



Fall 2025 Industry Advisory Board (IAB) Meeting

November 17–18, 2025
Indiana University, Bloomington, IN

AGENDA

Monday, November 17 (*All times listed are Eastern Time*)

Monday Zoom link: <https://notredame.zoom.us/j/5511482913>

8:15 am **Welcome and CBM Business Meeting¹**

Dogwood Room, Indiana Memorial Union

Welcome and introductions

Approval of spring 2025 minutes

Center Director's report

Other business

9:30 am **Break** with light snacks and beverages

9:45 am **2026 Proposal Presentations, Session #1** (moderator: Chris Welch)

Dogwood Room, Indiana Memorial Union

8 presentations (presentations: 10 min; Q&A: 3 min)

1 – David Clemmer - Exploring the Use of Ion Mobility Spectroscopy for Separation and Analysis of Closely Related Chemical Species

2 – Merlin Bruening - Absolute Protein Quantitation Using Digital Counting on Membranes

3 - Hilikka Kenttämä - Characterization of heteroatom containing contaminants in oils from waste feeds

4 - Stephen Jacobson - Single-Particle Analysis of Biologics and Co-Formulated Biologics with In-Plane Nanofluidic Devices

5 - Kaiyu Fu & Jon Camden - Autonomous Optical–Electrochemical Workflow for Continuous Drug Stability Assessment

6 - Hilikka Kenttämä - Nontargeted Detection and Quantitation of N-Nitrosamines by Using Semi-automated HPLC/Tandem Mass Spectrometry Experiments Based on CAD and Diagnostic Gas-phase Ion-Molecule Reactions

¹ Unless otherwise noted, meeting sessions and social events are open to all participants, including IAB members, CBM personnel, faculty, students, postdocs, and guests.

7 - Haixu Tang - Accelerating Chiral Separations through Predictive Machine Learning

8 - Alex Dowling - DoE-GPT: A Chat Bot Assistant for Optimal Experiment Design and Statistical Analysis

11:45 am Lunch

*Coronation Room in the Tudor Room, Indiana Memorial Union
Reservation under Center for Bioanalytic Metrology*

1:00 pm 2026 Proposal Presentations, Session #2 (moderator: Stephen Jacobson)

Dogwood Room, Indiana Memorial Union

6 presentations (presentations: 10 min; Q&A: 3 min)

9 - Matt Champion - Gel-free Capillary Electrophoresis-Mass Spectrometry for High-resolution Analysis of Therapeutic Oligonucleotides

10 - Alex Laskin - Rapid Molecular Characterization of Chemically Modified Polysaccharide Systems

11 - Eric Munson - Advanced Polymer Characterization of Derivatized Polysaccharides

12 - Vikas Tomar - Differential-Time Multi-Point (DTMP) Confocal Raman Microscopy for Subvisible Particulate Identification

13 - Arezoo Ardekani & Ashwin Ramachandran - Automated subvisible particle counting, characterization, and ingredient-level identification in viscous biologics using 3D profilometry and correlative hyperspectral imaging

14 – Skylar Wappes (Jonathan Raff) - Ultrasensitive Detection of Nitrosamine Contaminants using Chemiluminescence Detection

2:30 pm Break with light snacks and beverages

2:45 pm 2026 Proposal Presentations, Session #3 (moderator: Merlin Bruening)

Dogwood Room, Indiana Memorial Union

4 presentations (presentations: 10 min; Q&A: 3 min)

15 – Julia Laskin - High-Throughput Native Nanospray Desorption Electrospray Ionization Mass Spectrometry (nano-DESI)

16 - Xingchen Ye - Nanoscale Chemical Mapping of Organics and Polymers Using Correlative Cryo-4D-STEM and Cryo-EELS

17 - Kaiyu Fu - Correlative Nanoscale Spectroscopy and Electrochemical Contrast for High-Resolution Polymer Mapping

18 - Garth Simpson & Kurt Ristroph - Label-free substrate-enhanced photothermal infrared correlation spectroscopy

3:45 pm Finalize Proposal Scoring (IAB members)

4:30 pm **Poster Session**
Atrium, Chemistry Building with light snacks and beverages
Current CBM projects, proposed CBM projects, non-CBM projects

5:45 pm **Transition**

6–9 pm **Reception and Dinner**
Upstairs at Lennie's Restaurant, 514 E. Kirkwood Ave

Tuesday, November 18

9:00 am **2026 Proposals Review** (IAB, faculty, NSF, and CBM personnel)
Dogwood Room, Indiana Memorial Union; [Zoom Link](#)
Proposal updates from day 1, mergers, shifts in scope, etc.

9:45 am **Break** with light snacks and beverages

10:00 am **IAB Executive Session: Allocation of 2026 funding** (IAB and NSF only)
(parallel) *Dogwood Room, Indiana Memorial Union*
One IAB member per company
Review voting procedures

10:00 am **Industry-Student Event** (Graduate Students and Postdocs)
(parallel) *Oak Room, Indiana Memorial Union; [Zoom Link](#)*
AI in industry and professional life – Chris Brown

11:00 am **IAB Concluding Session** (IAB, CBM personnel, NSF)
Dogwood Room, Indiana Memorial Union
Report on allocation of funding
Any remaining business

12:00 pm **Lunch**
Sandwiches and salads

12:15 pm **Presentations by New Faculty from IU, Purdue, and Notre Dame**
Dogwood Room, Indiana Memorial Union; [Zoom Link](#)
4 presentations (presentations: 10 min; Q&A: 3 min)

1 - Bryon Drown
2 - Jingcheng Ma
3 - Jeffrey Dick
4 - Ricardo Vázquez

1:30 pm **Adjourn**

Contact Information:

Jessica Schiller (jschill2@nd.edu; mobile: 574-386-5349)

Stephen Jacobson (jacobson@iu.edu; mobile: 812-679-8121)