

## Nursing Informatics Working Group

Nursing Informatics is the "science and practice (that) integrates nursing, its information and knowledge, with management of information and communication technologies to promote the health of people, families, and communities worldwide."




# Nursing Informatics Pioneers Continue to Influence the Profession

Susan K Newbold

PhD RN-BC FAAN FHIMSS FAMIA



[www.amia.org](http://www.amia.org)



***"The farther back you can look,  
the farther forward you are likely  
to see."***

Winston Churchill



# Topics

- Major landmark events and milestones of nursing informatics
- AMIA Pioneers in Nursing Informatics Project
- Contribution of selected nurse pioneers to healthcare
- Lessons learned from the Pioneers in Nursing Informatics



# Major Events Changing Nursing Informatics

- History of Computers
- Health Care Reform
- Patient Engagement
- Social Media
- Telehealth
- Global Health



# Landmark Events Changing Nursing Informatics

- 1973 First invitational conference: Management Information Systems for Public and Community Health Agencies; NLN; Saba
- 1977 First Research Conference on NIS; U of IL; Werley
- 1977 First undergraduate course: Computers and Nsg; SUNY Buffalo; Ronald
- 1980 First text: Computers in Nursing; Zielstorff



# Landmark Events Changing Nursing Informatics

- 1981 First nursing papers at SCAMC (now AMIA); Saba
- 1982 CARING Founded (now ANIA); Newbold, Hallberg, McDermott
- 1983 First Hospital workshop: Computers in Nursing Practice; St Agnes Hospital; Newbold
  - Saba & McCormick (2015)



# Pioneers of Nursing Informatics Transform Healthcare

Dr. Harriet H. Werley  
Dr. Virginia K. Saba

- Photo by Newbold



# Project Funding Sources

- Allina Health System
- American Academy of Nursing
- McKesson
- CARING
- Robert Wood Johnson Foundation - Executive Nurse Fellows
- Robert Wood Johnson Foundation - Executive Nurse Fellows Alumni Association
- University of Maryland School of Nursing
- University of Minnesota School of Nursing





# AMIA NI History Committee

- Juliana J. Brixey, PhD MPH RN (Co-Chair)
- Susan K. Newbold, PhD RN-BC FAAN FHIMSS FAMIA (Co-Chair)
- Diana Dodd, DNP RN
- Virginia K. Saba, EdD RN FAAN FACMI
- Patricia M. Schwirian, PhD RN
  - and many others with prior participation



# Overall History Project

- Build National Library of Medicine archive for nursing informatics history
- Research/document history
- Videotape stories to preserve history for Nursing Informatics



# Project Purpose

## Nursing Informatics History Project

### Purpose

The overall purpose of the Nursing Informatics History Project is to document and preserve the history of nursing informatics. This is occurring through three activities:

1. Nursing informatics pioneers and nursing informatics organizations have been solicited to preserve their materials in an archive at the National Library of Medicine started by Dr. Virginia Saba in 1997.
2. Stories of the pioneers in nursing informatics are being videotaped and made available through AMIA's web site.
3. Historical research is planned to document the evolution of informatics as a specialty in nursing.

### Use Cases

Examples of how to use the Information

### Video Library

The videos are organized into two libraries. The first library is organized by the Nursing Informatics Pioneers. The second is organized by the Themes from Interviews.



# Pioneer Defined

- Innovator, trailblazer, or groundbreaker in some aspect of nursing informatics
- “First” in opening up a new area/aspect of nursing informatics,
- Shaped the thinking/direction of nursing informatics, and
- Demonstrated sustained leadership in nursing informatics

-AMIA Nursing Informatics History Committee, 2005



# Videotaping

- 145 pioneers identified
- 33 videotaped (Chicago, Washington, Baltimore)
  - July 2005 – November 2007
  - Summer Institute in Nursing Informatics
  - AMIA Fall Meetings
- Selection
  - Earliest contributors to various aspects of nursing informatics
  - Availability and willingness to be interviewed
  - Limited resources



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### NURSING INFORMATICS

> Committees

> History Project

Use Cases

Video Library 1

Video Library 2

Video Library 3

Additional Pioneers

> Leadership

> News

> Resources

### INFORMATICS CORE

The Science of Informatics

## Nursing Informatics History Project

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### Use Cases

Examples of how to use the Information

### Video Library

### Nursing Informatics History Project

- Use Cases
- Video Library 1: Nursing Informatics Pioneers
- Video Library 2: Themes from Interviews
- Additional Pioneers

### Have Questions?

Need Help?

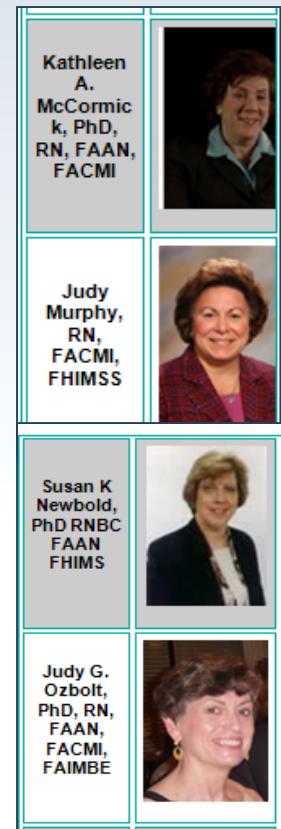
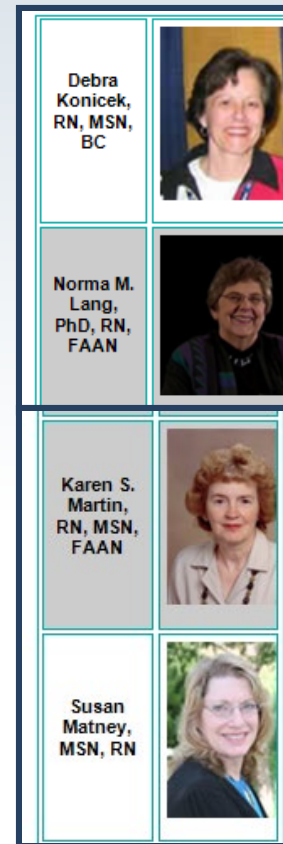
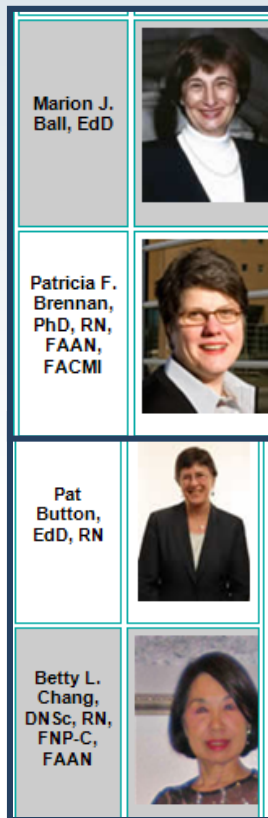
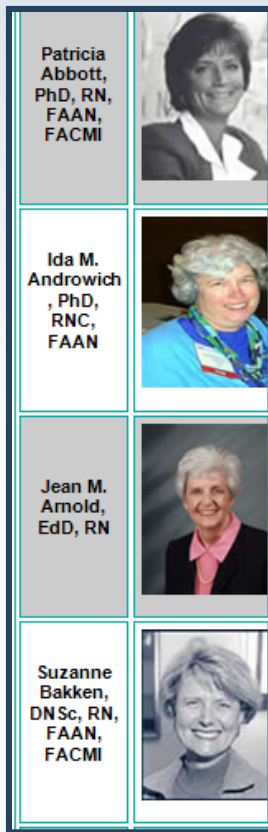
Contact Us



<https://www.amia.org/working-groups/nursing-informatics/history-project>

[www.amia.org](https://www.amia.org)

# Nursing Informatics Pioneers Interviewed



# Nursing Informatics Pioneers Interviewed

Carol A.  
Romano,  
PhD, RN,  
BC, CNAA,  
FAAN



Virginia K.  
Saba,  
EdD,  
Honorary  
PhD, DS,  
RN, FAAN,  
FACMI, LL



Joyce E.  
Sensmeier  
, RN, MS,  
RN-BC,  
CPHIMS,  
FHIMSS



Patricia M.  
Schwirian,  
PhD, RN



Roy L.  
Simpson,  
RNC,  
FNAP,  
FAAN



Diane J.  
Skiba,  
PhD,  
FACMI,  
FAAN



Nancy  
Staggers,  
PhD, RN,  
FAAN



Linda Q.  
Thede,  
PhD, RN,  
C



James P.  
Turley,  
PhD, RN



Judith J.  
Warren,  
PhD, RN,  
FAAN,  
FACMI



Charlotte  
A. Weaver,  
RN, PhD



Elizabeth  
E. Weiner,  
PhD, RN-  
BC, FAAN



Rita  
Zielstorff,  
RN, MS,  
FAAN, FAC  
MI





# Home Screen Options

[Kathleen A. McCormick PhD, RN, FAAN, FACMI](#)



Dr. McCormick is Senior Principal Scientist/Vice President, SAIC-Frederick in Rockville, Md ...[Read more](#)

[View her video](#)

[Listen to audio](#)

[Read transcript of the interview](#)

[Susan K. Newbold PhD, RN-BC, FAAN, FHIMSS](#)



Dr. Newbold is a Healthcare Informatics Consultant based in Franklin, TN. She founded CARING ...[Read more](#)

[View her video](#)

[Listen to audio](#)

[Read transcript of the interview](#)

[Virginia K. Saba](#)



Dr. Saba, a nationally and internationally known pioneer of computer technology in nursing has for over 40 years ...[Read more](#)

[View her video](#)

[Listen to audio](#)

[Read transcript of the interview](#)

[Diane J. Skiba, PhD, FACMI, FAAN](#)



Dr. Diane J. Skiba is Professor and Coordinator of Healthcare Informatics at the University of Colorado Denver. Since 1980, she has dedicated ...[Read more](#)

[View her video](#)

[Listen to audio](#)

[Read transcript of the interview](#)



# Common Themes

The screenshot shows a web browser window with the URL <https://www.amia.org/working-groups/nursing-informatics/history-project/video-library-2>. The page features a navigation bar with links to 'What's Hot', '10x10 Courses', 'iHealth 2015', 'Clinical Informatics Board Review Course', and 'Interprofessional Certification'. Below this is a breadcrumb trail: 'Home' > 'Membership' > 'Working Groups' > 'Nursing Informatics' > 'History Project' > 'Video Library 2'. The main content area is titled 'Video Library 2: Themes from Interviews' and includes a sub-header 'Select a theme below to view the videos.' followed by a list of eight themes. A sidebar on the left contains links to 'HISTORY PROJECT' (Use Cases, Video Library 1, Video Library 2, Additional Pioneers), 'INFORMATICS CORE' (The Science of Informatics), and 'INFORMATICS AREAS' (Translational Bioinformatics, Clinical Research Informatics, Clinical Informatics, Consumer Health Informatics, Public Health Informatics). A right sidebar titled 'Nursing Informatics History Project' lists 'Use Cases', 'Video Library 1: Nursing Informatics Pioneers', 'Video Library 2: Themes from Interviews', and 'Additional Pioneers'. Below this is a 'Have Questions?' section with 'Need Help?' and 'Contact Us' links. The page also includes 'Print' and 'Share' buttons.

**What's Hot:** 10x10 Courses iHealth 2015 Clinical Informatics Board Review Course Interprofessional Certification

**Navigation:** Home Membership Working Groups Nursing Informatics History Project Video Library 2

**HISTORY PROJECT**

- Use Cases
- Video Library 1
- Video Library 2**
- Additional Pioneers

**INFORMATICS CORE**

- The Science of Informatics

**INFORMATICS AREAS**

- Translational Bioinformatics
- Clinical Research Informatics
- Clinical Informatics
- Consumer Health Informatics
- Public Health Informatics

**Video Library 2: Themes from Interviews**

Select a theme below to view the videos.

- Theme 1: **Nursing Informatics what it is, present, future, what nursing brings to the table**
- Theme 2: **Informatics- its value, pioneer's realization of the value of informatics, how they came to understand the value of informatics**
- Theme 3: **Significant events that have shaped the field of nursing informatics**
- Theme 4: **Demographic of Pioneers including name, educational background, current position**
- Theme 5: **Pioneer's path-career that lead up to involvement in (nursing) informatics, When they first considered themselves an informatics nurse.**
- Theme 6: **Personal aspirations and accomplishments, Overall vision that guided pioneer's work, people the pioneer collaborated with to accomplish their vision/goals**
- Theme 7: **Pioneer's first involvement - earliest events they recall**
- Theme 8: **Pioneer's Lessons learned that they would like to pass on**

**Nursing Informatics History Project**

- Use Cases
- Video Library 1: Nursing Informatics Pioneers
- **Video Library 2: Themes from Interviews**
- Additional Pioneers

**Have Questions?**

**Need Help?**

**Contact Us**

**Print** **Share**



# Common Themes

1. Nursing Informatics- what it is, present, future
2. Informatics- its value, nursing information office
3. Significant events that shaped the field of nursing informatics
4. Demographic of Pioneers
5. Pioneer's path-career that lead up to involvement in informatics
6. Personal aspirations, accomplishments, vision, goals, collaborators
7. Pioneer's first involvement - earliest events they recall
8. Pioneer's lessons learned that they would like to pass on

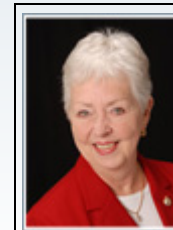


# Common Themes Examples

## Video Library 2: Themes from Interviews

Select a theme below to view the videos.

- Theme 1: **Nursing Informatics** what it is, present, future, what nursing brings to the table
- Theme 2: **Informatics-** its value, pioneer's realization of the value of informatics, how they came to understand the value of informatics
- Theme 3: **Significant events** that have shaped the field of nursing informatics
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- Theme 8: **Pioneer's Lessons learned** that they would like to pass on




Patricia M. Schwirian, PhD, RN

[View her video 1](#)

[View her video 2](#)

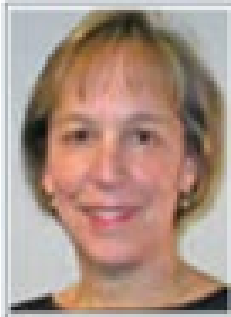


Virginia K. Saba, EdD, Honorary PhD, DS, RN, FAAN, FACMI, LL		Dr. Saba has for over 35 years pioneered the integration of technology in nursing. She spearheaded the nursing informatics movement, initiated academic technology programs, and supported the development of healthcare information technology (HIT) systems including the Clinical Care Classification (CCC) System. During her career she served as a Nurse Officer in the PHS where she provided national leadership and promoted the use of technology in nursing practice. She also served in academia receiving in, 1997 the title of Distinguished Scholar from Georgetown University and integrated nursing technology in the academic programs and facilities. She conducted a federally funded study from which she developed the CCC System. In the Uniformed Services University, (USU) she coordinated a Graduate Nursing Distance Learning Project with the Veterans Administration. Currently, she is involved in the national health standards groups, is President and CEO of Sabacare Inc., and is integrating the CCC System into electronic nursing documentation systems.	3:10 min	Windows Media Quick Time Audio Only Transcript
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# Examples of Videos

**Joyce E. Sensmeier RN, MS, RN-BC, CPHIMS, FHIMSS**



Joyce Sensmeier MS, RN-BC, CPHIMS, FHIMSS, FAAN began her career in Nursing Informatics at Palos Community Hospital ...[Read more](#)

[View her video](#)

[Read transcript of the interview](#)

**Roy L. Simpson, RN, C, FNAP, FAAN**



Roy L. Simpson, RN, C, CMAC, FNAP, FAAN, is vice president, nursing informatics, at Cerner Corporation. He is responsible for strategic sales/planning the patient...[Read more](#)

[View his video](#)

[Listen to audio](#)

[Read transcript of the interview](#)

# Sample Transcription

Patricia M.  
Schwirian,  
PhD, RN



## Dr. Patricia Schwirian

- Interviewer: Dr. Schwirian, could you please tell us your name, education, and title?
- Patricia Schwirian: Be glad to. I'm Pat Schwirian. I'm a Professor Emeritus of Nursing and Family Medicine at The Ohio State University in Columbus.
- Interviewer: Can you tell us a little bit about your educational background?
- Patricia Schwirian: My education started in Illinois at the Illinois State University where I thought I was going to be a science teacher for the rest of my life. Things changed. My life changed a lot. For instance, I got married, and we went to The University of Iowa. My husband—Sociology, and I worked on my degrees in Science Education there. Then we went to The Ohio State University, and have been there ever since. I got my Ph.D. there, and I went on later to get my bachelor's degree in Nursing at Capital University in Columbus. So, I was a late comer to the field of nursing.
- Interviewer: How would you describe nursing informatics?
- Patricia Schwirian: Well, I would describe a very broad definition of nursing informatics. I consider it the knowledge base that supports and furthers the application of computers in nursing practice, in nursing education, in nursing administration, and in nursing research.
- Interviewer: Dr. Schwirian, briefly describe your career in nursing that led up to your involvement in nursing informatics.
- Patricia Schwirian: Actually, my career in nursing became much earlier than my career in, than my career in nursing per se. I came through science education, and my research was in education and the social behavioral aspects of it. So my view of computers was as a tool for data analysis—that I could be an independent researcher and run my own data analysis. You may or may not know that at The University of Iowa they've always had a very strong computer analysis history because of the testing and information services that came out of The University of Iowa, so we had access to computer systems—large systems—that other people didn't, for many, many years. In fact, the computer that we both—my husband and I



# Use Cases

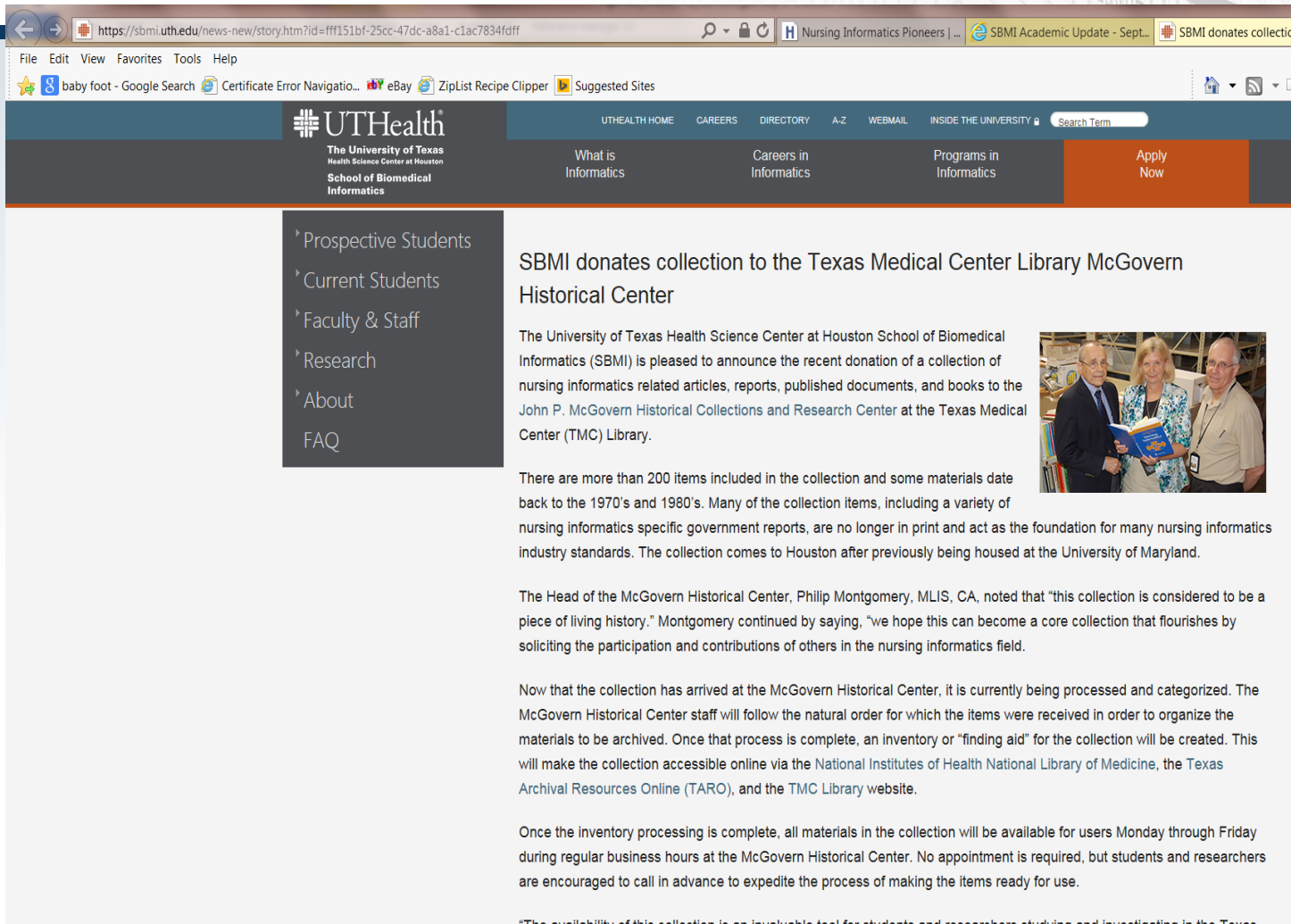
- Examples of how to use the information
  - Future of Nursing Informatics
  - Nursing Informatics Recruiting
  - Nursing Informatics Trends
  - Qualitative Analysis Research
  - Compare Nursing Pioneers

# Recent Work

- Updated biographies and photos of pioneers
- Added link to biography for Dr. Marianne Tallberg, Finland
- Create a tribute to Dr. Harriet H. Werley
- Explore extending pioneer project to international nursing informatics
- Donated Nursing Informatics materials to the John P. McGovern Historical Collections and Research Center at the Texas Medical Center Library in Houston



# Recent Work



The screenshot shows a web browser window displaying a news story from the University of Texas Health Science Center at Houston School of Biomedical Informatics (SBMI). The browser's address bar shows the URL: <https://sbmi.uth.edu/news-new/story.htm?id=fff151bf-25cc-47dc-a8a1-c1ac7834dfdf>. The page features a navigation menu with links to 'UTHealth HOME', 'CAREERS', 'DIRECTORY', 'A-Z', 'WEBMAIL', and 'INSIDE THE UNIVERSITY'. A search bar is also present. The main content area is titled 'SBMI donates collection to the Texas Medical Center Library McGovern Historical Center'. The text of the article states that the SBMI is pleased to announce the recent donation of a collection of nursing informatics related articles, reports, published documents, and books to the John P. McGovern Historical Collections and Research Center at the Texas Medical Center (TMC) Library. A photograph shows three people, two men and one woman, standing together and holding a book. The article continues to describe the collection, which includes over 200 items dating back to the 1970's and 1980's, and mentions that the collection is currently being processed and categorized. It also notes that the collection will be available for users Monday through Friday during regular business hours at the McGovern Historical Center.

UTHealth  
The University of Texas  
Health Science Center at Houston  
School of Biomedical  
Informatics


UTHealth HOME CAREERS DIRECTORY A-Z WEBMAIL INSIDE THE UNIVERSITY Search Term

What is Informatics Careers in Informatics Programs in Informatics Apply Now

Prospective Students  
Current Students  
Faculty & Staff  
Research  
About  
FAQ

## SBMI donates collection to the Texas Medical Center Library McGovern Historical Center

The University of Texas Health Science Center at Houston School of Biomedical Informatics (SBMI) is pleased to announce the recent donation of a collection of nursing informatics related articles, reports, published documents, and books to the [John P. McGovern Historical Collections and Research Center](#) at the Texas Medical Center (TMC) Library.



There are more than 200 items included in the collection and some materials date back to the 1970's and 1980's. Many of the collection items, including a variety of nursing informatics specific government reports, are no longer in print and act as the foundation for many nursing informatics industry standards. The collection comes to Houston after previously being housed at the University of Maryland.

The Head of the McGovern Historical Center, Philip Montgomery, MLIS, CA, noted that "this collection is considered to be a piece of living history." Montgomery continued by saying, "we hope this can become a core collection that flourishes by soliciting the participation and contributions of others in the nursing informatics field.

Now that the collection has arrived at the McGovern Historical Center, it is currently being processed and categorized. The McGovern Historical Center staff will follow the natural order for which the items were received in order to organize the materials to be archived. Once that process is complete, an inventory or "finding aid" for the collection will be created. This will make the collection accessible online via the [National Institutes of Health National Library of Medicine](#), the [Texas Archival Resources Online \(TARO\)](#), and the [TMC Library website](#).

Once the inventory processing is complete, all materials in the collection will be available for users Monday through Friday during regular business hours at the McGovern Historical Center. No appointment is required, but students and researchers are encouraged to call in advance to expedite the process of making the items ready for use.

"The availability of this collection is an invaluable tool for students and researchers studying and investigating in the Texas

# Recent Work – Additional Pioneers

- Myrna L. Armstrong EdD, RN, FAAN
- Constance Berg, RN, MBA, FHIMSS
- Diane M. Billings, EdD, RN, FAAN
- Amy Coenen, PHD, RN, FAAN
- Dorothy Fishman-Wetstone
- Kristine M. Gebbie, DrPH, RN
- Edward J. Halloran, RN, MPH, PhD, FAAN
- Barbara Happ, PhD, RN
- William L. Holzemer, RN, PhD, FAAN
- Kathleen M. Hunter, PhD, RN-BC
- Ramona Nelson, PhD, BC-RN, FAAN, ANEF



# Recent Work

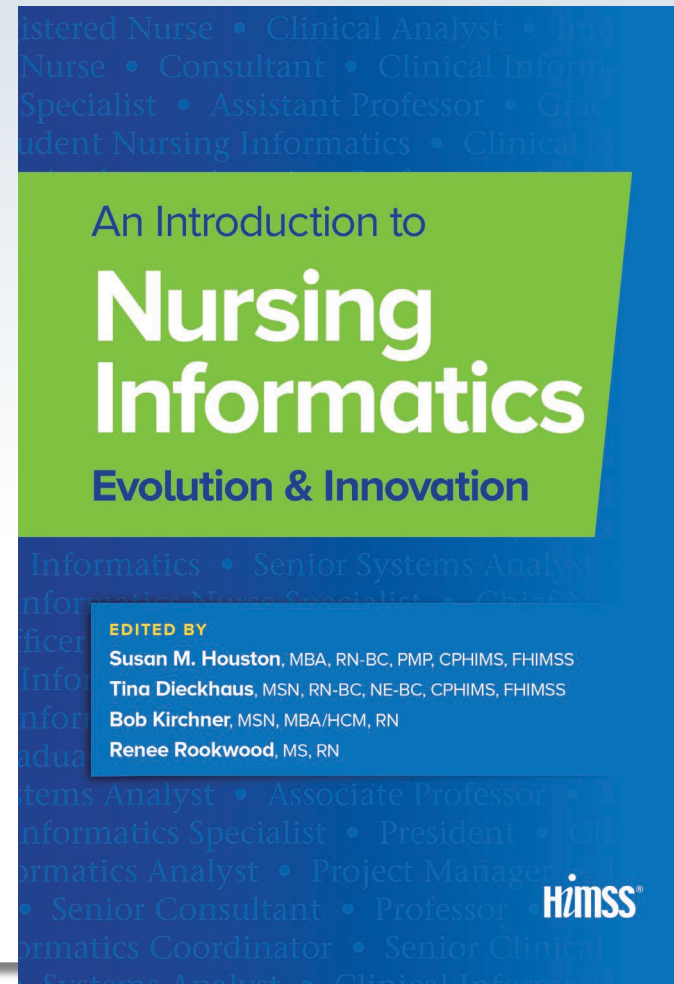
- Initiated reference list of early articles written or co-written by pioneers – some not in CINAHL – compiled by Jack Brixey
- Video Library 3: Computers in Nursing Series
  - Courtesy of Dr Roy Simpson/HCA

# Recent Work

- Poster @ MedInfo Hangzhou, China
- Poster @ AMIA, Washington, DC Nov 2019
- Dissemination of project via UT Houston SON & NI Boot Camps
- Continue to collect artifacts for UT Houston NI Library

# Nursing Informatics Changing Healthcare

- Conferences and Workshops
- Professional Councils
- Certification
- Advanced Education
- Writing for Publication
- Presentations
- HIMSS Bookstore



# Thank you to the Nursing Informatics Pioneers

...for sharing their knowledge and their expertise  
to ultimately provide better patient care



# References

Houston S, Dieckhaus T, Kirchner B, Rookwood, R. (2015). *An Introduction to Nursing Informatics: Evolution & Innovation*. Chicago: HIMSS Media.

Newbold, S.K. & Westra, B.L. (2009). American Medical Informatics Nursing Informatics History Committee Update. *CIN: Computers, Informatics, Nursing*, Vol. 27(4), 263-265.

Nursing Informatics History Project. <http://www.amia.org/working-groups/nursing-informatics/history-project>

Saba V.K. & McCormick, K.A. (2015). *Essentials of Nursing Informatics*. 6<sup>th</sup> Ed. New York: McGraw-Hill.

Westra, B. L. & Newbold, S. K. (2006). American Medical Information Association Nursing Informatics History Committee. *CIN: Computer, Informatics, Nursing*, Vol. 24(2), 113-115.



# Questions?

Susan K Newbold, PhD RN-BC FAAN FHIMSS FAMIA  
Director, Nursing Informatics Boot Camp  
[sknewbold@comcast.net](mailto:sknewbold@comcast.net)

Juliana J Brixey, PhD, MSN, MPH, RN  
Associate Professor, UT Health School of Nursing, Houston  
[Juliana.J.Brixey@uth.tmc.edu](mailto:Juliana.J.Brixey@uth.tmc.edu)

Nursing Informatics History Project:  
<https://www.amia.org/working-groups/nursing-informatics/history-project>





## Nursing Informatics Working Group

Nursing Informatics is the "science and practice (that) integrates nursing, its information and knowledge, with management of information and communication technologies to promote the health of people, families, and communities worldwide."



# Nursing Informatics Pioneers Continue to Influence the Profession

Susan K Newbold

PhD RN-BC FAAN FHIMSS FAMIA



[www.amia.org](http://www.amia.org)