The Challenge

Alkanes
Aromatics
Cycloalkanes

20M Gallons a Day vs 0.2M Gallons a Day

Glucans
Xylans
Lignin
Innovation Ecosystem

Faculty, Students & Management Team

Startups, Members & Innovation Partners

IDEAS

Products

Ideas

1-5 Yrs

Concept Generation

2-5 Yrs

Knowledge & Patents

4-10 Yrs

Product R&D

2+ Yrs

Commercialization
ERC’s need an active IAB with sufficient diversity to add value to the center.
Core Needs

- Clear Understanding of Industry Membership Benefits & Costs, and your Membership Agreements
- A Good Knowledge of your ERC’s Science & Technology
- Classy Brochure with your ERC Story
- Convincing PowerPoint Presentation with Great Slides

- Consistent Credibility with your ERC Management Team and University Admin
- Build Links to the Broad Industry of your ERC
- Dialogue & Good Relations with your Industry Member Folk
- Patience, Perseverance, Persuasion, Passion & Vision
Membership Database

Build a database of company names, connections, contact info and notes.
Recruit

- Emails, connections, business meetings lectures, brochures.
- Imperative to reach the “right person” as senior as you can get. Then build several connections.
- Follow-up with conference call and campus visit.
- Invite select guests to Annual Meeting (Fee & CDA).

Industry folk move jobs. Can track with LinkedIn.

- Cold calls do not work.
- CDA is sometimes a problem.
- Very little from IAB and Faculty.
Train

- Explain, describe and summarize.
- Often get new people to member meetings.
- Legal side and patents and internet access and strategy and SWOT.
- Build a good rapport with your IAB.
Reward

- Annual meetings are very important.
- Newsletters and webinars are very effective.
- Impossible to provide all information on an ERC to the membership.

- Not responding quickly to emails or phone calls is a bad reward.
Retain

- Improve your program over time so that there is always a next level.
- Build multiple relationships with members.
- IAB Seed projects from membership fees.
- Sponsoring research, internships, mentoring all build a deeper root in the ERC.
- Find creative ways to not lose a member.

- Members that leave do not come back.
Thank you!!
Different Stages

Stage 1. ERC Years -2 thru 0
Formation and Foundation

Stage 2. ERC Years 1 thru 3
Define and Develop

Stage 3. ERC Years 4 thru 6
Refine and Optimize

Stage 4. ERC Years 7 thru 10
Redefine and Mature

Stage 5. ERC Years 10+
Graduate to Sustainable Center

Formation & Foundation ➔ Develop & Refine ➔ Refine & Optimize ➔ Redefine & Mature ➔ Sustainable Center
# ERC Stages

<table>
<thead>
<tr>
<th>ERC STAGES &amp; YEARS CONCEPT</th>
<th>Stage 1. ERC Years -2 thru 0 Formation and Foundation</th>
<th>Stage 2. ERC Years 1 thru 3 Define and Develop</th>
<th>Stage 3. ERC Years 4 thru 6 Refine and Optimize</th>
<th>Stage 4. ERC Years 7 thru 10 Redefine and Mature</th>
<th>Stage 5. ERC Years 10+ Graduate to Sustainable Center</th>
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</thead>
<tbody>
<tr>
<td>Ideation and Formation</td>
<td>Work closely with ERC Founders and University advisors to develop ideas within context of NSF ERC Guidelines. Help define ERC opportunity.</td>
<td>Define and develop ERC concept working closely with ERC Management Team.</td>
<td>Refine ERC concept working closely with ERC Management Team.</td>
<td>Redefine Center concept based around a vision of future sustainability.</td>
<td>Review and define new sustainability strategy</td>
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<td>Member Recruitment</td>
<td>Secure letters of intent from future industry members. Identify key individuals to work with.</td>
<td>Develop active outreach process through business connections, technical summits, outreach presentations, fliers and brochures. Tiered membership structure based on company size, varying benefits. What is a realistic IAB size.</td>
<td>Refine recruitment efforts with a greater emphasis on maximizing ability to retain key members.</td>
<td>Redefine recruitment and retention around a future sustainability strategy.</td>
<td>Develop connections to forge the best path into Sustainability.</td>
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<tr>
<td>Member Retention</td>
<td>Begin to define strategy to retain members through engagement in center activities including newsletters, websites and other informational tools.</td>
<td>Develop company interaction and benefits. Develop ideas around joint projects, testbeds, and other ERC opportunities.</td>
<td>Maximize ERC / company interaction and benefits. Value and mechanisms of establishing multiple points of contact in firms.</td>
<td>Redefine recruitment and retention around a future sustainability strategy.</td>
<td>Develop retained connections to forge the best path into Sustainability.</td>
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<td>Commercialization of IP</td>
<td>Begin to define testbeds and cross project integration alongside a strategy for commercialization.</td>
<td>Develop Industry R&amp;D needs alongside ERC needs in testbeds, Integrate industrial input from project inception, using project management tools (timelines, go-no-go points, cross project integration, etc.). Strategies for increasing sponsored research projects with industry.</td>
<td>Meet Industry R&amp;D needs alongside ERC needs in testbeds, Integrate industrial input from project inception, using project management tools (timelines, go-no-go points, cross project integration, etc.). Strategies for increasing sponsored research projects with industry.</td>
<td>Redefine commercialization strategy around a future sustainability strategy.</td>
<td>Redefine commercialization strategy in light of sustainability path.</td>
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<td>Intellectual Property</td>
<td>Begin to define strategy for IP management and technology transfer.</td>
<td>Develop processes for management and strategy, Technology Transfer and the Invention Disclosure. Start to identify key technology transfer staff for ERC IP management (invention disclosures, patent processing, IP marketing, etc.), the licensing process and what is really valuable to the membership.</td>
<td>Refine management and strategy, Technology Transfer and the Invention Disclosure process. Realistic chances of &quot;big-hit&quot; from IP generated revenue. Cultivate connections to key technology transfer staff for ERC IP management (invention disclosures, patent processing, IP marketing, etc.), the licensing process and what is really valuable to the membership.</td>
<td>Redefine intellectual property strategy around a future sustainability strategy.</td>
<td>Redefine IP strategy in light of sustainability path.</td>
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<td>Innovation Strategy</td>
<td>Begin to identify key local innovation partners and infrastructure</td>
<td>Develop paths to entrepreneurship activities in the ERC and University, connecting to local, state, and regional economic development and incentive programs and role of investment groups such as Angels, VCs.</td>
<td>Cultivate entrepreneurship activities in the ERC and University, connecting to local, state, and regional economic development and incentive programs and role of investment groups such as Angels, VCs.</td>
<td>Redefine innovation strategy around a future sustainability strategy.</td>
<td>Redefine innovation strategy in light of sustainability path.</td>
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<td>Education Programs</td>
<td>Begin to identify strategy to develop valuable education programs</td>
<td>Start student mentoring programs, short courses and workshops for industry, Certificate programs and distance leaning models, Faculty and student exchange, Active promotion of industrial recruitment of graduates.</td>
<td>Refine student mentoring programs, short courses and workshops for industry, Certificate programs and distance leaning models, Faculty and student exchange, Active promotion of industrial recruitment of graduates.</td>
<td>Redefine education strategy around a future sustainability strategy.</td>
<td>Redefine education strategy in light of sustainability path.</td>
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<td>Goals</td>
<td>Define, Develop, Refine and Optimize</td>
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<tr>
<td>Strategy and Ideation</td>
<td>Define, Develop, Refine and Optimize CBiRC, Work Closely with Leadership Team</td>
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<td>Innovation</td>
<td>Cultivate Innovative Culture, Entrepreneurship Course, Translational Research, Startup Companies, Innovation Partners, Angels and VCs</td>
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<td>Education</td>
<td>Student Spotlights, Industry Internships, Distance Learning, Exchange, Student Mentoring, Recruitment</td>
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<td>Member Recruitment</td>
<td>Industry Outreach, Summits, Conferences, LinkedIn, Connections, Site Visits</td>
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<td>Member Retention</td>
<td>Newsletters, Networking, Poster Competition, Student Seminars, Technology Fair, Technology Transfer, Two-Way Confidentiality, Sponsored Research, Internships</td>
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<td>Commercialization of IP</td>
<td>Integrate Industry Input, Invention Disclosures, NSF Translation Research Grants, Startup Companies</td>
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<tr>
<td>Intellectual Property</td>
<td>Invention Disclosure Process, Align with Offices of IPTT,</td>
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