1. Introduction and Welcome IAB Guests (Art Lizotte, IAB President)
   Art opened the meeting, welcomed the new IAB guests (outlined above), shared the day's agenda, and then turned it over to Tony Maciejewski, ECE department head, for the department update.

2. Agenda and Department Update (ECE Department Head Tony Maciejewski)
   Tony welcomed the meeting attendees and provided an update on the following topics:
   **Awards:**
   - Keysight, Employer of the Year by CSU
   - Richard Toftness, Outstanding Individual Achievement Award from IEEE Region 5
   - Jesse Wilson, Melanoma Research Alliance Young Investigator Award
   - Sid Suryanarayanan, IEEE HKN Outstanding Educator Award
   - Sudeep Pasricha, Mid-Career Achievement Award from IEEE-CS TCVLSI

   **Celebrate Colorado State Awards:**
   - ECE Department, Davis Instructional Innovation Award for RED project
   - Diego Krapf, Interdisciplinary Scholarship Award
   - Tony Maciejewski, Pennock Distinguished Service Award

   **College of Engineering Awards:**
   - Chandra, Patent Award from CSU Ventures
   - Andrea Leland, Outstanding Staff
   - Ali Pezeshki, Outstanding Teaching and Service

   **Other Department News**
   - Students compete in dumpster dive competition
   - ECE researchers demonstrate micro-scale nuclear fusion with record efficiency; published in *Nature Communications*
   - Jayasumana leading research that has the potential to prevent a terrorist attack
   - New alumni scholarship: John and Betty Becker Family Scholarship
   - Upcoming events
Annual Best Paper Contest in June
Commencement set for Friday, May 11

Charts and data:
- College of Engineering research expenditures
- ECE research expenditures
- ECE direct and indirect costs
- Proposal activity
- ECE student credit hours
- National enrollments by discipline
- CSU engineering enrollments
- Biomedical dual majors
- ECE spring enrollment
- Nontraditional undergrads in ECE
- First-generation undergrads in ECE
- Freshman enrollment
- Freshman admissions outlook
- National persistence in engineering
- ECE freshman retention rates
- Women in engineering (FA17)
- Women in ECE at CSU
- Undergraduate degrees by country
- Undergraduate degrees awarded in ECE at CSU
- Graduate degrees awarded
- Percent of international degrees awarded
- Career outlook for ECE grads
- Engineers as a percentage of all occupations by state

Update on fall items:
- **Action item**: Share mechanical engineering persistence with the board.
- **Status**: Data included in presentation.
- **Action item**: Explore strategies from other cultures to gain insights into effective female recruitment.
- **Status**: Key factors in other countries: cultural perceptions about engineering, wealth of the country, and family influence.
  - 70% of STEM graduates from Iranian universities are women
  - Wealth may be related to gender discrepancy – in wealthy countries, people have “luxury” to pursue liberal arts.
- **Action item**: Share first-generation stats from other schools.
- **Status**: Challenging to collect consistent data from other ECE programs; CSU among best for first generation students.
- **Action item**: Share update on ECEDHA branding project.
- **Status**: Branding unveiled at ECEDHA meeting in March – examples shared in presentation.

3. **Professional Formation Thread Update (Jim Greener, Professional Formation Committee Member)**
   Jim Greener spoke about the work underway in the professional formation thread, including the revised focus areas and goals for 2018.

4. **ABET Survey**
5. **Prep for Engineering Days (Tony Maciejewski)**
   **Considerations:**
   - How are we doing overall?
     - Can you see the impact of your previous suggestions?
   - What are the strengths, weaknesses of the senior design program?
   - What changes would you recommend?
   - Which projects stand out, and what makes them great?

   **Assessing professionalism in Projects**
   - Complete enclosed rubric to build on SP16, SP17
   - Acceptable to use “n/a” or “.5” in your ratings
   - Results of SP17 baseline assessment of professionalism in senior projects shared in presentation
     - Students ranked highest in communication and teamwork

6. **Breakout Session: K-12 Outreach (Facilitators: Art Lizotte and Jeannine Looney)**
   **Considerations for Breakout:**
   - How do we enable meaningful collaborations between universities, industry, and K-12 partners?
   - What are the barriers to success, and how do we overcome the obstacles?
   - How do we effectively share our rebranded messaging with K-12 audiences?

   **Key Points and Suggestions:**
   - Students get drawn into CS and engineering when they feel empowered to solve real problems – show them the impact by engaging them in REAL engineering.
   - Mentoring and one-on-one relationship building are key; to get HS students interested in ECE, it’s important to have caring CSU students interfacing with prospects to expose them to the discipline.
   - Leverage FirstLego League and similar programs to build pipeline.
   - Internships are valuable.
   - Bolster outreach to H.S. counselors.
   - Give students broad exposure to ECE and build their confidence through camps and participation in fun, low-level engineering design projects.
   - To identify top prospects, narrow recruitment efforts to focus on H.S. students who are most likely to succeed in ECE; leverage H.S. contacts to identify these students.
   - Invite middle and high school students to on-campus events, e.g., E-Days, sophomore-level project demos, and Dumpster Dive Competition.
   - Consider partnering with industry to attract high school students to ECE; IEEE High Plains might be able to help with this.
   - Consider developing and AP engineering course taught by ECE faculty or put ECE 102 online for dual credit.
   - Create more YouTube videos that highlight ECE projects.

   **Barriers to success:**
   - High-level math that is required. While H.S. students are excellent problem solvers, often times they haven’t yet mastered the math and need a pathway.
   - Culture – students are often intimidated by engineering.

7. **Election (Jeannine Looney)**
   The board unanimously voted in favor of Mike Stiles (Avaya Communications) to serve as the IAB vice president for the upcoming academic year; Jeannine Looney becomes president.
8. **Closing Remarks (Tony Maciejewski)**

Tony wrapped up the meeting and thanked the board for their participation. He encouraged the board to contact him or Andrea with additional ideas or comments regarding the meeting topics.

**ACTION ITEMS:**

- Create outreach programs that emphasize one-on-one relationships between CSU ECE students and potential K-12 students.
- Create internship opportunities to expose prospective students to real engineering.
- Bolster outreach to H.S. counselors.
- To identify top prospects, narrow recruitment efforts to focus on H.S. students who are most likely to succeed in ECE; leverage H.S. contacts to identify these students.
- Invite middle and high school students to on-campus events, e.g., E-Days, sophomore-level project demos, and Dumpster Dive Competition.
- Consider partnering with industry to attract high school students to ECE; IEEE High Plains might be able to help with this.
- Create more YouTube videos that highlight ECE projects.

The fall IAB meeting is scheduled for Friday, October 26, 2018.