Scholarly Networks Security Initiative

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About the Scholarly Networks Security Initiative

- The Scholarly Networks Security Initiative (**SNSI**) brings together publishers and institutions to solve cyber-challenges threatening the integrity of the scientific record, scholarly systems and the safety of personal data.

- Members include large and small publishers, learned societies and university presses, libraries and others involved in scholarly communications.

LIBRARY

ACADEMIC
IT SECURITY

RESEARCH

PUBLISHING

SNSI Scholarly Networks Security Initiative

Did you know?

300

Fake websites and login pages linked to 76 university library systems around the world were found in August 2018.

3rd largest

The UK's National Cyber Security Centre lists the education sector as the 3rd largest target for cybercrime, ahead of retail.

Over 400

Universities and institutions across 41 countries have had their networks and data comprised by illegal website SciHub.

$1.14M

The ransom a leading medical-research institution working on a cure for Covid-19 had to pay when its servers were hacked.

Catalysts for Our Conversation

sky news

Sci-Hub: Police warn students and universities against using 'the Pirate Bay of science'

Sci-Hub has been described as "the Pirate Bay of science", but often receives praise for opening access to research.

THE CHRONICLE OF HIGHER EDUCATION

Cyberattacks Are Spiking. Colleges Are Fighting Back.

The Washington Post
Democracy Dies in Darkness

Justice Department investigates Sci-Hub founder on suspicion of working for Russian intelligence

CHEMISTRY WORLD

Why do higher educational institutions keep getting hacked?

BY DALMEET SINGH CHAWLA | 8 APRIL 2021

UK's cyber security centre warns of increasing attacks on university computer networks

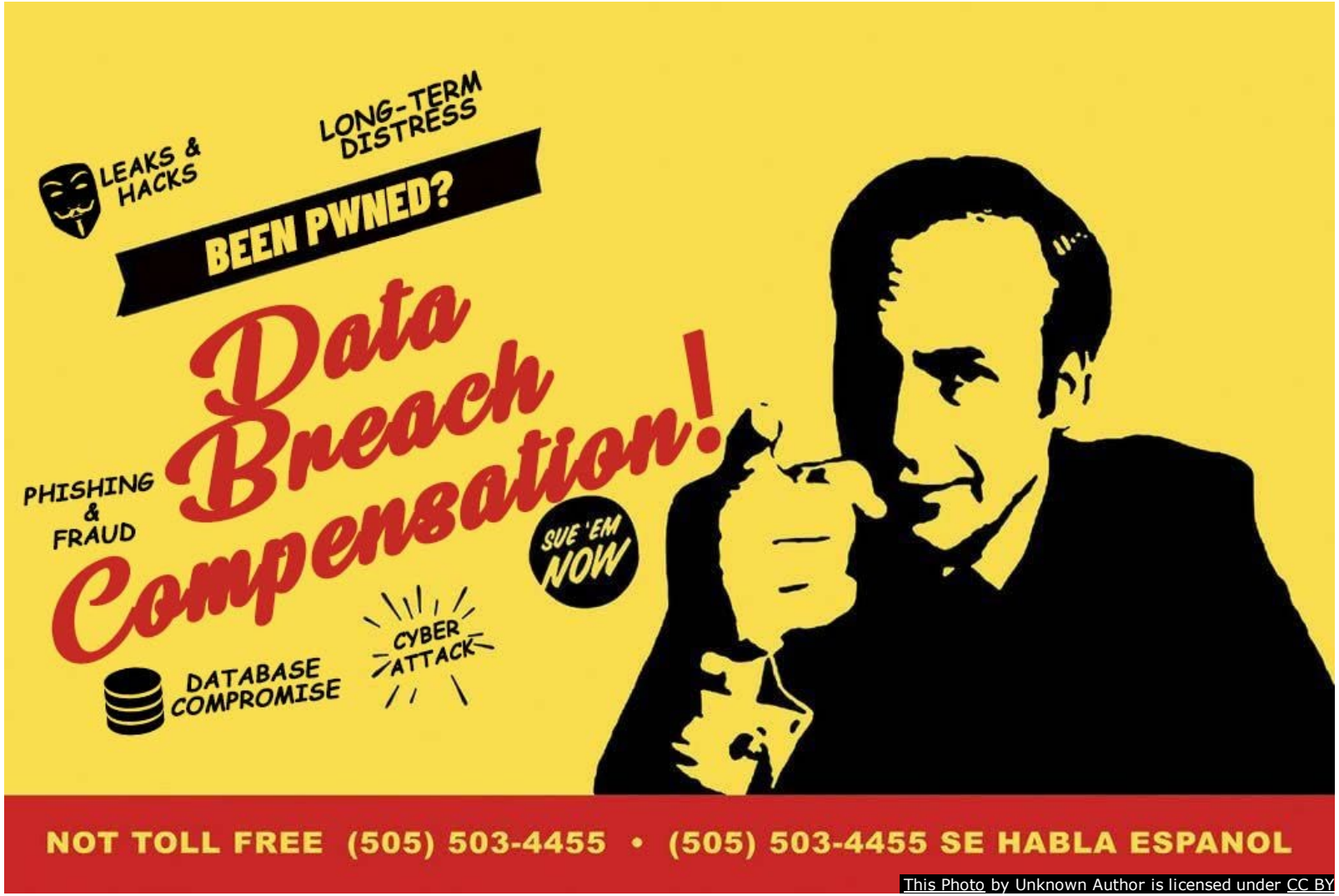
Two Resources

Nguyen CD, “Digital cultural heritage in the crossfire of conflict: cyber threats and cybersecurity perspectives,” Insights, 2024, 37: 7, 1–11; DOI: https://doi.org/10.1629/uksg.647

British Library. (2024, March 8). Learning lessons from the cyber-attack: British Library cyber incident review. https://www.bl.uk/home/british-library-cyber-incident-review-8-march-2024.pdf

What makes a soft target?

What's the Legal Risk?



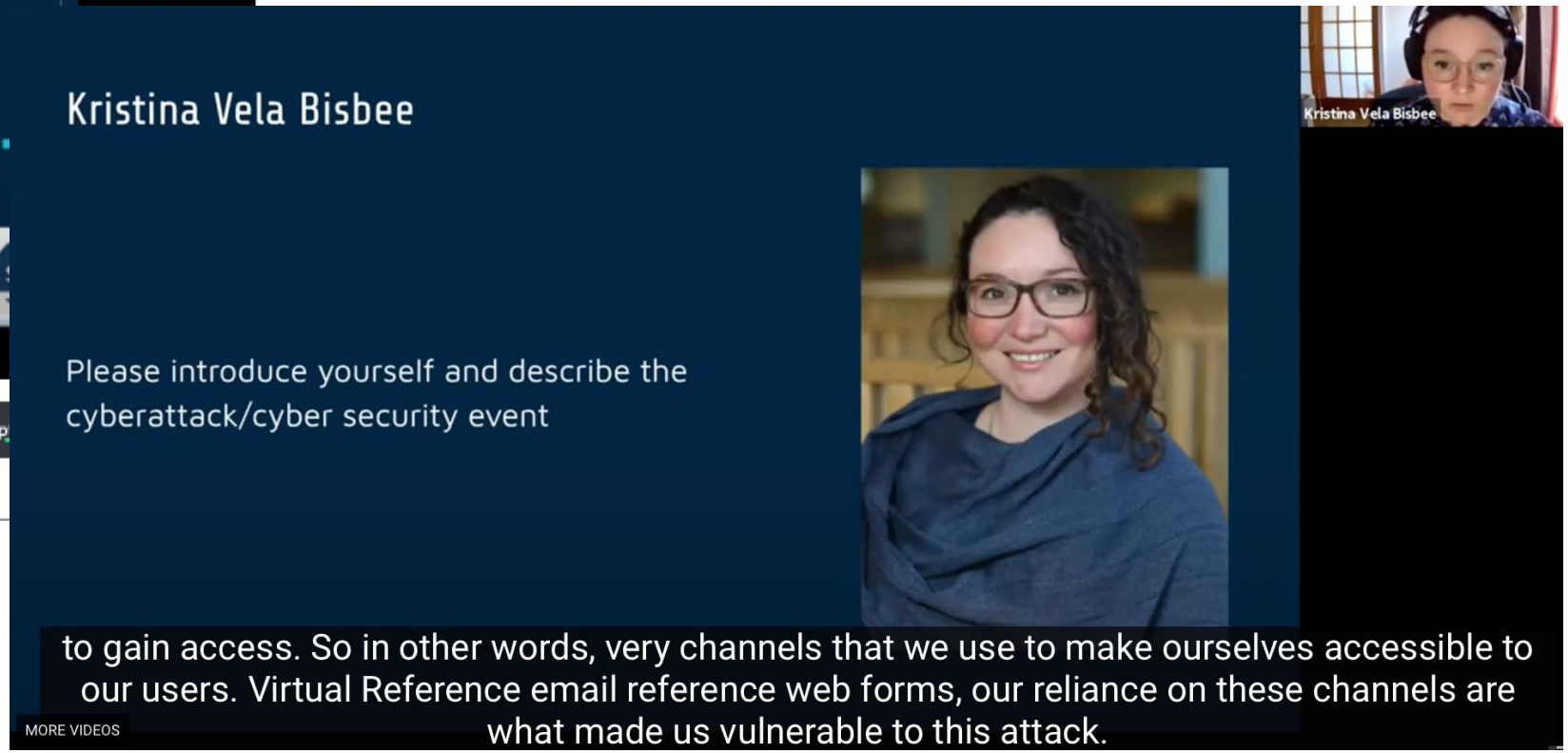
Physical/Digital Environment and Objects

Circulation Desk, Benjamin Franklin **Library**, Mexico, from National Archives https://catalog.archives.gov/id/23932427

Gone Phishing: Service Continuity after a Cyber Attack

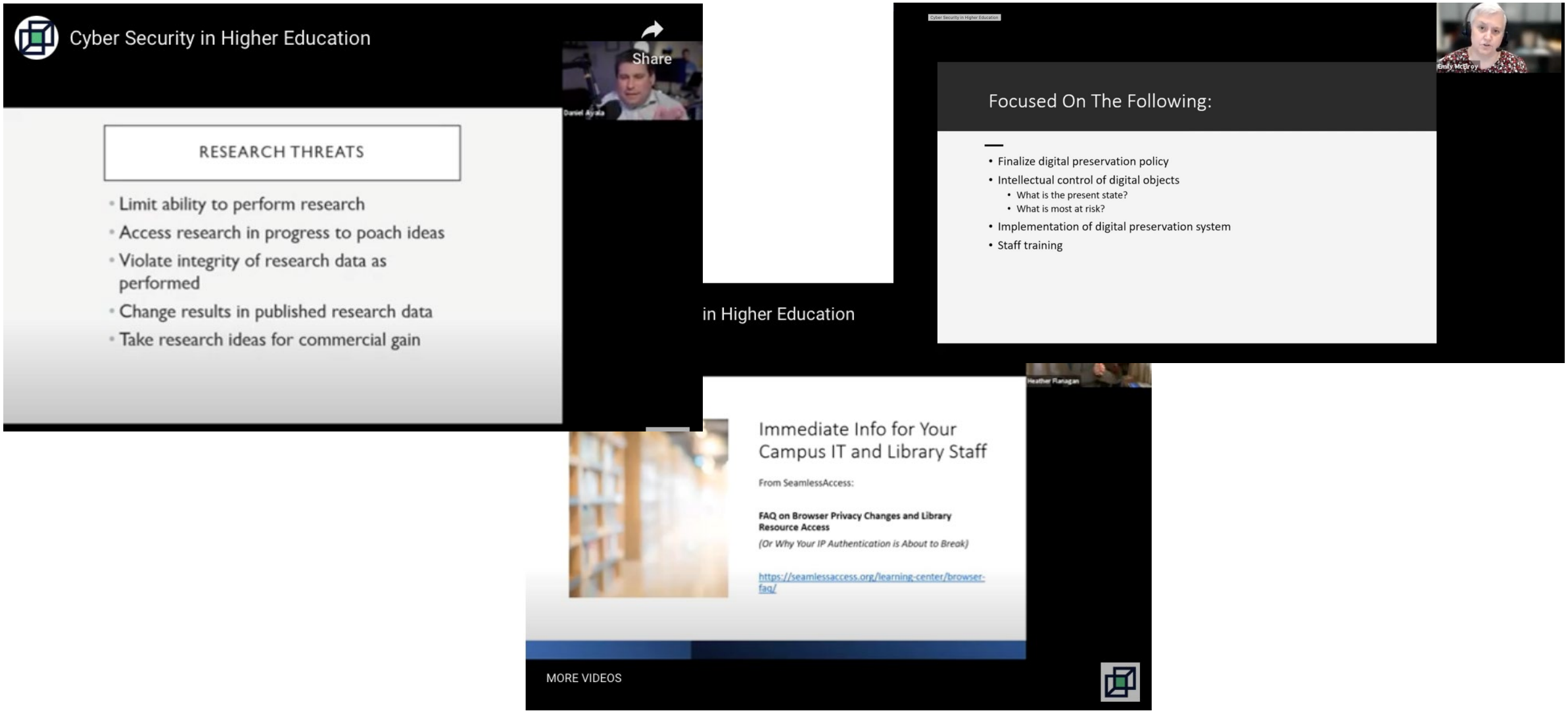
ACRL Choice SNSI Webinar https://www.choice360.org/webinars/gone-phishing-service-continuity-

Is your library prepared for a cyber attack?



Cyber Security in Higher Education

ACRL Choice SNSI Webinar https://www.choice360.org/webinars/cyber-security-in-higher-education/



A Librarian's Guide to Cybercrime Mitigation

ACRL Choice SNSI Webinar https://www.choice360.org/webinars/a-librarians-guide-to-cybercrime-mitigation/

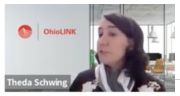
How can librarians mitigate risk and proactively protect against cybersecurity threats?

Where to Start

1. **What technology services does the library use & maintain?**
   a. ILS, proxy, website, vendor admin accounts, institutional repository, …
2. **Who manages each service?**
   a. Vendor, IT department, library, …
3. **Does that management include:**
   a. Usage monitoring?
   b. Password management?
   c. Software updates?
   d. Security patches?
   e. Backups?
   f. Digital preservation?

Where is Your Team?

	Grassroots	Team- or Compliance-Driven	Risk Management
Organizing Principle	Individual teams may take responsibility for security in their areas	Gov't regulations or customer expectations drive security measures	Security is an organization-wide risk management tool.
Organizational Awareness	No common understanding of or baseline for security across org, leadership & board	Only the teams responsible for compliance have a shared definition of security initiatives	Security integrated into program and product initiatives
Culture	Security seen as a "technical problem"	Security seen as "compliance problem"	Security seen as core to enabling the organization's mission
Technology	Security exists as configuration of networking, laptop, software tools	Security tools brought in as a response to outside pressures & may not be aligned with the business	Security tooling in place to support business alignment and risk management
Ownership/ Leadership	No central cybersecurity ownership or leader	Security leadership exists in a silo focused on compliance	Security leadership enabled by and has direct access to C-Suite, Board



SNSI tips for academic librarians on building strong information security defenses at your institution

The Scholarly Networks Security Initiative recommends these rules of thumb when considering how libraries can contribute and support information security practices in higher education. These same recommendations can also be applied to nearly any other organization too. The investment of time, focus, and technology in prevention efforts is far more useful than the significant costs that result after a security intrusion or data breach.

Security is the responsibility of everyone within an organization, to protect institutional data, that of faculty, staff and students, and to ensure the integrity of the work and research the institution performs. However, this investment in protecting information must be visibly supported from leaders across the organization to establish and reinforce a strong security culture on campus.

Create a Campaign for Information Security literacy

Refresh your knowledge of your institution's information security and privacy policies. Research aspects of the policy, if necessary. Take advantage of any training resources available from the Information Security Office.

Connect with your institution's Chief Information Security Officer or Director of Information Security and build a relationship to discuss ways that the library can participate in improving security and privacy culture on campus.

The library is a hub of learning for the campus community. Engage in teaching moments with students, faculty and staff that expand upon and extend normal password protection and phishing avoidance instruction taught by IT personnel to include responsibility for library resources.

Promote the use of confirmed, legitimate websites for collecting primary sources, including author and publisher sites. Discourage the use of pirate sites as the integrity of content coming from unofficial sources cannot be guaranteed.

Remind colleagues and students of the risks that come when sharing account passwords and campus credentials as they are likely tied to other personal information including HR or student grade information, and may unknowingly enable access well beyond the single system they are trying to share.

Provide clear, easy to understand and operate methods for securely accessing library resources from off campus.

Inform and educate faculty, staff and students on steps they should take if they discover that their credentials have been compromised or given to another individual.

Develop Mature Security Practices

Consult your institution's IT or Information Security office to recommend scheduling a REN-ISAC Cybersecurity Peer Assessment. Start a conversation about how the library can support and assist with increasing the institution's information security culture.

Partner with Campus IT or Information Security to promote available reading and videos on information security for self-service use by patrons at your institution. Examples and recommendations can be found on the SNSI Website https://www.snsi.info/librarian-resources/

Evaluate the library's and campus' requirements against the security capabilities of library-specific systems and applications and develop plans and pacing for timely software updates and patches.

Run and keep up-to-date endpoint protection and/or antimalware software on all library computers, both patron-facing and those that library staff use.

Back up important files and records for recovery in case of ransomware attack or system failure. If a campus-wide backup and recovery solution exists, begin to use it. SNSI recommends a 3-2-1 approach to backup: keep three distinct copies of the data, two of them local but on different mediums, and one additional copy being off-site (including cloud).

When looking into bringing on new electronic resources, make sure they comply with your institution's security policies.

Librarians and libraries have long been champions of good security to uphold the values core to the library. The campus-wide efforts to protect data are increasing as threats against institutions' data rise. Libraries, in partnership with other administrative units across campus including IT and Information Security, can educate patrons on how to protect institutional and personal information, access genuine resources to support their research, and build strong relationships between the Library and campus Information Security colleagues.

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https://www.snsi.info/media/dlmgarxk/snsi_security_a4_page_220722.pdf