

NDEW 2015

Welcome and Opening Remarks
Rigoberto Hernandez
April 13, 2015

www.oxide.gatech.edu



OXIDE: Who We Are

Open Chemistry Collaborative in Diversity Equity

We aim to flatten diversity inequities in academic chemistry departments by placing the responsibility and credit on institutions and administrators, not on single change agents

OXIDE: Who We Are



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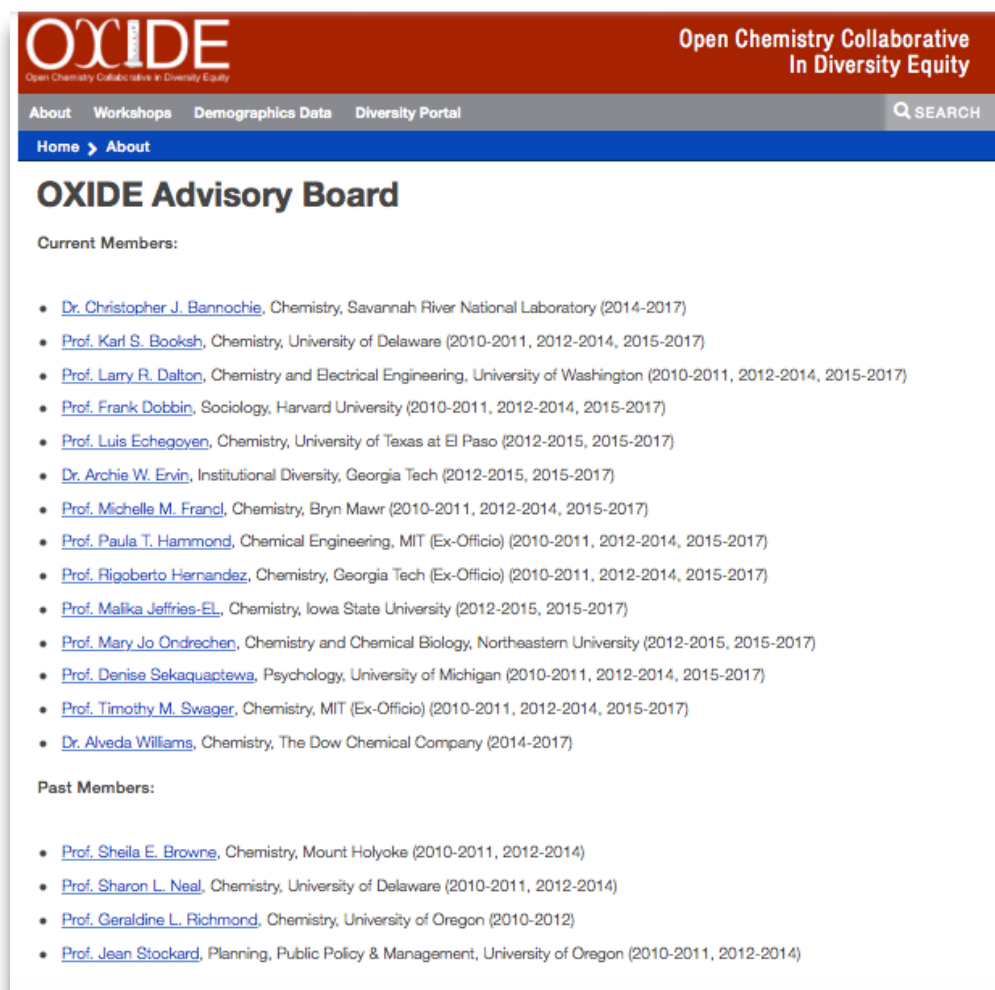


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OXIDE: Open Chemistry Collaborative in Diversity Equity



OXIDE
Open Chemistry Collaborative in Diversity Equity

Open Chemistry Collaborative
In Diversity Equity

About Workshops Demographics Data Diversity Portal SEARCH

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OXIDE Advisory Board

Current Members:

- [Dr. Christopher J. Bannochie](#), Chemistry, Savannah River National Laboratory (2014-2017)
- [Prof. Karl S. Booksh](#), Chemistry, University of Delaware (2010-2011, 2012-2014, 2015-2017)
- [Prof. Larry R. Dalton](#), Chemistry and Electrical Engineering, University of Washington (2010-2011, 2012-2014, 2015-2017)
- [Prof. Frank Dobbin](#), Sociology, Harvard University (2010-2011, 2012-2014, 2015-2017)
- [Prof. Luis Echegoyen](#), Chemistry, University of Texas at El Paso (2012-2015, 2015-2017)
- [Dr. Archie W. Ervin](#), Institutional Diversity, Georgia Tech (2012-2015, 2015-2017)
- [Prof. Michelle M. Franci](#), Chemistry, Bryn Mawr (2010-2011, 2012-2014, 2015-2017)
- [Prof. Paula T. Hammond](#), Chemical Engineering, MIT (Ex-Officio) (2010-2011, 2012-2014, 2015-2017)
- [Prof. Rigoberto Hernandez](#), Chemistry, Georgia Tech (Ex-Officio) (2010-2011, 2012-2014, 2015-2017)
- [Prof. Malka Jeffries-EL](#), Chemistry, Iowa State University (2012-2015, 2015-2017)
- [Prof. Mary Jo Ondrechen](#), Chemistry and Chemical Biology, Northeastern University (2012-2015, 2015-2017)
- [Prof. Denise Sekaquaptewa](#), Psychology, University of Michigan (2010-2011, 2012-2014, 2015-2017)
- [Prof. Timothy M. Swager](#), Chemistry, MIT (Ex-Officio) (2010-2011, 2012-2014, 2015-2017)
- [Dr. Alveda Williams](#), Chemistry, The Dow Chemical Company (2014-2017)

Past Members:

- [Prof. Sheila E. Browne](#), Chemistry, Mount Holyoke (2010-2011, 2012-2014)
- [Prof. Sharon L. Neal](#), Chemistry, University of Delaware (2010-2011, 2012-2014)
- [Prof. Geraldine L. Richmond](#), Chemistry, University of Oregon (2010-2012)
- [Prof. Jean Stockard](#), Planning, Public Policy & Management, University of Oregon (2010-2011, 2012-2014)

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Alveda Williams
The Dow Chemical Company

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Think-Pair-Share Q

- A paleontologist, an astronomer and a chemist walk up to a bar...
- Picture them in your mind.
- What does she order?
 - A. Skulls and Bones Cocktail.
 - B. Blue Moon Cocktail.
 - C. Neat oxygen dihydride.
 - D. All of the above.



Lego: Research Institute, Set 21110



...ironic result...

Inclusive Excellence is Diverse



...along many vectors...

What is Diversity?

Inclusion of the “*other*”

- Gender
 - Lesbian
 - Gay
 - Bisexual
 - Transgender
 - Queer
 - Intersex
 - Questioning
 - Allies
 - Other Identities and orientation
- Race & Ethnicity
- Disabilities
- LGBTQIQA+
- Socioeconomic
- Culture
- Life experiences
- Ideas
- Political Ideologies
- Religion
- Geography
- University Pedigrees
- Place of Origin
- Etc.



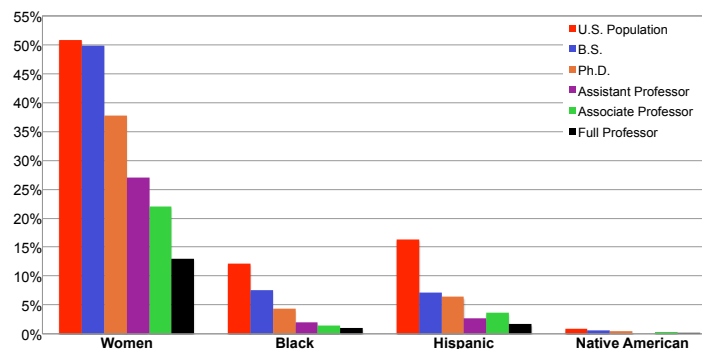
Competitiveness

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Faculty Demographics: URM

- In Top 50 in 2010, URM's comprise:
 - 5% of Assistant Professors
 - 5% of Associate Professors
 - 3% of Full Professors
- In the 2010 Census:
 - 16.4% Hispanic or Latino
 - 12.6% African American
 - 4.8% Asian American
 - .9% Native American
 - .2% Pacific Islander



* From: R. Hernandez and S. Watt in "A Top-Down Approach for Diversity and Inclusion in Chemistry Departments," Career Challenges and Opportunities in the Global Chemistry Enterprise; ACS Symposium Series, XXX, edited by H. N. Cheng, S. Shah, and M. L. Wu, Chapter X, pp. XX-XX (American Chemical Society, Washington DC, 2014), in press.

Compare to Chemistry 2010 PhDs†:

- 2306 All
- 57.4% (1323) U.S. Citizen or PR
- 0.4% Native American
- 10.9% Asian
- 4.1% African American
- 4.8% Hispanic
- 76.1% White

†Advancing Graduate Education in the Chemical Sciences (2012)

Take Home Message

- Representation drops dramatically from BS though to Full Professor
- Drop from Ph.D. to Assistant Professor is very dramatic

Faculty Demographics: URM

Percentages of Under-represented Minority (URM) Chemistry Professors at Top 50 Departments			
	AY2011-12	AY2012-13	AY2013-14
Assistant professors	5.2%	6.0%	5.6%
Associate professors	8.3%	7.8%	7.3%
Full professors	2.5%	2.7%	3.4%
All professors	3.8%	4.1%	4.2%

- OXIDE survey (unpublished)
- Very slow, **positive**, rate of increase over the past three years...
- But availability is there, and YOU can do something about it

Barriers to Diversity Equity

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Implicit Bias is Only One of the Barriers

Implicit or Unconscious Bias

Schemas

Accumulation of Bias
Lack of Universal Design
Insufficient Mentoring
Insufficient/Unequal “Family Friendly” Policies
Overburdening the Few
Unwelcoming/Non-Accommodating Climate
Unwelcoming/Non-Accommodating Professional Cultures
Qualitative vs. Quantitative Assessment

Solo Status

Stereotype Threat

Minimizing Differences/Colorblindness

Depoliticization and Meritocratic Ideology

Hernandez and Watt, “A Top-Down Approach for Diversity and Inclusion in Chemistry Departments,” in *Career Challenges and Opportunities in the Global Chemistry Enterprise*; ACS Symposium Series, Vol 1169, edited by H. N. Cheng, S. Shah, and M.L. Wu, Chapter. 19, pp. 207-214 (ACS, Washington D.C. 2014)

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Key Workshop Elements

- Session #1: Bias, Barriers, & Inequality
- Session #2: Intersectionality: Women of Color
- Keynote: Gregory Robinson
- Session #3: Future Faculty
- Session #4: Implementation & Solutions
- Workshop Recommendations
- Sample/Model Department Presentation: David Giedroc
- Keynote: Kei Koizumi

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2015 Diversity Catalyst Lecturer

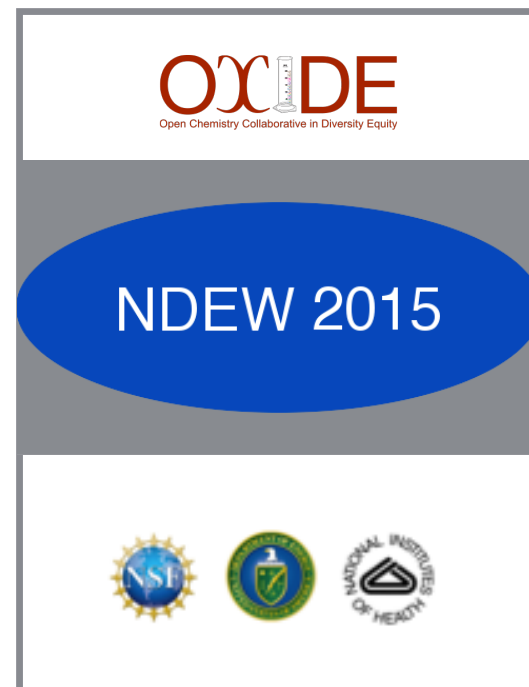


David Giedroc
Indiana University

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Your Deliverables

- It's a workshop!
- In your breakouts, you will:
 - Develop hypotheses for redressing a targeted diversity inequity
 - Recommend policies
 - Recommend programs
 - Include assessment plan
- Fill out Surveys re NDEW
- Not use screens during sessions
- Recycles badges
- Answer yesterday's "OXIDE Faculty Demographics Survey" e-mail



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“Sometimes it is the people,
who no one imagines anything of,
who do the things that no one can imagine.”

Joan Clarke, *The Imitation Game*