

Starting **U**niversity **C**linical **C**areers **E**fficiently, **S**cholarly, and **S**uccessfully

Building Your Clinical Niche: Lessons Learned

Christina Herrera, M.D.

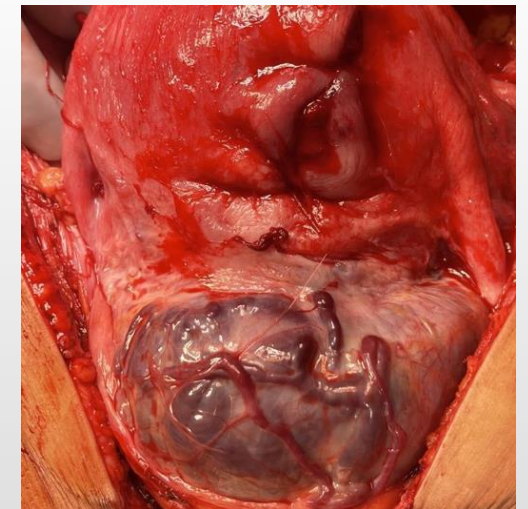
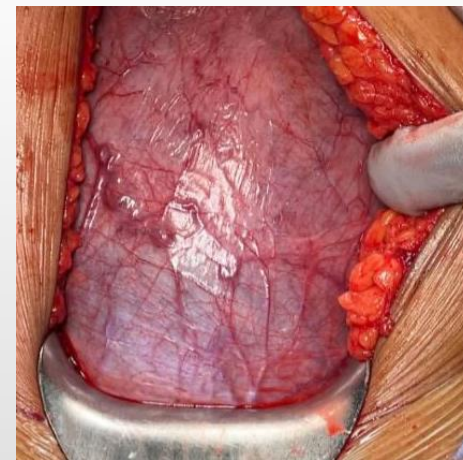
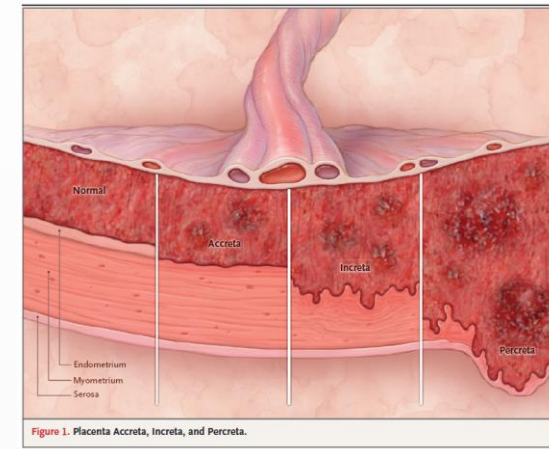
Clinical Scholar

Assistant Professor, Obstetrics and Gynecology

Division of Maternal-Fetal Medicine

My niche: the placenta

- Clinical: placenta accreta spectrum (PAS)
 - Leading cause of peripartum hysterectomy
 - Developing enhanced pre-operative risk stratification with US, MRI
- Research: placenta in health and diseased states
 - Longitudinal assessment with MR imaging (K23)
 - Expression profiling at delivery in maternal blood and placental tissue
 - Conditions of interest: obesity, chronic hypertension, preeclampsia, fetal growth restriction, PAS



How did I get here?

I. Learn your niche from past experiences.

2008

BA in Chemistry
Princeton University
• Bench research was not for me.

2013

MD
Columbia University College of P&S
• I enjoyed clinical research in obstetric imaging.



2009

Research assistant
UCSF
• I enjoyed clinical research.



2017

Residency, Obstetrics & Gynecology
UTSW
• I needed time to do clinical research in obstetric imaging.



2. Develop your niche.

Fellowship: Maternal-Fetal Medicine, UTSW

- I want to be a clinical and translational scientist focused on placental imaging.
 - Read and start to build expertise.
 - Look for opportunities to collaborate and expand.
 - Stick to what you are interested in as passion drives productivity.

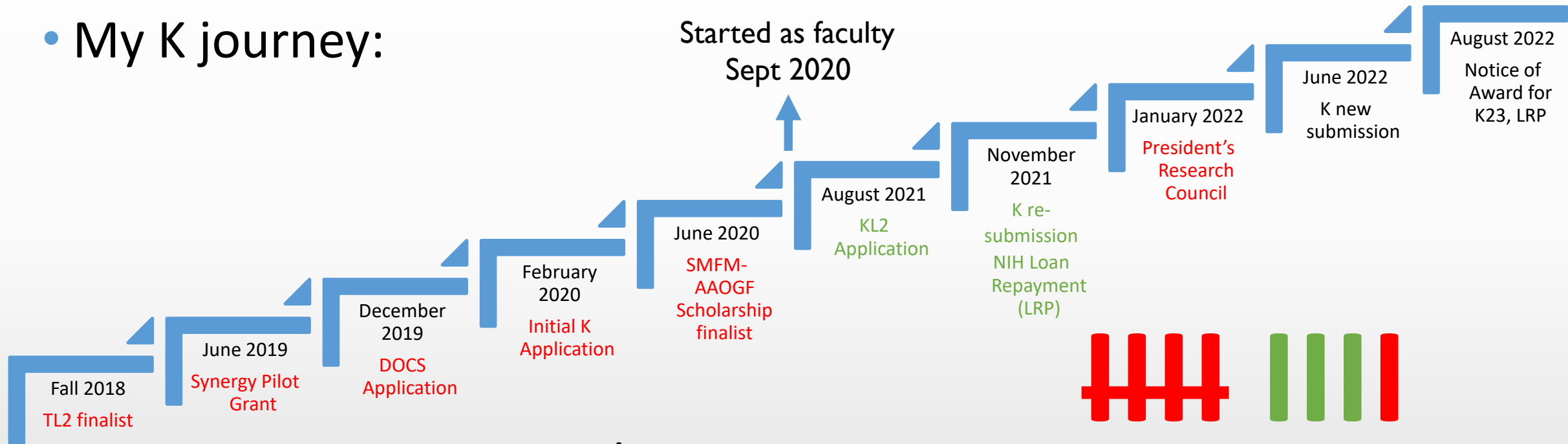


I did research because it was available.

- I needed research to be a clinical and translational scientist.
- I took opportunities where they were available.
- Publications from this time included various topics.
 - Maternal conditions: diabetic ketoacidosis, pulmonary hypertension
 - Fetal anomalies: MR imaging, postpartum depression risk
 - Basic science: Corticotrophin-releasing hormone in recurrent preterm birth (thesis)

3. Refine your niche from failure.

- My K journey:



- Lessons:

- If you don't apply, you miss the opportunity.
- Feedback leads to reflection and improvement.

4. Find good mentors invested not just in your niche, but in you.

- I am successful thus far because of the phenomenal mentorship I have pursued and received.

Lessons:

- Mentors can provide opportunities and support you otherwise wouldn't know about or have.
- Mentorship is a two-way street. You have to invest too.

5. Build collaborations that expand how you approach your niche.

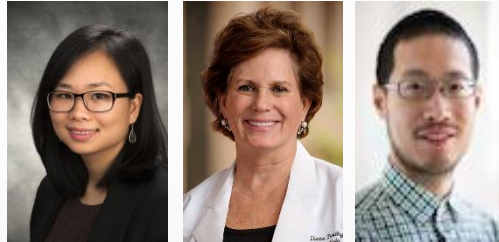
MFM:

- Emily Adhikari, MD (R21)
- Catherine Spong, MD



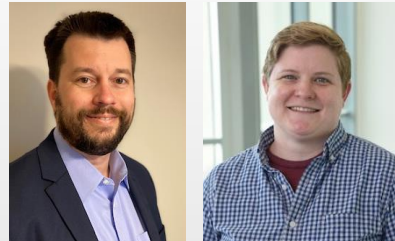
Radiology:

- Quyen Do, PhD (K25)
- Diane Twickler, MD
- Yin Xi, PhD



Green Center:

- David Owen, MD PhD
- Ashley Solmonson, PhD



Pathology:

- Naseem Uddin, MD



Ongoing Projects

Imaging:

- Longitudinal MR functional and radiomics data in normal, chronic hypertensive (K23), and PAS placentas (K25)
- Vector Flow Velocity Imaging of the Placenta (R00)
- Placenta effects on brain development with CHD (K23)

Basic science:

- Placental metabolism alternations in obesity
- Syphilitic changes in placental expression (R21)
- Biology and signaling in PAS
- Amyloid expression with preeclampsia

Pediatrics:

- Rachel Leon, MD PhD (K23)



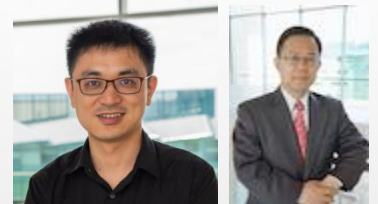
Center for Alzheimer's and Neurodegenerative Diseases:

- Lorena Saelices, PhD



UT Dallas:

- Leo Li, PhD (R00)
- Baowei Fei, PhD



UCLA:

- Yalda Afshar, MD PhD



6. Incorporate your niche into your daily work.

- I have slowly evolved to become all things placenta.
 - I clinically lead the placenta accreta team at Parkland Health.
 - Ultrasound: I specialize in assessment of PAS and development of our risk stratification.
 - Clinic: I oversee care coordination of patient with concern for PAS.
 - Meanwhile my research focuses on placental development in health and disease using a multimodal approach.
 - Ultrasound, MRI, RNA sequencing, metabolomics, pathology

Your niche will become evident to others.

- November 2023: DocStar Award for placental research
- November 2023: Rising Star Award for PAS team leadership
- June 2024: NIH Imaging Technical Development Study Section
- June 2024: NICHD PAS Workshop Invited Panelist for PAS imaging



Placenta Accreta Spectrum:
Present and Future

June 10-11, 2024 | Bethesda, MD

Building Your Clinical Niche

Summary of Key Points

Learn your niche from past experiences.

Develop your niche.

Refine your niche from failures.

Find good mentors invested not just in your niche, but in you.

Build collaborations that expand how you approach your niche.

Incorporate your niche into your daily work.

Be patient and resilient.

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Questions?



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