MINUTE OF THE STATUTORY HALF-YEARLY MEETING OF THE GENERAL COUNCIL HELD ON SATURDAY 29 JUNE 2019 AT 10.30am IN PARLIAMENT HALL, SOUTH STREET, ST ANDREWS

The Chancellor, Lord Campbell of Pittenweem was in the Chair. Welcoming 62 members to the meeting, he commented on the very good graduation week that had just ended, with nearly 2,000 students graduating.

1. Minute of the last ordinary half-yearly meeting of the General Council held on 24 November 2018.

With no comments or matters arising, the minute was accepted as an accurate record.

2. Announcement of the result of the election of General Council members to serve on the General Council Business Committee – Registrar and Clerk to the General Council.

An election to fill seven vacancies on the Business Committee from 1 July 2019 opened on 27 May and closed on 21 June 2019. This was as a result of six members reaching the end of their terms and one by an earlier resignation. Twelve nominations were received, as outlined on page 11 of the billet. Voting was conducted online using the Scottish Single Transferable Vote system. No postal votes were received. A total of 868 votes were cast representing an increase of 11 votes compared with the previous Business Committee election, and a slight decrease to 1.18% of the eligible electorate. The following six candidates will fill the four-year vacancies: Dr Stephanie O'Rourke, Mr Alan Chalmers, Mrs Grace Lyon, Mrs Annabel Hamid, Mr Gregory Newman and Ms Eliane Sum. Mr Stuart Bryan, the candidate placed 7th, will fill the two-year vacancy left by the resignation. Congratulations were conveyed to all the successful candidates.

The Chancellor next called upon Ms Wendy Russell, Acting Convener of the Business Committee, to deliver her report on the Committee's activities since the last meeting.

3. Report by the Acting Convener of the Business Committee

The Acting Convener, Wendy Russell, introduced herself as being an elected member of the Business Committee for the past two years. She had taken up the position of Acting Convener following the decision taken earlier in the year by Gillian Stamper to stand down as Convener. Ms Stamper had also indicated her intention to stand down from the Business Committee at the end of June, after six years of service, and Ms Russell conveyed the Business Committee's appreciation for her contribution both as Vice-Convener and, since September 2018, Convener.

Since the last General Council meeting in November 2018, there had been two meetings of the Business Committee in January and April, both in St Andrews. The minute of the January meeting was contained in the billet (pp 12-15).

The Acting Convener welcomed the seven newly elected members of the Business Committee and thanked the other candidates for standing and for their interest in contributing more directly to the University. Efforts to improve the diversity of applicants had resulted in a gender balance amongst the candidates and the Committee now has a majority of women. The Acting Convener also thanked those members who had reached the end of their terms of office on the Business Committee: Ross Allan, Alistair Galloway, Andreas Klasen and Jim Wallace.

Since November 2018, the former Convener and Acting Convener had held a number of constructive meetings with the Registrar and Clerk. Ms Stamper had also met with the Principal early in the year for a wide-ranging and helpful discussion.

The Business Committee, and in particular its Ordinances and Resolutions Sub-Committee, had focused

on the University's ongoing work to revise and re-draft the Ordinances required as a result of the Higher Education Governance (Scotland) Act 2016. The Committee had reviewed and commented on three draft ordinances since the last General Council meeting. The Acting Convener expressed frustration that the Business Committee had been invited to submit comments several days ahead of the statutory eightweek deadline for consultation, to allow discussion at scheduled meetings of Court's Governance and Nominations Committee as well as at Court.

The first draft ordinance related to the composition of Court. The Committee had questioned the change to the appointment process for General Council Assessors from 'by election by the General Council' to 'by nomination by the General Council' and had asked for the requirement to be retained in the new Ordinance for two of the co-opted members of Court to be graduates of the University. Court had accepted this second point and the Ordinance has been altered accordingly but, to the Business Committee's disappointment, had decided to make the change to appointing General Council Assessors by nomination rather than election despite arguments against this change made recently and in 2017. The Business Committee saw the election of Assessors to Court as one of the key roles of General Council.

The second draft ordinance related to the composition of the Senatus Academicus. The Committee had queried the removal of detailed process from the ordinance it is replacing, as well as the status of Academic Assessors on Court. The University had provided assurance that there had been extensive consultation with the academic community over the proposed changes and that the draft was both consistent with the governance structure wanted by the academic community and with the requirements of all related legislation.

The third and final draft ordinance reviewed recently was an amending ordinance removing all aspects relating to the process of electing General Council Assessors to Court. Its arguments in favour of retaining the existing process had been reviewed by Court but had not been sustained. In future, the process by which General Council Assessors are nominated will be established by Court decision, and set out in Court standing orders which are published in the Court Handbook. This would not require formal consultation with General Council.

The Acting Convener expressed the Business Committee's regret at this, and thanked those General Council members who wrote directly to Court on this matter and on other Ordinance changes.

Court agreed at its April meeting to engage with the Business Committee to develop alternative arrangements. A short-term working group comprising members of Court, the Vice-Principal (Governance) and members of the Business Committee was set up. It met twice and also conducted work via email. Everyone was determined to identify a solution which would both meet the requirements of Court for a skills-based appointment process and of General Council to have clear ownership of the process. Two options for a selection panel were agreed to be put forward, but both options were rejected. The approach adopted by Court will be the same as that for other appointed members of Court. The Acting Convener questioned whether this gave genuine ownership of the process to the General Council, as a body independent from Court. The Business Committee found this outcome deeply disappointing since it had been willing to move forward and work with a skills-based system in place of election. The Acting Convener stressed, however, that the Committee did not want to be seen as critics of progress. Its aim was to make positive contributions to support the prosperity and wellbeing of the University, the realisation of the University strategy, and increase engagement with General Council members. The Business Committee was committed to continuing to engage closely with the University executive and Court and hoped in turn to receive their support and encouragement.

The Acting Convener announced that she had received a letter of resignation on a matter of principle from Ken Cochran, recently re-elected General Council Assessor, and paid tribute to his contribution as a supporter of the General Council and of the Business Committee on Court.

In closing, the Acting Convener thanked all staff involved in organising and participating in General Council meetings and who provide ongoing support to the Business Committee throughout the year. The Committee was particularly grateful to Professor Vincent Janik, Director of the Scottish Oceans Institute, for agreeing to give a presentation at today's meeting. She thanked all of her Business Committee colleagues for their invaluable support and fellow General Council members for showing such interest in General Council affairs.

The Chancellor thanked the Acting Convener for her report and invited questions from the floor.

In response to a question concerning how relationships between the Business Committee and the University might be improved, the Acting Convener's view was that this could be achieved through continuing dialogue. Another member hoped that ways would be found to empower graduates by involving them in the governance of the University. Another member expressed their regret at the resignation of the previous Convener of the Business Committee.

For the assistance of the meeting, the Chancellor called upon the Registrar and Clerk to respond to some of the points that had been raised.

The Registrar and Clerk clarified several procedural issues raised by the Acting Convener. Firstly, there was no change to the consultation timeline for comments on Ordinances, and the Business Committee's considerations were fully considered by Governance & Nominations Committee as soon as they were received on the final day of the eight-week statutory consultation process and subsequently by Court. The University had offered from January onwards to engage with the Business Committee's Ordinances and Resolutions Sub-Committee on the detail behind the draft ordinances and the rationale for proposed changes in line with the collaborative approach agreed with the Business Committee in 2017. These offers were not taken up. Secondly, individual General Council members had been consulted directly on the draft Ordinances by email communication to all members. A clear majority of those who responded to the consultation supported the proposed change from election to a skills-based appointment process, a route which the other ancient universities had already adopted. Thirdly, the way ahead agreed by Court took full account of the Business Committee working group deliberations, agreeing with the principlesbased approach that the working group had proposed and differing only in terms of the detailed composition of the selection panel. A majority of members of the selection panel would be members of the General Council, and, indeed, ex officio members of the Business Committee - either as Court lay members who were graduates or qualifying members of the Executive.

Before opening up questions to the floor, the Chancellor asked for further information in relation to the position adopted by the other ancient universities and on whether the Scottish government had any role in this matter.

The Registrar and Clerk confirmed that the other ancient universities had, over the past few years, all moved away from electing their General Council Assessors to a skills-based selection process. Some had incorporated the General Council Assessors into their overall non-executive membership and had dispensed with the separate title. This was not the case at St Andrews, where the intention was to preserve a distinct role and identity for the General Council Assessors. The Registrar and Clerk confirmed that the proposed changes to Ordinance were consistent with government legislation and with all statutory requirements.

The Chancellor then invited questions or observations from the floor.

In response to a question about the numbers of responses from General Council members to the consultation on the Ordinances, the Registrar and Clerk confirmed that no responses from individual members had been received to the consultations on the composition of Court or Senate. In relation to the ordinance on General Council Assessors, 13 responses were received, the majority of which had been in favour of the changes proposed by Court.

Another member questioned whether the proposed system would result in even lower General Council participation in University Governance and further distancing between Court and General Council. The Registrar and Clerk responded that the changes proposed were intended to strengthen relationships between General Council and Court, both by retaining the distinct role of the General Council Assessor, and by including in the post description for that role a requirement for the incumbent to engage with the General Council and bring its perspectives to Court.

A final comment from the floor expressed appreciation for the continuing work of the Business Committee.

In the absence of any further questions or observations, the Chancellor thanked the Acting Convener for her report and called upon the Principal to deliver the University Address.

4. University Address - Professor Sally Mapstone, Principal and Vice-Chancellor

The Principal reported on a number of important matters since her last update to General Council at the end of November.

Overall, the University is in strong shape. Undergraduate application numbers for the 2019-20 entry look healthy. The total number of applications is up by 3%, with Overseas applications up by 12%. Postgraduate Taught applications are up slightly whilst Postgraduate Research applications are down slightly, and the Principal was pleased to report strong recruitment to ScotGEM, the Graduate Entry Medicine programme launched in collaboration with the universities of Dundee and the Highlands and Islands last year. Competitively won research funding is in line with plans, with awards currently standing at a little over £25m.

Following the successful completion of the 600th Anniversary Campaign, which raised over £100 million, work has begun on scoping out a new campaign with the aim of it being launched in quiet phase over 2020. The redevelopment of the Madras site on South Street as a hub for the Social Sciences will sit at the heart of this new campaign, alongside a range of other exciting projects, supporting the development of science and medicine on the North Haugh, and growing the University's capacity in enterprise education and entrepreneurship.

The Principal reported the excellent news that a real breakthrough has been made by St Andrews in the UK university rankings for 2020. The first of these rankings, the *Complete University Guide*, was published in May and placed St Andrews as Scotland's top university, and amongst the top three in the UK. An even more outstanding result, however, came on 7 June when the *Guardian University Guide* was published and St Andrews achieved its highest-ever rank. This made the *Guardian's* front page, as well as receiving extensive coverage in its additional supplement. The new guide places St Andrews second in the UK, with Cambridge securing the top spot. According to the *Guardian* editors, the strength of the St Andrews student experience, the quality of academic programmes, and the efforts made to widen access and become a more inclusive community are the factors which have helped St Andrews to break away from its perpetual third place in this particular guide. The Principal wrote to staff and students to congratulate them, and looked forward to testing out a new phrase, 'Saint-bridge', with the Vice-Chancellor of Cambridge when he visits this autumn!

The first of the major international university rankings, the *QS World University Rankings*, was also published in June. St Andrews remains amongst the global Top 100 universities. It has become increasingly challenging for Scottish universities to compete in the international rankings, and strategic steps are being taken to build our reputation, as surveys of academic and employer perceptions of universities have a marked impact.

The Principal moved on to the University Strategy for 2018-2023, which was launched in October. The document has lent tangible momentum to work across the University. The Strategy is built on four inter-connected themes: World-leading St Andrews, Diverse St Andrews, Global St Andrews,

and Entrepreneurial St Andrews, and the whole is underpinned by a University Social Responsibility statement. Five enabling strategies in Accommodation, Digital, Estate, Finance, and People will support the roll out, and will be finalised for the start of the next semester.

In terms of progress, under the World-leading pillar, the University's commitment to carrying out education and research at the highest levels of internationally recognised excellence has led to consideration of how Schools can be enabled to build further strategic capacity. To that end, the Principal had visited each of the University's 19 Schools over this academic year. A key focus is on developing the leadership of the Schools, and consideration is also being given as to how budgets can be best shared so that Schools can scope and resource plans. The Principal saw value in devolving further elements of the budget, particularly those regarding staff costs, to Schools. Discussion of a range of perspectives on this will continue over the coming year. Under this pillar, focus group meetings have also been held with academic staff on the direction to be given to six inter-disciplinary research themes. Some of these, such as Peace, Conflict and Security, and Materials for the Modern World, will be quick to take shape, whilst others may require more time to distil this University's unique offering. The Scottish Oceans Institute is an established interdisciplinary activity that provides an example of what it is possible to achieve.

Tangible progress is also being made under the Diverse St Andrews pillar. A second cohort of mentors and mentees have started on the Elizabeth Garrett programme, and in the latest round of Athena SWAN awards, both Schools which submitted applications, the School of Classics and the School of International Relations, attained Athena SWAN Bronze. The University now has nine bronze and three silver School-level awards.

The Principal moved on to Entrepreneurial St Andrews where a real step change is underway. Following the announcement of the success of the Tay Cities Deal last November, work is now focused on three long-sighted projects. The first of these is a Centre for Clean Energy, where £13.5m will be invested in a platform on which industry and academics can engage to take technologies from the lab to sub-utility scale, so that they are ready to deploy in the market. There is a strong focus on hydrogen and storage, as well as on the conversion of biomass and waste, such as plastic bottles, into other forms of fuel.

£6.5m from the Governments will be augmented by £3m from Fife Council to invest in an innovation space on the Eden Campus. This will include a co-location space to support new business ventures, flexible office accommodation for established businesses, and other workspaces where innovative companies can prototype new products. The first part of this, the co-location space for new ventures, is likely to be delivered at the same time as the completion of the move of professional services to Eden Campus in early 2020.

The Tay Cities Deal will also enable the University to invest £7m in a smart electrical grid for North East Fife, and a state of the art electrical substation will be built on the Eden Campus with a direct connection to St Andrews.

A programme board led by the Quaestor is overseeing this work, and an Outline Business Case has been submitted to both Governments whilst the Full Business Case is being developed. This will be submitted in November 2019, and is expected to be signed in December. The Tay Cities Deal is helping the University to leverage other funds and the Scottish Funding Council has also given favourable terms to make a multimillion pound investment in solar energy on Eden Campus too.

In support of these outstanding investments in infrastructure, the University's institutional and professional capacity for entrepreneurship is also being reviewed. St Andrews Applied Research, or StAAR, is the University's holding vehicle for all of its commercially focussed activities, and a Board, chaired by Brett Simpson, the CEO of Bridon-Bekaert, has recently been established to provide oversight and, indeed, challenge to management, so that Entrepreneurial St Andrews can be delivered.

This has already triggered a review of the University's Patent Portfolio, challenging what it chooses

to protect. Following the external review of the University's Knowledge Transfer Centre last June, its work has been re-focused on technology transfer. Recruitment is under way for an Intellectual Property Manager and two Commercialisation Managers. To communicate its new focus, the Centre will be renamed the Technology Transfer Centre. StAAR is also leading the University's thinking on the creation of an investment fund to support new commercial ventures, and donor support will be sought to provide grants to invest in new ideas and technologies. Related to facilities at Eden Campus, StAAR has initiated a review of support accommodation and services for new entrepreneurs, and this has stimulated the development of a road map for entrepreneurial training and education, some parts of which have already won support from a donor. Finally, the StAAR Board is reviewing all the entities operating under the aegis of StAAR to ensure that performance is being driven.

Lastly in this section, Social Responsibility continues to underpin everything the University does, so alongside these commitments to environmental and economic sustainability, investment is being made in the institution's social fabric. The University's first ever Community and Social Responsibility Officer, Lesley Caldwell, has just been recruited. In addition to helping to identify examples of good practice and opportunities to enhance the University's contributions, Lesley will be spending a great deal of time meeting and listening to groups and individuals in the local community about the ways in which the University and the local community can support each other.

The University also remains deeply engaged in discussions of local healthcare provision. Its challenge to the proposal made last year to close the out-of-hours St Andrews Treatment Centre has led to an improved proposal that would see a more generous service maintained, and this is now agreed, although the implementation date remains unclear at present.

The context within which the University operates continues to present some significant challenges. Following the delay of the Brexit decision deadline to 31 October, the political process around Brexit continues to be mired by prolonged uncertainty. The Principal explained that whilst this undoubtedly has negative impacts, the delay is expected to have some positive implications for universities, at least in the short term: any further Horizon 2020 research funding won will be secure as all grants signed by the departure date will be covered by the UK government underwrite; Erasmus+ 2019 bids, which fund student and staff mobility should be guaranteed, as these bids are due to be ratified by the European Commission over the summer; and finally, EU students and staff arriving in the UK before 31 October will be eligible for settled status.

In April, the Scottish Government announced its commitment to continue the funding of EU students who commence their undergraduate studies in Scotland from the academic year 2020-21 for the duration of their programme. This is an additional year on existing commitments. As had been the case for many months now, the University continues with its preparations for a variety of Brexit scenarios, and website content to advise staff and students is being kept up to date.

The Principal went on to explain how the Augar review, published on 30 May and commissioned by the UK Government to consider the entire post-18 education system and funding in England, was adding to an already challenging context. With regard to Higher Education, as expected, it is recommended that the tuition fee cap be reduced to £7,500 per year, from the current £9,250. The report recommends that the Government should replace in full the lost fee income by increasing the teaching grant, and favours an orientation of funding towards the UK Government's Industrial Strategy, and thus STEM (science, technology, engineering, medicine and maths) subjects. The report goes on to propose that the student loan repayment threshold be reduced and the repayment period be extended. It also recommends the reintroduction of maintenance grants of at least £3,000 per year for disadvantaged students.

The Principal described how such potentially major changes in England would inevitably reverberate in Scotland. The expectation is that the Scotlish Government would continue with the current policy of capping fees for students from outside Scotland at the level set in England. Compensatory top-up funding from the UK government, as recommended by Augar, would see a significant increase in Barnett

consequential allocations to the Scottish Government. It would be vital that this is passed on to universities, or the funding situation could start to unravel. Together with Universities Scotland, St Andrews will lobby hard for this. Announced as it was during the final days of Theresa May's tenure, it remains to be clarified how the Augar report's recommendations will be taken forward.

More locally, the Scottish Budget, approved by the Scottish Parliament on 21 February, makes for frustrating reading for universities, especially given the ever increasing demands placed upon them. Overall this University anticipates a reduction in funding, and estimates that the Scottish Funding Council grants as a percentage of income will drop from 15.2% for the last academic year, to 14.7% for this. The Principal continues to engage with Universities Scotland and the Scottish Funding Council to make the case for a better settlement.

In terms of Global St Andrews, the Principal had travelled to the US twice since the last meeting of General Council, as well as to Ireland and Finland, and will travel to Zambia this summer to participate in the University's charitable commitments in that country. On her last trip to the US it had been a particular pleasure to travel with the Chancellor for the launch of the US chapter of the Chancellor's Circle in New York and Washington. The Principal thanked the Chancellor for enthusing members of the Chancellor's Circle about what their legacies can achieve, and his insights on Brexit had also been greatly appreciated.

The University is continuing to add depth to its strategic US partnerships. The Principal reported that, over the past few months, at Johns Hopkins University positive discussions have been held which build further on the new Creative Writing Study Abroad programme, as well as Pre-health; at UC Berkeley, the developing relationship between the School of Management and their Institute for European Studies is moving forward, and plans for staff and postgraduate exchange are making progress; and at Emory University plans are being finalised for a new Collaborative Research Grants project between their Halle Institute for Global Research and St Andrews. Discussions are also exploring future opportunities for multi-lateral collaboration with Bonn University; and finally, the annual April visit to William & Mary included a meeting with their new President, Professor Katherine Rowe.

Elsewhere, the Provost of the University of Melbourne visited St Andrews in June to advance work on the St Andrews-Melbourne joint undergraduate degree programme. Links with the University of Hong Kong continue to advance, and the value of joint activity on academic programmes is currently being mapped out. The University would, at the end of June, host a visit by the China Scholarship Council. St Andrews typically has about 500 Chinese students registered on its courses and its relationship with the China Scholarship Council brings up to 65 excellent Chinese doctoral students to the University.

The Principal was pleased to report that the launch of the University of St Andrews Global Fellows' scheme, which enables talented researchers and teachers from institutions around the world to be invited to St Andrews to collaborate, had been exceptionally successful with over 180 applications received. Ten places have been offered for this coming year, with Fellows due to arrive from institutions including UCLA, the University of British Columbia, and the universities of Auckland, Bonn and Melbourne.

Turning to the University's Estate, the Principal underlined the importance of having a distinctive and international class Estate in order to attract people to the University. Facilities continue to be developed. The Principal updated on the fire that took hold at the Biomedical Sciences building on Sunday 10 February. The fire was a result of an accident with chemicals, classified by the insurers as 'human error'. Fortunately, the emergency planning the University has in place for eventualities such as this meant that the response was swift in support of the Emergency Services, who did such an excellent job to bring the fire under control. Thankfully no one was injured.

Four floors of the BMS building were affected and, after a focus on the preservation of time-critical research materials, attention has moved to the refurbishment process. To accommodate displaced staff

and students, temporary buildings will be put up on the North Haugh imminently, which will provide lab and teaching space. Other labs at the Purdie will be refurbished. It is now important to not only think about how to bounce back but also to how we can bounce forward. To support this, the Master has initiated a wide-ranging discussion of the North Haugh that addresses the interactions of education, research, infrastructure, and buildings, with the aim of establishing an integrated and ambitious strategy for this area.

Elsewhere on the Estate, the First Minister has accepted an invitation to open the remarkable new home of the Scottish Oceans Institute this September. Progress continues to be made on the new Laidlaw Music Centre, and it is expected that the Centre will come into use around the end of the year, enabling acceleration of the refurbishment of the Younger Hall. In addition, the MUSA (Museum of the University of St Andrews) extension project has commenced. As reported in the local press, plans for St Andrews West were approved by Fife Council in May, subject to legal agreement. This site will add to both the town and University, providing space for the new Madras school building, a care home and hotel, as well as increasing the stock of affordable housing. This sensitive proposal will enable St Andrews to grow to meet its long agreed need for additional housing, whilst maintaining what is valued by everyone. More specifically, as previously briefed to the General Council, the University had reached agreement with Fife Council to dispose of land at Langlands for the new Madras College in return for the Madras South Street site, in a deal that included funding to construct a road into the Langlands site. This agreement was subject to a number of conditions, such as Planning Consent being granted. The Principal was glad to confirm that all of these conditions have now been met and earlier in the week Fife Council gave its final approval to conclude the contract. Contractors are expected to be on site to start building the school within the next four to six weeks, with the build planned to take two years. During the construction period, the University will lease the South Street site back to the Council for use, as now, as a school.

Finally, the Principal reported that, over the past six months, work led by the Vice-Principal (Governance) has focused on making the Ordinance changes necessary to ensure that the University is compliant with the Higher Education Governance (Scotland) Act 2016, and that Court benefits from the best skills set amongst its lay membership. As reported earlier in the meeting, despite best efforts, turnout in General Council Assessor elections has been only around 2.5% of the membership. Accordingly, following consultation with the General Council membership, General Council Assessors will in future be appointed through a competitive skills-based appointment process analogous to that for Court's Non-Executive members. The General Council Assessors will remain as distinct positions on Court, with specific responsibilities for engaging with the General Council and bringing the perspectives of General Council to Court. The selection panel for both General Council Assessors and Court Non-Executive positions will contain a majority of General Council members. These new arrangements aimed to strengthen the links between Court and the General Council, whilst ensuring that General Council as a whole clearly owns the process for nominating and appointing its assessors to Court.

Before concluding, the Principal remarked on the Summer Graduation - an exceptional display and the largest ever, with nine graduation ceremonies and just shy of 2,000 students graduating.

The Principal closed her address by congratulating members of the University community who received awards in the Queen's New Year and Birthday honours this year. Professor Robert Bartlett, Emeritus Professor at the School of History and John Jardine, former Bedellus were recognised in the Queen's New Year's Honours with a CBE and BEM respectively. In the Birthday honours, Professor Sarah Broadie, Professor of Moral Philosophy in the School of Philosophical, Anthropological and Film Studies and Wardlaw Professor was awarded an OBE, as was Professor Ali Watson from International Relations. Professor Ian Boyd, formerly Director of the Scottish Oceans Institute and currently Chief Scientific Adviser to DEFRA as well as a Professor here, was awarded a Knighthood, whilst former Rector and graduate Catherine Stihler was made an OBE.

The Chancellor in thanking the Principal for her address, observed that the success that had just been described depends on the quality of leadership at all levels of the University, commending the Principal

on the outstanding quality of her own leadership throughout this extraordinary period of change, and which he was sure would continue. He then invited questions or comments from the floor.

One member asked about cliff erosion on The Scores, given the close proximity of some University property. The Principal responded that geographical surveys had been undertaken and that the University also benefited from advice shared by neighbours in private accommodation on The Scores. The University had not recently received any advice that had given cause for alarm but would, of course, continue to be vigilant and to draw upon expert advice, for which the Principal was very grateful.

There being no further questions or observations, the Chancellor thanked the Principal once again for her report and invited Professor Vincent Janik, Director of the Scottish Oceans Institute, to deliver his presentation.

5. Presentation by Professor Vincent Janik, Director of the Scottish Oceans Institute entitled "The new Scottish Oceans Institute: a Hub for Excellence and Innovation in Marine Science" Professor Janik was delighted to have been invited to address the General Council about the Scottish Oceans Institute (SOI), and particularly the new building. The official handover date to the University was in just two days' time. The SOI had grown out of the Gatty Marine Laboratory, founded in 1896, and over the years had experienced a number of extensions - in the 50s and 60s an extension was built that is still in use and, in the 1990s, another extension was built to accommodate the Sea Mammal Research Unit that had come up to St Andrews from Cambridge.

In 2009, the SOI was established in recognition of both the indisciplinarity of the field and also of all of the marine sciences in St Andrews outside of the School of Biology. The other members of the SOI, in addition to the School of Biology which is the largest in terms of the number of people, are the School of Mathematics and Statistics, the School of Geography and Sustainable Development and the School of Earth and Environmental Sciences. The total number of staff including postgraduate students is 150.

St Andrews is a small university and the SOI is a comparatively small institute. While this has sometimes been seen as a weakness, Professor Janik argued that it can be regarded as one of its particular strengths as it forces us to truly embrace Global St Andrews and the SOI certainly has a very wide-reaching network of people with whom it interacts and collaborates. Furthermore, in the marine sciences, almost all projects nowadays are not only interdisciplinary but also cross-institutional. Some indications of this are that the SOI is housing the Directorate of the Marine Alliance for Science and Technology Scotland (MASTS), which brings together all the marine sciences in Scotland, as well as the largest Marine Mammal Research Group in the world (SMRU), which was not the largest when it came up from Cambridge. More and more people in this field are being attracted to St Andrews, including Professor Janik himself. This also feeds into World-Leading St Andrews because SOI is certainly a world leader in this field, in addition to being one of the founding members of the European Marine Biology Resource Centre (EMBRC), which combines European marine laboratories and makes research infrastructure available across countries.

Professor Janik outlined the mission of the SOI, which is to conduct world-class basic and applied research on marine systems, to provide information and advice on marine issues to government and society, to educate a new generation of marine scientists, and to provide marine research tools and resources to the international community of ocean users, before going on to describe how the new building supports this mission. The extensions in the 1950s, 1960s and 1990s are still fully functional and in use. A new research aquarium has been built. The main entrance on the East Sands has an area behind it that is available for outreach and information exhibits, including a seminar room which is available for teaching for the University but also for visitors, for example, schoolchildren visiting the Institute. There is much-needed office accommodation for Principal Investigators, post-doctoral research students and PhD students and masters students. In between the buildings, there is a collaboration zone which provides space for people to interact, which is very important as some of those working in the Institute have their permanent office in other departments.

The development significantly increases the footprint of the Institute and, together with the addition of a second floor, provides much more space to house scientists and to conduct research. Most of the upper floor comprises services for the aquarium and for the building, including further office accommodation and open plan offices for postgraduate and post-doctoral students and various different meeting and conference rooms.

The new aquarium is not only the most recent, but also the largest research aquarium in the UK. There are individual temperature-controlled rooms, many of which can be cooled down to 4°C or heated up to 30°C to enable work on polar as well as tropical species. Tanks of varying sizes can be installed in this large research area to accommodate very small fish, such as zebra fish that a member of the School of Psychology and Neuroscience is working on, as well as larger organisms like nurse sharks that grow to over a metre in length and will require larger tanks.

Professor Janik commented on how delighted everyone is to have this facility, especially given that only three years ago, the original rooms from 1896 were still being used. He then went on to explain how a great many things are necessary to create a suitable environment for animals. Seven filters pump water into the building from the North Sea. The beach itself provides some filtration before water reaches the SOI intakes but modern filtration techniques, such as UV and ozone treatment, remove living organisms, while a protein skimmer removes protein from the water. Carbon filters are important for fresh-water animals as fresh water from the mains contains chlorine which is harmful to fish. Pumped water has harmful small gas bubbles so the water has to sit in large header tanks above the aquarium rooms for some time before being gravity fed down into the aquarium below. The large amount of modern technology involved is a real change to how aquaria were built when the Gatty Marine Lab first opened.

In the Reception and Outreach area there is a new reception desk in a larger space with a window which will hold a large tank with local wildlife, including some of the local sharks that can be found off the East Sands. This is a new space into which the general public can be brought to learn about what is happening in the building. Some of the rooms have already been used for an outreach event - the Bioblitz – a biodiversity survey which this year encouraged the general public to bring to the building any kind of living organism, whether it be plant or animal, from within a mile of the SOI, where experts would help them to identify what they had found and then record this in a database. This biodiversity survey is conducted throughout the world and all the data feeds into a single database.

Professor Janik was pleased to report that in the display area, for the opening of the building, there would be a small exhibit focusing on women's contribution to marine science, contributing to Diverse St Andrews. Two new academic members of staff – both female – have been appointed, one of whom is particularly tasked with outreach in this area.

The office and teaching space is of a much higher quality than before. The coastal path can be seen from the Seminar Room and the stones in the wall outside the window are stones from the old Gatty Marine laboratory, in an effort to provide some continuity in terms of the history of the place. The sea view is marvellous and animals can sometimes be seen from the windows and open space.

The new SOI will bring all marine scientists back into one building (making the collaboration zone particularly important), will provide a home for marine biology students from their first year, will allow the public to learn about marine science research at the University, and will provide a state-of-the-art aquarium with an increased water flow from previously 20 to now 100 cubic metres per hour.

Teaching is also at the heart of the SOI's mission and it delivers three different taught master courses – in Marine Mammal Science, in Marine Ecosystem Management and a distance learning course on Sustainable Aquaculture. In addition, pre-honours and honours teaching in Marine Biology will be brought back into the new building. Teaching is research led and very important to everyone in the SOI. SOI is a world leader in the design and production of animal-borne tags and in ocean noise, particularly when it comes to mitigating the impacts on marine mammals, and also has a very strong group in animal

monitoring, population sizes, and animal health. A lot of the non-marine mammal research is in the areas of fisheries and aquaculture, optimising food production and reducing environmental effects. All kinds of industrial impacts are researched, including marine energy, shipping, tourism, plastics in the ocean, and climate change. Also, in terms of food security, the SOI are advisers to 15 governments on their fish stocks and how to manage them.

Professor Janik reported the total value of grants held in the SOI in 2018 to be £17M - this is, of course, not an annual budget and the grants cover several years, but provides a snapshot and an indication of how successful the SOI has been.

Going back to World-Leading St Andrews, the SOI continues to have very high-profile publications. Examples from the last few years include papers in *Science* and in *Nature* on predicting the global killer whale population collapse and also on amphioxus genomics. From this year, a paper was published in *PLOS Biology* which uses neo-infra-red spectroscopy to look at the brain activity of a seal while it is free swimming and showing its normal behaviour and, most recently, the vocal learning abilities of gray seals studied in Professor Janik's lab was published in *Current Biology*.

The SOI has always had Entrepreneurial St Andrews at its heart and has long engaged not only with government, but also with industry. Spin-out companies include Xelect, which provides genetic solutions for aquaculture; GenusWave - a company that produces acoustic deterrent devices to be used to run fish farms in industrial installations; SMRU Consulting that takes contracts mostly from industry for environmental impact assessments of activities in the marine environment; the SMRU Instrumentation Group that builds and sells the animal-borne tags to the scientific community and then, most recently, the Great British Prawn – a company interested in the Guardbridge development, but also hopefully wanting to do some research and development at the SOI, and the Fish Vet Group with whom SOI is licensing out a small new test for salmon which they want to commercialise. Professor Janik emphasised that entrepreneurship is something that the SOI wants to embrace and to share with students in its teaching.

Finally, the SOI provides evidence-based science and informs government and society. Examples include the oceanographic data collected by seals carrying SMRU tags built in the SOI. This data improves climate models by 28%. The SOI has also been involved in the Deepwater Horizon disaster analysis, predicting that the dolphin population will take over 40 years to recover from this incident.

In the UK Research Excellence Framework in 2014, Biological Sciences at St Andrews were rated second in the UK for research impact and four of the six impact cases in our submission came from the SOI.

Professor Janik concluded by looking ahead briefly at the research strategy in this new building. The different areas that will be focused on will include: the cumulative effects of stressors on marine life; the genetic foundations of adaptation to environmental fluctuations; ecosystem engineering and niche construction; management and conservation of marine resources; and new directions in marine engineering and instrumentation. All of these are linked to applied issues in the marine environment and helped secure a quarter of the funding for the new building, with NERC and the Wolfson Foundation providing £4m to the University based on this strategy.

The Chancellor thanked Professor Janik for his presentation and invited questions and comments from the floor.

One question from the floor related to the impact of investment in the new building on income through entrepreneurial activities. In his reply, Professor Janik referred to working closely with other areas of the University and looking forward to involvement with Guardbridge. A variety of marine companies had already expressed interest in taking advantage of the development at Guardbridge and also hopefully taking advantage of the expertise SOI has in research and development. In terms of the flow of income, he believed he would have a key role to play in making academic staff aware of opportunities.

A second question asked whether any consideration had been given during the planning stage to the use of rainwater collection for supplying the freshwater requirements of the new building. Professor Janik confirmed that it had been considered, but that even in Scotland the weather was still relatively unpredictable. The need to ensure a constant supply of water meant that using carbon filters to treat the mains water was deemed to be a better solution to ensure that continuity.

There being no further questions, the Chancellor thanked Professor Janik for a most interesting presentation. He planned to take advantage of the access for the public to take a look at the new SOI for himself, and encouraged members to do the same.

6. Any Other Competent Business

No notice had been given of any other business. The Chancellor invited any final comments from the floor.

A final comment from the floor was made, appreciating that the Acting Convener of the Business Committee had taken over the role in somewhat trying circumstances, and wishing her and her colleagues - old and new - every success in the coming year.

There being no further comments or questions from the floor, the Chancellor called the meeting to a close and invited the Chaplain to pronounce the benediction.

Mr Alastair Merrill
Registrar and Clerk to the General Council