# FY22 ACM Education Board and Education Advisory Committee Annual Report

For the Period: July 1, 2021 - June 30, 2022

Submitted by: Chris Stephenson and Elizabeth Hawthorne, Co-Chairs
Alison Derbenwick Miller, Vice Chair
Jane Prey, Immediate Past Chair
Mehran Sahami, Past Chair Emeritus

# FY22 EXECUTIVE SUMMARY/HIGHLIGHTS

In FY22, the Education Board ("Ed Board") and Education Advisory Committee ("EAC") remained fully remote due to continuing COVID restrictions, holding regular meetings via Zoom. Member engagement remained high, partly due to streamlined agendas, but members expressed consistent desires to return to in-person meetings as soon as was practicable.

The following highlighted efforts made significant progress or are new:

The decennial revision of the **ACM Computer Science curriculum guidelines**, **CS2023**, was launched, completed partner MOUs, drafted and published an Alpha version, and began collecting initial feedback from the community. NSF funding was secured for additional outreach activities in 2022-23. The project is on target for on time, on budget completion in 2023.

The **Learning@Scale conference** had its best fundraising year ever, raising more than \$44,000, and held a successful first-ever hybrid event with nearly 200 attendees.

The **NDC Study** published its 2021 report in *Inroads* (Dec 2021) and expects its 2022 report to be published in *Inroads* in September 2022. Based on significant data overlap, integration with **ACER Task Force** reports is being finalized, with integration planned by September 2023.

A new ACM group focused on 2-year post-secondary computing education programs (ACM2Y) was launched and has a growing membership.

## 1. BASIC INFORMATION

#### 1.1 Members and Terms

#### **Education Board**

Co-Chair Co-Chair Vice Chair Chris Stephenson (7/20-6/22) Elizabeth Hawthorne (7/20-6/22) Alison Derbenwick Miller (7/21-6/22) Past Chair Jane Prey (7/20-6/22)
Chair Emeritus Mehran Sahami (7/20-6/22)

Members Diana Burley (7/21-6/22)

Michele Craig (7/20-6/22) Paul Leidig (7/20-6/22)

Andrew McGettrick (7/20-6/22) Briana Morrison (7/20-6/22) Fay Cobb Payton (7/21-6/22) Mihaela Sabin (7/20-6/22) Cara Tang (7/20-6/22) R. Venkatesh (7/20-6/22)

ACM Headquarters Yan Timanovsky

Ex-Officio

Jake Baskin (CSTA Executive Director)

Lisa Smith (ACM D&I Council Liaison)

## **Education Advisory Committee**

Tom Cortina (7/19-6/22) Carnegie Mellon University

Leigh Ann Delyser (7/19-6/22) CSforAll Mary Ann Eagan (SIGCSE appt) Siena College

Judith Gal Ezer (7/19-6/22) ACM Europe Council; Open University of Israel

Christina Gardner-McCune (7/19-6/22) University of Florida

Itana Maria Gimenez (SBC appt) Universidade Estadual de Maringá

Mikey Goldweber (SIGCAS appt) Xavier University

Steve Gordon (SIGHPC appt)

David Joyner (7/21-6/24)

The Ohio State University

Georgia Institute of Technology

Amruth Kumar (7/21-6/24) Ramapo College

Alvaro Monge (7/20-6/23) California State University, Long Beach

Tamara Pearson (7/21-6/24) Spellman University

Abhiram Ranade (ACM India appt) IIT Bombay

Donna Reese (CSAB appt) Mississippi State University

Susan Reiser (SIGGRAPH appt) University of North Carolina, Asheville

Christian Servin (7/21-6/24) El Paso Community College
Olivier St-Cyr (SIGCHI appt) University of Toronto
Jodi L. Tims (ACM-W appt) Northeastern University

Cindy Tucker (7/20-6/23) Bluegrass Community and Technical College

Ellen Walker (7/21-6/24) Hiram College Andrew Williams (7/20-6/23) The Citadel

Stuart Zweben (NDC appt) The Ohio State University

# **EAC 2022 Advisors**

Alison Clear CC2020; Eastern Institute of Technology (NZ)
Robert Schnabel ECE Task Force; University of Colorado, Boulder

## 1.2 Education Board and EAC Purpose

- To improve the teaching and learning of computer science.
- To launch, approve, disseminate, and update relevant ACM curricular documents.
- To serve as a forum for collaboration and knowledge sharing among ACM groups working in computer science education.
- To form and oversee task forces addressing issues deemed important to ACM's education efforts or the wider computer science education community.

## 1.3 Education Board and EAC Projects and Task Forces

- CS 2023 Curriculum. ACM Co-Chair: Amruth Kumar
- CC2020 Supplemental Visualization Tool. ACM Chair: Alison Clear
- ACM2Y. Chair: Cara Tang
- Actionable Computing Enrollment and Retention (ACER). Chair: Stuart Zweben
- Committee for Computing Education in Community Colleges (CCECC). Chair: Cara Tang (FY22); Marcus Geissler (FY23)
- DEI in Computing Education Task Force (DEI-CE). Co-Chairs: Fay Cobb Payton and Susan Reiser
- Education in Ethics and Computing (EEC). Chair: Bobby Schnabel
- Learning@Scale Conference. Chair: Mehran Sahami (FY22), David Joyner (FY23)
- NDC Study. Co-Chairs: Stu Zweben, Jodi Tims (FY22), Cindy Tucker (FY23), and Yan Timanovsky
- Resources for Instructors to Improve Teaching and Peer Mentoring Practices (EngageCSEdu).
   Co-chairs: Michelle Craig and Briana Morrison
- Revised Bloom's Verbs CCECC Project. Chair: Cara Tang
- Special Ed Board Research Publication. Chair: Chris Stephenson
- Standardization of ACM Curricula (StAC). Co-Chairs: Cara Tang and Mihaela Sabin

## 2. SUMMARIES, ACTIVITIES AND COMPLETED MILESTONES (FY22)

## CS 2023 Curriculum (Project)

**Purpose:** Development of the ACM 2023 CS Curriculum, a multi-year joint project with IEEE-CS and AAAI collaborators and wide input from the global CS education community.

**Starting Date:** July 2021 **Status:** Underway

Funds Budgeted: \$65,000 Funds Spent: \$65,000

Milestones:

- MOUs signed with partner organizations (IEEE & AAAI)
- Chairs, steering committee, and task force members from around the globe selected and onboarded

- First in-person meeting held in New York City in July 2022 (focus on core hours)
- Version Alpha of curricular content drafted and posted online (each to have at least three reviews)
- Curricular practices articles assigned to experts and in progress
- Outreach completed at CCSCNE 2022, ITiCSE 2022, and CRA 2022
- NSF funding secured to support outreach activities by steering committee members in 2022-23

## CC2020 Supplemental Visualization Tool (Project)

**Purpose:** Development of an online application that enables stakeholders to assign minimum and maximum values to each of the topic areas required in their degree programs, and then visualize their programs against the current ACM/IEEE-CS approved curricula and other degree programs globally.

Starting Date: July 2021

Status: Concluding (planned completion in 2022)

Funds Budgeted: \$20,000

Funds Spent: \$405

Milestones:

- Visualization tool released, with continued testing ongoing. Tool enhancement, in partnership with Texas A&M University, is ongoing in response to testing.
- Four workshops delivered in New Zealand
- Special Session to SIGCSE TS submitted to further promote the tool

## ACM2Y (CCECC Project)

**Purpose:** Launch of a new ACM group for those interested in computing education in 2-year post-secondary programs, such as those typically found at community colleges and technical colleges.

Starting Date: July 2021

Status: Ongoing

**Funds Budgeted:** \$0 (none required)

Funds Spent: \$0 Milestones:

- Charter adopted
- Organized and hosted a webinar panel discussion entitled From Pivot to Promise: Lessons Learned during COVID-19
- Increased visibility and supported outreach via a new website, Twitter account, logo, and ads in *CACM* and *Inroads*
- Opened membership and set up members listserv with 63 members as of 30-Jun-2022, on track with expected membership for the relatively short life of the project to date

# Actionable Computing Enrollment and Retention (ACER) (Task Force)

**Purpose:** Source rigorous and reliable data regarding undergraduate CS student retention and produce scholarly papers and presentations to share new information and insights with the CS education community.

Starting Date: July 2021

**Status:** Ongoing

Funds Budgeted: \$10,000 Funds Spent: \$9,923

Milestones:

- Obtained and analyzed data from National Student Clearinghouse ("NSC") for 2020-21 enrollment cohort
- Wrote and published in *Inroads* a paper incorporating four years of enrollment and retention data, data on non-retained students, and data on graduates studying at the next level
- Discussed with NDC steering committee the possible incorporation of the NDC into an annual, more comprehensive ACER report, starting in 2023. (The NDC Study is planning to eliminate its faculty data component; the remaining NDC data is obtained from NSC and used by the ACER task force to study retention-related issues.)

# Committee for Computing Education in Community Colleges (CCECC) (Task Force)

**Purpose:** Concerned with computing education at associate-degree granting colleges in the United States and similar post-secondary institutions throughout the world. The Committee engages in curriculum and assessment development, community building, as well as advises on public policy and advocacy in service to this sector of higher education.

Starting Date: July 1991

Status: Ongoing

Funds Budgeted: \$35,000 Funds Spent: \$21,546

**Activities:** 

- CCECC member serving on the steering CS2023 curriculum committee
- Contributions to ACER Task Force's published paper in *Inroads*
- Contributions to NDC published paper including data on associate programs
- Continuing presence at conferences including SIGITE, SIGCSE, 3CS, CCSC events, ITiCSE
- Bloom's Verbs project (see page 7 for details)

#### Diversity, Equity and Inclusion in Computing Education (DEI-CE) (Task Force)

**Purpose:** Work to address DEI issues directly impacting computing education.

**Starting Date:** July 2020 **Status:** Underway

Funds Budgeted: \$10,000

Funds Spent: \$0

Activities:

- Serve as Ed Board liaisons to ACM's Diversity and Inclusion Council
- Reviewed Chris Stephenson's All the Voices report

#### Milestones:

- Organized, publicized, and hosted two webinars with strong attendance:
- ✓ "Power On" (60 attendees and 365 YouTube views)
- ✓ "Language Matters: DEI and the Questions of URM" (149 attendees and 423 YouTube views)
- Held first in-person meeting July 25-26 to determine project goals for FY'23

# Education in Ethics and Computing (EEC) (Task Force)

**Purpose:** Provide a curated set of exemplary ethics resources to assist computing faculty with incorporating ethics content into their curricula/syllabi.

Starting Date: July 2020

Status: Concluding. Task Force to devise outcome metrics and measures and report before FY24.

Funds Budgeted: \$10,000

Funds Spent: \$0 Milestones:

- Ethics Repository added by the ECE Task Force to Engage site regular issue V1, I1 (4 OERs)
- Agreed with Engage team to publish a special issue on ethics topics in FY23+

# Learning@Scale Conference (Project)

**Purpose:** Deliver annual conference focusing on large-scale, technology-mediated learning environments that typically have many active learners and few experts on hand to guide their progress or respond to individual needs.

Starting Date: July 2014

**Status:** 2022 Conference completed; 2023 planning underway

Funds Budgeted: \$5,000 Funds Spent: \$0

Milestones:

- First ever hybrid conference (in person held at Cornell Tech, NYC)
- Strong combined attendance (~190)
- One of the best fundraising years (\$44,500), expected to break even
- Largest number of undergraduate attendees and undergraduate research submissions in the history of the conference
- Sponsored awards given for "Best Open Data Set" associated with an accepted paper, and "Best Undergraduate Research Paper"

# NDC Study (Project)

**Purpose:** Deliver and report on an annual national survey of non-doctoral granting, 4-year institutions in Computer Science, Computer Engineering, Information Systems, Information Technology, and Software Engineering.

**Starting Date:** July 2012

**Status:** Ongoing, but the NDC Study that was just published in the September *Inroads* is the last one of that format. Going forward, the NDC data will be a distinguishable component of future annual ACER reports.

Funds Budgeted: \$20,000 Funds Spent: \$12,843

Milestones:

- Published 2020-21 Study Report in December 2021 Inroads
- Conducted 2021-2022 NDC Study (faculty data), analyzed 2020-21 enrollment cohort data, and submitted to September 2022 ACM Inroads issue (accepted)
- Obtained, from National Student Clearinghouse (NSC), data on bachelor's and associate's enrollments and graduates from students in the 2020-21 enrollment cohort

## Resources for Instructors to Improve Teaching and Peer Mentoring Practices (EngageCSEdu) (Task Force)

**Purpose:** Broaden participation in computing by empowering faculty to improve curriculum and pedagogy in computing courses by using evidenced-based practices in instructional materials to promote student engagement and inclusive student culture.

Starting Date: January 2020

**Status:** Underway **Funds Budgeted:** \$0

Funds Spent: \$2,397 (funded by Ed Board budget)

#### Milestones:

- EngageCSEdu added to standard ACM latex paper templates
- Published special issue on HCI (7 OERs)
- Announced special issue on AI/ML/DS
- Announced special issue on Responsible Computing
- Papers are assigned DOIs now and are available in the ACM Digital Library. Supplementary
  materials do not have DOIs and are available only on the Engage site.

## Revised Bloom's Verbs Project (CCECC Project)

**Purpose:** Provide new recommendations for computing-oriented verbs to help curriculum developers create more rigorous and accessible learning outcomes.

Starting Date: July 2020 Status: Concluding

Funds Budgeted: \$0 (none needed - covered under CCECC budget)

Funds Spent: Included in CCECC budget

**Activities:** 

Lightning talk at SIGCSE 2022

#### Milestones:

- Published Iron Dog draft and received feedback from a variety of constituents
- Working on publishing final draft by the end of the calendar year

## Special Ed Board Research Publication (Project)

**Purpose:** Collaborative project of ACM and the Robin Hood Foundation. Publication of a new research compendium showcasing how to teach computational thinking at the elementary level. Provides clear examples, specific activities, ideas for applying computing to different subjects and approaches that have proven effective for different grade levels.

Starting Date: January 2020

**Status:** Completed

Funds Budgeted: \$50,000 (\$25,000 from ACM, \$25,000 from Robin Hood Foundation)

Funds Spent: \$39,000 - unspent budget is being returned to the Robin Hood Foundation by ACM

Milestone:

• Published in 2021 by ACM: <u>Computational Thinking in PreK-5: Empirical Evidence for Integration and Future Directions</u>

## Standardization of ACM Curricula (StAC) (Task Force)

**Purpose:** Provide best practices and recommendations for new processes to help standardize the development, dissemination, and maintenance of ACM curriculum documents.

**Starting Date:** July 2021

Status: Preliminary report delivered. Recommendations for next steps to be reviewed by Ed Board.

Funds Budgeted: \$20,000 Funds Spent: \$20,000

#### Milestones:

- Surveyed previous curriculum chairs to collected best practices and recommendations
- Wrote report and recommendations draft
- Conducted focus groups and incorporated feedback into second draft
- Shared third draft and implemented revision suggestions from Ed Board Executive

• Shared fourth draft with EAC for feedback

# 3. FUTURE PLANS (FY23)

# 3.1 Projects to be Concluded or Task Forces to be Reconstituted in FY23

- **Revised Bloom's Verbs Project (CCECC project):** Completed. Will publish the final report and project will conclude by the end of 2022.
- Special Ed Board Research Publication: Completed, published and concluded in 2021.
- CS2020 Supplemental Visualization Tool: Concluding and will finish by the end of 2022, after determining future possible enhancements to the tool and completing development of a competency-based tool by Texas A&M University.
- **Standardization of ACM Curricula (StAC):** Follow on work to be done. Task force to be reconstituted with new leaders and priorities.
- NDC Study: Discontinue Faculty part of survey collected on Peerfocus platform due to lack
  of ROI and rising cost of hosting/maintenance, saving more than \$13K per year. Collect the
  2021-22 enrollment and graduate data from NSC, as part of ACER's data request.
  Incorporate future NDC reports into ACER reports, but ensure that the NDC component of
  the data is clearly identified so that the NDC community can continue to receive this data
  and so that trend analyses with prior NDC reports can be performed. (See ACER below.)

## 3.2 Milestones and Planned Activities in Active Task Forces and Projects in FY23

## ACM2Y

- Two online events currently planned for FY23
- Regular articles on the web site, and relevant tweets to engage the community
- Continued collaboration with the CCECC & ACM Marketing to publicize ACM2Y at conferences and events, and increase membership
- Development of a more detailed governance model for the group

#### CS 2023 Curriculum

- Collection and analysis of Alpha version feedback
- Revision of curricular content towards Version Beta to be delivered for community comment in FY23
- Assignment of additional curricular practices articles
- Submit outreach proposals to SIGCSE 2023 and other similar events and international conferences specific to various knowledge areas

# **Committee for Computing Education in Community Colleges (CCECC)**

- Continue dissemination and promotion of ACM curriculum guidelines for two-year programs
- Publish the Bloom's Verbs Project report 2022 (see Section 3.1 above)
- Investigate guidelines for two-year Data Science programs
- Continue to partner with and support the growth of ACM2Y

- Continue support of other ACM groups and projects with community college perspective, as appropriate (examples: CS202X task force and other ACM curriculum projects; SIGCSE community college liaison; contributions to ACER, NDC study)
- Continue maintaining educator mailing list and website as a resource for educators

## **Actionable Computing Enrollment and Retention (ACER)**

- Complete a paper incorporating the 4-year data period (2017-18 through 2020-21) and submit to *Inroads* for publication
- Incorporate NDC enrollment and graduation data (beginning with 2021-22 enrollment cohort) into annual ACER update articles showing detailed data from the most recent year and trends that include prior years going back to 2017-18. The intent is to show the data and trends for NDC institutions and non-NDC institutions so that they may be compared.

# Diversity, Equity and Inclusion in Computing Education Task Force (DEI-CE)

- Work with groups across ACM to improve diversity data collection (specifically to develop boilerplate text to explain why this data is needed and how it is used)
- Recognize people and institutions who do exemplary DEI work within computing education.
   Because diverse faculty are often underrepresented on the Speakers List, and thus underrepresented at events and in front of audiences, phase one focuses on identifying new speakers from diverse backgrounds and mentoring them onto the Speakers List.
- Develop, promote, and facilitate a webinar or flash talk series focusing on examples of equitable collaboration
- Continue to develop instructional improvement projects

# Learning@Scale Conference

- Hold first conference in continental Europe and the first one outside the US since 2018
   (2021 was meant to be in Potsdam but had to go online due to COVID)
- Continue building community by co-locating with IC<sup>2</sup>S<sup>2</sup> 2023 (Conference on Computational Social Science)
- Conduct "decadal" survey and analyze data on shared Learning@Scale community research interests to better understand what infrastructure is needed, how Learning@Scale can advocate for it, and how NSF's Mid-Scale Research Infrastructure program can be leveraged

## Resources for Instructors to Improve Teaching and Peer Mentoring Practices (EngageCSEdu)

- Finalizing e-rights management process (nearly complete)
- Publishing a Special Issue on Programming Languages (hosting of both papers and supplementary materials in DL)
- Working with the Ed Board to find new editors

## 3.3 Proposed New Project in FY23

# NSF-Funded Future of Post-Secondary Computer Science Education White Paper (CRA Collaboration)

The proposed project, which will be submitted to the National Science Foundation, will gather community input and produce a white paper on the future of post-secondary computer science education. CRA has requested the Education Board's collaboration to develop and submit the proposal,

and to execute on the project if funded. CRA will serve as the Principal Investigator and ACM will serve as a key partner.

# 3.4 Equity and Representation Work in FY23

The Education Board and EAC will take a multi-pronged approach to our diversity, equity and inclusion ("DEI") work in the coming year, with both internally focused and outreach (see Section 4) efforts.

# **Improving Education Board and EAC Diversity**

- To diversify the Education Board, we have continued to act on the recommendations of external DEI expert Dr. Kelly Mack by identifying and appointing faculty of color and providing a fast track for diverse EAC members to move into positions on the Board. As a result, we have significantly improved the diversity of the Education Board.
- To diversify the EAC, also acting on the recommendations of Dr. Mack, we have continued to
  actively seek out and involve members of underrepresented communities to serve on the EAC.
  As a result, in three years, we have added three new Black educators, three new Latinx
  educators, and one new LGBTQIA+ educator. With this, we have successfully created a more
  robust pipeline of diverse EAC members to support and continue to expand future Education
  Board diversity.
- In addition, we are working to ensure age diversity on the EAC, which presently continues to skew slightly older. Recruitment (and mentoring) of younger educators has been a major component of our strategy to grow future leaders. Of the four younger educators appointed in FY21, all but one are still actively engaged and highly productive.
- The DEI-CE Task Force works to ensure global diversity in education-related efforts at ACM.
  - On the Education Board, the following countries are represented:

Canada: 1Europe: 1India: 1

■ USA: 11

On the EAC, the following countries are represented:

Brazil: 1Canada: 1

Europe: 2India: 1

New Zealand:1Singapore: 1

USA: 13

 Note: the ten SIG and partner organization representatives are not appointed by the Education Board.

#### **Collaboration with the ACM Diversity and Inclusion Council**

- The Ed Board DEI-CE Task Force has continued its close collaboration on key priorities with the ACM Diversity and Inclusion Council (the "D&I Council").
- The Ed Board DEI-CE Task Force Chairs and one of the Education Board Co-chairs are now official members of the D&I Council, and one of the D&I Council Co-chairs is now an ex-officio member of the ACM Education Board.

 The Ed Board DEI-CE Task Force has determined a set of four project priorities for itself, grounded in an education focus, that are consistent with the larger goals and priorities of the ACM Diversity Council.

# 4. DIVERSITY, EQUITY AND INCLUSION

The Education Board and EAC will take a multi-pronged approach to our diversity, equity and inclusion ("DEI") work in the coming year, with both internally focused (see Section 3) and outreach efforts.

## **Improving Curriculum and Instruction**

- The Ed Board DEI-CE Task Force organized and facilitated two well-attended <u>educational</u> webinars which will become a resource for the D&I Council's collection of educational materials.
- Members of the DEI-CE Task Force are working with the CS2023 Curriculum committee to
  ensure that the new curriculum materials provide a strong focus on DEI issues and instruction
  practices.
- The Ed Board and DEI-CE are working to ensure diversity on its Task Forces and Projects to ensure diverse viewpoints are represented in all education-related work. All Education Board and EAC members are required to participate in at least one task force or project. This work requires significant time and commitment, so members choose the task force(s) /project(s) which best matches their personal concerns, expertise and availability. Increasing the diversity of the Board and the EAC in all aspects of diversity has brought a greater diversity of perspectives to all the work in which the Education Board engages.

# APPENDIX A - Task Force and Project Memberships

# ACM CS2023 Curriculum (ACM Representatives only)

The CS 2023 Curriculum development is managed by a small steering committee, whose members are as follows:

- Amruth Kumar
- Monica Anderson
- Brett Becker
- Richard Blumenthal
- Michael Goldweber
- Pankaj Jalote
- Susan Reiser
- Titus Winters

The content development and feedback review processes for CS2023 are carried out by more than 90 additional volunteers in 16 countries. A complete list can be seen here.

## ACM2Y

- Cara Tang (Chair)
- Michael Bauer
- Randy Britto

- Misti Clark
- Terri Lane
- Kenyada McLeod
- Tommy Pollock
- Bill Pulling
- John Stryker
- Bob Tureman
- Markus Geissler (CCECC liaison)

# Actionable Computing Enrollment and Retention (ACER)

- Stuart Zweben (Chair)
- Rodrigo Duran
- Paul Leidig
- Mihaela Sabin
- Cindy Tucker
- Mark Weiss
- Yan Timanovsky

# **CCECC Revised Bloom's Verbs Project**

- Cara Tang (Chair)
- Adeleye Bamkole
- Markus Geissler
- Koudjo Koumadi
- Christian Servin
- Cindy S. Tucker

# Committee for Computing Education in Community Colleges (CCECC)

- Cara Tang (Chair)
- Cindy Tucker (Vice-Chair)
- Markus Geissler
- Christian Servin

# Diversity, Equity and Inclusion in Computing Education (DEI-CE)

- Fay Cobb Payton (Co-chair)
- Susan Reiser (Co-chair)
- Jake Baskin
- LeighAnn DeLyser
- Beth Hawthorne
- Alvaro Monge
- Tamara Pearson
- Mehran Sahami
- Lisa Smith (D&I Council liaison)
- Chris Stephenson
- Ellen Walker
- Andrew Williams

## **Education in Ethics and Computing (EEC)**

- Bobby Schnabel (Chair)
- Olivier St-Cyr
- Duncan Brumby
- Judith Gal Ezer
- Toni Granollers
- Anirudha Joshi
- Shaimaa Lazem
- Zhengjie Liu
- Craig M. MacDonald
- S. Sameerchand Pudaruth
- Eunice Sari
- Lauren Wilcox

# Learning@Scale

- David Joyner (Chair)
- Rene Kizilcec (Vice Chair)
- Justin Reich (Past Chair)
- Yan Timanovsky (ex officio)
- Armando Fox
- Claudia Urrea
- Ken Koedinger
- John Mitchell
- José A. Ruipérez-Valiante
- Xu Wang
- Susan Singer
- Ido Roll
- Eleanor O'Rourke
- Mar Pérez-Sanagustín
- Amy Ogan
- Marcus Specht
- Thomas Staubitz
- Katie Davis
- Javier Ochoa

## **NDC Study**

- Stuart Zweben (Co-chair)
- Jodi Tims (Co-chair, FY22)
- Cindy Tucker (Co-chair, FY23)

# Resources for Instructors to Improve Teaching and Peer Mentoring Practices (EngageCSEdu)

- Michelle Craig (Co-chair)
- Briana Morrison (Co-chair)

# Standardization of ACM Curricula (StAC)

• Cara Tang (Co-chair)

- Mihaela Sabin (Co-chair)
- R. Venkatesh
- Diana Burley
- Alison Clear
- Paul Leidig
- Itana Gimenes
- Markus Geissler
- Amruth Kumar
- Rajendra Raj
- Heikki Topi

# **Special Ed Board Research Publication**

- Chris Stephenson (Chair)
- Anne Leftwich
- Aman Yadav