



## POSITION DESCRIPTION

### North Dakota University System

#### PART A - Identification, Duties/Responsibilities, and Task Inventory

(#'s 1-12a must match HRMS or left blank and include a Position Request/Change form)

1. Name of Employee:		1a. EmplID #:	
2. Position #: 00016005	2a. Dept. ID #: 8015	2b. Current or Recommended Salary: \$60,000	
3. Band #/Title: 3000: Professional		3a. Job Family #/Title: 3325: General Science Professional	
4. Functional Title: Genomics Scientist			
5. Please check all that apply			
5a. Type of position:	<input checked="" type="checkbox"/> Full time <input type="checkbox"/> Part-time		IF Part-Time, FTE Percentage: _____%
5b. Length of Position:	<input type="checkbox"/> 9 month <input type="checkbox"/> 10 month <input type="checkbox"/> 11 month <input checked="" type="checkbox"/> 12 month		<input type="checkbox"/> Other Month _____
6. Institution: <b>University of North Dakota</b>		7. Division: School of Medicine & Health Sciences	
8. Department: The Biomedical Sciences		9. Unit:	
10. Work Mailing Address: 1301 N Columbia Road, Stop 9037, Grand Forks, ND 58202-9037		11. Work Phone: 777-6612	
12. Name & Title of Supervisor: Bony DeKumar, Genomics Core Manager		12a. Supervisor Posn # :00015420	
13. What is the function/mission of your department?			
<p>The mission of the UND Department of Biomedical Sciences is to:</p> <ul style="list-style-type: none"> <li>Educate and train future generations of scientists, physicians, and other health care providers.</li> <li>Advance basic and translational biomedical science and education through scholarly activity.</li> <li>Use professional skills and knowledge in the service of the School of Medicine and Health Sciences, the University of North Dakota, the people of the state and nation, and the profession.</li> </ul>			
14. What is the purpose of your position? (Why does the position exist, how does the position function within the work unit?)			
<p>The purpose of this position is to manage ongoing Genomics and bioinformatics research and provide genomics services to internal and external clients in the genomics Core. This position will provide comprehensive assistance with the design and implementation of experiments, technical assistance with advanced equipment and methods, computational and statistical analysis, and results reporting for SMHS faculty, staff, and students, as well as outside collaborating entities. The position will collaborative with investigators and others to bring issues to appropriate resolution; will present at seminars/teaching forums; and will work on an on-going basis to identify challenges and future directions as the Genomics Core continues to grow.</p> <p>The Genomics Core at the University of North Dakota is a shared resource providing state of the art genomics capabilities to investigators at UND, institutions across the northern Midwest, as well as commercial clients. The core facility is a NIH supported operation intended to help researchers utilize next generation sequencing technologies in basic and translational research. The Core's primary function is to help researchers generate genomics data, analyze, interpret, visualize and store the massive amount of data produced in next generation sequencing experiments. The Core provides services, training and genomics resources to the scientific research community here at UND, NDSU, USDA and nearby colleges. Core staff is available to design projects as well as analyze and present sequencing data based on needs of individual investigators and research projects. The Genomics Core provides services in sample preparation and data analysis using standard as well as custom library preparation and bioinformatics analyses based on the needs of specific projects.</p>			
15. Is this position essential during emergencies/closures? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
(Essential personnel may be required to work during emergencies and closures affecting UND depending on staffing levels required for that particular situation.)			

### PART A - 16. Duties/Responsibilities

⇒ **Indicate Essential/Secondary.** The following questions should be taken into consideration in the determination:

- Is the duty/responsibility the reason the job exists?
- Is this a highly specialized task or one that requires special education, training, licensure?

**If the answer is yes, the duty is "essential".**

- What is the percentage of time spent on the function?

**If the answer indicates a great % of time, the duty is probably "essential".**

- What are the consequences to others or the institution of a failure to perform the function?

**If the answer indicates a high level of accountability, the duty is "essential".**

NOTE: See Position Description Instructions and examples.

<b>Duty/Responsibility No. 1</b>	Percent of Time 70	Statement of duty/responsibility (used for evaluation/review of performance):  Manage Genomics Core Laboratory Functions
For ADA compliance, see instruction. Responsibility is: <input checked="" type="checkbox"/> Essential <input type="checkbox"/> Secondary (Please check one)		
Tasks involved in fulfilling the above duties/responsibilities (include description for physical and mental/cognitive demands) <ul style="list-style-type: none"> <li>Manage, design, execute, and analyze data of genomics and transcriptomics projects on behalf of the Core in consultation with investigators.</li> <li>Keep track of multiple sets of samples or data from multiple customers, organizing work-flow for the Core to optimize turn-around time and quality</li> <li>Troubleshoot assays or data analyses as required when results prove unsatisfactory</li> <li>Conduct quality control procedures for Core operations as directed by the Core Director</li> <li>Execute Next-generation sequencing procedures including quality control of samples provided by investigators pre- and post-sequencing.</li> <li>Operate and maintain computers used with data analysis and associated with Core equipment such as MiSeq, GridlonX5, 10X chromium system and VolTrax system.</li> <li>Analyze and interpret data, including Next generation sequencing and genomics techniques, both independently and as part of the team of researchers.</li> <li>Generate reports on the Core's programmatic and budgetary performance in compliance with requirements set by external funding agencies such as NIH and NSF.</li> <li>Interpret customer requests and determine best practices in order to provide comprehensive experimentation techniques and computational and statistical data analysis.</li> <li>Interact with both internal and external customers (including UND faculty and trainees as well as investigators from other institutions including the DaCCoTA CTR consortium) to explain the capabilities of the Core and help investigators determine how the Core capabilities can assist in their investigations</li> <li>Provide realistic estimates of turn-around time to internal and external customers</li> <li>Engage in service recovery activities, consulting with the Core Director as needed.</li> </ul>		

<b>Duty/Responsibility No. 2</b>	Percent of Time 10%	Statement of duty/responsibility (used for evaluation/review of performance):  Participate in Training and Education With/For Other Core Laboratories
For ADA compliance, see instruction. Responsibility is: <input checked="" type="checkbox"/> Essential <input type="checkbox"/> Secondary (Please check one)		
Tasks involved in fulfilling the above duties/responsibilities (include description for physical and mental/cognitive demands) <ul style="list-style-type: none"> <li>Participate in training and education sessions regarding teaching experimentation techniques, data analysis, and equipment maintenance/usage with/for other SMHS core laboratories to provide comprehensive services to local and outside entities.</li> <li>Become cross trained to perform assays and other technical duties in other SMHS cores to assist with peak workloads and absences.</li> <li>Facilitate and present training seminars for all services of the core facility.</li> <li>Attend training seminars for all services of other SMHS core facilities.</li> <li>Provide work direction for other SMHS core facility staff/faculty/students and accept work direction from other SMHS core facility personnel as may be required.</li> </ul>		

<b>Duty/Responsibility No. 3</b>	<b>Percent of Time 10</b>	<b>Statement of duty/responsibility (used for evaluation/review of performance):</b>
For ADA compliance, see instruction. Responsibility is: <input checked="" type="checkbox"/> Essential <input type="checkbox"/> Secondary (Please check one)		Manage Project Information
Tasks involved in fulfilling the above duties/responsibilities (include description for physical and mental/cognitive demands) <ul style="list-style-type: none"> <li>• Manage all core project information including project information, raw data, analyzed data, and steps taken for data analysis.</li> <li>• Track core usage data, generate and disseminate reports, as appropriate.</li> <li>• Track turn-around time, generate and disseminate reports, as appropriate</li> <li>• Summarize and compile research data to assist with preparation of manuscripts and grants for submission.</li> </ul>		

<b>Duty/Responsibility No. 4</b>	<b>Percent of Time 10</b>	<b>Statement of duty/responsibility (used for evaluation/review of performance):</b>
For ADA compliance, see instruction. Responsibility is: <input checked="" type="checkbox"/> Essential <input type="checkbox"/> Secondary (Please check one)		Manage and Supervise Core Personnel
Tasks involved in fulfilling the above duties/responsibilities (include description for physical and mental/cognitive demands) <ul style="list-style-type: none"> <li>• Help hire, train, evaluate, supervise, and perform disciplinary tasks as necessary for Core personnel.</li> <li>• Evaluate current training and operating procedures and processes for employees, draft new policies and procedures, as necessary.</li> <li>• Provide appropriate feedback and performance improvement measures and guidance.</li> <li>• Maintain organization chart for the Core group supervised, recommend changes as necessary.</li> <li>• Attend supervisory training sessions as deemed necessary and appropriate.</li> <li>• Provide work direction as necessary to other core laboratory personnel, including guidance on optimal workflow and customer service.</li> </ul>		

**PART B – Required Experience,  
Characteristics and Ability**

<b>1. EDUCATION/KNOWLEDGE REQUIREMENT</b> - Minimum education required to perform adequately in position could reasonably be attained only by completing the following (if you were to recruit today, what qualification would you require?)	
<b>REQUIRED EDUCATION/TRAINING</b> (choose one) <input type="checkbox"/> less than high school diploma <input type="checkbox"/> high school diploma or GED  <u>COLLEGE LEVEL</u> (choose one) <input type="checkbox"/> 1 year <input type="checkbox"/> 2 year <input type="checkbox"/> 3 year <input type="checkbox"/> 4 year <input type="checkbox"/> Associate's <input checked="" type="checkbox"/> Bachelor's  <u>GRADUATE LEVEL</u> (choose one) <input type="checkbox"/> 1 year <input type="checkbox"/> 2 year <input checked="" type="checkbox"/> post-graduate	Major field of study or degree emphasis (accounting, economics, etc...)  Biology, Life sciences, Computer Science, Mathematics, Chemistry, agriculture or other related field.  Specialized subject knowledge (cost accounting, MACRO economics, etc.)  Statistics, Molecular Biology and Biochemistry (Desirable)
<b>Minimum Qualifications:</b>  <ul style="list-style-type: none"> <li>B.S. in Biology, Life sciences, Computer Science, Mathematics, Chemistry, agriculture or other related field.</li> <li>2 or more years of experience in either a dry or wet lab.</li> <li>Evidence of independent research in form of co-authored peer-reviewed publications or experience in working in a core facility environment</li> <li>Proficiency with MS Office software (Word, Excel and PowerPoint).</li> <li>Successful completion of Criminal History Records Check.</li> </ul> <input type="checkbox"/> Valid Driver's License <input type="checkbox"/> Other License(s) or Certification(s) _____	
<b>Preferred Qualifications:</b>  <ul style="list-style-type: none"> <li>Ph.D. in Biology, Life sciences, Computer Science, Mathematics, Chemistry, agriculture or other related field.</li> <li>Minimum 2 years of experience in both a wet and dry lab outside of a classroom/teaching environment.</li> <li>Experience in ChIP-Seq, ATAC-Seq and whole genome Sequencing</li> <li>Experience in programming languages such as R, python or Perl.</li> <li>Proficiency in working with Linux environment.</li> <li>Proficient in statistical methods relevant to Genomics</li> </ul>	
<b>Competencies required:</b> (i.e. ability to..., demonstrated leadership skills, strong communication skills)  <ul style="list-style-type: none"> <li>Ability to work in a BSL2 laboratory with appropriate safety training and apparel.</li> <li>Excellent interpersonal, written, and verbal communication skills.</li> <li>Demonstrated problem solving skills.</li> <li>Willingness to learn new skills in Genomics, Statistics, Computational Biology and Bioinformatics.</li> <li>Willingness to learn new skills in core lab operations.</li> <li>Excellent organizational skills.</li> <li>Demonstrated ability to multi-task in a busy lab environment.</li> <li>Demonstrated ability to work both independently and as a member of a team.</li> </ul>	

**Work safety requirements:**

- Follow safety rules and promote safe behavior
- Help identify unsafe working conditions and notify supervisor or Office of Safety
- Ensure the safety policies and procedures are being followed
- Report incidents and near misses to supervisor or Office of Safety within 24 hours
- Complete all required safety and other mandatory training requirements

**Work habit requirements:**

- Attendance and punctuality consistently maintained; follows correct procedures for notification
- Use work time appropriately for work activities; attend meetings promptly
- Demonstrate flexibility in scheduling and accepting work assignments
- Follow procedures for requesting leave and reporting absences; provide necessary documentation/releases
- Remain calm, professional, and collegial in all circumstances

**2. RESPONSIBILITY FOR DIRECT SUPERVISION OF THE FOLLOWING CLASSIFIED POSITIONS**

Position Number	Job Family and Title of Persons Supervised	FTE
	(Insert information as specific to core)	
	TOTAL	0

**3. INDIRECT SUPERVISION:**

Total number of classified positions indirectly supervised: 0

Total number of student employees or other non-classified employees indirectly supervised: 0

**4. HAZARDOUS WORKING CONDITIONS**

Unusual or hazardous working conditions related to performance of duties:  
General safety conditions associated with BSL level 2 research laboratory.

Precautionary measures taken to avoid those unusual or hazardous working conditions:  
Ongoing training to OSHA and UND Safety Office procedures

Frequency of occurrence of unusual or hazardous working conditions:  
Rarely

<b>5. This position is classified as:</b> <input checked="" type="checkbox"/> <b>Exempt</b> <input type="checkbox"/> <b>Non-Exempt (eligible for overtime)</b>		
<b><u>Executive</u></b> <input type="checkbox"/> Meets FLSA Salary Requirements	<b><u>Administrative</u></b> <input type="checkbox"/> Meets FLSA Salary Requirements	<b><u>Professional</u></b> <input checked="" type="checkbox"/> Meets FLSA Salary Requirements
<input type="checkbox"/> Primary duty is management of the enterprise or recognized department/subdivision  <input type="checkbox"/> Does the employee have the authority to hire or fire or provide suggestions/recommendations to hire, fire, promote or change status of other employees	<input type="checkbox"/> Primary duty is office/non-manual work related to management policies/general business operations  <input type="checkbox"/> Work directly related to academic instruction or training	<input checked="" type="checkbox"/> Primary duty is work requiring knowledge of advanced type in science or learning  <input type="checkbox"/> Work is original and creative in a field of artistic endeavor  <input type="checkbox"/> Work is teaching in educational institution  <input type="checkbox"/> Work requires theoretical/practical application of highly specialized knowledge in computer systems analysis, programming and software engineering and employee is employed and engaged in these activities
<input type="checkbox"/> Customarily and regularly directs the work of two or more other employees	<input type="checkbox"/> Customarily and regularly exercises discretion and independent judgment in matters of consequence	<input checked="" type="checkbox"/> Work requires consistent exercise of discretion and judgment

**6. PHYSICAL JOB REQUIREMENTS:** Indicate according to essential duties/responsibilities

Employee is required to:	Never	1-33% Occasionally	34-66% Frequently	66-100% Continuously
Stand			X	
Walk		X		
Sit		X		
Use hands dexterously (use fingers to handle, feel)		X		
Reach with hands and arms		X		
Climb or balance	X			
Pulling/Tugging/Twisting	X			
Stoop/kneel/crouch or crawl	X			
Talk or hear		X		
Taste or smell	X			
Lift & carry: up to 10 pounds		X		
up to 25 pounds	X			
up to 50 pounds	X			
up to 75 pounds	X			
up to 100 pounds	X			
more than 100 pounds	X			
Other (Please Explain):				

My signature below indicates I have read and understand the description of the duties and responsibilities assigned to the position. I also understand that my supervisor and the institution has the right to make changes to duties and work schedule to meet business needs.

Employee's Signature

Supervisor's Signature

Date

Date

**PLEASE ATTACH A BLACK AND WHITE ORGANIZATIONAL CHART**



Bony De Kumar  
Genomics Core Manager  
00014520

Hannah Ness  
Research Specialist  
00013424

Danielle Perley  
Research Specialist  
00100172

TBD  
Genomics Scientist  
00016005