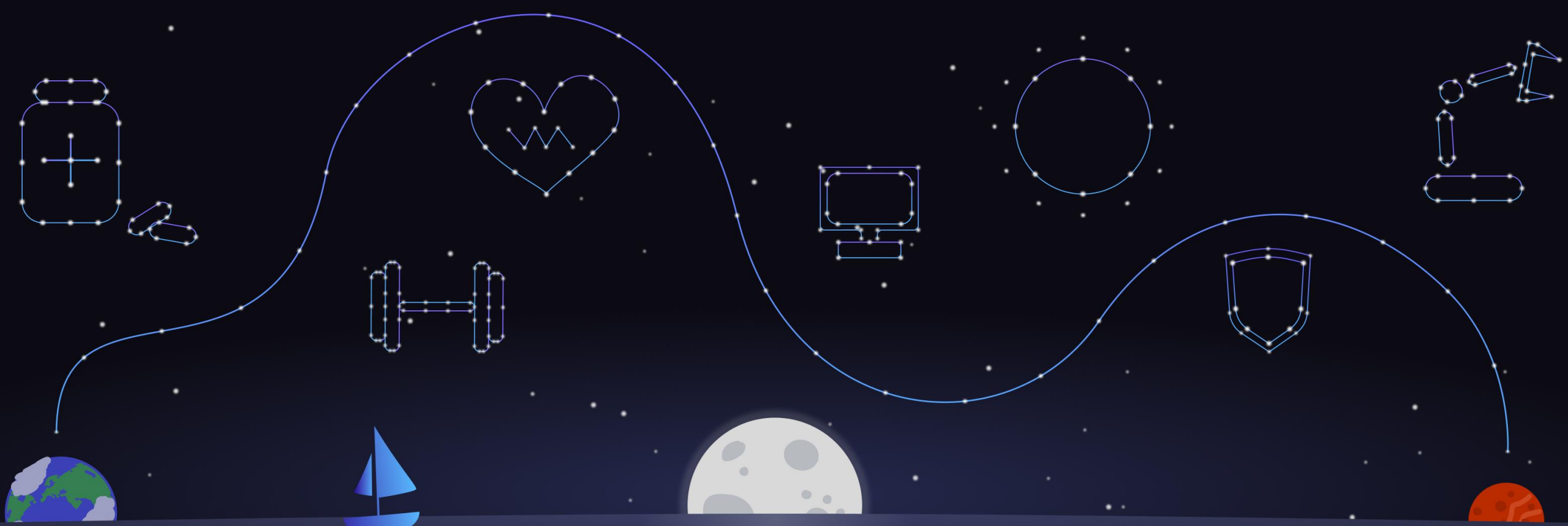

Data Consolidation for the International Space Station's Environmental and Veggie Microbial Isolates Increases Trending Capabilities

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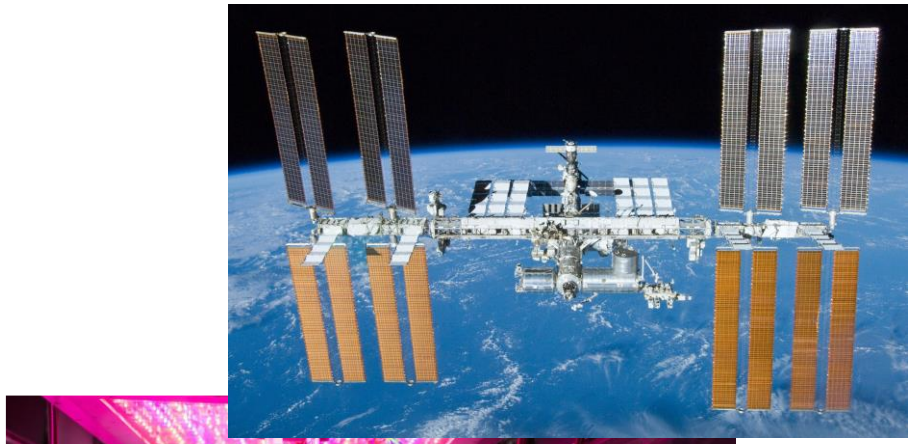
2022 NASA Human Research Program Investigators' Workshop

Goals

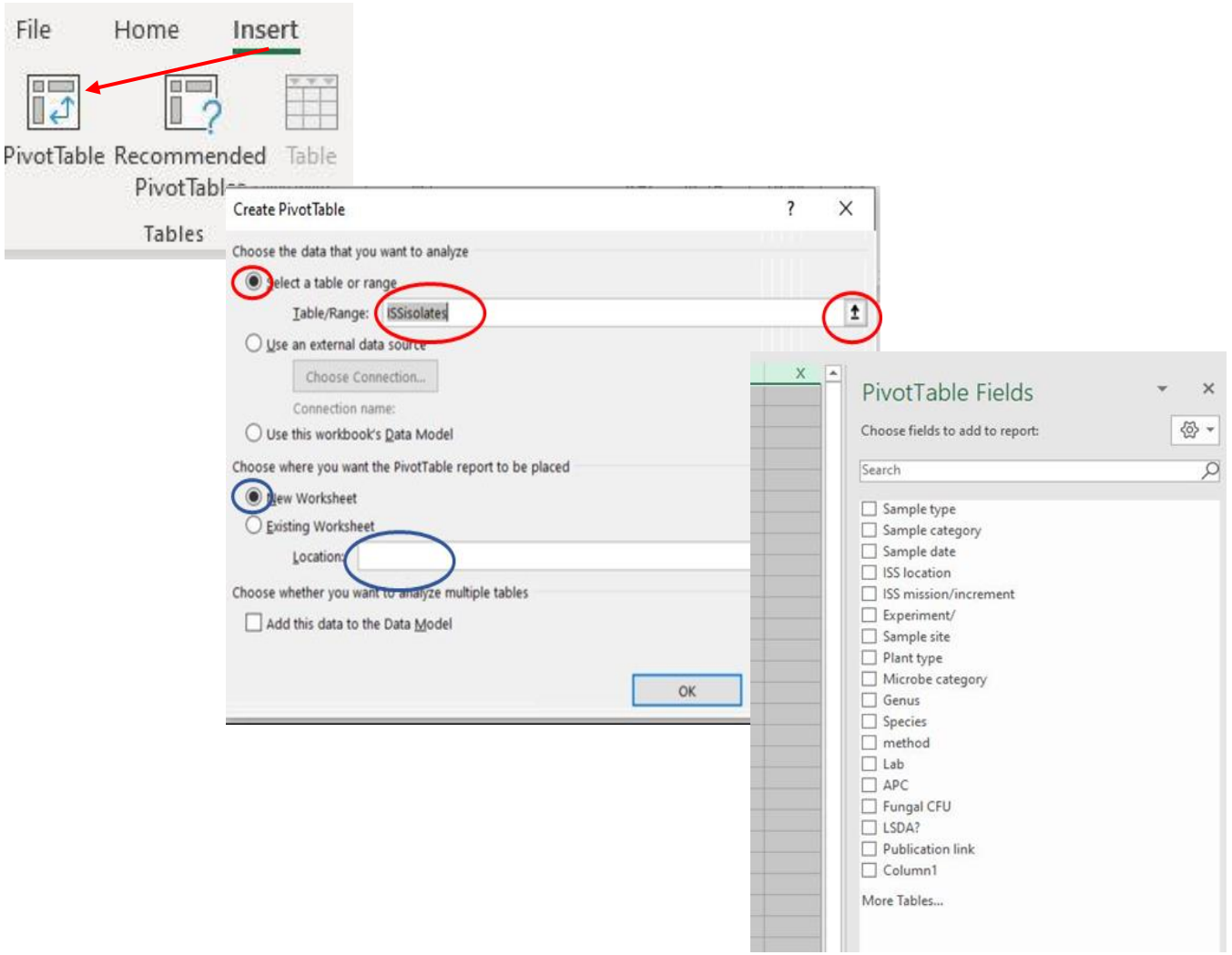
- **CURRENT GOALS**:
  - Compile and standardize microbiological data from JSC environmental ISS sampling and KSC Veggie flight and ground samples into a standard format
  - Develop a user-friendly tool to analyze the data for trends based upon multiple searchable fields
  - Identify microbes of interest at the genetic level to determine possible origin and relationships
- **FUTURE GOALS**:
  - Make this database available to external scientists
  - Build upon and maintain the compiled database



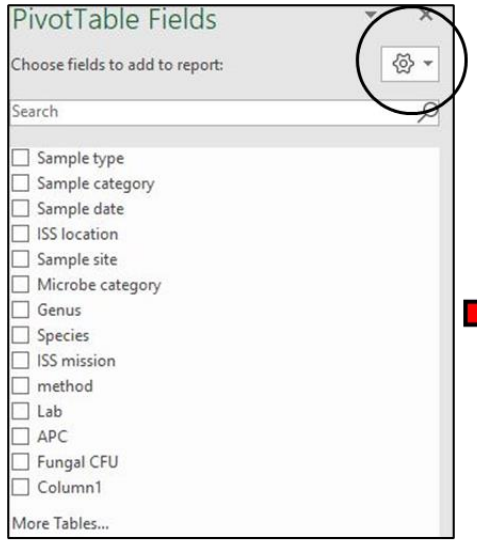
METHODS

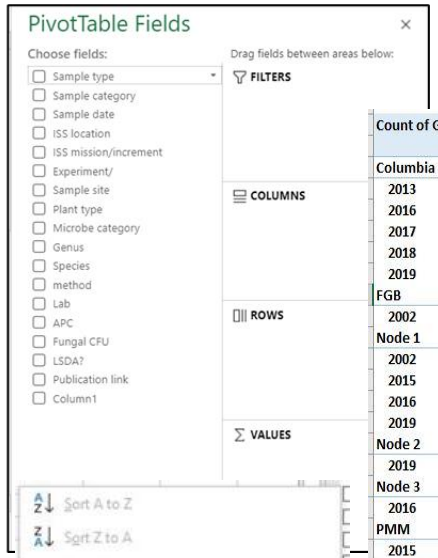
- Acquire and organize ISS environmental data to include
  - ISS Air
  - ISS Surface
  - Veggie
  - Ground Surfaces
- 2002 to Present
- Develop a series of searchable fields of interest for spatial and temporal categories
- Develop tutorial for use

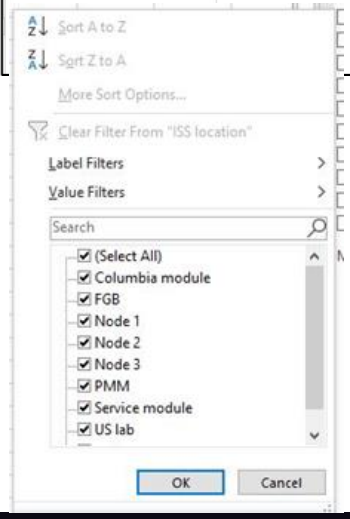
Tutorial



Tool to answer spatial or temporal inquiries



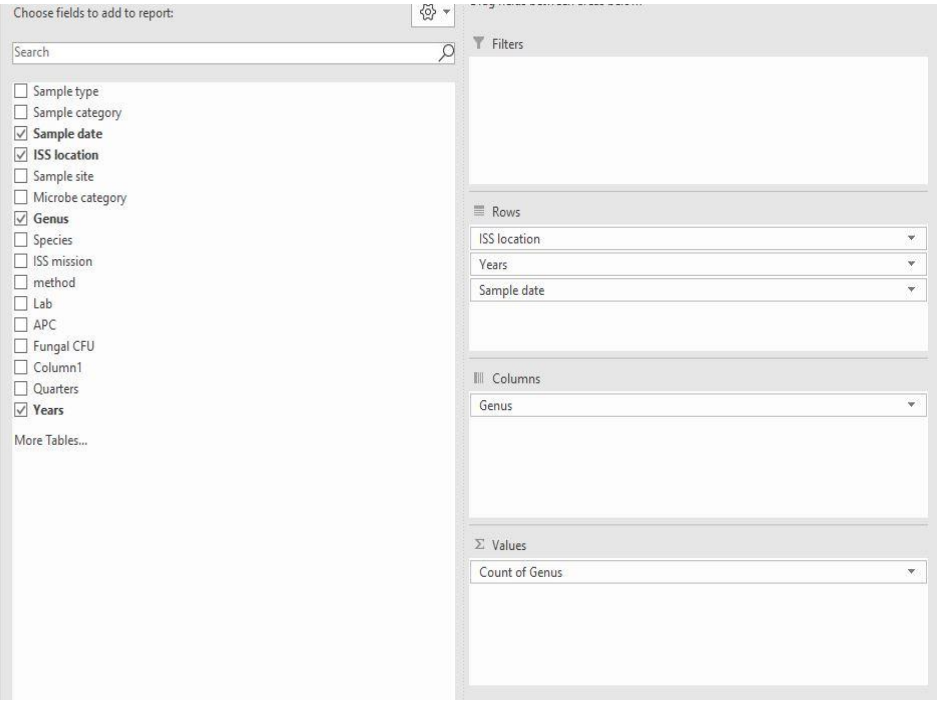




Searchable fields to build the report you want

Find some answers

Count of Genus	Achromobacter	Aspergillus	Bacillus	Enterobacter	Fusarium	(blank)	Grand Total
Columbia module	2	1	2	1			6
2013			1				1
2016				1			1
2017		1					1
2018	2						2
2019			1				1
FGB			1				1
2002			1				1
Node 1			2	3			5
2002			1				1
2015			1				1
2016				1			1
2019				2			2
Node 2				2			2
2019				2			2
Node 3				1			1
2016				1			1
PMM			1				1
2015			1				1
Service module			1				1
2002			1				1
US lab				2			2
2019				2			2
(blank)					1		1
<11/8/2002					1		1
Grand Total	2	1	7	9	1		20



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