

**REPORT ON ARIEL UNIVERSITY EVALUATION REVIEW COMMITTEE FOR
THE EVALUATION OF LIFE-SCIENCE STUDIES IN ISRAEL**

Dear Prof. Lynne Regan,

Thank you for your detailed recommendations. We carefully studied all your recommendations and incorporated them into our program. See our point-by-point responses to your comments in the following tables.

Kind regards,

Prof. Tovit Rosenzweig

Head, Department of Molecular Biology

Ariel University

A handwritten signature in black ink that reads "Tovit" followed by a stylized flourish.

Committee recommendation	Steps toward implementation
1. Essential	
<p>1.1. Implementing Life-Sciences strategic plan regarding teaching, research, and recruitment goals for five-year intervals</p>	<p>Currently, a strategic plan for the overall development of the University during the next decade is being generated. This plan includes the Department of Molecular Biology. The ongoing discussions cover crucial aspects, including the direction in which the department will be developed under the Faculty of Natural Science, the interplay between the department and the School of Medicine and the Department of Medical Sciences. The strategic decisions regarding the Department of Molecular Biology will significantly impact our scientific pursuits, the introduction of new study tracks, and the faculty's recruitment policy. In general, the Department of Molecular Biology aspires to expand and increase not only the number of faculty member, but also the biological fields covered. This will be reflected by recruiting new faculty members and opening new tracks for undergraduates, such as biotechnology, plant sciences and ecology. The department will recruit at least five faculty members in the coming five years. The completion of the strategic plan is anticipated by November 2024.</p>
<p>1.2. While retaining the policy for accepting individuals who could have not gained an opportunity to enroll elsewhere, the University needs to provide further support for students in need for social, personal, mental well-being, economic, organizational, and/or academic assistance, at all levels. The University should also Develop mechanisms to identify individual student's needs and act upon these early on – not when the students fail, or dropout.</p>	<p>The policy of accepting candidates with lower admission criteria than acceptable by some other universities in Israel, provides an opportunity for individuals with lower starting point to achieve an academic education. These students should prove their capabilities during the 1st year, by successfully passing all courses. While most students succeed to integrate, some fail, either due to personal or economic issues, while other because of insufficient academic capabilities. We agree with the committee that additional support may reduce the rate of students' dropout, mainly those that fail because of reasons that are not directly related to their capabilities.</p> <p>Enhancing the university's support for students in need will require a collaborative effort between the department and the Dean of Student Services.</p> <p>The department will establish a systematic procedure to identify students with low academic achievements (starting from this year). This assessment will take place at the end of each semester, facilitated by the department secretariat and the teaching committee. Students with an average below 65 will be required to meet a consultant from the Dean of Students' office to discuss their challenges and explore available assistance.</p> <p>In courses where there are ongoing evaluations, such as quizzes and lab reports, lecturers will arrange meetings with students who receive a mark below 65. These sessions aim to understand the specific difficulties faced by the students and determine how best to provide support.</p> <p>The Dean of student unit at the Ariel University has developed a range of activities to support students facing various challenges, including economic, social, psychological, and academic difficulties. In addition, the unit assigns coordinators to specific social groups, such as students of Ethiopian origin and Arab students, identified as needing special</p>

	<p>support. Information about the services provided by the Dean of the Student Unit and the specific support available to students is communicated through personal phone calls and frontal orientation meetings at the start of their studies. (Beginning of 1st year)</p> <p>As detailed in the Evaluation report (Section 3.3.3), the support offered by the Dean of Student Office encompasses personal mentoring, reinforcement classes, remedial teaching, workshops on teaching strategies, and English courses. Some services are offered free of charge and others involve a nominal fee. Additionally, students have access to consultations on any aspect related to their academic lives on campus, along with career advice and training on securing employment.</p> <p>Economic support is also extended through scholarships and favorable financial arrangements for tuition payment. The comprehensive approach reflects a commitment to addressing the diverse needs of the student community at Ariel University.</p> <p>We think that this collaborative approach will help the students and will reduce the dropout rate.</p>
<p>1.3. At the Institutional level, address the disparities in faculty members' representation and diversity; develop a plan to recruit more women and Arab faculty members.</p>	<p>Recruitment of new Faculty members depends on scientific achievements, teaching proficiency and the department's requirements, ensuring absolute equality and gender fairness among all Israeli candidates. The department makes efforts to recruit women and non-Jewish faculty members for tenure-track positions.</p> <p>A new female faculty member will be recruited to the department in the upcoming spring semester, reflecting our commitment to diversity. However, we are aware that the threshold condition for candidacy, which involves completing successful Postdoc training abroad, is a major obstacle, particularly affecting women. Therefore, we will also consider the candidacy of outstanding researchers who complete a combined Israeli-international Postdoc training.</p> <p>In parallel, the department will proactively allocate potential female Postdoc candidates through Science Abroad and the WISER platform.</p>
<p>2. Important</p>	
<p>2.1. To define and communicate the various criteria for "research excellence" for recruitment and promotion.</p>	<p>Criteria for recruitment, promotion and "research excellence" are already defined.</p> <p>Recruitment:</p> <p>As previously mentioned, the recruitment of new faculty members is contingent on scientific achievements, teaching proficiency, and alignment with the department's needs. The candidate's CV undergoes thorough review by the search committee, ensuring they meet specific recruitment criteria. These criteria include completing postdoctoral training abroad, a scientific excellence, reflected by a strong publication record in high-impact journals, a clear defined and innovative research proposal, and compelling recommendation letters.</p> <p>Candidates who fulfill the criteria are invited to present a seminar (Job talk), followed by personal meetings with faculty members and the head of the department. The final evaluation involves consideration by tenured faculty members, who vote in favor of or against the candidate, shaping the ultimate decision.</p>

	<p>Promotion criteria are published in the Hebrew website of the University (https://www.ariel.ac.il/wp/wp-content/uploads/2019/04/%D7%AA%D7%A7%D7%A0%D7%95%D7%9F-%D7%9E%D7%99%D7%A0%D7%95%D7%99%D7%99%D7%9D-%D7%95%D7%A7%D7%99%D7%93%D7%95%D7%9D-%D7%9C%D7%A1%D7%92%D7%9C-%D7%94%D7%91%D7%9B%D7%99%D7%A8.pdf).</p> <p>In addition, an effort to make the criteria and the process for promotion transparent, there are annual meetings of the Rector with Faculty members at different ranks (untenured lecturers, tenured lecturers and associate professors) to inform and to have Q&A on promotion criteria and the process.</p> <p>Additionally, the department holds annual personal meetings between the Head of the department and faculty members. During these sessions, achievements are reviewed, and attention is given to identifying additional milestones necessary for promotion. This proactive approach ensures a clear understanding of the path to advancement and provides valuable guidance for each faculty member's professional growth.</p>
<p>2.2. The Institution should establish faculty peer teaching evaluations, or various other mechanisms to evaluate instruction, as opposed to solely relying on student surveys.</p>	<p>The current student evaluations provide a valuable information regarding general student satisfaction, but do not reflect the overall educational work in the course. The university is in the process of adopting a tool for multidimensional assessment of teaching, which is based on a self-evaluation of teaching according to various criteria. The assessment tool includes balanced multi-dimensional assessment based on a variety of sources while combining formative and summative assessments.</p> <p>The new assessment process reflects trends and shifts occurring within academic education, and includes the following:</p> <ul style="list-style-type: none"> - Emphasis on imparting skills in addition to conveying knowledge - Transition to research-based teaching - Transition from teacher-centered learning to student-centered learning - Assimilation of digital technologies - Transition to multidimensional assessment that combines formative assessment and summative assessment. -
<p>2.3. The Faculty and the Department should define policies for teaching oversight, pedagogical instruction and help, and allocation of teaching assignments amongst faculty members. These should be communicated and available to faculty</p>	<p>While the majority of courses in our M.Sc. program incorporate active learning components, we acknowledge that this is not consistently reflected in our undergraduate program. This discrepancy primarily stems from the need for additional TAs to support lecturers in classes that include large number of students.</p> <p>In light of this valuable evaluation report, we are committed to addressing this issue. There are two different aspects of this problem: 1) the digitalization of courses with the implementation of active learning, and 2) the allocation of teaching assignments, to diversify evaluation methods.</p> <p>In the upcoming year, we will initiate the implementation of active learning in some courses (General Biology, and Cytogenetics). This</p>

<p>members, adjunct faculty, and Tas.</p>	<p>process will expand to additional courses in the coming years. This will be done with the support of the unit of digital learning at the university, headed by Mrs. Keren Barak.</p> <p>The unit of digital learning will provide full support for the transformation of courses into digital mode, encouraging active and interactive learning. This will be achieved by creating videos to impart knowledge, including visual demonstrations, on-line activities and quizzes. Digital courses will include some in-person lectures, to support active learning. Lecturers will also be available for students during reception hours. These courses will undergo a shift in assessment, moving away from the reliance on multiple-choice tests.</p> <p>In parallel, the department is in the process of implementing active learning tools in all frontal courses, and more diverse evaluation methods will be implemented in the coming future. Teaching assistants are expected to be assigned alongside the course lecturer, to ensure the successful integration of active learning strategies and diverse evaluation methods. We are optimistic that this requirement will receive support from the university.</p>
<p>2.4. The Institution should make an effort to improve the currently insufficient monetary amounts granted as start-up packages for new faculty hires.</p>	<p>The university is aware of the relatively-limited start-up package provided to new faculty member and aspires to increase the amounts. This process is in motion, and the most recent faculty member hired received 1 million NIS as startup funds. It's important to note that the university covers all costs associated with the basic organization of new labs, including construction, furniture, hoods, etc. Additionally, the university provides scholarships for research students, covering the full expenses for MSc and PhD students and partially covering costs for Postdocs .</p> <p>The university is aware of the relatively-limited start-up package provided to new faculty member and aspires to increase the amounts. This process is in motion, and the most recent faculty member hired received 1 million NIS as startup funds. It's important to note that the university covers all costs associated with the basic organization of new labs, including construction, furniture, hoods, etc. Additionally, the university provides scholarships for research students, covering the full expenses for MSc and PhD students and partially covering costs for Postdocs .</p> <p>Furthermore, the university invests millions of NIS annually in acquiring new research facilities for faculty use, and faculty members are not required to contribute financially. This reflects the university's commitment to providing financial support to faculty members. We anticipate that these efforts will continue and expand in the coming years.</p>
<p>2.5. The Department should implement a structured mentoring committee for faculty members to improve the opportunities for attaining tenure and promotions.</p>	<p>The department will establish a mentoring committee that will meet twice a year with the untenured faculty, provide assistance, and improve opportunities/collaborations to attain a tenure or promotion.</p> <p>Furthermore, the mentoring committee will actively evaluate teaching quality by attending lectures delivered by new faculty members. Constructive feedback and suggestions for improvement will be provided as needed, ensuring a continuous enhancement of teaching capabilities. This recommendation will be implemented this year.</p>

<p>2.6. The Department should offer more diverse courses in molecular biology by augmenting the teaching personnel with dedicated teaching adjuncts and TAs.</p>	<p>We agree that the department should add additional diverse courses. Currently, B.Sc. students can choose between three tracks of the program, but there are no elective courses within the tracks. M.Sc. and PhD students can choose elective courses, although the number of courses is limited due to the small faculty size. We intend to minimize this limitation by opening additional new courses in molecular biology that will be opened for both graduate and undergraduate (3rd year) students.</p> <p>This approach will enable us to increase the number of elective courses available for both BSc and MSc programs. Courses will be taught by the faculty member and by teaching adjuncts, which is also the situation today. We are planning to incorporate new courses in the program in the coming year (Winter 2024). We intend to add elective courses exclusive to the M.Sc. program, including advanced course in ecology and a laboratory course on flow cytometry. In addition, we intend to add additional two elective courses jointly with the B.Sc. program including courses in brain science and plant biotechnology. The purpose of these changes is to diversify the program curriculum and increase elective courses options.</p>
<p>2.7. At the Department level, diversify and upgrade student coursework evaluation methods through presentations, writing assignments, regular quizzes, and other means in addition to end-of-course exams only.</p>	<p>See our answer in section 2.3.</p>
<p>2.8. Establish a series of academic lectures, seminars and workshops by external professionals, to enhance the networking opportunities for the Department and broaden the education and expertise of the students.</p>	<p>The department has a weekly seminar throughout the academic year for graduate students and faculty. The lectures in the departmental seminar are given by visiting external professionals.</p>
<p>2.9. Establish career development seminars and work fairs, including alumni in the activities.</p>	<p>We started a program of invited lectures of alumni and professionals from industry for undergraduates and graduate students to expose them to potential career options. This program was started during the last academic year, received very good feedbacks from the students, and will be continued in the future.</p> <p>The Alumni association at Ariel University is currently not well-developed, requiring additional efforts to establish an active and efficient Alumni network. Recognizing the importance of this mission, the responsibility has been entrusted to the new president of the University, Prof. Grosman. He is determined to spearhead this project</p>

	and bring about a positive transformation in the university's Alumni network.
<p>2.10. At the Faculty level, identify and provide an onboarding period for incoming Deans and other leadership positions, and ensure continuity of best practice.</p>	<p>The University acknowledges the significance of a seamless transition for new leaders and the imperative to uphold the ongoing best practices. A comprehensive pre-arrival orientation program has been devised, providing an overview of the Faculty of Natural Sciences' vision, mission, and strategic goals, consolidating the corresponding approaches of the constituent departments.</p> <p>In pursuit of this, the incoming Dean has structured the onboarding period as follows:</p> <ul style="list-style-type: none"> • The Dean has initiated a collaborative program with the outgoing Dean and other experienced individuals within the Faculty of Natural Sciences. • Regular meetings with "key stakeholders," encompassing department heads, faculty members, administrative staff, and student representatives, have been facilitated by the Dean. <p>In ensuring the perpetuity of best practices, the Dean has decided to:</p> <ul style="list-style-type: none"> - Regularly update and circulate appropriate documents to ensure congruence with the evolving needs of the University. - Instigate a framework for periodic evaluations of administrative processes and academic initiatives. - Encourage feedback from leaders to pinpoint areas for enhancement and innovation. <p>All in all, the Dean is committed to creating a robust onboarding process that not only facilitates a smooth transition for new leaders but also ensures the sustained success of the Faculty of Natural Sciences.</p>
<p>2.11. The Faculty should develop a plan to recruit and retain lab technicians and/or Core facility staff managers, to assist more PIs, and ensure the continuity of research in laboratories.</p>	<p>The university recognizes the need to hire lab technicians and Core facility staff managers. In recent months, significant progress has been made in this regard, with the successful recruitment of five lab managers. Additionally, a new position for bioinformatician was created, and a qualified individual (PhD) was promptly hired on January 1, 2024, to provide an essential support to the department's researchers in the bioinformatic analysis of their data.</p> <p>We anticipate the ongoing recruitment of lab managers, aiming to reach a point where each research lab with proven scientific achievements has an experienced technician, at least in a part-time position.</p>
<p>2.12. The institution should make efforts to increase the Arab student enrolment and retention to provide a critical mass for peer support. The institution should also provide the needed resources for academic success.</p>	<p>See our answer in section 1.3.</p>

3. Desirable	
<p>3.1. In future SERs, address all relevant ongoing and future challenges, including the political and geographical challenges, so they are clear to the evaluating Committee prior to the visit.</p>	<p>Ariel University confronts various external challenges, with the European boycott standing out as a significant obstacle. The need to identify alternative resources to mitigate the impact on research is crucial. We remain optimistic that the academic community will assess Ariel University based on its scholarly accomplishments, ensuring that political considerations do not influence the assessment.</p>
<p>3.2. At the Department level, provide the opportunity to take more Molecular Biology courses at other institutions to compensate for the lack of breadth in the courses currently available; facilitate means for commuting and/or allow hybrid attendance, and provide guidance to students in selecting the relevant courses.</p>	<p>The possibility to attend courses at other universities is already open for MSc and PhD students. In order to approve attendance and refund, the student should justify the need, the specific importance of the desired course for the student's scientific development.</p>
<p>3.3. At the Institutional level, provide a program for student activities to foster a sense of community amongst and between commuter and dorm-living students</p>	<p>There are many activities for Israeli and foreign students, living in or outside the dormitories, organized by the dean or by the international unit. These include activities for holidays, tours, workshops, etc.</p>