Re: budget check for project in Kampff lab

Adam Kampff <adam.kampff@gmail.com>

Tue 2/5/2019 6:46 PM

To: Otis, Tom <t.otis@ucl.ac.uk>

Cc: Kim, Danbee <danbee.kim@ucl.ac.uk>; Kampff, Adam <a.kampff@ucl.ac.uk>; Boss, Alexandra <alexandra.boss@ucl.ac.uk>; Margrie, Troy <t.margrie@ucl.ac.uk>; Craig, Helen <h.craig@ucl.ac.uk>

1 attachments (15 KB)

Danbee Kim support letter.docx;

Hi All,

I feel I should clarify my view. This project, as with all of the projects in my lab, have mixed both research and engagement components. For example, the lab (Danbee and Goncalo) developed a public science exhibit (now permanent) at the Brighton Sea Life centre, that was both a psycho-physics research experiment and an explanatory demonstration of how one's eye movements interrogate a complex scene and respond to unexpected events. As another example, we have spent years gathering validation data for advanced CMOS electrodes, and have invested extensive resources in sharing this data with the broader scientific and non-scientific community (e.g. there was event at SWC dedicated to exploring these datasets with professional musicians, as well as number of VR projects in collaboration with groups at Central St. Martins and the Bartlett).

As you know, and as I discussed with Tom O. on Friday, I have clearly understood my mandate as a group leader at the SWC to pursue both neuroscience research and to explore new ways to do neuroscience research. With this understanding, I felt justified to pursuing these projects, many of which make up the bulk of Danbee's thesis.

My personal view is that neuroscience has a unique, and largely untapped, potential relative to other domains of science. Unlike particle physics, for example, a lay person's knowledge about the brain, its role in one's own behaviour and the behaviour of others, is significant, as it is necessary for navigating the complexity of human society. Most of the research/engagement projects that my lab has pursued have focused on finding novel ways to "tap" this potential...both to aid neuroscience research, and to improve society.

Both Danbee and I have been intrigued by the power of "a good story", and its impact on collective understanding in society, since the beginning of her PhD project. (...from why are (human) brains capable of such coordination? ...to what aspects of a story are most effective?). Given my (and Danbee's) interest in engaging the broad base of "lay expertise" in neuroscience research, it thus felt obvious to pursue this via an actual "story" that we could publish in a variety of formats and with a professional quality sufficient to attract a large audience (hence the need to recruit people who can actually draw).

I hope this helps explain where I was coming from, and my goals for this project and Danbee's thesis. Thank you for highlighting the public engagement funding scheme; we are working on the application right now (but we would appreciate some clarification on the deadline for this current round of funding).

I still feel that this project, like the others in my lab, represents a mix of research and engagement, and that it should be possible to support this with lab funds, although I recognize that this may not be the view of our funders. Towards clarifying their goals, Danbee had already contacted Helen Craig from UCL Culture, cc'ed, to offer the UCL perspective, and she has very kindly provided the attached letter. I would be very happy to contact both Wellcome and Gatsby to explain my views on this (and the other projects in my lab), if you think this could help justify the use of lab budget given the funders' goals.

Please let me know how to proceed, and thanks for your time,

Adam	
(On Tue, 5 Feb 2019 at 13:05, Otis, Tom < <u>t.otis@ucl.ac.uk</u> > wrote:
	Hi Danbee,
	Thank you for providing the additional information.
	In considering the justification you have provided, we have decided that:
	 The funds for scientific illustrations used in your thesis and in any subsequent research publications are supportable (£480 in your recent budget request) The graphic novel work and related character and dream sequence development is not research activity and thus is not a valid research expense and cannot be provided via Adam's budget
	Please note that funding requests can be submitted to our Public Engagement Funding scheme (guidelines and application attached). This funding is typically limited to £1000. However, if you choose to submit a request for this funding you should outline the purpose and budget of your entire project.
	It is good to hear that you have provided the thesis outline to your committee members Marta Moita and Susan Lima. I would also encourage you to follow up on the other suggestions (skype meeting with committee, Marta's suggestion regarding collaboration on data analysis) from the forwarded correspondence from Thiago Carvalho, the Programme Coordinator at Champalimaud (see below).
	Wishing you good luck in the final stages of the work,
	Tom
	Tom Otis, Ph.D.
	Chief Scientific Officer

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Professor of Neuroscience

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Cc: Alexandra Boss, Troy Margrie, Tom Mrsic-Flogel



Supported by





From: Kim, Danbee

Sent: 01 February 2019 12:58 **To:** Otis, Tom; Kampff, Adam

Cc: Boss, Alexandra; Allum, Laura; Fenelon, Brian; Margrie, Troy; Mrsic-Flogel, Thomas

Subject: Re: budget check for project in Kampff lab

Hi Tom,

Thank you for your questions. I have addressed each of them inline below.

From: Otis, Tom

Sent: Friday, February 1, 2019 10:37 AM

To: Kim, Danbee; Kampff, Adam

Cc: Boss, Alexandra; Allum, Laura; Fenelon, Brian; Margrie, Troy; Mrsic-Flogel, Thomas

Subject: RE: budget check for project in Kampff lab

Hi Danbee and Adam,

This budget request has just come to my attention. Considering the nature of the request (contracted work that would constitute a large part of your doctoral thesis) and the large expense (£10,000), we need more information in order to determine whether it is justified. Please understand that all of our expenses are subject to audit and we have a responsibility to make sure that our funders would consider any expenses valid.

I see that the budget that was forwarded to you is out of date - the most up-to-date project budget, which totals £8,560.00, can be found here:

https://docs.google.com/spreadsheets/d/1T-gb2VwRJqCN8jYjkmI91UCh0-Hw3A9GNJK9GyCLieU/edit?usp=sharing

Thus, in order to approve the request we need answers the following questions. In addition to the answers, please provide any additional documents as necessary, particularly if any contracts have been exchanged, if drafts have been provided, or if any of the work has been completed.

1. Your proposal of expenses (attached) details £640 for scientific illustrations. While some of the topics to be illustrated are unique (e.g. the cuttlefish hunting sequence), others are of standard items for which there are thousands of existing scientific illustrations (e.g. major glial cell types, a chemical synapse, action potential vs. graded potential). What was the rationale for generating new diagrams for these topics when ample diagrammatic materials already exists?

For the specific "common" topics you mention, there are deficiencies that I hope to address with my diagrams:

- neuron cell types by structure and major glial cell types:

Existing diagrams are misleading in several ways. The typical diagram of a neuron cell shows a typical vertebrate myelinated motor neuron as the canonical neuron cell, without specifying that this cell type is primarily in the periphery (as opposed to "in the brain", as is implied by many textbooks) and delivers zero sense of the vast diversity of cell types that exist in the nervous system. Typical diagrams of neuron and glial cell types also show these cells in isolation, and do not well communicate how intimately these cells work together, nor how they are spatially interconnected

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with each other.

You can find my detailed description to the artist for this diagram here: https://github.com/taunsquared/graphic-novel-thesis/blob/master
/ScientificDiagrams/03-NeuronAndGliaTypes/DiagramDescription.md
Unfortunately, the artist for this diagram has ceased communication with me (the last time I heard from them was Jan 7, 2019) and has seemingly flaked on the job. This means that I will be drawing this diagram, which fortunately means that it is no longer part of the budget.

- action potential vs graded potential and chemical synapse:

Existing diagrams tend to ignore graded potentials when talking about electrical activity of nervous system cells, and I have yet to come across a diagram that well communicates the relationship between action and graded potentials. Existing diagrams of chemical synapses also fail to include the presence of astrocytes and do not well communicate their crucial role in synaptic activity.

You can find my detailed description to the artist for this diagram here:

https://github.com/taunsquared/graphic-novel-thesis/blob/master/ScientificDiagrams/06-ActionGradedPotentialSynapse/DiagramDescription.md
This artist has already submitted the coloured version of their diagram, which you can see here: https://www.dropbox.com/s/mk6y5hot5vhqs41/final3.jpg?dl=0

2. Many of the other categories of artwork need further justification. You indicate that there will be expenses for 7 chapters of a graphic novel (£6,720). What is the outline of this content?

The full script of the graphic novel can be found here: https://github.com/taunsquared/graphic-novel-thesis/blob/master/ComicBookScript/2019-01-14 Script-Milestone 1.md

Unfortunately, one of the chapter artists has also ceased communication with me (the last time I heard from them was December 2, 2018), so I will be drawing chapter 6, which again means that this chapter is no longer part of the budget.

3. There is £1,440 listed for character development. Who are the characters and how do they relate to the content of the doctoral thesis?

Character profiles for all of the characters that appear in multiple chapters can be found here: https://github.com/taunsquared/graphic-novel-thesis/blob/master/ComicBookScript /2018-09-23 Character-Profiles.md

Because each chapter is being drawn by different artists, it was necessary to be very methodical and consistent about the visual design of each character, in order to make sure that they can be recognized from chapter to chapter.

Again, because my chapter 6 artist has flaked on me, I will be doing the character designs for chapter 6, which again means that the character development for this chapter is no longer part

of the budget.

4. What are the 'dream sequences' (£560)?

The dream sequences are part of the graphic novel plot. Each dream sequence can be found at the following links:

Dream 1 - https://github.com/taunsquared/graphic-novel-thesis/blob/master/ComicBookScript/2019-01-14_Script-Milestone1.md#dream-1-nostalgia

Dream 2 - https://github.com/taunsquared/graphic-novel-thesis/blob/master/ComicBookScript/2019-01-14_Script-Milestone1.md#dream-2-rites-of-passage

Dream 3 - https://github.com/taunsquared/graphic-novel-thesis/blob/master/ComicBookScript/2019-01-14_Script-Milestone1.md#dream-the-last-comma-not-a-period

5. What is the concept art (£640)?

The concept art functions as the chapter title pages for each chapter, and the cover art for the whole graphic novel. Again, because my chapter 6 artist has flaked, I will be illustrating the concept art for the chapter 6 title page, and thus this is also not part of the budget.

6. Have you presented a proposal of this material, specifically that there will be 7 chapters in graphic novel format, to your thesis committee at Universidad Nova? If so, are they supportive that this adds value to the thesis? Written correspondence would be helpful.

I have discussed the graphic novel format with Zach Mainen via email on May 29 and 31, 2018, before a full draft of the graphic novel existed, and at the time he expressed enthusiasm for the project but asked to see a draft before giving further opinions. I also discussed with Marta Moita during her visit to the SWC on September 21, 2018, at which time she gave her verbal support of the format. I have also sent them my detailed thesis outline, which I've also attached here for your convenience, on Jan 24, 2019, and am waiting to hear back from them.

I also attach for your convenience the primary reference for justifying my inclusion and use of the graphic novel format, a paper published last year and titled "Communicating Science Through Comics: A Method".

7. Have any contracts been exchanged with the artists? If so please provide these.

Templates of the Memorandum of Understanding I've drafted for the artists, based on the format provided to me by Laura, are attached. Because there are 3 categories of artists - Chapter Illustrator, Concept Artist, and Scientific Illustrator - there are 3 separate templates. Bracketed information in red is replaced by information specific to each artist.

8. Has any of the work been completed?

Yes - as you can see from the project timeline detailed in the Memorandum of Understanding, the first project milestone was in December 2018. All completed work to date can be found in this Dropbox folder, which has been the primary method for exchanging artwork for submission, feedback, and iteration:

https://www.dropbox.com/sh/zi8mba9pitiy0pg/AABbcsxk666imF8FsFtxRtEia?dl=0

Please respond if any of the questions are unclear, otherwise we await your response. In the meantime, given that risk that the expenses may not be justifiable, please advise the artists to stop any ongoing work.

I have discussed with my artists, and given the time remaining for me to submit my thesis we are all concerned about having enough time to complete the necessary work. We would all appreciate as fast a turnaround on this discussion as possible, as artistic work is very time consuming, and as you yourself pointed out, I will not be getting any more extensions.

Thank you so much for your detailed questions and frank communication on this matter. I very much appreciate the consideration you have shown!

Cheers,

Danbee

Sincerely,

Tom

From: Otis, Tom

Sent: 16 January 2019 13:36 **To:** Kim, Danbee; Kampff, Adam **Subject:** FW: Danbee Kim's status

Hi Danbee and Adam, Just forwarding along correspondence from Thiago at Champalimaud. This is simply further support for our VISA extension request which at this point is in process. You can see he also suggests to make contact with Marta Moita/Susan Lima. Just let me know if there is any further help we can provide. Best, Tom Tom Otis, Ph.D. Chief Scientific Officer Professor of Neuroscience Sainsbury Wellcome Centre **University College London** 25 Howland Street London W1T 4JG

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From: Thiago Carvalho < thiago.carvalho@research.fchampalimaud.org >

Sent: Tuesday, January 15, 2019 11:55:33 AM

To: Otis, Tom

Cc: Simone Zacarias; Maria Teresa Dias **Subject:** Re: Danbee Kim's status

Dear Tom

Apologies for the delay. Please let me know if the attached document is ok.

I have discussed Danbee's situation with Marta Moita, who is a member of her thesis committee. Although Danbee did not have a regular thesis committee meeting in 2018, Marta spoke with Danbee in September. She strongly recommended that Danbee collaborate with Gilles Laurent in the analysis of her data. From our own Skype conversation, it is my understanding that Danbee is currently doing so.

Because of Danbee's intention to defend her PhD this Spring, I think it would be essential to have a Skype or in person discussion with her full thesis committee, Marta and Susana Lima, if possible before the end of January, but certainly no later than February, to avoid any last minute surprises.

Best regards

Thiago