


UMass Dartmouth and the MAB: research and learning opportunities

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UMass Dartmouth and the Massachusetts Accelerator for Biomanufacturing (MAB)



- The MAB represents opportunities for UMass Dartmouth
 - Research opportunities
 - Learning opportunities
 - “Hands-on” biomanufacturing opportunities
- The MAB represents opportunities for Southeastern MA
 - Bringing more innovation and industry to the area
 - Providing training for biotechnology firms of the area
 - Providing the next generation of workforce to help drive the local economy
- The MAB represents opportunities for biotechnology
 - Providing space for startup ventures
 - Training the next (and current) generation of workforce

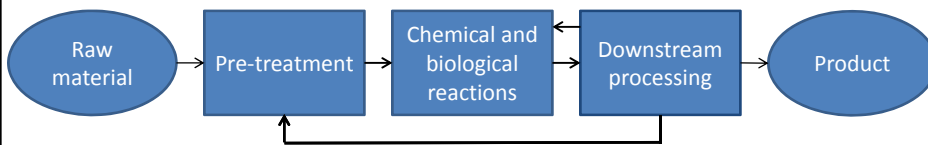


UMD undergraduate student opportunities at the MAB

- “Hands-on” experience and learning
 - Pre-treatment and media/buffer preparation in an industrial setting
 - Fermenter and bioreactor operations
 - Unit operations
 - Downstream processing
 - Unit operations
 - Training in a GMP-like environment
 - “Cradle to gate” biomanufacturing exposure

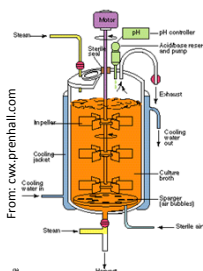


Educational tools
 Biomanufacturing laboratory classes
 Capstone (senior) projects
 Opportunities for observation



UMass Dartmouth graduate student opportunities at the MAB

- Graduate classes and laboratories in biomanufacturing
- Thesis projects:
 - In a biomanufacturing setting
 - In a cGMP-like setting
 - Partnering with industry (?)
 - “Real world” understanding of bioprocessing with “real world” unit operations
 - Involving process design and control

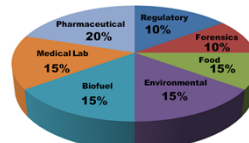


From: h2h.jobs



From: bioinformatics123.wordpress.com

Biotechnology Curriculum by Industry



From: learningin3d.ca



Biotechnology community learning at UMass Dartmouth and the MAB

- Development of 2-3 week intensive, hands-on courses in:

- Process development
- Fermentation
- Downstream processing
- QC
- Any unit operations therein

Similar to what other
MA institutions have
set up

- For:

- New hires at MA, RI (and more!) biotechnology firms
- UMass students
- Faculty
- Many others



Internships/Co-op opportunities at the MAB



UMass Dartmouth students get:

- Hands-on opportunities to work in a biomanufacturing setting
- Real industry experience
- Inroads into bioproduction, contacts
- Interesting projects

Our partners in industry get:

- Enthusiastic workers
- Skilled and knowledgeable workers
- Potential future employees!



Thank you!!!

ISPE

Friends and colleagues at UMass Dartmouth

Friends and colleagues at Co-Bio Consulting
Suffolk

BNG 312 students, especially the Tour Guides

