

## **Strengthening the Michigan Beer Industry by Expanding Opportunities**

Concept Paper (August 2017)

Midtown, Inc., Northern United Brewing Company, and Eastern Michigan University aim to establish a collaboration to increase and diversify talent and career opportunities within the craft beer industry with special emphasis on establishing training and education for women and individuals from underrepresented communities. According to the Michigan Brewer's Guild, growth of craft brewing in Michigan has had a significant direct economic impact, creating more than 5,000 jobs, paying almost \$145,000,000 in wages (<http://www.mibeer.com/economic-impact-of-craft-brewing>). With growing consumer awareness, increased interest in pubbing culture, growing demand for innovative flavored beer, and a rising number of pubs, growth in the global craft beer industry is expected to continue (public summary of Global Craft Beer Market Research Report-Forecast to 2023, [www.marketresearchfuture.com/reports/973](http://www.marketresearchfuture.com/reports/973)). The domestic craft brewing industry continues to grow as well. Small and independent breweries saw 8% growth in 2016, a bright spot in the domestic beer market (<https://www.brewersassociation.org/press-releases/2016-craft-beer-year-review-brewers-association>), but down from 13% growth in 2015 (<http://fortune.com/2016/03/22/craft-beer-sales-rise-2015/>).

In an article appearing in Thrillist (December 2015), Dave Infante discusses the many factors that have limited diversity in the craft brewing industry (<https://www.thrillist.com/drink/nation/there-are-almost-no-black-people-brewing-craft-beer-heres-why>). The U.S. craft brewing industry, not unlike the overall domestic brewing industry, is predominately white and male. Past patterns of discrimination in employment, and lack of access to start-up capital, and access to networks are a few of the historic, economic, and cultural reasons discussed. Regardless of the reasoning, the article recognizes two important benefits to making the craft beer movement more inclusive:

- Tapping the full spectrum of the talent to diversify beers that are developed; and
- Distributing the benefits of this growing industry to all segments of society through jobs and career opportunities

Most craft brewers had experience with craft brewed beer (even as consumers) before entering careers or starting businesses within the industry. As women and individuals from underrepresented communities are less likely to have this experience, broadening the talent pool and participation in this industry will require new strategies and pipelines that provide exposure and points of entry for these communities. One important strategy is training and education. Joining together to develop a full menu of job training and education options that address the needs of craft brewers in Detroit are: Midtown Detroit, Inc., a nonprofit planning and development organization that supports and enhances community and economic development of Midtown area through collaboration and partnerships with key stakeholders and supportive funders, Northern United Brewing Company and other Michigan-based craft brewers, and Eastern Michigan University. It is a win-win situation. Broadening participation will not only make jobs and careers available to communities that typically have not pursued opportunities

in the craft brewing industry, but will also strengthen the Michigan brewing industry by increasing the diversity among brewers and broadening the customer base.

EMU is an ideal partner for this collaboration for several reasons. In February 2016, the EMU Board of Regents approved a new baccalaureate program in Fermentation Science that is unique in the Great Lakes region. Broadly defined, fermentation is the process by which organisms convert carbohydrates into energy and other by-products in the absence of oxygen. The growth in the craft brewing industry, including beer, wine and spirits, along with increased consumption of, and interest in fermented foods, has created a need for a trained and knowledgeable workforce. EMU's program brings together subjects from multiple disciplines (including Chemistry and Biology), focusing them on the science of fermentation and its practical application within industry. The program is concluded with a senior capstone/internship experience (FERM 480/485), affording students an opportunity to apply their coursework-learning to real-world problems in collaboration with a community/industry partner. The initial rollout of the Fermentation Science program focuses on beer and brewing, in order to capitalize on the current growth and interests of the craft brewing industry. The goals of the program are:

- 1) To provide an integrated and practical educational experience for students interested in the science behind fermentation, including the production of fermented beverages, foods, and industrial products;
- 2) To afford the opportunity for students to have meaningful interactions and learning experiences with the local community, specifically those who are part of the broadly defined fermentation industry; and
- 3) To create an environment for students to develop broadly transferrable and applicable professional skills and an appreciation for scientific inquiry.

The program is being led by Professors Cory Emal and Gregg Wilmes, both from the EMU Chemistry Department. Dr. Emal is an organic and medicinal chemist with a strong background in the chemistry of beer. He is trained and certified as a beer judge through the Beer Judge Certification Program (BJCP); has given talks on the chemistry of beer at regional and local meetings of the American Chemical Society; has received formal training on Brewing Technology through the Siebel Institute of Technology; and is a member of the American Society of Brewing Chemists (ASBC) and the American Homebrewer's Association (AHA). Dr. Wilmes is an organic and polymer chemist who has a background in food fermentation, especially bread and aged sausage production. Professionals in the field with specific expertise have been identified to provide guest lecturers on topics, such as sanitation.

In addition to the Fermentation Science program EMU has a long-standing commitment to underserved communities. As an institution of access in higher education, EMU has significant experience supporting first generation students from underrepresented communities. More than 80% of EMU's students come from Michigan, most from counties in southeastern Michigan, and EMU graduates tend to remain in Michigan close to their homes and families after graduation. In short, EMU graduates fulfill an important role in the economy of southeastern Michigan. Eastern Michigan University's Professional

Programs and Training (PPT) division offers practical process-based education in a variety of industries. As a part of Engage@EMU, PPT supports economic development by developing non-credit training programs that address the needs of area industry. As a side note, also, EMU hosts Region 8 of Michigan Small Business Development Center (SBDC), which provides counseling, training and research for new ventures, existing small businesses and advanced technology companies in Wayne, Oakland, and Macomb counties.

The objectives of this collaboration are to:

- Identify a full-spectrum of training and education needs for the craft brewing industry; and
- Develop and deliver a menu of options that likely will include:
  - Special topic seminars, workshops or conferences related to the craft brewing industry (noncredit/need to be developed).
  - Training for specific jobs that provide entree into the industry, or provide up-skilling of existing workforce (noncredit, possibly with for-credit options/need to be developed): Training that focuses on specific entry level jobs in the brewing industry, such as brewing, fermentation, cellar work, packaging, quality control, or courses designed to up-skill existing workforce. These noncredit options may be short-term, specific-topic trainings, or a series of courses over a longer period of time. Topics and format will be developed after surveying the industry partners about its training needs.
  - Undergraduate certificate (credit/needs to be developed): Development of an undergraduate certificate that is offered in conjunction with, or subsequent to a baccalaureate degree.
  - Fermentation Science undergraduate major or minor (credit/existing): Bachelor of Science degree with a major in fermentation science, or a minor in fermentation science for biology or chemistry majors, has been designed for traditional students, as well as those already working in the fermentation industry who are interested in strengthening their skills and credentials to advance their careers, or bring expertise back to their own businesses.

Eastern Michigan University will develop content and delivery of courses using EMU personnel. Midtown Detroit, Inc., and Northern United Brewing Company will provide classroom space in Midtown Detroit. They will also assist EMU with marketing and promotion of the courses and workshops. Northern United Brewing Company will provide access to its brewing facilities and EMU with connections to Michigan brewers.