

As the debate of how to regulate the Internet become a major issue internationally, Norwegian decided to take the matter into their own hand. In March of 2017, the country amended their net neutrality laws. The major difference from the original bill is that Norway is now abandon its zero-rating cap practice. As defined by Harvard Berkman Klein Center for Internet and Society, “zero-rating allows users to access select Internet services ad content without incurring mobile data charges” (Bates et al,.). In other word, if one buy a service, there are certain paid websites/services that one can now access freely because the total cost has been paid. However, due the fact what the term as zero-rating is loosely characterized, many major communication corporation tried to fight back the provisions so they can continue to bring in more revenues.

As on the user’s end, Norwegian actually see little to none different on the service before and after the provisions (Sørensen).

## Questions to Consider:

How can we ensure universal access to any information and civil liberties without infringing on Member States' sovereignty?

Does your country have any laws on access to public records and academic journals? If so, what has been done to make sure that these systems are accessible?

Where does your country stand on the issue of net neutrality? Is your country a proponent or opponent? Why?

What are the programs in your countries that promote processing big data? How effective are these programs?

Where does your country stand on citizen access to government data?

# Topic II: The Fight Against Superbugs

---

## Introduction

In September of 2016, the Centers for Disease Control and Prevention (CDC) reported the first case of a superbug. An anonymous woman in Washoe County, Nevada was admitted to a hospital with Carbapenem-resistant Enterobacteriaceae (CRE) which is incurable by all available antibiotics. The 70-year-old patient had broken her hip in India and received treatment there. When she returned to the United States in August, she started to develop systemic inflammatory response syndrome (SIRS), which likely resulted from the hip fracture. After multiple hospitalizations, the patient passed away within a month. The case highlights the danger of the unregulated usage of antibiotics. Antibiotics are commonly used to treat bacterial infections, but people tend to utilize these medicines as solutions to all sicknesses. Common illnesses such as the common cold, bronchitis, and influenza are caused by a virus, not bacteria, most of the time; however, antibiotics are often used to treat these. Antibiotics are not effective against viruses because these organisms insert its genetic material into a human cell as pathogens, while most bacteria build up on the outside of the cell as extracellular pathogens. The misconception about antibiotics and the misuse of antibiotics has led to the birth of “superbugs,” which are bacteria that are resistant to antibiotics. In the case of the patient from Nevada, the bacteria that caused her death was resistant to all of 26 types of available antibiotics.

This superbug case leads the public to question: how can pharmaceutical companies not invest more in the Researching and Development (R&D) process in order to address this vital issue? The answer is simple: the market for developing new antibiotics is not profitable. There has been a dramatic shift in the antibiotic business from the 1980s to 2010s. According to the European Federation of Pharmaceutical Industries and Associations (EFPIA), in 1983 to 1987, the United States Food and Drug Administration (FDA) approved a total of 16 antibiotics. Nevertheless, the number has dropped to as low as two antibiotics from 2008 to 2011 (See: Figure 2.1). The R&D process requires companies to invest a large amount of capital into a drug that could be rendered ineffective with antibiotic resistance as soon as three months after becoming available to the public. Moreover, with increasing regulations from governmental agencies, private companies have gradually abandoned the antibiotics market.

The spread of antibiotic-resistant bacteria is fueled mainly by three things: doctors prescribing antibiotics when they are not needed, patients not finishing antibiotic prescriptions when they are needed, and the routine antibiotic treatment of livestock. As the misusing antibiotics is spreading worldwide, there is a vital need to slow down the development of resistant bacteria. Dr. Marie-Paule Kieny, the World Health Organization's (WHO) Assistant Director-General for Health Systems and Innovation stated, “Antibiotic resistance is growing, and we are fast running out of treatment options. If we leave it to market forces alone, the new antibiotics we most urgently need are not going to be developed in time.” Therefore, for this topic, the ECOSOC committee is tasked with coming up with novel solutions to help prevent and raise the awareness about superbugs globally.

## History

According to the Pew Charitable Trusts, “the last new class of antibiotics was invented in 1984. Every new antibiotic to hit the market since then is a variation on a decades-old design.” Critics point to Big Pharmaceuticals, where R&D has become too expensive and they do not have any financial incentive to develop new antibiotics, especially since world health organizations are advising doctors to reduce their

usage. In addition, antibiotics are usually short term rather than long term, therefore, the time that it can bring revenue for the company is little to none.

In addition, in 2012, a law passed requiring companies to provide an additional five years of researching data

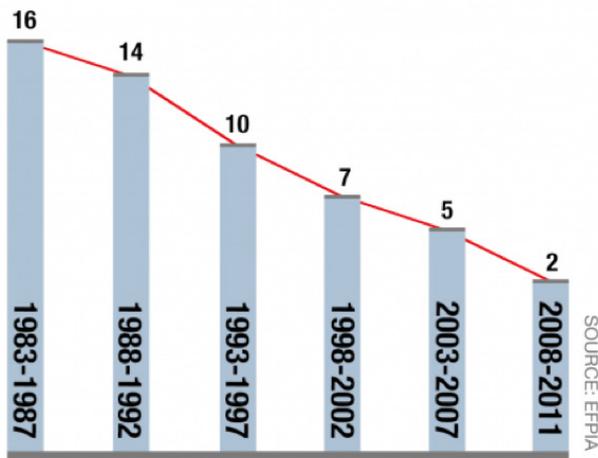


Figure 2.1: Number of antibiotics approved in the US (1983-2011) (Sukkar)

about a potential drug before it can pass FDA regulation. Amanda Jezek, Vice-President of Public Policy and Government Relation from International Swaps and Derivatives Association (ISDA), expressed her concern about the fate of antibiotics after the 2012 legislation passed. According to Ms. Jezek, the legislation, “could increase R&D spending on antibiotics and antifungals by over \$1 billion over a 10-year-period” for something that companies could reach within five years (Sukkar, 2013). Antibiotics will soon cost more yet be less effective. As superbugs grow more prevalent, the future of patients with bacterial infections may progress to hopeless. Thus, research presents a crucial alternative solution to the growing resistance dilemma that could potentially cut down the cost of R&D processes.

To truly address superbugs, the committee need to outline an effective and implementable global plan. The last time the UN was supposed to take major action on antimicrobial resistance was September 11, 2001. However, the release of the WHO Global Strategy in New York was ignored after the terror attacks that day and it has taken 15 years to get back on that agenda (Belluz). The United Nations reconvened again in 2016 with 193 member states. Almost all countries agree that superbug is an urgent threat and intermediate actions. However, some countries argued that the distribution of antibiotics is not enough since their countries still diseases that are preventable if access is available. At the end of the conference, no resolutions were reached (Belluz).

## Key Issues

Antibiotic-resistant bacteria is a substantial public health problem worldwide. Methicillin-resistant *Staphylococcus aureus* (MRSA) has become the cause for 18,000 deaths per year in the United States. The number of resistant bacteria cases has increased exponentially within the last 10 years. As a result, as infections become harder to treat, patients have to stay longer and utilize more hospital resources. In country when healthcare cost is high like the United States, hospital charges can really take a toll on a patient. According to researcher Dr. Green, the total cost for inpatients nationwide in 2003 increased to \$14.5 billion. From a physician’s point of view, doctors are spending more time on a preventable case while antibiotics are available. To further emphasize on the problem, the same study compare a common bacterial infection to other diseases:

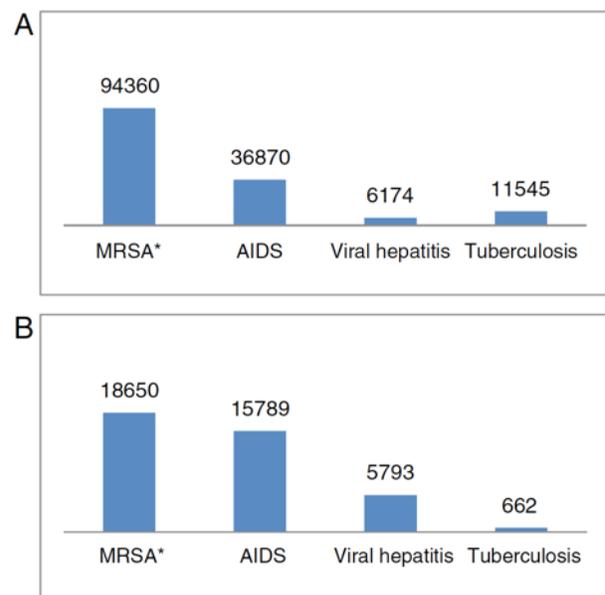


Figure 2.1: A, Infections per year in the United States. B, Deaths per year in the United States. (Green, Bart N., et al.)

“An example of the increased morbidity and mortality associated with MRSA can be seen when comparing the yearly infection rates and mortality rates in the United States for MRSA, AIDS, viral hepatitis, and tuberculosis. Methicillin-resistant *S. aureus* is estimated to cause more infections than the other diseases combined and more deaths per year than AIDS.” (Green, Bart N., et al.)

Another serious problem of developing superbugs is the use of antibiotics in meat production. According to microbiologist and director of Emerging Pathogen Institute Dr. Glenn Morris, “the problem for humans is that if a person ingests the resistant bacteria via improperly cooked meat and becomes ill, he or she may not respond to antibiotic treatment that the person will receive in the future.” The problem arises when meat producing companies, such as Tyson, want to have as much benefits from their products as possible. Ranchers and farmers tend to hold their animals in tight and unhygienic cages. As a result, breeding farms become perfect hosts for potential diseases. To prevent animals from getting sick, the ranchers give the animals as much antibiotics as possible to probable pathogens. As these animals get killed and put up for market for sale, the consumers are more likely to develop resistance to the bacteria unknowingly as they eat the meat (“Is Your Meat Safe”).

According to the medicine editor of Scientific American, Dina Fine Maron “encroaching antibiotic resistance will not slow to keep pace with international diplomacy, however. It has been decades since a new class of antibiotics has been introduced—a needed innovation as more pathogens become resistant to existing antimicrobials.” (Maron) The UN secretary general Ban Ki-moon said antimicrobial resistance is a “fundamental threat” to global health and safety at the first general. At the end of the meetings, a historic resolution targeting the superbug fight as well as the dangerous antibiotic resistant infections (AMR) passed. The Resolution pushed for “monitor[ing] of AMR and antimicrobial use (AMU) in food and agriculture, strengthen governance related to AMU and AMR in food and agriculture, and promote good practices and the prudent use of antimicrobials in these systems.” (FAO) The agency underlined the importance of reducing the need for antimicrobial medicines in the first place, such as through vaccinating farm animals to build their natural ability to withstand disease. It also stressed that by adhering to best practices for hygiene, biosecurity, and animal care and handling, farms can minimize outbreaks and spread of diseases. Albeit expectations are set, the resolution failed in real-life as countries do not enforce the very own agreement that they signed.

On another note, while in most countries, the overuse of antibiotics is a major problem. However, the committee must consider that there are hundreds of millions of people still don't have access to these medicines in developing countries. Antibiotics are luxury that only available for those who have enough money to purchase them in these countries. In Mozambique 1988, the treatment for sexually transmitted infection was \$137,587 a year, which translated to 0.13 cent per person (Meheus). Nevertheless, the costs are still too high compare to the average incomes of Mozambicans. Therefore, it is essential for the committee to reach resolutions that will compromise problems of overuse and under-distribution of antibiotics.

## Regional Context

The healthcare systems in Eastern European countries in general, and in Romania in particular, have been significantly affected by the political changes in the 1990s, decentralization, transition to market-oriented economies, as well as various political and economic crises. With the public attention being focused mainly on HIV and tuberculosis, methicillin-resistant *S. aureus* (MRSA) has slowly rising and become the public health threat for the Eastern Europe population within 50 years. According to leading physicians Dr. Monecka and Dr. Stefan, “MRSA rates are extremely high, ranging from approximately 30% up to 70% in recent Eastern Europe studies, thus reaching the highest prevalence levels reported anywhere in the world.” (Monecka, Muller, et al)

To address the issue in Romania, the national government created the National Anti-Drug Strategy, taking into account the EU Drugs Strategy 2013-20. The European Monitoring Centre for Drugs and Drug Addiction specifically outlines:

“Reflecting a balanced approach, the National Anti-Drug Strategy is structured around the two pillars of drug demand reduction and drug supply reduction. It also contains three cross-cutting themes: (i) coordination; (ii) international cooperation; and (iii) research, evaluation and information. The National Anti-Drug Strategy has five overarching objectives and is being implemented through two action plans, which address the periods 2013-16 and 2017-2020.” (EMCDDA)

## Case Study 1: Harvard’s Superbug Experiment

To further examines how quickly bacteria are become resistant to the antibiotics, in 2016, Harvard University conduct an experiment with real-time monitoring the transformation of antibiotics-resistant bacteria to superbug. The experiment is done in a large scale with gradually increasing concentration and different types of antibiotics.

*Escherichia coli* (*E. coli*) becomes the main test subject of the study. *E. coli* can be found anywhere in the environment, nevertheless if the bacteria comes into contact with human intestines, one can suffer from different illness that may have fatal consequences. To monitor the bacterial growth, *E. coli* is cultured in a 2-by-4 foot petri dish. At the same time, the antibiotics were placed methodically in the agar plate to see the actually evolution of the bacteria. The outermost contain none to little medications. However, as one moves to the center of the plate, the concentration increase at a logarithmic scale. The concentration of the center is 1000 times compare to the rims (Baym et al.).

The experiment spans over two weeks. In addition to the petri dish set-up, a camera is mounted on top of the dish. At the end of the process, a time-lapsed of the petri-dish was created to shorten the process once it is released to the public. According to the video, the bacteria quickly become resistant and the process is entirely visible to the naked eyes. Regardless how strong the antibiotics are, *E.coli* quickly adapt to the new environment and continue to thrive (Baym et al.).

“We know quite a bit about the internal defense mechanisms bacteria use to evade antibiotics, but we don’t really know much about their physical movements across space as they adapt to survive in different environments,” said Michael Baym, the first author of the academic journal.

The experiment was done in a very control experiment that fit within the laboratory setting. The researchers have tried to mimic the real-[world, however, the scenario is much more complicated. “Moving across environments with varying antibiotic strengths poses a different challenge for organisms than they face in traditional lab experiments that involve tiny plates with homogeneously mixed doses of drugs.” (Baym et al.).

From the Harvard’s study, one can conclude that investing in R&D should be one of the goals for committee resolution. Furthermore, if a country can come up with promising research or clinical trials that can help improving the superbug crisis, it may be integrated as a part of the solution at the conference.

## Case Study 2: Fatal Small Cuts

Bacterial-resistant problem gained international attention when Ashley Pacheco, a 3 year-old girl Venezuelan contracted a minor infection that turn deadly in 2016. Venezuela is well-known for its tourist attractions, oil exportation, and celebrities; nonetheless, under all the glamorous, the country now has become a dangerous

place to live for its citizens. As reported by journalist Hannah Dreier, “one in three people admitted to public hospitals last year died, the government reports. The number of operational hospital beds has fallen by 40 percent since just 2014. And as the economy fails, the country is running short on 85 percent of medicines, according to the national drugstore trade group” (Dreier). Ashley Pacheco was born during the time that country was engulfing in chaos. Ashley family lacked the basic necessity just to survive. They struggled to find her food, make sure the water is safe to drink, and worked hard jobs to have enough money to send her to private Catholic school one day as public schools were collapsing around the area.

Her living condition, unsurprisingly and unfortunately, gave the little a girl and small bacterial infection, which her immune system fought back by elevating her body temperature. She was quickly rushed to a local clinic where her parents waited hours service and did not receive it due to the overcrowding of patients that were admitted previously. As the temperature rose to 103 degrees Fahrenheit, her parents grew impatient. They traveled to the country’s main pediatric hospitals and largest general hospital, there were no room available for the little girl (Dreier).

The fever is no longer effective against the infection, Ashley body started to swell and fluid-sacs were visible on the skin. Her parent decided to drive her to an University hospital that locate in the South of the country, where operation room gang shooting happen frequently, to have someone to admit their daughter.

As Drier visits the hospital, she describes the place as the following:

“In Ashley’s hospital, the janitorial staff had run out of bleach to clean the floors. Stray dogs wandered the building, and cockroaches scuttled by on the walls. The water in the bathroom sometimes came out black. In her emergency care room, the sink was broken, the soap dispenser was empty and there was nothing in the container marked “sterile gloves.” Yet with the hospital so crowded that women in labor were sharing beds.” (Dreier)

Pacheco was finally admitted, however, she was not yet treated because the hospital had no supply to administer to any patient. Desperately, her parent did reach out to international organization but no intermediate action was taken due to the underdeveloped communication lines. The girl’s medicines finally come as the hospital allocate the drugs of the boy who died next room to her. As a result, Ashley soon became infection-free after two months of being treated.

## Questions to Consider:

What are policies that implemented within your country to control potential superbugs? How effective is it?

How bacteria antibiotics resistance has affect your country’s population?

How does your country promote pharmaceutical business to produce novel antibiotics?

Describe your country’s health care system. How do public hospitals resolve overcrowding problems?

What are potential solutions to resolve the lack of accessibility to antibiotics in developing countries?

# Works Cited

“About ECOSOC.” *United Nations Economic and Social Council*. Accessed 26 October 2018. <https://www.un.org/en/ecosoc/about/>.

“About Ushahidi.” *Ushahidi*. Accessed 17 October 2018. <https://www.usahidi.com/about>.

“Access.” *Digital Watch Observatory*. Accessed 26 October 2018. <https://dig.watch/issues/access>.

Adjidé, C., A. DeMeyer, M. Weyer, O. Obin, F. Lamory, C. Lesueur, L. Trouillet, M. Biendo, F. Eb, & O. Ganry. “Évaluation des risques microbiologiques hydriques associés à *Stenotrophomonas maltophilia* et *Pseudomonas aeruginosa* au CHU d’Amiens.” *Pathologie Biologie* 58, no. 2 (2010): e1-e5.

Bates, Samantha, et al. “Zero Rating & Internet Adoption.” *Berkman Klein Center*, Harvard University, 24 June 2016, [cyber.harvard.edu/publications/2017/10/zerorating](http://cyber.harvard.edu/publications/2017/10/zerorating).

Baym M., T. D. Lieberman, E. D. Kelsic, R. Chait, R. Gross, I. Yelin, R. Kishony. Spatiotemporal microbial evolution on antibiotic landscapes. *Science*, 2016; 353 (6304): 1147 DOI: 10.1126/science.aag0822

Belluz, Julia. “What to Expect from Today’s UN Meeting on Antibiotic Resistance.” *Vox, Vox*, 21 Sept. 2016, [www.vox.com/2016/9/20/12979968/antibiotic-resistance-superbugs-un](http://www.vox.com/2016/9/20/12979968/antibiotic-resistance-superbugs-un).

“Civil liberty.” *Encyclopedia Britannica*. Accessed 26 October 2018. <https://www.britannica.com/topic/civil-liberty>.

Dreier, Hannah. “A Child’s Scraped Knee a Life or Death Matter in Venezuelas.” *AP Explore*, Associate Press, 4 Oct. 2016, [www.ap.org/explore/venezuela-undone/childs-scraped-knee-life-or-death-matter-in-venezuela.html](http://www.ap.org/explore/venezuela-undone/childs-scraped-knee-life-or-death-matter-in-venezuela.html).

“Economic and Social Council.” *Encyclopedia Britannica*. Accessed 26 October 2018. <https://www.britannica.com/topic/Economic-and-Social-Council>.

“ECOSOC.” *United Nations*. Accessed 26 October 2018. <https://www.un.org/ecosoc/en/home>.

“Freedom of Information.” *United Nations Educational, Scientific and Cultural Organization*. Accessed 26 October 2018. <http://www.unesco.org/new/en/communication-and-information/freedom-of-expression/freedom-of-information/>.

“Freedom of Information.” *United Nations and the Rule of Law*. Accessed 26 October 2018. <https://www.un.org/ruleoflaw/thematic-areas/governance/freedom-of-information/>.

Green, Bart N., et al. “Methicillin-Resistant *Staphylococcus Aureus*: an Overview for Manual Therapists.” *Journal of Chiropractic Medicine*, Elsevier, Mar. 2012, [www.ncbi.nlm.nih.gov/pmc/articles/PMC3315869/](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3315869/).

“Is Your Meat Safe?” *PBS*, Public Broadcasting Service, 2018, [www.pbs.org/wgbh/pages/frontline/shows/meat/safe/overview.html](http://www.pbs.org/wgbh/pages/frontline/shows/meat/safe/overview.html).

- Lee, Timothy B. "The inside Story of Aaron Swartz's Campaign to Liberate Court Filings." *Ars Technica*, UTC, 8 Feb. 2013, [arstechnica.com/tech-policy/2013/02/the-inside-story-of-aaron-swartzs-campaign-to-liberate-court-filings/2/](http://arstechnica.com/tech-policy/2013/02/the-inside-story-of-aaron-swartzs-campaign-to-liberate-court-filings/2/).
- Maron, Dina Fine. "Superbug Explosion Triggers U.N. General Assembly Meeting." *Scientific American*, Scientific American, 7 Sept. 2016, [www.scientificamerican.com/article/superbug-explosion-triggers-u-n-general-assembly-meeting](http://www.scientificamerican.com/article/superbug-explosion-triggers-u-n-general-assembly-meeting).
- McDonald, Andrew. "Freedom of information." *Encyclopedia Britannica*. Accessed 26 October 2018. <https://www.britannica.com/topic/freedom-of-information>.
- Meheus A. Control of STI, HIV and AIDS. In: Arya OP, Hart CA, editors. Sexually transmitted infections and AIDs in the tropics. Oxford: CAB International; 1998. pp. 397–418.
- Monecke, Stefan, et al. "Molecular Typing of MRSA and of Clinical Staphylococcus Aureus Isolates from Iași, Romania." *PLoS ONE*, vol. 9, no. 5, 2014, doi:10.1371/journal.pone.0097833.
- "Multi-stakeholder participation in the Working Group on Internet Governance." *United Nations Economic and Social Council*. 23 December 2010. [https://unctad.org/en/pages/newsdetails.aspx?OriginalVersionID=71&Sitemap\\_x0020\\_Taxonomy=Commission%20on%20Science%20and%20Technology%20for%20Development](https://unctad.org/en/pages/newsdetails.aspx?OriginalVersionID=71&Sitemap_x0020_Taxonomy=Commission%20on%20Science%20and%20Technology%20for%20Development).
- Murphy, Kate. "Should All Research Papers Be Free?" *The New York Times*, The New York Times, 12 Mar. 2016, [www.nytimes.com/2016/03/13/opinion/sunday/should-all-research-papers-be-free.html](http://www.nytimes.com/2016/03/13/opinion/sunday/should-all-research-papers-be-free.html).
- "Network neutrality." *Digital Watch Observatory*. Accessed 26 October 2018. <https://dig.watch/issues/network-neutrality>.
- "Romania Country Drug Report 2018." *National Drug Strategy and Coordination in Romania 2018*, 2018, [www.emcdda.europa.eu/countries/drug-reports/2018/romania/national-drug-strategy-and-coordination\\_ro](http://www.emcdda.europa.eu/countries/drug-reports/2018/romania/national-drug-strategy-and-coordination_ro).
- Ropp, Thomas. "Drug Resistant Bacteria Are A Fundamental Threat." *HoneyColony*, HoneyColony, 2 May 2017, [www.honeycolony.com/article/drug-resistant-bacteria-fundamental-threat/](http://www.honeycolony.com/article/drug-resistant-bacteria-fundamental-threat/).
- "Russia Backs FAO Work to Tackle Antimicrobial Resistance with \$3.3 Million." *FAO - News Article: Russia Backs FAO Work to Tackle Antimicrobial Resistance with \$3.3 Million*, FAOUN, 3 Apr. 2017, [www.fao.org/news/story/en/item/878313/icode/](http://www.fao.org/news/story/en/item/878313/icode/).
- Schwartz, John. "Internet Activist, a Creator of RSS, Is Dead at 26, Apparently a Suicide." *New York Times*. 12 January 2013. <https://www.nytimes.com/2013/01/13/technology/aaron-swartz-internet-activist-dies-at-26.html>.
- Sørensen, Frode. "Net Neutrality in Norway." *Nkom.no*, Norwegian Communications Authority, 18 Aug. 2017, [eng.nkom.no/technical/internet/net-neutrality/net-neutrality-in-norway](http://eng.nkom.no/technical/internet/net-neutrality/net-neutrality-in-norway).
- "United Nations Economic and Social Council." *United Nations Economic and Social Council - New World Encyclopedia*, New World Encyclopedia, 2018.

“Subsidiary Bodies of ECOSOC.” *United Nations Economic and Social Council*. Accessed 26 October 2018. <http://www.un.org/en/ecosoc/about/subsidiary.shtml>.

Sukkar, Elizabeth. “Why are there so few antibiotics in the research and development pipeline?” *The Pharmaceutical Journal* 291 (2013): 520.

“TEGA.” *Girl Effect*, TEGA, 2018, [www.girleffect.org/what-we-do/mobile-platforms/tega/](http://www.girleffect.org/what-we-do/mobile-platforms/tega/).

Wasserman, Todd. “5 Arguments Against Net Neutrality.” *Mashable*, Mashable, 17 May 2014, [mashable.com/2014/05/16/5-arguments-against-net-neutrality/#7AwTqqpCGsq0](http://mashable.com/2014/05/16/5-arguments-against-net-neutrality/#7AwTqqpCGsq0).

“WHO publishes list of bacteria for which new antibiotics are urgently needed.” *World Health Organization*. 27 February 2017. <http://www.who.int/news-room/detail/27-02-2017-who-publishes-list-of-bacteria-for-which-new-antibiotics-are-urgently-needed>.