**Budget Justification**

**Senior Personnel:**

David Cox, Ph. D. Professor Cox is an Assistant in the Department of Molecular and Cellular Biology and the Center for Brain Science. He will be responsible for the overall direction of the research project, and will take primary responsibility for directing the computer vision effort. We request support for 1 Calendar Month.

Ken Nakayama, Ph.D. is the Edgar Pierce Professor of Psychology at Harvard University and the chair of the Psychology Department. He will be responsible for leading the psychophysics component of the project. We request support for 1 Calendar Month.

The full academic year salaries of the members of the Faculty of Arts and Sciences are paid by the University with the understanding that they will ordinarily teach and conduct research freely and flexibly and not make substantial, specific quantified commitments of time and effort to a specific organized research projects.

Walter Scheirer, Ph.D. is a senior postdoctoral fellow in the laboratory of Prof. Cox with a significant track record in computer vision. Dr. Scheirer will lead the execution of the computer vision and machine learning portions of the project. We request support for 6 Calendar Months.

**Other Personnel:**

Sam Anthony is a graduate student in the Department of Psychology at Harvard University. He has a strong programming background, and has made significant contributions to the TestMyBrain.org infrastructure. He will be responsible for designing and running psychophysical experiments on TMB. We request stipend and tuition support for 12 Calendar months.

**Undergraduate Research:**

TBN (Undergrad Research Assistant): Funds in the sum of $11,844 in the first year, with cost-of-living adjustments in subsequent years, are requested for an undergraduate research assistant working part-time during the Fall and Spring semesters, and full time during the Summer. This student RA will ideally have interests in both psychology and computer science and will work primarily on collecting and analyzing psychophysical data.

TBN (Undergrad Programmer): Funds in the sum of $38,210 in the first year, with cost-of-living adjustments in subsequent years are requested for an undergraduate programmer working part-time during the Fall and Spring semesters and full-time during the Summer, who will contribute to the infrastructure of the TestMyBrain.org website. The Nakayama lab has had excellent success in the past in recruiting talented undergraduate programmers to work in this capacity.

In accordance with our Negotiated DDHS agreement dated 5/10/12 our fringe rates are as follows:

Rates: FY 13 FY 14 FY15

Faculty 27.3 27.7 28.1

Postdoctoral 24.3 25.2 26

**Travel:**

Domestic

We have budgeted $3,000 in the first year and $3,500 in the second through fourth years for domestic travel for members of both labs to attend a relevant scientific conference in order to present findings e.g. IEEE Computer Vision and Pattern Recognition, the annual Computational Systems Neuroscience (CoSyNe) meeting, the Vision Sciences Society Meeting etc.

International

Funds in the amount of $2,500 are requested annually to support one for travel for a member of the computer vision (Cox) team to relevant international computer vision conferences; we are considering the International Conference on Computer Vision (which in 2013 will be held in Sydney, Australia). If these funds are not used in any given year, they will be rolled over in subsequent years, and if not used for international travel, they will be used for travel to a domestic conference instead.

**Small Equipment and Supplies:**

Funds in the amount of $500 are requested annually to cover assorted small computing equipment and supplies (e.g. hard drives).

**Server Hosting and Domain Registration:**

Funds in the amount of $738 for server hosting and $50 for domain registration are requested annually. These figures are based on the current upkeep costs of the TestMyBrain.org website.

**Other Direct Costs:**

Tuition for one graduate student (Sam Anthony) is included.

**Indirect Costs:**

Indirect costs are calculated at 69% for all 3 years in accordance with the Negotiated DHHS Agreement dated 5/10/2012.