ANNUAL REPORT
of the ACM History Committee
For the Period: July 1, 2022 - June 30, 2023
Submitted by Barbara Boucher Owens. chair
Version: August 15, 2023

Executive summary

- **Turing Awardee History Project:** The Turing Award website has complete biographies for all winners through 2021, only the most recent awardee for 2022 is outstanding. Three more oral histories are nearing completion. In FY 2023 we plan to pursue three new interviews and to cross-license a number of pre-existing oral histories.

- **ACM Key Award Winners Video Series Project**: This project has completed 85 Interviews and 77 preliminary transcripts between April 2019 and June 30, 2023. During this calendar year, we expect to complete an additional 52 interviews and 38 preliminary transcripts.

- **History and Archiving Fellowships program**: We received a total of seven fellowship project proposals. Five submissions were selected for awards, with three projects strongly related to the Heritage project (SIGGRAPH and the ACM/IEEE Supercomputer Conference).

- **Heritage Project**: The *Capturing Hidden ACM Heritage Seminar* in September 2022 was a success, with about 70 individuals registered for the 1.5 day event. Next steps are to further develop the Heritage website as a resource for SIGs / other ACM entities interested in preserving their heritage and to begin publishing a new ACM Digital Library series, *Heritage Insights*.

- **India Technology Leaders Video Project**: The project has collected four video interviews with one technology leader, with the videos edited and transcribed. Next steps will be to collect a set of retrospective interviews about the life and work of a second pioneer, who passed away before he could be interviewed.

- **Outreach and Publicity**: The Committee uses its website (history.acm.org) as a key tool for outreach and publicity, but is striving to work more closely with ACM HQ to support them in promoting history-related information.

- **Secretariat**: Adding a Secretariat Subcommittee has provided strong internal support for the Committee's work with agendas, minutes, annual reports, and drive organization.

- **Challenges and concerns:**
  - Post-pandemic impact on budget and projects, including no annual face-to-face History Committee meeting for a third year.
  - Achieving our goal of diversity and global participation in all Committee projects is difficult.
  - Lack of headquarters planning for and support of permanent archival storage of content in all media (written, audio, video), particularly digital.
  - Availability of regularly scheduled complete financial reports so we can properly monitor the Committee's use of funds. Lack of this data makes it particularly hard to track expenditures of our Fellowship recipients.
  - Need for a well defined process for ensuring up-to-date information on the ACM website about the Committee's on-going projects, including ACM's history page.

- Continuing progress in our collaborations with ACM Headquarters for policies, access, and dark storage needed for Committee projects.

1. <u>BASIC INFORMATION</u>

1.1 Membership

Barbara Boucher Owens, Chair, Southwestern University, joined December 2015

Members, in reverse chronological order of joining

John V. Tucker, Swansea University, joining July 2023

Jonathan Grudin, Microsoft and University of Washington, joined June 2023

Troy K. Astarte, Swansea University, joined September 2021

ac Loup, WSU Extension, joined September 2021

David C. Brock, Computer History Museum, joined May 2019

Sachin N. Maheshwari, IIT Delhi, joined July 2018

Jeffrey Yost, Charles Babbage Institute, joined July 2018

Vicki L. Almstrum, Texas State University, joined December 2015

Kim Tracy, Rose-Hulman Institute of Technology, joined October 2014

Mary Whitton, University of North Carolina Chapel Hill (retired), joined May 2010

Carol Hutchins, Courant Institute Library, joined February 2005.

Members who rotated off during report year

Roy Levin, Microsoft (retired), joined November 2012, left October 2022

Amanda Wick, Charles Babbage Institute, joined May 2019, left January 2023

Erik Rau, Hagley Museum, joined April 2018, left June 2023

1.2 Purpose

The History Committee fosters collection, preservation, and interpretation of the history of the ACM and its role in the development of computing. To this end, the Committee provides guidance within the Association and carries out activities independently and in collaboration with other groups.

1.3 Subcommittees and roles

- Turing Awardee History Project oversight — Brock [chair] with two contractors (Corry and Haigh)
- Budget and Finances — Whitton [chair], Rau
- History and Archiving Fellowships program — Tracy [chair], Brock, Rau, Whitton, Yost
- Heritage Project —Almstrum [chair], Loup, Wick, Grudin
- ACM Key Award Winners Video Series Project oversight — Hutchins [chair] with one contractor (House)
- CEOHP Heritage exemplar — Almstrum, Owens
- India Technology Leaders Video Project — Maheshwari [chair], Brock
- Outreach and Publicity— Hutchins [chair], Almstrum, Tracy, Wick
- Secretariat — Almstrum [chair], Astarte, Whitton
- SGB Representative — Tracy

1.4   Dates of committee meetings.

No face-to-face meetings this fiscal year.

12 teleconferences using Zoom:

     7/18/2022, 8/15/2022, 9/19/2022, 10/17/2022, 11/14/2022, 12/19/2022, 1/16/2023,
     2/20/2023, 3/21/2023, 4/18/2023, 5/16/2023, 6/20/2023

In addition, most committee members participated in the Capturing Hidden ACM Heritage workshop 9/30/2022–10/01/2022.

No additional meetings were planned or canceled.

2.   <u>PROJECT SUMMARY</u>

DEVELOPMENT FUND SPECIAL PROJECTS (1)

ACM Key Award Winners Video Series
- Phase I approved mid-October 2018, three years, $336,000, Goal: 72 interviews. Interviewing began April 2019; 72 interviews completed by April 2022. All 72 Phase I interviews have been initially transcribed; editing and approval from interviewees is underway, with 20 fully approved and 5 submitted to ACM headquarters for publication.
- Phase II approved June 2021, an additional three years (2022–2024) for $336,000. Goal: 72 additional interviews to be completed by end of calendar year 2024. As of June 30, 2023, 65 interviews and 51 transcripts are complete. Editing and approval from interviewees is underway.
- Funds spent through 6/30/2023: Phase I $324,000; Phase II $191,000
- Completion of tasks: Phase I end of CY 2023; Phase II tasks end of CY 2024

ONGOING COMMITTEE BUDGET FUNDED PROJECTS (5)

Turing Awardee History Project
- The subcommittee and the committee as a whole adopted a plan for the Project in FY23 to expand the associated activity (and therefore budget) to produce high-quality video-recorded oral histories with past and forthcoming awardees. In cases where high-quality video-recorded oral histories with awardees already exist, the Project will seek to cross-license them for use by the ACM. Some of the ACM produced interviews will continue to be done in partnership with the Computer History Museum for cost sharing and cross licensing. Franny Corry will be responsible for coordinating new oral histories and cross licensing. Tom Haigh will be responsible for the website, biographies, and oral history video clips. In FY24, we will seek to conduct interviews with Jeffrey Ullman, Butler Lampson, and Ken Thompson.
- Responsible Person: Brock, subcommittee chair; Tom Haigh and Franny Corry, contractors.
- Start Date: FY 2016 as a special development project; FY 2021 changed to an ongoing Committee project.
- Status: Ongoing.
- Funds Budgeted: FY23 $26,000 FY24 $42,000
- Funds Spent: FY23 $26,000

ACM Heritage Project
- The Heritage seminar, *Capturing Hidden ACM Heritage*, was held September 30–October 1, 2022. We decided to make the seminar on-line only, with the Charles Babbage Institute and the University of Minnesota helping with many of the services. This reduced costs significantly from the original estimates.
- The Heritage seminar targeted SIGs and other ACM organizational units. Presenters included individuals representing ACM-W Europe, SIGGRAPH, SIGCSE, SIGCOMM, the ACM/IEEE Supercomputer Conference, and the Software Heritage Initiative, as well as projects of the ACM History Committee. Yannis Ioannidis, the ACM president, provided opening comments and the opening keynote talk was by Vicki Hanson, CEO of ACM, "75 years of ACM's Heritage". The other two keynote talks:
  - "Why SIG history matters: New data on gender bias in ACM's founding SIGs 1970–2000" by Tom Misa, University of Minnesota faculty member, former director of the Charles Babbage Institute, and former member of the History Committee
  - "The Emerging Renaissance: Communiversity Science™ and HPC" by Ruby Mendenhall, Associate Dean for Diversity and Democratization of Health Innovation at the Carle Illinois College of Medicine at the University of Illinois at Urbana-Champaign
- 76 individuals registered for the Heritage seminar. Participation varied throughout the one-and-a-half day event, averaging about 45 present at any particular time.
- The Heritage website is still under development, with the plan to successively add resources useful to SIGs and other groups conducting history-related projects. The exemplar website for the Computing Educators Oral History Project is up-to-date, with plans to continue adding interviews over time.
- Responsible Person: Almstrum, Wick, Loup, Grudin
- Start Date: April 2017.
- Status Ongoing.
- Funds Budgeted: $24,000.
- Funds Spent: $7,760
  - $1,260 (technical services) + $2,500 (stipends) for seminar costs
  - $4,000 to support a fifth Fellowship award

History and Archiving Fellowship 2022 Awards
- The purpose of the Fellowship program is to encourage research on topics related to ACM History and to support building collections of historically important documents and artifacts.
- Each year the Committee aims to award a small number of research fellowships for up to $4,000 per award. The ACM Heritage project also provides additional support for relevant projects.
- The Committee website includes a page with information about prior awardees, projects, and results, as well as an example of a successful fellowship proposal. history.acm.org/projects-and-initiatives/fellowship-for-the-advancement-of-acm-history
- In March 2023, five of seven proposals were selected to receive Fellowship awards:
  - David Dunning, University of Pennsylvania, *Writing the Rules of Reason: A Social Life of Notation from Logic to Computing*
  - Bonnie Mitchell and Jan Searleman, Bowling Green State University & Clarkson University, *ACM SIGGRAPH History Archive: Expanding Conference Content*
  - Dana Plepys, University of Illinois at Chicago, *Long-term Storage and Preservation of the SIGGRAPH Video Review Media Archive*
  - Simon Rowberry, University College London, *The ACM Hypertext Class of 1987-1991 and the development of pre-Web reading on-screen*

- ○ Kevin Walsh, University of California San Diego, *Select Oral History Interviews for the 35th Anniversary of the ACM/IEEE Supercomputer Conference*
- Recipients were notified in April 2022 and normally spend the funds within a year of being notified.
- Start Date: Call for submissions was issued in October 2022.
- Responsible Person: Tracy.
- Status: Ongoing (annual project).
- Funds Budgeted: $16,000.
- Funds Spent: $20,000 (including $4,000 from the Heritage project budget).

ACM India Technology Leaders Video Project
- The objectives of this project are to record interviews with iconic figures who laid the foundation of the information technology industry, computer science education, and computer science research in India during the 1960s and 1970s.
- Responsible Person: Maheshwari.
- Start date: June 2019.
- Status: Ongoing.
- Funds Budgeted: $2500
- Funds Spent: $0 (setting up procedures for payments to someone in India)

Outreach and Publicity
- The Committee continues to strive to coordinate effectively with ACM HQ regarding outreach efforts.
- The History Committee's website is stable and updated regularly.
- The Committee uses Google Drive as a shared storage resource (HC Operations), the ACM listserv for communications, and an ACM Zoom account for monthly meetings.
- Responsible Person: Hutchins, Tracy.
- Start Date: Ongoing.
- Status: Ongoing.
- Funds Budgeted: $0
- Funds Spent: $0

3.   PLANS

3.1   Projects that will be completed or terminated in the coming year.
- No projects to be completed or terminated this year

3.2   Important changes or milestones in active projects during the coming year.

Turing Awardee History Project
- The Turing Award website is current with all biographies through 2021, missing only the most recent awardee for 2022.
- The oral histories of Al Aho and Judea Pearl are nearing completion, with edits back from the interviewees. Pat Hanrahan's oral history is in edit.
- The budget for FY 2024 has increased to allow us to conduct more of the interviews that we need to do to fill in gaps from the past and to keep current with new awardees.

- The oral history video clips continue to enjoy many thousands of views.

ACM Key Award Winners Video Series
- As follow-up to the 144 interviews from the Phase I and Phase II Development Funding, in February 2023 the Committee approved $40,000 per annum to add twelve interviews per year for "new awards". This activity will commence 4th quarter CY 2023, to be completed June 30, 2024 (end of FY23).

ACM Heritage Project
- The follow-up to the Fall 2022 Heritage seminar is underway, delayed due to schedule challenges and changes in the subcommittee composition. This follow-up is integrated with our work to establish the *Heritage Insights* series in the Digital Library (more on this in section 3.2). The submission and review process will use a service such as EasyChair and the procedures will follow ACM Digital Library practices.
- In the coming year we will further develop the Heritage website (heritage.acm.org/) as a gathering place for best practices and ideas that support ACM entities, such as the SIGs, as they plan for and organize their own history work.

ACM India Technology Leaders Video Project
- Four interviews with Prof. V. Rajaraman have been recorded using internet video services. These four interviews have been edited and transcribed. (en.wikipedia.org/wiki/Vaidyeswaran_Rajaraman)
- The other two intended interviewees, Mr. F.C. Kohli and Prof. Dutta Majumder, passed away during the Covid pandemic.
- For Mr. F.C. Kohli, an extensive collection of information already exists elsewhere. As a result, the project will not produce new information related to his history. (en.wikipedia.org/wiki/F._C._Kohli)
- For Prof. Dutta Majumder, the plan is to collect three retrospective interviews, for which the interviewers and interviewees have been identified. To ensure good quality of sound, light, and video, these interviews will be conducted face-to-face. (en.wikipedia.org/wiki/Dwijesh_Dutta_Majumdar)
- At the end of FY 2022, the funds allocated for this project are untouched but committed. Reimbursement will be requested once the processes for doing so are approved.

History and Archiving Fellowships
- The project has continued with the same level of funding (up to $16K for a maximum of $4K per fellowship award). We will distribute the call for next year's fellowships during the last 2 months of CY 2023 and select the FY 2024 fellowship winners in March or April, 2024.
- Because many of the proposals resonate with the goals of the ACM Heritage Project, the committee has voted the past few years to use funds allocated for the Heritage Project to support relevant proposals.

- We continue to explore ideas to encourage more applications from non-traditional applicants and individuals from smaller institutions.
- We will add a question for the application process for 2024 that asks the applicant to report where they heard about the Fellowship program.

Outreach and Publicity
- We have folded the tasks of the Web Subcommittee into the Outreach and Publicity Subcommittee.
- Outreach from ACM HQ for the Heritage seminar was very good. The publicity included a tile on the ACM homepage that encouraged registrations, promotion of the seminar via ACM's social media accounts, an announcement to the SIG Chairs, and an article about the seminar in the MemberNet. This type of support is invaluable in extending the reach of Committee activities.
- We are discussing a strategy for providing support to Committee members to attend conferences, as well as support for publicizing the work of the Committee at conferences where members are attending (whether or not the travel is supported from the Committee budget).

3.3   New projects or programs which are proposed or contemplated.

- **ACM Key Awards project**
  - The project will select shorter video clips from each video interview to post as highlights on a YouTube channel as well as on each awardee's ACM award webpage. This work is analogous to the popular video clip work that Thomas Haigh has spearheaded for the Turing Award winners.
  - To highlight awardee themes (e.g. initial inspiration for a CS career, epiphanies during a career, perspective on gender bias, or other thematic issues), we will create composite YouTube "stories", each of which incorporates ideas from several Key Awards interviews.
  - Another area we will explore is the possibility of one or more monographs, most likely targeted for the History of Computing category of ACM Books, where Tom Misa is the Area Editor. Description: "ACM Books encompasses a wide range of subjects pertinent to today's global computing society."
- **A new publication series:** *Heritage Insights*
  - The History Committee is establishing a series called *Heritage Insights*, to be published as part of the ACM Digital Library. The series is a long-term commitment for the History Committee and an exciting tool for communicating about ACM's history.
  - Project members have worked with the Digital Library staff to begin this process. The initial publications and videos will be drawn from the Hidden Heritage seminar that the Committee hosted in September 2022.
  - Description: "*Heritage Insights* is a series that showcases projects related to the history of ACM and its organizational units, such as the SIGs (Special Interest Groups). The primary goals of the series are to serve as a collecting place for publications related to heritage work and to provide inspiration and ideas for other projects. The series will include "how to"

articles, reports about projects that are in progress, analysis reports, articles from presentations during heritage seminars and conferences, pre-prints of academic publications, and project-end reports from Fellows. This series is a project of the ACM History Committee."

- **Recruitment**
  - The Committee continues to consider new members who will enhance global presence and representativeness.
  - The Committee has decided to build an advisory board of individuals on whom the Committee can call for advice as needed.
- **Outreach and Publicity**
  - The Committee plans to build an internal spreadsheet of the communication networks we use to publicize programs such as the Fellowships and workshops.
  - We recognize the importance of retaining the part of ACM's history that is represented in social media, such as tweets, toots, and other posts. This topic should be discussed and planned for in collaboration with ACM HQ.
  - To help connect the History Committee to relevant posts, we want to promote use of a hashtag such as #ACMHistory.
- **History of ACM webpage**
  - The ACM history page, acm.org/about-acm/acm-history, is attributed to the History Committee, but no one on the committee has had a role in its content. The current page describes the present state of ACM as a whole; only the "Introduction" section, about 20% of the document, addresses ACM's history.
  - We plan to ascertain the objective for this page and, if it really is intended to be about ACM History, ensure that the page is updated and the non-history parts rerouted to more appropriate parts of the ACM website.
- **ACM's overall digital preservation strategy**
  - The Committee needs to collaborate with ACM HQ about work that is in place or underway with respect to digital preservation. As an example, transferring material from the Turing Awardee project does not work well at this point. We seek an effective process for working with ACM in order to preserve these important materials.
  - The planning must consider the needs of ACM organizational units. SIGs have materials that must be preserved and many SIGs have the will to carry this through.
  - We have discussed the role of institutional repositories where ACM materials will eventually be housed. At this point, the Charles Babbage Institute (CBI) is a key partner. We understand the agreement with CBI is due for review and renewal. We hope that will happen during the coming year.
  - We propose to develop a white paper that includes templates and guidelines for the process to help us frame the needs for History Committee projects, as well as for other ACM organizational units.

3.4   Committee diversity
- As FY 2022 draws to a close, the Committee has 12 members, with the following composition related to diversity:
  - Four identify as female, two identify as non-binary, and the remaining six identify as male.
  - Two are relatively early in their careers, four are mid career, and six are late career / near retirement
  - The geographic distribution includes three international members (U.K. and India) and representative geographical coverage across North America.
  - Eight members are academics, one works as a librarian in a university institute, two direct museums or historical institutes, and four have spent at least part of their careers in industry.
  - The Committee has strong connections to SIGPLAN, SIGCSE, SIGCOMM, SIGCHI, SIGGRAPH, and SIGACCESS as well as to ABET / CSAB.
  - We seek better representation outside of North America, as well as ways to broaden ethnic representation.
  - Of the three members who left the Committee during FY 2022: two are male, one is female; all three live and work in the USA.

4.   <u>DIVERSITY, EQUITY, & INCLUSION + ACCESSIBILITY</u>
- The Committee has a strong commitment to Diversity, Equity, Inclusion, and Accessibility. Several current Committee members are active in efforts related to DEIA issues outside of ACM.
- The History Committee's mission is to document the history of the ACM. Some of this will be uncomfortable because history can be uncomfortable — e.g., dismantling white supremacy. Surfacing such stories should be an important part of the committee's work. When doing history, it is key to not exclude parts of history, to strive for an atmosphere of supportiveness so people join in rather than thinking "they don't care about me".
- The Committee has as an on-going goal to identify potential new members from underrepresented groups and locations.
- We hope to align our efforts with those being carried out by other ACM entities in order to better coordinate efforts. To that end, the Committee invited ACM's CEO, Vicki Hanson, as the opening keynote speaker at the Hidden Heritage Seminar; her talk included a strong component related to DEIA. Vicki Hanson also joined the Committee during a regular meeting during summer 2023 to describe current ACM activities related to Accessibility.
- The Committee strives to consider accessibility issues for all documents it produces, including PDF documents, images, etc. This concern extends to accessibility issues on the Committee websites.

5.   <u>COMMENTS</u>
- Things we are excited about:
  - We are pleased at the **skillful transition in leadership** for the Turing Awardee project as Roy Levin left the committee and David Brock became the subcommittee chair.

- **Video clips from the Turing Awardee project** have proven useful not only for attracting visits to the clips and the Turing Award website, but also as information for obituary writers, for example after Fred Brooks passed away.
- The **Heritage seminar in late September** built momentum within the Heritage project and is a great foundation for the Committee's continued work in this area. Support from Charles Babbage Center and the University of Minnesota was crucial in making this event so successful. A key tool was the detailed planning script.
- We are excited about the **Heritage Insights series as an on-going product** of the History Committee. We believe this will be useful in helping coordinate and recognize history efforts throughout ACM.
- A new **History Committee Advisory Board** will serve as a resource to advise the Committee on its projects. We plan to include a variety of individuals, including representatives from international groups, regional groups, and underrepresented groups, which can help us better achieve DEIA goals.
- Things we are concerned about:
  - **Systematic, permanent, and dark archiving of historical materials**, including current on-going work.
  - **Support from ACM** is uneven. This has hampered some Committee activities. Most notable have been delays in matters related to budget and IT.
  - **Addressing the global arena**, both in terms of outreach and Committee membership.
  - **Curriculum coverage of history issues**. History represented only a very small slice of the information included in the new CS2023, ACM/IEEE-CS/AAAI Computer Science Curricula.

TO HIGHLIGHT: ACM SIGGRAPH 50th ANNIVERSARY CELEBRATION

- The History Committee is proud to have supported SIGGRAPH projects intended to preserve and present materials in conjunction with SIGGRAPH's over 50 years of existence and its fiftieth conference in 2023.
- Since 2017, Bonnie Mitchell and Jan Searleman have received (either individually or together), five History and Archiving Fellowship awards for their work with SIGGRAPH materials:
  - 2017: SIGGRAPH Art Show Archiving
  - 2020: Innovative Archive Development: Adding Computer Graphics from the 1980s, Visualization and Enhancements
  - 2021: SIGGRAPH History Online Archives, design and development
  - 2022: Archiving the History of ACM SIGGRAPH Communities and Activities
  - 2023: ACM SIGGRAPH History Archive: Expanding Conference Content
- During the Hidden Heritage workshop in September 2022, Bonnie Mitchell and Jan Searleman were presenters to share and highlight their work. They provided two talks on SIGGRAPH's archival project work.
  - Part 1: From Concept to Completion: Designing and Building an Online Archive
  - Part 2: ACM SIGGRAPH's Online and Physical Archive: An Overview
- Thanks to the ACM History Committee's support, the ACM SIGGRAPH archive project could hire students to work on collecting and formatting historic materials. These materials not only went into the online and physical archive, but were also shipped to the SIGGRAPH 2023 conference and shown in the "Vulture Culture – A History of SIGGRAPH's Collectibles", as well as part of the "Time Tunnel". This material was also used by pioneers to prepare their talks for the five Retrospective Talks during the conference.
- Links to the descriptive materials:
  - The SIGGRAPH history work is captured here: history.siggraph.org/
  - Abstracts of the two presentations at the Hidden Heritage workshop are included on this page: https://history.acm.org/presenters-seminar-2022/
  - Vulture Culture description from the SIGGRAPH Program: s2023.siggraph.org/presentation/?id=histc_131&sess=sess422
  - Forbes article about the Time Tunnel: forbes.com/sites/dbloom/2023/08/06/siggraph-autodesk-take-time-tunnel-through-computer-graphics-history-on-50th-anniversary/
  - Video of the Time Tunnel from Laughing Place: laughingplace.com/w/articles/2023/08/10/siggraph-time-tunnel-art-gallery/