



ESTABLISHING GENETIC COUNSELING PROGRAM INTEGRATED WITH NURSE PRACTITIONER PROGRAM IN CHINA: A HYBRID MODEL

**Xianhong Li, PhD,RN, Professor
School of Nursing, Central South University**

Content



Why China needs GC Nurses



Get connected to G2NA leadership



Develop curriculum



Enroll master degree students into GC-NP program

I. Why China Needs GC Nurses?



China has Multiple genetic testing companies & No clear standard testing guidelines



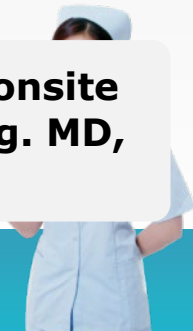
China has **a large volume of patients** who need GC services



Direct to consumer testing is broadly used in annual check up, but **no trained genetic professional** to explain the result.



Currently, only part time genetic counseling short courses(8 days onsite and 12 courses online) are provided to a variety of occupations, e.g. MD, MBA, BA.





Patients wait for registration



Patients wait to see a doctor

Physicians' Meeting Time with Each Patient

Only 5-15 Minute!



How can patients get adequate care and genetic counseling?

Bringing Nurses' Ability into Full Play



中信湘雅生殖与遗传专科医院
REPRODUCTIVE & GENETIC HOSPITAL OF CITIC-XIANGYA

Why nurses are optimal to be trained to deliver genetic counseling in China?



A good foundation in biological science.



Foundation training in patient interaction



Basic training in counseling skills



Nurses can serve more than one role, when clinic practice is busy, which fits China's large patient population.

Working with
patients

Laboratories

Research

Academia

Professional
and patient
organizations

Healthcare
administration

Public health

Policy

Areas for GC Nurse to Explore in China

II. Get Connected with G2NA Leadership



NCI/NIH, Bethesda, June, 2018



Preliminary discussion with Citic Xiangya Reproductive and Prenatal Hospital in Dec, 2018



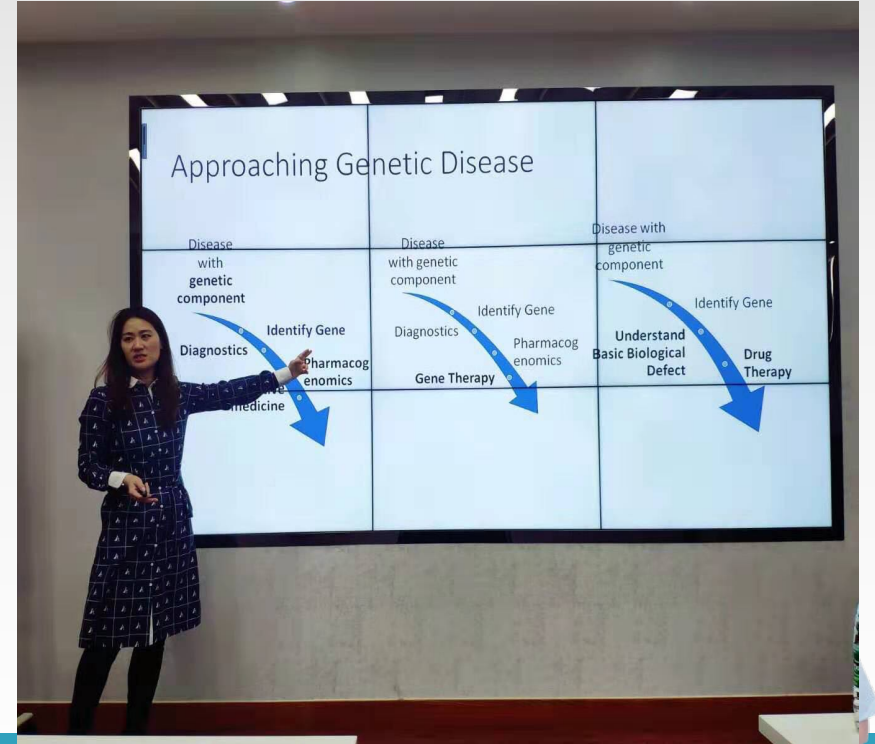
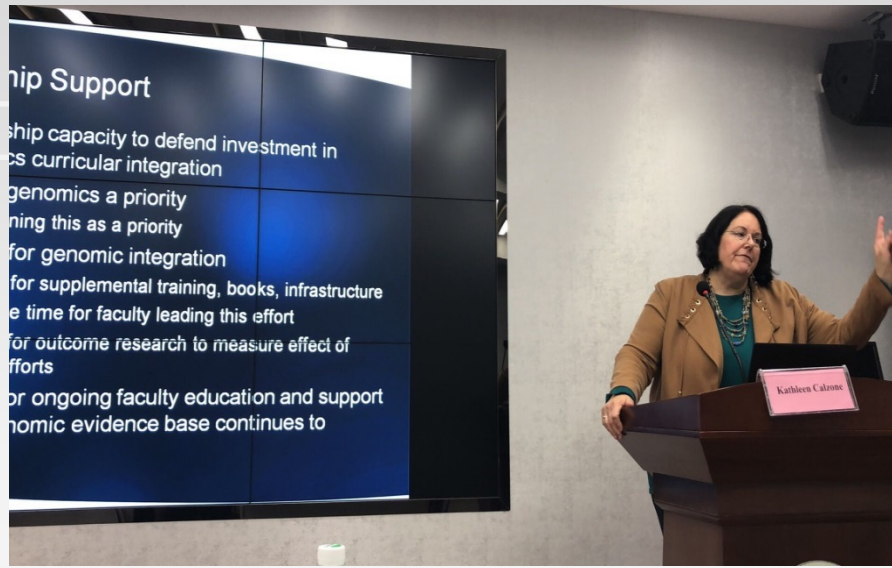
Genomic Medicine Education, Clinical Practice and Counseling workshop



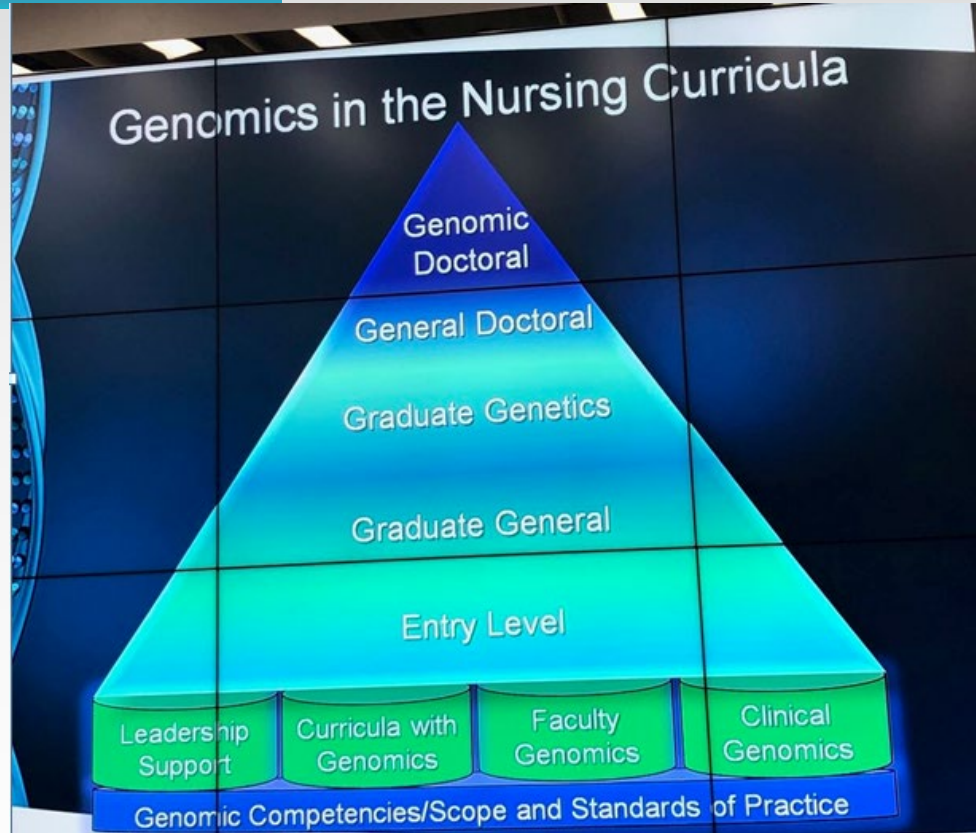
**Changsha,
Hunan, China.**

March 3-5, 2019





Changsha, Hunan of china. March 3-5, 2019



Changsha, Hunan, China, March 3-5, 2019

Ref: Kathleen Calzone's presentation in the March workshop

Round Table Discussion on Nursing GC Program in China



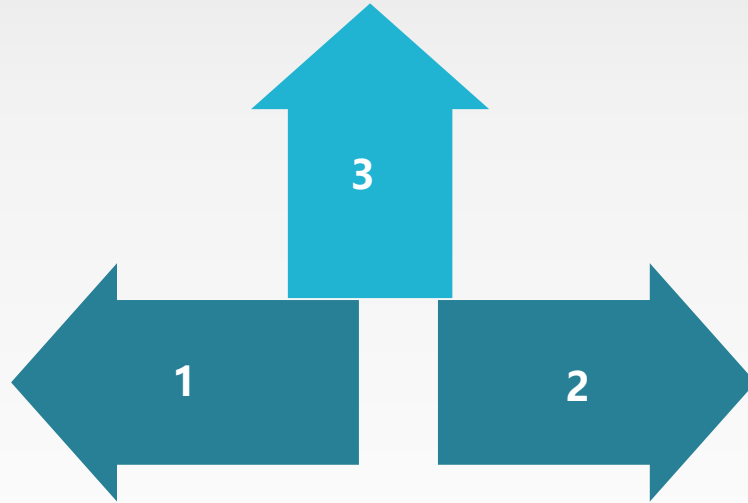
III. Explore Leadership Support

Health Ministry
level ????

Nursing School
Leaders

CSU level leaders

Allowed Schools to
develop their own tracks
in master program



Citic Xiangya
Hospital
brought
great support
and job
security



Exploring Leadership Support for NP Program



Officer from Ministry of Health in Hunan province, CSU leaders, Deans and nursing directors from 3 affiliated hospitals, Deans from SON, leaders from Reproductive & prenatal hospital attended;

March, 29, 2019



重磅！国内将试点培养开业护士（NP）

原创：李婷婷 中国护理管理 2017-05-08



上周五，北京大学护理学院微信公众号“未名护理”发布了一条消息：该校已将试点培养“Nurse Practitioner（NP，开业护士）”提上日程，开国内“高级执业护士”培养之先河！



（会议现场图）

这条消息一出，护理圈内一片哗然！这是一个振奋人心的好消息！什么是NP？在美国，NP（开业护士）是高级实践护士（APN）的一个分支，主要从事高级临床护理，除了具有

国内首批NP入读北大护理学院，专业方向为慢病管理

中国护理管理 2017-09-06



这两位护士，很可能是国内最早一批能开处方的护士！



Feasibility to Establish NP Program in SON of CSU

1. **Leading role** of Xiangya Nursing: Top 2 in china & Top 100 in World;
 2. Strong international experts' **support** for developing related curriculum;
 3. SON has enough master students (**>100per year ✓**) ;
 4. CSU and SON have excellent teaching faculties (**✓**).
 5. Employment institute? (**career development ? ? Policy support?**) ;
- Have get agreement on cultivating GC with Reproductive & Prenatal Hospital, which could be **one track of NP program**.



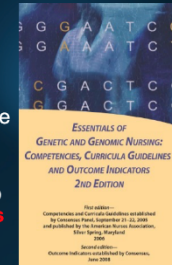
IV. Curriculum Development

From the workshop in March, we learned the basic competencies GC nurses should have. Combining China's clinical environment, we established our curriculum.



Essentials of Genetic and Genomic Nursing

- Define essential genetic and genomic competencies for **ALL** nurses regardless of level of academic preparation, practice setting or specialty
- 2nd Edition- Outcome Indicators
 - Specific Areas of Knowledge
 - Clinical Performance Indicators
- 3rd Edition includes a revision to the competencies **is in process**
- US Competencies have been used by other countries to develop their own competencies



IV. Curriculum Development

护理专业硕士研究生培养方案

授予学位类别：护理硕士专业学位

一级学科（专业学位）代码名称：1054 护理

二级学科（专业领域）代码名称：

制订单位：湘雅护理学院（牵头）

培养方案版本号：2019 版

二、研究方向

- 1、社区护理 Community Nursing
- 2、内外科护理 Medical-Surgical Nursing
- 3、妇儿护理 Maternal-Child Nursing
- 4、老年护理 Gerontological Nursing
- 5、急危重症护理 Emergent and Critical Nursing
- 6、心理精神护理 Mental Health Nursing
- 7、肿瘤专科护理 Oncological Nursing
- 8、遗传咨询 Genetic Counseling



Curriculum

学科基础课	18120511201 科技信息检索	16	1	秋季	
	69100412113 医学统计学 B (专业学位)	32	2	秋季	
	65100111306 高级病理生理学 A	36	2	秋季	
	72100711409 临床药物治疗学选论	16	1	春季	
	78101110201 护理研究	32	2	秋季	
	78101110203 循证护理	32	2	秋季	
	18120511306 学术诚信与论文写作	32	2	秋季	
专业课	78105412302 高级健康评估	48	2	春季	
	78101101402 心理护理理论与实践	32	2	秋季	
选修课	69100411104 SPSS 统计软件及其医学应用	32	2	秋季	
	78105412402 急危重症专科护理学	32	2	春季	
	78101110401 社区慢性病的护理与管理	16	1	春季	
	78105412403 妇女保健学	16	1	春季	
	78105412404 儿童健康管理及促进	16	1	春季	
	78105412405 移植护理学	16	1	春季	
	78105412406 肿瘤护理学	16	1	春季	
	65100111309 临床遗传学	32	2	春季	遗传咨
	78105412407 医学遗传学与基因组医学	48	3	春季	询方向 必选
seminar	学术研讨与学术交流		2	春秋季	
培养环节	00000000602 学位论文选题报告		1	春秋季	
	00000000604 专业实践	24 个月	4	春秋季	
	00000000603 社会实践		1	春秋季	



Genetic Counseling Program Coursework

- Human **genetics**
- Genetic **diagnosis** and treatment
- **Cancer** Genetics and other special genetic subject
- **Ethics**
- Counseling techniques and **Psychosocial** Assessments
- **Thesis/ Research** Project
- Genetic Laboratory Experience
- **Developmental Biology** and Human Malformations

Current courses in the Program

- **Human genetics**
- **Ethics;**
- **Communication and management in Nursing: Advanced skills;**
- **Nursing in GC research;**
- **Thesis development and supervision;**

Pre-requisites:

- **Histology and Embryology**
- **Physiology**
- **Cell biology**



IV. Student Enrollment



September, 2019

Acknowledgment

Great thanks to

1. Dr. Kathy Calzone, NIH, G2NA;
2. Ms. Yi Liu from VCU;
3. Dr. Lu Guangxiu, Dr. Lin Ge, Nursing director of Li Li and Lu Yanping, Associate Dean of Yi Jinjin; Director of Tan yueqiu from CITIC-Xiangya reproductive hospital;
4. Dr. Wang hongong, Dr. Li Lezhi, Director of Xiao Jianglong from Nursing School of CSU.





**Welcome any questions and
suggestions!**