

# Automated social media for Radiology correlation and education during Gross Anatomy: two years of experience

Liwei Jiang<sup>1</sup>, Christopher R. Bailey<sup>1</sup>, Krishna Juluru<sup>2</sup>, Donna Magid<sup>1</sup>

<sup>1</sup> Johns Hopkins University School of Medicine, Baltimore, MD

<sup>2</sup> Memorial Sloan Kettering Cancer Center, New York, NY

## Needs and objectives

Introductory Radiology is taught concurrently with Gross Anatomy at many medical schools. Opportunities exist to strengthen the integration of Radiology and Gross Anatomy to solidify cross-modality relationships, present clinical relevance, and foster early interest in Radiology. To pursue these goals, we sought to engage students by leveraging social media to deliver daily Web-based, high-yield Radiology cases closely correlated to Gross Anatomy's day-to-day syllabus.

## Setting and participants

First-year medical, biomedical engineering, and medical illustration students enrolled in the Johns Hopkins Gross Anatomy course (around 140/year) were encouraged to opt-in. This study was conducted in 2014 and again in 2015.

## Description

Thirty-three imaging cases reinforcing high-yield anatomic concepts were built on the Medical Imaging Resource Center software by RSNA. A public Facebook Page was created and promoted to the target demographic. Participants "Liked" (tracked) the Facebook Page, which enabled them to receive mobile and Web push notifications each time a new case was posted. Buffer (bufferapp.com), a social media automation tool, was utilized to automatically release queued cases to Facebook every weekday.

## Evaluation

Facebook metrics in 2014 revealed that each case was viewed by a mean of  $137 \pm 20$  participants, without uptrend or downtrend throughout Gross Anatomy. In an exit survey employing Likert-type questions, >70% of responders each year agreed that the cases were relevant, interesting, enhanced one's understanding of anatomy material, and increased one's appreciation of diagnostic imaging.

## Lessons learned

This novel approach using automated social media tools to deliver Radiology educational material is effective and integrates well with Gross Anatomy. For two years, students have cited greater understanding of both Anatomy and Radiology and increased appreciation of Radiology. Facebook is familiar to most learners, and Buffer's automation functions simplify administration. A main limitation emerged in the scope of Facebook metrics, which could not reliably exclude individuals outside the target demographic. This included (1) Facebook users not enrolled in Johns Hopkins Gross Anatomy and (2) participants from 2014 who "self-participated" in 2015. In conclusion, this

approach provides a framework for engaging learners using automated social media tools that may be adaptable to a variety of educational scenarios.