

1. **Name:** Patricia Ann Relue
2. **Education – degrees, discipline, institution, year:**
 - Ph.D. in Chemical Engineering, University of Michigan, May 1990 - Feb. 1994
 - M.S. in Engineering, University of Michigan, Aug. 1988 - May 1990
 - B.S. in Chemical Engineering, Magna Cum Laude, with Honors, Univ. of Toledo, 1984 - 1988.
3. **Academic Experience - 26 years**
 - Associate Dean of Research and Graduate Studies, College of Engineering, Feb. 2018 – present
 - Associate Dean of Research, College of Engineering, July 2017 – Feb. 2018
 - Undergraduate Program Director, Department of Bioengineering, July 2014 – July 2017; Aug 2000 – May 2001; May 1999 – Nov 1999
 - Professor, Department of Bioengineering, April 2014 – present
 - Graduate Program Director, Bioengineering, 2002-2010.
 - Visiting Assoc. Professor, NJIT, Dept. of Elec. & Computer Engineering, 2001 (sabbatical leave).
 - Associate Professor, Department of Bioengineering, 1999 – 2014.
 - Assistant Professor, Dept of Bioengineering, 1996 – 1999.
 - Assistant Professor, Dept of Chemical Engineering, University of Toledo, 1993 – 1999.
 - Adjunct Assistant Professor, Dept. of Pathology, Medical College of Ohio, Mar 1995 – 2003
4. **Non-academic experience:**
 - Isaac Corporation, Consultant, Defiance, Ohio, June 1995 - Jan. 1996.
 - Ford Motor Company, Instructor, Creative Problem Solving, Avon Lake, Ohio, Aug. 1994.
5. **Certifications or professional registrations:** N/A
- 6.

UT Research Council, 2013- present.

UT Graduate Council, May 2005 – May 2014; Jan 2017 – present;
 chair – May 2008-09; executive committee, May 2008 – May 2013;
 curriculum committee - May 2006-08, Aug 2010 – Aug 2017;
 curriculum committee chair - May 2006-08, Aug 2010 – May 2012, Oct 2015 – Aug 2017.

UT Outstanding Teacher Award selection committee, 2009, 2010, 2011.

UT Faculty Senate, 2007-2008; 2001 – present
 Academic Affairs Committee 2007-08; 2013-2015;
 Academic Programs Committee, 2013 – present;
 Committee on Committees 2009, 2013; 2014
 Faculty Affairs Committee, 2012-13;
 Student Affairs Committee, 2012-13.

UT Radiation Safety Committee, 1998 – 2003; chair, 1998 – 2001

University Committee on Sabbaticals, 2010 - 2017; Chair 2011-12; 2013-14; 2014-15, 2015-16

Biomedical Engineering PhD Program Administrative Committee, 2007 – present;
 Qualifying Examination (QE) Committee 2007-2017
 QE Chair, 2008, 2012, 2013, 2014, 2015, 2016

College of Engineering Diversity Committee, 2016-2017

College of Engineering Dean's Advisory Council, 2000 – 2003

BIOE Department Personnel Committee, 1999 – present; Chair 2006-07; 2014-2017.

Phi Sigma Rho Faculty Advisor, 1999 – 2014

9. Most important publications/patents/presentations:

Refereed Journal Articles (since 2011:)

- D. Yuan, K. Rao, **P. Relue**, and S. Varanasi, "Fermentation of biomass sugars to ethanol using native industrial yeast strains," **Bioresource Technology**, 102 (2011) 3246-3253.
- B. Li, S. Varanasi and **P. Relue**. "New strategies based on aldose-ketose transformation for separation and/or chemical conversion of C6 and C5 sugars from lignocellulosic biomass hydrolyzate". **US Utility Patent filed** April 2010.
- S. Varanasi, K. Rao, and **P. Relue**, "A Novel technique that enables efficient fermentation of xylose and hexose sugars from biomass hydrolysates using native non-GMO yeasts," **US Utility Patent filed** January 2, 2009.
- K. Rao; S. Chelikani; **P. Relue**; and. S. Varanasi, "A Novel technique for Optimizing the Simultaneous-Isomerization-and-Fermentation (SIF) Approach of Converting Xylose to Ethanol," **Applied Biochemistry and Biotechnology** 146(1-3):101-117, 2008.
- Y. Yuan and **P. Relue**, "Enzymatic degradation of human skin dermis revealed by fluorescence and reflectance spectroscopy," **Optics Express** 16(13):9857-9868, June 20, 2008.
- "Using Endogenous Polarization-Sensitive Fluorescence to Monitor Metabolic Changes in Living Cells," Y. Yuan, **P.A. Relue**, and B.D. Cameron,

- S. Varanasi, K. Rao, **P. Relue**, and D. Yuan, "System for Simultaneous Isomerization and Fermentation of Sugars," divisional patent US. Pat. No. **9,856,445 B2** issued January 2, 2018.
- S. Alipour, B. Li, S. Varanasi, **P. Relue**, and S. Viamajala, "Methods for high yield production of furans from biomass sugars at mild operating conditions," US Pat No. **9,828,615**, issued November 28, 2017.
- S. Alipour, B. Li, S. Varanasi, **P. Relue**, and S. Viamajala, "High yield production of furans from biomass sugars," divisional application, filed November 27, 2017.
- S. Varanasi, K. Rao, **P. Relue**, and D. Yuan, "System for Simultaneous Isomerization and

xylulose," ACS 21st Annual Green Chemistry and Engineering Conference, Reston, VA, June
13-

P. Zhang, H. Shao, S. Varanasi, S. Viamajala and P. Relue, "Algae Fermentation to 2,3-Butanediol by *Enterobacter cloacae*" 36th Symposium of Biotechnology for Fuels and Chemicals, Poster, April 28-May 1, 2014, Clearwater Beach, FL.

P. Zhang, B. Li, S. Varanasi, and P. Relue, "New route of lignocellulosic biomass sugars fermentation to ethanol by native *Saccharomyces cerevisiae*" 36th Symposium of Biotechnology for Fuels and Chemicals, Poster, April 28-May 1, 2014, Clearwater Beach, FL.

10. Professional development activities in the last five years:

Attended and/or presented at professional conferences:

March 11-13, 2019 -----ASEE Engineering Research Council, West Arlington, VA

June 4-5, 2018-----Advancing University Engineering and Manufacturing Education Workshop, Washington, DC

March 12-14, 2018 -----ASEE Engineering Research Council, West Arlington, VA

Oct. 29 – Nov. 3, 2017 ---AIChE National Meeting, Minneapolis, MN

Oct. 17, 2017-----Ohio Defense Forum, Columbus, OH

Oct 16, 2017-----Chicago Conference for Associate Deans of Research at Small and Mid-Sized Engineering Schools, UI at Chicago, Chicago, IL

Mar 2-6, 2016-----VentureWell OPEN Conference, Portland, OR

July 22-23, 2015-----Midwest Engineering & Entrepreneurship Network, Purdue University, Lafayette, IN

Apr 28-May 1, 2014 -----36th Symposium of Biotechnology for Fuels and Chemicals, Clearwater Beach, FL

Apr 29 – May 2, 2013 ----35th Symposium on Biotechnology for Fuels & Chemicals, Portland, OR