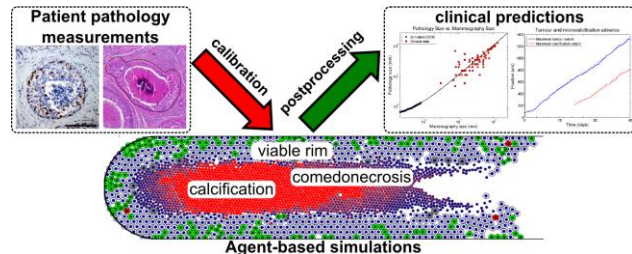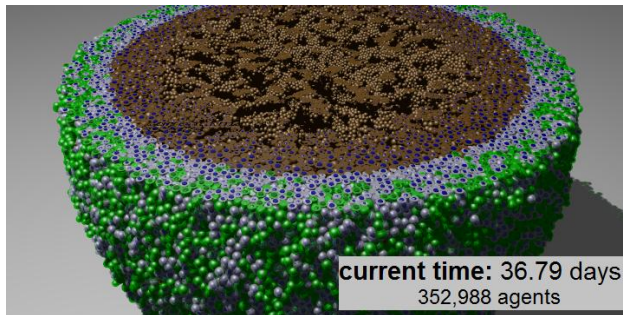# Part-time programmer/intern in computational oncology

Center for Applied Molecular Medicine (CAMM), and
Consortium for Integrative Computational Oncology (CICO – http://CICO.MathCancer.org),
Keck School of Medicine – University of Southern California (Los Angeles, CA USA)
Macklin Math Cancer Lab (http://MathCancer.org)

About CAMM, CICO, and Macklin Lab: The Center for Applied Molecular Medicine, as the lead institution of an innovative NCI-funded physical sciences oncology center (PS-OC), is committed to applying cross-disciplinary approaches to cancer. Our unique center brings physical scientists, mathematicians, biologists, and clinicians together for day-to-day collaboration. The Consortium for Integrative Computational Oncology—an outgrowth of two such PS-OCs—aims to develop clinically-oriented computational tools to fight cancer. As part of these efforts, the Macklin Math Cancer Lab (MathCancer.org) is developing a state-of-the-art multiscale cancer simulator that integrates data from multiple sources to predict cancer progression and therapy response *in individual patients.* We aim to accelerate discovery, challenge and refine cancer biology orthodoxy, and put powerful patient-calibrated computational tools in the hands of cancer doctors to improve care.

Position: The Macklin Lab and CICO are looking for a talented undergraduate or graduate computer programmer to work part-time on various cross-platform computational projects (primarily C++ with OpenMP) and occasional web development (PHP, HTML, CSS, Javascript, etc.). The programmer's main duty will be to assist continued development and optimization of a sophisticated agent-based simulator, with a planned open source release. Related duties will include development of graphical user interfaces (as configuration applications), 3-D visualization, postprocessing, and model sharing resources. This work will make a tremendous impact on breast cancer, lymphoma, prostate cancer, and metastasis research at USC, nationally, and internationally. The position is open for an immediate start and is expected to last through late summer 2013 (subject to job performance), with the possibility for renewal.

current time: 36.79 days
352,988 agents

Pay will be commensurate with experience, with 15-25 hours expected per week. In addition, the programmer will have publication opportunities and valuable resume experience in computational oncology.

Qualifications: The ideal candidate will be an undergraduate or graduate computer science major, or major in a technical field with demonstrated C++ experience. Anticipated necessary skills include object-oriented C++, data structures, parallel programming, and cross-platform GUI toolkits (e.g., Qt). The successful candidate is expected to work cordially in collaboration with multidisciplinary teams.

To apply: Send an email with subject "programmer application" to Paul.Macklin@usc.edu including:
  (1) Your curriculum vitae / resume
  (2) One or more well-commented code sample(s), including "plain English" descriptions
  (3) The names of one-three references
  (4) A brief (1 page max) statement, detailing why you are the right candidate for the job

For best consideration, submit all materials by **noon** (Pacific Time) **on February 18, 2013.**

Position will remain open until filled by the right candidate.