## M.S. in Clinical Translational Sciences

## **Sample Curriculum for Phoenix Students:**

## **Required Courses \***

- Principles:
  - o Fundamentals of Clinical Translational Science (CTS 500) 4 units; OR
  - Cellular, Molecular and Cancer Biology (CTS 555) 3 units, offered Fall semester [for post-baccalaureate students]; OR
  - Principles of Clinical Research I and II (CTS 501 and CTS 502) 4 units each, offered Fall and Spring semesters; OR
  - Principles of Surgery or Principles of Medicine (CTS 610 or CTS 620A/B/C) 3-6 units [for postgraduate students].
- Professional Development Series minimum 4 units, including:
  - Responsible Conduct of Research (CTS 595C) 1 unit/semester; taken Fall and Spring semesters [required]

And an additional 2 units chosen from:

- Individualized Scientific Writing (CTS 585) 2 units
- o Professional & Career Training Series (CTS 595D) 2 units [for post-baccalaureate students]
- o Or similar courses in other departments by prior approval of the CTS program.
- Biostatistics:
  - o Biostatistics in Public Health (BIOS 576A) 3 units [offered online in Spring semester].
- Seminar and/or journal club/colloquium 2 units total (1 unit per enrollment; 2 total enrollments).
  - Seminar options include the CTS Biomedical Sciences Seminar (CTS 696B) or any other graduate seminar available to Phoenix students via online or remote instruction.
    Postgraduate students may earn credit in CTS 696A for attendance at relevant grand rounds series in a clinical department.\*\*
  - The journal club/colloquium options available to Phoenix students are any section of the CTS Biomedical Sciences Journal Colloquium (CTS 595) or any other graduate journal club course available to Phoenix students via online or remote instruction. Postgraduate students may earn credit in CTS 595 for participation in clinical case conferences.\*\*
- Thesis (CTS 910) 6 units
  - \* May substitute other courses with CTS approval with the exception of CTS 910.
  - \*\* Seminar or journal club credit for activities other than CTS courses toward M.S. requires prior approval from CTS.

## **Elective Options**

Students may use any graduate courses approved by their faculty mentor, including online courses, as electives to meet the remaining M.S. unit requirements.

Sample elective courses (not a complete list of possible electives):

- Informatics for Clinical Research (CTS 503) 4 units [offered Spring semester]
- o Introduction to Bioinformatics (CTS 505) 3 units [offered Fall semester]
- Neurodevelopment in Action (CTS 572) 4 units [offered Spring semester]
- Human Histology: An Introduction to Pathology (CMM 510) 3 units [offered online in Fall semester]

- Basic Principles of Epidemiology (EPID 573A) 3 units [offered online in Fall and Spring semester]
- Inflammation and Immune Pathology (CMM 550) 1 unit [offered online in Spring semester]
- Genomic Medicine (CMM 534) 1 unit [offered online in Spring semester]
- o Principles of Cardiovascular Hematology (MEDP 620) 6 units [offered Spring semester]
- Human Neurobiology Basics (PHCL 544) 2 units [offered online in Fall semester]
- Or any other graduate courses recommended by the faculty mentor, including courses offered online.

Note: Phoenix students who find a course of interest that is offered in Tucson (and not via online instruction) may ask the CTS Director of Graduate Affairs to contact the offering department/program to ask whether the student can join the course and participate remotely from Phoenix.