WMU/KVCC Sustainable Brewing Advisory Board Agenda Friday, December 14, 2018

4:30 - 6:00 pm

Present: Steve Bertman, Brian Hay, Jeff Sobolewski, Tyler Glaze, Jeff Steinman, Aaron Ross, Dan King, John Liberty, Mike Christensen, Scott Vant Hul, Steve Bertman, Ryan Hamilton, Tracey Quada, Brian Lindberg, Trevor Klimek, John Mallet, Dan Rogers, Jared Vosler, John Liberty, Andre Venter, Marcel Zondag, Dave Sippel, Maarten vonHoff

Absent: John Sptisbergen, Chris Stroven, Bob Miller, Ed Martini, Monica Koning, Rachel Bair, Patti Henning, Kris Spaulding, Tim Suprise, Jason Salas, Joe Rudnick, Aaron Morse, Walker Modic, Matt Greff, Mike Babb, Kim Collins, Matt Ginter.

Welcome and Announcements 4:30-4:40

1. New Advisory Board members – Steve

Mike Christensen Final Gravity

Kim Collins Guardian Brewiing Company
Tim Ginter Gonzo's Biggdogg Brewing
Dan King Paw Paw Brewing Company

Trevor Klimek One Well Brewing

John Liberty West Michigan Beer Tours

John Mallet Bells Brewery, Inc.

Jared Vosler Founders

- 2. KVCC staffing updates Brian H.
 - a. Mike Babb has retired –fall of 2018.
 - b. Brian Lindberg and Aaron Ross are the new full-time faculty. They work with Jeff Sobolewski, the Brewing Operations Manger
 - c. Curriculum changes:
 - i. BREW 100 Food Safety Introductory class
 - ii. BREW 150 has been split into BREW 151 and BREW 152.
 - iii. Internship credits 3
- 3. KVCC enrollment/graduation stats
 - a. Stats will be distributed via email.
 - b. 6 graduates Fall 2018
 - c. Currently working on marketing plans to increase enrollment.
- 4. WMU enrollment/graduation stats Steve
 - a. KVCC certificate can transfer to WMU for a bachelor's degree. (4-5 graduates)
 - b. 54 declared BREW majors
 - c. Fall 2018 13 BREW majors were enrolled in classes. Given the age of the program, these numbers are not surprising.

Business (4:40-5:00)

- 1. Collaborative meeting of educational programs update Jeff
 - a. Competition of our schools WMU and KVCC
 - i. Intended for the winter semester students to have an opportunity to showcase their beers.
 - ii. Targeted to be scheduled in conjunction with the Brewer's Guild. Due to staffing

changes, this didn't happen.

- 2. Software (untapped, OrchestratedBEER, EKOS, others?) should we be teaching more?
 - a. Brewery Management Software training as part of our curriculum would enhance our student's resume portfolio.
 - b. The point was made that there are software programs that are process management of systems (automation control) oriented and programs that focus on enterprise resource (brewery management.)
 - c. Students that are aware of the importance of accuracy input is as important as knowing the software.
 - d. Learning objectives should be the priority. What should they?
 - e. This would be a difficult thing to manage. Software is constantly changing. Teaching the importance of tracking is included in curriculum.
- 3. Alumni mixer Jan. 8 Brian L.
 - a. As more of our students are graduating, more are moving into other communities. It's important to bring these students together to gather information.
 - b. Bell's Eccentric January 8, 2019. Planned for around the 4 PM hour. Just before the Guild.

Brainstorming - The current state of brewing (5:00-5:45)

Breakout groups (5:00-5:30)

- Where is the brewing industry heading?
 - o Small brew continuation
 - o Local Malt Growers Buy local
 - Other beverages Kombucha...
- What are the latest trends?
 - Water use and disposal
 - o Understanding ordinances and regulations of the city that you are brewing in. OSHA awareness.
 - Data collection is paramount –how to manipulate and understand the data is a necessary teaching.
 - o Sustainability and Conservation.
- How do we make sure curriculum is relevant into the future?
 - o Intentional teaching to prepare our students to enter various vocational needs within the brewing industry.
 - Look at enhancing the learning related to ordinances and regulations. OSHA.
 - o Do we teach about standard operating procedures?

Report out ideas (5:30-5:45)

- Five top "new things" What's coming?
 - Turpines flavorings
 - o Champagne beer, Kombucha alternatives
 - o Low sugar, lower alcohol, IPAs
 - Multiple locations
 - o Buy Local
 - Very Small Brewers and Brew pubs
 - Flavor share of
 - Local malt realistically 5 + years away from useable product for most breweries.
 - o Understanding demographics.

- Three things to watch for Challenges
 - o "Saturation"
 - o Regulatory OSHA and Water ordinances
 - o Social Media Crisis management
 - o Growth flattening out.
 - o Trend vs. Fad
 - Multi-use, multi barley hulless barley with good malt quality and good human food source qualities – winter growth habit. Promoting energizing interest in barley for food as secondary market for rejected barley.
- Three priorities for educational programs How can this program play the biggest role?
 - Understanding HACCP Plans, Food Safety
 - Waste Water Management Regulatory
 - Identify Markets
 - Marketing and PR
 - o Aseptic technologies
 - o BA safety classes
 - o Analytics
 - o Realistic job expectations. All other jobs.
 - o Mash filters synergy with food industry
 - o Cereal Chemistry deeper dive BREW 130?)
 - Warehousing

News/announcements (5:45-6:00)

- 4. Brewing Employer Career Fair offered to KVCC students. Is there interest for an event like this for our students? Brewing industry would come in to our Culinary Allied Health Building. Opportunity for students to learn how to network.
- 5. KVCC offers on-campus recruiting on Tuesday's over the lunch hour. Contact Tracey Quada if you are interested.

Any news to share?

Please stay for the 6:00 poster presentations by students in the KVCC brewing practicum course and in the WMU capstone course. Taste, critique, and discuss student-made beers and provide feedback about projects.

Name	Position	Affiliate	Contact:
Mike Babb	Retired Kalsec/Adjunct Faculty	Kalsec, KVCC	
Mike Christensen	Brewer	Final Gravity	mchristensen@finalgravitiybrew.com
Kim Collins	Owner/Head Brewer	Guardian Brewing	kimc@guardianbrewingco.com
Tyler Glaze	Quality Manager	Short's Brewing	tyler@shortsbrewing.com
Matt Ginter	Head Brewer	Gonzo's Biggdogg Brewing	tim@gonzosbiggdoggbrewing.com
Matt Greff	Proprietor	Arbor Brewing	mgreff@arborbrewing.com
Ryan Hamilton	Executive Director	Michigan Barley Association	ryan.hamilton@michiganbarley.com
Dan King	Brewer	Paw Paw Brewing	dan@2pawsbeer.com
Trevor Klimek	Brewer	One Well Brewing	trevor@onewellbrewing.com
John Liberty	General Manager	West Michigan Beer Tours	john@westmibeertours.com
John Mallet	Director of Operations	Bell's Brewing	jmallett@bellsbeer.com
Walker Modic	Sustainability Manager	Bell's Brewing	wmodic@bellsbeer.com
Aaron Morse	Owner	Dark Horse Brewing	aaronm@darkhorsebrewery.com
Dan Rogers	Brewmaster	Griffin Claw Brewing	drogers@griffinclaw.com
Joe Rudnick	Co-Owner	Tapistry Brewing	joerudnick07@gmail.com
Jason Salas	Brewery Production Manager	New Holland Brewing	salas@bewhollandbrew.com
Dave Sippel	Director of Brewing Operations	Arcadia Brewing	dave@arcadiaales.com
Kris Spaulding	Sustainability Director, Owner	Brewery Vivant	kris@breweryvivant.com
Jeff Steinman	Founder	Alpha Wolf Diversified Svs	jeff@hopheadfarms.com
Tim Surprise	Founder & President	Arcadia Brewing	tsuprise@arcadiaales.com
Jared Vosler	Director of Quality, Safety & Environment Mgmt	Founders	voslerj@foundersbrewing.com

Name	Position	Affiliate	Contact:
Rachel Bair	Director, Sustainable and Innovative Food Systems	KVCC	rbair@kvcc.edu
Steve Bertman	Professor	WMU	steven.bertman@wmich.edu
Brian Hay	Director of Culinary Education	KVCC	bhay@kvcc.edu
Patti Henning	Dean of Instruction for Health Careers & Sustainable Foods	KVCC	phenning@kvcc.edu
Steve Kohler	Director	WMU	steve.kohler@wmich.edu
Monica Koning	Internship Coorinator	KVCC	mkoning@kvcc.edu
Carla Koretsky	Dean	WMU	carla.koretsky@wmich.edu
Brian Lindberg	Brewing Instructor	KVCC	blindberg@kvcc.edu
Ed Martini	Associate Dean	WMU	edwin.martini@wmich.edu
Bob Miller	Associate Vice President	WMU	bob.miller@wmich.edu
Tracey Quada	Student Employment Relations Liaison	KVCC	tquada@kvcc.edu
Aaron Ross	Brewing Instructor	KVCC	aross@kvcc.edu
Jeff Sobolewski	Brewing Operations Manager	KVCC	jsobolewski@kvcc.edu
John Spitsbergen	Chair/Biological Sciences	WMU	john.spitsbergen@wmich.edu
Chris Stroven	Counselor	KVCC	cstroven@kvcc.edu
Andre Venter	Associate Professor	WMU	andre.venter@wmich.edu
Marcel Zondag	Assistant Professor of Marketing	WMU Haworth School of Business	marcel.zondag@wmich.edu