## **Warwick Centre for Predictive Modelling (WCPM)**

**1 Aims of the Centre**

(a) To raise the profile of predictive modelling research across scientific and engineering applications at Warwick to internal and external audiences and stakeholders.

(b) To bring academic staff together from across the faculties to address opportunities and challenges presented by predictive modelling.

(c) Position the University to attract and retain significant research income (from government; TSB; Research Councils; EU and industry) in the emerging areas of uncertainty quantification and predictive modelling.

(d) Via an annual ‘seed funding program’ allow new or existing members of the centre to propose exploratory/high risk research that could not otherwise be funded. This can be an efficient way to constantly look for new ideas and avoiding getting comfortable with the status quo.

(e) Focus University engagement with other aligned initiatives in the UK such as Nottingham, Cambridge, Imperial College, etc. but also in the EU such as TUM, University of Bonn, ETHZ, etc., the Americas (USA, Brazil, and Chile) and Asia (China, Korea, Japan, Singapore).

(f) Identify synergistic educational activities within the different schools and develop a unique curriculum on uncertainty quantification and predictive modelling at the Masters and PhD programmes.

(g) Development and delivery of innovative Masters and PhD programmes. Set common curriculum requirements (mathematical/statistical/computing aspects) and elective courses (applications).

(h) Impacting education in a unique way by bringing disciplines together while serving industrial needs.

(i) Provide the technical and administrative support for faculty teams interested in pursuing grand challenge applications where predictability and uncertainties play a key role (sub-centers within WCPM but without the burden of re-discovering research that others do in different areas).

**2 Membership**

(a) All university staff with a research interest in predictive modelling will be eligible to be a member of the centre (initial duration three years).

(b) These appointments are renewable for another 3 years assuming the centre member has a documented participation in one or more of the activities of the centre (advising students, participation in collaborative proposals, providing intellectual or administrative support, etc.). The membership renewals will be decided by the management committee and will require a minimal amount of bureaucracy.

(c) The founding members will be selected based on strong interests and relevant background in predictive modelling.

(d) Any applicants for membership will need to be nominated by a member and considered by the management committee.

(e) Visiting professors and collaborators from other universities can also be members of the centre.

**3 The director of the centre**

(a) The director shall be appointed by the head of the school of engineering (in discussion with the chair of the faculty of science) for a period of three years.

(b) The director shall be responsible for the implementation of the centre’s strategy for achieving its aims and for guiding its intellectual development.

(c) The director shall be the chair of the management committee.

(d) The director should provide quarterly updates to the management committee regarding the centre’s finances and all other pertinent matters.

(e) The director shall prepare annually a self-assessment report for consideration by the advisory board, which analyses the financial performance of the centre. The self-assessment may be supplementary to any reports required by external sponsors.

(f) Evaluate the research productivity of the centre as judged by the impact of journal publications of staff associated by the centre.

(g) Evaluate the research productivity of the centre as judged by research grants and contracts.

(h) Evaluate the work achieved through seed funding.

(i) Evaluate the impact on the recruitment of research students in departments connected to the centre.

(j) Evaluate all educational components of the centre including short course activity.

**4 Management committee and membership**

(a) There shall be a management committee of the centre which shall normally meet six times a year.

(b) The management committee will consist of a representative from each participating department (all members of the centre).

(c) Appointments to be made by the director in agreement with the head of the member’s department.

(d) A member of the management committee (appointed by the director) will serve as the associate director of the centre carrying the directors’ tasks in his absence.

(e) The director, ex officio (in the chair).

**5 Terms of reference**

The management committee is responsible for:

(a) Advising the director on the administration and activities of the centre including the development of the research programme.

(b) Funding initiatives to be undertaken by the centre.

(c) The appointment of staff to the centre.

(d) Reviewing the progress of research projects undertaken by the centre.

(e) Reviewing and making decisions on seed funding.

(f) Monitoring the allocation of discretionary funds and issues relating to the financial management of the centre.

(g) The management committee shall have a quorum of five.

**6 Scientific advisory board**

There shall be a scientific advisory board of the centre which shall normally meet annually. The meeting of the advisory board can coincide with a one day symposium highlighting the centre’s accomplishments. The director will present summary of the centre’s activities to the advisory board but will not participate on its deliberations. The director and management committee are responsible for selecting the membership of the advisory board.

**7 Membership**

As a minimum the membership of the board shall consist of:

(a) An externally appointed chair.

(b) The director and the associate director of the centre.

(c) Chair of the faculty of science.

(d) Representatives from EPSRC, industry, two academics (minimum) from the UK predictive modelling community and an international academic.

**8 Terms of Reference**

(a) Advise on strategic direction of the centre and priorities and gaps in programmes.

(b) Provide insights on the climate scene and key developments and events based on individual member's knowledge.

(c) Give advice on the priority issues on which to engage and how best the centre might exert influence.

(d) Propose funding opportunities which the centre should pursue and advice on how to realise those potential opportunities.

**9 Funding**

(a) The director shall supervise the funds of the centre subject to the university's financial regulations.

(b) A seed fund program will be established that will allow any faculty associated with the centre or any faculty interested to join the centre to propose an exploratory topic relevant to predictive modelling (one year duration). The management committee will review these short seed funding proposals and make funding recommendations to the director.

(c) The director is charged to authorise expenditure from funds allocated to the centre.

(d) The scientific advisory board shall be informed in the director's annual report about the funds associated with the centre.

(e) Nothing in this constitution abrogates the overall responsibilities of the University finance officer.