

Resource Technologist Track for Core Facilities: Path BioResource UPenn

TITLE	Salary Grade
Resource Technologist A (Entry Level, BA or BS req.)	24
Resource Technologist B (BA, BS, Min. 3 years exp.)	26
Resource Technologist C (BA, BS, Min. 5 yrs exp.)	27
Manager Research Proj. B (Master's degree, 7-10 years exp)	28
Manager Research Proj. C (Master's degree, more than 10)	29
Manager D (Master's degree, 7-10 years exp)	28
Manager E (Master's degree, more than 10)	29
Director C (Master's degree, 7-10 years exp)	29
Director D (Master's, More than 10 years) Technical Director	30
Director E (Master's plus, More than 10 plus...)	31

The three new tracks for resource technologists are outlined in the first grouping above. By eliminating a salary grade, salaries can become more commensurate with experience gained in core technologies that are ever-increasing in complexity. The Senior Resource Technologist at salary grade 27 is equivalent to a Research Specialist D at salary grade 27.

For the manager positions, HR does not provide generic descriptions as these are tailored to the work within the lab and the individual hierarchy established by the lab. SOM HR has indicated they are leaning toward Manager and Director Titles for most managerial/director functions within the labs. However, when a core lab has broken down some of its work into specific projects requiring focused project management, the Manager Research Project categories may be appropriate.

In all cases, where degree requirements and minimum experience are indicated, equivalent training and experience will pertain.

**UNIVERSITY OF PENNSYLVANIA
HUMAN RESOURCES/COMPENSATION
POSITION INFORMATION QUESTIONNAIRE SHORT FORM**

___ Check if new position is being created Date: _____

Job Title: **Junior Resource Technologist (A)** Employee Name: _____

Job Class Code/Grade: 24 Penn ID: _____

School/Center: _____ Supervisor's Name: _____

Department: _____ Supervisor's Title: _____

POSITION SUMMARY: In a few sentences, *briefly* describe the primary function and purpose of the position. The junior resource technologist is primarily responsible for the daily operation and associated quality control within a highly-technical resource laboratory. This position requires a college degree, preferably in science, or a minimum of 1-2 years hands-on experience in an analogous laboratory situation. (Equivalent Biotechnical training at an accredited institution is also acceptable.) This individual works within a team of resource technologists, each relying on the expertise, guidance, and precision-orientation of the others. The junior technologist recommends and implements and maintains improvements in experiment design and assists in preparation and response to any regulatory inquiries. This team member also regularly performs equipment, reagent and supply validation for any new and improved methods within the laboratory.

Although this is an entry level position, after a few months, this individual will meet with clients and set up experiments/procedures from start to finish. Some experiments can take several days or longer. Tasks are complex, so this person must be capable of interacting well with a diverse group of individuals to establish experiment perimeters and variables. Then, he or she is charged with maintaining quality control throughout the duration of each experiment/procedure.

PRINCIPAL POSITION REPOSIBILITIES/DUTIES: List up to ten major tasks starting with the most important for which the position is responsible. Include the estimated percentage of time spent on performing the task, with no task more than 25%. Also, identify how critical the task is to the position, with 1 being least important, 5 being most important. (Refer to PIQ guidelines.)

	RESPONSIBILITIES/DUTIES	Estimate d % of	Critical Level
1	Perform specimen collection/analysis, and/or experiments/assays from start to finish.	45%	5
2	Optimize and design assay conditions for new projects; read literature to determine the best way to perform assays.	15%	4
3	Validate assay performance characteristics, write protocols, create excel worksheets that can do calculations based on the number of samples and volume used.	10%	4

	RESPONSIBILITIES/DUTIES	Estimated % of	Critical Level
4	Interpret results and generate reports; review with the supervisor; troubleshoot, if necessary, discussing the measures with the supervisor.	10%	4
5	Maintain equipment and assist with quality control procedures in the laboratory on a daily basis.	5%	4
6	Record time, track the workflow, maintain all experimental details and generate billing for each project.	5%	4
7	Attend training sessions apropos to the resource laboratory technology/instrumentation used within the laboratory.	5%	4
8	Perform additional duties as assigned	5%	
9			
10			
		100%	

Identify any of the above listed tasks that were added in the last year by listing the related numbers:
 _____.

JOB EVALUATION FACTORS: Listed below are job evaluation factors. Check the single best answer that applies. (Refer to PIQ guidelines for definitions.)

<u>Position Evaluation Factor</u>	<u>Response</u>	<u>Key Words</u>
Q1	<input type="checkbox"/> 1	H.S. Diploma or GED preferred
Formal Education (Minimum education req.)	<input type="checkbox"/> 2	H.S. Diploma or GED required
	<input type="checkbox"/> 3	Vocational or Technical School required
	<input type="checkbox"/> 4	Associate's Degree or Two Year College equivalent required
	<input type="checkbox"/> 5	Bachelor's Degree required; Basic Science OR EQUIVALENT VOCATIONAL TRAINING
	<input type="checkbox"/> 6	Master's Degree required; Major (optional) _____
	<input type="checkbox"/> 7	M.D., Ph.D., Law Degree or equivalent doctoral degree required
	Q2	<input type="checkbox"/> 1 0 to 1 year
Minimum Experience (Minimum experience req.)	<input type="checkbox"/> 2 1 to 2 years	<input type="checkbox"/> 6 7 to 10 years
	<input type="checkbox"/> 3 2 to 3 years	<input type="checkbox"/> 7 Over 10 years
	<input type="checkbox"/> 4 3 to 5 years	
	Q3a	<input type="checkbox"/> 1 Daily
Planning Scope (Highest level of planning req.)	<input type="checkbox"/> 2 Current Week	<input type="checkbox"/> 6 One to Three Years
	<input type="checkbox"/> 3 One to Four Weeks	<input type="checkbox"/> 7 Three Years or More
	<input type="checkbox"/> 4 One to Three Months	
	Q3b	<input type="checkbox"/> 1 Individual (position only)

Planning Level
(Level of primary scope of planning)

- 2 Unit or equiv. (<15 faculty & staff)
- 3 Section or equiv. (> 15 faculty & staff)
- 4 Department or equiv. (> 15 faculty & staff)
- 5 School/Center
- 6 University-wide

Q4a
Impact on Operating Budget

- 1 None
 - 2 Incidental
 - 3 Supportive
 - 4 Recommending
 - 5 Controlling
 - 6 Delegating
- Approximate Size of Budget \$_500,000

Q4b
Impact on Grant Funds

- 1 None
 - 2 Incidental
 - 3 Supportive
 - 4 Recommending
 - 5 Controlling
 - 6 Delegating
- Approximate Size of Budget \$_500,000_____

Q4c
Impact on Revenue Generating

- 1 None
 - 2 Indirect
 - 3 Supportive
 - 4 Contributory
 - 5 Major impact
 - 6 Directing
- Approximate Size of Budget \$_500,000_____

Q5
Complexity

- 1 Standardized: duties are few and repetitive
- 2 Routine: routine tasks, processes, or operations
- 3 Basic: moderately complex procedures and tasks
- 4 Varied: complex and varied work
- 5 Analytic: non-standardized and widely varied work
- 6 Highly Complex: broad in scope covering one or more complicated areas
- 7 Multifaceted: broad in scope covering the entire University's operations

Q6
Decision Making
(Level of direction & supervision)

- 1 Standardized: little independent judgment required
- 2 Routine: limited opportunity for independent judgment
- 3 Basic: provided on an as needed basis; some independent judgment necessary
- 4 Varied: establish general objectives relative to project; independent judgment required
- 5 Analytic: establish and review broad objectives relative to duties/responsibilities
- 6 Highly Complex: review established objectives/recommend department/school objectives
- 7 Multifaceted: review and approve major recommendations; establish procedures

Q7
Problem Solving
(Typical level encountered over extensive period of time)

- 1 Problems solved by reporting them to a supervisor
- 2 Problems solved by talking with a supervisor
- 3 Solutions found by selecting from specific choices defined in standard work policies
- 4 Solutions found by using methods chosen before in similar situations
- 5 Problem solving involves identification and analysis of diverse problems
- 6 Problems are complex, varied and only mildly related to those seen before
- 7 Problem solving requires understanding and evaluation of impact upon the University

Q8a
Internal Contacts

- 1 Little or no contact
- 2 Regular contact within department & periodic contact with other departments
- 3 Regular contact within department & with other departments; supplying information
- 4 Regular contact to carry out programs; occasionally with officials at higher levels
- 5 Regular contact to carry out programs; continuing contacts with officials at higher levels
- 6 Regular contact with internal persons of importance and influence
- 7 Continuing contacts involving difficult formal negotiations

Q8b
External Contacts

- 1 External communication with others is minimal
- 2 Occasional contact with outside agencies & general public supplying information
- 3 Regular contact with outside agencies & general public supplying/seeking information
- 4 Regular external contacts to explain specialized matters, occasionally to enforce policies
- 5 Regular external contacts, with continuing personal contact to enforce policies
- 6 Regular contact with external persons of importance and influence
- 7 Continuing external contacts involving difficult formal negotiations

Q9a
Supervisory Responsibility

- 1 No responsibility or authority for direction of others
 - 2 Authority limited to direction of student &/or temporary workers
 - 3 Orient/train others; may act in a lead capacity
 - 4 Provide limited supervision for one or more functions within a department (functional)
 - 5 Make recommendations re: HR issues; plan/assign/evaluate work of staff (bonafide)
 - 6 Supervise multiple functions, with full responsibility for effective operation & results
 - 7 Overall responsibility to provide direction and guidance for Penn
- _____ Number of Direct Reports _____ Number of Indirect Reports

Q10a
Job-Related Knowledge
(Knowledge & skill required to perform job)

- 1 Basic Skills
- 2 Intermediate Skills
- 3 Advanced Skills
- 4 Formal Technical Skills
- 5 Entry Professional Skills
- 6 Advanced Professional Skills
- 7 Multiple Professional Skills/External Expert

Q11
Innovation/Creativity
(Degree job requires developing/improving procedures, policies systems, etc.)

- 1 Opportunities for innovations are rare
- 2 Improved methods affect the immediate department
- 3 Improved methods affect delivery of service to selected customer or students
- 4 Results impact several work groups, a large project or an extended customer base
- 5 Results generally affect a school/center within the University
- 6 Results generally affect several schools/centers
- 7 Results generally affect the University as a whole; impact competitive position

ORGANIZATION CHART:

(Use staff member names and position titles)

Technical Director

Junior Resource Technologist

WORKING CONDITIONS/PHYSICAL EFFORT: (Check as many as apply)

Working Conditions

- | | | |
|---|---|--|
| <input type="checkbox"/> Office, library, computer room | <input type="checkbox"/> Requires extensive safety training | <input type="checkbox"/> Exposure to chemicals |
| <input type="checkbox"/> Stockroom or warehouse exposure to weather | <input type="checkbox"/> Alternative work schedules | <input type="checkbox"/> Outdoor |
| <input type="checkbox"/> High noise environment protective devices | <input type="checkbox"/> On-Call (beeper) | <input type="checkbox"/> Requires |

☐☐☐ High dust, dirt, grease environment ☐☐☐ Exposure to moving machinery
Extensive travel (>1000 mi./month)

☐☐☐

Physical Effort

- | | |
|---|---|
| <input type="checkbox"/> Typically sitting at a desk or table | <input type="checkbox"/> Typically running, climbing |
| <input type="checkbox"/> Frequent lifting 25 lbs. or more | <input type="checkbox"/> Occasional lifting 25-50 lbs. |
| <input type="checkbox"/> Occasional lifting 25 lbs. or less | <input type="checkbox"/> Climbing ladders/scaffolds |
| <input type="checkbox"/> Typically standing or walking | <input type="checkbox"/> Intermittently sitting/standing/stooping |
| <input type="checkbox"/> Using tools requiring high dexterity | <input type="checkbox"/> Typically bending, crouching, stooping |

Employee's Signature: _____ Date: _____

Employee's Name (please print): _____

Supervisor's Signature: _____ Date: _____

Supervisor's Name (please print): _____

Supervisor's Title: _____

Department Head's Signature: _____ Date: _____

Department Head's Name (please print): _____

Department Head's Title: _____

POSTING INFORMATION: *(TO BE COMPLETED ONLY IF POSITION IS TO BE POSTED)*

Write summary of position for posting purposes.

DUTIES: *(Description should be brief and only include principle duties.)*

QUALIFICATIONS: *(Qualifications should clearly indicate those that are required and those that are preferred.)*

Supervisor's signature _____ Date: _____

**UNIVERSITY OF PENNSYLVANIA
HUMAN RESOURCES/COMPENSATION
POSITION INFORMATION QUESTIONNAIRE SHORT FORM**

___ Check if new position is being created

Date: _____

Job Title: **Intermediate Resource Technologist (B)**

Employee Name: _____

Job Class Code/Grade: 26

Penn ID: _____

School/Center: _____

Supervisor's Name: _____

Department: _____

Supervisor's Title: _____

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POSITION SUMMARY: In a few sentences, *briefly* describe the primary function and purpose of the position. The intermediate resource technologist is primarily responsible for the daily operation and associated quality control of the more complex instruments and procedures within a highly-technical resource laboratory. This position requires a college degree in science, with at least 3 years hands-on experience in the resource laboratory. (Equivalent Biotechnical training at an accredited institution is also acceptable.)

While this position often focuses on implementing one or two key high-end services for the laboratory, this individual is also called upon to move seamlessly between all types of equipment and demonstrate an ability to handle all procedures in the facility, bringing to completion various applications using the facility's instruments and techniques. Using a specialized knowledge in complex applications, this individual meets with clients to implement experiments for best analysis results. He/she maintains quality control throughout experiments, and validates individual procedures for sterility and purity, as well as overall performance. He/she translates the capability of the technology to PIs and junior researchers on a regular basis, indicating to researchers how they might best employ the facility's complex applications in their experiments. He/she also trains entry level technicians and students. The intermediate technologist, along with the junior technologist, recommends and implements and maintains improvements in experiment design and assists in preparation and response to any regulatory inquiries. The Intermediate Technologist is often asked to provide technical methods sections to investigators for publication and/or grant submissions. He/she will also be asked to present at national meeting regarding laboratory protocols and quality control procedures.

PRINCIPAL POSITION REPOSIBILITIES/DUTIES: List up to ten major tasks starting with the most important for which the position is responsible. Include the estimated percentage of time spent on performing the task, with no task more than 25%. Also, identify how critical the task is to the position, with 1 being least important, 5 being most important. (Refer to PIQ guidelines.)

	RESPONSIBILITIES/DUTIES	Est	Cr
1	Provides technical expertise on high-complexity instrumentation within the resource laboratory to researchers, performing all types/levels of applications.	4	5
2	Having been cross-trained on all instrumentation, moves effortlessly between instruments/procedures to ensure efficiency and quality control.	1	5
3	Validates assays/experiments for sterility and purity, while making certain that resulting data is of the highest caliber.	1	4
4	Employing a specialized knowledge of advanced technology, assists researchers in implementation strategies for their experiments.	1	4
5	Participates in national conferences, often presenting on latest protocols and quality control procedures.	5	4
6	.Mentors junior technologists as they learn resource laboratory instrumentation, work flow and SOPs.	5	4
7	Provides basic quality control, and works with other resource technologists in the lab, to determine ongoing needs of users, as well as changes in policy.	5	4
8	Additional duties as assigned.	5	
9			
1			
		1	

Identify any of the above listed tasks that were added in the last year by listing the related numbers:

_____.

JOB EVALUATION FACTORS: Listed below are job evaluation factors. Check the single best answer that applies. (Refer to PIQ guidelines for definitions.)

<u>Position Evaluation Factor</u>	<u>Response</u>	<u>Key Words</u>
Q1	<input type="checkbox"/> 1	H.S. Diploma or GED preferred
Formal Education (Minimum education req.)	<input type="checkbox"/> 2	H.S. Diploma or GED required
	<input type="checkbox"/> 3	Vocational or Technical School required
	<input type="checkbox"/> 4	Associate's Degree or Two Year College equivalent required
	<input type="checkbox"/> 5	Bachelor's Degree required; Basic Science OR EQUIVALENT VOCATIONAL
	<input type="checkbox"/> 6	Master's Degree required; Major (optional) _____
TRAINING	<input type="checkbox"/> 7	M.D., Ph.D., Law Degree or equivalent doctoral degree required

Q2 Minimum Experience (Minimum experience req.)	<input type="checkbox"/> 1	0 to 1 year	<input type="checkbox"/> 5	5 to 7 years
	<input type="checkbox"/> 2	1 to 2 years	<input type="checkbox"/> 6	7 to 10 years
	<input type="checkbox"/> 3	2 to 3 years	<input type="checkbox"/> 7	Over 10 years
	<input type="checkbox"/> 4	3 to 5 years		

Q3a	<input type="checkbox"/> 1	Daily	<input type="checkbox"/> 5	Four to Twelve Months
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Planning Scope
(Highest level of planning req.)

- 2 Current Week
- 3 One to Four Weeks
- 4 One to Three Months
- 6 One to Three Years
- 7 Three Years or More

Q3b
Planning Level
(Level of primary scope of planning)

- 1 Individual (position only)
- 2 Unit or equiv. (<15 faculty & staff)
- 3 Section or equiv. (> 15 faculty & staff)
- 4 Department or equiv. (> 15 faculty & staff)
- 5 School/Center
- 6 University-wide

Q4a
Impact on Operating Budget

- 1 None
 - 2 Incidental
 - 3 Supportive
 - 4 Recommending
 - 5 Controlling
 - 6 Delegating
- Approximate Size of Budget \$2,500,000

Q4b
Impact on Grant Funds

- 1 None
 - 2 Incidental
 - 3 Supportive
 - 4 Recommending
 - 5 Controlling
 - 6 Delegating
- Approximate Size of Budget \$2,500,000

Q4c
Impact on Revenue Generating

- 1 None
 - 2 Indirect
 - 3 Supportive
 - 4 Contributory
 - 5 Major impact
 - 6 Directing
- Approximate Size of Budget \$2,500,000

Q5
Complexity

- 1 Standardized: duties are few and repetitive
- 2 Routine: routine tasks, processes, or operations
- 3 Basic: moderately complex procedures and tasks
- 4 Varied: complex and varied work
- 5 Analytic: non-standardized and widely varied work
- 6 Highly Complex: broad in scope covering one or more complicated areas
- 7 Multifaceted: broad in scope covering the entire University's operations

Q6
Decision Making
(Level of direction & supervision required)

- 1 Standardized: little independent judgment required
- 2 Routine: limited opportunity for independent judgment
- 3 Basic: provided on an as needed basis; some independent judgment necessary
- 4 Varied: establish general objectives relative to project; independent judgment
- 5 Analytic: establish and review broad objectives relative to duties/responsibilities
- 6 Highly Complex: review established objectives/recommend department/school objectives
- 7 Multifaceted: review and approve major recommendations; establish procedures

Q7
Problem Solving
(Typical level encountered over extensive period of time)

- 1 Problems solved by reporting them to a supervisor
- 2 Problems solved by talking with a supervisor
- 3 Solutions found by selecting from specific choices defined in standard work policies
- 4 Solutions found by using methods chosen before in similar situations
- 5 Problem solving involves identification and analysis of diverse problems
- 6 Problems are complex, varied and only mildly related to those seen before
- 7 Problem solving requires understanding and evaluation of impact upon the

University

- Q8a**
Internal Contacts
- information
 levels
- 1 Little or no contact
 - 2 Regular contact within department & periodic contact with other departments
 - 3 Regular contact within department & with other departments; supplying
 - 4 Regular contact to carry out programs; occasionally with officials at higher levels
 - 5 Regular contact to carry out programs; continuing contacts with officials at higher
 - 6 Regular contact with internal persons of importance and influence
 - 7 Continuing contacts involving difficult formal negotiations

- Q8b**
External Contacts
- information
 policies
- 1 External communication with others is minimal
 - 2 Occasional contact with outside agencies & general public supplying information
 - 3 Regular contact with outside agencies & general public supplying/seeking
 - 4 Regular external contacts to explain specialized matters, occasionally to enforce
 - 5 Regular external contacts, with continuing personal contact to enforce policies
 - 6 Regular contact with external persons of importance and influence
 - 7 Continuing external contacts involving difficult formal negotiations

- Q9a**
Supervisory Responsibility
- (functional)
 (bonafide)
 results
- 1 No responsibility or authority for direction of others
 - 2 Authority limited to direction of student &/or temporary workers
 - 3 Orient/train others; may act in a lead capacity
 - 4 Provide limited supervision for one or more functions within a department
 - 5 Make recommendations re: HR issues; plan/assign/evaluate work of staff
 - 6 Supervise multiple functions, with full responsibility for effective operation &
 - 7 Overall responsibility to provide direction and guidance for Penn
- _____ Number of Direct Reports _____ Number of Indirect Reports

- Q10a**
Job-Related Knowledge
 (Knowledge & skill required to
 Expert
 perform job)
- 1 Basic Skills
 - 2 Intermediate Skills
 - 3 Advanced Skills
 - 4 Formal Technical Skills
 - 5 Entry Professional Skills
 - 6 Advanced Professional Skills
 - 7 Multiple Professional Skills/External

- Q11**
Innovation/Creativity
 (Degree job requires developing/
 improving procedures, policies
 systems, etc.)
- 1 Opportunities for innovations are rare
 - 2 Improved methods affect the immediate department
 - 3 Improved methods affect delivery of service to selected customer or students
 - 4 Results impact several work groups, a large project or an extended customer base
 - 5 Results generally affect a school/center within the University
 - 6 Results generally affect several schools/centers
 - 7 Results generally affect the University as a whole; impact competitive position

ORGANIZATION CHART:

(Use staff member names and position titles)

Technical Director

Senior Resource Technologist

Senior Resource Technologist

Peer Position

Intermediate Resource Technologist

Junior Resource Technologist

Junior Resource Technologist

WORKING CONDITIONS/PHYSICAL EFFORT: (Check as many as apply)

Working Conditions

- | | |
|---|---|
| <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Office, library, computer room | <input type="checkbox"/> <input type="checkbox"/> Requires extensive safety training |
| <input type="checkbox"/> <input type="checkbox"/> Exposure to chemicals | <input type="checkbox"/> <input type="checkbox"/> Stockroom or warehouse |
| <input type="checkbox"/> <input type="checkbox"/> Alternative work schedules | <input type="checkbox"/> <input type="checkbox"/> Outdoor exposure to weather |
| <input type="checkbox"/> <input type="checkbox"/> High noise environment | <input type="checkbox"/> <input type="checkbox"/> On-Call (beeper) |
| <input type="checkbox"/> <input type="checkbox"/> Requires protective device | <input type="checkbox"/> <input type="checkbox"/> High dust, dirt, grease environment |
| <input type="checkbox"/> <input type="checkbox"/> Exposure to moving machinery | <input type="checkbox"/> <input type="checkbox"/> Extensive travel (>1000 mi./month) |

Physical Effort

- | | |
|--|--|
| <input type="checkbox"/> <input type="checkbox"/> Typically sitting at a desk or table | <input type="checkbox"/> <input type="checkbox"/> Typically running, climbing |
| <input type="checkbox"/> <input type="checkbox"/> Frequent lifting 25 lbs. or more | <input type="checkbox"/> <input type="checkbox"/> Occasional lifting 25-50 lbs. |
| <input type="checkbox"/> <input type="checkbox"/> Occasional lifting 25 lbs. or less | <input type="checkbox"/> <input type="checkbox"/> Climbing ladders/scaffolds |
| <input type="checkbox"/> <input type="checkbox"/> Typically standing or walking | <input type="checkbox"/> <input type="checkbox"/> Intermittently sitting/standing/stooping |
| <input type="checkbox"/> <input type="checkbox"/> Using tools requiring high dexterity | <input type="checkbox"/> <input type="checkbox"/> Typically bending, crouching, stooping |

Employee's Signature: _____ Date: _____

Employee's Name (please print):

Supervisor's Signature: _____ Date: _____

Supervisor's Name (please print):

Supervisor's Title:

Department Head's Signature: _____ Date: _____

Department Head's Name (please print):

Department Head's Title:

POSTING INFORMATION: *(TO BE COMPLETED ONLY IF POSITION IS TO BE POSTED)*

Write summary of position for posting purposes.

DUTIES: *(Description should be brief and only include principle duties.)*

QUALIFICATIONS: *(Qualifications should clearly indicate those that are required and those that are preferred.)*

Supervisor's signature _____ Date: _____

UNIVERSITY OF PENNSYLVANIA
HUMAN RESOURCES/COMPENSATION
POSITION INFORMATION QUESTIONNAIRE SHORT FORM

__ Check if new position is being created Date: _____

Job Title: **Senior Resource Technologist (C)** Employee Name: _____

Job Class Code/Grade: 27 Penn ID: _____

School/Center: _____ Supervisor's Name: _____

Department: _____ Supervisor's Title: _____

POSITION SUMMARY: In a few sentences, *briefly* describe the primary function and purpose of the position. The senior resource technologist for the resource laboratory spends most of his/her time implementing analyses on high-complexity instruments with complex applications. This position requires a college degree, preferably in science (or equivalent Biotechnical training), and a minimum of 5 years hands-on experience in a resource laboratory. He/she interacts with PIs and junior researchers daily using a wide array of experimental designs. He/she troubleshoots any problems that may occur during an experiment, and maintains absolute quality control using standard protocols, as well as more complicated technical protocols. He/she supervises junior and intermediate resource technologists, mentoring them in all levels of experiment design and equipment operation in order that they are able to perform autonomously.

An important aspect of this mentoring is his/her modeling how to establish and maintain good client relations with Principal Investigators. Good communication with researchers is as critical as technical expertise. He/she also manages the daily work schedule for other technologists and keeps the technical director apprised of any schedule shifts or personnel issues. This position serves as the techniques master and knowledge resource for the laboratory. He/she also serves as the primary contact for facility and new equipment validation. The Senior Technologist is often asked to provide technical methods sections to investigators for publication and/or grant submissions. He/she will also be asked to present at national meeting regarding laboratory protocols and quality control procedures. Finally, the senior resource technologist recommends and implements elements of the facility's strategic plan in consultation with the Facility Director.

PRINCIPAL POSITION REPONSIBILITIES/DUTIES: List up to ten major tasks starting with the most important for which the position is responsible. Include the estimated percentage of time spent on performing the task, with no task more than 25%. Also, identify how critical the task is to the position, with 1 being least important, 5 being most important. (Refer to PIQ guidelines.)

	RESPONSIBILITIES/DUTIES	Estimate d % of	Critical Level
1	Oversees experiments of high complexity using the most advanced technology available within the resource laboratory.	35%	5

	RESPONSIBILITIES/DUTIES	Estimated % of	Critical Level
2	Provides sophisticated data analysis expertise to researchers.	15%	5
3	Interfaces regularly with researchers regarding experiment and assay design.	10%	5
4	Supervises junior and intermediate resource technologists, mentoring them in experiment and assay design and instrument operation.	10%	5
5	Models superior client relationships with principal investigators and junior researchers at Penn.	5%	4
6	Maintains high standards of quality controls, often using demanding technical protocols.	5%	4
7	Reports weekly to Resource Laboratory Director on operational issues, providing feedback for improvement in laboratory procedures and managements. Implements	5%	4
8	Manages a daily work flow for junior and intermediate technologists.	5%	3
9	Attends national and international meetings, often reporting to the field on his/her area of expertise.	5%	3
1	Additional tasks as assigned.	5%	
		100%	

Identify any of the above listed tasks that were added in the last year by listing the related numbers:
 _____.

JOB EVALUATION FACTORS: Listed below are job evaluation factors. Check the single best answer that applies. (Refer to PIQ guidelines for definitions.)

<u>Position Evaluation Factor</u>	<u>Response</u>	<u>Key Words</u>
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Formal Education (Minimum education req.)	<input type="checkbox"/> 2	H.S. Diploma or GED required
	<input type="checkbox"/> 3	Vocational or Technical School required
	<input type="checkbox"/> 4	Associate's Degree or Two Year College equivalent required
	<input type="checkbox"/> 5	Bachelor's Degree required; Basic Science OR EQUIVALENT VOCATIONAL TRAINING
	<input type="checkbox"/> 6	Master's Degree required; Major (optional) _____
	<input type="checkbox"/> 7	M.D., Ph.D., Law Degree or equivalent doctoral degree required
	Q2	<input type="checkbox"/> 1 0 to 1 year
Minimum Experience (Minimum experience req.)	<input type="checkbox"/> 2 1 to 2 years	<input type="checkbox"/> 6 7 to 10 years
	<input type="checkbox"/> 3 2 to 3 years	<input type="checkbox"/> 7 Over 10 years
	<input type="checkbox"/> 4 3 to 5 years	
	Q3a	<input type="checkbox"/> 1 Daily
Planning Scope (Highest level of planning req.)	<input type="checkbox"/> 2 Current Week	<input type="checkbox"/> 6 One to Three Years
	<input type="checkbox"/> 3 One to Four Weeks	<input type="checkbox"/> 7 Three Years or More
	<input type="checkbox"/> 4 One to Three Months	

Q3b
Planning Level
(Level of primary scope of planning)

- 1 Individual (position only)
- 2 Unit or equiv. (<15 faculty & staff)
- 3 Section or equiv. (> 15 faculty & staff)
- 4 Department or equiv. (> 15 faculty & staff)
- 5 School/Center
- 6 University-wide

Q4a
Impact on Operating Budget

- 1 None
 - 2 Incidental
 - 3 Supportive
 - 4 Recommending
 - 5 Controlling
 - 6 Delegating
- Approximate Size of Budget \$2,500,000

Q4b
Impact on Grant Funds

- 1 None
 - 2 Incidental
 - 3 Supportive
 - 4 Recommending
 - 5 Controlling
 - 6 Delegating
- Approximate Size of Budget \$2,500,000

Q4c
Impact on Revenue Generating

- 1 None
 - 2 Indirect
 - 3 Supportive
 - 4 Contributory
 - 5 Major impact
 - 6 Directing
- Approximate Size of Budget \$2,500,000

Q5
Complexity

- 1 Standardized: duties are few and repetitive
- 2 Routine: routine tasks, processes, or operations
- 3 Basic: moderately complex procedures and tasks
- 4 Varied: complex and varied work
- 5 Analytic: non-standardized and widely varied work
- 6 Highly Complex: broad in scope covering one or more complicated areas
- 7 Multifaceted: broad in scope covering the entire University's operations

Q6
Decision Making
(Level of direction & supervision)

- 1 Standardized: little independent judgment required
- 2 Routine: limited opportunity for independent judgment
- 3 Basic: provided on an as needed basis; some independent judgment necessary
- 4 Varied: establish general objectives relative to project; independent judgment required
- 5 Analytic: establish and review broad objectives relative to duties/responsibilities
- 6 Highly Complex: review established objectives/recommend department/school objectives
- 7 Multifaceted: review and approve major recommendations; establish procedures

Q7
Problem Solving
(Typical level encountered over extensive period of time)

- 1 Problems solved by reporting them to a supervisor
- 2 Problems solved by talking with a supervisor
- 3 Solutions found by selecting from specific choices defined in standard work policies
- 4 Solutions found by using methods chosen before in similar situations
- 5 Problem solving involves identification and analysis of diverse problems
- 6 Problems are complex, varied and only mildly related to those seen before
- 7 Problem solving requires understanding and evaluation of impact upon the University

Q8a
Internal Contacts

- 1 Little or no contact
- 2 Regular contact within department & periodic contact with other departments
- 3 Regular contact within department & with other departments; supplying information
- 4 Regular contact to carry out programs; occasionally with officials at higher levels
- 5 Regular contact to carry out programs; continuing contacts with officials at higher levels

**Q8b
External Contacts**

- 6 Regular contact with internal persons of importance and influence
- 7 Continuing contacts involving difficult formal negotiations
- 1 External communication with others is minimal
- 2 Occasional contact with outside agencies & general public supplying information
- 3 Regular contact with outside agencies & general public supplying/seeking information
- 4 Regular external contacts to explain specialized matters, occasionally to enforce policies
- 5 Regular external contacts, with continuing personal contact to enforce policies
- 6 Regular contact with external persons of importance and influence
- 7 Continuing external contacts involving difficult formal negotiations

**Q9a
Supervisory Responsibility**

- 1 No responsibility or authority for direction of others
 - 2 Authority limited to direction of student &/or temporary workers
 - 3 Orient/train others; may act in a lead capacity
 - 4 Provide limited supervision for one or more functions within a department (functional)
 - 5 Make recommendations re: HR issues; plan/assign/evaluate work of staff (bonafide)
 - 6 Supervise multiple functions, with full responsibility for effective operation & results
 - 7 Overall responsibility to provide direction and guidance for Penn
- _____ Number of Direct Reports _____ Number of Indirect Reports

**Q10a
Job-Related Knowledge**
(Knowledge & skill required to perform job)

- 1 Basic Skills
- 2 Intermediate Skills
- 3 Advanced Skills
- 4 Formal Technical Skills
- 5 Entry Professional Skills
- 6 Advanced Professional Skills
- 7 Multiple Professional Skills/External Expert

**Q11
Innovation/Creativity**
(Degree job requires developing/improving procedures, policies systems, etc.)

- 1 Opportunities for innovations are rare
- 2 Improved methods affect the immediate department
- 3 Improved methods affect delivery of service to selected customer or students
- 4 Results impact several work groups, a large project or an extended customer base
- 5 Results generally affect a school/center within the University
- 6 Results generally affect several schools/centers
- 7 Results generally affect the University as a whole; impact competitive position

ORGANIZATION CHART:

(Use staff member names and position titles)

Technical Director

Senior Resource Technologist

Peer Position

Intermediate Resource Technologist

Intermediate Resource Technologist

Junior Resource Technologist

Junior Resource Technologist

WORKING CONDITIONS/PHYSICAL EFFORT: (Check as many as apply)

Working Conditions

- Office, library, computer room
- Exposure to chemicals
- Alternative work schedules
- Requires extensive safety training
- Stockroom or warehouse
- Outdoor exposure to weather

- High noise environment
- Requires protective devices
- Exposure to moving machinery

- On-Call (beeper)
- High dust, dirt, grease environment
- Extensive travel (>1000 mi./month)

Physical Effort

- | | |
|---|---|
| <input type="checkbox"/> Typically sitting at a desk or table | <input type="checkbox"/> Typically running, climbing |
| <input type="checkbox"/> Frequent lifting 25 lbs. or more | <input type="checkbox"/> Occasional lifting 25-50 lbs. |
| <input type="checkbox"/> Occasional lifting 25 lbs. or less | <input type="checkbox"/> Climbing ladders/scaffolds |
| <input type="checkbox"/> Typically standing or walking | <input type="checkbox"/> Intermittently sitting/standing/stooping |
| <input type="checkbox"/> Using tools requiring high dexterity | <input type="checkbox"/> Typically bending, crouching, stooping |

Employee's Signature: _____ Date: _____

Employee's Name (please print):

Supervisor's Signature: _____ Date: _____

Supervisor's Name (please print):

Supervisor's Title:

Department Head's Signature: _____ Date: _____

Department Head's Name (please print):

Department Head's Title:

POSTING INFORMATION: *(TO BE COMPLETED ONLY IF POSITION IS TO BE POSTED)*

Write summary of position for posting purposes.

DUTIES: *(Description should be brief and only include principle duties.)*

QUALIFICATIONS: *(Qualifications should clearly indicate those that are required and those that are preferred.)*

Supervisor's signature _____

Date: _____