ESSIC Recruitment, Onboarding, Mentoring and Promotion Process for PTK Scientists

1. Introduction

The purpose of this document is to define and describe the process from hiring through promotions for ESSIC Professional Track Faculty (PTK). The intent is for our PTK to have a well-defined path for advancement at ESSIC, or for successful transition to other employment opportunities. The current process is summarized in Figure 2 at the end of this document.

2. Recruitment

The recruitment of a new PTK originates when the need for additional personnel to support a research task is identified. Typically, the research task leader (TL) will contact the ESSIC Assistant Director (EAD) to start a recruitment process. The EAD will evaluate the required level for the position, develop a job description, and work with the ESSIC Director of Human Resources (DHR) to post a job advertisement and associated job title (See Table 1).

The EAD and DHR will discuss the typical salary range for the job title being considered with the TL and ensure that the funding source is adequate for the salary and possible relocation expenses.

Candidates who apply for the position are evaluated by the EAD with consultation with local subject matter experts, and a selection is then made. The DHR issues an offer letter which includes current University of Maryland onboarding requirements, approved and signed by the ESSIC Director (ED). Once the offer is finalized, an official start date will be determined.

In some cases, a hire is expedited by using the "Visiting" title. The "Visiting" title is removed after the employee is approved by the CMNS Appointments, Evaluation and Promotion (AEP) committee for that title; the AEP meets annually. There is no salary adjustment made when the "Visiting" title is removed as it is not a promotion.

3. Onboarding

Once an offer is made and accepted, several steps occur during on-boarding. The ESSIC HR staff will be in contact with the PTK to take care of any paperwork that is needed before the start date. In cases where a visa is involved, additional paperwork is needed and this may delay the start date. In addition, other University requirements may have to be met (e.g., background checks, training, etc.) The DHR will provide any necessary information prior to the start date.

When a new PTK starts, the ESSIC HR team will meet with them and provide information about University and State of Maryland benefits, payroll, etc[1]. The HR team will also explain the University wide orientation sessions and stress to the faculty member the importance of participation in these[2]. If they are working on-site, the EAD will assign them an office. If they are working off-site, the TL will assign them an office at the government work site.

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[1] https://uhr.umd.edu/benefits/; https://uhr.umd.edu/sps/;https://uhr.umd.edu/benefits/tuition-remission/; https://research.umd.edu/coi
[2] https://faculty.umd.edu/

Upon request, the new PTK may also meet with the EAD to introduce expectations as a PTK faculty member and to outline the career paths available, including the CMNS and ESSIC promotion process. If the EAD is not available, the ESSIC Associate Director (ESD; E. Berbery for CISESS; R. Ferraro for all others) will perform this task. The EAD (or ESD) should further explain some of the on-line resources provided by the Office of Faculty Affairs[3] that include new faculty orientation, career development workshops and networking opportunities.

The University of Maryland offers an array of on-boarding orientation for new employees (e.g., new employee orientation, new faculty orientation, etc.) PTK will also be alerted to training programs required by either the Sponsor and the University of Maryland as needed. This may include, but is not limited to, Research Integrity, IT security awareness, conflict of interest, and workplace harassment.

During 2023, ESSIC has reestablished Affinity Groups, and the new employee will be assigned to a group based on their research focus[4]. Additionally, other peer and mentor groups are being developed, and the leads of those groups will meet with the new employee.

This is described further in the next section.

4. Promotion and Mentoring

Each of the current PTK position tracks include the opportunity for advancement for faculty who are hired in one of the more junior ranks. PTK hired as post-doctoral scientists (also referred to as Research Associates at ESSIC) and Faculty Assistants, may stay within those titles for up to three years. They may then be offered new appointments within the Scientist or Specialist tracks. The promotable ranks in different position categories are shown in Table 1.   Promotions, and associated pay increases, are awarded upon approval from CMNS and the salary increase typically becomes effective in the next full pay period.

Scientist Track	Specialist Track
Assistant Research Scientist	Faculty Specialist
Associate Research Scientist	Senior Faculty Specialist
Research Scientist	Principal Faculty Specialist

Table 1 – PTK Scientist and Specialist tracks at ESSIC and CMNS. ESSIC also has a Research Professor track which may be assigned to faculty hired by the various departments within ESSIC.

Presently, it is the PTK's prerogative to request a promotion review, although the EAD generally monitors potential promotions, especially for early career faculty. Promotion reviews are done on an annual basis, and a minimum of one year at the current job title is needed before a promotion can be considered.   The EAD advises potential candidates, making an initial assessment to determine if a promotion is warranted and what the likelihood of approval is by the ESSIC or CMNS AEP committee. However, the PTK can still request a promotion review, even if the EAD does not recommend it. Tables 2 and 3 provides some of the attributes that are

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[3] https://faculty.umd.edu/
[4] http://essic2.umd.edu/research/research-areas

expected at the various Scientist and Specialist positions. A summary of the timeline for promotions is provided in Figure 1.

	Assistant Research Scientist	**Associate Research Scientist**	**Research Scientist**
Project Development	Uses innovative techniques to modify or extend existing theories and practices for application to important problems.	Displays judgement, creativity, and foresight in guiding R&D projects of limited scope and/or complexity.	Conceives, plans, and guides research, development, or operational projects that set new standards and create new methods.
Work Management	Handles specific responsibilities within a larger team; May provide guidance to more junior scientists and technicians.	Has latitude to pursue efforts that support the overall unit mission; Supervises small numbers of technicians, students, etc.	Works with considerable independence; Formal or informal supervision or coordination of Co-Investigators, technicians, students, etc.
Community Service	Serves as a scientific peer reviewer and on professional meeting panels.	Serves on review panels, workshops, and conference organizing panels.	Participates in national scientific boards; Leadership of professional meetings and/or special sessions; Chairs scientist review panels.
Educational and Public Outreach (EPO) Research and Professionalism **Communication Reputation**	Contributor to activities led by others.	Lead or primary participant in one or a few EPO activities.	Leadership in defining programs, writing articles, and presenting science to educational and public audiences.
	Publication of results from scientific research as part of multi-author team or group, occasionally as first author. Presents papers at conferences.	Authorship of papers that are accepted as important contributions within a particular specialty field; Presents contributed and invited papers at professional meetings.	Published papers as corresponding or lead author of considerable scope and complexity that have significant impact on a broadly-defined field; Invited speaker at international conferences.
	Emerging reputation among peers as a significant contributor to an R&D field.	Well-known and respected by peers on a local or national level within a particular R&D field.	Nationally or internationally known and respected for contributions to broadly defined R&D fields and/or projects.

Table 2 - Attributes of ESSIC PTK Scientist Track. Note that items listed in each category are examples – candidates are not expected to demonstrate all attributes.

	Faculty Specialist	Senior Faculty Specialist	Principal Faculty Specialist
Project Development	Uses innovative techniques to modify or extend existing instrumentation and practices for application to important problems.	Displays judgement, creativity, and foresight in guiding R&D projects of moderate scope and/or complexity.	Conceives, plans, and guides research, development, or operational projects that set new standards and create new methods.
Work Management	Handles specific responsibilities within a larger team; May provide guidance to more junior specialists, scientists and technicians.	Has latitude to pursue efforts that support the overall unit mission; Supervises technical teams for specific projects.	Works with considerable independence; Formal or informal supervision or coordination of Co-Investigators, technicians, students, etc.
Community Service	Serves as a technical or scientific peer reviewer	Serves on professional committees, review panels, and workshops.	Participates in national technical boards and review panels; Leadership on professional committees and/or special meeting sessions;
Public Outreach	na	Leads or participates in one or a few Public Outreach activities.	Leadership in defining programs, writing articles, and presenting technical advances to public audiences.
Research, Communication, Professionalism	~~D~~ocumentation of results from technical development as part of a team or group, occasionally as first author. Includes technical reports, data sets, software. Presents papers at conferences or workshops.	Authorship of papers, reports, or data sets that are accepted as important contributions within a particular specialty field; Presents contributed and invited papers at professional meetings or workshops.	Corresponding or lead author on published papers, reports or data sets of considerable scope and complexity that have significant impact on a broadly-defined field;
Communication	Emerging reputation among peers as a contributor to an R&D field.	Known and respected by peers on a local or national level for technical contributions in a particular R&D field.	Nationally or internationally known and respected for technical advances in a broadly defined R&D field and/or project.

Table 3 - Attributes of ESSIC PTK Specialist Track. Note that items listed in each category are examples – candidates are not expected to demonstrate all attributes.
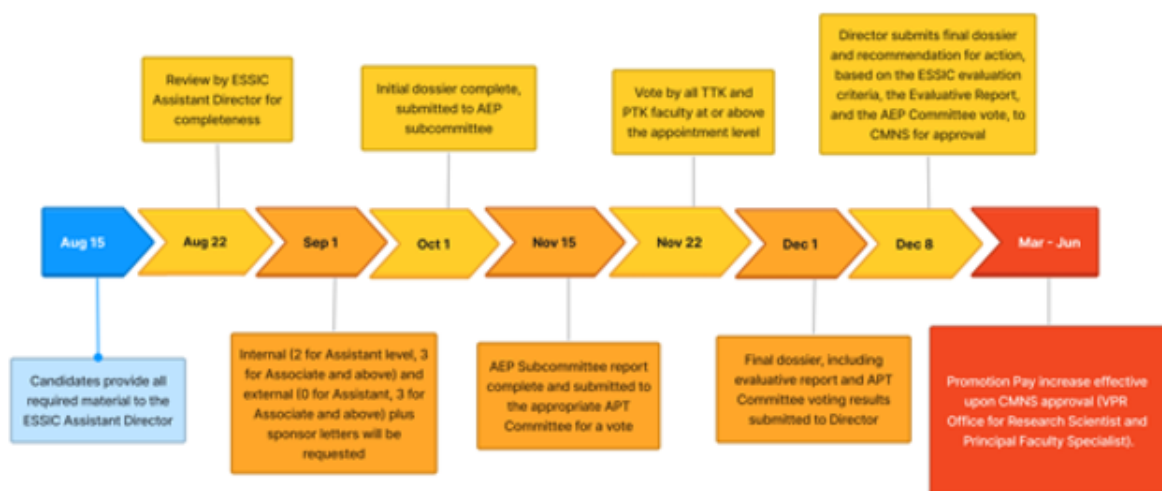

Figure 1 – ESSIC Promotion steps and associated timeline.

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The EAD supports the candidate by providing the information needed for the application and review process, much of which is also available from the University Faculty Affairs web page,[5] and soliciting the letters of recommendation required for the package. The promotion packages are due to the EAD by August 15, then they are forwarded to the ESSIC AEP committee for assessment. Upon ESSIC AEP approval, the requests are forwarded to CMNS for the next level of approval. For promotion to Research Scientist and Principal Faculty Specialist, the approval is subjected to the CMNS AEP Committee review, where it is forwarded to the University of Maryland's Provost Office for final approval.

ESSIC is evaluating an augmented process, where PTK would be assigned to a Mentor Group led by a senior faculty member. Working jointly with the Mentor Group Lead (MGL) or a designee, the PTK will develop a career development plan within 2-3 months of employment. The plans will be reviewed and updated with the Mentor on an annual basis; *ad-hoc* meetings with the Mentor will be encouraged during critical aspects of one's career.   This process is for career development and is not an evaluation of performance, although material developed in this process is likely to be helpful to the PTK in preparing promotion packages.

To ensure that the mentoring process is effective, the ESD has worked closely Chris Kidd, ESSIC Research Scientist, who initiated the beta-group effective August 2022. Later this year, the performance of the group will be evaluated, and we anticipate developing an ESSIC wide mentor program to start in late 2023/early 2024.

5. Special Circumstances/Interim Salary Adjustments

There are several instances where interim (e.g., not related to promotions) salary adjustments can be made.

- **Equity Adjustments**

On an annual basis (beginning of the calendar year), the EAD reviews the salaries of all PTK and determine if they fall more than one standard deviation below the average salary for their grade in their respective scientist or specialist tracks. This determination will also consider years of service in grade and at ESSIC, and equivalent years of service from a previous position(s). If a PTK qualifies, a suggested increase is determined, and it is discussed with both the PTK and their TL. A letter from the ED is sent to the Dean of CMNS to begin the University review process. If the request is approved, the salary increase is typically made retroactive to the most recent pay period

- **H1B Prevailing Wages[6]**

Prevailing wage determination is performed for the hire or promotion of PTK on H1B visas. The University Maryland International Office (ISSS) submits a prevailing wage determination to the DOL (Department of Labor) for the employee. Under the Labor Condition Application. The

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[5] https://faculty.umd.edu/main/appointments/promotion-and-tenure#ptk
[6] https://globalmaryland.umd.edu/offices/international-students-scholar-services/h-1b-faculty

University of Maryland Attests that The UMD will pay the higher of the prevailing wage or the actual salary paid to U.S workers with similar skills and qualifications. The PI will be notified for any changes of salary after the prevailing wage is received from the Department of Labor.

- **Retention Raise[7]**

An ESSIC PTK faculty may also request a salary increase if they have a job offer letter from another institution or private firm. The EAD will verify the legitimacy of this offer and evaluate it in terms of the salary range for the PTK's current job title and years of service (see equity adjustment above). ESSIC will determine what, if any, level of salary increase is warranted to support retention of the employee. If approved by the ED, a request for a retention raise is submitted to the CMNS Dean's office to begin the University review process. If the retention offer is approved, the salary increase is typically made retroactive to the most recent pay period.

- **Change in Duties**

In some instances, a salary increase of up to 12% may be requested for PTK faculty who have had a significant change in duties at the current position. An example would be leading a team of scientists on an existing or new project. Strong justification is needed to have this approved by the University. The EAD is typically contacted by the TL or PTK, and leads the development of this request to the Dean's office to begin the University review process.

- **Merit Increases**

The State of Maryland determines when merit raises will be provided to state employees, which includes University of Maryland Employees. When merit pay is authorized, the distribution of merit increases within ESSIC is determined on a standard review of the PTK faculty accomplishments. This review uses the same information considered for promotions, which are dependent on title and rank (see Table 2 or the document footnote 4). The rating system was established in 2022 by the EAD and ESD's, in conjunction with the ESSIC AEP committee chairs, and is reviewed and updated (if needed) on an annual basis. The PTK faculty will be asked to provide their information annually through *Faculty Success,* where ESSIC specific guidance was established[8]. The information was then transformed into metric ratings. The information is analyzed by the ESD, who recommends the proposed merit to the ESSIC ED. Upon final review by the ED, merit increases are finalized. In 2023, merit pay was awarded to PTK effective July 1, 2023. On average, it was 2.5%.

- **Cost of Living (COLA) increases and annual bonuses**

The Governor of Maryland determines the COLA increase for all State employees. In special circumstances, this may include a one-time bonus (e.g., in January 2022, a $1500 was granted to all PTK) and most recently, a 2% COLA was given effective July 1, 2023. The University of Maryland Human Resources Department processes the COLA increase, and the ESSIC HR Manager sends an email announcement alerting faculty to the increase.

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[7] https://uhr.umd.edu/comp_topic/compensation-classification-guidelines/exempt-guidelines/exempt-salary-adjustments/

[8] https://news.essic.umd.edu/faculty-success/quick-start/

New onboarding and promotion process

July 2023

Recruitment	Onboarding*	Mentoring and Promotion*	Interim Salary Adjusment*

• ESSIC task leader (or Federal sponsor) request new hire
• ESSIC develops and advertises job announcement
• Applicants are evaluated and interviewed
• An offer letter is issued
• The offer is finalized
  • Starting salary is based on job title, years of experience, and typical salary ranges at ESSIC
• Clarification on Visiting title for expedited hires; a title change comes via AEP with no promotion and salary increase.
	• Background check is completed 3 days prior to start date
	• New employee orientation conducted by ESSIC HR
	• ESSIC onboarding conducted by EAD, including PTK expectations, career path, etc.
	• PTK participates at UMD New Employee (monthly) and New Faculty (every Aug) Orientation
	• PTK is assigned to a mentor group
	• PTK participates at CMNS preparation workshops to enhance professional skills
	
	*https://www.faculty.umd.edu/main/appointments/startup-resources
	
	*https://www.faculty.umd.edu/main/leadership-development/faculty-development-initiatives-programs
		• ESSIC requests annual input from task leaders and mentor group leads
		• ESSIC and PTK will establish a Professional Development Plan
		  • Mentor Group lead meets with PTK annually
		  • Mentor advises on when a promotion should be pursued
		• PTK initiates request (based on guidance from group leader)
		• ESSIC provides template, timeline, etc. (differs by current job title) but follows CMNS and UMD guidelines
		• ESSIC review panel meets to discuss promotion
		• ESSIC contacts external references and sponsor/task leader
		• Peer approval or higher level CMNS review panel required for more senior job titles
		• A Recommendation letter is sent from ESSIC to CMNS
		  • New title/salary effective upon approval
		  • An equity adjustment if warranted
		*https://ebo.essic.umd.edu/policy/ESSIC_ProfessionalTrack_AEP_Process.pdf
			• H1B applications
			  • ISSS prevailing wages
			• Interim equity pay
			  • Yearly analysis by EAD
			  • Request of employee for special cases
			• Retention Pay
			  • ESSIC verifies offer letter
			  • EAD will determine level of possible retention offer consistent with pay range for current PTK job title
			  • Possible retention offer must be supportive within the budget available for that position
			• COLA Increase
			  • State controlled, same % for each employee
			• Merit Increase
			  • State controlled
			  • Based on merit review, approved by ED.
			
			*https://uhr.umd.edu/comp_topic/compensation-classification-guidelines/exempt-guidelines/

Figure 2 – New mentoring, onboarding and promotion process at ESSIC.