Open Access Policy, Biosketches and Current and Pendings

UNIVERSITY OF DELAWARE

Learning Objectives:

1. Raise awareness of the Open Access Policy and how it impacts our researchers.
2. Discuss changes to the NIH biosketch effective May 25, 2015 and NSF biosketch effective December 26, 2014.
3. Provide a brief overview of NCBI's "my bibliography" and "SciENcv".
4. Provide an open dialogue regarding best practices across campus for preparing and maintaining accurate current and pending documents and other support.

Speakers:

Leigh Botner, Research Development Director, Research Office
Judy Dellose, Sponsored Programs Coordinator, Chemistry & Biochemistry
Debbie Hendel, Sponsored Programs Coordinator, COE Business Office
Lisa Henriksen, Senior Sponsored Programs Coordinator, COE Business Office
Amy Slocum, Associate Director, Delaware EPSCoR

What is Open Access?

Open access literature is:

- digital
- online
- free of charge
- free of most copyright and licensing restrictions

What makes it possible is:

- the internet
- the consent of the author or copyright holder

Peter Suber, http:www.earlham.edu/~peters/fos/brief.htm

Why is it important to researchers?

White House Office of Science and Technology Policy Directive, February 22, 2013
January 2014 Consolidated Appropriations Act

Federal Bureaus with budgets > $100 million per year

Must ensure free public online access of:

- ✓ Author's accepted manuscript or the
- ✓ Version of record of their article
- ✓ Within 12 months of publication

Federal Agencies

2008

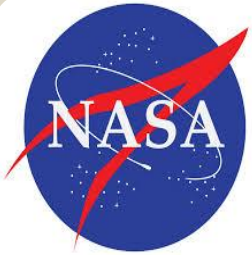
2009

2011

2012

2014

2015



2015

Foundations are also requiring open access

FORD FOUNDATION

BILL & MELINDA GATES foundation

HHMI
HOWARD HUGHES MEDICAL INSTITUTE

THE WILLIAM AND FLORA HEWLETT FOUNDATION

UD may soon require…

Pending Faculty Senate Resolution

The University of Delaware Faculty grant permission to make their scholarly journal articles openly accessible in the University of Delaware Library institutional repository, UDSpace.

UDSpace

https://udspace.udel.edu

University of Delaware Open Access Articles

Browse By

By Issue Date Authors Titles Subjects

Search this collection: Go (Advanced Search)

The University of Delaware Open Access Articles collection consists of scholarly articles written by University of Delaware-affiliated authors. These articles are posted as allowed by publisher agreements. Articles in this collection generally reflect changes made during peer-review.

Articles written by faculty on the University of Delaware Faculty Senate Library Committee will form the initial collection. The Faculty Senate Library Committee is drafting a University of Delaware Open Access policy for Faculty Senate for approval. Such a policy will facilitate the work of faculty and increase the availability of their research.

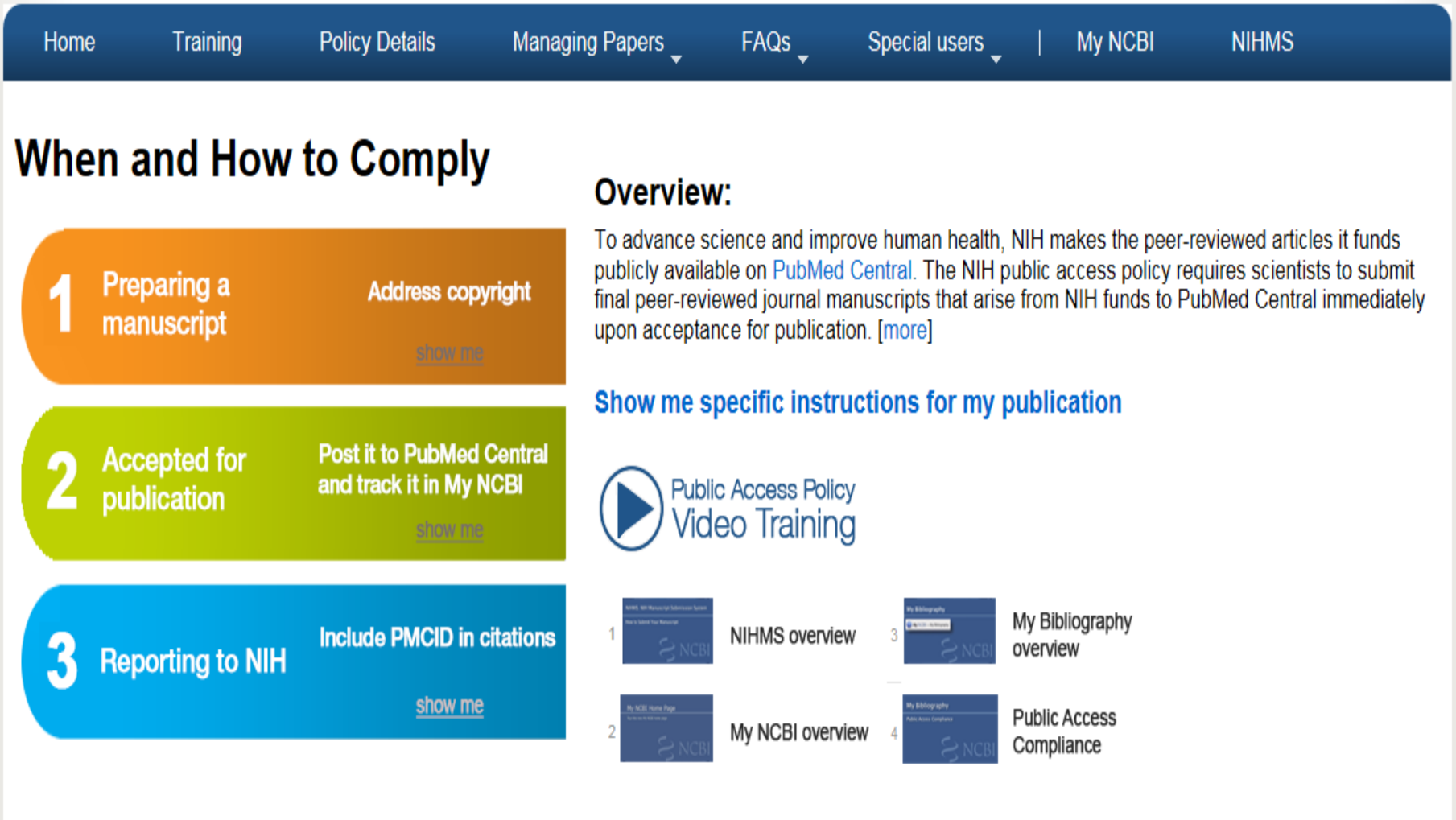
Since the publication version of the articles may vary, version details are supplied for each paper in the collection. Any of the following may be allowed by the publisher:

- Original author's manuscript prior to formal peer review
- Author's final manuscript post peer review, without publisher's formatting or copy editing
- Final published version as it appeared in a journal, conference proceedings, or other formally published context

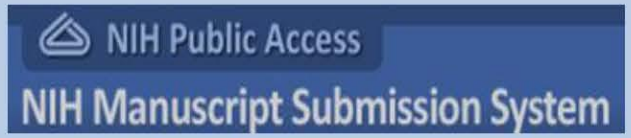
Additional peer-reviewed scholarly articles and resources are available through other University of Delaware collections in UDSpace and the ARTstor Commons collections of images and videos.

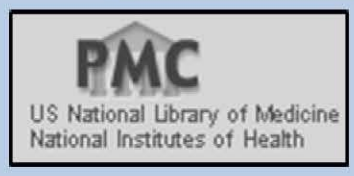
NIH Public Access Policy

https://publicaccess.nih.gov/



The Big Picture: How Are They Connected?

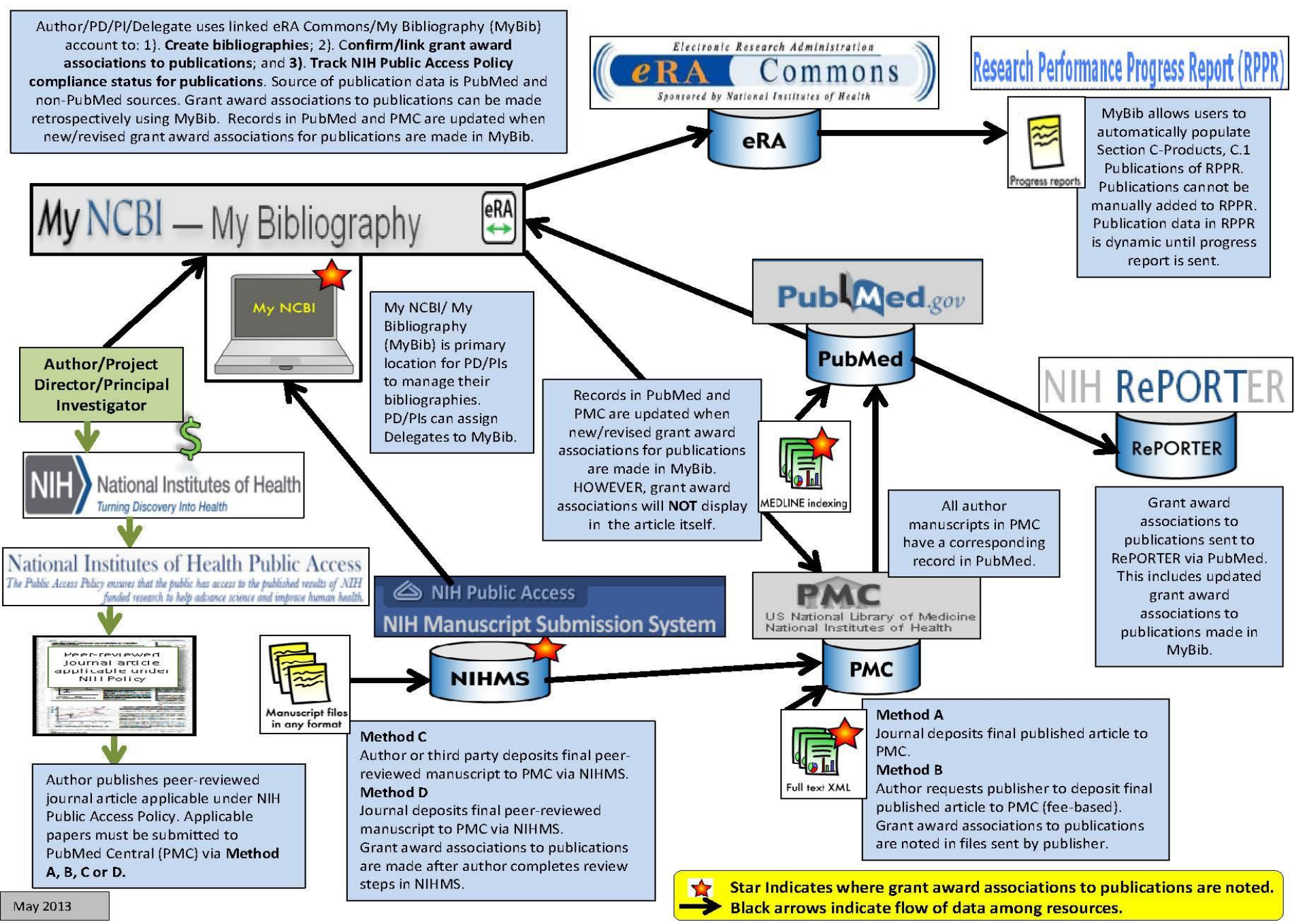




Becker Medical Library wishes to acknowledge Bart Trawick, PhD, National Library of Medicine (NLM), for his inspiration and review of the chart, and allowing use of graphics from NLM.

Have questions? Contact Cathy Sarli.

BERNARD BECKER MEDICAL LIBRARY



Becker Medical Library wishes to acknowledge Bart Trawick, Ph.D., National Library of Medicine (NLM), for his inspiration and review of the chart and allowing use of graphics from NLM. May 2013.

NIH and NSF Biosketches

- What is format of the biosketches for NIH and NSF?
- What are the new requirements for the biosketches?
- What resources are available to create biosketches?
- How do we know what to look for when creating biosketches?

New NIH Biosketch Format

http://grants.nih.gov/grants/guide/notice-files/NOT-OD-15-032.html

- Section A – Personal Statement, can now include up to four peer reviewed publications
- Section B – Positions & Honors, No change
- Section C – Contributions to Science, new section (replaces previous section of just 15 publications):
  - Include up to five contributions of up to ½ page each
    - For each, indicate the historical background that frames the scientific problem; the central findings(s); the influence of the finding(s) on the progress of science or the application of those finding(s) to health or technology; and your specific role in the described work.
    - Within each contribution, include up to 4 peer reviewed publications or other non-publication research products that are relevant to the contribution.
    - Provide a URL to a full list of the published work
- Section D – Research Support, no change
- NIH will accept the old format until May 25

Advantages

- Gives the opportunity to explain personal circumstances
- Descriptions can be accompanied by a listing of up to four relevant peer-reviewed publications or other non-publication research products
- Researchers will be allowed to include a link to a full list of their published work such as MyBibliography or SciENcv

For more information, go to:
http://grants.nih.gov/grants/guide/notice-files/NOT-OD-15-032.html#sthash.HxJTieRp.dpuf

NIH

Frequently Asked Questions Biosketches

1. **Is there a specific format that must be used for biosketches in NIH competing applications?**
   The NIH required format for biosketches announced December 2014 (NOT-O -15-03) can be found in the biosketch section of the SF424 (R&R) Application and Electronic Submission Information page.

   Applicants are encouraged to use the new format immediately for all grant and cooperative agreement. The new format is required for due dates on or after May 25, 2015.

   In addition to the standard biosketch format, NIH also has a Fellowship-specific format for individual predoctoral and postdoctoral fellowships, dissertation research grants (R36), and Research Supplements to Promote Diversity in Health-Related Research (Admin Suppl).

   Note: Applicants submitting early for due dates on/after May 25, 2015 still must use the new format.

2. **What biosketch format should be used in RPPR non-competing progress reports?** The new biosketch format announced in NOT-OD-15-032 applies to both competing applications and non-competing progress reports.

   Per the NIH and Other PHS Agency Research Performance Progress Report (RPPR) Instruction Guide, follow the biosketch instructions in the competing application guide and provide active other support for all new senior/key personnel. Combine all biosketches and other support into a single PDF.

3. **Do biosketches in NIH applications have a page limit?**
   NOT-OD-15-032 indicates that applicants have the choice of using the old or new biosketch format for due dates prior to May 25, 2015.

   The page limits are linked to the format used. Biosketches using the old format are limited to 4 pages. Biosketches using the new format are limited to 5 pages.

   See Table of Page Limits for details and exceptions

4. **Where can I find sample biosketches?**
   Sample biosketches can be found on the SF424 (R&R Application and Electronic Submission Information forms page.

   'Old format' samples (may be used prior to May 25, 2015)
   - General
   - Fellowship

   'New format' samples (must be used on/after May 25, 2015)
   - General
   - Fellowship - Predoctoral
   - Fellowship – Postdoctoral

5. **Can I include links in my biosketch attachments?**
   The biosketch format in place for applications to due dates May 25, 2015 and beyond (NOT-OD-15-032) allows applicants to include a link to a full list of their published work (both peer-reviewed, non-peer reviewed and accepted for publication) as found in a publicly available digital database such as My Bibliography. No other links are allowed within the biosketch.

   When including an active/clickable link to published work in your biosketch, spell the URL out in full, beginning with 'http://' (e.g., http://grants.nih.gov/grants/oer.htm). Do not include the link as hyperlinked text (e.g., NIH Grants Web page) as eRA system processing will not retain the active link behind the hyperlinked text in the assembled application image in eRA Commons.

   Web links should not be included in other areas of the application such as the specific aims and research strategy attachments.

6. **Is a link to a full list of published work required in the new biosketch format?** No. The link to a full list of published work as found in a publicly available digital database such as MyBibliography is allowed, but not required.

7. **Is it acceptable to use 'et al' in citations?**
   Applicants may use 'et al' in lieu of listing all authors in a citation.

8. **Should the biosketch format pages be used for all types of applications and grant mechanisms?**
   The format pages apply to all types of grant applications and cooperative agreements (New, Resubmission, Renewal, Revision) and grant mechanisms (research, training, fellowships, etc.).

9. Can I use the new biosketch format for due dates prior to May 25, 2015?

Per NOT-OD-15-032, we encourage applicants to use the new format prior to May 25, 2015 though it isn't required until May 25, 2015.

Applicants submitting under the continuous submission policy have the option of using the new format for submissions made prior to May 25, 2015 and must use the new format for submissions made on/after May 25, 2015.

10. Prior to May 25, 2015, can an application include biosketches with a mix of old and new formats?

Yes, during the transition period a mix of biosketch formats is acceptable. As of May 25, 2015 all biosketches must use the new format.

11. What meets the criteria for a "publicly available digital database" to list all an applicant's published work, as mentioned in NOT-OD-15-032?

Per NOT-OD-15-032, the new biosketch format allows applicants to include a link to a full list of their published work as found in a "publicly available digital database" such as MyBibliography.

NIH cautions reviewers against accessing URLs that may compromise their anonymity. The NIH prefers applicants use MyBibliography because the NIH can assure reviewers that their anonymity will be protected if they review publications at that site.

Use of publicly available sites other than MyBibliography is at the discretion of the applicant and not typically cause for preventing an application from moving on to review. Any provided site must be accessible to the general public without registration.

12. Can I update a biosketch post-submission to include new articles just accepted for publication or non-traditional application materials not previously available?

No. A new biosketch attachment is only allowed post-submission if it is related to a change in senior/key personnel due to the hiring, replacement or loss of an investigator. When allowed, the new format must be used on/after May 25, 2015.

Under some circumstances, news of a late-breaking article can be submitted following the guidelines in the Post-Submission Application Materials policy (see NOT-OD-13-030).
The desire to update a biosketch to include videos, products, and other non-traditional application materials (even if those materials became available after submission) are not appropriate as post-submission materials. The intention to submit those materials must be specified in the original application submission according to the instructions in NOT-OD-12- 141.

13. Does the PD/PI need to be an author on a publication used to reference a contribution to science?

No, the publication does not need to be their own. It is up to the applicant to describe their contributions. Listing a key publication that builds on their work is one way of doing so.

14. Is there a tool that can help me prepare my biosketch in the NIH format?

The Science Experts Network Curriculum Vitae (SciENcv), which serves as an interagency system designed to create biosketches for multiple federal agencies, supports the new NIH biosketch formats. Within SciENcv, you can easily transform an existing biosketch from one format to another (e.g. old NIH format to new NIH format, NIH format to NSF format).
See technical bulletin for details.

A YouTube video provides instructions for using SciENcv.

15. Is the use of SciENcv required?

Not at this time.
Although SciENcv can be used to create biosketches in the NIH format, applicants can also use other programs to create NIH formatted biosketches and convert them to PDF format on their own.

16. Are the DOI (Digital Object Identifier), PMID (PubMed reference number), and PMCID (PubMed Central reference number) required with each reference in the biosketch?

NIH does not require a DOI (Digital Object Identifier) or PMID (PubMed reference number) with each reference in the biosketch. However, NIH does require a PMCID or other evidence of compliance with the public access policy for papers that fall under the policy. Please see http://publicaccess.nih.gov/include-pmcid-citations.htm for more details.

NIH encourages applicants to use SciENcv (http://www.ncbi.nlm.nih.gov/sciencv/) to generate their biosketches. SciENcv quickly formats everything, including citations, according to NIH rules.

17. **What application submission validations will eRA systems enforce for biosketches?**

eRA systems only validate that a biosketch is attached for each and every Sr/Key person listed in the application and that each biosketch is less than or equal to 5 pages and in PDF format.

Failure to meet any of these conditions will result in a submission error preventing your application from moving forward to NIH for consideration.

NSF Biosketch

http://www.nsf.gov/pubs/policydocs/pappguide/nsf15001/sigchanges.jsp

A. Professional Preparation

- In chronological order (lowest degree to highest degree)
- Include undergrad, grad and postdoc institution, location major, and degree and year

B. Appointments

- Reverse Chronological Order – current position should be **first** in the list

C. Products

- *Five* closely related
- *Five additional significant publications*
- Each product must include **full** citation information including names of *all* authors (et al. should not be used).

NOTE: if only publications are listed, heading can be "Publications" rather than "Products"

D. Synergistic Activities

- *Five* examples

E. Collaborators and Other Affiliations

- Collaborators and Co-Editors – current or within the 48 months preceding the submission of the proposal – must be in alphabetical order and include current organizational affiliation.

*Total number of collaborators and co-editors must be identified

- Graduate Advisors and Postdoctoral Sponsors – include name and current organizational affiliation

*Total number of graduate advisors and postdoctoral sponsors must be identified

- Thesis Advisor and Postgraduate-Scholar Sponsor – within last 5 years – include name and organizational affiliation

*Total number of graduate students advised and postdocs sponsor must be identified

*If a PI does not have one/any/all of these, they must state so.

LIMITED TO 2 PAGES UNLESS SOLICITATION SAYS OTHERWISE

For Postdocs, Other Professionals and Students (RAs), the proposal also may include information on exceptional qualifications that merit consideration in the evaluation of the proposal. Such information should be clearly identified as "Other Personnel" biographical information and uploaded along with the Biosketches for Senior Personnel in the Biosketches section of the proposal.

NSF -
Frequently Asked Questions Biosketches

1. Is there a specific format that must be used for biosketches in NSF applications?

The NSF required format for biosketches announced December 26, 2014 (NSF 15-1) can be found in the biosketch section of the GPG section II.f.

2. Do biosketches in NSF applications have a page limit?

The biosketch is limited to 2 pages, unless specified differently in the solicitation. If the Collaborator section makes the biosketch longer than 2 pages you must contact the Program Director.

3. Is there a specific format that must be used for biosketches in NSF applications?

The NSF required format for biosketches announced December 26, 2014 (NSF 15-1) can be found in the biosketch section of the GPG section II.f.

4. Do biosketches in NSF applications have a page limit?

The biosketch is limited to 2 pages, unless specified differently in the solicitation.

5. Is there a tool that can help me prepare my biosketch in the NSF format?

The Science Experts Network Curriculum Vitae (SciENcv), which serves as an interagency system designed to create biosketches for multiple federal agencies, supports the NSF biosketch format. Within SciENcv, you can easily transform an existing biosketch from one format to another (e.g. old NIH format to new NIH format, NIH format to NSF format).
See technical bulletin for details. A YouTube video provides instructions for using SciENcv.

6. Is the use of SciENcv required?

Not at this time.
Although SciENcv can be used to create biosketches in the NSF format, applicants can also use other programs to create NSF formated biosketches and convert them to PDF format on thier own.

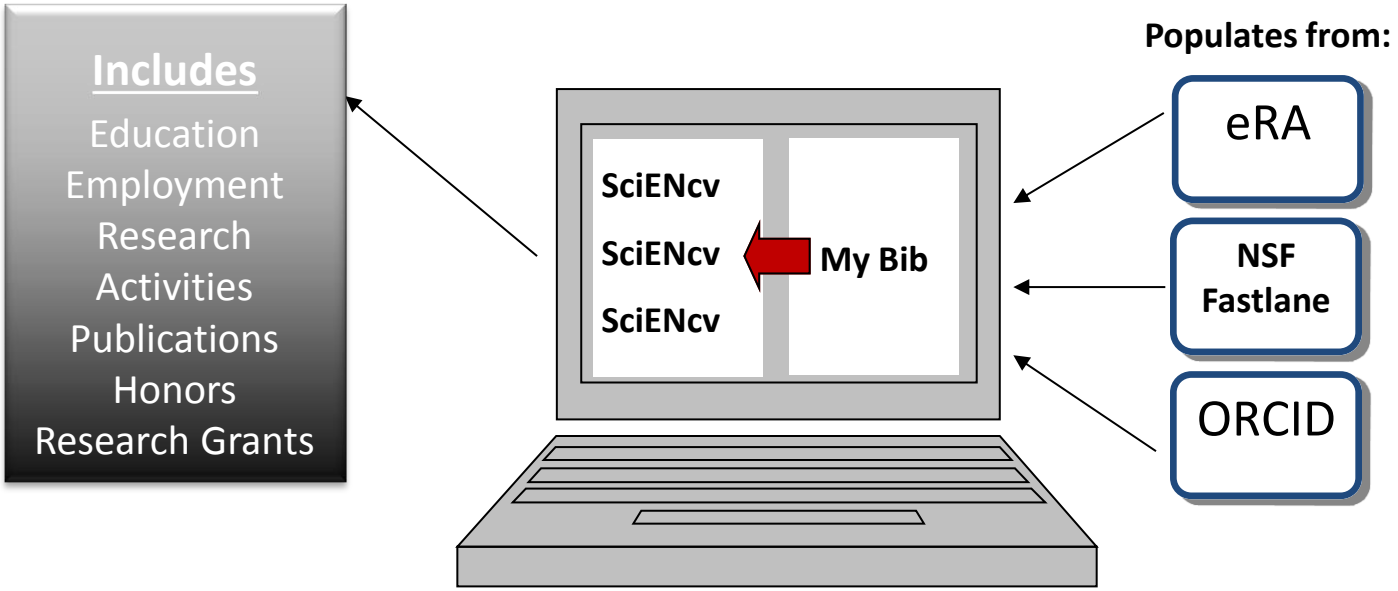
7. Do I need to list all of my collaborators?

No, only the ones during the 48 months preceding the submission of the proposal, but you must provide the total number of collaborators and co-editors. The organizational affiliate also must be listed. Your solicitation may override this section.

8. Do I need to list all of my thesis advisor and postgraduate-scholars?

Only the ones during the last 5 years. Include name and organizational affiliation. Total number of graduate students advised and postdocs sponsor must be identified.

SciENcv- Tool for Creating NIH and NSF Biosketches



Three ways to create a professional profile in SciENcv:

- Through manually entering your information into a SciENcv template
- Through an automated data feed from an external source
- Through making a duplicate of an existing profile

Link on how to use SciENcv:

http://www.ncbi.nlm.nih.gov/books/NBK154494/#sciencv.Using_the_NSF_Biographical_Sketch

OMB No. 0925-0001/0002 (Rev. 08/12 Approved Through 8/31/2015)

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.

Follow this format for each person. DO NOT EXCEED FIVE PAGES.

NAME: RIORDAN, CHARLES G.

eRA COMMONS USER NAME (agency login): CRIORDAN

POSITION TITLE: Deputy Provost for Research and Scholarship

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.)*

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
College of the Holy Cross	BA	06/1986	Chemistry
Texas A&M University	PHD	12/1990	Inorganic Chemistry
University of Chicago	Postdoctoral Fellow	1992	Chemistry

A. PERSONAL STATEMENT

I will serve as a Steering Committee Member for the Biomaterials COBRE Phase III. I am the Deputy Provost for Research and Scholarship at the University of Delaware. I have been involved in the Biomaterials COBRE since its inception in 2002, when I was the Chair of the Department of Chemistry and Biochemistry. Biomaterials COBRE has been instrumental for the development of research infrastructure and faculty on campus, during the highly successful Phase I and II of the grant. I am very excited that the Center is entering Phase III, and am looking forward to serving on the Steering Committee.

As Deputy Provost for Research and Scholarship, I have oversight responsibilities for the research enterprise at the University, working collaboratively with the President, Provost, Deans and faculty members to set the University's strategic research priorities and managing the University's capital research assets. Five University-wide research institutes report directly to my office. Prior to my current appointment, I served as the Vice Provost for Graduate and Professional Education.

In this capacity I was responsible for campus-wide graduate student education including developing policies, initiating new programs, allocating University funding resources, etc. Initiatives included expanding professional development programming for graduate students, developing a funded parental accommodation (leave) policy for graduate students and significantly enriching the benefits in the graduate student health insurance program. I have served as PI on NSF and/or NIH funded programs for almost twenty years with my research focus in synthetic and mechanistic inorganic chemistry and their application to bioinorganic chemistry, i.e. biomimetic models of active sites in nickel-containing proteins and bioinspired oxidations promoted by understanding nickel-dioxygen reactivity. During my independent career eleven students have completed doctoral studies in my laboratory, ten postdoctoral associates and ~two dozen undergraduates have been mentored. I served as a regular member and chair (3 years) of the MSF-A Study Section in the NIGMS. I am involved in a campus-wide faculty recruiting and mentoring initiative funded by the NSF ADVANCE program aimed at increasing the number of women (and extending to under-represented minorities) among STEM faculty. Among our activities are the presentation of best practice workshops to faculty and administrative leaders (deans, dept. chairs, and search cmte chairs) across campus involved in faculty recruiting and mentoring. I continue to apply the best practices lessons learned from the ADVANCE work to inform my administrative leadership and graduate student mentoring activities.

1. Kieber-Emmons MT, Riordan CG. Dioxygen activation at monovalent nickel. Acc Chem Res. 2007 Jul;40(7):618-25. PubMed PMID: 17518438.
2. Eckert NA, Dougherty WG, Yap GP, Riordan CG. Methyl transfer from methylcobaloxime to (triphos)Ni(PPh(3)): relevance to the mechanism of acetyl coenzyme A synthase. J Am Chem Soc. 2007 Aug 1;129(30):9286-7. PubMed PMID: 17622143.
3. Dougherty WG, Rangan K, O'Hagan MJ, Yap GP, Riordan CG. Binuclear complexes containing a methylnickel moiety: relevance to organonickel intermediates in acetyl coenzyme A synthase catalysis. J Am Chem Soc. 2008 Oct 15;130(41):13510-1. PubMed PMID: 18800791; PubMed Central PMCID: PMC2649800.
4. Ariyananda PW, Kieber-Emmons MT, Yap GP, Riordan CG. Synthetic analogs for evaluating the influence of N-H...S hydrogen bonds on the

formation of thioester in acetyl coenzyme A synthase. Dalton Trans. 2009 Jun 14;PubMed PMID: 19662314; PubMed Central PMCID: PMC3650029.

B. POSITIONS AND HONORS

Positions and Employment

1993 - 1997	Assistant Professor, Department of Chemistry, Kansas State University
1994 - 1997	Graduate Faculty, Department of Biochemistry, Kansas State University
1997 - 2001	Associate Professor, Department of Chemistry and Biochemistry, University of Delaware
1999 - 2002	Director of Graduate Studies and Assistant Chair, Department of Chemistry and Biochemistry, University of Delaware
2001 -	Professor, Department of Chemistry and Biochemistry, University of Delaware
2002 - 2007	Chair, Department of Chemistry and Biochemistry, University of Delaware
2010 - 2013	Vice Provost for Graduate and Professional Education , University of Delaware
2012 - 2014	Vice Provost for Research, University of Delaware
2014 -	Deputy Provost for Research and Scholarship, University of Delaware

Other Experience and Professional Memberships

-	Member, American Chemical Society, American Institute of Chemists, Phi Lambda Upsilon, Sigma Xi, American Association for the Advancement of Science, Society of Biological Inorganic Chemistry
1988 - 1990	President, Beta Beta Chapter
1988 - 1990	President, Phi Lambda Upsilon National Chemistry Honor Society, Texas A&M University
1994 -	Vice Chair, Kansas State Local Section of ACS
1995 -	Chair, Kansas State Local Section of ACS
1997 -	Member, NSF CAREER Awards Review Panel (Inorganic, Organometallic and Bioinorganic)
1998 -	Member, NSF-NATO Postdoctoral Fellowships Panel
2000 - 2002	Ad Hoc Member, NIH Metallobiochemistry Study Section
2000 - 2002	Editorial Advisory Board, Inorganic Chemistry
2002 - 2003	Chair-Elect and Chair, Bioinorganic Subdivision, Division of Inorganic Chemistry, American Chemical Society
2004 -	Guest Editor, Journal of Biological Inorganic Chemistry, Series of Mini-reviews on acetyl coenzyme A synthase
2004 -	Member, International Organizing Committee, International Conference on Coordination Chemistry (ICCC-36), Merida, Mexico
2005 -	Ad Hoc Member, NIH Macromolecular Structure and Function- A Study Section
2006 - 2010	Member, Chair, NIH Macromolecular Structure and Function- A Study Section
2007 - 2010	Editorial Advisory Board, Current Chemical Biology
2007 - 2011	Secretary, Society for Biological Inorganic Chemistry
2007 - 2012	Editorial Board, Dalton Transactions
2008 -	Local Organizing Committee Member, International Symposium on Bioorganometallic Chemistry
2008 - 2010	Editorial Advisory Board, Journal of Biological Inorganic Chemistry

Honors

1986	American Institute of Chemists Award, College of the Holy Cross
1988	Travel Grant Award, Phi Lambda Upsilon
1988	Travel Grant Award, Arthur E. Martell
1990	Department of Chemistry Inorganic Research Award, Sponsored by the American Chemical Society, Texas A&M University
1990	Sharon Dabney Memorial Graduate Research Award, Sponsored by Phi Lambda Upsilon, Texas A&M University
1994	Young Investigator, National Science Foundation
2003	Karcher Lecturer, University of Oklahoma
2005	Elected Fellow, Academy of Distinguished Former Students,

College of Science, Texas A&M University

2006 Visiting Lecturer, Chemistry Research Promotion Center, Taiwan

2008 Doctoral Mentoring and Advising Award, University of Delaware

2010 Fellow, Royal Society of Chemistry

2013 Fellow, American Academy of the Advancement of Science (AAAS)

2013 Delaware Section Award, American Chemical Society

C. Contribution to Science

Up to 5 contributions

1. For each entry provide the historical background that frames the scientific problem; the central finding(s); the influence of the finding(s) on the progress of science or the application of those finding(s) to health or technology; and your specific role in the described work.
   a. Popescu CV, Mock MT, Stoian SA, Dougherty WG, Yap GP, et al. A high-spin organometallic Fe-S compound: structural and Mössbauer spectroscopic studies of [phenyltris((tert-butylthio)methyl)borate]Fe(Me). Inorg Chem. 2009 Sep 7;48(17):8317-24. PubMed PMID: 19642622.
2. For each, indicate the historical background that frames the scientific problem; the central finding(s); the influence of the finding(s) on the progress of science or the application of those finding(s) to health or technology; and your specific role in the described work.
   a. Van Heuvelen KM, Kieber-Emmons MT, Riordan CG, Brunold TC. Spectroscopic and computational studies of a trans-mu-1,2-disulfido-bridged dinickel species, [{(tmc)Ni}(2)(S(2))](OTf)(2): comparison of end-on disulfido and peroxo bonding in (Ni(II))(2) and (Cu(II))(2) species. Inorg Chem. 2010 Apr 5;49(7):3104-12. PubMed PMID: 20199095.
   b. Van Heuvelen KM, Cho J, Dingee T, Riordan CG, Brunold TC. Spectroscopic and computational studies of a series of high-spin Ni(II) thiolate complexes. Inorg Chem. 2010 Jul 19;49(14):6535-44. PubMed PMID: 20565082; PubMed Central PMCID: PMC2914102.
3. For each, indicate the historical background that frames the scientific problem; the central finding(s); the influence of the finding(s) on the progress of science or the application of those finding(s) to health or technology; and your specific role in the described work.
   a. Wallick J, Riordan CG, Yap GP. C-H activation by a diselenido dinickel(II) complex. J Am Chem Soc. 2013 Oct 9;135(40):14972-4. PubMed PMID: 24067023.
   b. Wang P, Yap GP, Riordan CG. Five-coordinate M(II)-semiquinonate (M = Fe, Mn, Co) complexes: reactivity models of the catechol dioxygenases. Chem Commun (Camb). 2014 Jun 4;50(44):5871-3. PubMed PMID: 24756105.
4. For each, indicate the historical background that frames the scientific problem; the central finding(s); the influence of the finding(s) on the progress of science or the application of those finding(s) to health or technology; and your specific role in the described work.
   a. Wallick JL, Riordan CG, Yap GP. Acetate and acetamide complexes of [Ni(Me4[12]aneN4)]PF6: a tale of two ligands. Acta Crystallogr C Struct Chem. 2014 Jul;70(Pt 7):640-3. PubMed PMID: 24992102.

Complete List of Published Work in My Bibliography:
http://www.ncbi.nlm.nih.gov/myncbi/charles.riordan.1/bibliography/47256443/public/?sort=date&direction=ascending

Full URL

D. RESEARCH SUPPORT

Ongoing Research Support

2012/09/01-2015/08/31

1229234, National Science Foundation

RIORDAN, CHARLES G. (PI)

MRI: Acquisition of a High Resolution Mass Spectrometer for Small Molecule Analysis

This MRI award brings a new mass spectrometer with exact mass and liquid injection field desorption ionization (LIFDI) for small molecule analysis to the Department of Chemistry & Biochemistry.

Role: PI

2013	Fellow, American Academy of the Advancement of Science (AAAS)
2013	Delaware Section Award, American Chemical Society

add another entry

C. Contribution to Science [Done]

Add another contribution

1 | 2 | 3 | 4

Delete this contribution

Description edit

For each entry provide the historical background that frames the scientific problem; the central finding(s); the influence of the finding(s) on the progress of science or the application of those finding(s) to health or technology; and your specific role in the described work.

Citations [Select citations]

a. Popescu CV, Mock MT, Stoian SA, Dougherty WG, Yap GP, Riordan CG. A high-spin organometallic Fe-S compound: structural and Mössbauer spectroscopic studies of [phenyltris((tert-butylthio)methyl)borate]Fe(Me). Inorg Chem. 2009 Sep 7;48(17):8317-24. PubMed PMID: 19642622.

☑ Include link to complete list of published work in My Bibliography.
(Selecting this option will make the list public.)

D. RESEARCH SUPPORT [Edit awards]

Ongoing Research Support

2012/09/01-2015/08/31
1229234, National Science Foundation
RIORDAN, CHARLES G. (PI)
MRI: Acquisition of a High Resolution Mass Spectrometer for Small Molecule Analysis

NSF BIOGRAPHICAL SKETCH

NAME: Sparks, Donald L.

POSITION TITLE & INSTITUTION: S. Hallock du Pont Chair, Director, Delaware Environmental Institute (DENIN), University of Delaware, Newark DE 19711; Phone: 302-831-4335; Email: dlsparks@udel.edu

A. PROFESSIONAL PREPARATION

INSTITUTION	LOCATION	MAJOR / AREA OF STUDY	DEGREE (if applicable)	YEAR YYYY
University of Kentucky	Lexington, KY	Soil Science	BS	1975
University of Kentucky	Lexington, KY	Soil Chemistry	MS	1976
Virginia Polytechnic Institute & State University	Blacksburg, VA	Soil Chemistry	PHD	1979

B. APPOINTMENTS

2009 -	Director, Delaware Environmental Insitute, University of Delaware, Newark, DE
2002 -	S.Hallock du Pont Chair, University of Delaware, Newark, DE
2001 - 2002	T.A. Baker Professor, Plant and Soil Sciences, University of Delaware, Newark, DE
1996 -	Francis Allison Professor, University of Delaware, Newark, DE
1994 - 2001	Distinguished Professor, University of Delaware, Newark, DE
1989 - 2008	Department Chair, Plant and Soil Sciences, University of Delaware, Newark, DE Professor
1987 -	of Plant and Soil Sciences, Civil and Environmental Engineering, Chemistry and Biochemistry, and Marine Science and Policy, University of Delaware, Newark, DE Visiting
1985 - 1986	Associate Professor, University of California, Riverside, CA
1983 - 1987	Associate Professor of Soil Chemistry, University of Delaware, Newark, DE
1979 - 1983	Assistant Professor, Soil Chemistry, University of Delaware, Newark, DE

C. PRODUCTS

PRODUCTS MOST CLOSELY RELATED TO THE PROPOSED PROJECT

1. Landrot G, Ginder-Vogel M, Livi K, Fitts JP, Sparks DL. Chromium(III) oxidation by three poorly crystalline manganese(IV) oxides. 2. Solid phase analyses. Environ Sci Technol. 2012 Nov 6;46(21):11601-9. PubMed PMID: 23050862.
2. Chen C, Dynes JJ, Wang J, Karunakaran C, Sparks DL. Soft X-ray spectromicroscopy study of mineral-organic matter associations in pasture soil clay fractions. Environ Sci Technol. 2014 Jun 17;48(12):6678-86. PubMed PMID: 24837340.
3. Siebecker M, Li W, Khalid S, Sparks D. Real-time QEXAFS spectroscopy measures rapid precipitate formation at the mineral-water interface. Nat Commun. 2014 Sep 19;5:5003. PubMed PMID: 25233849.
4. Chen C, Sparks DL. Multi-elemental scanning transmission X-ray microscopy-near edge X-ray absorption fine structure spectroscopic assessment of organo-mineral associations in soils from reduced environments. Environmental Chemistry. 2014 September 29; 12(1):64.
5. Chen C, Dynes JJ, Wang J, Sparks DL. Properties of Fe-organic matter associations via coprecipitation versus adsorption. Environ Sci Technol. 2014 Dec 2;48(23):13751-9. PubMed PMID: 25350793.

OTHER SIGNIFICANT PRODUCTS, WHETHER OR NOT RELATED TO THE PROPOSED PROJECT

1. Sparks DL. Kinetics of soil chemical processes. New York: Academic Press; 1989. 210p.
2. Sparks DL. Environmental soil chemistry. 2nd edition. San Diego, CA: Academic Press; 2002. 352p.
3. Hochella MF Jr, Lower SK, Maurice PA, Penn RL, Sahai N, Sparks DL, Twining BS. Nanominerals, mineral nanoparticles, and Earth systems. Science. 2008 Mar 21;319(5870):1631-5. PubMed PMID: 18356515.
4. Ginder-Vogel M, Landrot G, Fischel JS, Sparks DL. Quantification of rapid environmental redox processes with quick-scanning x-ray absorption spectroscopy (Q-XAS). Proc Natl Acad Sci U S A. 2009 Sep 22;106(38):16124-8. PubMed PMID: 19805269; PubMed Central PMCID: PMC2741480.
5. Landrot G, Ginder-Vogel M, Livi K, Fitts JP, Sparks DL. Chromium(III) oxidation by three poorly- crystalline manganese(IV) oxides. 1. Chromium(III)-oxidizing capacity. Environ Sci Technol. 2012 Nov 6;46(21): 11594-600. PubMed PMID: 23050871.

D.SYNERGYSTIC ACTIVITIES

1. Chair, National Academy of Sciences U. S. National Committee for Soil Science
2. Past-President, Soil Science Society of America
3. Past President, International Union of Soil Sciences.
4. Director, Delaware Environmental Institute (DENIN)

E.COLLABORATORS & OTHER AFFILIATIONS

COLLABORATORS AND CO-EDITORS

D. Abdala, Brazilian Synchrotron Light Source; Y. Arai, Clemson Univ.; S.J. Billings, Columbia University; W. Caliebe, Hasylab, Germany; T. Centofanti, Univ. of Maryland; R. Chaney, USDA; C. Chen, Univ. DE; B. Chimchart, Kasetsart Univ., Thailand; D.M. Ditoro, Univ. DE; E. Elzinga, ETH, Switzerland; J. Everhart, SPI Polyols; T.T. Fan, Chinese Academy of Science; C.L. Farrow, Columbia Univ., NY; X. Feng, Huazhoing Agricultural Univ., China; J.P. Fitts, Princeton Univ.; A.I. Frenkel, Yeshiva Univ.; M. Ginder- Vogel, Univ. of Wisconsin; G. Hendricks, Univ. DE; E. Iriowen, DE State Univ; C. Jones, Stanford; C. Jonsson, Johns Hopkins; S. Khalid, Brookhaven National Lab; S. Khaokaew, Univ. Kasetsart, Thailand; J. Kubicki, Penn State Univ.; B. Lafferty, US Army Corp of Engineers; A. Lanzirotti, Univ. of Chicago; O. Lazareva, N/A; S. Lee, Univ. of DE; W. Li, Nanjing Univ., China; F. Liu, Huazhong Agricultural Univ., China; K. Livi, Johns Hopkins; H. Michael, Univ. DE; F. Michel, Stony Brook Univ.; M. Newville, Univ. Chicago; P. Northrup, Stony Brook Univ.; F. Ono, Federal Univ. of Lavras, Brazil; W. Pan, Univ. DE; K. Pandya, Brookhaven National Lab; J. Parise, Stony Brook Univ.; K. Paul, Dupont Co.; J.E. Post, Smithsonian Natl Museum of Natural History, Washington DC; C. Shi, Columbia Univ.; Z. Shi, Univ. DE; P. Siddons, Brookhaven National Lab; J. Sonke, National High Magnetic Field Lab; S. Sutton, Univ. Chicago; W. Tan, Huazhong Agricultural Univ., China; R. Tappero, Brookhaven National Lab; Q. Wang, Yeshiva Univ.; X. Wang, Huazhong Agricultural Univ., China; Y. Wang, Chinese Academy of Science; G.A. Waychunas, Lawrence Berkeley National Lab; S.M. Webb, Stanford Synchrotron Radiation Light Source; Y. Wu, Univ. DE; Z. Xu, Zhejiang Univ., China; D.M. Zhou, Chinese Academy of Science; M. Zhu, Univ. Wyoming.

Total Collaborators/Co-Editors:57

GRADUATE ADVISORS AND POSTDOCTORAL SPONSORS

H.H. Bailey, deceased; D.C. Martens, retired; L.W. Zelazny, deceased.

Total Advisors/Sponsors:3

THESIS ADVISOR and POSTGRADUATE-SCHOLAR SPONSOR

D. Abdala, Brazilian Synchrotron Light Source; S. Carter, Geosyntec/Univerisyt of Toronto; C. Chen, Univ. DE; J. Fischel, Univ. DE; M. Fischel, Univ. DE; A. Gamble, Univ. DE; M. Ginder-Vogel, Univ. Wisconsin; A. Givens, Univ. DE; C. Jones, Stanford; S. Khaokaew, Kasetsart Univ., Thailand; B. Lafferty, US Army Corps of Engineers; G. Landrot, Kasetsart Univ., Thailand; O. Lazareva, N/A; J. Lemonte, Univ. DE; W. Li, Nanjing Univ., China; J. Mihailic, Univ. DE; C. Moyer, Mary McDowell Friends School; W. Pan, Univ. DE; J. Seiter, US Army Corps of Engineers; Z. Shi, Univ. DE; M. Shimizu, Univ. Colorado; M. Siebecker, Univ. DE; A. Starcher, Univ. DE; J. Stuckey, Univ. DE; Y. Wu, Capital One; J. Yang, Univ. DE.

Total Advised/Sponsored: 26

Current and Pending (AKA Other Support)

- What is Other Support?
- What is the purpose of the Other Support document?
- Who must provide Other Support and when?
- What is format of the Other Support document
- What is the difference between Active and Pending?

Open Dialogue
How do *you* create
Current & Pending and Other Support?

Project Added Attributes

Generate Project ID | To add a new project, click "Add New Project" button, type in at *least* the short title (feel free to add more data than that) then click "Generate Project ID" | Add New Project | Edit is OFF | Close

Project ID 1007114

Short Title DOE PAPOUTSAKIS

Attributes | Proposals | Accounts | Notes | PIs | Match

Long Title: Experimental Systems-Biology Approaches for Clostridia-Based Bioenergy Production

Total Funding: 2247174 Status: current Sponsor: Department of Energy Award_Number: DE-SC0007092

Start Date: 9/1/2011 End Date: 2/28/2015 Proposal Coordinator: Henriksen

Location of Project: University of Delaware

Major Goals of Project:

Grants Officer

Name | Email

Phone | Fax

Street

City | State | Zip

Program Officer

Name | Email

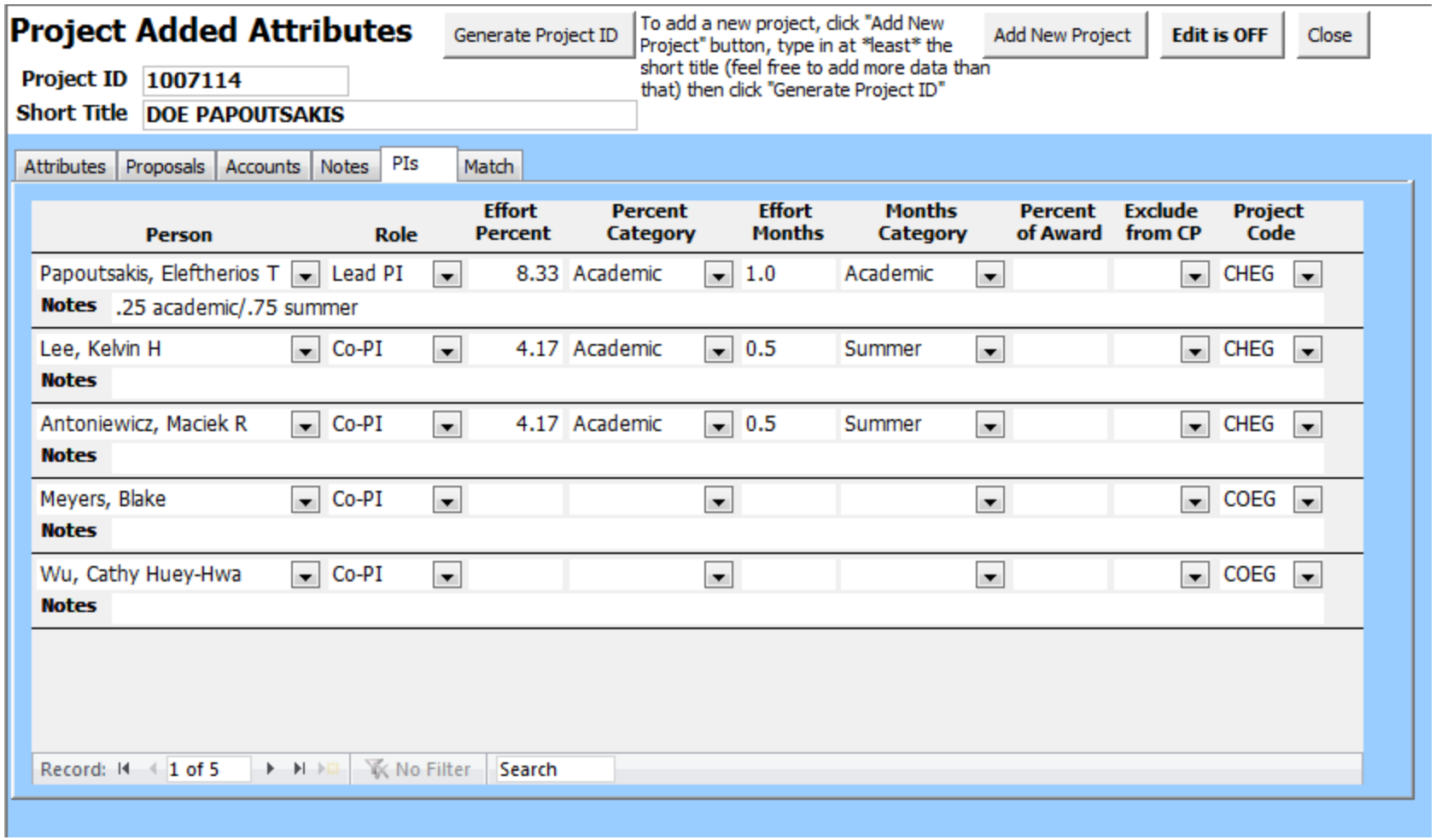
Phone | Fax

Street

City | State | Zip

Last change: LHENRIK 10/28/2014 11:11:41 AM

Project Code: CHEG



COE Business Office has plans to enhance the database to the newest version of Access within the next few months

Current and Pending Support

The following information should be provided for each investigator and other senior personnel. Failure to provide this information may delay consideration of the proposal.

Investigator **Eleftherios T Papoutsakis**	Other agencies to which this proposal has been/will be submitted:

Support: ☑ current ☐ pending ☐ Submission Planned in Near Future ☐ *Transfer of Suppor

Project/Proposal Title

Experimental Systems-Biology Approaches for Clostridia-Based Bioenergy Production

--Co-PIs: CHuey-Hwa Wu, B Meyers, MR Antoniewicz, KH Lee

Source of Support: Department of Energy

Total Award Amount: $2,247,174 Total Award Period Covered: 9/1/2011 - 2/28/2015

Location of Project: University of Delaware

Person-Months Per Year Committed to the Project: Cal: Acad: 1.0 Summ:

Support: ☑ current ☐ pending ☐ Submission Planned in Near Future ☐ *Transfer of Suppor

Project/Proposal Title

SYNTHETIC METHYLOTROPHY TO LIQUID FUEL

--Co-PIs: W Chen, MR Antoniewicz, B Bahnson

Source of Support: Department of Energy

Total Award Amount: $4,500,000 Total Award Period Covered: 1/13/2014 - 1/12/2017

Location of Project: University of Delaware

Person-Months Per Year Committed to the Project: Cal: Acad: 2.35 Summ:

Support: ☐ current ☑ pending ☐ Submission Planned in Near Future ☐ *Transfer of Suppor

Project/Proposal Title

SusChEM: Installing the Wood-Ljungdahl pathway in a clostridium platform organism for enhanced metabolite production

--Co-PIs: MR Antoniewicz

Source of Support: National Science Foundation

Total Award Amount: $630,153 Total Award Period Covered: 5/1/2015 - 4/30/2018

Location of Project: University of Delaware

Person-Months Per Year Committed to the Project: Cal: Acad: Summ: 0.3

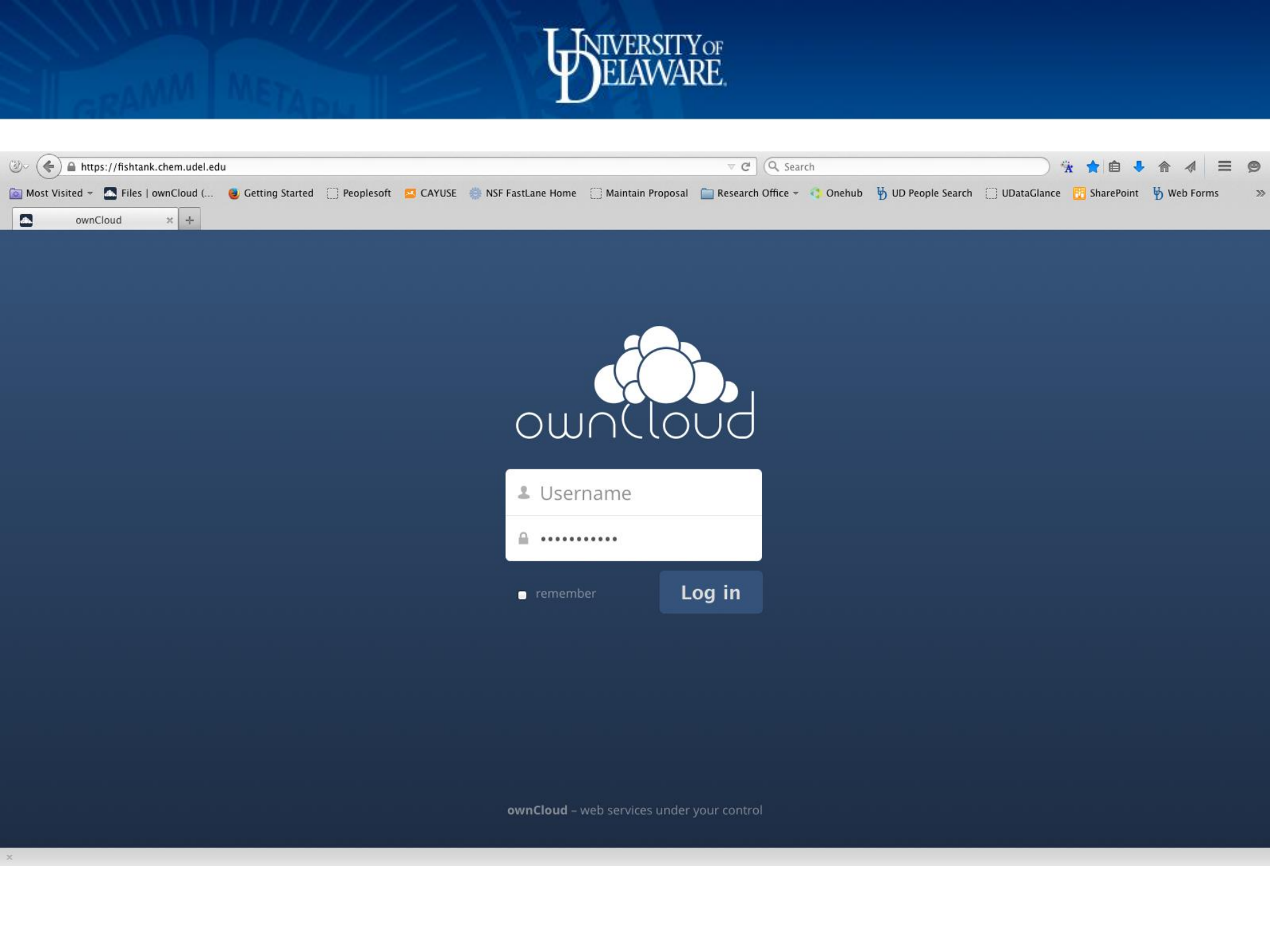
Eleftherios T Papoutsakis

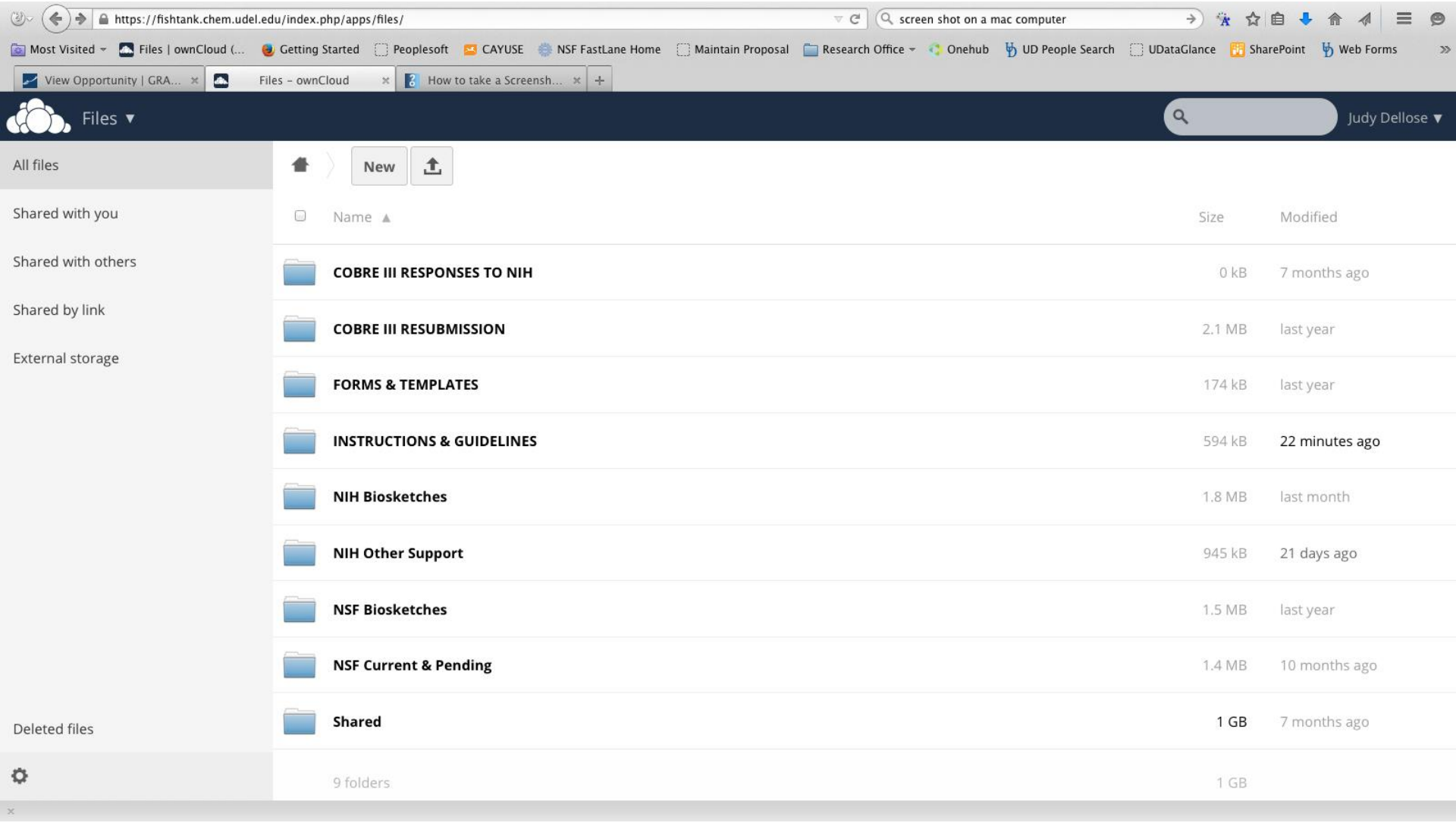
Current and Pending Support

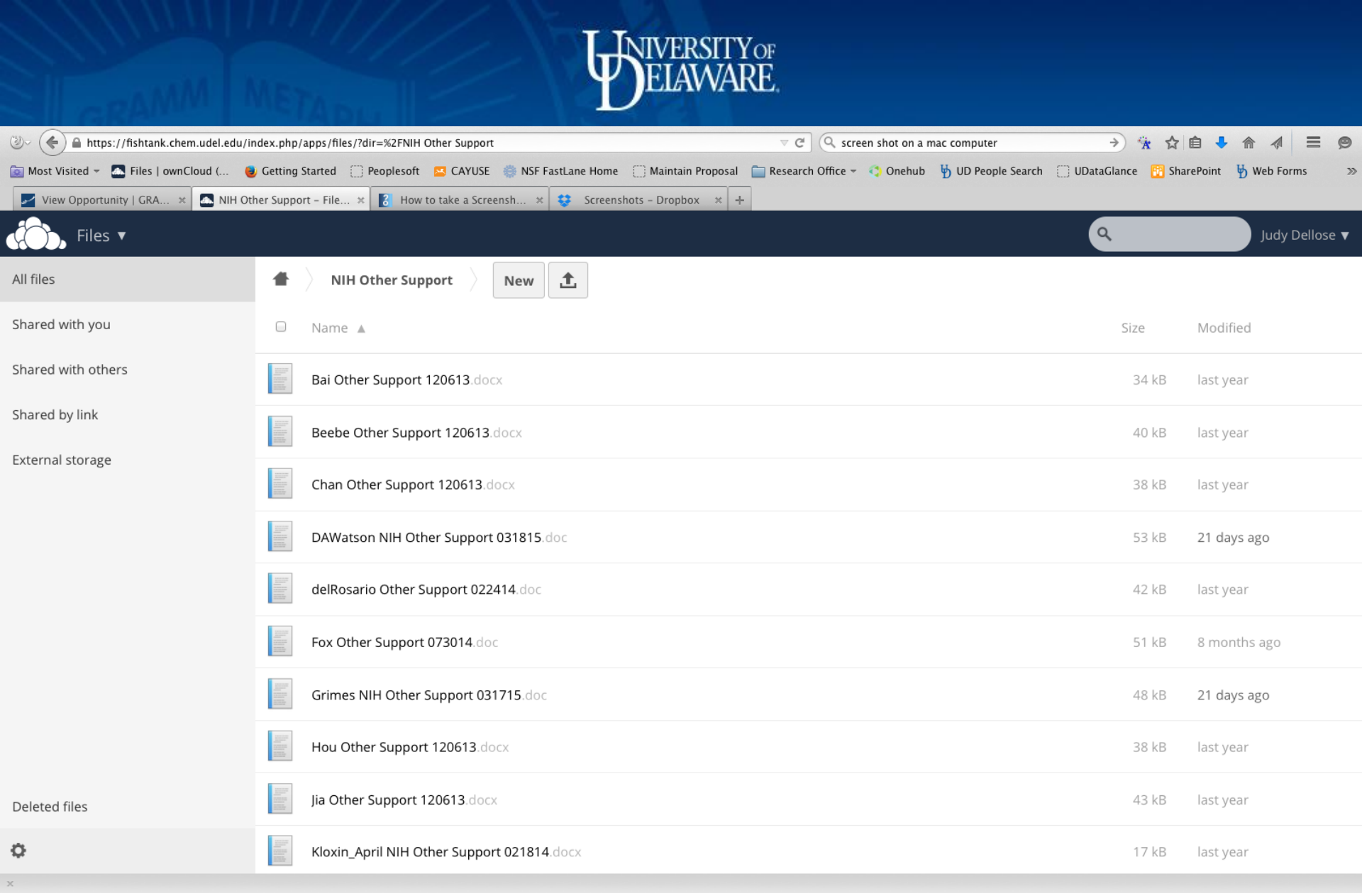
Sponsor	Project Title (1007114)	Award Amount	Avg Annual Direct Cost	Project Period
Department of Energy	Experimental Systems-Biology Approaches for Clostridia-Based Bioenergy Production	$2,247,174	$561,793.50	9/1/2011 - 2/28/2015
Award #	**Co-PIs:**			**Percent Effort**
DE-SC0007092	Maciek R Antoniewicz, Kelvin H Lee, Blake Meyers, Cathy Huey-Hwa Wu			8.33%

Sponsor	Project Title (1013557)	Award Amount	Avg Annual Direct Cost	Project Period
Department of Energy	SYNTHETIC METHYLOTROPHY TO LIQUID FUEL	$4,500,000	$1,500,000.00	1/13/2014 - 1/12/2017
Award #	**Co-PIs:**			**Percent Effort**
DE-AR0000432	Maciek R Antoniewicz, Brian Bahnson, Wilfred Chen			20.9%

Sponsor	Project Title (1017380)	Award Amount	Avg Annual Direct Cost	Project Period
National Science Foundation	SusChEM: Installing the Wood-Ljungdahl pathway in a clostridium platform organism for enhanced metabolite production	$630,153	$210,051.00	5/1/2015 - 4/30/2018
Award #	**Co-PIs:**			**Percent Effort**
pending	Maciek R Antoniewicz			2.5%


UNIVERSITY OF DELAWARE
https://fishtank.chem.udel.edu
Search
Most Visited
Files | ownCloud (...
Getting Started
Peoplesoft
CAYUSE
NSF FastLane Home
Maintain Proposal
Research Office
Onehub
UD People Search
UDataGlance
SharePoint
Web Forms
ownCloud
ownCloud
Username
remember
Log in
ownCloud – web services under your control


https://fishtank.chem.udel.edu/index.php/apps/files/
screen shot on a mac computer
Most Visited
Files | ownCloud (...
Getting Started
Peoplesoft
CAYUSE
NSF FastLane Home
Maintain Proposal
Research Office
Onehub
UD People Search
UDataGlance
SharePoint
Web Forms
View Opportunity | GRA...
Files - ownCloud
How to take a Screensh...
Files
Judy Dellose
All files
Shared with you
Shared with others
Shared by link
External storage
Deleted files
New
Name
Size
Modified
COBRE III RESPONSES TO NIH 0 kB 7 months ago
COBRE III RESUBMISSION 2.1 MB last year
FORMS & TEMPLATES 174 kB last year
INSTRUCTIONS & GUIDELINES 594 kB 22 minutes ago
NIH Biosketches 1.8 MB last month
NIH Other Support 945 kB 21 days ago
NSF Biosketches 1.5 MB last year
NSF Current & Pending 1.4 MB 10 months ago
Shared 1 GB 7 months ago
9 folders 1 GB


UNIVERSITY OF DELAWARE
https://fishtank.chem.udel.edu/index.php/apps/files/?dir=%2FNIH Other Support
screen shot on a mac computer
Most Visited
Files | ownCloud (...
Getting Started
Peoplesoft
CAYUSE
NSF FastLane Home
Maintain Proposal
Research Office
Onehub
UD People Search
UDataGlance
SharePoint
Web Forms
View Opportunity | GRA...
NIH Other Support - File...
How to take a Screensh...
Screenshots - Dropbox
Files
Judy Dellose
All files
Shared with you
Shared with others
Shared by link
External storage
Deleted files
NIH Other Support
New
Name
Size
Modified
Bai Other Support 120613.docx 34 kB last year
Beebe Other Support 120613.docx 40 kB last year
Chan Other Support 120613.docx 38 kB last year
DAWatson NIH Other Support 031815.doc 53 kB 21 days ago
delRosario Other Support 022414.doc 42 kB last year
Fox Other Support 073014.doc 51 kB 8 months ago
Grimes NIH Other Support 031715.doc 48 kB 21 days ago
Hou Other Support 120613.docx 38 kB last year
Jia Other Support 120613.docx 43 kB last year
Kloxin_April NIH Other Support 021814.docx 17 kB last year

For New and Renewal Applications (PHS 398) – DO NOT SUBMIT UNLESS REQUESTED
For Non-competing Progress Reports (PHS 2590) – Submit only Active Support for Key Personnel

PHS 398/2590 OTHER SUPPORT

Provide active support for all key personnel. **Other Support includes all financial resources, whether Federal, non-Federal, commercial or institutional, available in direct support of an individual's research endeavors, including but not limited to research grants, cooperative agreements, contracts, and/or institutional awards.** Training awards, prizes, or gifts do not need to be included.

There is no "form page" for other support. Information on other support should be provided in the *format* shown below, using continuation pages as necessary. ***Include the principal investigator's name at the top and number consecutively with the rest of the application.*** The sample below is intended to provide guidance regarding the type and extent of information requested.
For instructions and information pertaining to the use of and policy for other support, see Other Support in the PHS 398 Part III, Policies, Assurances, Definitions, and Other Information.
Note effort devoted to projects must now be measured using person months. Indicate calendar, academic, and/or summer months associated with each project.

Format

NAME OF INDIVIDUAL ACTIVE/PENDING		
Project Number (Principal Investigator) Source Title of Project *(or Subproject)* The major goals of this project are…	Dates of Approved/Proposed Project Annual Direct Costs	Person Months (Cal/Academic/ Summer)

OVERLAP *(summarized for each individual)*

Grimes, Catherine L.

ACTIVE

12A00944 (Grimes) 06/01/12 – 05/31/15 (NCE) 0.0 months
University of Delaware Research Foundation (UDRF) $35,000 direct
Bacterial Cell Wall Remodeling: A Tool for Studying Mammalian Innate Immune Activation

This project funds preliminary experiments to determine if the enzymes in bacterial cell wall are able to accept alternative substrates in vitro. We plan to express and purify the enzymes involved in bacterial cell wall biosynthesis and probe for sugar substrate specificity.
No overlap

15A00458 (Grimes) 12/01/14 – 05/31/16 0.0 months
University of Delaware Research Foundation (UDRF) $45,000
Strategic Initiative Award
NMR as a Tool to Investigate the Molecular Mechanism of Ligand Recognition by the Innate Immune Receptor Nod2
This project funds preliminary NMR experiments to probe the molecular mechanism by which an innate immune receptor, Nod2, binds to its bacterial cell wall ligand, muramyl dipeptide (MDP). We have recently provided the first evidence that these two molecules interact with nanomolar affinity *in vitro*. We will elicit structural information using NMR spectroscopy. As there are no crystal structures of Nod2, these studies will provide critical information for designing therapeutics for Crohn's Disease, in which mutations in the protein Nod2 lead to chronic inflammation. We will tackle this problem from two ends: labeling either the bacterial cell wall ligand or the protein receptor with 13C/15N labels.
No overlap

00027335 (Grimes) 8/01/14 – 7/31/19 0.13 academic
PEW Charitable Trusts $55,556 direct/year
PEW Scholars Program in the Biomedical Sciences
Chemical Biology of the Bacterial Cell Wall: A Double Edge Sward to Identify Antibiotics and Anti-inflammatory targets

This project aims: (1) to identify the enzymes responsible for producing immunostimulatory fragments from bacterial cell wall and (2) to fully characterize the bacterial cell walls from multiple strains of bacteria.
No overlap

150081 (Grimes, PI; Zachara, co-PI) 04/01/15 – 03/31/16 .13 academic
Mizutani Foundation for Glycoscience $45,453 direct
Regulation of Nod2 by O-GlcNAc glycosylation and its role in Crohn's Disease

This project seeks to determine the function of the O-GlcNAc modification of the human protein Nod2.
No overlap

23388 (Grimes) 07/01/15 – 06/30/18 .13 academic
Research Corp. for Science Advancement $75,000 direct
Cottrell Scholar Award
Remodeling Bacterial Cell Walls and Biochemistry Laboratory Curriculum

This project aims to learn how to manipulate the bacteria's cell wall biosynthetic pathway to install bio-orthogonal probes and then use these probes to determine how the human innate immune system breaks down this polymer to generate an immune response. In addition to remodeling bacterial cell walls, time will also be used to remodel the sophomore organic, biochemistry and nursing laboratories.
No overlap

PENDING

AAAS (Grimes) 06/01/15 – 05/31/17 .13 academic
Novel Therapeutics for the Treatment of Crohn's Disease $47,619 direct year 1

This project aims to use chemistry to discover novel mechanisms to treat Crohn's disease by developing two different tools: (1) solid phase synthesis of bacterial cell wall fragment and (2) a small molecule screen for Nod2 stabilizers.
No overlap

Acknowledgements

Catherine Wojewodzki, UD Morris Library ,Slides 4-9

Bernard Becker Medical Library, https://becker.wustl.edu/
Becker Medical Library wishes to acknowledge Bart Trawick, Ph.D., National Library of Medicine (NLM), for his inspiration and review of the chart and allowing use of graphics from NLM., Slides 11-12

UNIVERSITY OF DELAWARE | Research Office
www.udel.edu/research

Get connected

Visit www.udel.edu/research
Contact us at 302-831-4007
Follow us on Twitter @UDResearch