

INDUSTRIAL PHARMACY RESIDENCY PROGRAM (IPRP)

TERMS OF REFERENCE FOR 2022-23

ADMINISTERED BY:



UNIVERSITY OF TORONTO
LESLIE DAN FACULTY OF PHARMACY

With the following participating companies' Canadian affiliate:

| | | |
|----------------------------|-----------------------------|---------------------|
| Abbott Laboratories | Bayer | Lilly |
| Abbvie | Biogen | Novo Nordisk |
| Alexion AstraZeneca | Eisai | Roche |
| Amgen | GlaxoSmithKline | Sanofi |
| Amylyx | Jazz Pharmaceuticals | |

The participating companies reserve the right to change, add or remove their offering of a residency program at any time. Applicants should check the most recent list of companies and positions on the website: <https://pharmacy.utoronto.ca/programs/residency-programs>

For additional information or questions, please contact:

Industrial Pharmacy Residency Program,
144 College Street
Leslie Dan Faculty of Pharmacy
University of Toronto
Toronto, Ontario, Canada, M5S 3M2
Pharm.residency@utoronto.ca

Monica Gautam, BScPharm, PharmD
Industrial Pharmacy Residency Program
Coordinator
monica.gautam@utoronto.ca

CONTENTS:

- I. PROGRAM DEFINITION
- II. RESIDENT ELIGIBILITY
- III. APPLICATION PROCESS
- IV. OBJECTIVES
- V. SUCCESS CRITERIA
- VI. START AND FINISH DATES
- VII. COMPLETION REQUIREMENTS
- VIII. MAJOR PROJECT
- IX. AWARD
- X. ANNUAL GENERAL MEETING
- XI. FINANCIAL COMPENSATION
- XII. KEY EXPECTATIONS OF FACULTY LIAISONS
- XIII. KEY EXPECTATIONS OF COMPANY SUPERVISORS
- XIV. KEY EXPECTATIONS OF RESIDENTS

I. PROGRAM DEFINITION

The Industrial Pharmacy Residency Program (IPRP) is a twelve-month educational program administered by the Leslie Dan Faculty of Pharmacy, University of Toronto in cooperation with participating pharmaceutical companies as listed in this document and on our website. The Core Committee consisting of the 1) Resident, 2) Company Supervisor and 3) Faculty Liaison are responsible to work together to ensure all elements of the IPRP are fulfilled.

Effective for the 2023-24 cohort, several twenty-four-month IPRP residencies will be offered in Global Program Management Regulatory Affairs at Roche.

New companies wishing to participate in the IPRP should first contact the Residency Coordinator.

Companies wishing to refine their current IPRP positions should first contact the Residency Coordinator.

II. RESIDENT ELIGIBILITY

Applicants to the IPRP must be a pharmacist or a student in the final year of study leading to a recognized university degree in pharmacy. *All pharmacy degree requirements must be completed before starting the residency.*

Applicants must have graduated, within the **previous five years** from the application year, with a recognized professional (practice) degree in pharmacy from a university accredited within Canada by [CCAPP](#) or within the USA by [ACPE](#). Other programs may be approved, based on review of the applicant's university transcripts by the Residency Coordinator, to determine comparability with a Canadian undergraduate pharmacy practice degree.

A license to practice pharmacy is recommended but not mandatory. Previous work experience in the pharmaceutical industry is not required. Canadian citizenship and permanent resident status will be given priority.

III. APPLICATION PROCESS

The application period typically opens in early September for admission the following year. Applicants are encouraged to consult the [website](#) for the most current information about residency positions, company brochures, application process and key dates.

| Phase 1 – Initial Submission | | [September] |
|--|--|--------------------|
| Applicants to: | <ul style="list-style-type: none"> a. Complete the online application b. Provide names and contact information for two references c. Provide pharmacy transcripts (official or unofficial) d. Provide resume e. Pay application fee | |
| Phase 2 – Company Specific Applications and Packages | | [October-November] |
| Applicants to: | <ul style="list-style-type: none"> a. Indicate application to specific residency program(s) b. Provide company specific cover letter(s) (optional) | |
| IPRP Office to: | <ul style="list-style-type: none"> a. Ensure applications are complete b. Securely provide the application packages to participating companies | |
| Phase 3 – Applicant Assessment | | [December-January] |
| Companies to: | <ul style="list-style-type: none"> a. Review application packages and identify top candidates b. Select and schedule applicants for interviews c. Conduct all interviews | |
| Applicants to: | <ul style="list-style-type: none"> a. Attend invited interview(s) | |

| Phase 4 – Ranking | | [Early February] |
|--------------------------|---|--------------------------|
| Companies to: | a. Rank interviewed and successful applicants b. Submit ranking to the IPRP Office on time | |
| Applicants to: | a. Rank residency positions where an interview was granted b. Submit ranking to the IPRP Office on time | |
| Phase 5 – Match | | [Late February] |
| IPRP Office to: | a. Review all rankings b. Match applicants to residency programs – initial and subsequent rounds c. Communicate initial and subsequent matches to companies and residents | |
| Applicants to: | a. Accept or decline residency offer per timelines | |
| Phase 6 – Post Match | | [March – June] |
| Companies to: | a. Issue employment contract to resident(s) per usual human resources process b. Confirm start dates c. Inform IPRP Office of any changes | |
| Applicants to: | a. Sign employment contract b. Inform IPRP Office of start date or any changes | |
| IPRP Office to: | a. Support future residents and companies as needed b. Manage residency opportunities as needed | |
| 2023-24 Residency Starts | | [July 1 – Sept 30, 2023] |

IV. OBJECTIVES

The IPRP is intended to educate the resident in depth in at least one functional area within the pharmaceutical industry. Residents are expected to meaningfully contribute to projects. Residents should be exposed to other areas through committees, teams, projects and/or mentorship to better appreciate the complexities of commercializing medications and key issues globally and in Canada.

Upon completion of the IPRP, supervisors will ensure residents will be able to:

- Appreciate the complexities of the drug commercialization process
- Understand key policies/issues that affect the pharmaceutical industry both locally and globally
- Describe the roles and responsibilities of different functional areas in a pharmaceutical company
- Describe the interrelationships among the functions in a pharmaceutical company
- Identify external stakeholder groups for the pharmaceutical industry and appreciate their role
- Apply principles of critical appraisal, strategic thinking and creative problem solving to an identified significant issue within the pharmaceutical company
- Meaningfully contribute to projects at either a brand or functional level
- Reliably prepare and deliver high quality presentations and written reports

V. SUCCESS CRITERIA

Success of the IPRP will be assessed regularly on the following parameters:

- Number of companies taking part in the IPRP year over year
- Number of residency positions offered year over year
- Number of IPRP applicants year over year
- Percentage of available residency positions successfully filled
- Percentage of residents that complete all requirements of the IPRP
- Career path of residents after completion of the IPRP
- Surveys of residents, supervisors and faculty liaisons to assess:
 - Development of resident's skills/competencies
 - Satisfaction with the IPRP

VI. START AND FINISH DATES

Residents must complete all academic requirements including examinations, clinical and other rotations, and projects prior to starting their residency. Residents normally start the residency between **July 1 and September 30**. If an earlier or later start date is needed, residents must discuss with the Residency Coordinator.

The IPRP finish date is twelve or twenty-four months after the start date depending on the residency.

- An earlier completion date of no more than 4 weeks **may** be approved in exceptional circumstance only, and if the resident has been in their role for a significant amount of time.
- A later completion date **may** be approved in exceptional circumstance only, and for no more than three more months of IPRP training.

In either circumstance, residents need to provide a rationale and seek permission from the Residency Coordinator who may engage the supervisor and/or faculty liaison to make a final decision.

VII. COMPLETION REQUIREMENTS

| 12 MONTH RESIDENCY | 24 MONTH RESIDENCY |
|--|--|
| a. 12 months of company training | a. 24 months of company training |
| b. Complete all IPRP milestone activities outlined in University of Toronto's Quercus learning platform | b. Complete all IPRP milestone activities outlined in University of Toronto's Quercus learning platform |
| c. Complete at least two meetings of the Residency Core Committee | c. Complete at least three meetings of the Residency Core Committee |
| d. Attend at least two of three offered IPRP webinars on different functional areas and/or industry topics | d. Attend at least two of three offered IPRP webinars on different functional areas and/or industry topics each year |
| e. Major Project – approval of the formal written report and at least one presentation | e. Major Project – approval of the formal written report and at least one presentation |
| f. Attend and present as requested at the IPRP Annual General Meeting | f. Attend and present as requested at the IPRP Annual General Meeting |
| | g. Rotation through a second functional area |
| | h. Completion of Regulatory Affairs certification is strongly recommended |

To receive the IPRP certificate of completion, the resident must complete all the above requirements during the IPRP. The company supervisor and/or the faculty liaison must inform the Residency Coordinator of the resident's successful completion of the program so that the certificate can be issued.

VIII. MAJOR PROJECT

The IPRP major project is a year-long, meaningful initiative with a high-quality final report that could be published or shared broadly across an organization. It is **not** meant to be a series of role specific duties or experiential work.

The company supervisor is to provide the resident with a list of projects of value for the company that are feasible and can be completed in one-year. Based on their interests, the resident is responsible to develop a proposal (ex. rationale, scope, methodology, design) for their major project and seek approval by the Core Committee **within three months** of starting their residency. The company supervisor, or their delegate, will take full responsibility for the resident's work and progress.

Residents who require Research Ethics Board (REB) approval for their major project are to follow their company's standards and procedures for conducting high quality research and related publications. The faculty liaison may offer guidance as needed.

The final major project written report must be submitted and approved by the company supervisor and faculty liaison prior to the completion of the residency. The resident is expected to present their major project to the Core Committee and to appropriate stakeholders within the company.

The final written report is normally between 2500-5000 words and should be formal, organized like a publication and include references. Below are recommended headings to structure the report.

| | |
|---------------------------|-------------------------------------|
| ▪ Title page | ▪ Results including tables, figures |
| ▪ Abstract (~250 words) | ▪ Discussion and recommendations |
| ▪ Acknowledgments | ▪ Limitations |
| ▪ Introduction/background | ▪ Conclusions |
| ▪ Objectives | ▪ References |
| ▪ Methodology | ▪ Appendices |

IX. AWARD

A plaque and \$1000 are awarded to acknowledge one IPRP resident who has demonstrated leadership qualities, undertaken new initiatives and whose Major Project is of exceptional quality. In case of a tie by the evaluation committee, the prize money will be split equally to recognize two winners.

Residents who have successfully completed the IPRP and who wish to apply for this award, must provide the following to the Residency Coordinator by **October 31** of the year they complete the IPRP:

- A copy of their major project report
- A letter of nomination from their residency supervisor
- A letter from the resident outlining their leadership skills during the residency

The Residency Coordinator will invite faculty members and/or pharmaceutical industry experts with no conflicts of interest to assess and score submissions for consideration of the award.

X. ANNUAL GENERAL MEETING

The IPRP Committee provides overall direction and accountability for the Industrial Pharmacy Residency Program. This committee meets at least annually and is composed of the following:

- Dean of the Leslie Dan Faculty of Pharmacy, University of Toronto, or designate
- Faculty IPRP Coordinator
- Faculty Liaisons
- Company supervisors and other representatives
- Ontario Pharmacy Residents' Association Industrial Pharmacy Representative

It is expected that IPRP residents will attend parts of the meeting and present a high-level update.

XI. FINANCIAL COMPENSATION

The resident will be an employee of the company, on a one-year contract basis. The same salary will apply to each residency position offered in the program. Participating companies will establish the salary yearly through consensus at the Annual General Meeting.

- For the **2022-23** residency cohort the salary is **\$54,664 CAD**
- For the **2023-24** residency cohort the salary is **\$55,757 CAD**
*Residents in year two of the 24-month residency will receive a salary increase of ~20%

July 1, 2022

2022-23 IPRP Cohort

While the salary is uniform at all participating companies, the benefits are not the same. The applicant should seek information about benefits directly from the companies. Additional benefits may include vacation time, health benefits, or attendance at conferences.

XII. KEY EXPECTATIONS OF FACULTY LIAISONS

The Dean of the Leslie Dan Faculty of Pharmacy appoints the Faculty Liaison, usually for a 3-year, renewable term. They are a member of the residency Core Committee and responsible for the following:

1. To serve as an academic advocate for the resident.
2. To attend the Core Committee meetings at least twice per year.
3. To advise the resident in the development of their major project to ensure its quality and feasibility.
4. To propose potential project collaboration and/or supports, where possible.
5. To review and approve the major project proposal, other reports and the final project report.
6. To inform the coordinator of the resident's successful completion of the IPRP requirements.
7. Offer input and suggestions for quality improvement of the IPRP program.
8. To provide the Core Committee with relevant IPRP and Faculty updates.
9. To attend the IPRP Annual General Meeting, held at the Faculty or virtually.
10. To provide the resident with ongoing mentorship, guidance and support.

The host company is expected to compensate the Faculty Liaison for travel, accommodation and meal expenses incurred for any in person Core Committee meeting attendance.

XIII. KEY EXPECTATIONS OF COMPANY SUPERVISORS

| Activity | Timeframe |
|--|----------------------------|
| FOR FUTURE RESIDENTS [2023-24] | |
| Engage IPRP Coordinator to set up or discontinue residency positions | Ongoing |
| Confirm positions with coordinator for the upcoming application cycle | Aug |
| Provide coordinator with a new/updated description of company, residency position | Aug |
| Review application package and conduct interviews with candidates | Dec - Jan |
| Submit candidate rankings by requested deadline | Early Feb |
| Extend formal employment contracts to successful resident(s) outlining start dates | Mar - Jun |
| Attend and briefly present at Information Night for interested students | May |
| FOR CURRENT RESIDENTS [2022-23] | |
| Provide the resident with the necessary electronic equipment and workstation | 1 st wk of IPRP |
| Review organizational structure and introduce new resident to team members | 1 st wk of IPRP |
| Review expectations, projects and finalize learning objectives with resident | 2 nd wk of IPRP |
| Provide options to resident(s) for their major project | Before mth 2 |
| Plan and execute at least two meetings with the core committee | Mth 3 and 9 |
| Approve resident's major project | At 12 mths |
| Meet resident at least monthly to assess progress, provide feedback and guidance | Ongoing |
| Employment opportunities are not offered to residents prior to completion of IPRP | Ongoing |
| Attend Annual General Meeting or send a delegate | Jun |
| Escalate issues to faculty liaison and/or coordinator | Ongoing |
| Inform coordinator of approval of the major project | At 12 mths |

XIV. KEY EXPECTATIONS OF RESIDENTS

| Activity | Timeframe |
|--|-------------|
| Accept or decline matched residencies per requested deadlines | Feb/Mar |
| Timely sign off company provided work contract | Mar-Jun |
| Pay residency fee of \$50 prior to start of residency | Jul-Sep |
| Obtain UTORID and sign onto Quercus platform | Jul-Sep |
| Seek approval and/or inform coordinator of residency start date | Mar-Jun |
| Develop and submit residency learning objectives | Mth 1 |
| Plan and execute at least two meetings with the core committee | Mth 3 and 9 |
| Prepare, present and submit proposal for major project | Mth 3 |
| Engage faculty liaison for mentorship, advice and input on major project | Ongoing |
| Escalate issues to faculty liaison and/or coordinator | Ongoing |
| Permanent employment opportunities are not pursued prior to completion of IPRP | Ongoing |
| Attend at least 2 of 3 offered IPRP webinars | Ongoing |
| Attend and present at Annual General Meeting | Jun |
| Present the final major project to the core committee | Jun-Aug |
| Submit final major project report to supervisor and faculty liaison for approval | Jun-Aug |
