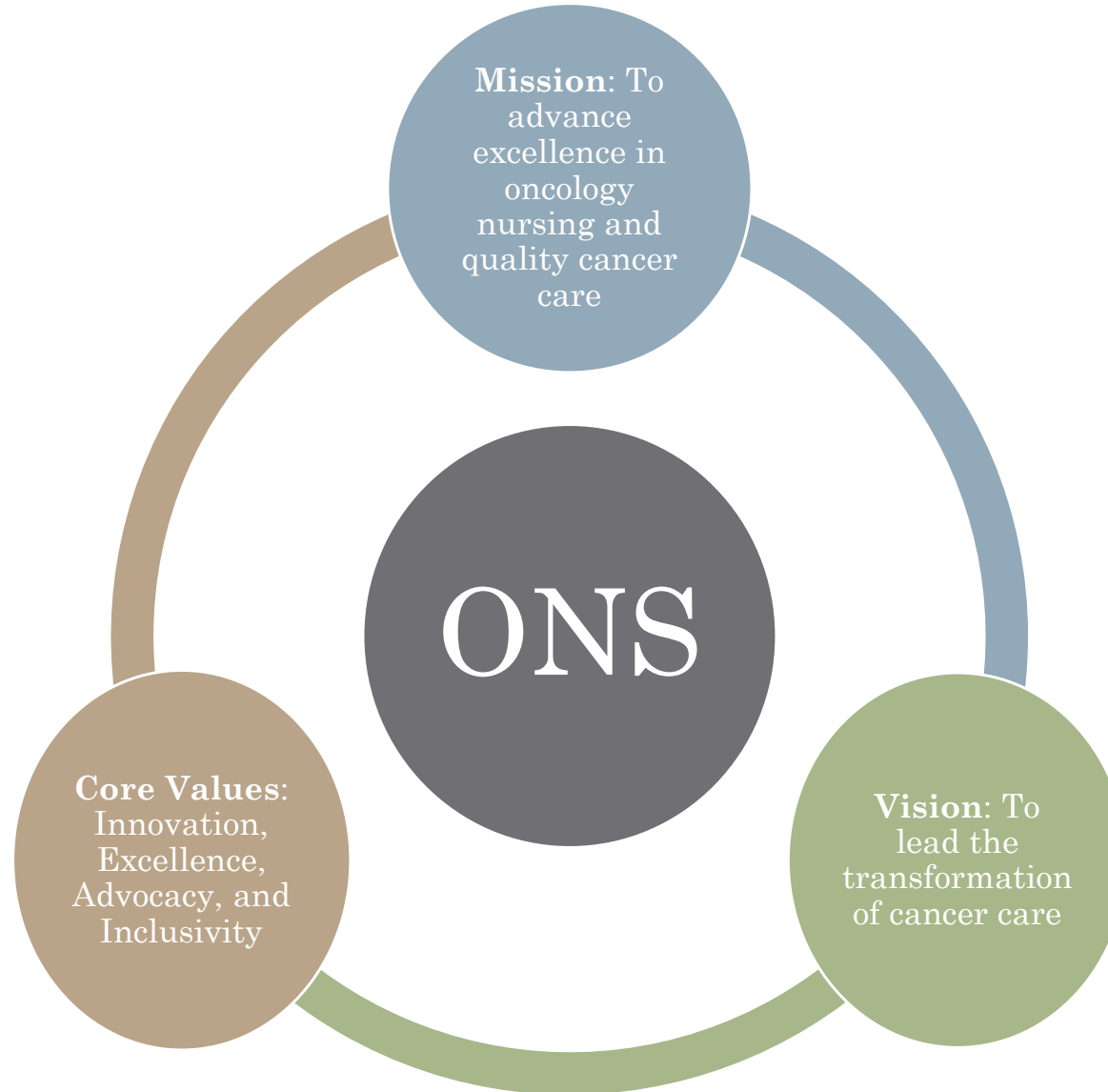




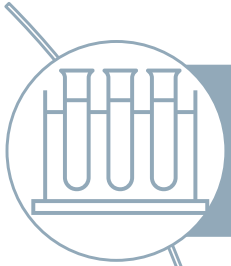
Closing the Genomic Practice Gap of Oncology Nurses: A Nursing Professional Organization's Approach

Erin Dickman MS, RN, OCN
Oncology Clinical Specialist
Oncology Nursing Society

Oncology Nursing Society (ONS)



Statement of the Problem



Rapid evolution of technology and approval of novel therapies



Lack of genomic literacy and knowledge



Insufficient genomic education



Few nursing organizations providing continuing nursing education on the topic

Significance of the Problem

Most people diagnosed with cancer are eligible for biomarker testing.

Approximately, 1.8 million people are diagnosed with cancer in the US annually (National Cancer Institute, 2020).



Implications for patient care:

Nurses disengage in clinical conversations about genomics (Flynn et al., 2019).

Missed referrals to genetics professionals (Hickey, et al., 2018).

Poor patient/family teaching which could lead to misconceptions and confusion (Friend, et al., 2021).



Setting the Organizational Priority

Image courtesy of NIH: <https://www.genome.gov/image-gallery#nanogallery/nanogallery2/0/29402599464>

Genomics Advisory Board

Kathleen Calzone, PhD, RN, AGN-BC, FAAN ADD TITLES

Kelliann C. Fee-Schroeder, BSN, RN, OCN®

Patricia Friend PhD, APRN-CNS, AOCNS®, AGN-BC

Suzanne Mahon, DNS, RN, AOCN®, AGN-BC

Mary L. Schmitt, MS, APRN, FNP-BC, AOCNP

Elisabeth King, RN, FNP, AOCNP, AGN

Data Collection



Internal

Landscape analysis
Expert advisory board
Member survey



External:

Literature review
Analyzed efforts of other
organizations

ONS Member Genomics' Survey

February 2020 with 700 respondents

72% state their educational preparation did not include content on genomics

50% would describe their knowledge of genomics as good; 45% would describe it as poor

95% agree that integrating genomics into practice is important

44% report low confidence in discussing genomics with patients

49% report low confidence discussing genomics with healthcare providers

99% responded they would see value in learning more about genomics

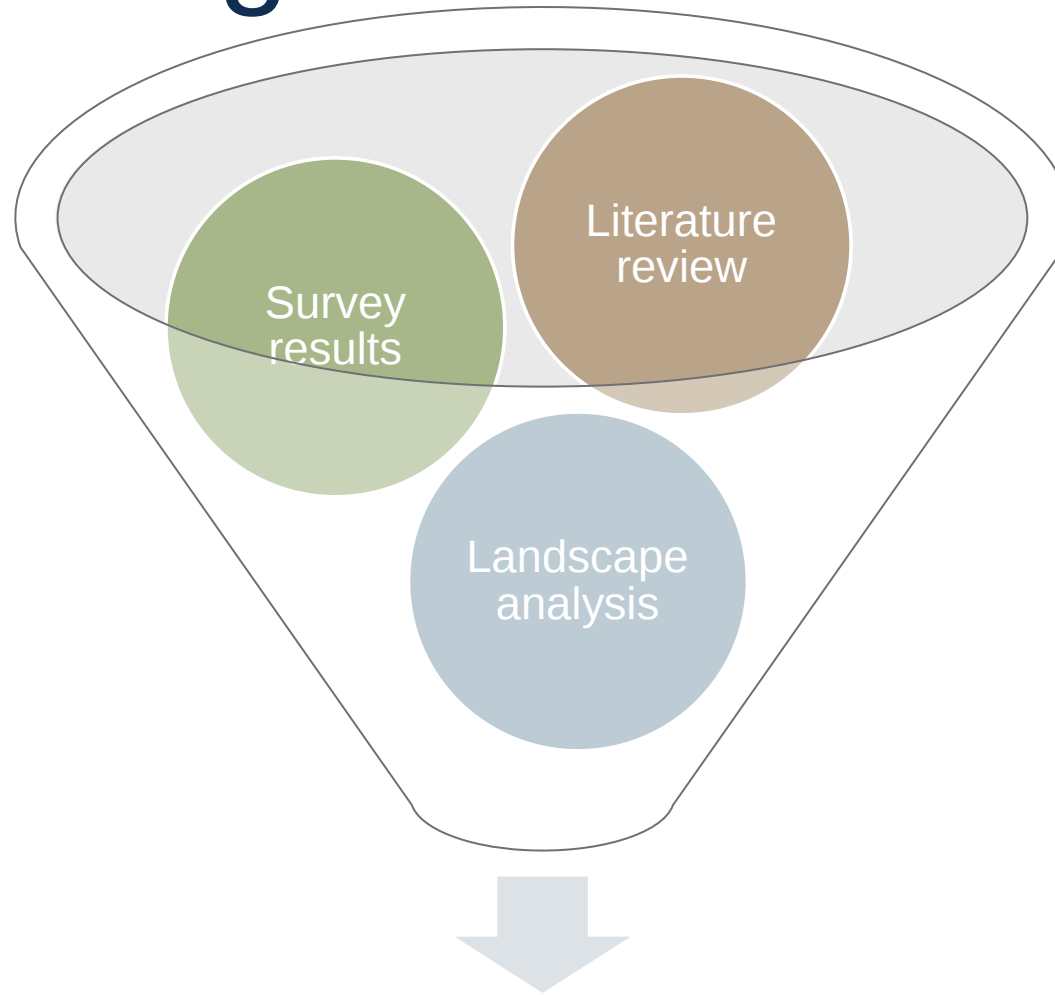
93% responded they would attend a course on genomics on their own time

99% responded that ONS should offer programs on genomics

Problem Statement

Genomics is not foundational to all oncology nursing practice therefore is not integrated into care.

Strategic Planning



SWOT Analysis

SWOT Analysis

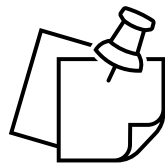
Strengths



Weaknesses



Opportunities

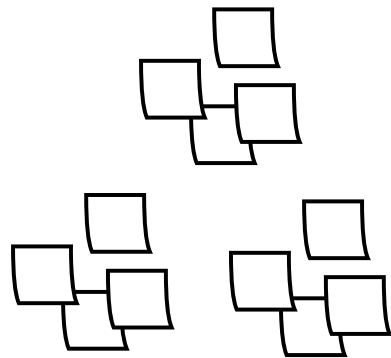


Threats

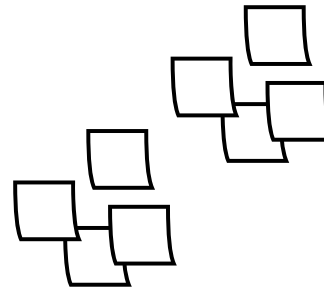


Affinity Clustering

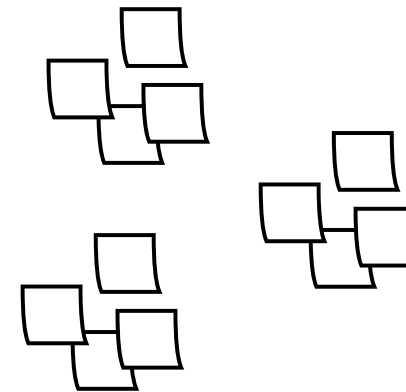
Awareness



Knowledge



Resources



An Organizational Strategic Approach

Problem: Genomics is not foundational to all oncology nursing practice therefore is not integrated into care.

Awareness

Knowledge

Skills

Nurses as essential members of the healthcare team need to be literate and knowledgeable to provide genomic-informed care



Project teams were created based on interest and expertise



Action plans were written



Based on action plans a proposal was developed to look for funding opportunities



Our first actions were focused on building awareness and foundational knowledge

Strategic Next Steps

Internal Team Members



Clinical



Learning and Development



Design Specialist



Project Management



Marketing and Communications



Instructional Designer

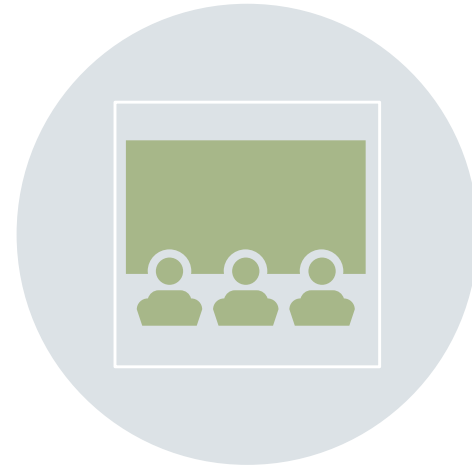


Information Services

Recruiting Volunteers



EXPERTS



END-USERS

Timeline

September 2018: Organizational Priority Set



May 2019: Genomics Advisory Board Initiated



March 2020: Strategic Planning



August 2020: Launched Genomics Taxonomy



2021-2022: Launched deliverables



**106
Terms**

in the genomics taxonomy
geared towards nurses



>25

Learning Activities including a
course, case studies, short videos,
and podcasts



5

Patient Education
Resources



10

Clinical Practice
Resources



A clinical decision support tool
with

103

Biomarkers and 5 cancer
types



>40

Expert member
contributors

The ONS Multi-Faceted Approach

Awareness

- Infographic
- Chapter media toolkit
- Social media
- Learning library
- Call to action
- Press release
- Campaign with hashtag

Knowledge

- Taxonomy
- Publications
- Podcasts
- Online course
- Video series
- Synchronous workshops

Point of Care Tools

- Quick guides
- Algorithms
- Checklists
- Discussion tools
- Patient education
- Genetic disorder reference sheets
- Biomarker database

Genomics and Precision Oncology Learning Library



The ONS Genomics Advisory Board members have compiled a comprehensive list of learning resources for your quick reference!

Patient Education- New!

Clinical Practice Resources- New!

Learning Activities

Genomic "Glad You Asked" Video Series

ONS Articles

ONS Genomics Taxonomy

Books

Podcasts

Genomics External Resources

Learn More About the ONS Genomics Advisory Board



No paid membership needed, just an ONS registered account.



Genomics Taxonomy

Genomics Taxonomy



The ONS Genomics Advisory Board members have created a comprehensive glossary of genomics related terms for your quick reference.

As ONS works to update and expand available genomic education, resources and publications, use of current terminology consistently is a priority to help avoid confusion and reflect the state of the evidence. We are in the midst of a terminology transition as we move from genetics into genomics. The goal is for all oncology nurses to be fluent in not just these terms, but the underlying concepts and their applications in practice. This taxonomy serves as foundation for terminology that will begin to be represented in ONS materials. As the evidence base continues to evolve and expand, so will this taxonomy. You can refer to the [outline of the taxonomy](#) to find the categorization of terms.

[Genomics Taxonomy Terms Table of Contents](#)

[Genome Foundations](#)

[Mode of Inheritance](#)

[Biomarkers](#)

[Biomarker Testing](#)

[Variant](#)

[Variant Subcategories](#)

[Incidental Finding](#)

[Genomics Taxonomy References](#)

Learn Cancer Care

Articles reviewing venous access devices, cancer genetics, immunotherapy, survivorship care, and more.

[Resources »](#)

Formulation of the Taxonomy

- Foundational to all other materials
- Utilized established peer reviewed definitions
 - i.e. NHGRI Talking Glossary, NCI Genetic Dictionary of Terms
- Includes foundational terms
- Organized terms based on key topic areas to facilitate learning
- Training on the Taxonomy to other ONS staff to facilitate the transition to a consistent taxonomy



Friend et al. (2021). Using a Genomics Taxonomy: Facilitating Patient Care Safety and Quality in the Era of Precision Oncology. CJON, PMID: 33739339



Welcome, Learn more about Biomarkers

Curated for oncology nurses by oncology nurses to bring precision oncology and the most recent biomarker advances to the point of care

[Learn More](#)

Search by biomarker, cancer type, or targeted therapy.

Refine by:

BRCA1 X

Cancer Types

Targeted Therapies

Showing 1-1 of 1 Results

BRCA1

[Show Details >>](#)

Prostate Cancer

Implications for Patient Care

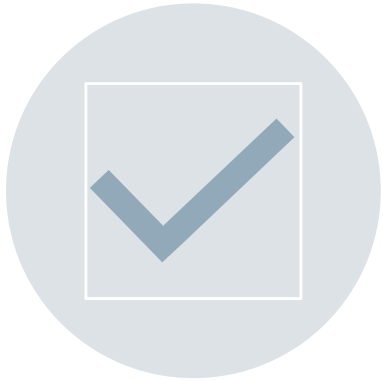
BRCA1 is a susceptibility biomarker, and pathogenic variants in germline testing indicate increased risk of breast and other cancers. BRCA1 is a prognostic biomarker, and germline variants are...

Quick Links

[Testing](#)

[Additional Considerations](#)

Measuring Success



EVALUATIONS



SURVEYS

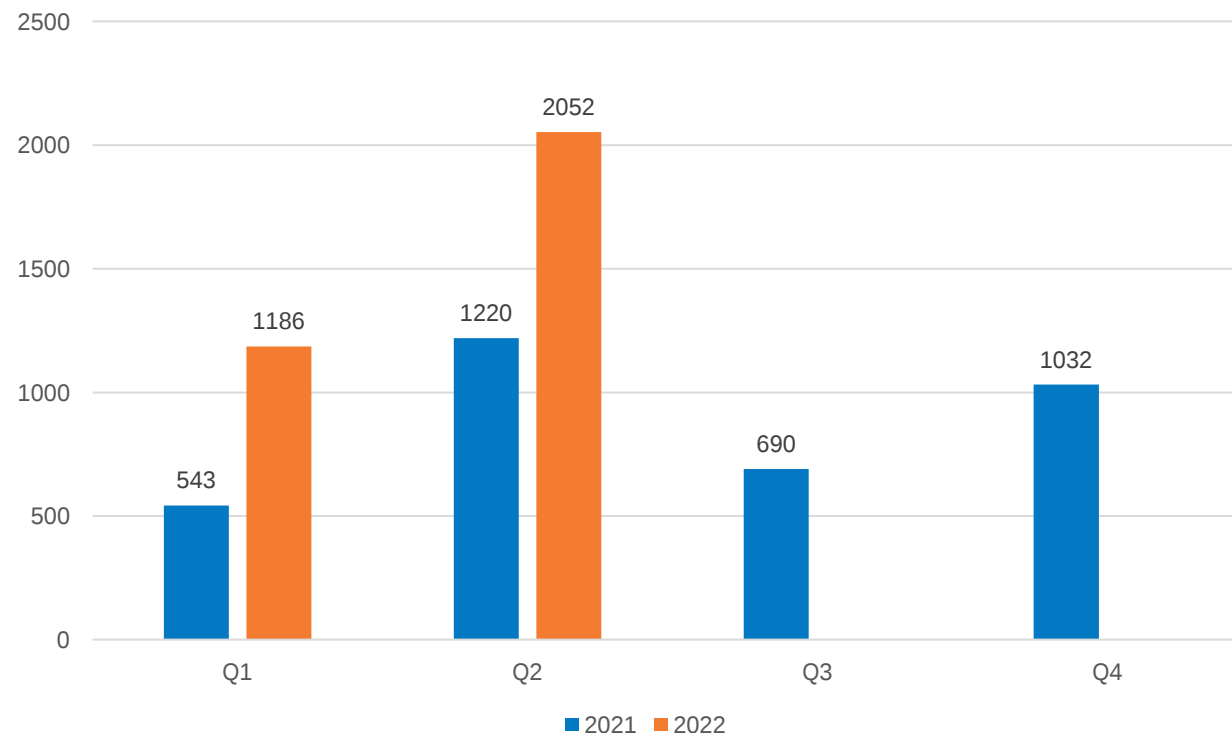


WEBSITE METRICS

Learning Library Landing Unique Page Views by Quarter

The genomics learning library landing page is seeing a positive increasing trend.

It is the third most popular learning library on ONS.org



This is pulled from Google Analytics.

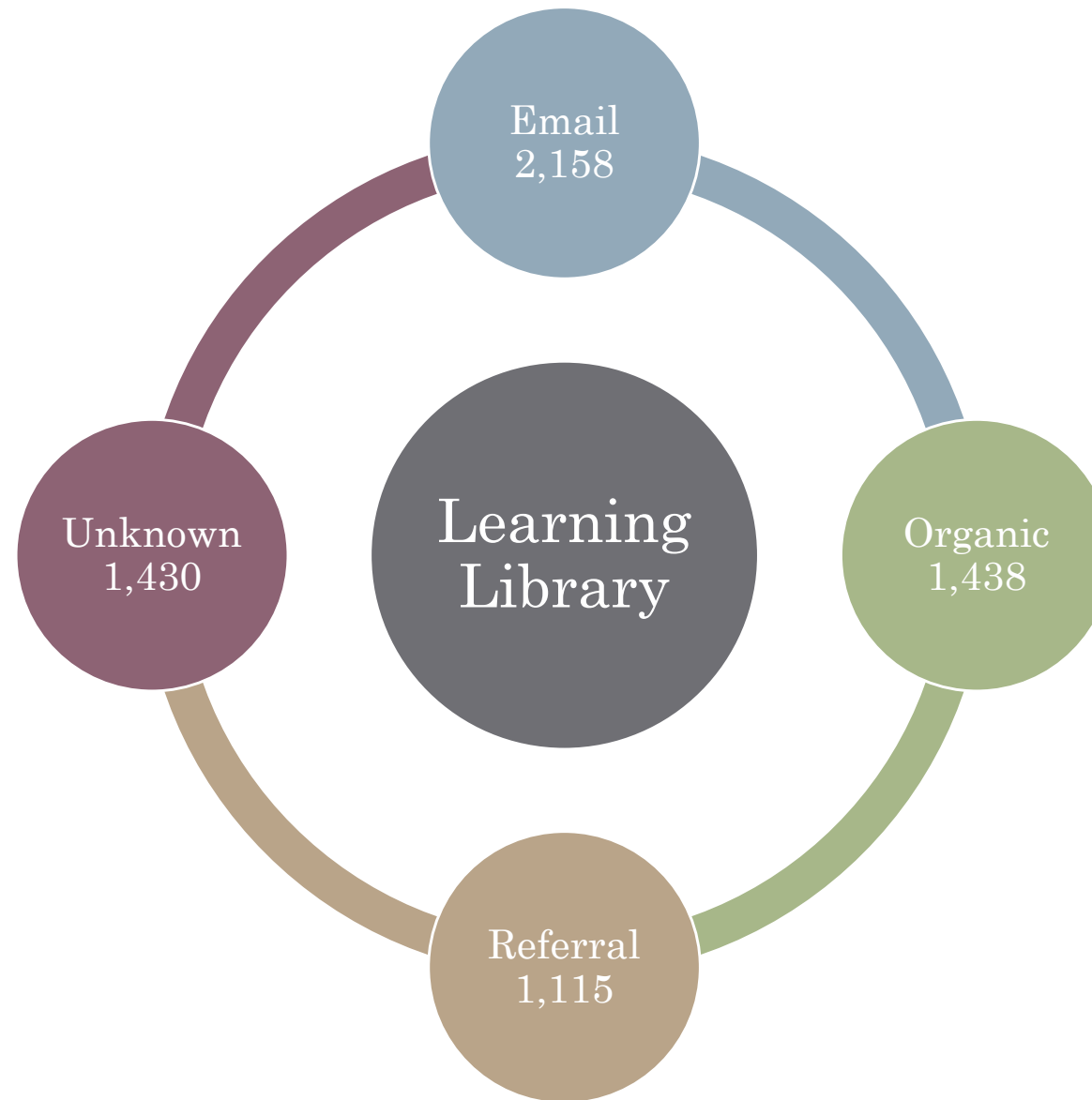
Learning Library Assets Page Views

Top 3 assets in Q2 2022:

1. Germline and Somatic Mutations: What is the Difference (5,682) - Voice article
2. Genomics taxonomy (4,357) - Web
3. Biomarker Database (2,050) (only active for a month of Q2)

Mode of Inheritance page continues to be the topic that garners most of the catalog's traffic with 2,395 unique pageviews in Q2.

Traffic Sources



Current Genomics Advisory Board



Kathleen Calzone,
PhD, RN, AGN-BC,
FAAN



Patricia Friend PhD,
APRN-CNS, AOCNS,
AGN-BC



Patricia A. Kelly,
DNP, APRN, CNS,
AGN-BC, AOCNS



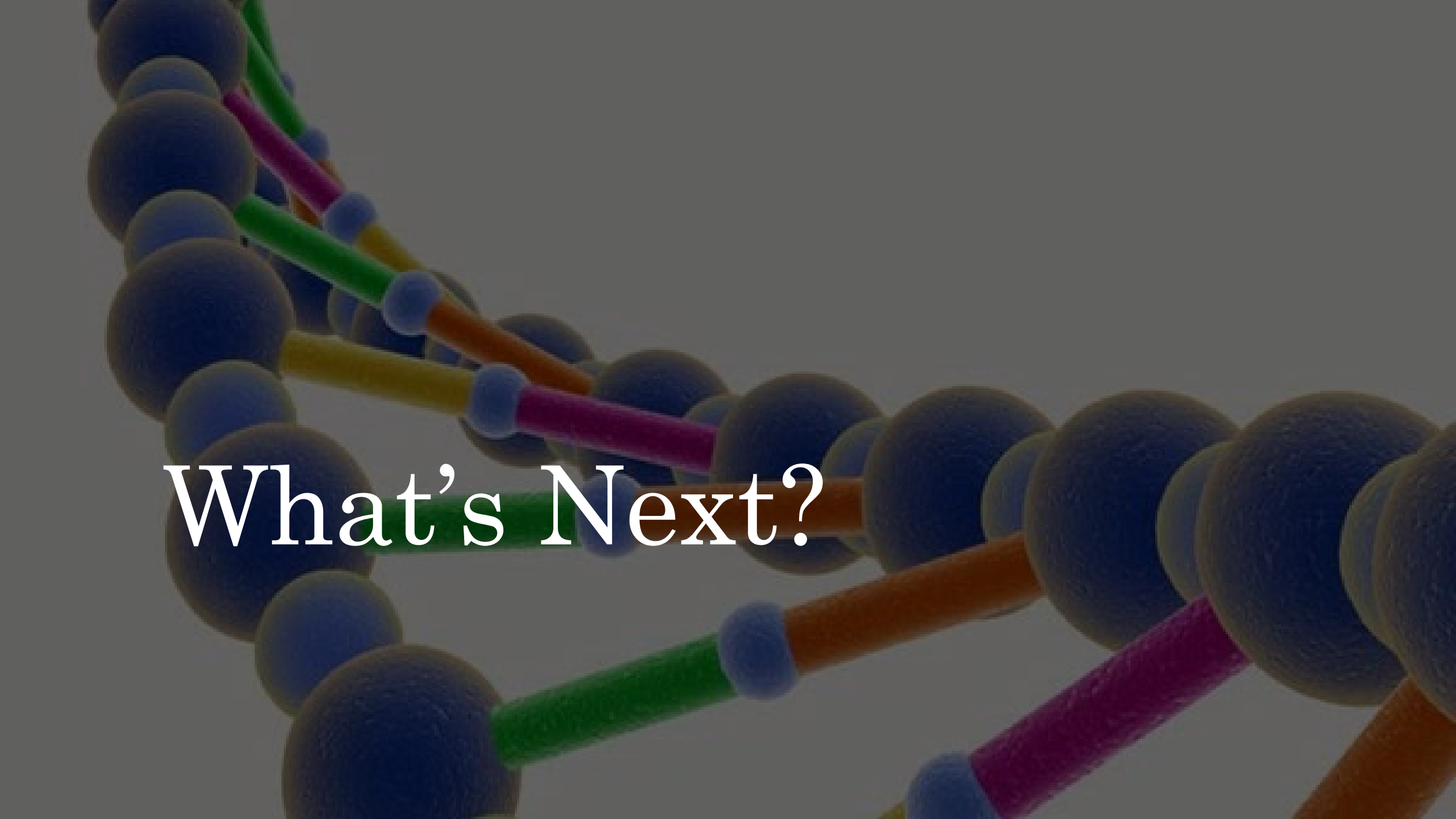
Kerensa Marty,
MSN, RN, OCN



Suzanne M Mahon
DNS RN AOCN®
AGN-BC FAAN



Mary L. Schmitt,
MS, APRN, FNP-
BC, AOCNP



What's Next?

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Questions?

For additional questions, please contact:

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