

TOWARDS A TWENTY-FIRST CENTURY RENAISSANCE: THE FUTURE OF BENGAL'S PRESIDENCY UNIVERSITY

Fourth Report of the Presidency Mentor Group, January 2013

PREAMBLE

It has been a year and a half since we began our deliberations to come up with a set of recommendations on how to **reshape Presidency as a center of excellence**. Our first, second and third reports were submitted in August 2011, January 2012, and August 2012. **Our aim remains the transformation of Presidency University into a world-class research and teaching institution by the time of its 200th anniversary in 2017. In this, our fourth, report, however, we focus on what needs to be accomplished within the time frame of the next six months to one year in order to keep up the momentum towards reaching our goal.**

The members of the Presidency Mentor Group gathered in Kolkata on December 18, 19 and 22, 2012, for a formal meeting. **It was pleasure to meet a large number of new faculty members and quite a few students and to learn about their needs and aspirations.** We reviewed the implementation of our first three sets of recommendations and formulated a number of new suggestions that are put forth in this short fourth report, which should be read together with our more wide-ranging and elaborate first three reports. This report has been given final shape after further consultation among PMG members by phone and email. We trust it will be given the same serious consideration as the three earlier reports.

ACTION TAKEN AND TO BE TAKEN ON THE FIRST THREE PMG REPORTS

1. We are pleased that the Chief Minister and the Government of West Bengal have accepted our recommendation that Presidency should be a unique state university with a special status to be nurtured as **a center of excellence**.
2. We had recommended recruiting half a dozen strong academic leaders in the natural sciences, social sciences and the humanities as **Distinguished University Professors**. Following a meeting with the PMG Chairman on January 2, 2012, the Chief Minister personally approved and announced four such positions at Presidency University named after iconic figures in the modern history of Bengal on January 4, 2012. These have been described as follows: Acharya Jagadish Chandra Bose Distinguished University Professorship in the Natural Sciences; Kabiguru Rabindranath Tagore Distinguished University Professorship in the Humanities (in the field of

- literature and cultural studies); Swami Vivekananda Distinguished University Professorship in the Humanities (in the field of philosophy, broadly defined); and Netaji Subhas Chandra Bose Distinguished University Professorship in the Social Sciences (in the fields of economics, history and/or political science). The Chief Minister offered a fifth position named after Kazi Nazrul Islam and the Government of West Bengal accepted our suggestion to define this position to be in the field of Inter-Cultural Dialogue and Peace Studies. We recommend launching searches to fill these positions based on procedures described below in the section on recruiting an outstanding and diverse faculty. We re-iterate the recommendation we made in our third report that two more Distinguished University Professorships in the natural and mathematical sciences be created as soon as possible.
3. Excellent progress has been made in recruiting an outstanding and diverse faculty capable of cutting-edge research and high-quality teaching that we had identified in our first report as the top priority. We are delighted that the state government approved and the university authorities adopted the transparent and rigorous selection process suggested by us. The outstanding scholars who came as subject experts have seen for themselves what is happening at Presidency and this has enhanced the University's reputation throughout India and beyond. We warmly congratulate Vice-Chancellor Malabika Sarkar for conducting a gigantic and complex faculty recruitment process at the highest level of professional competence. **As of January 31, 2013, 137 new faculty members of Presidency University have been selected – sixteen of them at the full professorial rank – most have accepted and many have joined. We have every reason to applaud both the process and the outcome of this first round of faculty recruitment. Advertisements for the second round are being issued.**
 4. In order to attract the best faculty to Presidency as a unique institution and center of excellence, we had emphasized the need to offer remuneration including medical and other benefits comparable and commensurate with central and central government funded institutions. The decision of the Chief Minister to create a provision for a guaranteed annual supplement in the form of faculty research and professional development funds – Rs 4 lakh for Distinguished University Professors, Rs 3 lakh for Professors, Rs 2 lakh for Associate Professors, and Rs 1 lakh for Assistant Professors – is an important step in the right direction. The offer of moving expenses for faculty relocating from outside West Bengal has sent the right signal about our intention to make Presidency a magnet for talent from across India and the world. We reiterate that much more will need to be done to compete effectively with institutions in other states and central government funded autonomous institutions, such as, IIM-Kolkata, IIT-Kharagpur and IISER-Kalyani in our own state. Now that we have been successful in recruiting outstanding faculty, our next challenge is retention. We must attract and retain top-notch faculty with proven excellence in research at the international level. In the absence of complete parity with central institutes in regard to salary, allowances, and perquisites, it will be extremely difficult to recruit and retain

- the very best faculty, especially in the sciences. Presidency urgently needs to upgrade its infrastructure and research facilities. **We strongly recommend the establishment of two Central Research Instrumentation Facilities for experimental scientists as described below in the section on infrastructure development.** Other institutions in India have their eyes on the best scholar-teachers we are bringing to Presidency. We commend Vice-Chancellor Malabika Sarkar for arranging transit accommodation for faculty coming from outside Kolkata. In terms of medical benefits, we are glad to note that the university authorities are taking the lead among state universities in creating a cost-effective and high-quality group medical insurance scheme in which the employer will contribute a substantial fraction of the annual premium.
5. As part of dramatically upgrading the academic infrastructure, we had recommended the enhancement of IT capability on campus. We congratulate Vice-Chancellor Malabika Sarkar for enabling candidates to file online applications for faculty positions and efficiently interviewing many candidates via video conference through a new streamlined system. The website needs to be kept up-to-date and departmental pages will have to be well maintained.
 6. We are grateful to the Chief Minister for providing a ten-acre plot at a good location in Rajarhat for Presidency's second campus. We provided detailed recommendations on the second campus along with architectural drawings in our third report. **We urge the Government of West Bengal to expedite the process of transferring the land to Presidency University.**
 7. **Presidency University has been accorded the status of "an institution of national eminence" by the UGC and Finance Ministry clearance was received on December 14, 2012, for Presidency to receive fully tax-exempt donations and gifts. The PU Council has approved at its meeting on December 18, 2012, a proposal to set up a Section 501 © non-profit entity named Friends of Presidency University in the United States to facilitate receipt of tax-deductible contributions.**
 8. While several challenges will have to be addressed in the future, the accomplishments during the last year and a half have been impressive.

A STATE UNIVERSITY WITH A SPECIAL STATUS

[Terms of Reference No. 11: To explore whether Presidency should continue to be a State university or seek the status of a Central university or aspire to be counted as one among the new innovation universities.]

In light of the measures taken and support given by the Chief Minister along with the Education and Finance Departments, our first preference is to allow Presidency University to flourish as a state university with a special status with due acknowledgement of its unique heritage. However, Presidency should seek additional financial support from the central government, the University Grants Commission, and the Planning Commission for the 12th plan period. We especially

encourage the university authorities to seek a one-time special budgetary allocation from the Prime Minister of Rs 200 crores to be used to build state-of-the-art infrastructure in time for Presidency's 200th anniversary in January 2017. We also recommend that the university authorities seek recognition as an "Innovation University" that will entitle Presidency to receiving up to Rs 300 crores in special support. We hope very much that the Government of West Bengal will be able to provide at least Rs 50 crores on the occasion of the centenary of the Baker Laboratory Building that is in urgent need of repair and renovation. The state government needs to clarify the extent to which it will be able to support the infrastructure development needs of Presidency University between now and the 200th anniversary in January 2017. This will enable us to plan fund-raising efforts from the central government and private sources.

AN OUTSTANDING AND DIVERSE FACULTY

[Terms of Reference No. 4: To define search procedures and the constitution of search committees to make the best faculty appointments at the levels of professor, associate professor and assistant professor in order to create an outstanding and diverse faculty.]

We had stated in our first report that the first 100 faculty appointments will be of critical importance in shaping the future of Presidency University. We are very pleased that the recommendations in our first and second reports about the recruitment process and the composition of selection committees were taken on board in designing the faculty recruitment drive for 184 advertised positions that took place during 2012. **As of January 31, 2013, 137 excellent appointments have been made. Very high standards have been maintained. The acceptance rate on offers made is encouraging. Sixteen full professors have accepted of whom fourteen have joined. The two Professors of Economics will join later this year. 109 associate/assistant professors have accepted of whom 75 have joined. A further 12 candidates who have recently received offers are in communication with the University.**

The following sentences in our earlier reports bear repetition as part of the mission statement of the new Presidency: "We envisage Presidency University as a path-breaking institution of higher learning that will have a judicious balance and synergy between research and teaching. Presidency must be a place where the faculty will carry out first-rate research at the level of top institutions in India and, in time, the leading institutions in the world. The faculty should be encouraged to offer research-based teaching and inspire students to undertake research."

In addition to excellence due attention needs to be paid to the question of diversity. We are happy to note that very good appointments have been made at the assistant professor level in the scheduled tribes, scheduled castes, and other backward classes reserved categories. Attention also needs to be paid to under-represented

minorities and the maintenance of a healthy gender balance on the faculty. We noted in our first report that Muslims forming over a quarter of the population in our state accounted for less than 2% of Presidency teachers in mid-2011. This serious problem of under-representation has begun to be addressed and Presidency now has more talented faculty drawn from under-represented minorities. **We need to appoint more women at the senior ranks as only two of the sixteen full Professors appointed so far are women. The gender balance is much better at the associate/assistant professor levels where more than a third of the appointees are women.** The same selection committees for the new appointments evaluated current Presidency College teachers and others in the education service wishing to opt in, several of whom have been selected as Presidency University faculty. In consultation with the Vice-Chancellor, the Higher Education Department should now arrange the orderly and dignified transfer of teachers who opted out or were not selected. Typically, these transfers to government colleges should be made at the end of a teaching semester.

We now look forward to the second round of faculty recruitment. If feasible, we suggest sending a list of names of applicants in each subject to as many members of our expert panel as may be willing to offer their opinion. This could ensure good applicants are not left out of a short list in subjects with a very large number of applicants. This should not require too much effort on the part of the experts since we will not be seeking a comprehensive short list from them but simply the names of those outstanding candidates they would personally recommend for interview. This would be a good use of the excellent list of experts that we have for various subjects.

We reiterate our recommendation made in our third report that it may be necessary in the second round to indicate preferences for particular specializations in order to build balanced departments with adequate coverage of essential fields of knowledge. This does not preclude any deliberate decision to excel in certain sub-fields by creating a genuine depth of faculty expertise in those areas.

We should now launch the searches and seek nominations for the Distinguished University Professorships. We understand the constraint that the basic salary of the Distinguished University Professors cannot be more than the basic salary of the Vice-Chancellor. However, the total remuneration should be at the same level with the best available in India for similar positions in central institutes. Presidency University should supplement the funds provided by the government from its own resources and actively seek private gifts to make the Distinguished University Professorships attractive to leading scholars throughout the world. **We recommend that the initial total remuneration in July 2013 for the Distinguished University Professors should be at least Rs 170,000 (Rupees One Lakh Seventy Thousand) per month with a provision of annual increments at a rate of 5% to 7%.**

Announcements seeking nominations and applications for the five Distinguished University Professorships should be published in national newspapers as well as the *Times Higher Education Supplement* and the *Chronicle of Higher Education*. In addition, an announcement of the Jagadish Chandra Bose Distinguished University Professorship ought to appear in *Science and Nature*. The Vice-Chancellor should appoint and chair five high-level Search Committees, each with a membership of three senior and eminent scholars in the relevant branches of learning.

We repeat the descriptions of the announcements for the five Distinguished University Professorships with the proviso that particular requirements may be waived for exceptionally brilliant candidates. For example, a truly outstanding younger candidate with a superb publication record need not have long years of service.

1. Presidency University seeks nominations and applications for the Acharya Jagadish Chandra Bose Distinguished University Professorship in the Natural Sciences. Candidates may be theoreticians or experimental scientists in the disciplines of physics, chemistry, mathematics, and the life sciences or cutting-edge inter-disciplinary scholars in these fields. A very strong publication record in international refereed journals is required. A distinguished scholar normally with at least twelve years of teaching and/or research experience who has acquired national recognition and international stature based on her/his academic contribution to the philosophy of the subject will be selected on the recommendation of a Search Committee of senior and eminent scholars specially appointed to review the candidates' work and lifetime achievements. Letters of nomination and expressions of interest should be sent to Vice-Chancellor Malabika Sarkar, Presidency University, 86/1 College Street, Kolkata 700073, India (Email: vc@presiuniv.ac.in).
2. Presidency University seeks nominations and applications for the Kabiguru Rabindranath Tagore Distinguished University Professorship in the Humanities. Candidates may be discipline-based or inter-disciplinary scholars in the fields of literature and cultural studies. A very strong publication record with at least two books published by reputable academic presses and articles in international refereed journals is required. A distinguished scholar normally with at least twelve years of teaching and/or research experience who has acquired national recognition and international stature based on her/his academic contribution to the philosophy of the subject will be selected on the recommendation of a Search Committee of senior and eminent scholars specially appointed to review the candidates' work and lifetime achievements. Letters of nomination and expressions of interest should be sent to Vice-Chancellor Malabika Sarkar, Presidency University, 86/1 College Street, Kolkata 700073, India (Email: vc@presiuniv.ac.in).

3. Presidency University seeks nominations and applications for the Swami Vivekananda Distinguished University Professorship in the Humanities. Candidates may be discipline-based or inter-disciplinary scholars in the field of philosophy, broadly defined. A very strong publication record with at least two books published by reputable academic presses and articles in international refereed journals is required. A distinguished scholar normally with at least twelve years of teaching and/or research experience who has acquired national recognition and international stature based on her/his academic contribution to the philosophy of the subject will be selected on the recommendation of a Search Committee of senior and eminent scholars specially appointed to review the candidates' work and lifetime achievements. Letters of nomination and expressions of interest should be sent to Vice-Chancellor Malabika Sarkar, Presidency University, 86/1 College Street, Kolkata 700073, India (Email: vc@presiuniv.ac.in).
4. Presidency University seeks nominations and applications for the Netaji Subhas Chandra Bose Distinguished University Professorship in the Social Sciences. Candidates may be discipline-based or inter-disciplinary scholars in the fields of Economics, History and/or Political Science. A very strong publication record is required. Historians and political scientists should have at least two books published by reputable academic presses and articles in international refereed journals. Economists should have articles in the top international refereed journals. A distinguished scholar normally with at least twelve years of teaching and/or research experience who has acquired national recognition and international stature based on her/his academic contribution to the philosophy of the subject will be selected on the recommendation of a Search Committee of senior and eminent scholars specially appointed to review the candidates' work and lifetime achievements. Letters of nomination and expressions of interest should be sent to Vice-Chancellor Malabika Sarkar, Presidency University, 86/1 College Street, Kolkata 700073, India (Email: vc@presiuniv.ac.in).
5. Presidency University seeks nominations and applications for the Kazi Nazrul Islam Distinguished University Professorship in Inter-Cultural and Peace Studies. Candidates may be discipline-based or inter-disciplinary scholars in the humanities or the social sciences. A very strong publication record with at least two books published by reputable academic presses and articles in international refereed journals is required. A distinguished scholar normally with at least twelve years of teaching and/or research experience who has acquired national recognition and international stature based on her/his academic contribution to the philosophy of the subject will be selected on the recommendation of a Search Committee of senior and eminent scholars specially appointed to review the candidates' work and lifetime achievements. Letters of nomination and expressions of interest should be sent to Vice-Chancellor Malabika Sarkar, Presidency University, 86/1 College Street, Kolkata 700073, India (Email: vc@presiuniv.ac.in).

We reiterate our recommendation that 15 of the currently sanctioned full Professorships be re-designated as department-based Heritage Chaired Professorships – one each in 15 departments – with salary levels higher than the full Professorships and lower than the Distinguished University Professorships. This will enable Presidency to recruit and retain senior scholars of great merit who have shown or are displaying interest in joining the Presidency faculty.

We reaffirm our hope that the search and selection procedure outlined in our first two reports and this one will give way to the normal rules of university autonomy and faculty self-governance by 2017. Once a critical mass of excellent faculty has been assembled at Presidency University, they will take a leading role in recruiting their colleagues with the help of outside experts. In all well-established, reputable universities in the world, a fine faculty usually knows how to replenish and augment itself.

Now that the picture of the yield from the first round of the permanent faculty recruitment process has emerged, Presidency University should move swiftly to invite very capable guest faculty through contractual appointments for fixed terms as described in our first report.

VISITING PROFESSORS

[Terms of Reference No. 15: To create a provision for short courses to be taught by distinguished scholars based in other parts of the world as visiting professors.]

There is great interest among scholars based in different parts of the world to teach short courses at Presidency. We understand recruitment of a permanent faculty had to be the first priority. It would be good to invite a few visiting professors to teach in July and August 2013.

A TALENTED AND DIVERSE STUDENT BODY

[Terms of Reference No. 5: To refine and streamline the admissions process in order to recruit the most talented students from all sections of society and the process for awarding scholarships and providing financial aid on the basis of merit and need.]

We reaffirm the principles that ought to undergird the students admissions process at Presidency outlined in our first report – outreach to schools in many regions, undergraduate admissions tests of a high standard, open competition among graduates from all universities for post-graduate admissions except for specific integrated BA-MA/B.Sc./M.Sc programs, and due attention to diversity on the student body.

We recommend that the university authorities have a dialogue with the Higher Education Council about the proposed Common Entrance Test for post-graduate admission to all state universities. As we had said in our third report, if such a test is meant to be similar to the GRE in the United States and its scores taken to be just one of many criteria to be considered in the admissions process, then it may well be acceptable. However, over-centralization of post-graduate admissions across universities should be avoided. Every university should have autonomy in determining its admissions process and deciding on its admissions list. Presidency University as a unique institution and center of excellence must be free to have its own admissions tests and interviews or to create specific integrated five-year BA-MA/B.Sc.-M.Sc programs, where appropriate. However, students should have flexibility to change subjects between the graduate and post-graduate levels so long as they are adequately prepared. It is also a very healthy academic practice in the best universities around the world to have a very large intake of graduates from other universities at the post-graduate level through a competitive admissions process.

DEPARTMENTAL REORGANIZATION AND INTERDISCIPLINARY INITIATIVES

[Terms of Reference No. 6: To suggest innovative and efficient ways of organizing Departments and Schools of the University enabling both disciplinary and interdisciplinary appointments and courses of study.]

We are glad to note that our recommendation to create a unified ‘Department of Biological Sciences’ has been accepted. We recommend that the current and future faculty recruitment processes take place in the context of such an integrated department. The biologists have informed us of their urgent requirements and these are noted below in the context of setting up Central Research Instrumentation Facilities. Since some of the best science is taking place at the points of intersection of various disciplines, Presidency needs to have a flexible organizational structure to promote research and teaching in these fields.

We welcome plans to have theoretical computer science as a new stream in a revamped Mathematics Department. As noted before, a focus on linguistics, complexity theory and algorithms, neglected in other Indian institutions, may enable Presidency to quickly emerge as a leader in this area.

We are very pleased that outstanding young scholars in social and cultural anthropology have been appointed as part of the faculty recruitment process for the Department of Sociology. The time has come to rename the department as the Department of Social Anthropology and Sociology.

We reaffirm our recommendation that the departments be structured under two Faculties – the Faculty of Natural and Mathematical Sciences and the

Faculty of Social Sciences and Humanities – each with a Dean. We continue to encourage two or three University-wide research initiatives and the future establishment of a School of Public Policy and a Center for the Study of Asian Connections.

Pending the creation of Faculty Councils under the relevant statutes after the Appointed Day, the Vice-Chancellor may wish to harness the energy of the new faculty in institution building by nominating interim Faculty Councils with senior faculty members of her choice as Conveners in lieu of Deans. In order to get student input in the academic and extra-curricular affairs of the University, we recommend exploring setting up a Students' Senate on the BESU model.

AN INTELLECTUALLY EXCITING CURRICULUM

[Terms of Reference No. 7: To propose a curricular structure and an intellectually exciting curriculum with a balance of lecture courses, seminars and tutorials and to provide detailed guidelines for innovative syllabi in the natural sciences, social sciences, humanities and the arts.]

We dealt with this topic in great detail in our second report. We continue to suggest the elimination of the current distinction between honors and pass courses and to give students the flexibility to change their honors subject based on aptitude and performance at the end of the first year. Students should not have to follow an arbitrary, regimented schedule over three years, even though the number of courses to be taken to fulfill the honors requirement may remain the same.

As the PMG we are simply suggesting the need for Presidency University to return to its original vision of being an institution imparting a genuine liberal arts education, especially in the undergraduate college. We have limited ourselves to prescribing a broad structure for the curriculum, leaving the faculty with a great deal of autonomy to fashion their own courses. We still hope that our recommendation for curricular reform can be put into place for the incoming class of July 2013. For this to happen, the Vice-Chancellor may wish to appoint a faculty curriculum committee of seven members with a senior faculty member of her choice as chair.

We had mentioned in our second report that our vision for Presidency would be easier to implement if we had a four-year bachelors' degree. However, cognizant of the cost implications of such a move, we had been somewhat tentative about making that recommendation. We had noted that Presidency could be a trail-blazer in pursuing a 12 (school) plus 4 (bachelors) and then doctoral program with the masters being an exit option after one year of graduate-level coursework for those not continuing with doctoral dissertation research. Having deliberated further on these important issues at our July 2012 meeting, we had urged in our third report submitted in August 2012 that Presidency should take the lead in discussions about a four-year bachelors' degree that has been mooted by the central government.

Since a Masters' degree is still a requirement for a University job under UGC rules, we suggested that such a degree can be awarded on the way to a Ph.D. and not just as an exit option.

Since our third report, Delhi University has already announced a four-year bachelors' degree program. We would like the Presidency faculty to be fully consulted on the possibility of moving towards a four-year bachelors' degree program, perhaps integrated with a fifth year Masters program and a subsequent Ph.D. program. However, the resource requirements for such a change should be carefully evaluated before announcing or implementing any move to a new system.

THE UNDERGRADUATE COLLEGE AND GRADUATE STUDIES

[Terms of Reference No. 8: To define the relationship between the undergraduate College and the post-graduate Departments and Schools.]

We wish to build on our earlier recommendations to devise a synergistic relationship between undergraduate and graduate studies, including the employment of post-graduate students as teaching assistants or fellows in undergraduate courses. We have now recruited a number of faculty members with a high research profile who will wish to have doctoral students of their own. As we begin to build small, but high-quality, Ph.D. programs in different fields, it will be necessary to make provision for a number of multi-year research studentships to support doctoral students.

THE ACADEMIC CALENDAR

[Terms of Reference No. 9: To devise the most suitable academic calendar and consider whether to adopt a semester-system or year-long courses.]

We once again recommend the introduction of an intensive monsoon semester in July and August in partial overlap of the regular first semester and a winter semester in January in partial overlap of the regular second semester in order to introduce courses by distinguished visiting professors.

AN EFFICIENT AND ATTRACTIVE ACADEMIC INFRASTRUCTURE

[Terms of Reference No. 10: To suggest ways of making rich library resources available to faculty and students, building laboratories for scientific research, and equipping the campus with state-of-the-art information technology.]

In our first two reports we have already made several concrete recommendations regarding space and infrastructure in the old historic

College Street campus including a slim, tall, high-arched, iconic Bicentenary Building. In our third report we focused on the building of the second campus in Rajarhat behind the HIDCO building and on how we envision the links between the two campuses. We refer the reader to our third report for details on the second campus. We need the state government to expedite the transfer of the land to Presidency University if the second campus is to be ready and fully functional by the time of the bicentennial in January 2017.

In this report we emphasize the development of infrastructure that must take place within the next six months to one year. Of the three heritage buildings – the Main Building, the Baker Building and the Eden Hindu Hostel Building – in the old campus, it is the centenary of the Baker Lab in 2013. It needs thorough refurbishment not just for historical reasons: it urgently needs upgrading to attract and retain outstanding scientists at Presidency in the future. The approximate costs for renovating the heritage buildings are given in Annexure 1.

We strongly recommend the establishment of two Central Research Instrumentation Facilities (drawings attached) for our experimental scientists in 2013. We have received detailed proposals from the new faculty in Physics and the Biological Sciences, including lists of required instruments, and give them our unequivocal endorsement.

The proposal from Physics is as follows:

“Presidency University is in the process of recruiting a faculty in Physics who are world-class in teaching and research, with the goal to restoring its glorious days, when, led by Acharya Jagadish Chandra Bose, starting a century ago, it led the world in experimental innovation. An essential element of this is to build from scratch, since experimental facilities currently do not exist for research at the highest level, a central instrumentation facility designed to meet the basic needs of the researchers (faculty and fellows) of the department. Of course, this facility will be available to other members of the University, and indeed, to the research community in the local region as the need arises.

Currently the department has a basic X-ray diffraction facility for research purposes, which is used by faculty in Physics as well as members of other departments such as Geology and Chemistry. With the new recruitment well under way, the teaching load of faculty members is being reduced and it is expected that all faculty members will spend at least 50% of their time on research activities. In addition, research fellows working towards their PhD degrees, and postdoctoral fellows will be recruited in most areas of Physics.

In addition to four members of the original Presidency College faculty, we have now recruited Professor Somak Raychaudhury as head of Physics: he comes from over 20 years of research experience at the University of Cambridge, Harvard University, IUCAA Pune and most recently at the University of Birmingham, UK. Dr. Sukanta De has joined

us as DST Ramanujan research fellow from Trinity College Dublin. Dr. Debashis Datta (PhD from Saha Institute for Nuclear Physics, research at Universite Paris Sud), Dr. Rabindranath Gayen (PhD from Jadavpur University and research at and Dr. Ratna Koley (PhD at IIT Kharagpur, research at IUCAA Pune) were recruited from within Kolkata, but they have many years of research experience. Dr. Ritaban Chatterjee (PhD Boston University) will soon be joining us from Yale University, USA. We will recruit for 5 more positions in early 2013.

Proposed Facilities and Benefits

The Central instrumentation facility at the department of Physics will have the general-use instrumentation necessary for the experimental areas of focus of the department, namely condensed matter physics, the physics of nano-materials and optical and infrared spectroscopy in the context of Astrophysics and the physics of materials.

The basic infrastructure of this facility will rest on equipment that deal with scanning microscopy, spectroscopy and spectrophotometry, and the preparation of sample materials. We will source the instrumentation from within the state and the country as far as practicable, for the ease of procurement and follow-up maintenance, and wherever we have to acquire instruments from abroad, we will ensure that local follow-up facilities are available. We also intend to make these facilities widely available within the University and with the city, in a controlled manner, after prioritising the needs of the Presidency University community.

The proposed facilities will enhance the level of research activities within Physics department as well as provide support to other science departments to bring the right balance of research and teaching in the University as planned. They will be used by members of faculty, research fellows and occasionally by postgraduate students as part of their research projects. This Centre will also facilitate the development of advanced and innovative laboratory experiments for the applied courses of undergraduate and postgraduate curriculum as part of the training of students.

Fund requirement

The estimated cost of equipment required will be Rs 498 lakh. The list of items has been shown in the annexure along with the costs for each item. For imported items, estimated freight and local clearing charges have been included.

Timely and generous support from the State Government will enable us rebuild the department of Physics with experimental research facilities which will act as an important nodal point for the growth of scientific activities at Presidency University.”

A detailed list of equipments for Physics is given as Annexure 2. An abbreviated bullet list is given below:

- a) General Research Laboratory set-up (including optical benches and general optical laboratory set-up, lasers, microscopes, basic spectrometers, CCD detectors, oscilloscopes, voltage and current sources, vacuum pumps, cryostat and furnace)
- b) UV-Visible-NIR spectrophotometer with reflection facility
- c) Small Angle (XRD) analysis device
- d) Pulsed Laser Deposition Chamber and Excimer Laser
- e) Scanning probe microscopy:
 - Scanning Tunneling microscope (STM)
 - Atomic Force Microscope (AFM)

The proposal from Biological Sciences is as follows:

“Presidency University has recently constituted the Department of Biological Sciences, combining the departments of physiology, botany, zoology, molecular biology, bio-technology and bio-chemistry. For efficient functioning of the department, it is essential to set up a Central Instrumentation Research Facility, CIRF, to provide a common and thus cost-effective facility for all faculty members, research scholars and students of biosciences.

The facilities and equipment for research currently available in the various departments of physiology, botany, zoology, etc. are quite old and some of them are non-functional. No significant investments were made in the last couple of decades, in the then Presidency College, to improve and modernise the facilities. Given the task in hand of re-establishing Presidency as an institution of national eminence and of international standards, the investment in establishing CIRF will be a step towards these objectives.

Proposed Facilities

The CIRF will be a specialised research facility housing state-of-the-art instruments with approximately 40 supporting and basic facilities. It will provide a central facility of latest and Advanced Analytical Instruments for research in the application areas of physical, environmental, biological, allied and interdisciplinary sciences. It will cater to numerous interdisciplinary research activities amongst all the science divisions as well as for research in biosciences, particularly in the field of material research at Presidency University.

The CIRF shall house the instrumentation facilities covering the recommendations of UGC and DBT for infrastructure requirements and will be excellent for training in the modern areas of biological sciences. These include:

- 1 Central Common Instrumentation Facility
- 2 Experimental Biophysics and Biochemistry Facility

- 3 Microscopy Facility
- 4 Genomics & Proteomics Facility
- 5 Bio-safety (BSL II/III) Facility

With advances in technological development, biological scientists require ever more powerful tools for their research. As new instruments with enhanced performance become available, their importance for research increases. The young pool of newly recruited faculty members of Presidency University, with expertise in modern cutting-edge research areas, are gearing to make a mark in international research arena and the installation of CIRF will be the right step in that direction.

Benefits

The primary aim of the proposed CIRF is to utilize the inherently integrated nature of modern biological research wherein a core set of tools and assays can be used across a range of sub-disciplines and model systems (microbe, plant, animal tissue, cells, cultures, etc). This, in turn, allows us to optimize the use of such equipment at a much lower cost. In other words, rather than having individual labs duplicating the same equipment, we wish to have the CIRF serve as a central hub for all bio-scientists to use the same facilities in a more cost-effective and efficient manner.

This will also have the additional benefit of naturally fostering collaborations and interactions between scientists from various disciplines of biology who together will play a pivotal role in the growth of the Department of Biological Sciences at Presidency University.

Presidency University has recently appointed many talented young scientists, in the department of Biological Sciences, who bring with them a range of cutting-edge expertise in frontier areas of research in the biological sciences. The CIRF will be critically important for their ability to carry out research at an internationally competitive level and also train the next generation of students and research scholars in West Bengal.

Fund requirement

The estimated cost of the equipment required for CIRF will be Rs 495 lakh. List of items have been shown in the annexure along with the costs for each item. For imported items, estimated freight and local clearing charges have been built in.

Timely and generous support from the State Government will enable us to build the CIRF which will act as an important nodal point for the future academic and intellectual growth of science at Presidency University.”

We are grateful to the following faculty members in the Biological Sciences for drawing up the list: Bhaskar Gupta, Sutapa Saha, Abhik Saha, Sugopa Sengupta, and Nabendu Biswas. We thank Ujjwal Chowdhury, an alumnus, for giving final shape to the proposal.

Faculty members and students in the humanities and social sciences now have access to journals through JSTOR. However, the library needs to be upgraded and the posts of librarians filled as soon as possible.

A CAPITAL CAMPAIGN

[Terms of Reference No. 12: To establish a University development office and recommend a process to vet private gifts for endowed chairs, research funds, fellowships, scholarships, and physical infrastructure that might augment government funding and grants.]

We had strongly recommended engaging a professional and experienced fundraiser, perhaps on a commission basis, to build a corpus and mobilize resources for current use. We are pleased to note that the University has set up its own Development Office and Office of Alumni Affairs, and a concerted effort is under way to create an alumni database. A clear scaled set of gift opportunities need to be defined for private donors who may wish to give for buildings as well as named chairs, fellowships, etc.

COOPERATION WITH OTHER UNIVERSITIES

[Terms of reference No. 13: To suggest cross-registration agreements with other universities and colleges and partnerships or exchanges with other research institutes in West Bengal and India.]

We had outlined possible cooperative arrangements with other institutions in our earlier reports. **Given the historical ties between Presidency College and Sanskrit College since the nineteenth century, we reiterate our recommendation to explore mechanisms of recreating a special relationship between Presidency University and Sanskrit College, possibly as an affiliated college, in order to strengthen the study of Sanskrit as well as the classical and modern humanities. Its implementation will resuscitate Sanskrit College and pave the way for the building of an outstanding Humanities Center under the auspices of Presidency University. Similarly, recalling historical links, we may explore possibilities of collaboration with BESU in the area of the history and philosophy of science and technology.**

INTERNATIONAL PARTNERSHIPS

[Terms of reference No. 14: To help create international partnerships and exchanges with select, outstanding colleges and universities in other parts of the world.]

We once more endorse the Vice-Chancellor's efforts to establish strategic partnerships with a few leading foreign universities in various fields. We need to look both east and west in forging these relationships and be highly selective in signing any MoUs. We welcome the MOU signed with Trinity College, Dublin.

THE GOVERNANCE STRUCTURE

[Terms of Reference No. 1: To craft an appropriate governance structure for Presidency University enabling its most distinguished alumni to play a positive role in restoring it to a position of academic excellence.]

We reiterate our recommendation on this topic as it has yet to be implemented. We gave considerable thought to the question of an appropriate governance structure for Presidency at our July 2012 meeting. There is now considerable research to suggest that distinguished alumni play a key role in the governance structures of the world's leading universities.¹ We need not imitate the best practices of these universities, but rather adopt their basic principles while modifying the structures to suit Indian conditions, especially the particular requirements of Presidency University. For a unitary university of the size of Presidency University, we continue to believe one Governing Board rather than a Court and a Council may provide a more efficient and streamlined system of governance.

We recommend that the composition of the Governing Board should be as follows. The Chancellor or, in his absence, the Vice-Chancellor should chair the meetings of the Governing Board. Ex-officio representatives drawn from government functionaries should be kept to the bare minimum and should not exceed a maximum of three such members. There should be a judicious balance between faculty representatives and nominated members who should be eminent scholars or distinguished alumni. We suggest a maximum of nine faculty representatives: the two Deans of the Faculty of Natural and Mathematical Sciences and the Faculty of Humanities and Social Sciences; three Heads of Departments by rotation for one year in alphabetical order to be selected by the Vice-Chancellor; two teachers from the Faculty of Natural and Mathematical Sciences elected by the teachers of the Faculty of whom at least one shall be a Professor; and two teachers from the Faculty of Humanities and Social Sciences elected by the teachers of the Faculty of whom at least one shall be a Professor. We suggest a maximum of nine members who

¹ See, for example, Shailendra Raj Mehta, "Why is Harvard # 1? Governance and the Dominance of US Universities", IIM Ahmedabad Working Paper, April 5, 2012.

are eminent scholars or distinguished alumni, but not employed by the University: two members to be nominated by the Chancellor from amongst eminent scholars or distinguished alumni interested in University education of whom at least one shall be an alumnus of Presidency College/University; three members to be nominated by the State Government from amongst eminent scholars or distinguished alumni interested in University education of whom at least two shall be alumni of Presidency College/University; and four members to be nominated by the outgoing Council/Governing Board of whom at least two shall be eminent scholars and at least two shall be distinguished alumni of Presidency College/University.

THE PRESIDENCY UNIVERSITY ACT

[Terms of Reference No. 2: To propose amendments to the Presidency University Act, as necessary, to facilitate achieving its goals of excellence and equity.]

If the state government intends to amend the Presidency University Act, we urge that this be done in the next (February 2013) session of the Assembly. This is important because the statutes of Presidency University will have to be drawn up in consonance with the provisions of the Act. We recommend once more introduction of appropriate language in the preamble stating the intention to develop Presidency University as a unique center of excellence. One Governing Board may replace the Court and Council and the composition of the Governing Board may be defined along the lines suggested in the previous section. The transitory provisions of the Act need to stay in place until the appointed day.

STATUTES AND UNIVERSITY OFFICERS

[Terms of Reference No. 1: To revise and frame Statutes of the University as they relate to its governance structure, the process of appointing the Vice-Chancellor and other officers of the University, and the conduct of academic affairs.]

Once the legislature has passed the amendments the government wishes to make to the Act, the PMG members stand ready to participate as members of the PU Council to help frame the first statutes. **In our third report we had recommended setting as our goal the first day of classes in the academic year beginning in July 2013 to be the appointed day. In order to achieve this goal, the statutes must be ready by June 30, 2013. If this timetable is to be maintained, the amendment of the PU Act must be done by February 2013.**

We strongly recommend the institution of three sets of policies and procedures with immediate effect: 1) Policies and procedures to combat sexual harassment in the workplace with provisions for swift disciplinary

action against offenders. 2) A policy of zero tolerance of drug use on campus with procedures for dismissal and expulsion. 3) An Academic Ethics Committee to oversee the maintenance of the highest standards of academic integrity, and empowered to take appropriate action in cases of plagiarism.

CONCLUSION

The Presidency Mentor Group warmly appreciates the rapid progress of Presidency University on the road to academic excellence in the last year and a half. Members of the Group will remain in touch with one another and the Chairperson will maintain regular contact with the Vice-Chancellor and leaders of the state government over the next few months. The Chairperson wishes once more to record his deep gratitude to Professor Amartya Sen for his sage advice on all matters. The Presidency Mentor Group will have a formal meeting in late June 2013 and submit a fifth report soon after containing further observations and recommendations.

Acknowledgements

The Presidency Mentor Group congratulates Professor Malabika Sarkar, Vice-Chancellor of Presidency University, for her visionary leadership in rejuvenating Presidency and thanks her for providing gracious hospitality in Kolkata. We are also grateful to the Professor Prabir Dasgupta, Registrar, and to Dr Debajyoti Konar, Controller of Examinations, for his multitasking skills. Mr Anirban Chakrabarti in the Vice-Chancellor's office has been exemplary in providing logistical support for our meetings as well as the faculty recruitment process. Dr Debashruti Roychowdhury, Dean of Students, has not only looked after the welfare of our students, but has also helped in making new faculty feel welcome.

We remain grateful to Shrimati Mamata Banerjee, Hon'ble Chief Minister, for the courtesy extended to the Chairperson and her swift decisions regarding land for the second campus, the Distinguished University Professorships and the guaranteed annual supplements for faculty in the form of research and professional development funds as well as moving expenses for faculty from outside West Bengal. We thank Shri Amit Mitra, Finance Minister, for providing financial sanction for the above in record time and Shri Bratya Basu, Education Minister, for his energy and enthusiasm in supporting our cause. Professor Sugata Marjit, head of the Higher Education Council, has joined in helpful discussions with the PMG. We look forward to working with Shri Vivek Kumar, Principal Secretary, Higher Education. Shrimati Madhumita Roy, Joint Secretary, continues to help in the implementation of our plans for Presidency University.

We are grateful to Shri Partha Ranjan Das, architect, for his expert opinion on space and architecture and for his drawings. We again thank the distinguished scholars in various disciplines. They have spent long hours over several days interviewing candidates and selecting excellent scholar-teachers for Presidency University. We appreciate the broad public interest in and support of our endeavor. Hindu College

began its journey nearly two centuries ago as a collective citizens' initiative. The same spirit of service is required to rebuild Presidency University as a unique center of excellence in India and a world-class institution by its bicentennial in January 2017.

Sugata Bose (Chair), Isher Judge Ahluwalia, Abhijit Banerjee, Sabyasachi Bhattacharya, Swapan Chakravorty, Nayanjot Lahiri, Rahul Mukerjee, Himadri Pakrasi, Ashoke Sen