Timeline of planning research space for Department of Neuroscience

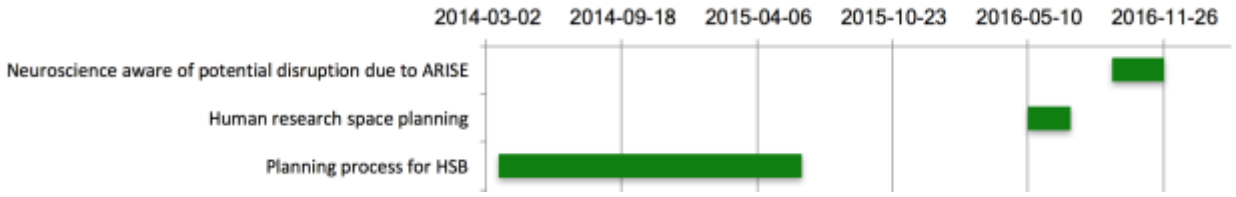
Planning for new research and teaching space for the Department of Neuroscience has been occurring for the past few years. Below is the time of past (and continuing) discussions held regarding

1. the relocation of the Department of Neuroscience from LSRB, to accommodate funding received for the ARISE project
2. the need for human research space for the Neuroscience and Health Sciences department, as this space was ultimately not incorporated into the new Health Science Building
3. the future layout of the Health Science Building

This timeline is based on documented communications, based primarily on emails, but also on time-stamped electronic documents for each of the three areas above. Informal discussions have not been included, due to the inability of all participants to validate the contents of those discussions. Direct quotes from emails are limited to those from Neuroscience faculty, to avoid distributing communications generated from outside of the department without permission.

In the spirit of transparency, the Department of Neuroscience is happy to provide all original communications from the department on request (to John.Stead@Carleton.ca). We have also provided dates and subject lines of all relevant emails to facilitate any FIPPA requests for materials.

If there are discrepancies of information, we invite any documented communications that can provide further insights.



Discussions regarding the relocation of the Department of Neuroscience from LSRB

We are aware that the federal and provincial government held a competition for Strategic Innovation Funds (competition deadline May 9, 2016). Communications regarding this project began as indicated below.

September 12 2016

Email from Malcolm Butler (Dean of Science) and Nimal Rajapakse (Vice President, Research and International) to neuroscience faculty

Subject: The future of LSRB

First email communication to neuroscience indicating that there may be some disruption to neuroscience due to LSRB upgrade. No further details were shared due to Ministry embargo.

September 12 2016

Email from Malcolm Butler (Dean of Science) to Hymie Anisman (Neuroscience faculty member), all neuroscience faculty copied.

Subject: The Future of LSRB

HA explicitly asks the Dean whether neuroscience research could be affected by the LSRB upgrade plans. The response indicated that the 'project team' was concerned and looking at possible contingency plans if needed.

September 12 2016

Email from John Stead (Chair of Neuroscience) to Malcolm Butler (Dean of Science)

Subject: The Future of LSRB

JS noted the need to carefully plan for student research projects over the next 12 months and requested to be involved in any conversations determining how to deal with potential disruptions:

"This is excellent news about the building upgrade – thanks Malcolm. Given that there are already conversations underway with the project team, can I be at the table as these conversations moving forward? It is necessary for us to now be planning research projects that are starting 12 months from now, with certain implicit assumptions regarding those projects such as full availability of vivarium, animal testing facilities (appropriate for stress research, and therefore not impacted by noise or odors from construction), and lab space. We need clear plans now in the context of the move to the new building, and while the new information is obviously excellent news, it sounds like it may require a different level of planning to ensure we can continue to deliver on existing commitments to undergraduate students, graduate students, and grant funding agencies."

September 12 2016

Email from Natalina Salmaso (Neuroscience faculty, CRC) to Malcolm Butler (Dean of Science)

Subject: The Future of LSRB

Need for consultation is highlighted (and also the lack of knowledge by neuroscience faculty at that time):

"I would also like to add to John's statement that for those of us working with transgenic animals or long-term aging studies, many animals are actually being bred now (or recently born) for experiments lasting until late spring, so it would be important for the P.I.'s to understand early on what the implications might be for ongoing experiments from both a practical and an ethical standpoint."

September 21 2016

One-on-one meeting between John Stead (Chair of Neuroscience) and Malcolm Butler (Dean of Science)

Notes from meeting captured (with electronic time stamp) by JS:

- *"Space in next 12 months?*
    - *Fed money – gut and add 2.5 floors to lsrb using long-span steel to build a building around the building.*
    - *Feds need april 2018 to be substantial completion date. Cannot be accomplished if wait until oct 2017. Need to sort out transition. Contingency possibly accessed in fall for 12 months. Includes NRC, OHRI. From next week, meet with Sandra (it is CURO's project), Kerri, and someone who uses vivarium outside of neuro. Meetings are taking place above MB about contingency. Money will be held back if not completed by that date. Could consider a 2 year option relocating whole department in a second place.*
    - *What was Hymie's contingency plan for the original CFI for transition?*
    - *No presumption from MB that there will be acceptance.*
    - *Keep 2 animal facilities for the transition.*
    - *Hope to know what we are doing by nov 1st. may be tricky.*
    - *May need to vacate LSRB in march."*

September 22nd

Departmental meeting.

JS informed department of planned move. Minutes of departmental meeting September 28th read:

"Human research space and LSRB renovations: JS announced that the VP Research had secured funding to renovate the LSRB and increase it by two floors. Unfortunately the timing for completion in order to receive all promised funding is unrealistic. The targeted date for completion is April 2018. This translates to a worst case scenario of having the LSRB be vacated by March 2017. A position statement will be prepared and sent to the VP indicating the negative impact of this unsuitable deadline."

September 28 2016

Email from Sandra Crocker (OVRPI) to John Stead (Chair of Neuroscience), Malcolm Butler (Dean of Science) cc'ed

Subject: Animal facilities and retrofit

OVPRI indicates a continued lack of clarity regarding timelines, and requests more detailed information from all animal users in LSRB.

September 28 2016

Email to from John Stead (Chair of Neuroscience), to Sandra Crocker (OVRPI), Malcolm Butler (Dean of Science) cc'ed.

Subject: Animal facilities and retrofit

Extensive concerns regarding discussions being confined to the administration raised by JS, as there were many concerns about what was happening with the LSRB planning, well beyond animal research. This email is attached in full (Appendix A).

September 30 2016

Email from John Stead (Chair of Neuroscience) to Sandra Crocker (OVRPI), Malcolm Butler (Dean of Science) cc'ed.

Subject: here is the draft email to send to the faculty

SC was planning on sending a request to all neuroscience, health science and biology faculty (users of the vivarium) requesting predictions of animal use, number of students, and number of rooms of various types (animal, procedural, lab) every month for 18 months, commencing January 2017. JS questioned the utility of data collection in this manner given that the nature of research in inherently unpredictable (cannot accurately predict research funding, number of students, or the impact of current research on specific plans for subsequent follow-up studies). Nevertheless, this request for information was sent, and remains the only information collected by the administration upon which to attempt to plan departmental needs during the forthcoming eviction.

October 3 2016

Email from John Stead (Chair of Neuroscience) to SC and Malcolm Butler (Dean of Science)

Subject: Planning

JS provides suggestions on how to minimize disruption. It is emphasized that the only way by which the number of studies to be disrupted could be greatly reduced would be to put a plan into action quickly (Appendix B). While JS received a response that the feasibility of these plans would be explored, none of the plans were enacted. Nearly 2 months later, no plan has been communicated to the department.

October 26 2016

Letter sent by Neuroscience faculty to Dr. Runte, Dr. Ricketts, Dr. Piché, Dr. Goubran, Dr. Blanchard, and Dr. Neufang, copying the Chair of the Board of Govenors, Dr. Chris Carruthers

Letter co-signed by all 100% appointed neuroscience faculty clearly highlighted the impact of the proposed eviction on graduate and undergraduate students, on funding obligations, in career prospects of junior faculty in the neuroscience department, and animal welfare concerns. This letter concludes:

"It is for the reasons outlined here that we implore you, as the body of administration here at Carleton University, to work with us in finding a quick and suitable solution that will minimize or avoid significant delays and distress to our undergraduate students, graduate students, animal subjects and faculty members, and to support our research initiative. We appreciate ongoing efforts in attempting to identify possible solutions to this very difficult situation.

However, given the concerns detailed above, it is clear that the only solution that will avoid substantial and long-term negative impacts on research, faculty and students, would be to allow us to remain in LSRB until we can transition directly into the new Health Science Building."

The full text of this letter is found in Appendix C.

October 31st 2016

Drs Runte and Piché toured the LSRB for ~30 minutes

Drs Runte and Piché met with JS and two faculty members (Mike Hildebrand and Natalina Salmaso) during their tour.

November 1st 2016

Email from John Stead (Chair of Neuroscience) to Drs. Runte and Piché, Malcolm Butler (Dean of Science) cc'ed

Subject: Thank you for your visit

This email reinforced the negative impact of the planned eviction. For example:

"I hope we were able to convey that a 6-7 month relocation, especially involving any move of animals off campus, would largely paralyze our research activities. We would also like to highlight the problems of moving animals off campus, which likely include insufficient associated wet lab research space and the need for all active animal ethics protocols to be approved by the new 'home'. This temporary animal move would also expose the home facilities' animals to pathogens present in our colonies (specifically Helicobacter infection in our facility) and vice versa, negatively impacting not only our research but also the research in the host facility.

As an institution that always strives to put students first, we are particularly concerned for our ~50 graduate and ~50 undergraduate students who would be facing major disruption to their current and future research activities, potentially delaying their graduation dates and career plans. While we are trying on a daily basis to reassure these students that Carleton University will prioritize them and protect their careers, we are cognisant of their research already becoming adversely affected by the uncertainty of the current situation. We therefore look forward to hearing your plans for how to ensure protection of these students and their research activities over the next 12 months."

November 11 2016

Email from Malcolm Butler (Dean of Science) to Neuroscience faculty, Carleton vet cc'ed

Subject "Update on the ARISE project and impacts for the Department of Neuroscience"

Precise deadline for eviction of by March 1st 2017 provided for the first time.

Current status: As of November 28, no plans for conducting the evacuation have yet been discussed or shared.

Given that confusion on the timeline of consultation may have arisen due to other facility-planning conversations, timeline on the very distinct discussions regarding human research panning, and the Health Science Building, are both presented below.

Discussion of the need for human research space for the Neuroscience and Health Sciences department

Discussions have been ongoing between the Department of Neuroscience and the university administration for a number of years regarding the need for human health research facilities. These facilities were eliminated from the plans from the new Health Sciences Building as the footprint and funding allocated for the new building were not sufficient to accommodate the needs associated with research focused on human participants.

August 26 2014

Email from Malcolm Butler (Dean of Science) to John Stead (Chair of Neuroscience)

Subject: building

It was recognized that the University still had to accommodate Health Science/Neuroscience research with human participants, including big data access requirements. Once vacated by current users, LSRB was considered as a possible future location to be used in part for Neuroscience and Health Science human research.

May 11 2016

Email from John Stead (Chair of Neuroscience) to Bob Burk, Chair of Health Science

Subject: Human research space planning

JS seeks to establish committee to plan human research space to form the basis of anticipated future discussions with administration.

May 12 2016

Email from John Stead (Chair of Neuroscience) to members of the Human Health Research planning committee

Subject: Human Research Space Planning Group

A joint committee of Neuroscience and Health Sciences faculty worked together in a planning process. Based on recommendation by the Dean, an assumption was made to work this space into a hypothetical footprint comparable in size to what was included in the original HSB plans.

July 12 2016

Email from John Stead (Chair of Neuroscience) to members of the Human Health Research planning committee

Subject: "Human Research Space Planning Group - for comments"

A finalized version of the human research space plan was shared with the committee for comments and final approval.

July 13 2016

Email from Malcolm Butler (Dean of Science) to John Stead (Chair of Neuroscience).

Subject: Human Research Space

Human health research plan was sent to Dean. It was acknowledged as *"really helpful and timely"*.

Current status: The Department is Neuroscience has been informed verbally by the Dean of Science that human research space for both Neuroscience and Health Science departments is to be incorporated into the ARISE project. This news is welcomed by the department. However, the need to move from the LSRB early to make way for ARISE was not explicitly shared with the Department until September 21 2016.

Discussions on the future layout of the Health Science Building

June 9 2014

Email from Anne Richards (Facilities Management Planning) to Malcolm Butler (Dean of Science), John Stead (Chair of Neuroscience), Peter Ricketts plus 4 other, Darryl Boyce cc'ed.

Subject: FW: Updated Report - Report #4 Final for Review

Following months of consultation including Neuroscience and Health Science, the "final version" of the Functional Space Program for the HSB was distributed for review and comment. This version included 12,890 nasf (net assignable square feet) for the vivarium, 26,878 nasf wet lab space (rising to 39,222 nasf by 10 years with the completion of shell space) for Health Sciences and Neuroscience, plus faculty office space, graduate student space, meeting rooms, storage space and a 400 person capacity teaching theatre. The building was being designed for 90 Neuroscience graduate students (rising to 110 within 10 years) and 14 full-time faculty (rising to 17 within 10 years).

August 26 2014

Email from Malcolm Butler (Dean of Science) to John Stead (Chair of Neuroscience) and 2 others.

Subject: building

Email indicated that the planning document from June 9th may not be feasible due to financial restrictions, and that human research space would in the future be located elsewhere (LSRB was mentioned as a possibility, but this would be dealt with at a later time). An adjustment to the plan was indicated, including a reduction in vivarium space to 8000 nasf, and wet lab space to 15,000 nasf.

January 27 2015

Email from Anne Richards (Facilities Management Planning) to John Stead (Chair of Neuroscience), Malcolm Butler (Dean of Science), 6 others.

Subject: Health Science Building - User Group Meeting Workshop #1

During a meeting between faculty and architects on January 26th, it was noted that a different version of the Functional Space Program was sent by Carleton to architects that had not previously been shared with faculty. Altered parameters include 1) Building now designed for only 56 neuroscience graduate students, as opposed 90, 2) Building now designed for 11 neuroscience faculty as opposed to 14 (rising to 17 in 10 years). For context, the department already has 12 full-time faculty; 3) the animal capacity of the vivarium had been reduced from an estimated need for 6700 animals (based on growth in both Neuroscience and Health Sciences) to just 1500. Note that between 2010 and 2012 (during which period management of the animal facility was the responsibility of the Chair of the Neuroscience Department, and for which relevant data is therefore available) there were just 6 primary animal users amongst neuroscience department faculty who collectively held an average of 1427 animals. Capacity of the new vivarium was therefore planned to be substantially less than the current facility, despite the HSB being planned to accommodate the needs of faculty in two rapidly growing departments

(Neuroscience and Health Science), as well as the emerging areas of health biology and health biochemistry.

March 13 2015

Email from John Stead (Chair of Neuroscience) to Malcolm Butler (Dean of Science)

Subject: Early comments on design

JS clearly stated that the proposed plans for the HSB, despite months of consultation and planning, were inadequate for neuroscience even without growth.

"For the record, I am not in favour of signing off on Wednesday. I do not see anything in the 4th floor plans that suggests this is a workable design for Neuroscience, even based on current need."

(The following except is from the attached document as opposed to the body of the email) "the current plans that allow for 30 people to work in the main lab (assuming no equipment in the labs) will effectively shut down research in the Neuroscience department."..."Even with this re-design, I do not anticipate that the lab design will meet needs of the department today, and certainly not if there is future expansion of the department."..." Fifth floor shell space must be configured so that it can accommodate a vivarium extension. Present vivarium design looks great, but capacity would be less than we needed ~4 years ago with only 5 users. The vivarium as planned will not accommodate future needs of current Neuroscience faculty, let alone provide space for animal usage by member of Health Science or additional Neuroscience hires."

March 16 2015

Email from Malcolm Butler (Dean of Science) to John Stead (Chair of Neuroscience)

Subject: comments on plans

Due to space restrictions in the planned design for the HSB, the LSRB was raised as a future potential location for storage of freezers for tissue banks and archiving. No specific plans for LSRB renovation were proposed.

March 26 2015

Email from John Stead (Chair of Neuroscience)) to Malcolm Butler (Dean of Science)

Subject: Health Science - Mar 25, 2015 Draft Plans

JS clearly states again that the HSB plans are severely inadequate for need:

"I'm really trying to stay positive, and keep engaged with this process. But looking at the 4th floor it should be obvious to everyone that we are simply trying to fit too much stuff into a box that is fundamentally too small. From all of the facilities we toured recently, every lab had at least as much open lab space as there was support space, with every PI having at least 3 bays of benches. Most actual lab work will be conducted in the open lab and not the support space, and we just don't fit.

I'm absolutely not trying to derail the process, but if I see something as fundamentally unworkable, then I have to let you know. "

June 12 2015

Email from John Stead (Chair of Neuroscience) to Malcolm Butler (Dean of Science)

Subject: Thoughts on new building designs

To address some of neuroscience's concerns regarding low square footage in the HSB, an additional shell floor was added. However, offices were cut from along 2 walls of each floor and graduate student space was been completely eradicated. Neuroscience's concerns were expressed, for example:

"I basically think that the new set of designs for a 7-story is a big step backwards, even compared to the cheaper 6-story building."

Current status: The University is pursuing a design for the HSB that was strongly opposed by the Department of Neuroscience, due to inadequate capacity to support current and future research needs of faculty, graduate and undergraduate students.

Appendix A

September 28 2016

Email to from John Stead (Chair of Neuroscience) to Sandra Crocker (OVPRI), Malcolm Butler (Dean of Science) cc'ed.

Subject: Animal facilities and retrofit

Extensive concerns regarding discussions being confined to the administration raised by JS, as there were many concerns about what was happening with the LSRB planning, well beyond animal research.

"Thanks for the email, and for consulting with me on this. I would definitely need to be at this meeting, as would the entire department irrespective of whether or not they are current animal users. For example, disruptions to animal use will impact most of our students at the graduate and undergraduate (honours thesis) level, with potential impacts on their research, time to completion, etc. This will therefore be of concern to every departmental member, including Kim Hellemans who, while an instructor, is also the undergraduate chair responsible for honours thesis projects.

Particular sensitivities will be the impact on grad and undergrad students (which I suspect will mean any suggestion of relocating animals to another site is extremely problematic, given that students have to move between lectures and animal experiments multiple times per day), and therefore the broader impact of this on research productivity, which can in turn raise questions about tenure (we have several junior faculty, including 2 who started in the last 4 months) and ability to meet our plans detailed in grants that are both held and planned. It is important, when factoring in considerations of animal care, to also consider that 1) many of our studies involves animal stressors, so experimental can be massively impacted by any disruption to animals (including noise, new environments), 2) we have several breeding colonies that need to be maintained, including transgenic lines 3) we continually need both wet lab (fully equipped with most existing items in LSRB) and behavioural testing space located proximal to the animal housing space to allow for even the most routine of our studies, 4) if animals and therefore labs are to be located elsewhere, and our students are consequently located elsewhere, then faculty offices similarly need to be moved in order to ensure supervision (both from the perspective of health and safety, and for successful continuation of research), and this needs to be done in a way that does not disrupt teaching (accessibility to lecture theatres) for both faculty and students (potentially including summer classes for faculty). It is also important to bear in mind that we have already begun animal projects (at least in the context of ACC approvals) that will be taking place throughout the winter semester and summer, that students (graduate and undergraduate) need to continue with these projects to avoid delays in the completion of their theses and therefore times to completion, that we are currently having conversations with both graduate and undergraduate students about joining our research labs for next year on projects that will inevitably involve animals (unless several of our faculty members are expected to have a forced hiatus of their research programs), and that we have promised undergraduate students in our program that they will have these research opportunities and that is part of the reason why they selected Carleton in the first place – we cannot therefore back out on those commitments. Finally, we need to have clear plans in terms of animal housing and testing capacity throughout the transition – maintaining a minimal animal facility to maintain breeding colonies cannot be an objective during the transition without effectively shutting down the research endeavor, in part due to the need for behavioural testing space and lab space, and in part due to the need to breed sufficient animals from the minimal colony in order to generate sufficient numbers of animals for experimental to actually take place. Even the suggestion that this might happen will either negatively impact research productivity/students by not starting research, or runs the risk of ordering/breeding animals for experiments and then not using those animals for the intended purpose, with the obvious consequences for animal ethics considerations.

Obviously faculty have been anticipating some unavoidable disruption in the move from LSRB to HSB, but a transitional period where both facilities are available for both vivarium and wet lab research would be required in order to allow the department to fulfil existing commitments to both students, funding agencies, and faculty (in particular junior faculty).

Another consideration that would be useful to bear in mind is that Neuroscience is very disappointed with the plans for the Health Science Building. This is not a complaint to you – I'm simply I'm telling you this to provide a broader context for these conversations. It has been clear from a very early stage in the HSB planning process (and we have been consistently vocal on this) that the HSB will be grossly inadequate in terms of lab research space, student space, and vivarium capacity/animal testing capabilities. There are not even enough faculty offices to keep us all in one location. The message from the department has always been that the current HSB plans will impair our ability to do research, as opposed to enhance it, and consequently there was never any sign-off on the plans from the department. The reason I am mentioning this here is to dispel any sense of 'short-term-pain for 'long-term-gain', or that the ends will justify the means in the context of a difficult transition. The universal view from the department is that the end point may if anything be worse than what we have at present (at least on a per-capita basis for individual researchers), which may impact the attitude towards unexpected disruptions during the transition. This has contributed to a growing sense in the department that despite major increases over recent year in what we contribute to the university (particularly, but not exclusively in the context of undergraduate enrolment) we are being increasingly taken for granted, and our opinions disregarded. I've had several faculty (both new and well established, including some of our most prolific researchers) tell me that they are either interested in, or actively seeking positions outside of Carleton, due primarily to their perception of how the university is not taking their research needs seriously. This interest in leaving is something I've heard recurrently over the last year, and have not heard conversations of this type previously.

One final point – this department has a particular reputation for looking after our students – both graduates and undergraduates. It is something that we all actively work on, and in which we take considerable pride. It is therefore fair to expect that any plans that could adversely affect either graduate or undergraduate students would be received with particular sensitivity by the department.

I hope this helps raise some of the potential concerns. I've copied Malcolm to keep everyone on the same page. Thanks very much for working with us on this"

Appendix B

October 3 2016

Email from John Stead (Chair of Neuroscience) to Sandra Crocker (OVPRI) and Malcolm Butler (Dean of Science)

Subject: Planning

JS provides suggestions on how to minimize disruption. It is emphasized that the only way by which the number of studies to be disrupted could be greatly reduced would be to put a plan into action quickly.

"I'm following up on a conversation I had this morning with Malcolm, and thought it might be helpful to include both of you on this. Obviously, any plan that involves moving out of LSRB some time before HSB is ready will be incredibly unpopular at met with negativity. Let me just put that to one side for now and focus on some things that might help, if this worst-case scenario was unavoidable. Also, the suggestions below are all directly from me – does not mean that the department will like them or agree to them (I have not had those conversations) but may represent a more palatable way forward.

Many planned studies will involve behavioural components, with follow-up analysis in the wet labs. Perhaps we should therefore be talking about how to maximize doing behavioral work now at a higher rate than normal, so we can focus on wet lab work over the summer. Things to consider… first, we really need a concrete plan asap in terms of timing. Do we really lose LSRB vivarium access in March, or could it be delayed until May, or even later. If there is uncertainty at this point, proper planning is even harder. Either way, we want to be maximizing our use of the animal facility while we have it, particularly for more behaviourally-sensitive work. To get the most out of the next few months, we could be talking about expediting new protocol review through the ACC (ACC meetings weekly if

necessary) so that if a new protocol is submitted next week, we want to be able to start with the animals 2 weeks later. Second, we would need Kerri to work with us very closely with the goal of maximizing throughput in the vivarium. Third, you may want to consider offering to hire a couple of additional animal technicians (potentially from recent graduate from the neuro neuro grad programs – even some undergrads) who already know how to do the behavioural work (or anything else that has to be done in a 'stable' vivarium) to ensure that the animal work can be completed asap (including new projects that could be completed by March, or whenever). These people would be shared by and working for the researchers, and not for the vivarium, but would need support of the vivarium in order to achieve what they need to do. In this way, the message would become 'we understand that the plans will dramatically impact animal work for a 6 month period, but let us help you therefore do the equivalent of 12 months of animals work in the next 6 months, to minimize the negative impact on you, your students, and your collective research productivity'.

During the transition, I suspect that housing mobile animal facilities on campus would be a better option that a third facility off campus – there will be some experiments that can continue relatively unaffected with this set up (even though others would be completely impossible).

If the above 2 plans were in place, fast, then the number of studies that would absolutely require animal behavioural testing, etc, and what would be unavoidably disrupted during the transition, may be greatly reduced – housing a small number of these studies off-campus may therefore be a less challenging option.

Collectively, the above may minimize research delays directly due to vivarium disruption. The next question is how to minimize delays due to disruption of the research labs (which we will hopefully need by that stage to mainly analyse the tissue that has already been collected. It would be worth considering (and I raised this with Malcolm this morning) seeing if LSRB construction could begin before we have to leave the LSRB labs (therefore delay vacating the labs until the very last minute), and if we can occupy 5th floor of HSB before the rest of the building is complete. This approach clearly will not work for the vivarium due to disturbances of animals, but some lab work can continue despite a degree of noise and vibration. Could it even be possible to move directly from the LSRB labs to the HSB labs? I understand that this is likely to be more expensive (changes in construction schedule, building inspections done piece-by-piece as opposed to for the whole building in one go) but the transition is going to be expensive anyway, and this may offset other costs.

There will be some lab work that can't be done if there are vibrations from construction, such as electrophysiology or some forms of microscopy. But we are then in a position of having to relocate a small subset of our research capacity to other spaces on campus (such as some of the undergrad teaching labs over the summer?) – such things would be much easier to co-ordiante and accommodate.

As I said, even this plan is unlikely to be 'popular' but it may end up being less disruptive, or at least less impactful on research output over the 12 month period. However, for this to have any chance of success, we need to absolutely maximize the time we have left – ideally having some meaningful conversations with all faculty (and vivarium/ACC) within the next week."

Appendix C

October 26 2016

Letter sent by Neuroscience faculty to Dr. Runte, Dr. Ricketts, Dr. Piché, Dr. Goubran, Dr. Blanchard, and Dr. Neufang, copying the Chair of the Board of Govenors, Dr. Chris Carruthers

Letter co-signed by all 100% appointed neuroscience faculty clearly highlighted the impact of the proposed eviction on graduate and undergraduate students, on funding obligations, in career prospects of junior faculty in the neuroscience department, and animal welfare concerns.

Carleton UNIVERSITY
Canada's Capital University

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Life Sciences Research Building
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October 24, 2016

Dear President, Vice-Presidents, and Dean of Graduate Studies, Carleton University

We are writing this letter to request your guidance in seeking a solution to the challenges associated with the proposed temporary relocation of Neuroscience faculty members and their research program from the Life Sciences Research Building (LSRB). From the current information we have received, renovations on the LSRB are slated to begin in March 2017. We have been informed of an expected move-in date of Fall 2017 to the new Health Sciences Building. This means that all faculty and their research programs will be effectively displaced (with no home building) for a minimum of 7 months. This is not reasonable and the neuroscience faculty request some clarity as to the plans in place to accommodate our research programs and students during this period.

There are substantial consequences resulting from this situation, including, but not limited to the following:

1) an inability to start or complete undergraduate and graduate research theses, impacting times-to-completion and career objectives for our students
2) an inability for established faculty members to fulfill obligations to funding agencies
3) an inability for new faculty members to establish and populate their laboratories, impacting future research funding and their ability to fulfill the requirements for tenure
4) animal welfare concerns.

Given the enormous time constraints, we would like to work with the Carleton University administration to find suitable solutions to minimize the impact on our students, faculty and animal welfare. In this way, we are seeking to ensure that our department remains able to promote Carleton University's Mandate, to *"provide programs, services and opportunities for students, and to undertake research that enables graduates to become highly qualified participants in an evolving economy, and contribute to creating a strong nation and a better world." (Strategic Mandate Agreement, 2014)*

Impact on graduate and undergraduate students

We currently have 28 MSc students, 21 PhD students, and over 550 undergraduate students. Of these undergraduates, 30 are currently conducting their 4th year honour's thesis work in research laboratories (with thesis completion dates at the end of April 2017), and approximately 40 are slated to conduct their honour's thesis during the 2017-18 academic year. One of the major points of attraction for students to our program is to conduct their thesis work with rodent models. This means spending 4-6 months working with animals for an undergraduate thesis, 12-18 months for an MSc thesis and 3 - 4 years for a PhD thesis. During these restricted time frames, animals cannot be readily moved mid-study without seriously compromising and potentially invalidating the study results. This issue is further complicated by the fact that a significant area of research under current pursuit by several faculty members involves assessment of stress and its impact on the brain. The proposition to move animals twice, within a 7 month period, is unreasonable and could invalidate any data accumulated by several neuroscience faculty members.

As we have not been provided with any concrete details of the facilities available for our students during the 7 month transition period, we are unable to commit to accepting undergraduate and graduate students in our laboratories for the 2017-18 year. There are far-reaching implications for the University in terms of attracting students and maintaining a growing reputation as a research-intensive institution. In the absence of proper facilities, our department will not be able to offer training in essential laboratory-based research skills that our undergraduate students were promised. This will undoubtedly

have a detrimental impact on Carleton's ability to attract top-tier students and could significantly impact subsequent career aspirations of our current students. Graduate students already in our programs will not be able to complete experiments during our temporary relocation, delaying their thesis work by two or even three semesters. There are both financial (students will need to pay for additional semesters of study) and personal (delaying career progression will significantly affect morale) impacts on these students. We anticipate that the March 2017 move from the LSRB, and consequent inability to fulfill our obligations to current students, could dramatically tarnish Carleton's reputation as a leader in brain health research, and the future success of our department in recruiting stellar students to Carleton University.

Funding obligations

Almost all of our current faculty members hold one or more active tri-council grants (15 active tri-council grants spanning CIHR, NSERC and SSHRC, with a combined budget of over $2.5 million) as well as private foundation funding (OMHF, NARSAD, MJFF, CPS, Pfizer), and our two newest faculty members are in the process of submitting grant applications to the tri-council (deadline November 1st). Both the faculty members who hold these awards and Carleton University have obligations to these funding agreements. The University has an obligation to facilitate this work by managing financial aspects and by providing appropriate facilities for wet lab experiments, including animal behaviour testing and breeding. The complete loss of numerous ongoing research studies and delay in other studies by months will reduce faculty research productivity. This will affect reviewer perception of past progress for current funding applications and have a long-term impact on success in future competitions. The lack of University support during this period might also give the perception that Carleton University does not prioritise their researchers, which will negatively affect the scientific and public perception that Carleton University is a research-intensive institution. The negative impact on our research productivity will be noticeable for years to come, both directly through reduced numbers of research personnel, and indirectly through the impact on HQP data, which are critical for future tri-council applications.

Impact on recent hires

We currently have four faculty members that are pre-tenure (one hired in 2013, one in 2014 and two in 2016). Two of these are Tier II Canada Research Chairs. Productivity during these first years is critical to renewal of these Chairs, promotion to associate professor and tenure evaluations, as well as for the effective establishment of their research careers. The first year is absolutely critical for new faculty members to recruit lab members, establish a research program and ensure ongoing success at Carleton. This move will have significant effects on research productivity with respect to setting up labs and filling them with the necessary tools and personnel to form a functioning unit. Without clear and confirmed plans for designated space from March until September 2017, new faculty members are unable to attract students and appropriately set up laboratory equipment. Because two of the new faculty members work with highly sensitive equipment, it is not practical to establish the infrastructure now to be moved once in March and once again in the Fall. The infrastructure is extraordinarily susceptible to electrical noise and any movements will reduce its reliability. Without establishing a successful research program early on, new faculty members are limited in what they can provide for the Carleton University research environment.

Animal welfare concerns

At the time of writing, we have yet to receive an official date as to when we must relinquish occupancy of the LSRB labs and vivarium. All of our animal users are running various studies that were planned to continue until Fall 2017 – the anticipated date of occupancy of the Health Sciences building. Furthermore, there was to be a transition period during which both the old and new vivaria would be available for a short period of time, in order to allow studies to finish in the LSRB while new ones begin in the Health Science Building, without having to sacrifice existing studies or animals. Therefore two relocations of animals in under a year would essentially shut down thesis work for students for the duration of the transition. As well, we should underscore that we have multiple sensitive and extremely costly unique transgenic mouse lines that are currently breeding in our animal facilities. Many of these unique mice are not available elsewhere and represent hundreds of hours of work (and allocation of research funds) and are fundamental for numerous graduate theses. Thus, any adverse stress or loss of animals would be catastrophic not only for tri-council funded faculty research, but also for students.

It would clearly be against Canadian Council for Animal Care guidelines to not consider the impact of these actions on the welfare of our animal subjects. The first guideline from the CCAC as to the maintenance of vivarium facilities reads:

"...it should be clear that the overall aim is to ensure the availability of facilities necessary to maintain appropriate standards of animal care and use. This is the principal criterion that CCAC Assessment Panels will use when assessing the acceptability of facilities as part of an institution's animal care and use program."
(retrieved from: http://www.ccac.ca/en_/standards/guidelines/additional/facility_implementation)

It is for the reasons outlined here that we implore you, as the body of administration here at Carleton University, to work with us in finding a quick and suitable solution that will minimize or avoid significant delays and distress to our undergraduate students, graduate students, animal subjects and faculty members, and to support our research initiative. We appreciate ongoing efforts in attempting to identify possible solutions to this very difficult situation. However, given the concerns detailed above, it is clear that the only solution that will avoid substantial and long-term negative impacts on research, faculty and students, would be to allow us to remain in LSRB until we can transition directly into the new Health Science Building. We do understand that the proposed timeline for LSRB renovations was created by completion dates that were not generated within Carleton but rather by the federal government, and that the university is already lobbying the government to extend their March 2017 deadline. However, we do request that Senior Administration both prioritize and engage directly with these lobbying efforts. Given the negative impact of the planned renovations include undergraduate academic programs, undergraduate student engagement, retention, and recruitment, graduate student success, research output and research funding, faculty careers, and both direct and indirect financial consequenes of each of the effects, this is a matter of clear concern for all members of our Senior Administration, and we look forward to working with you to find a solution that will be to the long-term advantage of the Department and the University.

Sincerely,

Alfonso Abizaid, Professor
Hymie Anisman, Professor
Melissa Chee, Assistant Professor
Shawn Hayley, Professor, Graduate Chair
Kim Hellemans, Instructor III, Undergraduate Chair
Michael Hildebrand, Assistant Professor
Matthew Holahan, Professor, Animal Care Committee Chair
Kim Matheson, Professor
Natalina Salmaso, Assistant Professor, Tier II CRC
Patrice Smith, Associate Professor
John Stead, Associate Professor, Department Chair
Hongyu Sun, Assistant Professor, Tier II CRC