

EESB Nominations Committee
Minutes of actions taken electronically July 31 and August 15, 2020

The Nominations Committee met via Zoom and communicated via e-mail during June and July 2020.

The Nominations Committee members are Amy Sullivan (Chair), Mike Burkart, Liz Maas, Lee Phillips, and Steve Schutter.

The primary purpose of the committee meetings was to nominate new members and establish a schedule for replacing founding Members of EESB.

Amendments to the bylaws were needed to 1- establish the Nominating Committee as an additional standing committee; and 2- amend the bylaws as required to proceed with EESB member succession issues.

On July 16, 2020 EESB Chair Sullivan submitted, by e-mail, to the EESB, the proposed amended bylaws as appended to these minutes. The proposed amendments are shown in green text.

The July 16 e-mail included a request that any objections to the amendments be submitted by July 31. Following the bylaw requirements for consensus approval, if no objections were received by that date, the amended bylaws would be approved.

No objections were offered, so the by-laws stand amended as shown below. Bylaws Committee Chair, Burkart, posted the amended by-laws under the “documents” tab of the EESB section of the Earth and Environmental Sciences Department web site of the University of Iowa.

August 7, EESB Chair Sullivan submitted an e-mail to the EESB requesting: “On behalf of the EESB Nominating Committee (Burkart, Maas, Phillips, Schutter, Sullivan), we offer this proposed slate of four exceptional candidates for approval to join the EESB. Their terms will start in the fall of 2020 and last three years.”

Nominees must adhere to Article III, Section 1 requirements for new Members. All nominees have been interviewed by two Nominating Committee members. Attached you will find their CV and a summary of Supporting Statements for each nominee from members of the Nominating Committee.

The Nominating Committee *strongly supports all four alumni to join the board*. Their combined background lends academic and professional strengths in both environmental science and geology. In addition their experience will benefit undergraduate and graduate students in areas of mentoring and career planning.

Although the board generally works by consensus, our revised bylaws (approved July 31, 2020) require a vote by the board for new board members. Seven affirmative votes will approve a nominee (two-thirds of board).

Seven votes in favor of the new Members and no votes opposing were received by August 15, 2020, the four new Members are approved and will begin their 3-year terms at the October triennial meeting.

Respectfully submitted,
Michael R Burkart, Secretary

Nominee	UI Degree	Grad Degree	How Nominated?	Location
Rob Decker	B.S. Geology B.A. Anthropology	• M.S. Structural and Geotechnical Engineering – UW Platteville • CPG – American Institute Professional Geologists • CPII – Certified Public Infrastructure Inspector	self-nominated after article in Spring 2020 newsletter, contacted Cramer	Iowa City
Rhawn Denniston	Ph.D. Geosciences 2000	• B.A. Geology Hamilton College • M.S. Earth & Planetary Science, UNM	Nominated by Cramer	Cornell College, Mt. Vernon IA (resident of Iowa City)
Melissa Evans	B.S. Environmental Science 1999	VP/Senior Petrophysicist DeGolyer & MacNaughton	Nominated by Maas	Dallas – Fort Worth Area
Noah Stern	B.S. Environmental Science 2005	• M.S. Applied Environmental Geology • PhD Environmental Chemistry & Technology – UW Madison • Post Doc - UW	self-nominated after article in Spring 2020 newsletter, contacted Sullivan	Madison WI, Iowa City native

***Please see CV for details*

EESB Secretary, Burkart, post, these minute and attachments, under the “documents” tab of the EESB section of the Earth and Environmental Sciences Department web site of the University of Iowa.

**Article I: The name of this organization is the
Earth & Environmental Sciences Department Alumni Advisory Board.**

Article II: Objectives

The objectives of the Earth & Environmental Sciences Department Alumni Advisory Board (EESB) are to:

- 1) facilitate communication among alumni of The Earth and Environmental Sciences Department (and Department names used by its academic predecessors) at the University of Iowa (EESD) and between alumni and EESD;
- 2) participate in campaigns to raise funds to enhance EESD research, teaching, and outreach;
- 3) provide information and mentoring on professional opportunities to EESD students and alumni;
- 4) contribute to external advocacy for the EESD to University administration, Iowa Regents, and the Iowa Legislature.

Article III: Members

The EESB will consist of at least eight (8) and no more than fifteen Members (15).

Section 1. **Each Member** of the EESB shall be an alumna or alumnus of the EESD.

- a. Each Member has a responsibility to attend EESB meetings and serve on its committees. Participation in at least one annual fall meeting in person during a three-year term is encouraged, particularly triennial meetings.
- b. Members shall be approved by the EESB and the EESD Executive Officer (DEO), also known as the EESD Chair.
- c. Members will be encouraged to actively participate by self-identifying committee(s) on which they prefer to serve. They may also bring new goals to the EESB for consideration.
- d. EESB, Faculty Liaison and the DEO will be empowered to dismiss a Member if their behavior is unacceptable and conflicting with the University of Iowa policies (<https://opsmanual.uiowa.edu/>)
- ee. Membership shall reflect, insofar as is practical, the Diversity of EESD and alumni.
- fd. Members shall serve for a term of three years. Members shall not serve more than two consecutive terms of three years each.
- ge. Each Member shall have one vote on any decision of the EESB. If a Member is unable to attend a meeting, the Member may assign her/his vote to a proxy Member by providing the proxy Member's name by letter or e-mail to the EESB Chair in advance of the date of the meeting.
- hf. A Member may resign at any time by written statement to the EESB Chair.
- if. Members who do not meet responsibilities as stated above will be removed by vote of the EESB.

Section 2. ~~Ex-Officio Members~~ **Alumni and Invited Participants** shall be individuals with an interest in furthering the objectives of the EESB

- ~~a. Ex-Officio Members shall serve as advisors to EESB without voting rights, but with rights to raise questions and propose topics for discussion. Their presence at a meeting does not affect the number of Members required for a quorum at any meeting.~~
 - a. Alumni and invited participant may participate as non-voting member at any meeting. Alumni and Invited Participants may serve as advisors to EESB without voting rights, but with rights to raise questions and propose topics for discussion. Their presence at a meeting does not affect the number of Members required for a quorum at any meeting.
- b. Two standing ~~Ex-Officio Members~~ **Participants** shall be the DEO and EESD Faculty Liaison. The Faculty Liaison shall be selected by the EESD Faculty.
- c. ~~Any individual alumna, alumnus, faculty, or student may participate as an Ex-Officio Member at any meeting. All alumni are encouraged to participate in Triennial meetings as Ex-Officio members to learn about and comment on functions of the EESB.~~ **Only members may hold office, chair a committee or vote. They are**

welcomed to provide input to the EESB, participate as a non-voting committee member (Article VI, Section 1) and volunteer for other activities supporting the department. All alumni are encouraged to participate in Triennial EESB meetings.

Article IV: Officers, Eligibility, Duties, and Election

Section 1: ~~The EESB shall elect a Chair and a Secretary.~~ **The EESB shall have three officers: A Chair, Chair-Elect and a Secretary will be elected. The Chair will become the Past Chair when their term ends.**

- a. **Officers shall be Members**, and any member is eligible to serve as an officer.
- b. Each officer shall serve a three-year term or the remainder of a term in the event that an office is vacated for any reason.
- c. **The duties of the Chair** shall be to preside over meetings and serve as liaison between the EESB and EESD. These duties include assembling meeting agenda and distributing agenda to Members in advance of meetings. **The Chair serves for one additional year on the Board as Past-Chair. The duties of the Past Chair** shall be to provide insight and continuity on all activities and decisions over which they presided during their term. The Past Chair will serve on the EESB for 1 year in a non-voting role.
- d. **The duties of the Chair-Elect** shall be to assume the duties of the Chair in case of vacancy due to any cause for such period or periods that the Chair, for any reason, is unable to perform their duties. The Chair-Elect shall then automatically succeed to the office of the Chair for a full three-year term following the term of the Chair. Thus the Chair-Elect is responsible for filling the vacated term of a Chair in addition to their own tenure as Chair.
- e. **The duties of the Secretary** shall be to maintain minutes of meetings, with particular attention to decisions, and written communications to and from the EESB. Upon approval by the EESB, the Secretary shall transfer meeting minutes and communications ~~to the DEO for posting on that section of the EESD website assigned to EESB (www.)~~ **to that section of the EESD website assigned to EESB (<https://clas.uiowa.edu/ees/alumni-and-friends/ees-alumni-board/documents>)**

Section 2. Election of Officers

- a. Members may nominate themselves or other members for office at a triennial meeting or special meeting called for that purpose in the event that an office is vacated for any reason. **Members may also express interest for holding an office to the Chair, Chair-Elect or Secretary.**
- b. **The Executive Committee, consisting of the Chair, Chair-Elect and Secretary, will compile the list of nominated candidates for an office and communicate it to the EESB DEO and EESD Faculty Liaison.**
- c ~~b~~. Officers shall be **elected by a vote** of members present at each triennial meeting or special meeting called to fill an office vacancy.

Article V: Meetings and Decisions

All meetings times, locations, and agendas shall be announced at least 30 days in advance by e-mail from the EESB Chair to EESB Members, DEO, Faculty Liaison, ~~other self-identified ex-officio members~~ **alumni and participants**, and by posting on the Department's web site.

Section 1: **Fall Biannual meetings** will generally be held on the Friday of University Homecoming weekend. The date will be established and approved by the EESB one year in advance. **New board member terms will commence at the fall meeting.**

Section 2: **Spring Biannual meetings** will generally be held on a weekend in April each year and conducted via teleconferencing using a venue and virtual meeting links established by the DEO or Faculty Liaison. The date

will be established and agreed upon during the fall meeting of the previous year and will not coincide with Spring Break or GSA Sectional Meetings. The spring meeting will be organized to make decisions required for topics arising during and following the fall meeting adjournment.

Section 3: **Triennial meetings** will be organized to include an Alumni Day ~~in conjunction with addition to~~ the annual fall EESB business meeting. The first Triennial Alumni Day will be held during Homecoming weekend in ~~2020~~2021. The schedule should coincide with presentation of the Distinguished Alumni Award. This Distinguished Alumni Award shall include an invitation for the recipient to present a talk during the EESD Friday seminar.

Section 4: **Special Meetings** for specifically defined purposes may be requested by the EESB Chair, DEO, Faculty Liaison or at least two Members. Special meetings shall be conducted by teleconference facilitated by the DEO or Faculty Liaison. The agenda for a special meeting will be assembled by the requesting individual(s) and the EESB Chair.

Section 5: **Meeting Agendas:** Items for inclusion in Fall and Spring meetings will be solicited by the EESB Chair, DEO, and Faculty Liaison. Once assembled, the EESB Chair will distribute the agenda to the EESB at least 30 days in advance of the meeting and posting, by the DEO, of the agenda on the EESD website.

Section 6: **Transaction of Business**

- a. Meeting actions will be official only during meetings with a quorum consisting of at least 50% plus one member. Written proxy voting statements by members addressed to the EESB Chair shall be counted in determining the existence of a quorum.
- b. EESB shall strive to make consensus decisions. Following discussion of a proposed action, the EESB Chair will ask for any objections to approval of the proposal. If no objections arise, the proposal is approved. If objections arise, a vote will be required for a decision. A minimum of two-thirds of the members present including proxies must vote yes for any proposal to be approved at any meeting.

Article VI: Committees

Section 1. The EESB shall establish committees to propose actions to the EESB and, when specifically approved by EESB, act on behalf of EESB.

- a. Each committee shall be chaired by an EESB Member.
- b. Committee members can be alumni, faculty, and students with interest in the committee activities.
- c. Committee membership shall be by invitation from the EESB chair, committee chair, or DEO, or volunteer. Any changes to committee membership will be communicated to the EESB Chair and posted on the EESD web site.
- d. Committee chairs shall report progress toward the committee objectives at the fall meetings and at other intervals as requested by the EESB Chair.

Section 2. **Standing committees** listed in this section shall be maintained by the EESB until one or more are dissolved by amendment of these by-laws. ~~Each committee will have a committee chair who will communicate activities and results back to the EESB and the Chair. Any committee chair is responsible for finding a new chair to replace them when they wish to step down.~~

- a. **The Fundraising Committee** will assist and participate in development and campaigns to raise funds to enhance EESD research, teaching, and outreach.
- b. **The Mentoring Committee** will maintain and provide mentoring services to EESD students and alumni on professional and educational opportunities
- c. **The Alumni Outreach Committee** will organize and maintain systems for regular communication among alumni and EESD faculty and students, assist in the selection of the Distinguished Alumni Award, and plan the Alumni Day as part of triennial meetings.

d. **The Nominating Committee** will maintain a search for new EESB Members, ensuring the EESB maintains its minimum membership. The committee will maintain a spreadsheet of members' terms and will verify that board members will/will not continue for their second term. The committee will provide updates to the EESB, Faculty Liaison and DEO on upcoming vacancies. Nominees must adhere to Article III, Section 1 requirements for new Members. The annual nomination and selection process follows:

- i. A list of potential candidates for consideration will be reviewed at the spring biannual meeting. Additional member nominees are solicited from the EESB, Faculty Liaison and DEO at that time.
- ii. Committee will develop a slate of the best nominees after the spring meeting and provide a slate of candidates to the EESB for electronic voting.
- iii. Notify the new members so they may begin their term in the fall.

Article VII: Modifications

Any member of the EESB may propose a modification of the by-laws at any time.

Section 1: The process shall include the following steps:

- a1. Any proposed modification must be in writing to the EESB Chair.
- b2. Within 30 days of receipt, the EESB Chair shall convey the request to the members for consideration.
- c3. At the request of three or more Members, the proposed modification will be placed on the agenda of the next fall or spring meeting.
- d4. A vote of at least two-thirds of ALL Members of the EESB shall be required for a proposed modification to be made of these by-laws.
- e5. The approved modifications will be posted on the EESD web site.



ROB DECKER MSE, CPG, CPII PRINCIPAL, BUILDING SERVICES MANAGER

Rob founded Axiom Consultants in 2018 after working for over 22 years in the public and private sectors. Rob earned his Masters degree from the University of Wisconsin-Platteville in Structural and Geotechnical Engineering. He has a Bachelor's Degree in Geology/Anthropology from the University of Iowa. He is a Certified Professional Geologist and Certified Public Infrastructure Inspector.

Rob has extensive experience as a project manager, owner's representative, construction manager, and design consultant in both private and public industry. With over two decades of expertise in civil infrastructure design and construction, building design and construction, and specialty inspections, his expertise covers nearly any client need on a variety of scales.

Rob serves as the primary project manager and client lead on many of Axiom Consultants' offerings. He leads the building services team which includes a talented group of engineers and associates completing work in private commercial development, public/municipal infrastructure for cities and counties, and institutional offerings for universities, school districts, non-profits, and private business. He also oversees Axiom's BIM, rendering and conceptual services, and scanning efforts by the survey division.

CONTACT

M: 319.333.9322 | O: 319.519.6221
rdecker@axiom-con.com

EDUCATION AND CREDENTIALS

Masters in Structural and Geotechnical Engineering, UW-Platteville
Bachelors in Geology/Anthropology, The University of Iowa
Certified Professional Geologist - CPG, American Institute Professional Geologists
Certified Public Infrastructure Inspector - CPII, American Public Works Assoc.
Unmanned Aircraft Pilot, The Federal Aviation Administration (#4191203)

SOCIETIES AND MEMBERSHIPS

American Society of Civil Engineers
American Institute of Steel Construction
American Institute of Professional Geologists
American Public Works Association
Englert Theater Board Member (since 2016)

CONTINUING EDUCATION - CERTS

OSHA 30-Hour
CPR/AED Certified

PROJECT EXPERIENCE

Each project denoted with scope of Axiom services (CV-civil, ST-structural, MEPT-mech/elec/plumb/tech, SV-survey, PM-proj mgmt)

GREENSTATE CREDIT UNION NLFC EXPANSION

NORTH LIBERTY, IA
CV, ST, MEPT, SV, PM

WILLIAMSBURG COMMUNITY SCHOOLS PEPL PROJECTS

WILLIAMSBURG, IA
CV, ST, MEPT, SV, PM

RICEVILLE COMMUNITY SCHOOLS NEW GYMNASIUM

RICEVILLE, IA
CV, ST, MEPT, SV

LION'S GATE DEVELOPMENT and MASTER PLAN

ALTOONA, IA
CV, ST, SV, PM

SILVIS PUBLIC WORKS and FIRE STATION

SILVIS, IL
CV, ST, MEPT, SV, PM

12 EAST COURT

IOWA CITY, IA
CV, ST, MEPT, SV, PM

MAYOR'S YOUTH EMPOWERMENT PROGRAM EXPANSION

IOWA CITY, IA
CV, ST, MEPT, SV

THE SUMMIT RETIREMENT COMMUNITY

BETTENDORF, IA
CV, ST, MEPT, SV, PM

WEST HILL PUMP STATION IMPROVEMENTS

MUSCATINE, IA
ST, MEPT, SV

DAVIS COUNTY COURTHOUSE REMODEL

BLOOMFIELD, IA
CV, ST, MEPT, SV

BURLINGTON STREET DAM INSPECTIONS

IOWA CITY, IA
ST, SV, PM

OAKDALE STEAM and CONDENSATE REPAIRS

IOWA CITY, IA
CV, MEPT, SV, PM

CARDINAL VILLAS II

IOWA CITY, IA
CV, ST, MEPT, SV

302 MAIN MIXED USE

CEDAR FALLS, IA
CV, ST, MEPT, SV

MUSCATINE COUNTY SHERIFF'S OFFICE ADDITION

MUSCATINE, IA
CV, ST, MEPT, SV

MUSCATINE COUNTY MAINTENANCE BUILDING

MUSCATINE, IA
CV, ST, MEPT, SV

HORIZON EVENTS CENTER RENOVATION

CLIVE, IA
CV, ST, MEPT, SV, PM

BIOLOGY BUILDING EAST GREENHOUSE RENOVATION

IOWA CITY, IA
ST, MEPT, PM

KEOKUK CITY HALL RENOVATION

KEOKUK, IA
ST, MEPT

JOHNSON COUNTY POOR FARM RENOVATIONS

IOWA CITY, IA
CV, ST, MEPT, SV

Department of Geology
Cornell College
Mount Vernon, Iowa 52314

Rhawn F. Denniston

Tel: (319) 895-4306
Fax: (319) 895-5667
RDenniston@CornellCollege.edu

Education

Ph.D., Geosciences, University of Iowa, 2000
M.S., Earth & Planetary Science, University of New Mexico, 1995
B.A., Geology, Hamilton College, 1991

Professional Experience

Cornell College

W.H. Norton Professor of Geology, 2017-present
Professor, 2013–16; Associate Professor, 2006–13; Assistant Professor, 2000–06
Chair, Department of Geology, 2003–06; 2009–12; 2014–15; 2016–18
Chair, Environmental Studies Program, 2001 – present

External Appointments

Executive Committee, Center for Global and Regional Environmental Research, 2016-present
Affiliate Associate Professor, Geological & Atmospheric Science, Iowa State University, 2016–present
Visiting Scientist, Earth and Planetary Sciences, University of New Mexico, 2006–07
Adjunct Assistant Professor, Earth & Environmental Science, University Iowa, 2001–present

Course Offerings

Dynamic Earth (GEO 111)	Climate Change (GEO 122)
Advanced Paleoclimatology (GEO 322)	Environmental Perspectives (ENV 101)
Geology of New Zealand (GEO 329)	Hydrogeology (GEO 320/ENV 301)

Select Published Manuscripts (Undergraduate Authors in Red)

Haws, J., Benedetti, M.M., Funk, C.L., Bicho, N.F., Daniels, J.M., Forman, S.L., Minckley, T.A., and Denniston, R.F. (2020) Late Pleistocene landscape and settlement dynamics of Portuguese Estremadura. *Journal of Field Archaeology*: 10.1080/00934690.2020.1733780.

Thatcher, D.L., Wanamaker, A.D., Denniston, R.F., Asmerom, Y., Polyak, V.J., Fullick, D., Ummenhofer, C.C., Gillikin, D.P., and Haws, J.A. (2020) Hydroclimate variability from western Iberia (Portugal) during the Holocene: Insights from a composite stalagmite isotope record. *The Holocene*: 10.1177/0959683620908648.

Argiriadis, E., Denniston, R.F., and Barbante, C. (2019) Improved polycyclic aromatic hydrocarbon and n-alkane determination in speleothems through cleanroom sample processing. *Analytical Chemistry*, 91, 7007-7011.

Denniston, R.F., **Houts, A.N.**, Asmerom, Y., Wanamaker, Jr., A.D., Haws, J.A., Polyak, V.J., Thatcher, D.L., **Altan-Ochir, S.**, **Borowski, A.C.**, Breitenbach, S.F.M., Ummenhofer, C.C., Regala, F.T., Benedetti, M.M., and Bicho, N. (2018) A stalagmite test of North Atlantic SST and Iberian hydroclimate linkages over the last two glacial cycles, *Climate of the Past*, 14, 1-21.

PAGES Flood Working Group Consortium: Wilhelm, B., Baker, V., Ballesteros, C.J.A., Barriendos, M., Benito, G., Brauer, A., Corella, J.P., Denniston, R., Glaser, R., Ionita, M., Kahle, M., Tao, L., Luetscher, M., Madonald, N., Macklin, M., Mudelsee, M., Manoz, Schulte, L., St. George, S., Markus, S., Toonen, W.H.J., and Oliver, W. (2018). Interpreting historical, botanical, and geological evidence to aid preparations for future floods. *WIREs Water*, 10.1002/wat2/1318.

MELISSA EVANS

641.781.1377

M_k_evans@hotmail.com · <https://www.linkedin.com/in/melissakevans>

Prior to working as a geologist, then petrophysicist, I attended the University of Iowa with no idea what I wanted to do. Although I started off as a chemistry major, I transferred to the Department of Geosciences my junior year and had the time of my life! I was primarily interested in Hydrology at the time, and had no idea where life would take me. All I knew was that I enjoyed studying geology and environmental science, and appreciated the way the department and my fellow students made it fun and not feel like work. Prior to finding my home at Trowbridge, I had just been ready for school to finish. The department changed everything for me, and I have several life-long friends to prove it.

EXPERIENCE

2010 – PRESENT

VP/SENIOR PETROPHYSICIST, DEGOLYER & MACNAUGHTON

I have led the petrophysical efforts and managed projects for governments, banks, and private clients all over the world. Having built many positive relationships, my educational seminars and presentations are often requested and recognized for clearly explaining complicated technical subsurface information.

2006 – 2010

DCS GEOLOGIST, SCHLUMBERGER

I had several different roles during my time with Schlumberger. Most notably, I developed a geomechanics department for the integration of advanced subsurface products not previously seen in the Permian Basin.

2005 – 2006

FIELD GEOLOGIST/WETLAND SCIENTIST, TERRACON

Acted as project manager for all wetland determination and mitigation projects, including presentations and interaction with clients and regulatory agencies

2002 – 2005

FIELD GEOLOGIST/ SOIL & WETLAND TECHNICIAN, MMS CONSULTANTS, INC.

Completed advanced soil type evaluations for wastewater treatment, dam and pond design, and various other engineering projects, Prepared National Pollution Discharge Elimination Systems (NPDES) permits, Stormwater Pollution Prevention Plans (SWPPP), and Erosion and Sediment Control plans, and designed and tested for private wastewater systems

ACTIVITIES

I spend most of my spare time, traveling, hiking, or volunteering. In recent years, I have volunteered for several animal charities, a foundation for the underprivileged in South Dallas, and For Love & Art – a charity that takes the museum art experience to those with mobility issues.

Noah W. Stern

3210 Northbrook Drive, Middleton, WI 53562 - (608) 334-0900 - nstern2@wisc.edu

SUMMARY

Motivated bioengineer and microscopy expert with extensive research experience and firm understanding of cell imaging, genetic engineering, metabolomics, and statistics.

SPECIAL SKILLS & QUALIFICATIONS

- | | |
|---|--|
| ✦ Liquid Chromatography Mass Spectrometry (LC-MS) | ✦ Biofuel Bacterial Strain Engineering |
| ✦ High Pressure Liquid Chromatography (HPLC) | ✦ Putative Gene Functional Annotation |
| ✦ Fluorescent Confocal Laser Microscopy | ✦ Metabolic Flux Modeling |
| ✦ Fluorescent Reporter Plasmid Design | ✦ Analytical Chemistry |
| ✦ Golden Gate and Gibson Plasmid Assembly | ✦ XRD |
| ✦ Quantitative PCR | ✦ SEM and EDS |
| ✦ Metagenomic Analysis and Binning | ✦ Trace Metal Extraction |
| | ✦ Statistical Analysis |
| | ✦ Method Development |

Software Used: QIIME, CLC Genomics Workbench, MetaBAT, MEGAN, NCBI BLAST SUITE, LASERGENE, JGI Integrated Microbial Genomes and Microbiomes, ImageJ, RStudio, Maven and MATCH!

EDUCATION

UNIVERSITY OF WISCONSIN, Madison, WI

June 2018

PhD in Environmental Chemistry and Technology-Civil and Environmental Engineering Department Minor in Civil and Environmental Engineering

EBERHARD KARLS UNIVERSITY, Tübingen, Germany

2012 Masters in Applied Environmental Geology

December

THE UNIVERSITY OF IOWA, Iowa City, IA

BS in Environmental Science, Minor in Biology

June 2005

PROFESSIONAL & RESEARCH EXPERIENCE

UNIVERSITY OF WISCONSIN, Madison, WI

Postdoctoral Scholar, *Department of Bacteriology*

Primary Investigator: Professor Daniel Amador-Noguez

June 2018- Present

- Investigated the metabolic bottlenecks of the isoprenoid pathway in the non-model bacterium, *Z. mobilis*, using metabolomics and genetics approaches
- Identified gene operons upregulated during biofilm formation using fluorescent protein reporters

Postdoctoral Liaison, *Water@UW Executive Committee* <https://water.wisc.edu/> June 2018- Present

Lead Coordinator, *Water@UW Frozen Assets Festival: Posters on Ice* February 2020

Graduate Discussion Moderator, *Go Big Read UWMadison* <https://gobigread.wisc.edu/> Oct 2018- May 2019

Doctoral Candidate, *Environmental Chemistry and Technology* January 2012- June 2018

Planning Committee and Session 3 Co-Chair: Midwest Microbiome Meeting April 2018

<https://microbiome.wisc.edu/madison-microbiome-meeting-m3/>

Research Assistant, *Environmental Chemistry and Technology* May 2013- June 2018

- In partnership with Pacific Northwest National Laboratory, conducted experiments investigating carbon metabolism in freshwater sediments
- Created protocols for metagenomic and 16s amplicon sequence processing and analysis
- Demonstrated how to differentiate between soil humic acid electron donor and electron shuttle reactions during dissimilatory iron reduction
- Published research paper in Applied Environmental Microbiology about fine particulate matter and how it influences microbial metabolism rates in the hyporheic corridor

Teaching Assistant, *Civil and Environmental Engineering Department* January 2012-May 2012

- Created and graded coursework assignments for Introduction to Environmental Engineering

EBERHARD KARLS UNIVERSITY, Tübingen, Germany

September 2010-December 2012

Teaching Assistant, *Geomicrobiology Department* October 2011-February 2012

- Assisted teaching and graded coursework for Bioremediation of Subsurface Contaminants

Research Assistant, *Environmental Mineralogy Department* April 2011- December 2012

- Assisted in research of anaerobic biodegradation capability of benzotriazole
- Performed High-Performance Liquid and Ion Chromatography Sample Analysis
- Collected field samples during installation of bore hole heat exchange system

Research Assistant, *Geomicrobiology Department* August 2011- December 2012

- Assisted in research on microbial reduction potential of iron-oxide minerals
- Performed laboratory synthesis of iron-oxide mineral phases for use in experimentation
- Participated and helped organize seminar in “Geomicrobiology Investigative Techniques” August 2011

Manuscript Editor, *Environmental Mineralogy Department* December 2010-December 2012

- Edited research manuscripts for submission to peer-reviewed journals and for PhD thesis projects

JMM MANAGEMENT GROUP LLC, Elgin, IL March 2008-September 2010

Project Manager

- Oversaw environmental regulatory compliance and liability portfolios for regional and global UST sites in the oil and gas industry
- Managed on-site compliance surveys nationwide and oversaw response to storage tank tests and alarms

INNERSPACE ENVIRONMENTAL ASSESSMENT, Elburn, IL

April 2005-March 2008

Environmental Inspector and Consultant

- Managed lead-based paint, asbestos and mold risk inspections and remediation projects, including collaborating with external laboratories, report generation, and project follow up

ORAL AND POSTER PRESENTATIONS

- Stern, N., Ginder-Vogel, M. 2014 WARF Discovery Challenge Poster Symposium. Madison WI. 05/2014. "Carbon Sequestration Using Reactive Minerals" (Poster)
- Stern, N., Roden, E.R., Stegen, J.C., Arntzen, E., Kennedy, W.K. Pacific Northwest National Laboratory SFA Annual Meeting. Richland, WA. 11/2014. "Composition and metabolic activity of Columbia River SIZ microbial communities in relation to habitat and DOC source." (Poster)
- Stern, N., Mejia, J., He, S., Ginder-Vogel, M., Roden, E.R. Soil Science Society of America Annual Meeting, Minneapolis MN, 11/2015, "Dual Role of Soil Organic Matter as Electron Donors and Shuttles for Dissimilatory Iron Oxide Reduction." (Oral)
- Stern, N., Roden, E.R., Stegen, J.C., Arntzen, E., Kennedy, W.K. Water@UW Poster Symposium. 10/2016 "Composition and metabolic activity of Columbia River SIZ microbial communities in relation to habitat and DOC source." (Poster)
- Stern, N., Roden, E.R., Stegen, J.C., Arntzen, E., Kennedy, W.K. Water+Energy+Urban Symposium, CHAOS Lab, Princeton Environmental Institute, Princeton NJ. 07/2017 "Water+Carbon+Environment" (Oral)

PUBLICATIONS

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