



# NC Society of Pathologists Digest

## Society News

April 2024

### New Mentorship Program –

We need your help!

### Initial Trainee Lecture was a Success!

Next session is set for May.

### NCSP Annual Meeting This Month!

#### Your Officers:

- Christopher McKinney, MD  
President
- Diana Cardona, MD, MBA  
President-elect
- Chad McCall, MD, PhD  
Vice President
- Matthew Snyder, MD  
Secretary Treasurer
- William Shipley, MD  
Immediate Past President

#### Trainee Advisory Council:

- Meg Lee, MD  
Chair
- Joseph Maniaci, MD  
Co-Chair

## New Mentorship Program!

The NCSP executive committee, in collaboration with the trainee advisory council, is excited to announce the creation of a new trainee mentorship program. And **we need your help!**

We plan to match interested residents and fellows from our four NC training programs with volunteer pathologists from varying practice settings, with diverse backgrounds and a range of experience. The goal is to foster a collaborative relationship through interactions that provide trainees opportunities to learn from pathologists that match their interests. Guidelines for this year-long commitment will be provided with the intent of allowing for a flexible relationship that is mutually rewarding. If you are interested, please [email us](#) and provide the information below to facilitate the best mentor - mentee match:

- Name- Practice Location-
- Practice setting- Years in Practice-
- Gender/Race- Marital Status/Children-
- Anything else you would like to share –

## Trainee Lecture Series

In March the NCSP hosted its first trainee lecture focused on financial strategies to consider as a resident, presented by Damon Lichtenberger, CLTC from North Star Resource Group. Our next lecture, entitled “Basics of Employment Contracts” is scheduled for May and will be presented by Sean A. Timmons, JD from Polsinelli LLP. If you have topic ideas or would like to present on an area of expertise, please let us know!

## Join Us In Charlotte!

This year’s Annual Meeting will focus on Digital and GU pathology. The keynote speaker is Dr. Anil Parwani from Ohio State University, a leading and pioneering department in the digital pathology space. Additionally, pathologists from our own state will share their experiences with digital pathology implementation. We are also excited to bring back our trainee poster session and competition. Friday night’s reception and dinner will culminate with a presentation on cybersecurity from an FBI agent. During the meeting, there will be plenty of opportunities to network and catch up with old friends. So come support your state society, learn something new and socialize. **We hope to see you in Charlotte!** Register [HERE](#).

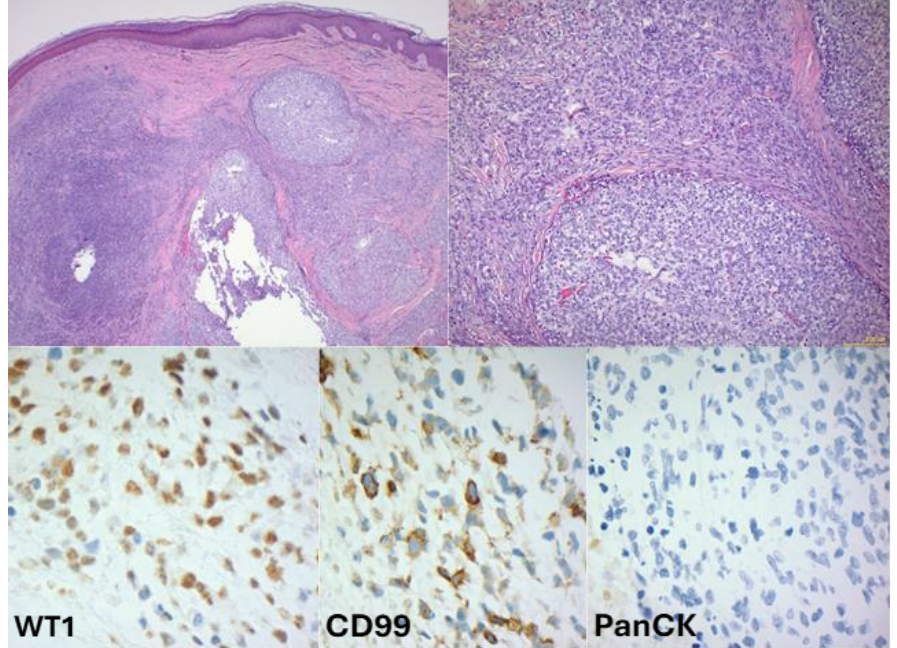
# NCSP Interesting Case Series

Case #2 by Diana Cardona, MD, MBA

**Clinical History:** Female teenager with a superficial, slowly growing upper shoulder mass, incisional biopsy.

**Histology:** Dermal based proliferation of small round cells with mild pleomorphism and a variably myxoid background. Mitotic activity is increased and there is frequent single cell apoptosis. Tumor cells are positive for CD99, ERG, and WT1 and negative for pancytokeratin, p40, SOX10, CD45, chromogranin, SMA, desmin, and S100. INI1/SMARCA4 expression is intact.

**Molecular:** *CIC* gene rearrangement.



## Case Diagnosis:

### *Undifferentiated round cell sarcoma with CIC-DUX4 fusion*

#### Key Clinical and Pathology Findings:

- **Aggressive sarcoma** most commonly affecting *soft tissues of children and young adults* (peak 4th decade)
- Solid or nodular growth, composed of *round/ovoid cells with high N:C ratio*, nucleoli and mild pleomorphism
- Some display spindle cell, epithelioid or rhabdoid morphology and 1/3 have a myxoid background
- **Express CD99, WT1** (N or C terminus), **ERG**, FLI1, DUX4, **ETV4, MYC**, calretinin
- **CIC-DUX4 fusion** resulting from t(4;19) or t(10;19) translocation
- **Poor prognosis** with high metastatic rate; 43% 5 year overall survival

#### High-Yield Relevant Information

- *CIC-DUX4* fusion results in the activation and expression of *ETV1/4/5*
- *MYC* amplification in majority of cases

#### Differential Diagnoses:

<b><i>Ewing's Sarcoma</i></b>	<b><i>Synovial Sarcoma</i></b>
Younger age group, most involve bone. Sheets of <b>monomorphic round cells</b> . <b>CD99 membranous and NKX2.2 +</b> . FLI1 + (EWSR1-FLI1 fusion); ERG+ (EWSR1-ERG fusion). <b>EWSR1 rearranged</b> .	Young adults. Occur throughout the body. Variable histology- <b>monophasic</b> (spindle cells or epithelial) or <b>biphasic</b> (both). <b>+ CK, EMA, BCL2, TLE1, &amp; CD99</b> . <b>t(X;18)(p11;q11)</b> involving <b>SS18 &amp; SSX1, SSX2 or SSX4</b> .