**MICRO-CREDENTIALS and MASTERS: ENGAGING PHARMACY STUDENTS IN RESEARCH PROJECTS**

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**Introduction**

- Our pharmacy students have several options to engage in structured research activities:

  **Micro-credentials in**
  - Clinical Pharmacy Research
  - Pharmaceutical Sciences Research

  Or dual graduate degrees:
  - PharmD + Masters in Pharmaceutical Sciences
  - PharmD + Masters in Pharmacometrics and Personalized Pharmacotherapy

  **Clinical Pharmacy Research**

  **Micro-credential**

  [http://pharmacy.buffalo.edu/academic-programs/pharmd/special-programs/crp.html](http://pharmacy.buffalo.edu/academic-programs/pharmd/special-programs/crp.html)

  **ELIGIBILITY**
  - Pharmacy students in their last two professional years - P3 and P4 students
  - Overall GPA greater than 3.0
  - Formal application process

  **PROGRAM STRUCTURE**
  - Professional Courses:
    - PHM 551 & 552 Clinical Research 1 & 2
    - PHM 831 Clinical Research APPE: 6-12 week rotation to conduct the research
  - Co-Curricular
    - Written Research Proposal
    - “Three Minute” style Oral Defense
    - Scientific Poster

  **PharmD + Masters Dual Degrees (4+1)**

  [http://pharmacy.buffalo.edu/academic-programs/pharmd/combined-degrees/dual-graduate-degrees/pharmd-ms-pharmaceutical-sciences.html](http://pharmacy.buffalo.edu/academic-programs/pharmd/combined-degrees/dual-graduate-degrees/pharmd-ms-pharmaceutical-sciences.html)

  **ELIGIBILITY**
  - P3 student
  - Overall GPA greater than 3.0
  - Formal application process

  **PROGRAM STRUCTURE**
  - Completion of P1 and P2 years, 1 year as a Graduate Masters student, P3 and P4 years = 2 degrees
  - **Courses**: 30 credits: 20 graduate didactic + 10 research experience credits
  - **Co-Curricular**
    - Data Analysis Project
    - Written Report
    - Public Seminar and Oral Defense

**IMPACT**

- A digital badge is awarded for completing the Clinical Pharmacy Research program.
- Two degrees and diplomas are conferred awarded for completing the dual degree program.
- Students develop their critical thinking / problem solving, research and communication skills through these programs.
- Students, matched with a faculty advisor, are engaged in a supportive mentoring experience.

- Over 35 students earned the Clinical Research notation.
- All of these students went on to residencies or fellowships.
- Eight students were awarded dual degrees: PharmD and MS.
- Currently, there are 33 Clinical Pharmacy Research students and 4 PharmD-Masters students.
- 12-15 Pharmacy students a year are accepted into one of the programs.
- 24 Faculty from Pharmacy Practice and Pharmaceutical Sciences participate in the program.