

# Welcome to Illumina MiSeq Sequencing

## Brainstorm Project Ideas

### Applications



- Discover the types of research taking place with Illumina technology by clicking the 'Applications' drop-down menu on the Illumina [main web page](#).
- Explore your area of interest: [agrigenomics](#), [cancer genomics](#), [forensic genomics](#), [genetic disease](#), [microbial genomics](#), and [others](#).



- Get an in-depth knowledge of MiSeq capability by navigating to the [MiSeq page](#).

### Publications

SEARCH PUBLICATIONS

Author Name:  Text:  Year:

All  Application: All  Product: All

- The [publication tracker](#) is a great resource for brainstorming project ideas. This tool enables you to search for publications based on author, technology, or application.
- View [featured articles](#) in recently released scientific publications
- As you review publications, pay attention to information on the following:
  - Nucleic acid isolation method
  - Sample preparation kit
  - Coverage level (ex. 30X)
  - Sequencing run length
  - Analysis technique

## Project Planning Resources

### Support Website

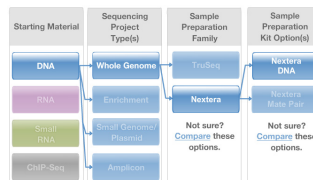
- The [MiSeq support page](#) contains protocols, trainings, site preparation requirements, computing/analysis considerations, and more.
- For full access to all tools and resources on the web site, register for a [MyIllumina account](#).
- Educate yourself on MiSeq technology through these recommended online [training courses](#).

MiSeq: Sequencing Fundamentals (15 min)

MiSeq: Sequencing Chemistry (20 min)

MiSeq: Getting Started (20 min)

### Sample Preparation:



- The [Kit Selector Tool](#) helps you choose a sample preparation kit for your project. Use the Compare links in the tool to view side-by-side information that can help in your decision making.

### Sequencing:

HiSeq Output Calculations		HiSeq 1500/2500 rapid run (one flow cell)	
TruSeq v3 Reagents (one flow cell)		Clusters/mmi <sup>2</sup> (900K @91%PF)	
Clusters/mmi <sup>2</sup> (900K @85%PF)	680,000	Clusters/mmi <sup>2</sup> (900K @91%PF)	819,000
%PF may vary based on library	273.3	%PF may vary based on library	184
Area of a lane (mm <sup>2</sup> )	186,048,000	Area of a lane (mm <sup>2</sup> )	160,696,000
Reads/lane	186,048,000	Reads/lane	160,696,000
Genome or region size (in bases)	Enter your value here	Genome or region size (in bases)	Enter your value here
Coverage	Enter your value here	Coverage	Enter your value here
Total number of cycles (e.g. 200 for 2x100)	Enter your value here	Total number of cycles (e.g. 300 for 2x150)	Enter your value here
Total output required (in bases)	Enter your value here	Total output required (in bases)	Enter your value here
Output/lane (bases/lane)	Enter your value here	Output/lane (bases/lane)	Enter your value here
Number of lanes	Enter your value here	Number of lanes	Enter your value here
Number of samples/lane	Enter your value here	Number of samples/lane	Enter your value here

- The [coverage calculator](#) helps you estimate the number of sequencing runs necessary for your project.
- Review the [Estimating Sequencing Coverage Technical Note](#) for more information on using the coverage calculator tool.

## The Illumina Community

### Connect with your Peers

- Stay up-to-date on emerging research and product development news by reading the [iCommunity Newsletter](#).
- Access the [archive](#) of previous newsletters.

### Events



Conferences & Tradeshows



Seminars



Webinars

- The [events web page](#) allows you to find User Group Meetings and tradeshows in your area, as well as register for webinars.

Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

- Hover over Calendar dates to get more information about upcoming events.

Blog @ Illumina ASHG ESHG ASM AGBT illumina.com

Blog @ Illumina  
Real scientists. Real commentary

Current Articles RSS Feed

- The [Illumina Blog](#) provides a forum for scientists to give commentary on Illumina's events as well as write articles about cutting-edge innovations in their field.

### Notes: