Meeting Synopsis:

1) Call to order
2) Review of the minutes from December 13th, 2017
3) Open Access publishing – Gordon Aamot
4) Digital Preservation Network and Data Refuge project – Liz Bedford
5) Good of the order
6) Adjourn

1) Call to order

The meeting was called to order at 2:30 p.m.

2) Review of the minutes from December 13th, 2017

The minutes from December 13th, 2017 were approved as amended.

3) Open Access publishing – Gordon Aamot

Gordon Aamot (Director, Scholarly Communication and Publishing, Library Research & Learning Services) and Liz Bedford (Scholarly Publishing Outreach Librarian, Library Scholarly Communication and Publishing) were present to show a presentation on open access publishing, which they explained is planned to subsequently be given in academic units across the university’s three campuses as part of an educational campaign. A PowerPoint was used as part of the presentation (Exhibit 1).

Aamot explained a disconnect has existed in the scholarly publishing ecosystem between scholarly content and the ownership/distribution of that content. Scholarly content is often created via public funding, researchers traditionally publish their findings without the expectation of additional compensation in the interest of advancing human knowledge, yet the results are almost always controlled by publishers, hidden behind paywalls, with access granted only to those who can afford purchase it (Slide 2-3, Exhibit 1). Typically, author/publisher contracts require the transfer of copyright of faculty works to the publisher. Several additional points were made relating to paywalls (Slide 4, Exhibit 1):

- They prevent the vast majority of the planet from seeing and benefiting from the knowledge that researchers produce
- Scholars in the Global South whose institutions can’t afford subscriptions are locked out
Doctors and patients can’t access the latest research on treatments
Journalists rely on press releases about research rather than being able to read the source material
Local community can’t read scholarship they are a part of

It was noted the development and implementation of Open Access (OA) policies at institutions around the globe address this imbalance, and over 50 U.S. universities adopted OA policies based on the Harvard model approved in 2008. The UW’s draft OA Policy is also based on Harvard’s model. A slide was shown listing benefits of a UW Open Access Policy (Slide 6, Exhibit 1):

- Contribution to the Public Good
  - UW research freely available to the world – locally, nationally, internationally
- Advantages to Faculty Authors
  - Greater visibility and impact
  - No article processing charges (APCs) to make work OA
  - Retain rights to work that are usually lost to publishers
  - Aid preservation of the scholarly record

Bedford explained UW’s draft OA Policy is executable under an automatic, non-exclusive license to UW to exercise rights under copyright relating to authors’ scholarly articles “for the purpose of making their articles freely and widely available in an open access repository” (Slide 7, Exhibit 1). Under the Policy, faculty deposit a post-peer-review, pre-publisher-formating copy of the article in a UW repository. For faculty authors who do not wish to submit to OA, a waiver (opt-out entirely or delayed access) will be granted automatically when requested (waivers are mandatorily granted upon request). The differences between an author’s final version and a published version of an article were shown in an example illustration (Slide 10, Exhibit 1).

Some information was given on the differences between the granting of a non-exclusive license and a copyright transfer. Generally in copyright transfer agreements, authors are asked to completely transfer their copyright to a publisher, leaving them with no rights relating to their former works, while the publisher retains all of those rights. With a non-exclusive license, a faculty author retains their right to transfer copyright to whomever they wish, and other rights relating to the scholarly work are also retained.

Bedford explained in relation to an opt-out OA policy – this type of policy addresses the previously-mentioned power imbalance as it is no longer an individual author who must negotiate with a publisher to submit to their institution’s data repository, it is rather a policy of the faculty of the UW. A non-exclusive license also precedes any publisher agreement, and allows the University to re-license works back to the faculty member. A slide was shown on what the proposed UW OA Policy does not do (Slide 15, Exhibit 1).

It was noted it is expected that articles created on or after the day a UW OA Policy goes into effect will be subject to the OA Policy, while articles published prior to Policy implementation would not be applicable. Some information was given on timeframe and support in relation to the policy (Exhibit 1).
Symplectic Elements (self-archiving) Software was explained, which is planned to be utilized by the UW if the OA Policy is instituted.

**Questions/feedback**

A member asked what happens if a publisher pushes back and says they will not accept articles that have been submitted to intuitional OA. It was noted a faculty author can choose to either submit to Open Access or to use their mandatory waiver and submit their work to a publisher; it is always an author’s choice if they wish to publish to OA, or to a journal (if one or the other must be chosen). It was noted at the University of California, the deposit rate of faculty works to the institutional repository is about 35% under their opt-out OA Policy, and other institutions (e.g. MIT) have a higher deposit rate.

It was noted if the Policy was enacted, Symplectic Elements will not likely gather articles outside of the hard sciences, and so additional support services will need to be utilized. There was a question of a particular situation wherein a work is not picked up by Symplectic software before rights are transferred to a publisher, and what then becomes of the UW’s non-exclusive license for that work? One guest felt there would be substantive issues in that situation.

It was noted the policy would apply only to UW faculty, and is not meant to apply to UW students.

It was noted a meeting of faculty council chairs, faculty senate leadership, and others was held on January 12th to discuss next steps for institutional review and approval of the OA Policy. The plan is for the Policy to be reintroduced to the Faculty Senate during spring quarter of 2018. It was noted legal concerns have been largely sorted out by Advisory Committee on Intellectual Property, Policy, and Practice (ACIP3) and those concerns were the main stall to Faculty Senate approval in the last academic year (2016-2017).

There was a question of whether the majority of UW research faculty share the concerns relating to the power of publishers to control/own scholarly work. The answer was not known.

It was noted members of the UW Libraries are seeking forums to share information on Open Access with faculty members as part of an educational campaign. A member noted the item should be placed on departmental (faculty) meeting agendas. Another member recommended Elected Faculty Councils (EFCs) be levied as a method to place the item on departmental meeting agendas. It was noted local support for the effort in various UW colleges is valuable to the initiative.

Discussion was ended, and Aamot and Bedford were thanked for sharing the presentation with the council.

4) **Digital Preservation Network and Data Refuge project – Liz Bedford**

Bedford explained she received a question from an FCUL member and the agenda item is a response to the member’s question. The question relates to the work of UW researchers conducting politically
sensitive work/research, and the extent to which the UW (and UW Libraries) protect and maintain records of this type of work given external pressures.

Bedford spoke about the Digital Preservation Network and Data refuge project. She explained the UW Libraries have a history of working with researchers with sensitive material, and the unit is committed to the stewardship of materials it brings into its stores, including digital preservation. It was noted politically-motivated pressure to “make data disappear” is protected against by the institution, and all items stored within the UW data repository are safeguarded/maintained to the same degree regardless of their content.

5) Good of the order

Nothing was stated.

6) Adjourn

The meeting was adjourned at 4:00 p.m.

Minutes by Joey Burgess, jmbg@uw.edu, council support analyst

Present:

- **Faculty**: Trent Hill, Randall Leveque, Betty Bekemeier
- **Ex-officio reps**: Susanne Redalje, Alanna McAuley, Ellen Barker, Kate O’Neill
- **Guests**: Cynthia Fugate, Gordon Aamot, Liz Bedford

Absent:

- **Faculty**: Richard Furman, Michael Kucher
- **President’s designee**: Betsy Wilson
- **Ex-officio reps**: Navid Azodi

Exhibits

Exhibit 1 – 2018.02.14 OA Policy for FCUL
UW Proposed Open Access Policy

Gordon Aamot, Director, Scholarly Communication & Publishing
Liz Bedford, Scholarly Publishing Outreach Librarian
Faculty Council on University Libraries
February 14, 2018
Scholarly Publishing Ecosystem

• Disconnect between creation and ownership/distribution
• Scholarly research is mostly produced with public dollars by researchers who share it freely
  • Governments and foundations provide most of the funding for research
  • Public institutions employ a large portion of all researchers
  • Researchers publish their findings without the expectation of additional compensation in the interest of advancing human knowledge, building careers
  • Peer review - researchers evaluate each other’s work for free
• But the results are controlled by publishers and usually hidden behind paywalls
Publishing industry vs. authors - huge power imbalance

- Contracts require authors to transfer their copyright to the publisher
  - No posting to website, no emailing to friends
Publishing industry vs. community engagement - paywalls block access

- Paywalls prevent the vast majority of the planet from seeing and benefiting from the knowledge that researchers produce
  - Scholars in the Global South whose institutions can’t afford subscriptions are locked out
  - Doctors and patients can’t access the latest research on treatments
  - Journalists rely on press releases about research rather than being able to read the source material
  - Local community can’t read scholarship they are a part of
OA Policies: addressing the imbalance

• Harvard the first in 2008
• Over 50 US universities adopted policies based on Harvard’s Model
  • Duke, Florida State, Indiana, Illinois, MIT, Arizona, Colorado, Illinois, North Carolina, Texas, all 10 U California campuses...
• UW’s recommended policy based on Harvard model
Benefits of a UW Open Access Policy

• Contribution to the Public Good
  • UW research freely available to the world – locally, nationally, internationally

• Advantages to Faculty Authors
  • Greater visibility and impact
  • No article processing charges (APCs) to make work OA
  • Retain rights to work that are usually lost to publishers
  • Aid preservation of the scholarly record
Proposed policy

Automatic, non-exclusive license to UW to exercise rights under copyright relating to authors’ scholarly articles “for the purpose of making their articles freely and widely available in an open access repository”

Deposit a post-peer-review, pre-publisher-formatting copy of the article in a UW repository

Waiver (opt-out entirely or delayed access) granted automatically when requested by author
Copyright: transfer vs. non-exclusive license

Exhibit 1
Deposit in UW Repository

submitted version

peer review, edit & revise

accepted by publisher

owned by the author

copyright transfer agreement

proofs

version of record

copyediting, typesetting

published

owned by the publisher

open access institutional repository
Learning the human chromatin network from all ENCODE ChIP-seq data

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3 Department of Computer Science, University of Toronto
4 Department of Genome Sciences, University of Washington

Abstract

Introduction: A cell’s epigenome arises from interactions among regulatory factors—transcription factors, histone modifications, and other DNA-associated proteins—occurring at particular genomic regions. Identifying the network of interactions among regulatory factors, the chromatin network of a particular genomic region, is important for understanding these interactions. Current methods identify putative regulatory regions and the genes interacting with them. We developed a novel computational approach, ChromNet, to infer the chromatin network from ChIP-seq data. ChromNet has two features that enable its use on large collections of ChIP-seq data. First, rather than using pairwise co-occurrences of factors along the genome, ChromNet models conditional dependence relationships that better elucidate direct and indirect interactions. Second, our novel statistical technique, the group graphical model, improves inference of conditional dependence on highly correlated datasets. Such datasets are common because some transcription factors form a complex and the same transcription factor is often found in different cell types or cell states. Thus, ChromNet’s computationally efficient method and the group graphical model enable the learning of a joint network across all cell types, which greatly increases the scope of possible interactions. We have shown that this results in a significantly higher fold enrichment for validated protein–protein interactions. Further, ChromNet provides an efficient way to identify the genomic context that drives a particular network edge, which provides a more comprehensive understanding of regulatory factor interactions.

Methods: We developed a novel computational approach, ChromNet, to infer the chromatin network from ChIP-seq data. ChromNet has two features that enable its use on large collections of ChIP-seq data. First, rather than using pairwise co-occurrences of factors along the genome, ChromNet models conditional dependence relationships that better elucidate direct and indirect interactions. Second, our novel statistical technique, the group graphical model, improves inference of conditional dependence on highly correlated datasets. Such datasets are common because some transcription factors form a complex and the same transcription factor is often found in different cell types or cell states. Thus, ChromNet’s computationally efficient method and the group graphical model enable the learning of a joint network across all cell types, which greatly increases the scope of possible interactions. We have shown that this results in a significantly higher fold enrichment for validated protein–protein interactions. Further, ChromNet provides an efficient way to identify the genomic context that drives a particular network edge, which provides a more comprehensive understanding of regulatory factor interactions.

Results: We applied ChromNet to all available ChIP-seq data from the ENCODE Project, consisting of 1,000 ChIP-seq libraries, which allowed particularly diverse physical interactions better than alternative approaches. ChromNet also identified previously reported regulatory factor interactions. We experimentally validated one of these interactions, between the MYC and HOPX transcription factors.

Discussion: ChromNet provides a useful tool for understanding the interactions among regulatory factors and identifying novel interactions. We have provided an innovative web-based visualization of the full ENCODE chromatin network and the ability to interpret specific conditions from http://chromnet.ca/ u.washington.edu.

METHOD

ChromNet: Learning the human chromatin network from all ENCODE ChIP-seq data

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Abstract

ChromNet: Learning the human chromatin network from all ENCODE ChIP-seq data

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4 Department of Genome Sciences, University of Washington

Introduction

Regulatory factors—such as transcription factors, histone modifications, and other DNA-associated proteins—bind to DNA in the genome and interact with each other to regulate gene expression. Using the physical structure of the genome (e.g., DNA modifications) and other regulatory factors, the interactions between regulatory factors can be modeled to infer the chromatin network among regulatory factors, which we term the chromatin network. The chromatin network is important for understanding how gene regulatory factors and the function of each regulatory factor interact. To identify the chromatin network, we used a novel computational method, ChromNet, to infer the chromatin network from ChIP-seq data. ChromNet models the conditional dependence relationships between regulatory factors, allowing us to measure the gene-wide localization of regulatory factors, and identify complex regulatory networks.

Results

ChromNet identifies novel gene regulatory interactions, and our algorithm identifies direct interactions between regulatory factors, which are enriched in ChIP-seq and can be validated by immunoprecipitation. ChromNet also identifies previously reported regulatory factor interactions. We experimentally validated one of these interactions, between the MYC and HOPX transcription factors.

Discussion

ChromNet provides a useful tool for understanding the interactions among regulatory factors and identifying novel interactions. We have provided an innovative web-based visualization of the full ENCODE chromatin network and the ability to interpret specific conditions from http://chromnet.ca/ u.washington.edu.
Three ways to achieve OA outcome

1. UW Repository
2. Disciplinary repository (non-profit, with preservation)
3. OA Journal
Waiver system

“The Provost or Provost’s designate will waive this requirement or delay access for a specified period of time for a particular article upon express direction by the Faculty member. Grant of such a waiver or delay is mandatory, not at the discretion of any person or group.”
‘Opt out’ vs. ‘opt in’
Why is the license automatic?

• Addresses the power imbalance
  • No longer an individual author negotiating with a publisher – it’s a policy of the faculty of the UW.

• Non-exclusive license precedes any publisher agreement
  • After publication agreement is signed, copyright has transferred and can’t grant the license
Automatic, non-exclusive license

- submit to publisher
- peer review
- edit & revise
- accepted by publisher
- copyright transfer agreement
- proofs
- version of record
- copyediting
- typesetting
- published
- owned by the publisher
- non-exclusive copyright license
- re-license to author (if necessary)
The OA Policy does NOT:

• Restrict where authors can or should publish

• Force authors to pay APCs
  • In fact, deposit in ResearchWorks is a *free* way to comply with federal OA mandates

• Take copyright away from authors
ALUW implementation

• Publisher notice one month before the policy went into effect

• Author’s addendum language for those who request it

• Waiver is a Google form which sends an automatic response

• Working on ALUW-scale, but for Faculty we will need to help automate the process
Faculty implementation

• Timeframe
  • Applied to articles created on or after the date that the policy goes into effect
  • Articles published prior to the policy would not be included
    • Although deposit would be encouraged where feasible

• Support
  • The Libraries and University will strive to provide appropriate technology and other support to facilitate article deposit for faculty authors
  • Symplectic Elements
Questions?

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