MRI Physics Support for Research Projects at the UC Davis Research Imaging Center

This document suggests a policy for reimbursing for MR physicists’ efforts in MRI research studies of other principal investigators, at the Research Imaging Center. The policy attempts to insure that necessary MRI physics support and reimbursement is provided to research projects of PIs who have not explicitly provided for that support in their funded grants. The policies are designed to promote the inclusion of physicists in research studies at an early, grant application submission stage, not after the grant is funded. Note that MRI physics support is normally provided at no charge for research projects approved through the RIC’s MRI Research Project Proposal mechanism.

1. If a research project uses MRI, and a grant application has not yet been submitted, the MRI physicist should be included in that application as a co-investigator or consultant. Salary support for their effort should be included in the grant application. For projects involving only protocol setup with existing commercial sequences, salary support should be 3% per year. For projects involving protocol setup with custom research pulse sequences delivered from other institutions and or special hardware, the support would be roughly between 4 and 8% per year, based upon a review by the Research Imaging Center Technical Director of the requirements and estimated effort. For projects additionally involving custom pulse sequences or software on research workstations, or customized hardware configurations, the support would be roughly 6%-15% per year, again depending upon the RIC Technical Director's review of the requirements and estimated effort. Because software is normally upgraded and has to be retested and or calibrated on a yearly basis, support is included for every year of the grant. Reduction to 3% per year after the first year would be acceptable if it is clear that the physicist's effort will be much less after the first year.

2. When a physicist has not been included as a co-Investigator or Consultant on a research project involving MRI that has been funded and initiated, salary support for the effort should be arranged through a Professional Fee. The fee would be based upon an hourly rate, or an agreed upon yearly flat fee. The hourly rate for all efforts related to the project should be approximately $200/hour. The Technical Director will assign a physicist if one has not already agreed to participate through informal discussion, and the Administrative Officer will keep track of time and activities, and provide an invoice of services upon completion of the work and or at 3-month intervals. The PI of the research project should provide a DAFIS account number for fee collection. Advance payment of $2,500 will be collected to cover hourly fees, and all unexpended funds would be returned at the completion of work. Alternatively, a yearly flat fee might be paid in advance, in which case the Administrative Officer would provide a formal quotation based upon his review of the research project and estimate of effort. The flat fee could be negotiated each year of the project. If in a given year a flat fee is not negotiated, then the hourly rate would apply for effort during that year.

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1st Draft: October 8, 2001, Updated: February 8, 2003
3. As an alternative to a Professional Fee, it has been considered to reimburse for physicist's effort as a fixed charge per scanning session. The Technical Director believes that payment should be made prior to study initiation, not as a per session charge, because the physicist's effort is in setup prior to study initiation. Therefore, Physicist's effort should not be included as a charge per scanning session, but rather by methods discussed in 1 and 2 above. Per session charge should be used only if these methods cannot be implemented. This exclusion from per session charges assumes that the MR technologist and or research assistants are able to successfully perform the imaging studies and related image processing tasks at each scanning session. Per session charges at the hourly rate set in 2. above will be made in the unlikely event that the physicist is needed to perform these tasks at each scanning session.

4. MRI has many parameter options and it is not always certain which is best for the specific imaging objective. As a co-investigator, consultant or paid professional involved in the project, the physicist will thoroughly research the topic and will setup what he believes is the best pulse sequence and parameters for the imaging objective. The PI's personal preferences and perceptions may differ from those beliefs. The final decision as to which pulse sequences and parameters to use will rest with the PI, and if requested, the physicist will setup the protocol to comply with those preferences.