# Graduate Certificate Renewal for Anatomical Sciences Instruction Director: Dr. April Richardson-Hatcher

### Have the objectives of the certificate been met over the last 5 years?

The objectives of the Graduate Certificate in Anatomical Sciences include the following:

- 1. Prepare recipients for a successful career in teaching the anatomical sciences (gross anatomy, histology, neuroscience and/or embryology).
- 2. Provide recipients with a broad understanding of the interrelationship of the anatomical scientific disciplines.
- 3. Provide recipients with a form of validation of their anatomical sciences teaching experience.
- 4. Encourage recipients to develop a professional teaching philosophy and portfolio.

These objectives have been met in a several ways, beginning with the successful job placement of certificate graduates which will be addressed on the next page of this document. Students enrolled in the certificate receive various opportunities to teach in the lecture and lab settings in the teaching practicum requirement. They are instructed on anatomy specific pedagogical approaches (i.e. how to approach regional and neuroanatomy) as well as general techniques of instruction (i.e. team-based learning). Faculty provide frequent feedback through evaluations of the student's lectures/lab performance as well as provide the certificate participants with student feedback that can be used to build their teaching portfolio. One of the certificate requirements (ANA 609) addresses a range of educational topics from how to design an anatomy curriculum to how to compose a teaching philosophy.

## Have the educational needs which triggered the development of the graduate certificate been satisfied?

Yes, the graduate certificate in teaching was initiated to provide instruction and feedback to graduate students interested in a teaching career. There are few PhD programs available in medical education, in which students would be specifically trained to teach a dissection-based gross anatomy course. The lack of training programs, coupled with the shortage of gross anatomy educators in the work force, substantiated the need for a formal instructional program in gross anatomy. This certificate verifies that the recipient has studied gross anatomy or neuroanatomy and followed up with this knowledge in a practicum experience designed to build and critique their teaching skills by fellow faculty members in anatomy education.

How many students have been admitted to the certificate program over the last five years? Fourteen students have been admitted to the program since 2007.

What is the average amount of time that these students have taken to complete the program? The average amount of time from acceptance to certificate completion is two years. Students must first enroll in a gross anatomy or neuroanatomy course and then complete a practicum in this course the following year. The remaining requirements include one session of a seminar course (ANA 600), which is

offered yearly, and a department specific teaching course (ANA 609), which is offered every other year.

## How many students have graduated from the program over the last five years?

Ten students have completed the teaching certificate as of May 2012.

#### What value have the students derived from receiving the graduate certificate?

Number of Students	Job Description Upon Certificate Completion
4	Accepted positions as an Assistant Professor in anatomy education at universities in Washington, Kentucky, and Jordan
1	Full-time instructor in biology and anatomy at a university in Kentucky
1	Part-time instructor and Post-doctoral scholar at a university in Kentucky
1	Has been offered a full-time Assistant Professorship in Anatomy in a medical school in Tennessee
2	Accepted into medical school
1	Continued medical practice in Kentucky

Seven of the ten certificate graduates received job offers to teach gross anatomy after their doctoral training (2 of these actually began working while finishing their doctorate and one other student has currently been offered a full-time position as soon as he graduates); five of these positions were at the Assistant Professor level and two were adjunct faculty. Two of the ten students were accepted into medical school post PhD and one student is a medical doctor who will continue practicing medicine until she begins a second residency in the next year. She pursued the certificate for more exposure to teaching as she felt it would enrich her role as a clinician.

## What is your assessment of the need for this graduate certificate over the next five years?

I strongly feel this certificate will continue to benefit future medical educators from many different backgrounds. This training bridges a gap in current formal training for gross anatomists. Many graduate students who are interested in teaching must learn how to teach in addition to their research studies, and receive minimal faculty and peer —reviewed feedback on their teaching skills before they enter the workforce. The Certificate in Anatomical Sciences not only provides opportunities for teaching in the gross anatomy and neuroanatomy disciplines, but it equips students with the skills to build a strong teaching philosophy and portfolio based on a variety of pedagogical experiences.