Proposed process for selecting for the Academic and Administration Assistant position established in the proposed Centre for Fibre Science and Technology and Materials

Division of Sciences

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on behalf of the University of Otago

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Introduction

The University of Otago as a whole, including the Division of Sciences, is facing financial challenges. This is attributed to a reduction in effective full time students (EFTs), particularly at first year (in part related to changes in University Entrance), and international students. This situation is forecast to continue for the foreseeable future. The Division of Sciences needs to take steps to position itself to meet future demands of its operations.

The second issue faced by the University of Otago, including the Division of Sciences, is to ensure that its research and external engagement meet standards of excellence expected of a leading institution.

It is in this context that a Review of the Department of Applied Sciences was conducted late 2014.

Background

The Department of Applied Sciences was established in January 2011. This involved the transfer of the Clothing and Textile Sciences group in the Department of Food Science, Clothing and Textile Sciences, with some elements of the Department of Design Studies, the latter having been disestablished. The major subject, Design Studies (for the Bachelor of Arts, and the Bachelor of Consumer and Applied Science (BA, BCApSc) was phased out, and the Design for Technology (DETE) major for the BAppSc substantially modified from 2012. The Director of the Applied Sciences Programme was initially based in the Department and that Programme administered from the Department. In 2014 the Director of Applied Science Programme was reassigned to the Divisional Office and currently reports to the Pro-Vice-Chancellor, Sciences. In 2010 two fixed-term part-time (0.15FTE) positions in Bioengineering and Nanomedicine were created (one each funded from the Division of Health Sciences and the Division of Sciences), and other staff were expected to join, perhaps leading to a School of Applied Sciences.

There were several reasons for this change: the reduction in student enrolments in the Department of Design Studies (from over 200 EFTs in 2005 to under 140 in 2009[1]); a need to increase research activity to enhance research informed teaching; and a need to increase externally-derived revenue.

1 209 EFTs in 2005; 136 EFTs in 2007; 139 EFTs in 2009

It was anticipated that the new Department would create increased EFTS. This has not been realised: Clothing and Textile Sciences EFTs have remained stable (although low) and at the end of 2014, were approximately 27 EFTs; Design for Technology EFTs have continued to fall and at 31 December 2014 were approximately 42 EFTs.

Additionally, in 2015 there were no new postgraduate student enrolments in Design for Technology. While enrolments in Clothing and Textile Sciences remain low, this programme attracts a reasonable proportion of postgraduate students[2]. Enrolments in Bioengineering (postgraduate) are small as would be expected with this new development.

Gross income for the Department is currently $1.34m, and the salary budget alone is $1.5m. The allocation from the Division of Sciences to cover all costs to the Department is approximately $2m. Therefore, the Department is being subsidised by other academic units in the Division. Although this situation is not unique, the financial shortfalls are of concern and cannot be sustained.

In April 2014, I met with the Department and advised them of the precarious financial situation the Department was facing, and that I was considering what could be done to improve this. A working party was established to discuss and advise on the feasibility of developing a major in aspects of materials science The working party concluded that such a major could be developed, and members of the Department began working on this. A second report was commissioned in 2014 to report on any prospects or new programme initiatives that may attract school leavers and opportunities to leverage further from existing expertise that the University has in medicine and dentistry. Holdsworth concluded that there were opportunities worth exploring further. A third report directly relevant to fibres and materials was completed during 2014 'Growing Otago's Primary Industries Research' and highlighted opportunities which the University's expertise was well positioned to support.

A formal Quality Advancement Review of the Department took place in December 2014. The review panel concluded that overall, the Department as a whole was not meeting the expectations of the University, although noted that the Clothing and Textile Sciences group was performing very well relative to expectations of delivering excellence in research and academic outputs, and with their success in securing external research income from non-traditional sources.

[2] 15 postgraduate students (5 EFTs) as at 31 May 2015

The panel also noted the large number of papers offered that led to, in some cases, over-emphasis on undergraduate teaching and a consequential under-emphasis on research. The panel recommended that the total number of papers be rationalised, noting the potential for further development of the CLTE group, a unique NZ resource, to be strengthened with additional resource in materials, and the opportunity for further research and application in medical and dental health. The panel was complimentary about the scholarship, alignment with industry and potential for further growth in these areas.

The University of Otago Strategic Direction to 2020 document states that we are committed to carefully scrutinising our internal activities, processes and structures for both efficiency and effectiveness. Those that do not support the University's goals will be modified or discontinued. and "*where there are areas of academic endeavour which are not strong, decisions will continue to be made either to investing in improving performance or to reorganising and, if required, reducing or ending our involvement*" [3].

Future Direction

As both a Division and a University, we recognise there exists an opportunity to enhance our fibre science/technology/biomaterials area and develop a Centre that delivers excellent programmes to students, promotes strong research activity and scholarship, is responsive to our national goals in terms of both educational needs and New Zealand's external and industry requirements, and aligns with the strategic imperatives of the University[4]. This new Centre needs time to become financially sustainable, in order that it can grow.

Any developments in the academic programme need to meet changing needs in science, and provide alternative academic pathways which lead to new EFTS income streams. We need to refine and broaden relevant offerings in both undergraduate and postgraduate areas, and continue to build on research opportunities that exist in the fibre science and technology, materials, and biomaterials areas. However, we first need to address budget concerns which currently prevent us from continuing to develop these initiatives. This will necessitate some change to staffing, current papers, and a commitment and plan to strengthen our research focus.

3; Imperative: Sustaining Capability

4 University of Otago Strategic Direction to 2020; Imperative: Strong External Engagement

We also urgently need improved physical facilities for teaching, and especially for research, in order provide for staff and students in The Centre and to attract research visitors and postgraduate students. This is a critical part of becoming a successful and recognisable Centre.

Overview of Proposed Changes

1. It is proposed that a Centre focusing on Fibre Science and Technology, and Materials Science (working title) be established in the Division of Sciences. It is also proposed that the Department of Applied Sciences be disestablished.

2. It is proposed that academic positions currently in the Clothing and Textile Sciences, Biomaterials and Bioengineering groups from the Department of Applied Sciences be transferred to this Centre, and that other academic positions in the Department of Applied Sciences be disestablished.

3. It is proposed that the permanent position of Hard Media Technician, currently located in the Department of Applied Sciences, be transferred to the Department of Food Science.

4. It is proposed that all other general staff positions in the Department of Applied Sciences be disestablished, and one general staff position be established in The Centre.

5. It is proposed that a new major in the field of Fibre Science and Technology, and Materials Science be introduced; and that existing papers and major subjects (i.e. Clothing and Textile Sciences (CLTE), and Design for Technology (DETE)) will be phased out from their current form.

Specific details of the proposal are provided as follows.

1. Establish a Centre for Fibre Science & Technology, and Materials Science (working title); and disestablish the Department of Applied Sciences

It is proposed that a new Centre be established in the Division of Sciences focussing on Fibre Science and Technology, and Materials Science. For efficiency in support-related costs, it is proposed the Centre is co-located with the Department of Food Science, given both groups currently share some facilities, resources, and equipment, and that there are existing areas of research collaboration (i.e. odour volatiles, biomaterials). The proposed Centre will be expected to become financially sustainable as quickly as practicable, and the Divisional office will work closely with the Centre and monitor its performance in relation to academic and financial expectations.
The University proposes to retain academic capability in the disciplines of fibre science and technology, textiles, materials, and biomaterials.

It is proposed to transfer the position of Hard Media Technician from the Department of Applied Sciences, to the Department of Food Science. This position would support research and teaching activities in The Centre by agreement.

One new permanent general staff position is proposed for The Centre to support the Centre's teaching, research and administrative activities.

It is proposed to disestablish all remaining positions in the Department of Applied Sciences.

Leadership of the Centre: It is proposed that Professor Raechel Laing, who is the current Head of Department and has a permanent position as Professor, be appointed Centre Director, for a fixed term period to be discussed. Much like a Head of Department, this position would be a service role in an academic position, and as such, the incumbent would be expected to remain research active. The Director will be responsible for developing and implementing a new degree major in the fibre science and technology/ materials/ biomaterials areas. This proposed new major subject will be designed to address needs of school communities, those in work (continuing academic and professional development), and international students. The major is expected to attract new EFTS.

Together with the Pro-Vice-Chancellor, Sciences, the Director will facilitate further development of strong linkages with academic departments, external industry and other groups, and establish The

Centre as a national/international leader for fibre science and technology/ materials science, thus achieving the aspirations for excellence as identified in the University's Strategic Direction.

Location of the Centre: Although this is a secondary issue, given that the Clothing and Textile Sciences group is presently co-located with the Department of Food Science, and that they were once part of the same Department, for efficiency of resources, it is proposed that if this proposal is implemented, The Centre would remain alongside the Department of Food Science in its current location, and share resources wherever possible. Both groups currently share some space and equipment and I would expect the Department of Food Science and The Centre to collaborate with administrative and other support requirements.

It is critical that the University invests in an appropriate facility for Food Science and The Centre in order to enhance our ability to offer nationally and internationally competitive facilities for academic staff, and students from both the domestic and international market. In my view, the current St David 2 building project is a desirable option, and should this proposal proceed, I intend to pursue this.

Timeframe for the establishment of The Centre: It is proposed that the Centre would be established at the end of 2015, and the Department of Applied Sciences would be disestablished at that time. Appendix 1 outlines the proposal to manage the transition of content of the major subjects.

2. Impact of proposal on existing academic positions

It is proposed that academic positions in the Clothing and Textile Sciences, and Biomaterials groups from the Department of Applied Sciences be transferred to The Centre to ensure consolidation of the current direction and provide the basis for extended scope. The positions that are proposed to transfer into The Centre are as follows:

Position	Focus and academic expertise
Professor	Academic leader, research and teaching. Academic expertise in Fibres/ textiles - structure, function, performance, development
2 FTE Associate professors	Research and teaching. Academic expertise in Fibres/ textiles - structure, function, performance, development; and Computational modelling, fluids, modelling and performance of materials

2 FTE Senior lecturers	Research and teaching. Academic expertise in Materials and human culture - analysis, structure, function, conservation; and Fibres, biomaterials - structure, function, development
1 (0.5 FTE) Professional practice Fellow	Teaching and research support and expertise in fibres/textiles - structure, function, performance, development

The future location of Bioengineering capability is currently under discussion with the Pro-Vice-Chancellors of Science and Health Science.

No changes are proposed to existing fixed-term positions, and if the proposal proceeds, any fixed term positions will transfer to The Centre, the Divisional Office, or elsewhere in the University, for the remainder of the current agreed fixed-term period.

3. Impact of proposal on Hard Media Technician position

It is proposed that the Hard Media Technician position, currently in the Department of Applied Sciences, would transfer to the Department of Food Science. This is to ensure that the capability in relation to instrumentation and plant required for teaching and research, currently shared informally among staff in the Department of Applied Sciences and the Department of Food Science, continues to be available to both groups.

4. Impact of proposal on other General staff positions

It is proposed that (with the exception of the Hard Media Technician) all general staff positions in the Department of Applied Sciences would be disestablished, and one new position established in The Centre to undertake administrative tasks and support research and teaching activities. If the proposal proceeds and The Centre co-locates with the Department of Food Science, this position would also work closely with administrative staff of that Department.

A draft position description is included for consultation. This proposed position description has been provisionally evaluated at Level 5. Staff affected by this proposal would be able to apply for the new position.

Summary of impact on current permanent positions:

This proposal would result in the disestablishment of 8 permanent positions. The overall impact would be a reduction of 7 permanent positions (6.1 FTE overall):

	Position	Current		Proposed		
		positions n=	total FTE	positions n=	total FTE	
Academic	Professor / Associate Professor	3	3.0	3	3.0	No change
	Senior Lecturer	4	4.0	2	2.0	Disestablish 2 positions
	Professional Practice Fellow	4	2.6	1	0.5	Disestablish 3 positions Overall reduction of 2.1 FTE
General	Computing Advisor	1	1.0	0	0.0	Disestablish
	Hard Media Technician	1	1.0	1	1.0	No change, relocate to FOSC
	Other Technical/Admin	2	2.0	1	1.0	Disestablish 2 positons, establish 1 position. Overall reduction of 1 FTE
Total impact		15 (13.6 FTE)		8 (7.5 FTE)		Disestablish 8 positions. Reduction of 7 positions (6.1 FTE) overall

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4. Proposal to disestablish current majors and introduce new major

It is proposed that the major subjects, Design for Technology (DETE) and Clothing and Textile Sciences will be phased out, and a new major developed in Fibre Science, Technology, and Materials science. Where it is appropriate to do so, existing papers will be re-constituted and given an appropriate title.

I have not proposed any major change to existing papers in Bioengineering.

Potential impact for existing students: Should this proposal proceed, the University is committed to supporting our existing students who are enrolled in DETE majors to complete their Otago degree. Pathways will be provided for every student with a declared major in DETE.

There are currently 57 students enrolled for a DETE major: 16 first year students (enrolled in 2015), 19 students in their second or third year of study, and 22 students who are now in their third year and who are expected to complete their degree this year. If the proposal to disestablish the DETE major proceeds, we would work through pathways for completion with every student. I have already assured the President of OUSA that I am committed to minimising disruption and unrest for our student community.

Financial analysis

The Department currently earns $1.084 million of income from funding, fees, and PBRF after central overheads have been removed. Under the current system, the Division of Sciences provides a funding allocation to the Department of $1.92 million (including PBRF) which includes a subsidy of $835k. The table below illustrates the financial impact of this proposal, based on 2015 budget information:

	Current	**Proposed**	$ Impact
Income from SAC funding, fees and PBRF	$1,344,347	**$641,000**	-$703,347
Central overheads (Service divisions, Committees, reduction to meet surplus target)	$260,226	**$112,486**	-$147,740
Funding Allocation ex Financial Services	$1,084,121	**$528,514**	-$555,607
Funding allocation from Divisional Office	$1,920,000	**$867,391**	-$1,052,609
Subsidy from Divisional Office	$835,879	**$338,877**	-$497,002

Furthermore, the proposed model indicates that the funding allocation from the Division of Sciences would reduce from $1.92 million to an estimated $867k. The Division would still be required to provide a subsidy, however this would be at a reduced level of approximately $339k: this proposal will therefore result in anticipated savings to the Division of Sciences of $497k[5].

Externally-funded research income has fluctuated since 2011 from $157k (in 2011), to $490k (in

5 Excluding the cost of transferring one position to the Department of Food Science

2013). In 2014, the total external research income was $370k, and in 2013 and 2014 all externally-funded research income was generated from research in either Clothing and Textile Sciences or in Biomaterials/Bioengineering.

In order to ensure that The Centre establishes itself with a financially strong and sustainable foundation, I propose that the Divisional Office would manage the finances of The Centre. The financial goal is for the Centre to be a successful and profitable unit with strong external research income.

Consultation

The university is committed to its obligation to consult with staff and Unions about the changes proposed in this Management of Change document.

This proposal and process is being managed under the University of Otago Management of Change process (MoC) which can be found on the HR website and is contained in your employment agreement.

Approval has been sought from the Office of the Vice Chancellor to commence consulting with staff on the proposed changes. The University of Otago Senate has also been briefed on the proposal.

The consultation process will include:

- provision of this document;
- provision of such information (subject to commercial confidentiality being protected) to enable employees and the Unions to form a view;
- employees and the Unions having the opportunity to make submissions, and
- consideration of submissions before a final decision is made.

Before a final decision is made, you are invited to provide feedback about the proposed changes. The aim of this consultation is to ensure that all parties have an understanding of the objectives of the changes proposed, and an opportunity to respond to these before final decisions are made. This invitation is important: you need to carefully consider the proposal so we ensure the changes are workable and will achieve the aims.

Let me stress that this is a proposal and any feedback you provide will be carefully considered.

You are encouraged to discuss this proposal widely and seek advice.

Timeframe

The expected timeframe for the Management of Change process is as follows:

Monday 29 June 2015 (today)	Consultation period commences: Staff receive proposal documentation. Divisional HR Manager, HR Director and Unions in attendance. During the consultation period I am available to meet with staff individually or in groups. On Friday 3 July I am free between 10am and 3pm, and between 9am and 12pm Wednesday 15 July should anyone wish to speak with me. I will also be available outside these times by appointment via my EA. I will not be available the week of 6 – 10 July.
Monday 20 July 2015	Submissions close at 5.00 p.m. Depending on feedback received, further information may be required or further consultation with staff.
By mid August	Final decisions announced. Staff will be informed in writing of the final decision.

Your written submission should be addressed to Jane Stumbles (Divisional HR Manager, Division of Sciences) and reach her no later than 5.00pm on Monday 20 July 2015.

You are welcome to contact me or our Divisional HR Manager Jane Stumbles, on extension 8150 or by email jane.stumbles@otago.ac.nz about the information provided, or the Management of Change process. You are also entitled to seek independent advice and representation. Information outlining other support that is available from the University is enclosed in this pack.

Conclusion

I recognise that change processes are demanding on all involved and accordingly I encourage you to make use of the University's Employee Assistance Programme (EAP). A brochure outline EAP is enclosed with this proposal.

Thank you for taking the time to read this proposal. I look forward to receiving your written submissions.

Professor Keith Hunter,
Pro-Vice-Chancellor Sciences

Appendix 1: Proposed timeframe for transition

If the proposal proceeds the Centre would be established by 30 January 2016 in readiness for the 2016 academic year, and the Department of Applied Sciences would be disestablished at that time.

The following table highlights how it is proposed to manage the transition of academic papers:

Year	Paperwork	New papers introduced	Existing papers taught for last time
2015	• indicative full proposal • regulations for change to BIOE, CLTE, DETE majors/minors • new regulations (major(s)/minor(s) • new 100-level paper		100-level DETE paper
2016	By Feb AppSc BoS: - new 200-level papers	100-level paper	200-level papers not required
2017	By Feb AppSc BoS: - new 300-level papers	200-level papers	300-level papers not required
2018		300-level papers	

Feedback regarding the plan proposed for transition will be sought from stakeholders external to the Department of Applied Sciences, including the following:

Departments within the Divisions of Sciences and Health Sciences, and the Department of Anthropology and Archaeology

Centre for Bioengineering and Nanomedicine (University of Otago, Dunedin hub)

Academic and Advisory Boards, including Bioengineering and Nanomedicine Advisory Board, Applied Sciences Board of Studies and Industry Advisory Board

Professional institutes including the Textile Institute, the Institute of Professional Engineers of New Zealand (IPENZ), and the Design Institute New Zealand (DINZ)