## Abstract 24

Title: What's in the white coat: An evaluation of factors influencing professional identity formation in medical students

*Background*: Interactions with patients, doctors, and peers influence medical student professional identity formation but are infrequently quantified. This study sought to describe the influence of these groups on students' understanding of professionalism and describe changes during training.

*Objectives*: 1) Quantify the influence of doctors, patients, peers, and classes on students' understanding of professionalism; 2) Determine how demographic factors and burnout affect these influences.

*Methods/Design*: A cross-sectional survey enrolled first (M1) through fourth year (M4) medical students at Wake Forest School of Medicine. A study-specific questionnaire asked students to report their agreement with the statement: "My experiences observing doctors/patients/classes/peers have influenced my idea of what it means to be a medical professional" (5 point Likert, 1=strongly disagree, 5=strongly agree). Demographics were collected along with self-reported burnout via the validated Oldenburg Burnout Inventory (OBI, average score 1-4, higher = greater burnout). Responses were collapsed into binary response of disagree (1, 2, 3) or agree (4, 5). Statistics were performed for the cohort, by year, and for students with higher burnout (OBI score > mean OBI) versus lower (OBI score  $\leq$  mean).

*Results*: 259 responses were collected: 96 (68%) M1s, 41 (30%) M2s, 73 (63%) M3s, and 49 (42%) M4s. Nearly all students (91-95%) across all years reported strong influence of patients on their understanding of professionalism. Influence of providers dipped for M2s but remained generally high (>83%, p = 0.05). Classes influenced M2s most (80%), M1s least (23%) and plateaued for clerkship students (M3-4 = 63-67%, p<0.0001). The influence of peers was lowest for M1s (49%) and rose each year of training (M2=61%, M3=67%, M4=80%, p<0.002). Significantly more women than men agreed that patients influenced professional identity formation (97 vs 88%, p=0.003). Mean OBI score was 2.18±0.4. The influence of peers did not differ for students with higher burnout (p=0.33), though students with higher burnout were significantly less sensitive to influences from patients (p=0.03), doctors (p=0.02), and classes (p=0.002).

*Conclusions*: Multiple factors contribute to a student's professional identity. Interactions with doctors and patients contribute substantially, and interactions with peers gain importance during training. Burnout may desensitize students to many of these influences and affect their professional identity.

## References:

- Byszewski A et al. Wanted: role models medical students' perceptions of professionalism. BMC Medical Education. 2012; 12:115.
- Hilton SR et al. Proto-professionalism: how professionalisation occurs across the continuum of medical education. Medical Education. 2004; 39(1):58-65.