

IOWA

FOCUS: The Key to Research at the University of Iowa College of Nursing

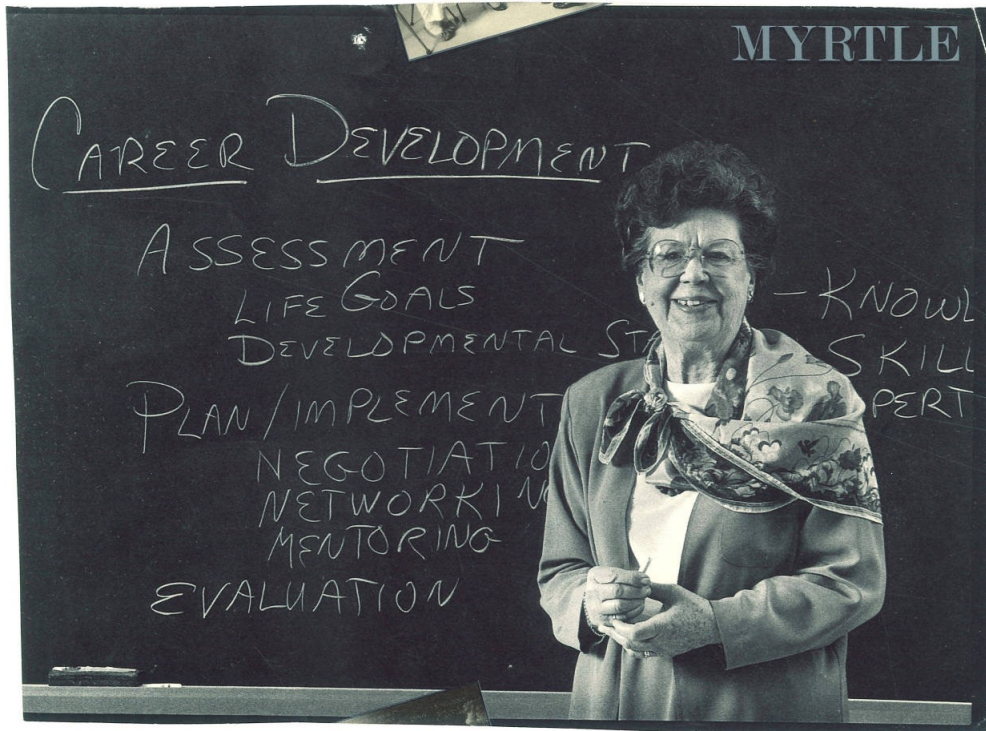
College of Nursing 125th Celebration

September 22, 2023

First Major Research Activity: 1956-1957



Myrtle Kitchell Aydelotte & Marie E. Tener (1961) "An Investigation of the Relation Between Nursing Activity and Patient Welfare" *Nursing Research*



MKA at Seminar 1988

416. AYDELOTTE, MYRTLE KITCHELL, and TENER, MARIE E. *An Investigation of the Relation Between Nursing Activity and Patient Welfare*. Iowa City, State University of Iowa, 1960. Organization Project, 1960. Issued. 412 pp.

The validity of the speculation that increases in the amount of nursing care will produce improvement in patient welfare was tested in one hospital in a series of five experiments by: (1) increasing the size of a ward's nursing staff and (2) introducing an inservice education program for increasing the amount and quality of nursing care. A "nursing activity instrument" was used to measure how time was spent among "those externally observable acts which the nursing personnel engage in while on duty." The activities were defined by the members of the project in consultation with the technical director. A statistical analysis of 19 "minor categories" was grouped into seven, two of which covered patient care activities and five covered activities not performed in the patient's direct presence. The ward staff comprised graduate student nurses, practical nurses, aides, orderlies and ward clerks.

Impact: Tested the common assumption that increasing nursing staff and conducting staff education improve patient welfare.

Results of the study "contradict many assumptions commonly held regarding nursing, and the influence of certain changes in patient welfare."
—M. Fundis.



Pioneers of nursing research (from left): Dr. Myrtle Aydelotte, Dr. Virginia Henderson, Dr. Harriet Werley, Jessie M. Scott, Dr. Faye G. Abdellah.

RESEARCH HIGHLIGHTS

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First Major Externally
Funded Research Activity

1956



Myrtle Aydelotte

RESEARCH HIGHLIGHTS

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First Major Externally
Funded Research Activity

Creation of PhD Program

1956



Evelyn Barritt (left)
Ada Jacox



RESEARCH HIGHLIGHTS

IOWA

First Major Externally
Funded Research Activity

1956



Laura Hart (left), Pat Donahue, Geraldene Felton

Creation of PhD Program

RESEARCH HIGHLIGHTS

IOWA

1956



1983-1987



1988



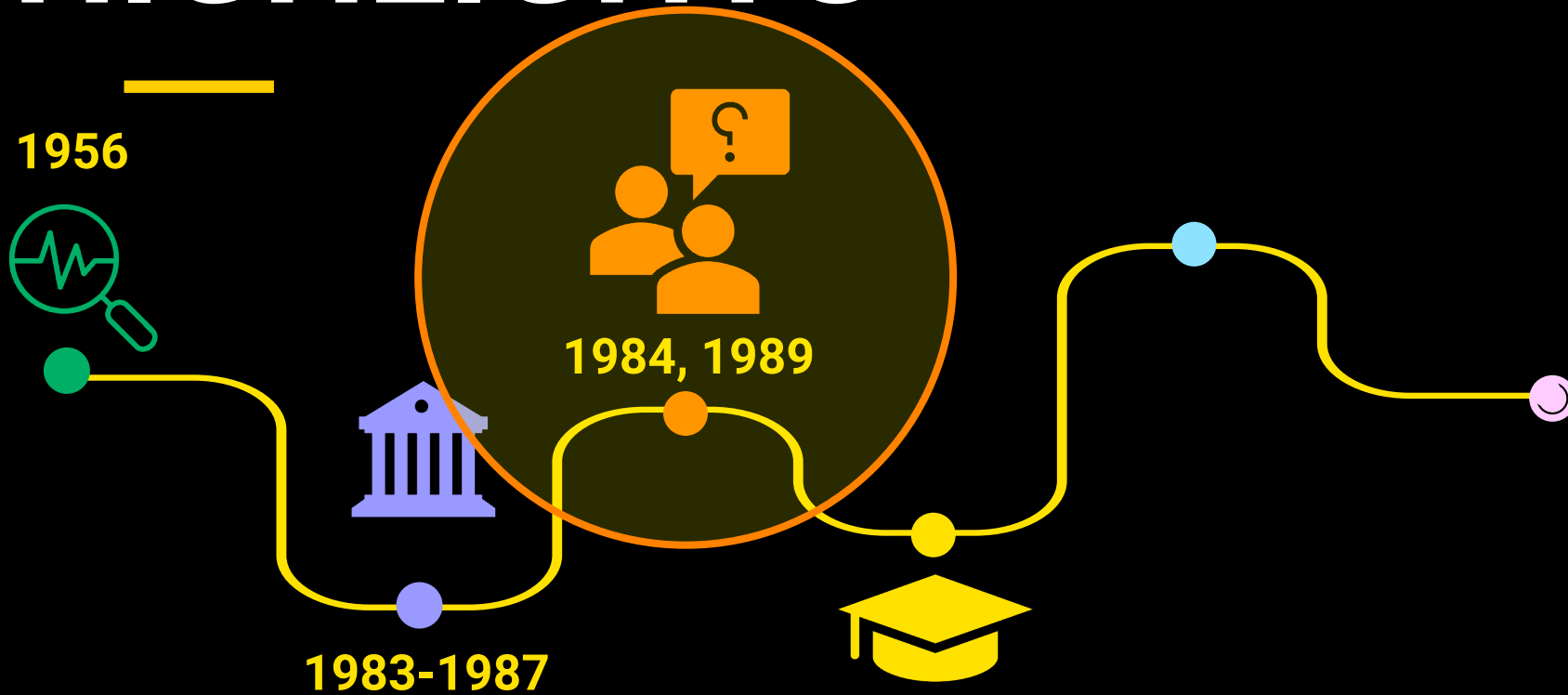
First Major Externally
Funded Research Activity

Foundational Funding in
Gerontology and NSA

Creation of PhD Program



RESEARCH HIGHLIGHTS



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First Major Externally Funded Research Activity

Foundational Funding in Gerontology and NSA

Creation, then Joint Sponsorship of ONR(S)

Creation of PhD Program

Research Expansion: 1985-1995



- **Research funding**

\$10,000 (1980) → \$418,892 (1984) → \$2,000,000 (1995)

- **Faculty with doctoral degrees**

10 (1976) → 43 (1995)

- **Faculty publications**

40 (1979) → 146 (1995)

- **Faculty National and International presentations**

17 (1979) → 101 (1995)

Joint Sponsorship of the ONR: CON-UIHC DON Research Collaboration



The University of Iowa

Iowa City, Iowa 52242
 OFFICE FOR NURSING RESEARCH DEVELOPMENT AND UTILIZATION
 FAX: 319/335-9590
 The University of Iowa College of Nursing 407 NB
 319/335-7133
 and
 The University of Iowa Hospitals & Clinics Department of Nursing T100 GH
 319/356-2267
 Director, Toni Tripp Reimer, Ph.D., R.N., F.A.A.N.
 Associate Director, Kathleen C. Buckwalter, Ph.D., R.N.

COPY



1847

TO: Eldean Borg
 Gordon Strayer

FROM: Toni Tripp Reimer

DATE: June 30, 1989

RE: Announcement of Joint Sponsorship

As of July 1, 1989, the Office for Nursing Research will be jointly sponsored by the College of Nursing and The University of Iowa Hospitals and Clinics Department of Nursing. A news release is attached to this memo.

We would appreciate your coordination of this announcement. If you have any questions, please feel free to contact either myself or Dr. Buckwalter, at the numbers shown above.



Celebrating the 30th Anniversary of the UI College of Nursing and the UI Hospitals and Clinics Research Collaborations (1989-2019)

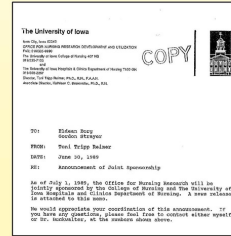


Patient-centered research begins with clinically-based questions, and the findings from patient-centered research return to clinical practice. Thirty years ago, visionary leaders at the UI College of Nursing (CON) and the UI Hospitals and Clinics recognized that formalizing their partnership would advance nursing science and patient care.

On June 30, 1989, CON Professors Dr. Toni Tripp-Reimer (Associate Dean for Research) and Dr. Kathleen Buckwalter (Associate Director) signed a Memorandum of Understanding with Sally Mathis Hartwig, Director of UI Hospitals and Clinics Department of Nursing. This agreement formalized the collaboration and pledged support from the College of Nursing.

Thirty years later, the partnership between the College and the UI Hospitals and Clinics is still strong. Nursing leaders and front-line clinicians at the hospital and academic partners at UI continue to co-author peer-reviewed papers, submit grant proposals, mentor students and collaborate on a variety of research, Evidence Based Practice (EBP) and quality improvement initiatives.

The strength of this collaboration has been recognized nationally. In 2014, the partnership received the American Association of Colleges of Nursing *Exemplary Academic-Practice Partnership Award*. In 2017, the collaboration received the *Academic-Clinical Partnership Award* from the Midwest Nursing Research Society.



A page from the 1989 Memorandum of Understanding formalizing the UI CON-UI Hospitals and Clinics partnership



Geraldine Felton



Sally Mathis Hartwig



Toni Tripp-Reimer



Kathleen Buckwalter

Leadership team in 1989 (clockwise from top left): Geraldine Felton, Dean, College of Nursing; Sally Mathis Hartwig, Director of UI Hospitals and Clinics Department of Nursing; Kathleen Buckwalter, Professor and Associate Director; Toni Tripp-Reimer, Professor and Associate Dean for Research



Julie Zerwic



Cindy Dawson



Ann Marie McCarthy



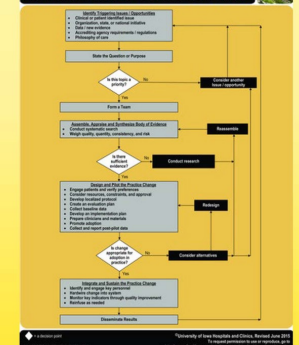
Kirsten Hanrahan

Leadership team in 2019 (clockwise from top left): Julie Zerwic, Dean, College of Nursing; Cindy Dawson, UI Hospitals and Clinics Chief Nurse Executive; Kirsten Hanrahan, UI Hospitals and Clinics Director of Nursing Research and EBP; Ann Marie McCarthy, Professor and Associate Dean for Research

Examples of UI CON-UI Hospitals and Clinics Collaborative Projects

- Heparin vs. saline for IV flushes
- Family responses during critical illnesses
- Sibling visitation program in the NICU and adult ICU
- Distraction for pediatric procedural pain
- Nurse fatigue reduction strategies
- Incorporation of standardized nursing language into UI Hospitals and Clinics electronic health record
- Pain assessment for elderly
- High-fidelity simulation in the Nursing Clinical Education Center
- Internationally recognized Iowa Model of Evidence Based Practice

The Iowa Model Revised: Evidence-Based Practice to Promote Excellence in Health Care



The Iowa Model Revised (2017). Published in *Worldviews on Evidence-Based Nursing*.

RESEARCH HIGHLIGHTS

IOWA

1956



1983-1987



1984, 1989



1988



First Major Externally
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Foundational Funding in
Gerontology and NSA

Creation, then Joint
Sponsorship of ONR(S)

Creation of PhD Program

Gerontological
Nursing Research

Nursing Service
Administration

RESEARCH HIGHLIGHTS



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1983-1987



1984, 1989



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1990, 1991, 1995



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NIC, NOC, CNC created

Nursing Interventions Classification (NIC)

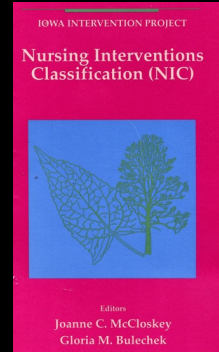
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“Our purpose is to conceptualize what nurses do in forms of treatment, define those treatments, and develop a taxonomy so it may be effectively communicated. There is a definite need for this, and because of advanced technology there is a demand for a universal validated language for nurses.”

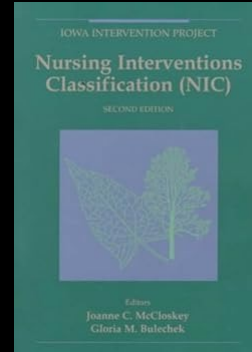
- Joanne McCloskey, PhD, RN, FAAN



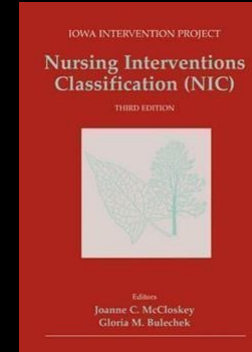
Nursing Interventions Classification (NIC)



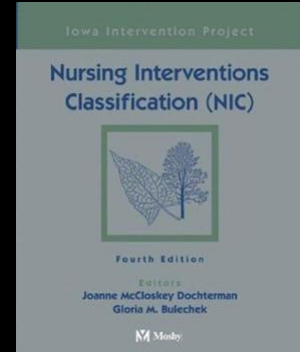
1st



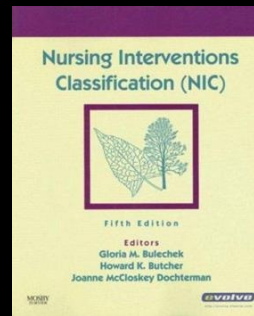
2nd



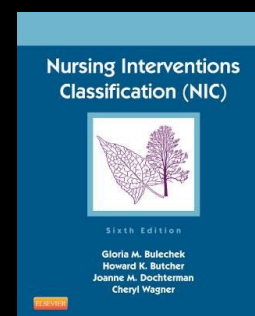
3rd



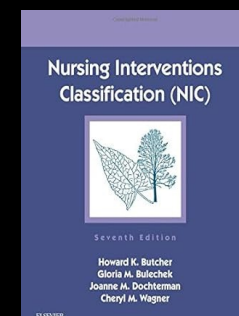
4th



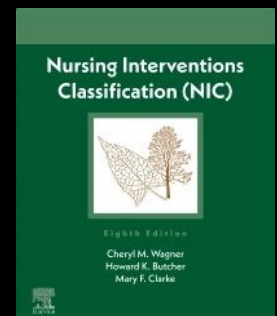
5th



6th



7th

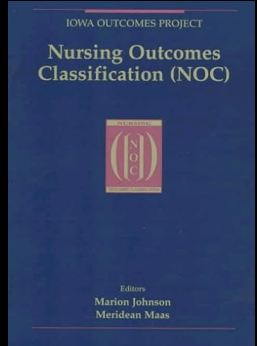


8th

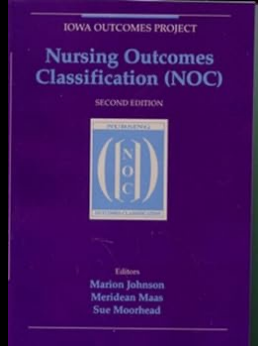
NIC Founders Gloria Bulechek and Joanne McCloskey

Nursing Outcomes Classification (NOC)

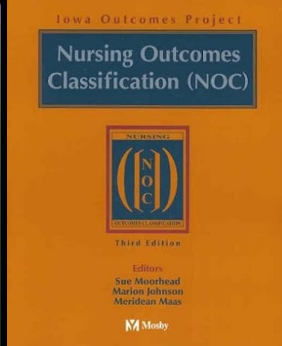
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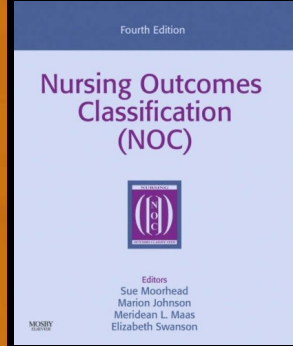
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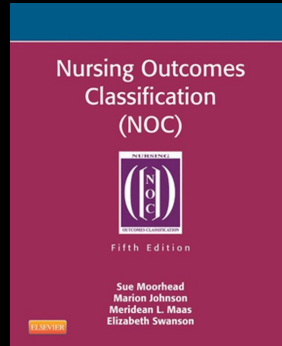
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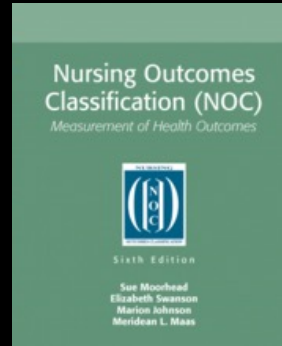
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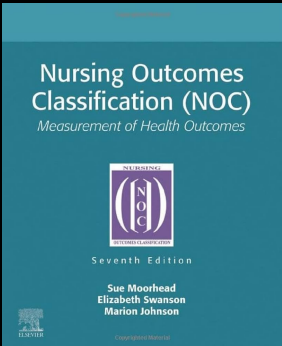
4th



5th



6th



7th

NOC Founders Meridean Maas and Marion Johnson

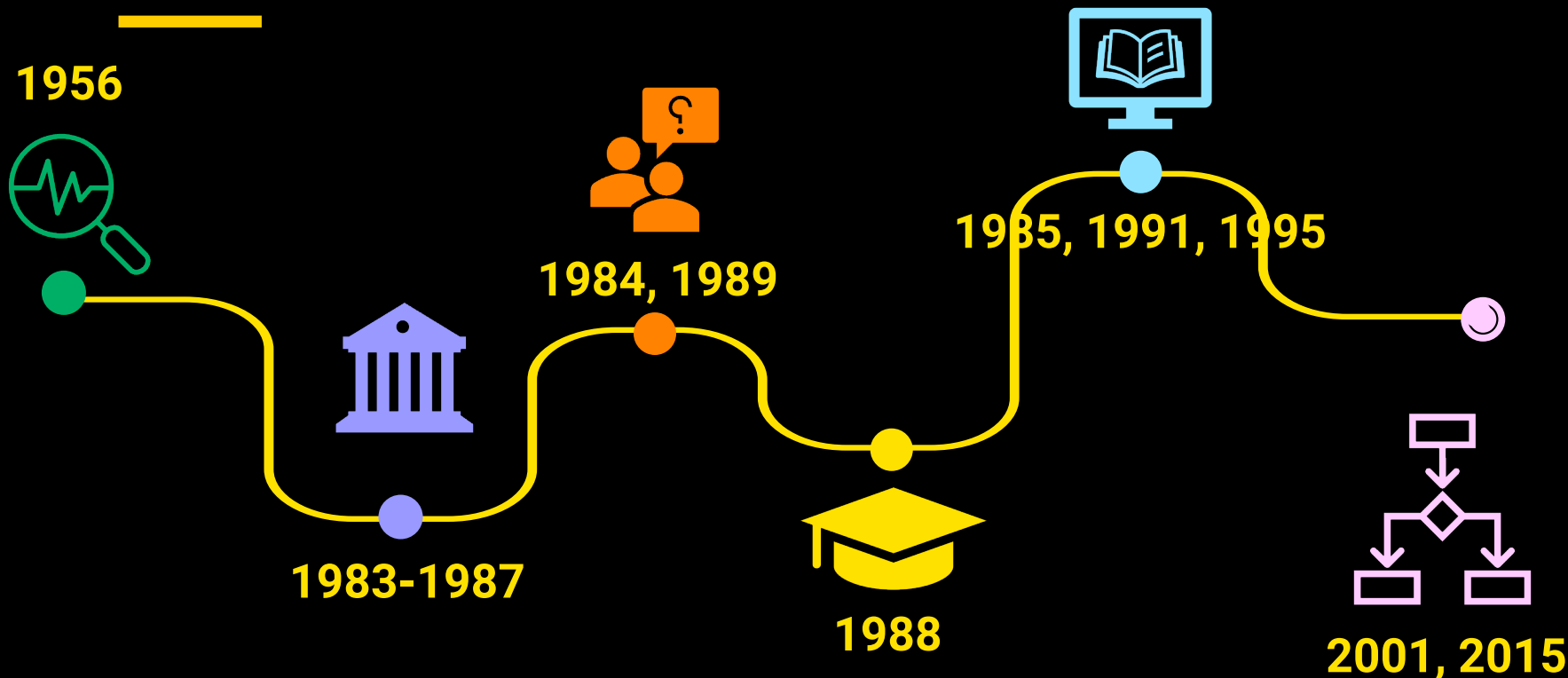
NIC and NOC Teams Feb 1999



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RESEARCH HIGHLIGHTS

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First Major Externally Funded Research Activity

Foundational Funding in Gerontology and NSA

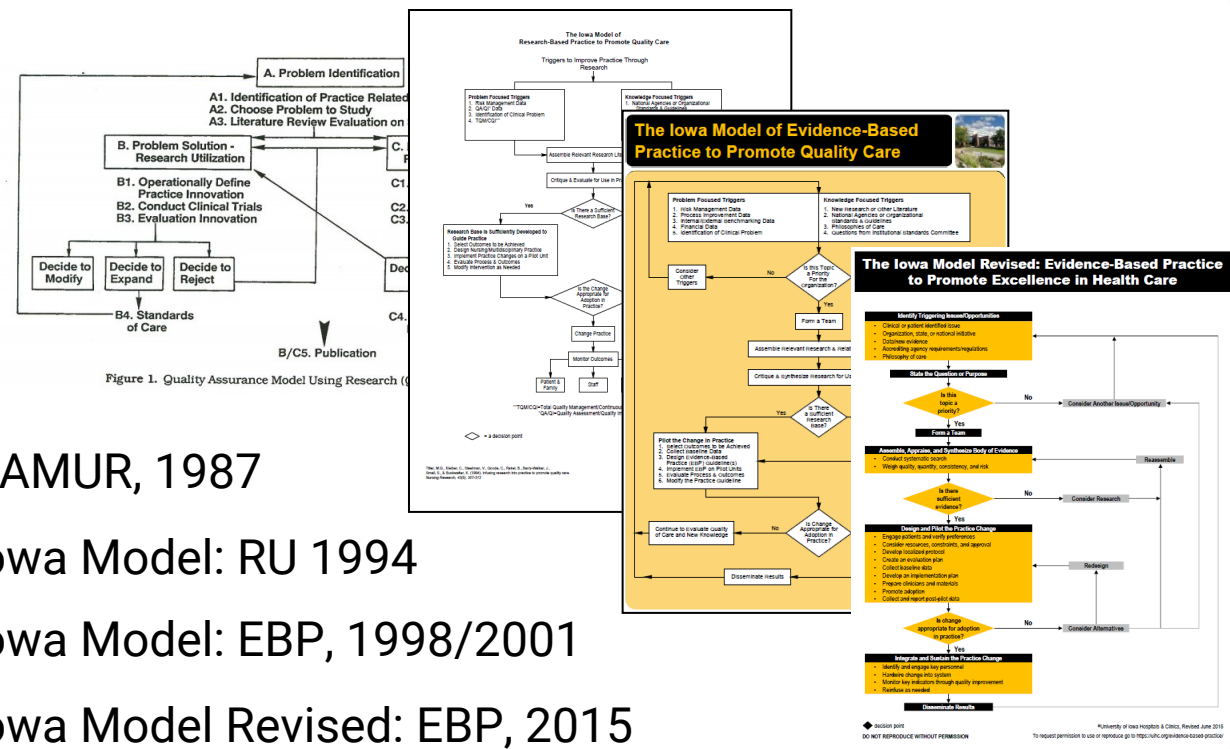
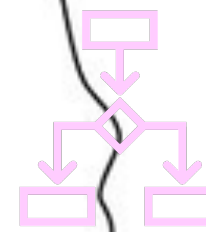
Creation, then Joint Sponsorship of ONR(S)

Creation of PhD Program

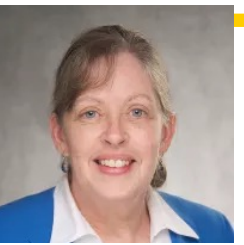
NIC, NOC, CNC created

Publication and Revision of Iowa Model of EBP

The Iowa Model: Development and Revisions

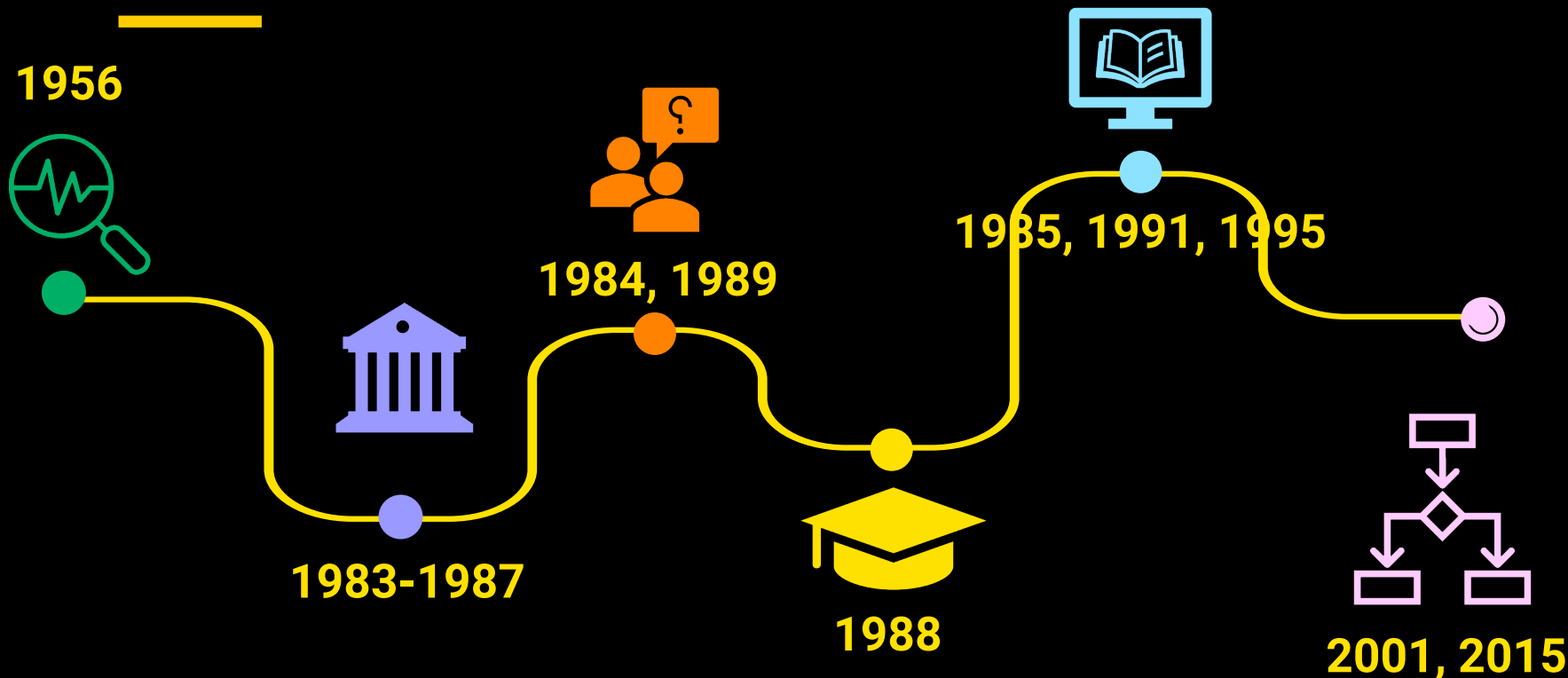


QAMUR, 1987
 Iowa Model: RU 1994
 Iowa Model: EBP, 1998/2001
 Iowa Model Revised: EBP, 2015



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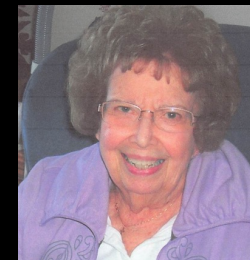


1988: Focus on Areas of Strength

- **Tripp-Reimer:** Illness in Ethnic Groups
- **Buckwalter:** Geriatric Mental Health, National Caregivers Project
- **Maas:** Interventions, Family Involv. in Care in Alz.
- **Felton:** Professional Nurse Traineeship
- **McClelland:** Satellite Centers for RNs
- **McCloskey:** Nursing Satisfaction, Nurse Retention

Gerontological Nursing Research

Nursing Service Administration



Gerontological Nursing Research

Nursing Service Administration

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Meridean Maas, Ph.D., R.N. Aging Research

Dr. Maas is studying a special care unit for Alzheimer's patients at the Iowa Veteran's Home in Marshalltown, Iowa. In the past, nursing homes integrated Alzheimer's patients with the traditional resident. Currently, the Alzheimer's patient is being placed in special environments. "The strategy behind these

special care units is to reduce the stimuli the Alzheimer's patient receives. Controlling and reducing the stimuli is thought to reduce the deterioration of the Alzheimer's patient." At the core of Dr. Maas' research is care for the elderly patient with the emphasis on quality.

Gerontological Nursing Research

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- **Tripp-Reimer:** Illness in Ethnic Groups
- **Buckwalter:** Geriatric Mental Health, National Caregivers Project
- **Maas:** Interventions, Family Involv. in Care in Alz.

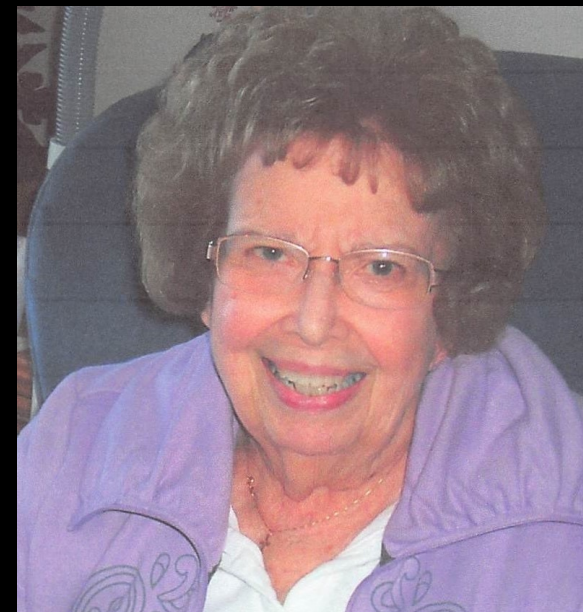


Nursing Service Administration

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- **Felton:** Professional Nurse Traineeship
- **McClelland:** Satellite Centers for RNs
- **McCloskey:** Nursing Satisfaction, Nurse Retention



1988 - 1993: Nursing Education and Nursing Care Delivery

IOWA



Gerontological Nursing Research

- **Frantz:** Nursing Interventions, Healing Ulcers w/TENS, Pressure Ulcers and TENS in Older Adults
- **Tripp-Reimer:** Gero Nursing Training Grants (T32)
- **Buckwalter:** PLST Model for Rural Alz Caregivers

Nursing Service Administration

- **McCloskey:** Advanced Nurse Education, Expanding NSA, Classification of Nursing Interventions
- **Blegen:** Hospital Based Managed Care: Cost & Quality
- **Weiler:** Patient Knowledge/Use of Advanced Directives
- **Eland:** Education Patients about Cancer Pain
- **Felton:** Nurse Anesthetist Education Program
- **Johnson:** Classification of Nurse-Sensitive Outcomes



1994 - 1999: Gero Interventions and Clinical Evaluations

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Gerontological Nursing Research

- **Tripp-Reimer:** Gero Nursing Interventions Res. Ctr.
- **Mobily:** Elder Pain in LTC
- **Swanson:** Music Therapy for Elders Agitation in LTC
- **Herr:** Elder Pain—Assessment of Intensity
- **McCarthy:** Diabetes Effects on Learning in Children
- **Culp:** Hydration in LTC to Prevent Acute Confusion

Parent, Child, Family

- **J. Williams:** Genetic Knowledge—Psychosocial Impact
- **McCloskey:** NIC/NOC and Effectiveness
- **Clark:** Alcohol, Bone Mass, Depo Provera, Bone Density in Premenopausal Women
- **Felton:** Professional Nurse Traineeship, Nurse Anesthetist Traineeship
- **Johnson:** Eval. of Nursing Outcomes Classification

Nursing Service Administration



Iowa Gerontological Nursing Interventions Research Center

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- 1/6, only NINR research center in midwest
- Established a 17-school consortium

Center Outcomes 1994 - 2010

- 72 pilot grants (w/ Hartford)
- 41 Evidence-Based Practice guidelines
- 47 R-series grants, 4 K-series grants
- 597 publications



2000 - 2005: Pain and Applied Clinical Research

IOWA



Adult and Gerontology

Parent, Child, Family

Health Systems and Practice

- **Tripp-Reimer:** Caring for Native American Elders
- **Butcher:** Written Emotional Exp & Caregiver Burden
- **Buckwalter:** Treatment for Alz-related Anxiety in ALF
- **Herr:** Cancer Pain in Elders—Promoting EBP in Hospices
- **Buckwalter:** Hartford Ctr. for Gero. Nursing Excellence
- **J. Williams:** Family Health HD Predictive Testing, Genetics T32 Postdoctoral Training
- **Dochterman:** Training Nursing Effectiveness Research
- **McCarthy:** Child. Responses to Distraction from Pain
- **Clark:** Leptin Control of Obesity
- **Ayres:** Impaired Mobility and Transition to Adulthood



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Iowa Hartford Center for Gerontological Nursing Excellence

- One of five original Hartford Centers
- Center Outcomes 2000 - 2015:
- Evidence Based Practice guidelines
- GeriatricPain.org
- Predoctoral fellowships
- Precursor to the Csomay Center (2015)



2006 - 2015: Prediction, Prevention, and Training

IOWA



Adult and Gerontology

Parent, Child, Family

Health Systems and Practice

- **Specht:** EBP Adoption in LTC, **M-TRAIN Contenance & Pain Control**
- **Rakel:** **TENS on Pain w/Movement, Osteoarthritis & Fxn**
- **Gardner:** Bioburden Predict. of Diabetic Ulcer Complicat.
- **Herr & McCarthy:** Pain Nurse Research Training T32
- **Rakel:** **Effectiveness of TENS on TKR Pain w/Movement**
- **Smith:** Improving Mood in AL using Cognitive Training
- **J. Williams:** Managing Incidental Genomic Findings
- **Daack-Hirsch:** Communication of Genomic Risk
- **Grossmann:** Metabolomic Biomarkers of Nutritional Int
- **Steelman:** Perioperative Hypothermia Prevention



Evolution of CON Areas of Excellence



1988

Gerontological Nursing Research

Administration

1995

Human Responses to Illness

Theory and Health Promotion

Organizations and Systems

1997 - 2011

Adult and Gerontology

Parent, Child, Family

Systems and Practice

Genetics, Omics

Pain

2019

Gerontology

Multimorbidity, Pain and Symptom Science

Health Systems, Technology and Informatics

2022

Aging, Cognitive Health, and Palliative Care

Pain, Symptoms, and Multimorbidity Science

Workforce Development for Healthcare Quality and Safety

Community/Primary Division

Acute/Critical Care Division



2017 - Present: Data Mining for Early Detection and Profiling Risk

- **St. Marie:** Decision Support for Responsible Pain Mgmt
- **Segre:** Well-being in Distressed NICU Mothers
- **Gardner & Raker:** Ctr for Advancing Multimorbid. Science
- **Groves:** Nurse Judgements about Safety Concerns
- **Gardner:** Severe Pain During Wound Care
- **Farag:** Medication Safety in K-12 Schools
- **Liu:** Mealtime Difficulties and Food Intake in NHs, OPTIMAL Mealtime Intervention
- **Smith:** Vocal Detection of Late-Life Depression
- **Raker:** Preventing Post-surgical Pain in At-Risk Veterans



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RESEARCH IMPACT:

**Five CON Research
Studies that Defined
Nursing Science**

Nurses' Job Satisfaction: A meta-analysis of related variables

Mary A. Blegen

(1993). *Nursing Research*, 42(1), 36-41



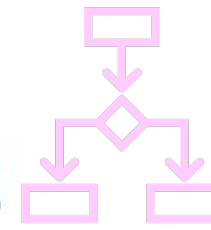
The Iowa Model of Evidence-Based Practice to Promote Quality Care

Marita Titler, Charmaine Kleiber, Victoria Steelman, Barbara Rakel, Ginette Budreau, Linda Everett, Kathleen Buckwalter, Toni Tripp-Reimer, Colleen Goode.

(2001), Critical Care Nursing Clinics in North America 13(4), 497-509.



Countries using the Iowa Model and Implementation Framework



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Pain Assessment in the Nonverbal Patient: Position Statement with Clinical Practice Recommendations



Keela Herr, PJ Coyne, T Key,
R Manworren, M McCaffery, S
Merkel, J Pelosi-Kelly, L Wild
(2006). Pain Management Nursing,
7(2), 44-52

Nurses' Job Satisfaction: A Proposed Measure

Charles Mueller and
Joanne McCloskey

(1990). *Nursing Research*, 39(2), 113-117



Nurses' job satisfaction: A proposed measure
C W Mueller, J C McCloskey
Nursing Research
Vol 39 (March-April 1990)
113-117

McCloskey/Mueller Satisfaction Scale (MMSS)
Copyright 1989, Used with permission

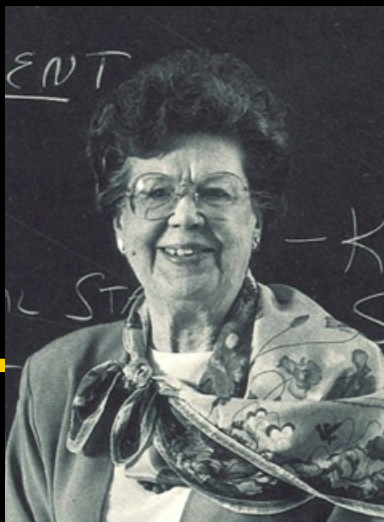
Community-based Participatory Research: An Approach to Intervention Research with a Native American Community



**Patti Holkup,
Toni Tripp-Reimer,**

EM Salois, C Weinert
(2004). *Advances in Nursing Science*,
27(3), 162-175

Thank You



Aydelotte



Frantz



Eland



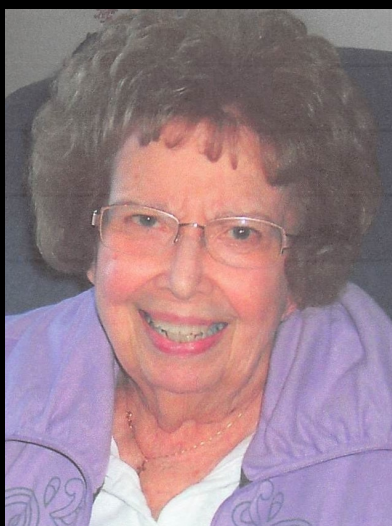
Barritt



Hart



Maas



McClelland



Tripp-Reimer

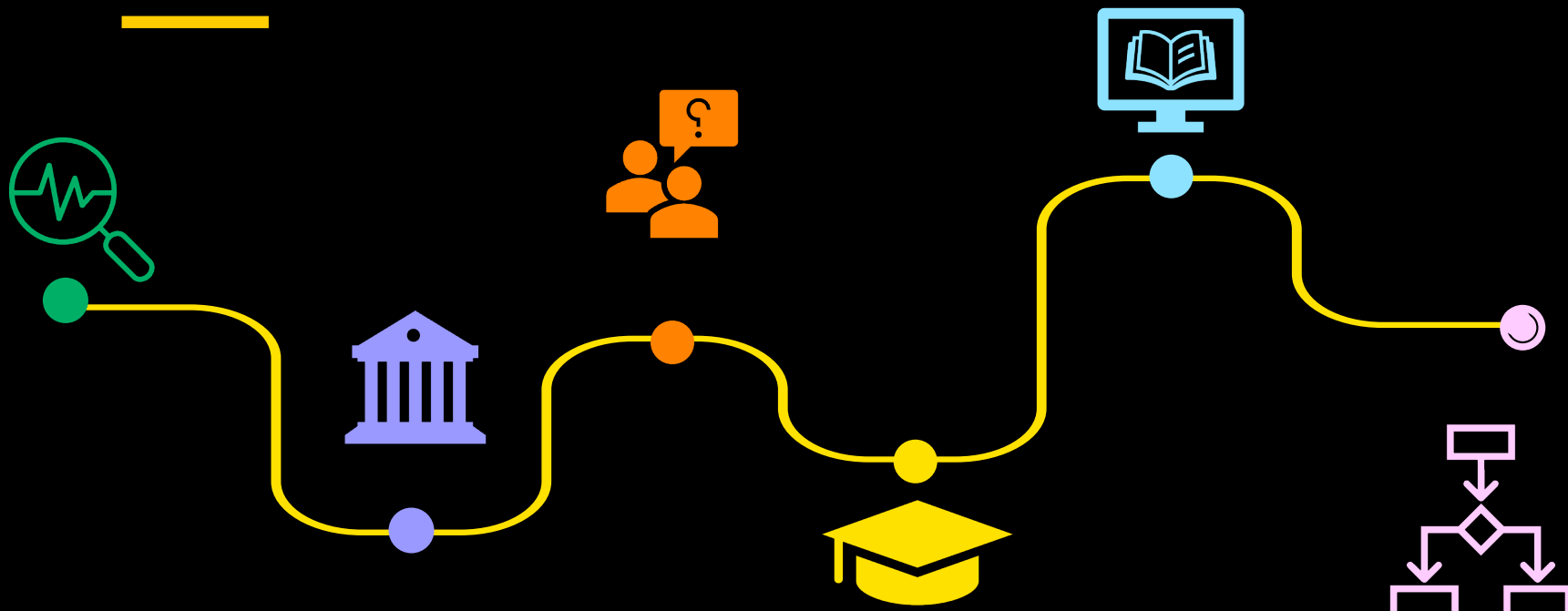


Specht



Donahue

CONCLUSIONS



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