

Gilbert, Ashley R

From: Bowen, Jennifer <je.bowen@northeastern.edu>
Sent: Thursday, August 24, 2017 11:58 AM
To: Gilbert, Ashley R
Cc: Ashley Noelani Bulseco-McKim
Subject: Re: Action requested - EMSL User Proposal 49986

I understand that you are just doing your job, so I will refrain from comment. I redacted the offensive clause. Revised abstract is below.

Best,
Jen

Salt marshes sequester an order of magnitude more carbon in their sediments than their terrestrial counterparts because rates of decomposition are inhibited by anoxic, water-logged soils. Once easily degradable organic matter is preferentially used by microbes, the less labile fraction is buried vertically within the sediments, and is thought to remain stable. Recent work, however, suggests that the addition of nitrogen in its oxidized form (nitrate) may stimulate decomposition of this organic matter by providing an energetically favorable electron acceptor for heterotrophic metabolisms. In controlled experiments we found that the addition of nitrate at 25 cm depth fundamentally altered the microbial community, and stimulated organic matter decomposition. By providing more energy to the system, the added nitrate allowed microbes to oxidize a pool of organic matter otherwise left untouched. This degradation not only lessens the ability of salt marshes to store carbon, but may also release this carbon as CO₂, contributing to greenhouse gas release in unknown ways. The question that remains is, can the addition of nitrate in deep salt marsh sediments that capture 3000 years of stored carbon, also stimulate decomposition, or is the organic matter simply too recalcitrant for microbes to use, even with the increased energy supplied by the enhanced electron acceptor? We hypothesize that some portion of the highly recalcitrant stored carbon that is thousands of years old will be decomposed when exposed to elevated nitrate concentrations and there will be a concomitant shift in the structure and function of the microbial community, providing a mechanistic basis for this carbon loss.

We will test this hypothesis by sequencing salt marsh sediment microbial metagenomes and metatranscriptomes in parallel with high resolution characterization of recalcitrant organic matter from sediments exposed to long term nitrate enrichment. We will analyze sediment samples from three-meter-deep cores, where deepest sediments are approximately 3000 years old, that we already collected as part of a multi-investigator team studying the long-term nutrient enrichment of salt marshes at the Plum Island Ecosystem LTER. This experiment, supported by ongoing funding from the National Science Foundation, involves experimental nitrate enrichment of duplicate salt marsh creeks since 2004. We have documented the dramatic effect of added nitrate on surface microbial processes but, have not yet examined how deep into the marsh this influence propagates. It is, however, essential to understand how nitrate enrichment alters sediments at depth, as that is where the preponderance of carbon storage takes place. We therefore propose to link changes in genetic potential and expression to the high-resolution characterization of organic matter using solid state ¹³NMR, which can resolve components of complex organic matter, from samples collected at depth in nitrate enriched and unenriched marshes. With parallel deep sequencing of the metagenomes and metatranscriptomes of these sediments, we can 1) identify genomes of novel microbial players that are able to decompose recalcitrant organic matter in the presence of nitrate, 2) determine which metabolic pathways are differentially expressed as a result of nitrate addition, and 3) link differential expression of these genes to the decomposition of organic matter in salt marsh sediments. Taken together this work will provide novel insights into the forces that control carbon storage in salt marsh sediments and it will shed light on how exposure of those sediments to a critical global change driver, nitrate enrichment, alters carbon storage capacity, a critical ecosystem service.

Jennifer Bowen
Associate Professor

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781.581.7370 x346

From: "Gilbert, Ashley R" <Ashley.Gilbert@pnnl.gov>
Date: Thursday, August 24, 2017 at 2:28 PM
To: "Bowen, Jennifer" <je.bowen@northeastern.edu>
Subject: Action requested - EMSL User Proposal 49986

Hi Jennifer,

I am writing regarding your recently approved FICUS (EMSL-JGI) proposal # 49986, "Combining high resolution organic matter characterization and microbial meta-omics to assess the effects of nutrient loading on salt marsh carbon sequestration." I have been asked to contact you to update the wording in your proposal abstract to remove words such as "global warming" or "climate change". This is being asked as we have to meet the President's budget language restrictions and don't want to make any changes without your knowledge or consent. Below is the current wording for your abstract – at your next convenience, will you kindly revise the wording and send back to me as soon as you can? That way we can update our website. Please let us know if you have any questions about this request. Thank you!

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Ashley

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User Program Services, Project Coordinator

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Gilbert, Ashley R

From: Gilbert, Ashley R
Sent: Thursday, August 24, 2017 1:05 PM
To: Bowen, Jennifer
Cc: Ashley Noelani Bulseco-McKim
Subject: RE: Action requested - EMSL User Proposal 49986

Hello again,

Thank you for your quick response – I appreciate your time!

Ashley Gilbert

EMSL User Program Services, Project Coordinator
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ashley.gilbert@pnnl.gov
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From: Bowen, Jennifer [mailto:je.bowen@northeastern.edu]
Sent: Thursday, August 24, 2017 11:58 AM
To: Gilbert, Ashley R <Ashley.Gilbert@pnnl.gov>
Cc: Ashley Noelani Bulseco-McKim <bulseco.mckim@gmail.com>
Subject: Re: Action requested - EMSL User Proposal 49986

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Gilbert, Ashley R

From: Gilbert, Ashley R
Sent: Thursday, August 24, 2017 11:28 AM
To: 'je.bowen@northeastern.edu'
Subject: Action requested - EMSL User Proposal 49986

Importance: High

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Gilbert, Ashley R

From: Gilbert, Ashley R
Sent: Thursday, August 24, 2017 11:22 AM
To: 'saleska@email.arizona.edu'
Subject: Action requested - EMSL User Proposal 49950

Importance: High

Hi Scott,

I am writing regarding your recently approved FICUS (EMSL-JGI) proposal #49950, "Investigating the carbon cycling implications of changing microbial leaf litter decomposition across a permafrost thaw gradient." I have been asked to contact you to update the wording in your proposal abstract to remove words such as "global warming" or "climate change". This is being asked as we have to meet the President's budget language restrictions and don't want to make any changes without your knowledge or consent. Below is the current wording for your abstract – at your next convenience, will you kindly revise the wording and send back to me as soon as you can? That way we can update our website. Please let us know if you have any questions about this request. Thank you!

Thawing arctic permafrost (which contains 30-50% of global soil carbon) is expected to drive substantial alterations to carbon (C) cycling that will accelerate climate change. As permafrost thaws, old C may decompose more rapidly and be released as methane (CH₄) and carbon dioxide (CO₂), but thawing soil can also increase plant productivity as perennial shrub communities transition to faster growing annual wetland plants. The effect of new C input from plants on the C cycle is not yet well understood. It could mitigate C loss if C input rates are high enough, or it could increase contributions to CH₄ emission (a more potent greenhouse gas than CO₂) if it decomposes anaerobically. This project will examine (1) the ways in which fresh plant litter deposition influences microbial activity, (2) the differences between these dynamics across three stages of permafrost thaw, and (3) the overall impact of these changes on greenhouse gas emissions. It make use of a lab experiment tracing ¹³C labeled plant material through decomposition incubations to identify (through stable isotope probing and mass spectrometry) which members of the microbial community are active in transforming plant litter into different organic matter compounds and greenhouse gases. This project will increase our understanding of the importance of species-specific interactions on biogeochemical cycling and the complex factors that control arctic greenhouse gas emissions. Such understanding is needed to predict the timing and magnitude of climate change impacts on humans and ecosystems.

Ashley

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Gilbert, Ashley R

From: Gilbert, Ashley R
Sent: Thursday, August 24, 2017 11:31 AM
To: 'david.walsh@concordia.ca'
Subject: Action requested - EMSL User Proposal 49965

Importance: High

Hi David,

I am writing regarding your recently approved FICUS (EMSL-JGI) proposal # 49965, "Towards a molecular-level understanding of terrestrial organic matter transformations by microbes in a rapidly changing Arctic Ocean." I have been asked to contact you to update the wording in your proposal abstract to remove words such as "global warming" or "climate change". This is being asked as we have to meet the President's budget language restrictions and don't want to make any changes without your knowledge or consent. Below is the current wording for your abstract – at your next convenience, will you kindly revise the wording and send back to me as soon as you can? That way we can update our website. Please let us know if you have any questions about this request. Thank you!

The fate of terrestrial organic matter in coastal seas and open oceans is not well understood. This is especially true in the Arctic Ocean, which is one of the largest depositories of terrestrial organic carbon on the planet. Much of this carbon originates from river runoff and remobilization of ancient permafrost carbon where it is largely inaccessible to microbial activity. However, global warming is now causing unprecedented changes in the Arctic, including permafrost thaw, increased river runoff, and increased transport of terrestrial organic material to the Arctic Ocean. How these changes will impact carbon cycling and Arctic marine ecosystem processes are difficult to predict due to a limited knowledge of the Arctic Ocean carbon-microbe system. The objective of our project is to provide a mechanistic understanding of microbial transformation of terrestrial organic matter in the Arctic Ocean by combining 'omics-based characterization of microbial communities with molecular-level characterization of dissolved organic matter. To meet this objective, we will 1) assess the metabolic capabilities of Western Arctic Ocean microbial communities through a combination of metagenomic/ metatranscriptomic analyses (with the JGI) and metaproteomics analyses (with EMSL) and 2) link the metabolic capabilities of microbial communities to the sources and composition of organic matter through 21T FT ICR MS analysis of Arctic Ocean organic matter (with EMSL). We expect our project to advance our understanding of the links between terrestrial organic carbon and coastal and marine biogeochemistry (i.e. the terrestrial-aquatic interface). The study will provide fundamental knowledge on processes and mechanisms that influence carbon sequestration and the impact of permafrost thaw on Arctic marine ecosystems. This enhanced understanding will facilitate more accurate predictions on the fate of newly released terrestrial carbon as the Arctic continues to warm, and contribute to better policy, planning and societal adaptation.

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Gilbert, Ashley R

From: Gilbert, Ashley R
Sent: Thursday, August 24, 2017 12:36 PM
To: David Walsh
Subject: RE: Action requested - EMSL User Proposal 49965

Hello again,

Thank you for your quick response – I appreciate your time!

Ashley Gilbert

EMSL User Program Services, Project Coordinator
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From: David Walsh [mailto:david.walsh@concordia.ca]
Sent: Thursday, August 24, 2017 11:38 AM
To: Gilbert, Ashley R <Ashley.Gilbert@pnnl.gov>
Subject: Re: Action requested - EMSL User Proposal 49965
Importance: High

Holy cow, really?

That sentence could be changed to “ However, unprecedented changes are occurring in the Arctic, including...”

David Walsh
CRC Microbial Ecology and Genomics
Associate Professor
Biology Department
Concordia University
7141 Sherbrooke St. West
Montreal, QC
H4B 1R6

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david.walsh@concordia.ca
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On Aug 24, 2017, at 2:30 PM, Gilbert, Ashley R <Ashley.Gilbert@pnnl.gov> wrote:

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From: Law, Terry J
To: Gilbert, Ashley R
Subject: RE: FICUS project abstracts 2018
Date: Thursday, August 24, 2017 5:46:12 PM

Have you updated the Word document and created new PDFs yet? If not, could you do that first thing tomorrow? Thanks again!

T

From: Gilbert, Ashley R
Sent: Thursday, August 24, 2017 3:36 PM
To: Law, Terry J <Terry.Law@pnnl.gov>
Subject: RE: FICUS project abstracts 2018

Hi, just wanted to give you an update on this...

I have gotten in touch with 2 of the 3 PI's (Bowen and Walsh). Both projects have been updated in EUS. I am waiting to hear back from Saleska – I was unable to get him on the phone and have not seen an email response yet.

Proposal ID	PI	Institution	Title	Abstract	New Abstract
49950	Saleska, Scott Reid	University of Arizona	Investigating the carbon cycling implications of changing microbial leaf litter decomposition across a permafrost thaw gradient.	<p>Thawing arctic permafrost (which contains 30-50% of global soil carbon) is expected to drive substantial alterations to carbon (C) cycling that will accelerate climate change. As permafrost thaws, old C may decompose more rapidly and be released as methane (CH₄) and carbon dioxide (CO₂), but thawing soil can also increase plant productivity as perennial shrub communities transition to faster growing annual wetland plants. The effect of new C input from plants on the C cycle is not yet well understood. It could mitigate C loss if C input rates are high enough, or it could increase contributions to CH₄ emission (a more potent greenhouse gas than CO₂) if it decomposes anaerobically. This project will examine (1) the ways in which fresh plant litter deposition influences microbial activity, (2) the differences between these dynamics across three stages of permafrost thaw, and (3) the overall impact of these changes on greenhouse gas emissions. It make use of a lab experiment tracing ¹³C labeled plant material through decomposition incubations to identify (through stable isotope probing and mass spectrometry) which members of the microbial community are active in transforming plant litter into different organic matter compounds and greenhouse gases. This project will increase our understanding of the importance of species-specific interactions on biogeochemical cycling and the complex factors that control arctic greenhouse gas emissions. Such understanding is needed to predict the timing and magnitude of climate change impacts on humans and ecosystems.</p>	
49986	Bowen, Jennifer Lynne	Northeastern University	Combining high resolution organic matter characterization and microbial meta-omics to assess the effects of nutrient loading on salt marsh carbon sequestration	<p>Salt marshes sequester an order of magnitude more carbon in their sediments than their terrestrial counterparts because rates of decomposition are inhibited by anoxic, water-logged soils. Once easily degradable organic matter is preferentially used by microbes, the less labile fraction is buried vertically within the sediments, and is thought to remain stable. Recent work, however, suggests that the addition of nitrogen in its oxidized form (nitrate) may stimulate decomposition of this organic matter by providing an energetically favorable electron acceptor for heterotrophic metabolism. In controlled experiments we found that the addition of nitrate at 25 cm depth fundamentally altered the microbial community, and stimulated organic matter decomposition. By providing more energy to the system, the added nitrate allowed microbes to oxidize a pool of organic matter otherwise left untouched. This degradation not only lessens the ability of salt marshes to store carbon, but may also release the carbon as CO₂, contributing to greenhouse gas release and climate change in unknown ways. The question that remains is, can the addition of nitrate in deep salt marsh sediments that capture 3000 years of stored carbon, also stimulate decomposition, or is the organic matter simply too recalcitrant for microbes to use, even with the increased energy supplied by the enhanced electron acceptor? We hypothesize that some portion of the highly recalcitrant stored carbon that is thousands of years old will be decomposed when exposed to elevated nitrate concentrations and there will be a concomitant shift in the structure and function of the microbial community, providing a mechanistic basis for this carbon loss. We will test this hypothesis by sequencing salt marsh sediment microbial metagenomes and metatranscriptomes in parallel with high resolution characterization of recalcitrant organic matter from sediments exposed to long term nitrate enrichment. We will analyze sediment samples from three-meter-deep cores, where deepest sediments are approximately 3000 years old, that we already collected as part of a multi-investigator team studying the long-term nutrient enrichment of salt marshes at the Plum Island Ecosystem LTER. This experiment, supported by ongoing funding from the National Science Foundation, involves experimental nitrate enrichment of duplicate salt marsh creeks since 2004. We have documented the dramatic effect of added nitrate on surface microbial processes but, have not yet examined how deep into the marsh this influence propagates. It is, however, essential to understand how nitrate enrichment alters sediments at depth, as that is where the preponderance of carbon storage takes place. We therefore propose to link changes in genetic potential and expression to the high-resolution characterization of organic matter using solid state ¹³NMR, which can resolve components of complex organic matter, from samples collected at depth in nitrate enriched and unenriched marshes. With parallel deep sequencing of the metagenomes and metatranscriptomes of these sediments, we can 1) identify genomes of novel microbial players that are able to decompose recalcitrant organic matter in the presence of nitrate, 2) determine which metabolic pathways are differentially expressed as a result of nitrate addition, and 3) link differential expression of these genes to the decomposition of organic matter in salt marsh sediments. Taken together this work will provide novel insights into the forces that control carbon storage in salt marsh sediments and it will shed light on how exposure of those sediments to a critical global change driver, nitrate enrichment, alters carbon storage capacity, a critical ecosystem service.</p>	<p>Salt marshes sequester an order of magnitude more carbon in their sediments than their terrestrial counterparts because rates of decomposition are inhibited by anoxic, water-logged soils. Once easily degradable organic matter is preferentially used by microbes, the less labile fraction is buried vertically within the sediments, and is thought to remain stable. Recent work, however, suggests that the addition of nitrogen in its oxidized form (nitrate) may stimulate decomposition of this organic matter by providing an energetically favorable electron acceptor for heterotrophic metabolism. 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49965	Walsh, David Andrew	Concordia University	Towards a molecular-level understanding of terrestrial organic matter transformations by microbes in a rapidly changing Arctic Ocean	<p>The fate of terrestrial organic matter in coastal seas and open oceans is not well understood. This is especially true in the Arctic Ocean, which is one of the largest depositories of terrestrial organic carbon on the planet. Much of this carbon originates from river runoff and remineralization of ancient permafrost carbon where it is largely inaccessible to microbial activity. However, global warming is now causing unprecedented changes in the Arctic, including permafrost thaw, increased river runoff, and increased transport of terrestrial organic material to the Arctic Ocean. How these changes will impact carbon cycling and Arctic marine ecosystem processes are difficult to predict due to a limited knowledge of the Arctic Ocean carbon-microbe system. The objective of our project is to provide a mechanistic understanding of microbial transformation of terrestrial organic matter in the Arctic Ocean by combining 'omics-based characterization of microbial communities with molecular-level characterization of dissolved organic matter. To meet this objective, we will 1) assess the metabolic capabilities of Western Arctic Ocean microbial communities through a combination of metagenomic/metatranscriptomic analyses (with the JGI) and metaproteomics analyses (with EMSL) and 2) link the metabolic capabilities of microbial communities to the sources and composition of organic matter through 21^{FT} ICR MS analysis of Arctic Ocean organic matter (with EMSL). We expect our project to advance our understanding of the links between terrestrial organic carbon and coastal and marine biogeochemistry (i.e. the terrestrial-aquatic interface). The study will provide fundamental knowledge on processes and mechanisms that influence carbon sequestration and the impact of permafrost thaw on</p>	<p>The fate of terrestrial organic matter in coastal seas and open oceans is not well understood. This is especially true in the Arctic Ocean, which is one of the largest depositories of terrestrial organic carbon on the planet. Much of this carbon originates from river runoff and remineralization of ancient permafrost carbon where it is largely inaccessible to microbial activity. However, unprecedented changes are occurring in the Arctic, including permafrost thaw, increased river runoff, and increased transport of terrestrial organic material to the Arctic Ocean. How these changes will impact carbon cycling and Arctic marine ecosystem processes are difficult to predict due to a limited knowledge of the Arctic Ocean carbon-microbe system. The objective of our project is to provide a mechanistic understanding of microbial transformation of terrestrial organic matter in the Arctic Ocean by combining 'omics-based characterization of microbial communities with molecular-level characterization of dissolved organic matter. To meet this objective, we will 1) assess the metabolic capabilities of Western Arctic Ocean microbial communities through a combination of metagenomic/metatranscriptomic analyses (with the JGI) and metaproteomics analyses (with EMSL) and 2) link the metabolic capabilities of microbial communities to the sources and composition of organic matter through 21^{FT} ICR MS analysis of Arctic Ocean organic matter (with EMSL). We expect our project to advance our understanding of the links between terrestrial organic carbon and coastal and marine biogeochemistry (i.e. the terrestrial-aquatic interface). The study will provide fundamental knowledge on processes and mechanisms that influence carbon sequestration and the impact of permafrost thaw on</p>

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Thanks,
Ashley

Ashley Gilbert
 EMSL User Program Services, Project Coordinator
 Pacific Northwest National Laboratory
 Direct Phone: 509.371.6777
ashley.gilbert@pnnl.gov
[EMSL User Portal](#)

From: Law, Terry J
Sent: Thursday, August 24, 2017 8:32 AM
To: Gilbert, Ashley R <Ashley.Gilbert@pnnl.gov>
Subject: RE: FICUS project abstracts 2018

I stopped by the office and mentioned this to Courtney because you weren't there, so you may hear from her as well. But basically, this is an urgent request, so I'd like you to call the PIs as the first step and see if they can give you the corrections over the phone. If not, then email them the abstract and ask that they make the corrections and mail it back. The changes will need to be made in EUS, and in a document on our share drive for FICUS (Courtney will show you). As you get the updates and save new versions of the PDFs, please let me know and I'll put them on the website.

Thanks for your help with this!!

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From: Gilbert, Ashley R
Sent: Wednesday, August 23, 2017 4:03 PM
To: Law, Terry J <Terry.Law@pnnl.gov>
Cc: Carpenter, Courtney <Courtney.Carpenter@pnnl.gov>
Subject: RE: FICUS project abstracts 2018

Will do!

Ashley Gilbert
 EMSL User Program Services, Project Coordinator
 Pacific Northwest National Laboratory
 Direct Phone: 509.371.6777
ashley.gilbert@pnnl.gov
[EMSL User Portal](#)

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Sent: Wednesday, August 23, 2017 3:35 PM
To: Gilbert, Ashley R <Ashley.Gilbert@pnnl.gov>
Cc: Carpenter, Courtney <Courtney.Carpenter@pnnl.gov>
Subject: FICUS project abstracts 2018
Importance: High

Can you look at the 14 abstracts for the 2018 FICUS projects and find those that talk about global warming or climate change? Then contact the PIs to get different wording? Just explain to them we still have to meet the President budget language restrictions but don't want to make changes without their knowledge or consent.

Thanks!

Thanks

Terry Law

Sent from my Android phone using TouchDown (www.symantec.com)

Gilbert, Ashley R

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Thanks!

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Terry Law

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Gilbert, Ashley R

From: David Walsh <david.walsh@concordia.ca>
Sent: Thursday, August 24, 2017 11:38 AM
To: Gilbert, Ashley R
Subject: Re: Action requested - EMSL User Proposal 49965

Importance: High

Holy cow, really?

That sentence could be changed to “ However, unprecedeted changes are occurring in the Arctic, including...”

David Walsh
CRC Microbial Ecology and Genomics
Associate Professor
Biology Department
Concordia University
7141 Sherbrooke St. West
Montreal, QC
H4B 1R6

514-848-2424 ext 3477
david.walsh@concordia.ca
www.dawalsh.ca

On Aug 24, 2017, at 2:30 PM, Gilbert, Ashley R <Ashley.Gilbert@pnnl.gov> wrote:

Hi David,

I am writing regarding your recently approved FICUS (EMSL-JGI) proposal # 49965, “Towards a molecular-level understanding of terrestrial organic matter transformations by microbes in a rapidly changing Arctic Ocean.” I have been asked to contact you to update the wording in your proposal abstract to remove words such as “global warming” or “climate change”. This is being asked as we have to meet the President’s budget language restrictions and don’t want to make any changes without your knowledge or consent. Below is the current wording for your abstract – at your next convenience, will you kindly revise the wording and send back to me as soon as you can? That way we can update our website. Please let us know if you have any questions about this request. Thank you!

The fate of terrestrial organic matter in coastal seas and open oceans is not well understood. This is especially true in the Arctic Ocean, which is one of the largest depositories of terrestrial organic carbon on the planet. Much of this carbon originates from river runoff and remobilization of ancient permafrost carbon where it is largely inaccessible to microbial activity. However, global warming is now causing unprecedeted changes in the Arctic, including permafrost thaw, increased river runoff, and increased transport of terrestrial organic material to the Arctic Ocean. How these changes will impact carbon cycling and Arctic marine ecosystem processes are difficult to predict due to a limited knowledge of the Arctic Ocean carbon-microbe system. The objective of our project is to provide a mechanistic understanding of microbial transformation of terrestrial organic matter in the Arctic Ocean by combining 'omics-based characterization of microbial communities with molecular-level characterization of dissolved organic matter. To meet this objective, we will 1) assess the metabolic capabilities of Western Arctic

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Ashley

Ashley Gilbert

User Program Services, Project Coordinator

EMSL, the Environmental Molecular Sciences Laboratory
3335 Innovation Blvd, Richland WA 99354

Pacific Northwest National Laboratory
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www.emsl.pnnl.gov

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Collaboration | Creativity | **Courage** | **Integrity** | Impact

Gilbert, Ashley R

From: Gilbert, Ashley R
Sent: Friday, August 25, 2017 2:44 PM
To: Koller, Greg L
Cc: Rickey, Tom
Subject: FW: Quick question from a reporter

FYI

Ashley Gilbert

EMSL User Program Services, Project Coordinator
Pacific Northwest National Laboratory
Direct Phone: 509.371.6777
ashley.gilbert@pnnl.gov
[EMSL User Portal](#)

From: Dave Levitan [mailto:davelevitan@gmail.com]
Sent: Friday, August 25, 2017 2:12 PM
To: Gilbert, Ashley R <Ashley.Gilbert@pnnl.gov>
Subject: Quick question from a reporter

Hi Ashley,

I just left you a voicemail as well, apologies for bothering you twice. I'm a reporter, and I'm looking into the [reports](#) that [certain](#) DOE grantees have received messages asking them to change the wording of their abstracts to remove "global warming" and "climate change." I understand those emails came from PNNL, and I was wondering if they came from you. If so, could you tell me anything else about this? The messages say that the sender "has been asked" to request these changes -- who did the asking?

Anything you could tell me to shed some light on this would be great. And of course, if I have the wrong person, my apologies, and if you could point me in the right direction I would really appreciate it.

Best regards,

Dave Levitan

www.davelevitan.com
[@davelevitan](https://twitter.com/davelevitan)

Gilbert, Ashley R

From: Gilbert, Ashley R
Sent: Friday, August 25, 2017 2:51 PM
To: Law, Terry J
Subject: FW: Quick question from a reporter

Ashley Gilbert

EMSL User Program Services, Project Coordinator
Pacific Northwest National Laboratory
Direct Phone: 509.371.6777
ashley.gilbert@pnnl.gov
[EMSL User Portal](#)

From: Gilbert, Ashley R
Sent: Friday, August 25, 2017 2:44 PM
To: Koller, Greg L <greg.koller@pnnl.gov>
Cc: Rickey, Tom <tom.rickey@pnnl.gov>
Subject: FW: Quick question from a reporter

FYI

Ashley Gilbert

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Dave Levitan

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Gilbert, Ashley R

From: Gilbert, Ashley R
Sent: Friday, August 25, 2017 8:34 AM
To: Law, Terry J
Subject: RE: FICUS project abstracts 2018

I have done this on two. We are getting inquiries about this situation, can you please come down when you get a moment?

Thanks,
Ashley

Ashley Gilbert

EMSL User Program Services, Project Coordinator

Pacific Northwest National Laboratory

Direct Phone: 509.371.6777

ashley.gilbert@pnnl.gov

[EMSL User Portal](#)

From: Law, Terry J
Sent: Thursday, August 24, 2017 5:46 PM
To: Gilbert, Ashley R <Ashley.Gilbert@pnnl.gov>
Subject: RE: FICUS project abstracts 2018

Have you updated the Word document and created new PDFs yet? If not, could you do that first thing tomorrow? Thanks again!

T

From: Gilbert, Ashley R
Sent: Thursday, August 24, 2017 3:36 PM
To: Law, Terry J <Terry.Law@pnnl.gov>
Subject: RE: FICUS project abstracts 2018

Hi, just wanted to give you an update on this...

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Proposal ID	PI	Institution	Title	Abstract
49950	Saleska, Scott Reid	University of Arizona	<i>Investigating the carbon cycling implications of changing microbial leaf litter decomposition across a permafrost thaw gradient.</i>	<i>Thawing arctic permafrost (which contains 30-50% of global soil organic carbon) is expected to drive substantial alterations to carbon (C) cycling and accelerate climate change. As permafrost thaws, old C-rich vegetation will decompose more rapidly and be released as methane (CH₄) and carbon dioxide (CO₂). However, thawing soil can also increase plant productivity as new species and communities transition to faster growing annual wetland plants. The net effect of new C input from plants on the C cycle is not yet clear. It could mitigate C loss if C input rates are high enough, but it could also increase contributions to CH₄ emission (a more potent greenhouse gas than CO₂) if it decomposes anaerobically. This project will use a lab experiment to trace C isotopes through decomposition incubations to identify the pathways in which fresh plant litter deposition influences microbial dynamics. We will compare the differences between these dynamics across three stages of permafrost thaw, and (3) the overall impact of these changes on greenhouse gas emissions. It make use of a lab experiment tracing ¹³C isotope probing and mass spectrometry) which measures how different microbial community members are active in transforming plant litter into different organic matter compounds and greenhouse gases. This project will improve our understanding of the importance of species-specific interactions in the complex biogeochemical cycling and the complex factors that control greenhouse gas emissions. Such understanding is needed to predict the timing and magnitude of climate change impacts on human health and ecosystems.</i>
49986	Bowen, Jennifer Lynne	Northeastern University	<i>Combining high resolution organic matter characterization and microbial meta-omics to assess the effects of nutrient loading on salt marsh carbon sequestration</i>	<i>Salt marshes sequester an order of magnitude more carbon than their terrestrial counterparts because relatively large amounts of organic matter decomposition are inhibited by anoxic, water-logged sediments. In contrast, degradable organic matter is preferentially used by microorganisms in the oxygenated surface layer, where the labile fraction is buried vertically within the sediments, and remains stable. Recent work, however, suggests that the addition of nitrogen in its oxidized form (nitrate) may stimulate decomposition of organic matter by providing an energetically favorable electron acceptor for heterotrophic metabolism. In controlled experiments, the addition of nitrate at 25 cm depth fundamentally altered the microbial community, and stimulated organic matter decomposition, providing more energy to the system, the added nitrate may have been used to oxidize a pool of organic matter otherwise left untouched by the oxygenated surface layer.</i>

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49965	Walsh, David Andrew	Concordia University	<i>Towards a molecular-level understanding of terrestrial organic matter transformations by microbes in a rapidly changing Arctic Ocean</i>	<i>The fate of terrestrial organic matter in coastal seas and oceans is not well understood. This is especially true in the Arctic where the ocean is one of the largest depositories of terrestrial organic carbon. Much of this carbon originates from river runoff and recently released ancient permafrost carbon where it is largely inaccessible to microbial activity. However, global warming is now causing unprecedented changes in the Arctic, including permafrost thaw, increased river discharge, and increased transport of terrestrial organic material to the Arctic Ocean. How these changes will impact carbon cycling and Arctic ecosystem processes are difficult to predict due to a limited understanding of the Arctic Ocean carbon-microbe system. The objective of this project is to provide a mechanistic understanding of microbial transformation of terrestrial organic matter in the Arctic Ocean by combining characterization of microbial communities with molecular characterization of dissolved organic matter. To meet these objectives, we will 1) assess the metabolic capabilities of Western Arctic microbial communities through a combination of metagenomic/metatranscriptomic analyses (with the JGI) and metaproteomic analyses (with EMSL) and 2) link the metabolic capabilities of microbial communities to the sources and composition of organic matter using ²¹T FT ICR MS analysis of Arctic Ocean organic matter (with the University of Washington). We expect our project to advance our understanding of the fate of terrestrial organic carbon and coastal and marine biogeochemical cycles at the terrestrial-aquatic interface. The study will provide knowledge on processes and mechanisms that influence carbon sequestration and the impact of permafrost thaw on Arctic ecosystems. This enhanced understanding will facilitate predictions on the fate of newly released terrestrial carbon as the Arctic continues to warm, and contribute to better policy, planning, and adaptation.</i>
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Thanks,
Ashley

Ashley Gilbert

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Gilbert, Ashley R

From: Koller, Greg L
Sent: Friday, August 25, 2017 3:14 PM
To: Gilbert, Ashley R
Subject: RE: Quick question from a reporter

Thanks, Ashley. I'll let Dave know who to contact at DOE Public Affairs, and how. Keep sending these my way.

Greg Koller
Manager, External Communications
(509) 372-4864
greg.koller@pnnl.gov

From: Gilbert, Ashley R
Sent: Friday, August 25, 2017 2:44 PM
To: Koller, Greg L <greg.koller@pnnl.gov>
Cc: Rickey, Tom <tom.rickey@pnnl.gov>
Subject: FW: Quick question from a reporter

FYI

Ashley Gilbert
EMSL User Program Services, Project Coordinator
Pacific Northwest National Laboratory
Direct Phone: 509.371.6777
ashley.gilbert@pnnl.gov
[EMSL User Portal](#)

From: Dave Levitan [<mailto:davelevitan@gmail.com>]
Sent: Friday, August 25, 2017 2:12 PM
To: Gilbert, Ashley R <Ashley.Gilbert@pnnl.gov>
Subject: Quick question from a reporter

Hi Ashley,

I just left you a voicemail as well, apologies for bothering you twice. I'm a reporter, and I'm looking into the [reports](#) that [certain](#) DOE grantees have received messages asking them to change the wording of their abstracts to remove "global warming" and "climate change." I understand those emails came from PNNL, and I was wondering if they came from you. If so, could you tell me anything else about this? The messages say that the sender "has been asked" to request these changes -- who did the asking?

Anything you could tell me to shed some light on this would be great. And of course, if I have the wrong person, my apologies, and if you could point me in the right direction I would really appreciate it.

Best regards,

Dave Levitan

www.davelevitan.com

[@davelevitan](https://twitter.com/davelevitan)

Gilbert, Ashley R

From: Law, Terry J
Sent: Friday, August 25, 2017 12:28 PM
To: Gilbert, Ashley R
Subject: RE: query from Nature

Headed down to talk....

From: Gilbert, Ashley R
Sent: Friday, August 25, 2017 10:02 AM
To: Law, Terry J <Terry.Law@pnnl.gov>
Subject: FW: query from Nature

FYI

Ashley Gilbert
EMSL User Program Services, Project Coordinator
Pacific Northwest National Laboratory
Direct Phone: 509.371.6777
ashley.gilbert@pnnl.gov
[EMSL User Portal](#)

From: Tollefson, Jeff [<mailto:J.Tollefson@us.nature.com>]
Sent: Friday, August 25, 2017 10:00 AM
To: Gilbert, Ashley R <Ashley.Gilbert@pnnl.gov>
Subject: query from Nature

Hello Ms. Gilbert,
We've been told you were the author of the email to Jennifer Bowen suggesting that she remove the words "climate change" and "global warming" from the abstract of her funded research project. I was hoping we could chat. It looks like this is a defensive move to protect the research, but we are also wondering how widespread this practice is. We'll be posting a story today, so feel free to call me on my cell anytime - happy to talk on background/off the record.

Regards,
Jeff

<http://observer.com/2017/08/energy-department-censorship-scientists-climate-change/>

<https://m.facebook.com/photo.php?fbid=10155636640937579&id=826862578&set=a.10151225318492579.492169.826862578&source=48&ref=bookmarks>

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Gilbert, Ashley R

From: Law, Terry J
Sent: Friday, August 25, 2017 9:30 AM
To: Carpenter, Courtney; Gilbert, Ashley R
Subject: FW: EMSL and "Climate" Censorship Email 2 of 2

FYI. ☺

T

From: Koller, Greg L
Sent: Friday, August 25, 2017 9:20 AM
To: Law, Terry J <Terry.Law@pnnl.gov>; Rickey, Tom <tom.rickey@pnnl.gov>
Subject: RE: EMSL and "Climate" Censorship Email 2 of 2

Thanks, Terry. Sharlene is saying what we three just said, it looks like:

We routinely ask folks to modify their abstracts, for length, clarity, etc. In this case, it could have been as simple as someone wanting to just highlight the parts of the research that are priorities for this administration.

Greg Koller
Manager, External Communications
(509) 372-4864
greg.koller@pnnl.gov

Gilbert, Ashley R

From: Law, Terry J
Sent: Friday, August 25, 2017 9:35 AM
To: Gilbert, Ashley R; Carpenter, Courtney
Subject: FW: climate language

FYI. I think Scott will be okay with this, but asked him to let me know if he had concerns.

T

From: Saleska, Scott R - (saleska) [mailto:saleska@email.arizona.edu]
Sent: Friday, August 25, 2017 9:30 AM
To: Law, Terry J <Terry.Law@pnnl.gov>
Subject: RE: climate language

Thanks Terry. I understand your clarification.

Cheers,
Scott

From: Law, Terry J [mailto:Terry.Law@pnnl.gov]
Sent: Friday, August 25, 2017 9:27 AM
To: Saleska, Scott R - (saleska) <saleska@email.arizona.edu>
Subject: climate language

Scott,

I couldn't find my copy so actually asked our Director to send it to me (attached). What I was trying to explain on the phone, but not well, is that we believe that we have accepted research proposals that adhere to the President's Budget request. We're asking for abstracts to be slightly revised in order to eliminate confusion by others who may not understand the nuances and falsely assume we're funding research that was specifically eliminated for EMSL in the budget language.

The language we're following is:

Budget language: EMSL will eliminate user access for research related to **climate feedbacks and carbon**.

Hope that helps, but if you have ongoing concerns about the request, please let me know.

Thanks,

T

Terry J. Law
Manager
User Program Services
EMSL: Environmental Molecular Sciences Laboratory

Pacific Northwest National Laboratory
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Richland, WA 99352 USA (*99354 for overnight*)
Tel: 509-371-6201
Fax: 509-371-6204
terry.law@pnnl.gov
www.emsl.pnl.gov
<https://eus.emsl.pnl.gov/Portal>
[EMSL Facebook](#)

Gilbert, Ashley R

From: Law, Terry J
Sent: Friday, August 25, 2017 1:04 PM
To: Gilbert, Ashley R; Kimball, Haylie C; Carpenter, Courtney
Subject: Reporters

All,

So this is the definitive “plan of action.”

If you or others get media inquiries, you can send them to Greg Koller (first) with cc to Tom Rickey (backup). They won’t be responding, but can send the reporter to the right place at DOE Public Affairs. Contact info below.

Greg Koller
Manager, External Communications
(509) 372-4864
greg.koller@pnnl.gov

Tom Rickey
News and Media Relations
Pacific Northwest National Laboratory
(509) 375-3732
cell # is 585-709-9672

T

From: Law, Terry J
Sent: Friday, August 25, 2017 12:30 PM
To: Rickey, Tom <tom.rickey@pnnl.gov>; Koller, Greg L <greg.koller@pnnl.gov>
Subject: FW: query from Nature

FYI. We have not responded.

T

From: Gilbert, Ashley R
Sent: Friday, August 25, 2017 10:02 AM
To: Law, Terry J <Terry.Law@pnnl.gov>
Subject: FW: query from Nature

FYI

Ashley Gilbert
EMSL User Program Services, Project Coordinator
Pacific Northwest National Laboratory
Direct Phone: 509.371.6777
ashley.gilbert@pnnl.gov
[EMSL User Portal](#)

From: Tollefson, Jeff [<mailto:J.Tollefson@us.nature.com>]

Sent: Friday, August 25, 2017 10:00 AM

To: Gilbert, Ashley R <Ashley.Gilbert@pnnl.gov>

Subject: query from Nature

Hello Ms. Gilbert,

We've been told you were the author of the email to Jennifer Bowen suggesting that she remove the words "climate change" and "global warming" from the abstract of her funded research project. I was hoping we could chat. It looks like this is a defensive move to protect the research, but we are also wondering how widespread this practice is. We'll be posting a story today, so feel free to call me on my cell anytime - happy to talk on background/off the record.

Regards,

Jeff

<http://observer.com/2017/08/energy-department-censorship-scientists-climate-change/>

<https://m.facebook.com/photo.php?fbid=10155636640937579&id=826862578&set=a.10151225318492579.492169.826862578&source=48&ref=bookmarks>

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Gilbert, Ashley R

From: Law, Terry J
Sent: Friday, August 25, 2017 5:03 PM
To: Gilbert, Ashley R; saleska@email.arizona.edu
Subject: RE: Action requested - EMSL User Proposal 49950

I appreciate you looking out for our staff. If we can keep her name out of further stories, I'd appreciate it simply because she was just the messenger. But it's your call. For our side of things, we're referring everyone to DOE Public Affairs.

Sorry to put you in the limelight. And hope you have a great weekend!

T

Terry Law

Sent from my Android phone using TouchDown (www.symantec.com)

-----Original Message-----

From: Saleska, Scott R - (saleska) [saleska@email.arizona.edu]
Received: Friday, 25 Aug 2017, 4:46PM
To: Gilbert, Ashley R [Ashley.Gilbert@pnnl.gov]
CC: Law, Terry J [Terry.Law@pnnl.gov]
Subject: RE: Action requested - EMSL User Proposal 49950

Dear Ashley and Terry,

Here you go (see below) for modified abstract text.

FYI, I think there will be a story about this in Nature magazine. Jeff Tollefson, a reporter from Nature, contacted me and asked if I had gotten an email like the one that was already being reported elsewhere, and I confirmed that I had, and explained my understanding that it was not self-censorship so much as a means of clarifying compliance with presidential budget guidance. He asked if I could confirm that my email came from Ashley Gilbert from PNNL, but I said I'd rather not identify specific people unless I have had a chance to talk to them first. If it's OK with you I can confirm that, but on the other hand I think it is probably fairly moot, since it seems he will reporting it in any case.

Well, good luck with the brouhaha!

Cheers,

Scott

Thawing arctic permafrost (which contains 30-50% of global soil carbon) is expected to drive substantial alterations to carbon (C) metabolism that will accelerate broader changes in biogeochemical cycling throughout the earth system. As permafrost thaws, old C may decompose more rapidly and be released as methane (CH₄) and carbon dioxide (CO₂), but thawing soil can also increase plant productivity as perennial shrub communities transition to faster growing annual wetland plants. The effect of new C input from plants on the C cycle is not yet well understood. It could mitigate C loss if C input rates are high enough, or it could increase contributions to CH₄ emission (a more potent greenhouse gas than CO₂) if it decomposes anaerobically. This project will examine (1) the ways in which fresh plant litter deposition influences microbial activity, (2) the differences between these dynamics across three stages of permafrost thaw, and (3) the overall impact of these changes on emissions of carbon gases. It makes use of a lab experiment tracing ¹³C labeled plant material through decomposition incubations to identify (through stable isotope probing and mass spectrometry) which members of the microbial community are active in transforming plant litter into different organic matter compounds and greenhouse gases. This project will increase our understanding of the importance of species-specific interactions on biogeochemical cycling and the complex factors that control arctic carbon gas emissions.

From: Gilbert, Ashley R [mailto:Ashley.Gilbert@pnnl.gov]
Sent: Thursday, August 24, 2017 11:23 AM
To: Saleska, Scott R - (saleska@email.arizona.edu)
Subject: Action requested - EMSL User Proposal 49950
Importance: High

Hi Scott,

I am writing regarding your recently approved FICUS (EMSL-JGI) proposal #49950, "Investigating the carbon cycling implications of changing microbial leaf litter decomposition across a permafrost thaw gradient." I have been asked to contact you to update the wording in your proposal abstract to remove words such as "global warming" or "climate change". This is being asked as we have to meet the President's budget language restrictions and don't want to make any changes without your knowledge or consent. Below is the current wording for your abstract – at your next convenience, will you kindly revise the wording and send back to me as soon as you can? That way we can update our website. Please let us know if you have any questions about this request. Thank you!

Thawing arctic permafrost (which contains 30-50% of global soil carbon) is expected to drive substantial alterations to carbon (C) cycling that will accelerate climate change. As permafrost thaws, old C may decompose more rapidly and be released as methane (CH₄) and carbon dioxide (CO₂), but thawing soil can also increase plant productivity as perennial shrub communities transition to faster growing annual wetland plants. The effect of new C input from plants on the C cycle is not yet well understood. It could mitigate C loss if C input rates are high enough, or it could increase contributions to CH₄ emission (a more potent greenhouse gas than CO₂) if it decomposes anaerobically. This project will examine (1) the ways in which fresh plant litter deposition influences microbial activity, (2) the differences between these dynamics across three stages of permafrost thaw, and (3) the overall impact of these changes on greenhouse gas emissions. It makes use of a lab experiment tracing ¹³C labeled plant material through decomposition incubations to identify (through stable isotope probing and mass spectrometry) which members of the microbial community are active in transforming plant litter into different organic matter compounds and greenhouse gases. This project will increase our understanding of the importance of species-specific interactions on biogeochemical cycling and the complex factors that control arctic greenhouse gas emissions. Such understanding is needed to predict the timing and magnitude of climate change impacts on humans and ecosystems.

Ashley

Ashley Gilbert

User Program Services, Project Coordinator

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ashley.gilbert@pnnl.gov

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Gilbert, Ashley R

From: Rickey, Tom
Sent: Friday, August 25, 2017 8:27 PM
To: Gilbert, Ashley R
Subject: Fwd: BuzzFeed News query

Greg or I will respond

Sent from my iPhone

Begin forwarded message:

From: Nidhi Subbaraman <nidhi.s@buzzfeed.com>
Date: August 25, 2017 at 7:55:35 PM PDT
To: <Ashley.Gilbert@pnnl.gov>
Cc: <tom.rickey@pnnl.gov>
Subject: BuzzFeed News query

Hello Ashley and Tom, I'm a science reporter at BuzzFeed News.

Ashley: Nature News is reporting that you sent an email to Jennifer Bowen at Northeastern University earlier this week, asking to change a reference to "climate change" in an abstract.

This is related to a project that was funded by the JGI-EMSL FICUS program. Jennifer Bowen [posted](#) the email yesterday on a public Facebook post.

Can you confirm if you sent the email that Dr. Bowen shared online?

- This is the Nature News report: <http://www.nature.com/news/us-energy-agency-asked-scientists-to-scrub-references-to-climate-change-1.22513>
- Here is the item posted by Dr. Bowen:

<https://m.facebook.com/photo.php?fbid=10155636640937579&id=826862578&set=a.10151225318492579.492169.826862578&source=48&ref=bookmarks>

Tom: If PNNL has comment on this, please let me know.

Thanks,

Nidhi Subbaraman (760 712 7313)

--

Nidhi Subbaraman BuzzFeed News Science reporter
O: (202) 602 1715 | M: (760) 712 7313 | Twitter: [@NidhiSubs](#)
1630 Connecticut Ave NW, 7th Floor Washington, DC 20009

Gilbert, Ashley R

From: Tollefson, Jeff <J.Tollefson@us.nature.com>
Sent: Friday, August 25, 2017 10:00 AM
To: Gilbert, Ashley R
Subject: query from Nature

Hello Ms. Gilbert,

We've been told you were the author of the email to Jennifer Bowen suggesting that she remove the words "climate change" and "global warming" from the abstract of her funded research project. I was hoping we could chat. It looks like this is a defensive move to protect the research, but we are also wondering how widespread this practice is. We'll be posting a story today, so feel free to call me on my cell anytime - happy to talk on background/off the record.

Regards,
Jeff

<http://observer.com/2017/08/energy-department-censorship-scientists-climate-change/>

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