

## December 2016 review of Concordat Action Plan 2014-2016

### A and B. Recruitment and Selection, and Recognition and Value

1. Recognition of the importance of recruiting, selecting and retaining researchers with the highest potential to achieve excellence in research.
2. Researchers are recognised and valued by their employing organisation as an essential part of their organisation's human resources and a key component of their overall strategy to develop and deliver world-class research.

| 2014-16 Actions   | Responsibility                          | Progress   |
|---|---|--|
| Develop a web based recruitment process utilising our HRConnect system                            | HRD                                     | <b>COMPLETED and ongoing:</b> all vacancies are now advertised through our web based vacancies portal and supporting system changes to HRConnect have been introduced. The use of HRConnect to support recruitment is also being integrated into a wider recruitment and talent development strategy currently being rolled out by HRD.  |
| Review academic induction events to ensure research is included as part of the academic role      | APD, Researcher Developer               | <b>COMPLETED and ongoing:</b> Academic induction includes centrally run events by the Department of Learning and Teaching Enhancement (which the APD team joined in 2015), complemented by School level induction events, as well as targeted introductory information from RIO. This approach ensures that the full academic role is covered during induction period, and CROS data from 2015 showed a strong increase in staff reporting institutional, departmental, and local induction to be very useful /useful compared to data from 2013.<br><br>A working group has been formed in September 2016 to review online induction resources for new members of staff which will include information on research activities from RIO. |
| Review exit questionnaire data from researchers and identify if common themes emerge from leavers | Diversity Partner, Researcher Developer | <b>COMPLETED:</b> Exit questionnaire data from 2014 was reviewed as part of our Equality and Diversity activity and was included in <a href="#">reporting</a> in April 2015.<br><br>While many cited positive reasons for leaving (such as leaving because they had secured more senior posts), a proportion cited negative reasons such as lack of job satisfaction, stress/workload and working relationships with line manager/colleagues. These themes   |

|  |                            |  |
|--|----------------------------|--|
|  |                            | are being addressed through the continued promotion of our University Values and Behaviours, through the academic workload review and other initiatives from the Employee engagement forum.  |
| Review recruitment policy on the use of fixed term versus open ended contracts for research staff                                  | HRD, RIO                   | <b>COMPLETED:</b> HRD reviewed their policies in 2015 and a new <a href="#">Fixed-term Contract policy statement</a> was created in Oct 2015 which gives guidance on the appropriate use of open ended contracts versus fixed term contracts.  |
| Maximise opportunities for recruitment of international researchers through use of EURAXESS to advertise research jobs             | HRD, Researcher Developer  | <b>IN PROGRESS:</b> The use of online job portals to help recruit international researchers is being reviewed as part of a wider recruitment and talent management strategy being developed by HRD during 2017.  |
| Offer one-to-one development meeting for research staff as they approach the end of contract                                       | Researcher Developer       | <b>UPDATED ACTION:</b> Support for research staff as they approach end of contract will be reviewed as part of the wider Recruitment and talent management strategy being carried out by HRD during 2017.  |
| Continue one-to-one induction meetings with new researchers with emphasis on helping researchers navigate the university structure | Researcher Developer       | <b>COMPLETED and ongoing:</b> The Researcher Developer sends individual information and offers to meet one-to-one with new research staff to help them understand the university structure and what support is available to them. Each School also has a Research and Innovation Manager who can provide individualised funding support to new research staff.   |
| Review and implement new appointment, promotion and progression criteria for academic careers                                      | HRD                        | <b>COMPLETED:</b> The <a href="#">Academic Appointment and Promotion Framework</a> was approved in Dec 2014 and has been rolled out since Jan 2015 for all academic recruitment within the University. There are four pathways within the framework: Research, Learning & Teaching, Professional Practice, and Enterprise. Since April 2015 the Framework has also been used for Academic Promotion and Award of Title panels.   |
| Review Workload Allocation model (WAM) to ensure it supports our Strategy 2020   | HRD, Academic Lead - Deans | <b>ONGOING:</b> The workload allocation model was reviewed during AY2015/16 and a new Academic Workload Framework (AWF) has been developed and agreed by Deans of School and Trade Unions. The new AWF is intended to provide for the allocation of comparable workloads in a fair, consistent and transparent way.<br><br>During AY2015/16 Senior Leadership were involved in a <i>Time for Research</i> initiative to identify ways to improve the balance for academics between Teaching and Research. Barriers and challenges to protecting research time were also identified by ECRs as part of the work of the ECR forum and have been fed into the <i>Time for Research</i> project. Actions from this project will be implemented in the next two year cycle. |

|  |   |   |
|--|---|---|
| <p>Create a development plan to support the University's Strategy 2020 objective to increase the numbers of research active staff</p>            | <p>Researcher Developer, RIO</p>                      | <p><b>COMPLETED and ongoing:</b> <a href="#">Strategy 2020</a> created targets to double our research staff submitted to REF2021 as well as increase the number of staff holding external research funding to 40% by 2020.</p> <p>The creation of the Research and Innovation Office in Jan 2015 has been a substantial commitment by the University to support this strategic vision. RIO has brought together many of the support functions for research; a researcher development programme, research degrees administration, external funding support, research integrity and governance, REF preparation, and research policy development. The Research and Innovation Office's yearly objectives have been created to support the increase of research active staff including; individualised funding support, research funding competitions, and investment in online researcher development skills courses.</p> |
| <p>Complete employee engagement survey action plan</p>   | <p>HRD, Deans, Directors of Professional Services</p> | <p><b>COMPLETED:</b> The <a href="#">Employee engagement survey</a> was carried out in November 2015 by an external company Capita Research and had a 69% response rate.</p> <p><i>82% of respondents said 'the University is a good place to work' and 89% 'generally enjoy their work' while 85% 'find their work is varied and interesting'.</i></p> <p>The survey identified areas for improvement (workload and bureaucracy, change management, staff retention and career progression) and an Employee Engagement Action group was set up to address these areas.</p>   |
| <p>Review website representation of research activity to ensure adequate recognition of researchers contribution to University Strategy 2020</p> | <p>Web redevelopment project team</p>                 | <p><b>COMPLETED:</b> The launch of our Research Information Management system during AY15/16 has created editable <a href="#">website profiles</a> for all staff at the university, which is raising the visibility of our research activity and research staff. The webpages allow staff to create their own 'About me' information, and showcases data on funding, supervision, and research outputs ensuring all research activity is given a high profile on our external website.</p>  |
| <p>Support researchers to author papers at all stages of career and to understand sector developments in open access publishing</p>              | <p>Researcher Developer, RIO, Heads of School</p>     | <p><b>COMPLETED:</b> Several initiatives have focused on raising awareness of open access publications including the University taking part in Open Access week in Oct 2015, running workshops on publishing strategies within our new Leap into Research event which had approx. 80 people attending over three days, and throughout the Researcher Development programme during AY15/16 and into AY16/17.</p>   |

|  |  |  |
|--|--|--|
|  |  | <p>Data from CROS 2015 showed an approx. 25% increase in the number of researchers who understood the Research Excellence Framework (REF) compared with CROS 2013 data.</p> <p>The development of our new Research Information Management System (Worktribe) during AY2015/16 providing both funding data and our institutional research repository, allows us to analyse our research outputs in a much more systematic way than previous systems allowed. The new repository also fulfils requirements from funders and for the next REF for research outputs to be open access, thereby further supporting our researchers to engage with open access publishing.</p> |
|--|--|--|

### C. Support and Career Development

3. Researchers are equipped and supported to be adaptable and flexible in an increasingly diverse, mobile, global research environment.
4. The importance of researchers' personal and career development, and lifelong learning, is clearly recognised and promoted at all stages of their career.

| 2014-16 Actions  | Responsibility                                    | Progress   |
|--|---|--|
| Redevelop the Pg. Cert in Learning Teaching and Assessment Practice to ensure it includes a research focus including research-teaching linkages and research supervision | ASPEN, Researcher Developer, RIO                  | <b>COMPLETED:</b> The <a href="#">Pg.Cert</a> was redeveloped to run from AY15/16 as a yearlong course (it was previously over two years) and now contains specific learning outcomes that focus on pedagogical research and scholarship, and the supervision of students' research.   |
| Develop and provide events to support staff applying for research funding  | Researcher Developer, Research support staff, RIO | <p><b>COMPLETED and ongoing:</b> The researcher development programme has been expanded to include more sessions on applying for funding and has brought funders (such as Chief Scientist Office, Carnegie Trust, Research Funding Councils) on campus to explain their procedures, as well as providing sessions by external facilitators to help researcher develop funding bids.</p> <p>The Research and Innovation Managers from RIO work closely with Schools and provide individualised support to research active staff who are applying for research funding.</p> <p>The development of our RIM system will now allow us to monitor the success rate of applications and other analysis of funding trends.</p> |

|   |   |  |
|---|---|--|
| <p>Implement and support developmental needs arising from the new Public Engagement Strategy</p>          | <p>RIO, PE coordinating group</p>                 | <p><b>COMPLETED and ongoing:</b> The University's commitment to Public Engagement was confirmed by the creation of a Public Engagement Officer role within RIO in November 2015. The PE officer, working with the Public Engagement Forum has been reviewing the PE strategy, mapping activity across the university, brokering relationships with external partners, and providing developmental support for public engagement practitioners.</p> <p>We also continued our commitment to the Edinburgh-wide Beltane PE network through funding contributions during AY14/15 and AY15/16, to help support developmental needs of researchers active in Public Engagement.</p>                                |
| <p>Develop new Performance Development Review (PDR) process to support Strategy 2020</p>                  | <p>HRD</p>  | <p><b>COMPLETED:</b> A new performance and development review process called 'My Contribution' was launched for AY16/17. My contribution builds directly on Strategy 2020 using the Corporate Plan, Leadership Competencies and the Academic Framework to support Performance and Development across the University. For the first time staff are now able to record objectives online and access all their HR information in one place.</p>   |
| <p>Publish development events schedule over full trimester so researchers can see frequency of events</p> | <p>Researcher Developer, RIO</p>                  | <p><b>COMPLETED:</b> From AY15/16 we advertised the researcher development programme over a full trimester and from the start of AY16/17 we have moved to a full calendar programme covering the whole academic year. This allows researchers to see the variety and frequency of events over the year.</p> <p>Almost 60% of contract research staff had attended a session from the Researcher Development programme by Dec 2016, and an increasing number of sessions during Trimester 1 of AY16/17 were full (between Oct- Dec we ran 16 sessions of which 30% were fully booked; and we had over 200 session attendees during trimester 1).</p>  |
| <p>Develop employability sessions for researchers</p>   | <p>Researcher Developer, RIO, Careers service</p> | <p><b>ONGOING:</b> We have included sessions with a focus on employability as part of our Researcher Development programme and at our new three-day skills development event 'Leap into Research' which involved approx. 80 researchers from across the university.</p> <p>We will continue to encourage researchers to use Vitae's RDF to support development and career planning and have subscribed to the online RDF planner.</p> <p>We have also invested in a number of online courses that cover career planning and employability to complement face-to-face sessions. These online courses are available through our virtual learning environment (Moodle) and allow researchers to engage with</p> |

|  |   |   |
|--|---|---|
|  |   | the resources as appropriate for their developmental needs.   |
| Provide Coaching & mentoring available to staff identified through their PDR (as required for research leadership development) | CL&D<br>APD                                   | <b>ONGOING:</b> Coaching and mentoring needs are identified through our PDR process 'My Contribution' and may be provided locally within Schools (as examples the Business School and School of Arts and Creative Industries both have mentoring schemes available for ECRs). Local provision is complemented by centrally provided coaching and mentoring where needed, and may include external opportunities such as the AURORA programme for female leadership development.   |
| Develop academic leadership development and support opportunities which includes Research leadership                           | APD, CL&D, RIO                                | <b>ONGOING:</b> As part of the roll out of the new Academic Appointment and Promotion Framework a series of development opportunities by HRD was tied to the new framework to help people engage with academic and research leadership.   |
| Review development opportunities available for staff to undertake PhDs and create a policy                                     | HRD, RIO, RDAB                                | <b>ONGOING:</b> After the creation of RIO in Jan 2015 a review of development opportunities was carried out which highlighted that there were several routes being used to support staff to undertake research degrees, including PhD by Published Works and the development of a university-wide Professional Doctorate during AY15/16, to complement the Business School's well established DBA degree.<br><br>Access to support for PhD studies will be assessed as part of HRD's recruitment and talent development strategy, and will feed into policy development from the Research and Innovation Committee.           |
| Develop career case studies to illustrate research career pathways   | Researcher Developer,<br>RIO, Careers service | <b>ONGOING:</b> We have developed a number of career case studies for our redeveloped website and continue to use Vitae case studies as part of our researcher development programme where appropriate.   |
| Enhance communications about external training and development opportunities to researchers                                    | Researcher Developer,<br>RIO                  | <b>COMPLETED and ongoing:</b> We have improved our communications about external opportunities from partner organisations including Beltane PE network, and our partnership with Scottish Graduate Schools. We have also highlighted external development opportunities such as Scottish Crucible by holding information sessions about them in 2016, and our Research Innovation Managers work with Schools to raise awareness of these opportunities. These approaches are leading to an increased awareness and applications to such schemes, and our new RIMS will allow us to analyse application trends in more detail. |

|   |   |  |
|---|---|--|
| <p>Review our use of technology to support research community building activities</p>                     | <p>Researcher Developer, RIO</p>                  | <p><b>COMPLETED:</b> A Senior Web content Officer was appointed to RIO in July 2016 which has allowed us to improve our use of different online tools to improve our communications and help build our research community. We now have a @ENU_RIO twitter stream and are developing a RIO blog to help researchers stay connected to what is going on.</p> <p>The development of our RIMS Worktribe allows researchers to develop online profiles which helps create interactions between researchers, as research information is now more visible and searchable from within and beyond the university.</p>   |
| <p>Create opportunities to show case the research activity from across the university</p>                 | <p>RIO, Researcher Developer, Heads of School</p> | <p><b>COMPLETED and ongoing:</b> We held our first University-wide <a href="#">Research conference</a> in June 2016 which provided an opportunity for researchers (including PhD students) to meet and talk about their research activities. Part of the conference was the award ceremony for the Principal's Research Excellence Awards which was part of showcasing our research activities.</p> <p>We also introduced a three-day <a href="#">Leap into Research</a> event held in March 2016 which was designed to increase the interaction between research active staff from across the university, and provided a focus on researcher development topics such as winning funding, writing for publication and collaboration.</p> <p>The re-development of our <a href="#">external website</a> for AY16/17 has also created opportunities to showcase the research activity across the university and we are developing further case studies to enrich our research content further.</p> |
| <p>Use ENRoute scheme to help support researchers with appropriate experience to gain HEA fellowships</p> | <p>APD, Researcher Developer, ASPEN</p>           | <p><b>COMPLETED and ongoing:</b> The ENRoute scheme allows researchers to apply for HEA fellowship helping them to gain external recognition for their teaching activity.</p> <p>During 2016 we saw increased engagement of PhD students, research technicians and contract research staff with ENRoute, including several researchers whose applications were used as case studies in the <a href="#">ENRoute Yearbook</a>.</p> <p>The engagement of researchers with the HEA scheme will be further supported by plans to include a research supervision, and research student-specific routes during our reaccreditation with the HEA during AY16/17.</p>   |

## D. Researchers' Responsibilities

5. Individual researchers share the responsibility for and need to pro-actively engage in their own personal and career development and lifelong learning.

| 2014-16 Actions  | Responsibility            | Progress   |
|--|---------------------------|--|
| Continue to provide research integrity development   | Researcher Developer, RIO | <p><b>COMPLETED and ongoing:</b> We have integrated Research Integrity into the Researcher Development programme. We have also invested in online skills courses on this topic as an additional resource for part-time researchers or for researchers who may not be able to attend face-to-face sessions.</p> <p>A <a href="#">cross-university ethical approval</a> system has also been created to help deal with applications that span more than one School; this process in particular helps to support pedagogical and inter-disciplinary research, which had previously been hampered by a cumbersome ethical approval system.</p> |
| Devise and implement an academic mentoring scheme for all that encompasses the whole academic role and contributes towards the achievement of professional recognition, academic leadership and researcher development | APD                       | <p><b>RESCHEDULED ACTION:</b> The PDR process helps identify any coaching and mentoring needs of staff which is currently provided either locally at School level or through other development opportunities.</p> <p>The roll out of the new Academic Appointment and Promotion Framework, as well as and the redevelopment to My contribution during AY15/16 impacted on the timing of development of an academic mentoring scheme which has been rescheduled for development during 2017. Feedback from ECRs as part of the ECR Forum activity during AY15/16 will feed into the development of the mentoring scheme.</p>                |
| Increase applications to Researcher-Led initiative competition   | Researcher Developer, RIO | <p><b>COMPLETED and ongoing:</b> We have run the Researcher-Led initiative competition each year and saw a doubling of applications between 2015 and 2016, after increased communications and information sessions about the funding opportunities.</p> <p>In 2016 we also introduced the chance for PhD students and / ECRs to become panel reviewers as a developmental opportunity, and we aim to extend this practice in the coming two years.</p>   |
| Facilitate and support researchers to identify external opportunities for  | Researcher Developer, RIO | <p><b>COMPLETED and ongoing:</b> As part of the Researcher Development we have run an increased number of sessions about external opportunities during AY15/16, including</p>  |

|   |                      |  |
|---|----------------------|--|
| professional recognition e.g. working groups/committees, membership of professional bodies                              |                      | Scottish Crucible and RSE Young Academy of Scotland.<br><br>We have involved academics with experience of these application processes, and have seen an increase in successful applications for these types of external opportunities (for example we now have five members of the RSE YAS). |
| Continue to promote the use of Vitae's events and resources for researchers to engage with their own career development | Researcher Developer | <b>COMPLETED and ongoing:</b> We purchased an institutional licence for Vitae's RDF planner for AY16/17 and we continue to map all researcher development events against Vitae's Researcher Development Framework.   |

## E. Diversity and Equality

6. Diversity and equality must be promoted in all aspects of the recruitment and career management of researchers.

| 2014-16 Actions   | Responsibility             | Progress   |
|---|----------------------------|--|
| Agree and commit resources required to maintain university commitment to the Athena Swan programme  | University Leadership Team | <b>COMPLETED:</b> We received an Athena Swan Bronze Award in April 2015 and the University is committed to working towards individual departmental submissions in the next academic year.<br><br>The university has held high profile events to celebrate Ada Lovelace Day in both 2015 and 2016, and has also agreed to support <a href="#">Girl Geeks Scotland</a> as part of our gender equality commitments.                         |
| Develop and facilitate effective communication strategies so that those that would benefit from development opportunities hear about them | RIO, APD                   | <b>COMPLETED and ongoing:</b> We have developed more effective communications from the Research and Innovation Office by tailoring communications to target audiences, and through using a variety of communications channels. The Research and Innovation Office had a new role (Senior Web Content Officer) to help with communications established in July 2016 which has led to more direct communication with researchers from RIO. |
| Investigate opportunities for gender equality to feature as a theme in forthcoming University conferences related to research             | RIO, APD                   | <b>COMPLETED:</b> We held our first university-wide Research conference in June 2016 bringing together ~ 130 research students and research active staff from across the different Schools. As part of the conference, Equate Scotland ran a workshop and the Athena Swan team were involved in the conference showcase to highlight their work on gender equality.  |

|  |   |  |
|--|---|--|
| Review university policy on committee representation and propose and implement changes | Governance services, Athena Swan team, Researcher Developer | <p><b>COMPLETED:</b> In December 2014 the University’s Academic Board approved a process for the conduct of a focussed effectiveness review of Academic Board’s constitution and sub-committee structure which was undertaken between January and May 2015. The new <a href="#">Academic Board Constitution</a> was approved by University Court at its June 2015 meeting.</p> <p>All committee remits contain a statement on the need for Equality Issues to be considered: <i>“Those officers with responsibility for nominating or appointing members to the committee as prescribed by the constitution should, in doing so, have due regard to the desirability of achieving an equal balance of either gender within the committee’s membership”.</i></p>  |
| Carry out equal pay audit in 2015  | Diversity Partner   | <p><b>COMPLETED:</b> A <a href="#">Gender Pay gap report</a> was carried out in 2015 and actions were fed into plans within the <a href="#">Equality Outcomes 2015-2017</a> documentation.</p>   |
| Investigate the benefits to applying for ‘gender mark’ and ‘race mark’ charter status  | Diversity Partner   | <p><b>COMPLETED and new action:</b> Charter status was investigated for gender mark and race mark but not taken further during 2015.</p> <p>To extend our Equality and Diversity work beyond the Athena Swan remit, the University has become a Stonewall Diversity Champion and Disability Confident Employer.</p> <p>The Department of Learning and Teaching Enhancement ran an <a href="#">Inclusivity Week</a> in October 2016. The week hosted a range of events and activities, and welcomed external guests to celebrate the university as an inclusive community. Highlights included: a human rights debate with Alan Masson, an Inclusivity Fair and an ARISE Lecture with Professor Tom Shakespeare.</p> <p>In November 2016 the University also launched an employee network to support LGBT+ colleagues and supporters.</p> |
| Devise plans for prioritising Athena SWAN departmental award applications              | Heads of the 4 STEM schools, Athena Swan team               | <p><b>COMPLETED and ongoing:</b> Departmental plans towards Athena Swan submission have been developed by our Schools since we gained institutional Bronze award in 2015. The School of Computing, and the School of Engineering and the Built Environment submitted their applications in November 2016. Two further Schools (Applied Science, and the Business School) are planning to submit in April 2017, whilst the University will be submitting further action plans as part of our Bronze award in November 2017.</p>   |

## F. Implementation and Review

7. The sector and all stakeholders will undertake regular and collective review of their progress in strengthening the attractiveness and sustainability of research careers in the UK.

| 2014-16 Actions  | Responsibility  | Progress   |
|--|---|--|
| Increase uptake in research surveys such as PRES, CROS, PIRLS  | Researcher Developer, RIO                                 | <b>COMPLETED:</b> We achieved an increased engagement with two of the surveys against our 2013 levels after a coordinated communications strategy to raise awareness of the 2015 surveys. CROS responses increased from 11% to 22% in 2015, and PRES increased from 33% to 42%. However, the PIRLS response went through a decrease and this will be investigated as part of our preparations to run these surveys again in 2017.                    |
| Report results from PRES, CROS, and PIRLS 2015 and actions taken to relevant university committees and to research community | Planning and Intelligence unit, RIO, Researcher Developer | <b>COMPLETED:</b> Survey data was reported at relevant committees including RDC, RIC and at RIO management meetings during AY15/16. We also ran a successful <a href="#">#12daysofPRES</a> feedback campaign in Dec 2016 to communicate actions taken as a result of the previous PRES survey results. This type of 'you said, we did...' feedback will be used as a model for future survey feedback due to the positive responses to the campaign. |
| Review and refresh the concordat action plan on annual basis   | Researcher Developer                                      | <b>COMPLETED:</b> A review of actions was undertaken in 2015 after the formation of the Research and Innovation Office, and this document captures the progress as of Dec 2016.  |
| Discuss Concordat Action plan and progress at Research Knowledge exchange committee twice a year                             | Convenor of RKEC (now RIC), Researcher Developer          | <b>COMPLETED and ongoing:</b> The Dean of Research and Innovation provides RIO updates to RIC at each meeting. The Concordat action plan and the ECR forum are agenda items on appropriate committee (RIC).  |
| Benchmark Researcher Development activities via Vitae community, ScotHERD and US-RTSC  | Researcher Developer                                      | <b>COMPLETED and ongoing:</b> The Researcher Developer engages with sector development through Vitae, ScotHERD and Universities Scotland Research Training Subcommittee membership.  |

**Abbreviations:**

|                 |  |
|-----------------|--|
| <b>APD</b>      | Academic Professional Development                        |
| <b>ASPEN</b>    | Academic Strategy & Practice at Edinburgh Napier         |
| <b>AY</b>       | Academic Year  |
| <b>CL&amp;D</b> | Corporate Learning and Development                       |
| <b>CROS</b>     | Careers in Research Online Survey                        |
| <b>HRD</b>      | Human Resources and Development                          |
| <b>PDR</b>      | Professional Development Review                          |
| <b>PRES</b>     | Postgraduate Research Experience Survey                  |
| <b>PIRLS</b>    | Principal Investigators and Research Leaders Survey      |
| <b>RDC</b>      | Research Degrees Committee                               |
| <b>RDF</b>      | Researcher Development Framework                         |
| <b>RIO</b>      | Research and Innovation Office                           |
| <b>RIC</b>      | Research and Innovation Committee                        |
| <b>SEDA</b>     | Staff and Educational Development Association            |
| <b>ScotHERD</b> | Scotland and Northern Ireland Researcher Developer group |
| <b>URIC</b>     | University Research Integrity Committee                  |
| <b>US-RTSC</b>  | Universities Scotland Research Training Sub-Committee    |