Results and Recommendations from the Project Juno Survey.

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Preamble

Project Juno is an initiative run by the UK Institute of Physics to recognise and reward physics departments that can demonstrate that they have taken action to address the under-representation of women in physics, and to encourage better departmental practises for all genders.

In September 2015 the Physics Department Equity Working Group surveyed all physics staff on their experiences and perceptions of the department relating to processes, structures, and culture that would support improving gender equity. The questions were based on the Project Juno Checklist – 32 items that correspond to the five Project Juno principles and key criteria. Presenting the checklist items as survey questions means that the responses reflect staff perceptions, awareness, and experiences of how the department is performing on the principles and key criteria.

Participation was invited from 61 staff associated with the Physics Department, including Post-docs; Research Fellows; Teaching Fellows; and Technical, Professional and Affiliated Staff. The last grouping includes those staff listed on the department's webpage but not housed within the department, and other University employees affiliated with the department (e.g. through the CoREs Te Pūnaha Matatini and the Dodd-Walls Centre) and located within floors six and seven of the department. 38 responses were received. These were comprised of PTF: 2/2 (1M, 1F); Post-doc/Research Fellow: 6/12 (3M, 3F); Lecturer/Senior Lecturer: 9/10 (7M, 1F, 1T); A-Prof/Prof: 12/17 (12M); Technical/Professional/Affiliated Staff: 10/19 (4M, 6F). The low response rate for the last category is to be expected as it included a large fraction of staff who are only peripherally associated with the department, for example though financial services roles. The relatively low response rate for Post-docs and Research Fellows may indicate a lack of engagement, or perceived lack of inclusion within the department, from this group. The lower response rates for academic staff at A-Prof/Prof level, relative to those at Lecturer/Senior Lecturer level, may also indicate that the former group is relatively less interested in engaging with the issue of gender equity within the department.

Each question presented respondents with a statement corresponding to an item on the Project Juno checklist and asked respondents to rate their assessment of the extent to which the statement was reflected within the department, according to a five point scale:

A - embedded
B - adopted
C - developing
D - compliant
E - not in place

Each question also provided an option for respondents to add a comment to elaborate on their response. Most questions received around 5 or 6 comments. Respondents were able to skip questions, but there was no option to click an "I don't know" response. As a consequence, it is likely that some respondents used a middling response – C – to indicate a "don't know" or "no perception" response rather than skipping the question. This is consistent with the low skip rate (around 2—3) for each question.

We report on the responses aggregated to the level of the nine main components covered by the Project Juno principles. We have summarised comments to avoid identifying individuals. For each component we include a table with quantitative responses for individual questions, colour-coded by quintile.

Survey results

Principle 1: A robust organisational framework to deliver equality of opportunity and reward.

1.1 Establish an organisational framework:

Quantitative responses were mostly middling (B-C), but spanned the full range from A to E.

Comments indicated particularly low opinions of departmental structures for management and decision-making being transparent and accountable to all staff. More positive comments (and more A responses) were received for the statement "The department allocates time and resources to support women in science activities, initiatives and programmes", though comments also indicated a concern that much of this was "third-shift" work; i.e. additional work beyond that accounted for in workload models, undertaken by those who most value the outcomes of such activities. Such work is typically not formally rewarded.

Comments indicated a clear perception that while leadership from the HoD, & senior academics demonstrates a willingness to support good practise, there is, however, a lack of specific action. Good words are not translated into good deeds.

Some responses also indicated a perceived resistance from some of the professoriate.

There was a theme in responses that decision-making can be ad hoc and is seen as not being transparent. There is a perceived "favoured group" of staff whose input is welcomed while that of other staff is not sought or is ignored.

There was a perception from some that resourcing for establishing initiatives, to foster and promote women in science, is marginal and that the lack of transparency prevents some staff from accessing what resourcing might exist.

Quantitative summary:

	A	B	C	D	E
Q1 (1.1.1)	0%	47%	50%	3%	0%
Q2 (1.1.2)	3%	29%	45%	16%	8%
Q3 (1.1.3)	11%	38%	41%	11%	0%

Figures are rounded to the nearest percentage point and therefore may not sum to 100.

1.1.1: The Head of Department, or another senior academic, leads and champions good practice for women-in-science initiatives and programmes. Senior staff are generally committed to making change happen and "owning" the action.

1.1.2: The departmental structures for its management, organisation, operations and decision-making are clear, transparent and accountable to all its staff.

1.1.3: The department allocates resources (time, admin support, facilities and funding) to support its women-in-science activities, initiatives and programmes.

1.2 Monitoring and evidence base

Respondents identified collecting and reporting on both qualitative and quantitative data as an obvious weakness of the department. There were, however, a small number of responses indicating a belief that the department made good use of qualitative data from focus groups, et cetera, (though it was not clear what this data might be). Most quantitative responses were C-D.

Issues raised include that when data is collected it is not used or acted upon, and that data collection doesn't occur as a matter of process. While it was not raised as a comment, the perception reported in the previous section, that certain voices in the department have a privileged audience with the HoD or senior leadership would seem to also be relevant here, in the context of qualitative data from discussions and focus groups.

Quantitative summary:

	A	B	C	D	E
Q4 (1.2.1)	0%	16%	32%	24%	27%
Q5 (1.2.2)	11%	11%	37%	29%	13%

Figures are rounded to the nearest percentage point and therefore may not sum to 100.

1.2.1: The department collects, monitors and reports data, including staff and student profiles, by gender. Information on male and female differential representation and progression (at all levels from undergraduate entrants to Professors) is analysed.

1.2.2: The department accesses and uses qualitative data gained from staff surveys, discussions, focus groups, etc.

Principle 2: Appointment and selection processes and procedures that encourage men and women to apply for academic posts at all levels

2.1 Ensure that processes and procedures are fully inclusive.

Impressions were particularly poor regarding the department's implementation of this principle. Most responses were C-E. Comments indicated that, while there is a belief that such processes and procedures are important, there was a lack of awareness that any such processes are actually in place. There was also a lack of awareness of how career breaks are accounted for in appointments, a perception that there is limited training on unconscious bias, and concern that future training/awareness will be ad hoc. These could be addressed by developing internal guidelines and expectations for appointment processes, beyond those required by the University.

Comments also identified the need for a departmental induction programme for all new staff, including Post-docs, where department processes, procedures, expectations and practises would be covered.

Quantitative summary:

	A	B	C	D	E
Q6 (2.1.1)	0%	31%	17%	14%	37%
Q7 (2.1.2)	0%	17%	28%	11%	44%
Q8 (2.1.3)	3%	9%	26%	11%	51%

Figures are rounded to the nearest percentage point and therefore may not sum to 100.

2.1.1: The department has a clear policy on how career breaks are considered in relation to appointment and selection.

2.1.2: The department ensures that all staff who interview have undertaken appropriate equality and diversity training so that those who make decisions are aware of male and female differences and unconscious bias.

2.1.3: There is a departmental induction programme that introduces departmental practices and procedures to all staff, including post-doctoral researchers.

2.2 Take positive action to encourage under-represented groups to apply for jobs.

Quantitative results indicated a positive view of the department's progress in this regard but there were comments indicating concern that what encouragement does occur is ad hoc, rather than deliberate, and that there are no clear strategies. This makes any good results somewhat tenuous since it relies on individuals going out of their way to take action as an exception, rather than it occurring as a matter of procedure.

Quantitative summary:

	A	B	C	D	E
Q9 (2.2.1)	33%	36%	14%	8%	8%
Q10 (2.2.2)	25%	44%	14%	14%	3%

Figures are rounded to the nearest percentage point and therefore may not sum to 100.

2.2.1: The department encourages both women and men to apply internally for appointment.

2.1.2: The department actively attempts to identify and attract appropriate external male and female candidates.

Principle 3: Departmental structures and systems that support and encourage the career progression and promotion of all staff and enable men and women to progress and continue in their careers.

3.1 Transparent appraisal and development.

Quantitative responses in this section were mixed. APR and Evolve processes mean that respondents felt that they were regularly assessed (A & B responses), but responses regarding any follow up from the appraisal were spread equally from A to E, with comments suggesting a view that appraisal documents are simply filed away and ignored.

Comments also suggest that appraisal and development seemed to be driven from outside the department, via PBRF and APR goals, rather than by the department having its own goals, guidance, and documented support.

It is worth noting that the APR process is currently under review at University level. The new process may address some of the issues raised here.

Quantitative summary:

	A	B	C	D	E
Q11 (3.1.1)	37%	40%	3%	17%	3%
Q12 (3.1.2)	19%	28%	19%	17%	17%
Q13 (3.1.3)	0%	11%	23%	17%	49%
Q14 (3.1.4)	6%	29%	29%	17%	20%
Q15 (3.1.5)	6%	14%	14%	26%	40%

Figures are rounded to the nearest percentage point and therefore may not sum to 100.

3.1.1: All staff, including post-docs, are regularly appraised.

3.1.2: Staff are clear about what happens to appraisal documents and what follow-up action should be taken, where necessary.

3.1.3: The department has a career development/mentoring scheme in place and the department encourages all staff (i.e. trains them and provides them with guidance) to become mentors or mentees.

3.1.4: Staff understand their responsibilities towards providing career development and career advice for research staff, including post-docs.

3.1.5: The department encourages all staff to access careers advice, and monitors the appropriateness, value and uptake by all staff (from post-docs to professors) of the career development training, advice and appraisal that is available to them.

3.2 Transparent promotions processes and procedures

Responses in this section were either broadly distributed (A-E) or were poor (D-E). Comments indicated a concern that there is no departmental support for preparing for promotion and that feedback mechanisms are poor. There were also concerns that it was unclear how career breaks are treated. A number of comments mentioned both the current lack of, and perceived value of unconscious bias training for those assessing promotions, including at professorial level. Perhaps the strongest case for unconscious bias training was made by the comment expressing scepticism that such training might ever be needed.

Quantitative summary:

	A	B	C	D	E
Q16 (3.2.1)	3%	18%	40%	21%	18%
Q17 (3.2.2)	3%	18%	18%	27%	33%
Q18 (3.2.3)	9%	24%	24%	27%	15%
Q19 (3.2.4)	0%	6%	30%	15%	48%

Figures are rounded to the nearest percentage point and therefore may not sum to 100.

3.2.1: *The department's promotion processes and criteria for nominating and supporting candidates for promotion are well communicated, consistent, fair in application and transparent. Staff in the department are supported through the process with, for example, help in the preparation of the application and mock interviews.*

3.2.2: *There is a clear policy on how career breaks are considered in the promotions process.*

3.2.3: *Feedback is given to unsuccessful applicants for promotion.*

3.2.4: *The department ensures that those involved in promotions decisions have undertaken appropriate equality and diversity training.*

Principle 4: Departmental organisation, structure, management arrangements, and culture that are open, inclusive and transparent and encourage the participation of all staff

4.1 Promote an inclusive culture

Quantitative responses were mixed: those questions that asked about values and expectations tended to get a broad range of responses, while those that referred to specific actions that the department might carry out, were rated poorly (D-E). Examples of such explicit actions included ensuring that staff receive equity and diversity, and/or unconscious bias training as part of induction, and monitoring of and reporting on gender of speakers at colloquia.

Themes that came through from comments include the perception that the department lacks socialising events that would present an opportunity to demonstrate inclusive behaviour and that while there are some good role models in the department demonstrating inclusive behaviour, more leadership is required from the professoriate. There was also concern that the department has an entrenched culture that encourages segmentation of staff according to a perceived hierarchy based on job titles. The link between job titles and the department e-mail lists were mentioned in particular as something that may mean that some staff miss out on opportunities.

Quantitative responses indicated a perception that the department is doing well in its inclusion of women and under-represented groups in publicity material, however comments raised the concern that this is largely "window dressing" and is somewhat over-done, to the point of being disingenuous, given the makeup of the department. A related concern was that while there are individual good examples of ensuring that junior staff, women, and under-represented groups receive opportunities to raise their profile, this was somewhat ad hoc. It was also noted that the department is perhaps quicker to take credit for any successes from such groups than it is to demonstrate support for them.

Monitoring and reporting on gender of speakers at departmental colloquia was a clear area where there is an opportunity for improvement, with most staff responding with an E.

Quantitative summary:

	A	B	C	D	E
Q20 (4.1.1)	11%	17%	34%	26%	11%
Q21 (4.1.2)	0%	3%	20%	14%	62%
Q22 (4.1.3)	6%	23%	31%	20%	20%
Q23 (4.1.4)	26%	41%	21%	12%	0%
Q24 (4.1.5)	14%	34%	26%	11%	14%
Q25 (4.1.6)	0%	12%	12%	9%	68%

Figures are rounded to the nearest percentage point and therefore may not sum to 100.

4.1.1: The department has clear values and expectations of the behaviour of individuals to each other (staff and students) and these are communicated to all staff.

4.1.2: The department ensures that all staff undertake equality and diversity training and/or unconscious bias training, as part of their induction or their career development.

4.1.3: Social activities are encouraged and involve all staff including part-time and non-academic staff as well as staff on sabbaticals, career breaks, long-term sick leave and maternity leave. All staff are encouraged and supported to network at faculty, university, regional and national levels.

4.1.4: The departmental image (publicity, photographs, newsletters, job particulars, and prospectus) reflects the contribution of women and under-represented groups.

4.1.5: Junior staff, women and under-represented groups, including post-docs and research assistants, are encouraged to raise their profile internally, e.g. by contributing to departmental research seminars and presenting to research sponsors.

4.1.6: Gender monitoring of speakers at departmental seminar programmes and other similar events is collected and reported on. The department aims to ensure that speakers from under-represented groups are actively sought.

4.2 Transparent workload allocation model

Quantitative results were generally high (A-C), however, comments suggest a view that while the teaching allocation is transparent, other work such as service and mentoring is not so well accounted for. Some comments also expressed scepticism about how well the numbers in the workload allocation model reflect reality.

Quantitative summary:

	A	B	C	D	E
Q26 (4.2.1)	29%	17%	28%	20%	6%
Q27 (4.2.2)	29%	20%	26%	14%	11%

Figures are rounded to the nearest percentage point and therefore may not sum to 100.

4.2.1: The department has fair and open systems for allocating workload (teaching, administration and research) and this is reviewed regularly. The department ensures that the systems are inclusive and fully recognises and rewards all types of contributions (including administration, mentoring, pastoral work and outreach). Departmental roles and responsibilities, including committee memberships, are rotated for staff to gain experience / exposure.

4.2.2: The department communicates the model it uses to determine the workload allocation to all staff.

Principle 5: Flexible approaches and provisions that enable individuals, at all career and life stages, to optimise their contribution to the department, their institution and to STEM.

5.1 Support and promote flexible working practices

Quantitative responses here were either broadly distributed (for questions about perception of supportive attitudes) or low (for questions about concrete actions like policy and monitoring).

Comments indicated that people perceive that things have somewhat improved with regards to flexible working, but that this has happened more by accident than through any explicit effort or communicated practice. Comments also identified the lack of process and policy for offering and monitoring the uptake of flexible working, consideration for work-life balance, career breaks and maternity leave, parental and caring leave, and support for getting people back up-to-speed after a career interruption.

Several comments identified that there are individual cases where some staff appear to have negotiated their own flexible working arrangements – in particular it was remarked that senior staff demonstrate their own flexible work arrangements. However, there is no clear indication that flexible working is supported or how arranging it might be approached. This is problematic as it disadvantages certain groups such as new staff or junior staff who are more likely to lack both support and information in negotiating flexible working arrangements. This is exacerbated by an apparent lack of documentation of any existing flexible working arrangements.

Quantitative responses indicated a general positive perception of support and understanding from the department with regard to parental or caring leave, but were poor with regards to proactively managing career breaks such as maternity leave, including making allowances for those returning to get back up-to-speed.

Quantitative summary:

	A	B	C	D	E
Q28 (5.1.1)	17%	14%	37%	27%	14%
Q29 (5.1.2)	9%	20%	17%	23%	31%
Q30 (5.1.3)	11%	29%	29%	14%	17%
Q31 (5.1.4)	3%	12%	44%	12%	30%
Q32 (5.1.5)	14%	34%	40%	9%	3%

Figures are rounded to the nearest percentage point and therefore may not sum to 100.

5.1.1: *There is clear support from the head of department for flexible working, evidenced by personal take up by senior staff.*

5.1.2: *The department's policy and practice on flexible working is transparent and consistently applied. The department monitors the take-up of flexible working options for both male and female staff.*

5.1.3: *The department's management and operational arrangements reflect the department's understanding of, and commitment to, a good work-life balance for all its staff. For example, department meetings are timed to take account of caring/family responsibilities, work allocation discussions are held with new staff to pick up work-life balance issues, and changes in caring responsibilities are dealt with in a supportive and practical way.*

5.1.4: *The department proactively manages arrangements in advance of, and during, career breaks or maternity leave and provides the support and flexibility to allow returners to get back up to speed, e.g. enabling individuals to focus on their research initially and/ or work part-time with teaching duties limited in the first year after the break.*

5.1.5: *There is clear support and understanding from all members of the department, including the head, for parental and other caring leave.*

Summary

The survey responses revealed a number of themes that cut across the different sections of the survey. These themes reveal some strengths within the department that can be built upon, but also indicate that failings in the department often share common weaknesses. Any plans to address equity and diversity in the department should be mindful of these themes, whatever the context in which the proposed action might occur.

Good attitudes:

The department demonstrates some good attitudes towards improving gender equity. Several comments made mention of supportive attitudes in the department when it comes to addressing gender equity, from the HoD and from a set of colleagues. These comments were backed up by quantitative results – statements about supportive attitudes towards gender equity tended to receive more positive responses than those that related to specific actions to improve gender equity.

Poor follow-through:

Despite the good attitudes, comments frequently identified a lack of "walking-the-talk" when it comes to addressing gender equity in the department. The poorest quantitative responses tend to relate to those statements regarding specific actions taken within the department to address gender equity, or referring to the existence of specific processes. When respondents did identify positive action that supported gender equity, there was concern that the action was ad hoc and was typically un-documented. This means that when action does take place, the benefit of it is less than it might be – other staff members remain unaware of what is possible and the uptake of positive practises is limited.

Lack of information and documentation:

There is a perceived lack of information and documentation about processes, procedures, and practises and this has negative consequences for gender equity. In some cases, information may already exist within university policies but it is unclear how the policies are made operational within the department. Those processes driven by the university (e.g. APR/Evolve/PBRF), were typically seen as being better documented than those within the department or the faculty (e.g. negotiation of flexible working arrangements, support for professional development, promotion and hiring).

We should be more transparent:

Transparency of departmental decision making processes in general was seen to be poor, though some departmental processes, such as the workload allocation model, were seen as being reasonably transparent, even if there were reservations about how well this model reflects reality.

There is concern about a lack of consultation within the department and there is a lack of clarity about the role of the HoD advisory committee. Clarifying the role of the HoD committee has the potential to create a more effective leadership group within the department. Not all department members, or students, will always feel that they are able to directly engage with the HoD on all issues. A well-defined leadership group, that played a role in departmental decision making, could provide more avenues for people to seek information and for people to raise concerns. Department members would need to know that the HoD engages regularly with the group. A standing role, for one or more people, as deputy HoD could have a similar effect.

Better planning:

Responses to several sections indicated concern that the department's approach to processes is ad hoc. Better planning can help the department be more proactive in addressing gender equity. A lack of transparent planning makes it difficult to document processes or to collect data on their performance. It also tends to exclude those staff members with weaker links within the department such as newer staff members and under-represented groups. Demonstrating planning will also help improve transparency as processes are documented and formalised.

We could do worse:

While the survey responses identify a number of concerns and areas where work is needed to address gender equity, and other diversity issues, in the department, there was a feeling amongst the respondents that the department is ahead of many others in the university, in demonstrating a willingness to engage positively with the issue of gender equity.

Several people noted in the final "open feedback" question that ethnic diversity within the department is another area of concern.

Recommendations

Based on the findings above, we have formulated a set of five recommendations that are intended to help address some of the weaknesses identified. In formulating these, we have focused on points that the department can easily implement itself. We note, however, the importance of the department adopting and implementing existing University or Faculty policies and guidelines relevant to improving gender equity. This process can be facilitated by the department fully engaging with, for example, the Faculty Equity Committee and the Gender Equity Platform. Good communication between these groups and the department also means that effective initiatives within the department can spread to other parts of the University.

1) Develop and implement an induction process for new staff
   - Put together a cheat-sheet of 1-2 pages including guidelines and expectations around equity (e.g. meeting times, arranging flexible work, applying for leave and how requests will be treated). The content of this needs to be developed collegially in order to build a culture of support for the practices it covers.
   - Ensure that all new staff, at any level, are assigned a mentor for their first year of employment. Develop and document expectations for what the mentoring relationship would cover and how the mentoring process might operate. The mentor need not be from within Physics, and in many cases there may be advantages to the mentor being external to the department.

2) Establish regular staff forums to promote transparency of processes and to share information and expectations.
   - Pre-schedule monthly staff meetings as a forum to hear reports from each departmental committee (research, equity, teaching, HoD advisory group, et cetera) and discuss current issues or future plans. It is important that these be regular and clearly advertised as a forum for both information sharing and for gathering feedback.
   - The annual staff retreat (already in place) is an opportunity for staff to engage in longer term planning and to develop departmental guidelines and processes for improving gender equity. There is an opportunity to link such planning to Faculty initiatives, such as the recently launched Gender Equity Platform. We would like to suggest that in the first year, this could focus on discussing and developing departmental expectations and guidelines for gender equity at conferences associated with the department and its staff.

3) Establish regular reporting and discussion on the state of gender equity in the department. Every 2 years hold a presentation of the current state of equity. This would be a forum to report on progress by the department relating to equity. In the future, reporting would include presentation of data collected by the department, related to any processes it runs, student demographics and performance, staff demographics, colloquium speaker statistics, et cetera.
   We propose that this year we should cover:
   - Presentation at a staff seminar of the work by Steven Turnbull on analysis of gender effects in student performance data; followed by discussion.
   - At one of the monthly PhD meetings, hold a similar discussion with PhD students and discuss potential initiatives with students.
   - Presentation of these survey results at a staff meeting; followed by discussion.

4) Establish guidelines for departmental expectations for *any* open recruitment processes, from selection of summer students, though to appointment of staff. These guidelines should ensure that any such processes begin by planning to ensure gender equity.
   Steps might include:
   - Ensuring that people involved in the process have participated in unconscious bias training.
   - Checking that job descriptions and advertisements are worded so as to engage with under-represented groups.
   - Ensuring that data on gender is recorded at each stage of the selection process. Where these processes are led externally to the department, it will be necessary for the HoD or a senior staff member to advocate on behalf of the department to ensure that data is collected and shared.

5) Identify departmental processes where it is possible to collect data for monitoring gender equity (and other diversity relevant statistics). Document expectations about:
   - Data collection:
     - Which processes will be monitored?
     - What will be recorded?
     - Who is responsible for ensuring that data collection takes place?
   - Data use and storage:
     - Who should have access to any records?
     - How will data be stored?
     - How will the department keep track of what records it holds?
   - Data analysis and reporting:
     - How frequently will data be analysed and reported on?
     - Who will be responsible for this?