Clinical Research Seminar
April 18, 2012

Understanding and Complying
The NIH Public Access Policy

U.S. Department of Health & Human Services
National Institutes of Health Public Access
The Public Access Policy ensures that the public has access to the published results of NIH funded research to help advance science and improve human health.
The Law says...

The **NIH Public Access Policy** requires that all investigators funded by the NIH, submit or have submitted for them to the National Library of Medicine’s PubMed Central (PMC), an electronic version of their final, peer-reviewed manuscripts upon acceptance for publication, to be made publicly available no later than 12 months after the official date of publication.

**Division G, Title II, Section 218, PL 110-161 (Consolidated Appropriations Act, 2008)**
In a nutshell...

If your hard work

that same article must also somehow get here too
PubMed Central (PMC)?

**Citation database**
- Citations assigned a PMID
- Over 20 million citations from journals indexed by PubMed

**Repository of full-text biomedical works from books and journals**
- Works assigned a PMCID
- Over two million full-text works

Alumni Medical Library
Overexpression of DPAGT1 leads to aberrant N-glycosylation of E-cadherin and cellular discohesion in oral cancer.

Department of Molecular and Cell Biology, Boston University Medical Center, Boston, Massachusetts 02118, USA.

Abstract
Cancer cells are frequently characterized by aberrant increases in protein N-glycosylation and by disruption of E-cadherin-mediated adherens junctions. The relationship between altered N-glycosylation and loss of E-cadherin adhesion in cancer, however, remains unclear. Previously, we reported that complex N-glycans on the extracellular domains of E-cadherin inhibited the formation of mature adherens junctions. Here, we examined whether dysregulated N-glycosylation was one of the underlying causes for cellular discohesion in oral cancer. We show that dense cultures of human salivary epidermoid carcinoma A253 cells exhibited elevated expression of DPAGT1, the gene that initiates protein N-glycosylation. Overexpression of DPAGT1 correlated with the production of E-cadherin-bearing complex N-glycans in nascent adherens junctions. Partial inhibition of DPAGT1 with small interfering RNA reduced the complex N-glycans of E-cadherin and increased the abundance of alpha-catenin and stabilizing proteins in adherens junctions. This was associated with the assembly of functional tight junctions. The inverse relationship between DPAGT1 expression and intercellular adhesion was a feature of oral squamous cell carcinoma. Oral squamous cell carcinomas displayed overexpression of DPAGT1 that correlated with diminished localization of E-cadherin and alpha-catenin at the sites of adherens junctions. Our studies show for the first time that DPAGT1 is an upstream regulator of E-cadherin N-glycosylation status and adherens junction composition and suggest that dysregulation of DPAGT1 causes disturbances in intercellular adhesion in oral cancer.

MID: 19549906  
PMCID: PMC2771199
Who’s responsible?

Institution

Author

Principal Investigator

F PostDoc

Author

Grant

Assistant

BU Alumni Medical Library

BOSTON UNIVERSITY

BOSTON MEDICAL CENTER

EXCEPTIONAL CARE. WITHOUT EXCEPTION
NIH Policy has two parts:

1. Manuscript Submission

2. Manuscript Citation
How to comply?

Part I

Manuscript Submission
How to Submit?  →  4 methods

National Institutes of Health Public Access

The Public Access Policy ensures that the public has access to the published results of NIH funded research to help advance science and improve human health.

**Submission Methods**

There are four methods to ensure that an applicable paper is submitted to PubMed Central (PMC) in compliance with the NIH Public Access Policy. Authors may use whichever method is most appropriate for them and consistent with their publishing agreement. Click on the method in the table for details. Use the box on the left to help determine which submission method to use for your journal.

**Overview of Submission Methods**

<table>
<thead>
<tr>
<th>Method A</th>
<th>Method B</th>
<th>Method C</th>
<th>Method D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journal deposits final published articles in PubMed Central without author involvement</td>
<td>Author asks publisher to deposit specific final published article in PMC</td>
<td>Author deposits final peer-reviewed manuscript in PMC via the NIHMS</td>
<td>Author completes submission of final peer-reviewed manuscript deposited by publisher in the NIHMS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Version of Paper Submitted</th>
<th>Final Published Article</th>
<th>Final Published Article</th>
<th>Final Peer-Reviewed Manuscript</th>
<th>Final Peer-Reviewed Manuscript</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Task 1: Who starts the deposit process?</th>
<th>Publisher</th>
<th>Publisher</th>
<th>Author or designee, via NIHMS</th>
<th>Publisher</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Task 2: Who approves paper for processing?</th>
<th>Publisher</th>
<th>Publisher</th>
<th>Author, via NIHMS</th>
<th>Author, via NIHMS</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Task 3: Who approves paper for PubMed Central display?</th>
<th>Publisher</th>
<th>Publisher</th>
<th>Author, via NIHMS</th>
<th>Author, via NIHMS</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Participating journal/publisher</th>
<th>Method A Journals</th>
<th>Make arrangements with these publishers</th>
<th>Check publishing agreement</th>
<th>Make arrangements with these publishers</th>
</tr>
</thead>
</table>

[http://publicaccess.nih.gov/submit_process.htm](http://publicaccess.nih.gov/submit_process.htm)
Differences are...

Who does it?

Publisher
OR
You

What to PMC?

Article
OR
Manuscript

These tend to be decided by publishers.

Contract
via

Be aware of addendum
What to PMC & How to PMC

Published article
1000+ PMC Journals

Final Peer reviewed manuscript

express

PubMed Central

PMC ID

NIHMS

NIHMS ID

via

Published article
1000+ PMC Journals

Final Peer reviewed manuscript

express

PubMed Central

PMC ID

NIHMS

NIHMS ID

via

Published article
1000+ PMC Journals

Final Peer reviewed manuscript

express

PubMed Central

PMC ID

NIHMS

NIHMS ID

via

Published article
1000+ PMC Journals

Final Peer reviewed manuscript

express

PubMed Central

PMC ID

NIHMS

NIHMS ID

via

Published article
1000+ PMC Journals

Final Peer reviewed manuscript

express

PubMed Central

PMC ID

NIHMS

NIHMS ID

via
What?! NIHMS?!

http://www.nihms.nih.gov/
NIH Manuscript Submission System

No manuscripts that require your attention

I don't see one of my manuscripts.

Must Tell about Embargo!!!
Back to Method A, B, C, D:

<table>
<thead>
<tr>
<th>Method A</th>
<th>Method B</th>
<th>Method C</th>
<th>Method D</th>
</tr>
</thead>
<tbody>
<tr>
<td>** PMC Journal **</td>
<td>$$$$</td>
<td>Peer-reviewed Manuscript</td>
<td>Peer-reviewed Manuscript</td>
</tr>
<tr>
<td><strong>Published Article</strong></td>
<td><strong>Published Article</strong></td>
<td><strong>Someone starts process to NIHMS</strong></td>
<td><strong>Published Article</strong></td>
</tr>
<tr>
<td>Publisher starts process</td>
<td>Publisher starts process</td>
<td>Publisher approves files</td>
<td>Publisher starts process to NIHMS</td>
</tr>
<tr>
<td><strong>Author</strong> approves files</td>
<td><strong>Author</strong> approves files</td>
<td><strong>Author</strong> approves uploaded files</td>
<td><strong>Author</strong> approves uploaded files</td>
</tr>
<tr>
<td><strong>Publisher</strong> approves web format</td>
<td><strong>Publisher</strong> approves web format</td>
<td><strong>Author</strong> approves web format to PMC</td>
<td><strong>Author</strong> approves web format to PMC</td>
</tr>
</tbody>
</table>

NIHMS will email you.
Remember, Contract checkbox

Don’t forget to check the box.

- **FUNDING**: No funding was received for the research reported in the article
- **FUNDING**: The research reported in the article was funded by the US National Institutes of Health

Note that for NIH employee-authors, the Publisher and NIH have agreed the form of a “Cover Sheet” which is also available on [www.elsevier.com](http://www.elsevier.com) and which is incorporated here by reference.
Not always checkbox

Depositing Manuscripts in NIH Repository

In response to the notice "Enhanced Public Access to NIH Research Information" by NIH, Frontiers in Bioscience, would permit un-copyedited manuscripts that gain support from NIH to be included in PMC provided that the following statement is included in the author's manuscript. When a manuscript is to be submitted to PMC by the author, the author should make such a request in writing by sending an E-mail to fbs@biocience.org.

☑ Include the following statement in the manuscript when the author's manuscript is to appear in its original format in sites other than Frontiers in Bioscience:

"This is an, un-copyedited, author manuscript that has been accepted for publication in the Frontiers in Bioscience®. Cite this article as appearing in the Journal of Frontiers in Bioscience. Full citation can be found by searching the Frontiers in Bioscience (http://biocience.org/search/authors/html/search.html) following publication and at PubMed (http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?CMD=search&DB=pubmed) following indexing. This article may not be duplicated or reproduced, other than for personal use or within the rule of "Fair Use of Copyrighted Materials" (section 107, Title 17, U.S. Code) without permission of the copyright holder, the Frontiers in Bioscience. From the time of acceptance following peer review, the full final copy edited article of this manuscript will be made available at http://www.biocience.org/. The Frontiers in Bioscience disclaims any responsibility or liability for errors or omissions in this version of the un-copyedited manuscript or in any version derived from it by the National Institutes of Health or other parties."

Following publication of manuscript in PMC, it is the author's responsibility to provide the final URL of the manuscript in an E-mail to fbs@biocience.org.
Remember!

Do not ignore email from NIHMS.

From: "nihms-help@ncbi.nlm.nih.gov" <nihms-help@ncbi.nlm.nih.gov>
Date: June 20, 2010 10:41:56 PM EDT
To: [Person]
Subject: [nihms] NIHMS204868: Approve Submission of Manuscript

[Article Title: NIHMS204868, PubID: BCP10556]

[NOTICE: This is an automated message from the NIHMS System. To contact the NIHMS Staff, please visit our website at http://www.nihms.nih.gov/db/nih.cgi?page=email&mid=204868]

Dear Shaoqiang Li,

Author support. Elsevier has submitted the following manuscript for publication in PubMed Central in compliance with the NIH Public Access Policy: [http://publicaccess.nih.gov/policy.html].

Manuscript Title: NIHMS204868. The manuscript ID for this article is NIHMS204868. Please approve the submitted materials and confirm that it was supported by NIH and/or HHMI funding so the full text of this manuscript can be processed and made available to the public in PubMed Central. Please note that this must be done in the NIHMS System even though NIH or HHMI support may be acknowledged in the manuscript text.

There are three steps:

1. Access the System - Please click on the following URL to access the NIHMS System:
   http://www.nihms.nih.gov/db/sub.cgi?ticket=c69a4acda4db29bab7064e27051baf33b9432f41b
   NOTE: If the above link is broken, please copy and paste the entire URL into your browser. **You must follow this link to find your manuscript.**
   This link is a “ticket” that allows our system to match the manuscript with your login session.
   Ticket Number:c69a4acda4db29bab7064e27051baf33b9432f41b

2. Log in to the NIHMS System - If you need assistance with this step, the following step-by-step guides will show you how to log into the system:

3. Review "PDF Receipt" and click "Approve" button. If you can provide more appropriate person to curate this manuscript submission, please click corresponding button and follow the instruction.

Please let us know if you have questions.
Sincerely, NIHMS System Help Desk, NCBI
NIHMS Account

Manuscript List for Young-Joo Lee

Start Here | Submit New Manuscript

Attention (0) | Optional (0) | In process (0) | Stalled (0) | Completed (0) | Published (0)

No manuscripts that require your attention

I don't see one of my manuscripts.
The policy ONLY applies to...

**YES**

Peer Reviewed Journal Article

**NO**

Editorials, Letters to the Editor, Book chapters, Conference papers and/or presentations, Magazine or popular press articles
How to comply?

Part II

Manuscript Citation
Compliance starts \textit{BEFORE} publication.

The full text should be publicly available no later than \textit{12 months} after the publication.

But, submittal to PMC should be made upon \textit{ACCEPTANCE} of publications.

If your manuscript is accepted today (April. 2012) to be published in April 2013 ...
Citations noted in NIH applications, proposals and progress reports must include PMCID (PubMed Central Reference Number)

Citation examples:


OR

NIHMS ID

“PMC Journal – In Process”

If Method A journals
Dear Principal Investigator,

Your recent progress report submission identified papers that have resulted from your NIH award. It appears that the following papers have not yet been submitted for upload to PubMed Central and may be out of compliance with the NIH Public Access Policy.
Methods of Citation Mgmt:

- **eRA Commons** Used by PI

- **My NCBI** Used by Delegate (also by PI)
If you’re a PI

Notes & Tips:
- All of your peer-reviewed journal papers that are accepted for publication as of 04/07/08, and supported by NIH awards active in FY2008 and beyond must include evidence of compliance with the NIH Public Access Policy.
- Use the NIH Manuscript Submission (NIHMS) System to upload manuscripts or associate papers with your award. You will be automatically logged into the NIHMS with your NIH eRA Commons user ID, and your manuscripts will appear below.
- If an NIHMSID is listed as invalid, more than three months have passed since the paper was published. The manuscript and its associated award will not be in compliance with the NIH Public Access Policy until the submission is complete, and a PMCID is available.
- By July 2010 users will not have the ability to access citations in Commons via this screen. Beginning in October 2010, users will no longer be able to see citations that have not yet been moved to the MyNCBI system.

A publication has been added successfully.

<table>
<thead>
<tr>
<th>Publications 1-2 out of 2 records</th>
<th>Prev 1 Next</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid NIHMSID</td>
<td>Citation Source</td>
</tr>
</tbody>
</table>

BU Alumni Medical Library
My NCBI linked

My NCBI — My Bibliography

Display Settings: Award view, Sort by public access compliance, group by citation type

Select: All, None 0 items selected

My Bibliography: Award View

Journal Articles


Public Access Compliance: Edit Status

NIH Funding: No funding has been associated with this citation.


Public Access Compliance: Edit Status

NIH Funding: No funding has been associated with this citation.


Public Access Compliance: Edit Status

NIH Funding: No funding has been associated with this citation.
Compliance Status:

- A red dot indicates that an article is **non-compliant**.

  ![Public Access Compliance: Non-compliant. Citation not in NIHMS or PMC. NIH Funding: No funding has been associated with this citation.](image)

- A yellow dot means that the citation has been submitted to the NIH Manuscript Submission system and is considered **in process**.

  ![Public Access Compliance: PMC Journal – In Process. NIH Funding: No funding has been associated with this citation.](image)

- A green dot indicates that the citation is **compliant** with the NIH Public Access Policy. Note that the PMCID number displays in this status.

  ![Public Access Compliance: Complete. PMCID: PMC2632597. NIH Funding: No funding has been associated with this citation.](image)

- Articles that were accepted for publication prior to April 7, 2008 are not covered by the NIH Public Access Policy. These citations will be marked as N/A for **Not Applicable** (this status is also automatically applied to citation types that are not journal articles, e.g., book chapters, patents, presentations).

  ![Public Access Compliance: Not applicable. NIH Funding: No funding has been associated with this citation.](image)

- A question mark indicates that compliance with the NIH Public Access Policy cannot be determined without additional information. Click on the question mark icon or the "Edit Status" link to enter supporting information for the citation.

  ![Public Access Compliance: Edit Status. NIH Funding: No funding has been associated with this citation.](image)
Response to NIH

1. NIH Funding: Yes (edit)

2. Choose Your Awards That Funded This Citation (edit)

3. Public Access Compliance

The NIH Public Access Policy requires scientists to submit final, peer-reviewed journal manuscripts that arise from NIH funds to the digital archive PubMed Central upon acceptance for publication. (See Determine Applicability for full details.) Please submit the final manuscript sent to your publisher or indicate that this publication is exempt from the policy.

This citation has been submitted to NIHMS and is being processed. If this has changed, please make a new selection below.

- Begin submission in the NIHMS.
- This citation has been submitted. NIHMS ID: 263739
- Arrangements have been made for a publisher on this list to send the final article directly to PubMed Central.
- This citation does not need to be submitted under NIH Public Access because:
  - Publication was not peer reviewed.
  - Publication was accepted for publication before April 7, 2008.
  - Publication was written in a script other than Latin (e.g., Russian, Japanese).
  - Publication was not directly supported by NIH.

Save & Close  Cancel
More Information

NIH Public Access Policy:
http://publicaccess.nih.gov/index.htm

Sherpa-Romeo:
http://www.sherpa.ac.uk/romeo/

PMID PMCID Converter:
Library can help:

- Location of journal policies
- My NCBI, My Bibliography & eRA Commons
- Hands-on training
- Assistance with documentation of compliance
QUIZ TIME
What is one thing that...

For most Method D journals, you need to check a box on the contract form to start the process (=publisher’s uploading the manuscript to NIHMS)

NIH Grantees

Authors of manuscripts reporting NIH-funded work that are accepted on or after April 7, 2008, are required to deposit their unedited and unformatted manuscripts on the National Library of Medicine's PubMedCentral (PMC) database. AACR grants such permission, without formal request or fee, subject to the following conditions:

- Only the accepted manuscript is deposited, not the edited and formatted paper as published in the journal.
- Authors stipulate that PubMedCentral may release the paper for public access no sooner than 12 months after its print publication date (the print publication date is considered the official publication date, not the date of any online publication of earlier versions of the paper).
- Authors ensure the published source of the material (the journal citation) is included in the deposited version.
- A link to the final PDF version of the article on the publisher’s website (www.aacrjournals.org) is included.

☐ If one or more authors has NIH funding related to this research and is subject to this requirement, please check here.

Mochida Y, Kaku M, Yoshida K, Katafuchi M, Atsawasuwann P, Yamauchi M.

Department of Periodontology and Oral Biology, Boston University, Henry M. Goldman School of Dental Medicine, 700 Albany Street, Boston, MA 02118, USA. mochida@bu.edu

Abstract

Recently, significant attention has been drawn to the biology of small leucine-rich repeat proteoglycans (SLRPs) due to their multiple functionalities in various cell types and tissues. Here, we characterize a novel SLRP member, "Podocan-like (Podnl) protein" identified by a bioinformatics approach. The Podnl protein has a signal peptide, a unique cysteine-rich N-terminal cluster, 21 leucine-rich repeat (LRR) motifs, and one putative N-glycosylation site. This protein is structurally similar to podocan in SLRPs. The gene was highly expressed in mineralized tissues and in osteoblastic cells and the high expression level was observed at and after matrix mineralization in vitro. Podnl was enriched in newly formed bones based on immunohistochemical analysis. When Podnl was transfected into osteoblastic cells, the protein with N-glycosylation was detected mainly in the cultured medium, indicating that Podnl is a secreted N-glycosylated protein. The endogenous Podnl protein was also present in bone matrix. These data provide a new insight into our understanding of the emerging SLRP functions in bone formation.

Copyright © 2011 Elsevier Inc. All rights reserved.

PMID: 21672516

PMCID: PMC3159388 [Available on 2012/7/1]
When is Compliance Required?

The Policy applies to any work that is accepted for publication in a journal on or after April 7, 2008

http://publicaccess.nih.gov/FAQ.htm
PMC Journals (Method A)

Do they change?
How about Method C & D?
Let’s say 2% of PI’s salary if funded by a NIH grant, then...

→ Any papers originated from the grant (which pays 2% of salary) is subject to the Policy.

→ All other research (98% of PI’s salary is funded) is **NOT**.

Contact me for Qs on NIH Public Access Policy

Kathryn Mellouk
Executive Director
Research Integrity & Assurance
kateski@bu.edu
NIHMS ID is effective for...

90 days
Please contact:

Young-Joo Lee
ylee13@bu.edu
617-638-9183

Reference Desk
Refquest@bu.edu
617-638-4228
Alert from NIH

Original article

HIV type-1 clade C resistance genotypes in treatment-naive patients and after first virological failure in a large community antiretroviral therapy programme

Catherine Orell*, Rochelle P Walenskya, Elena Losinaa, Jennifer Pitt, Kenneth A Freedberg and Robin Wood

Dumitru Tatu, HIV Foundation, Institute of Infectious Disease and Molecular Medicine, Faculty of Health Sciences, University of Cape Town, Cape Town, South Africa

Division of General Medicine and Infectious Disease, Massachusetts General Hospital, Harvard Medical School, Boston, MA, USA

Division of Infectious Disease and HIV Medicine, Department of Medicine, Brigham and Women’s Hospital, Boston, MA, USA

Division of Infectious Disease, Brigham and Women’s Hospital, Boston, MA, USA

Division of Infectious Diseases, Boston University School of Public Health, Boston, MA, USA

*Corresponding Author: e-mail: catherine.orell@research.uwa.edu.au

Background: This study aimed to identify HIV type-1 treatment-experienced patients, 95 (85%) had indinavir resistance mutations, and in those failing first-line therapy, to examine the pattern of resistance in the South Africa National ART programme

This study suggests that at present it is crucial to be aware of the South African National ART programme, to have routine access to genotypes at baseline, as the vast majority of treatment-naive samples continue to be wild type. In contrast, the development of resistance to these failing first-line therapy suggests that viral load monitoring is crucial and there would be a role for individual genotypes in those failing first-line therapy, specifically the rechallenge of treatment-naive patients with genotypes that are likely to be compromised by resistance to first-line therapy. Increased availability of low-cost assays for identifying resistance in patients in South Africa would be clinically valuable.

Acknowledgements

Many thanks go to Monica Vogl and Jennifer Cooper, who carefully stored and retrieved samples for us for many years. We would also like to thank the staff at Virology Laboratories that stored and retrieved the more recent samples.

This work was supported by the National Institute of Allergy and Infectious Diseases (R01 AI219736, K24 AI862476, P01 AI60354) and the Doris Duke Charitable Foundation Clinical Scientist Development Award.

References


Additional file

The additional file ‘Supplementary file’ can be accessed at www.tanddempress.com

Let me know if you want to receive updated info.
Thank you!

Special thanks to:

Mary-Tara Roth, RN, MSN, MPH
Director, Clinical Research Resources Office

Sylvia Baedorf Kassis, MPH
Project Manager, MGH

Kirsten A. Martin
AV / Instructional Support Supervisor
Educational Media
Credit

If my presentation was any good, the credit goes to:

**Cathy Sarli**
*Scholarly Communications Specialist*
*Washington University School of Medicine*

**Sally Gore**
*Head, Research & Scholarly Communication Services*
*University of Massachusetts Medical School*

**Scott Lapinski**
*Digital Resources and Services Librarian*
*Harvard Medical School*