The BioNumerics Software: database creation, experiment type, import of TIFF files, and setting up experiments

A SIX STEPS PROCESS:

- **STEP 1-** Create a new database
- **STEP 2-** Create the experiment type (Fingerprint)
- **STEP 3-** Import the TIFF files into the Database
- **STEP 4-** Analyze a TIFF:
  1. Convert a TIFF to Gel Strips
  2. Define Curves
  3. Normalize the gel
  4. Find Gel Bands
- **STEP 5-** Link Lanes to Database Entries
- **STEP 6-** Add information on the Isolates (virulence genes, serogroups etc…)

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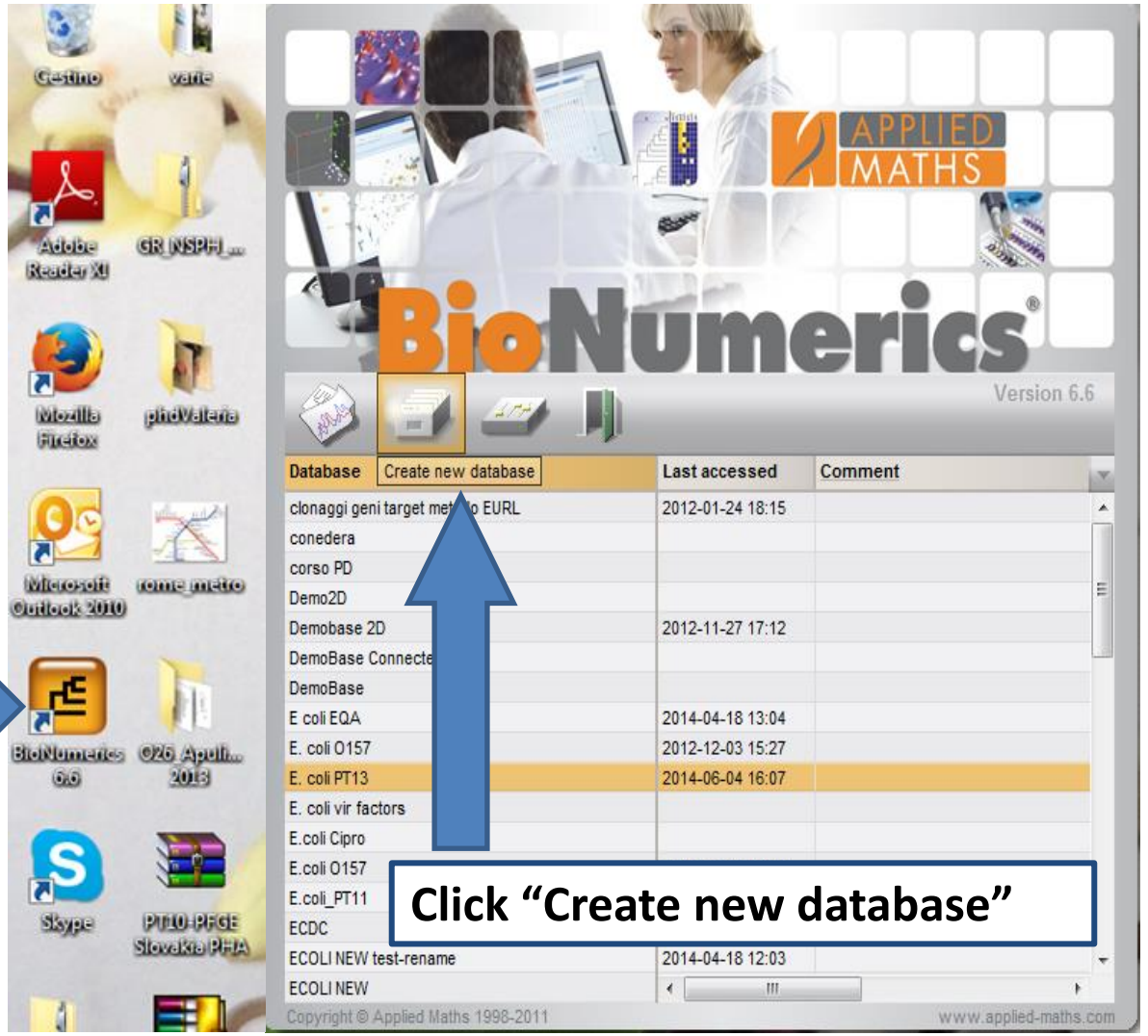
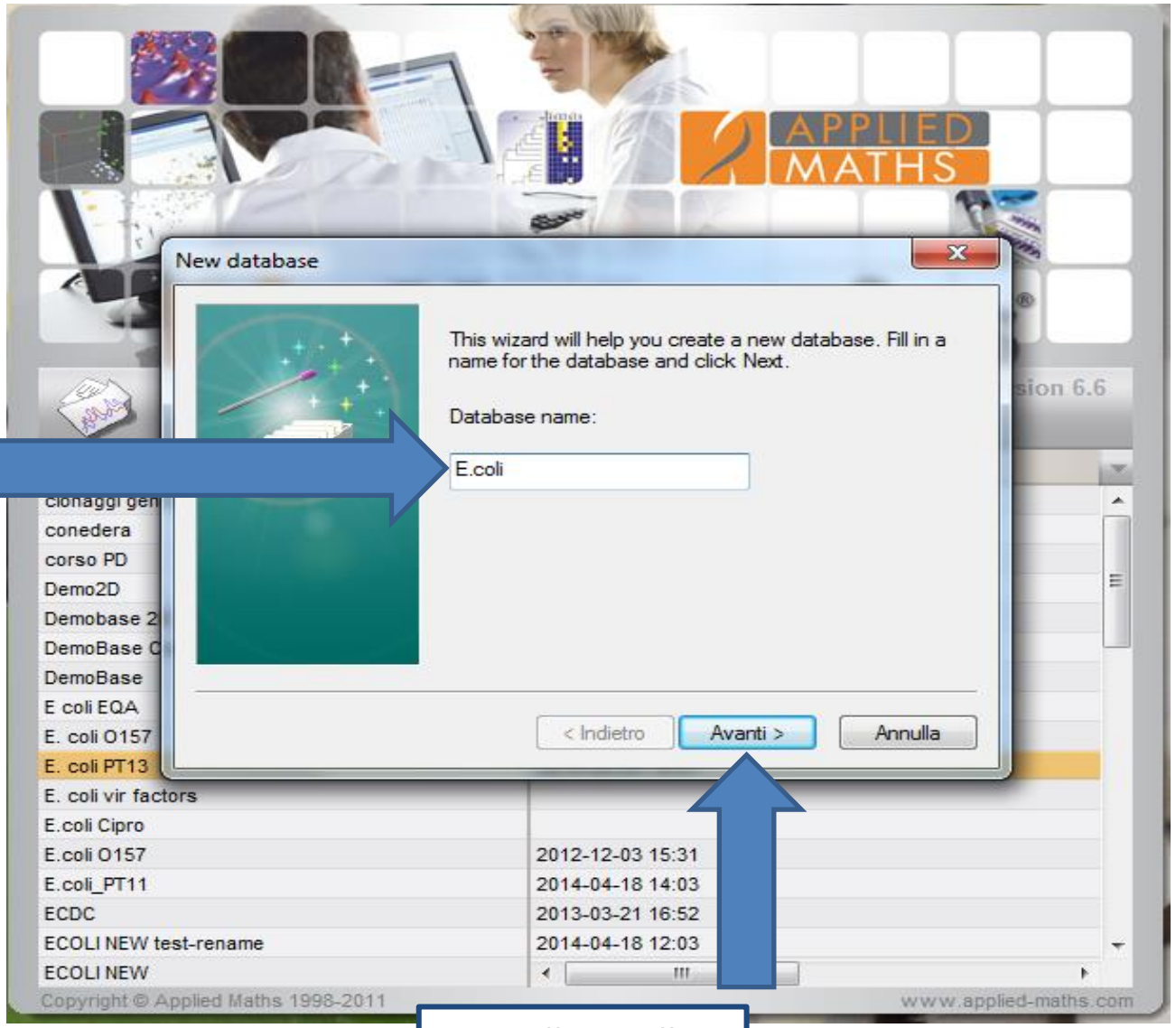
Step 1: Create a New Database

Double click on the BioNumerics shortcut



Step 1: Create a New Database

Type in the name for your new database: E.coli



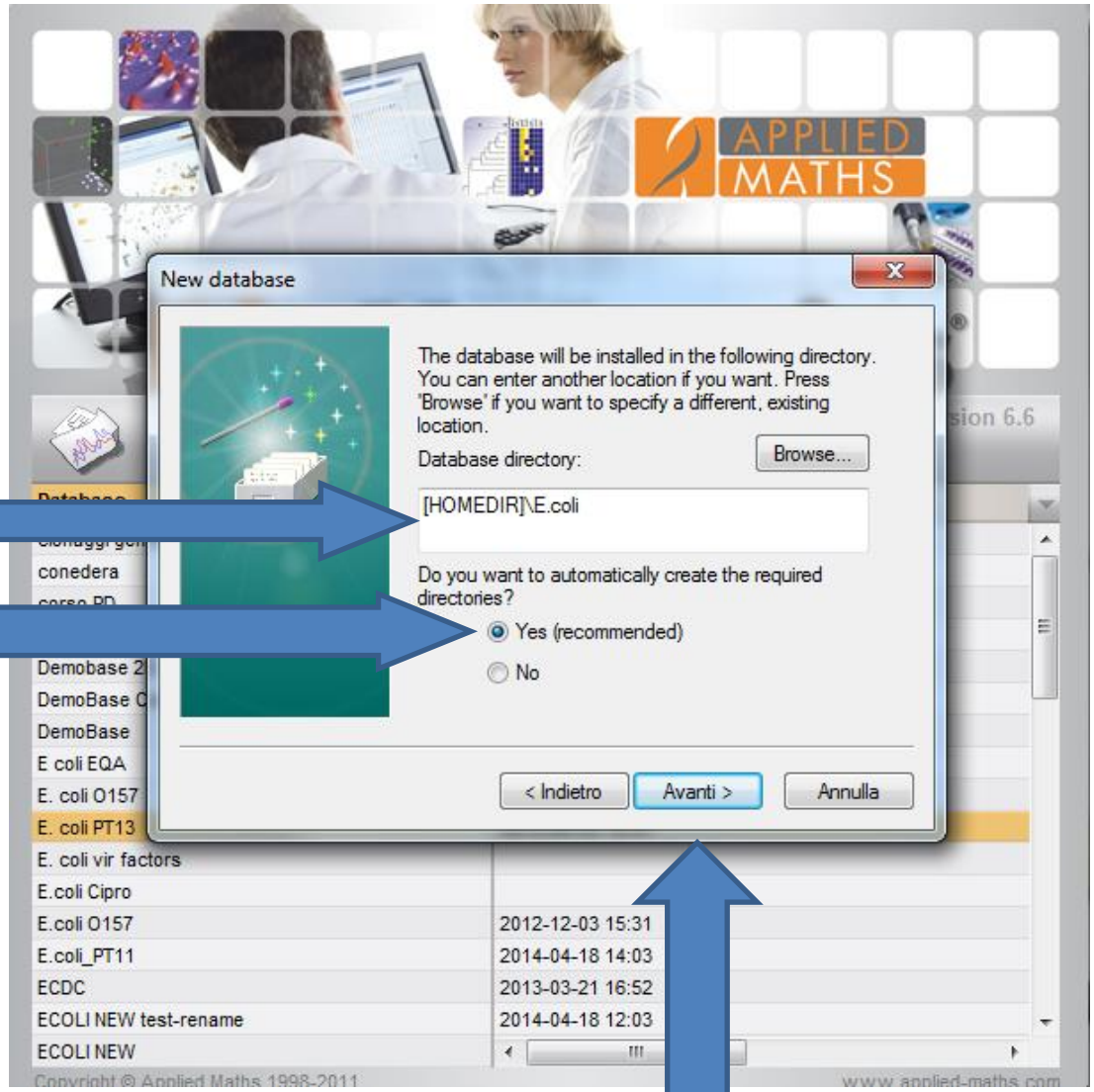
Click "Next"

The BioNumerics Software: database creation, experiment type, import of TIFF files, and setting up experiments

Step 1: Create a New Database

Select the default directory

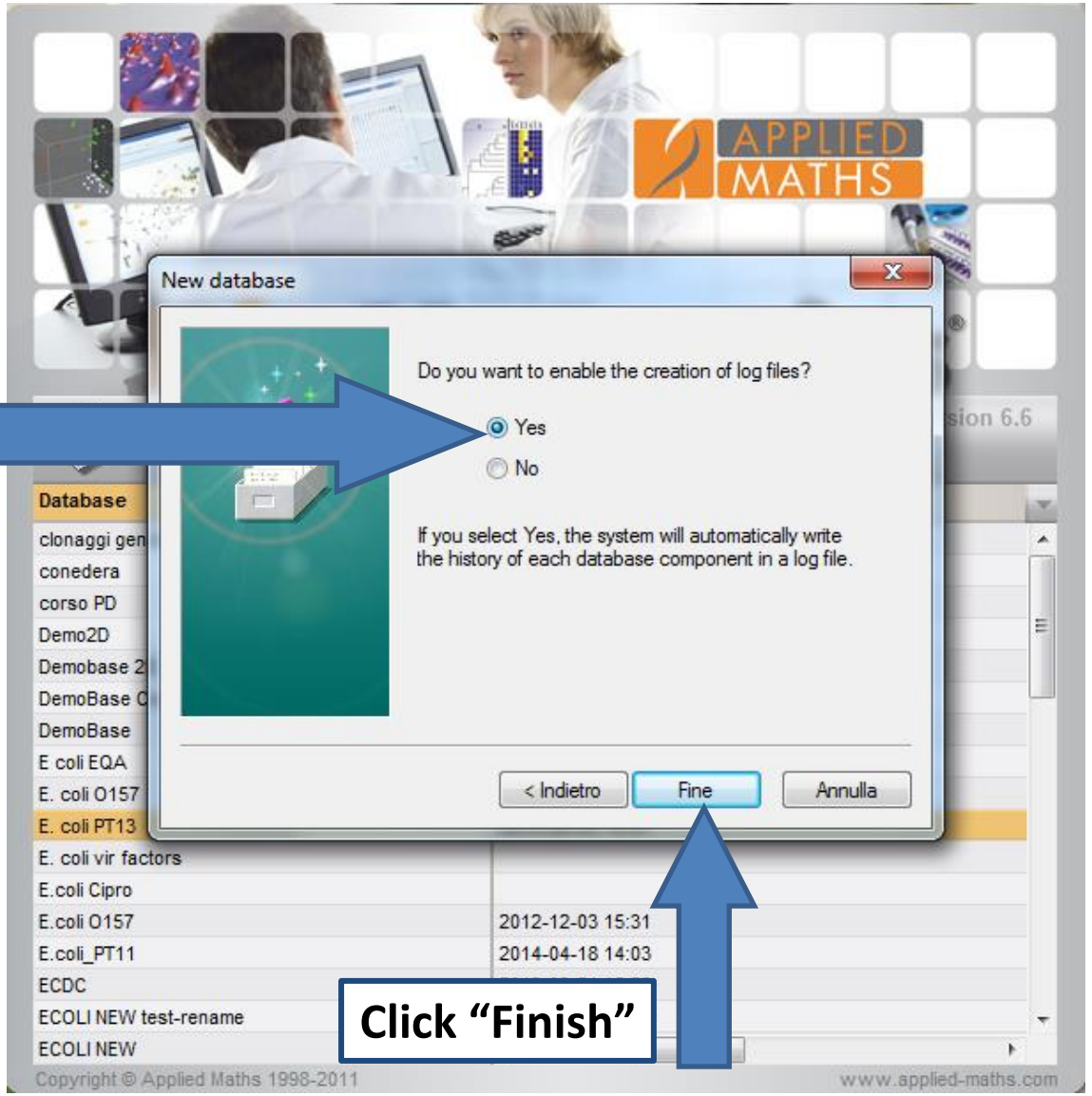
Keep the default at "Yes"



Click "Next"

Step 1: Create a New Database

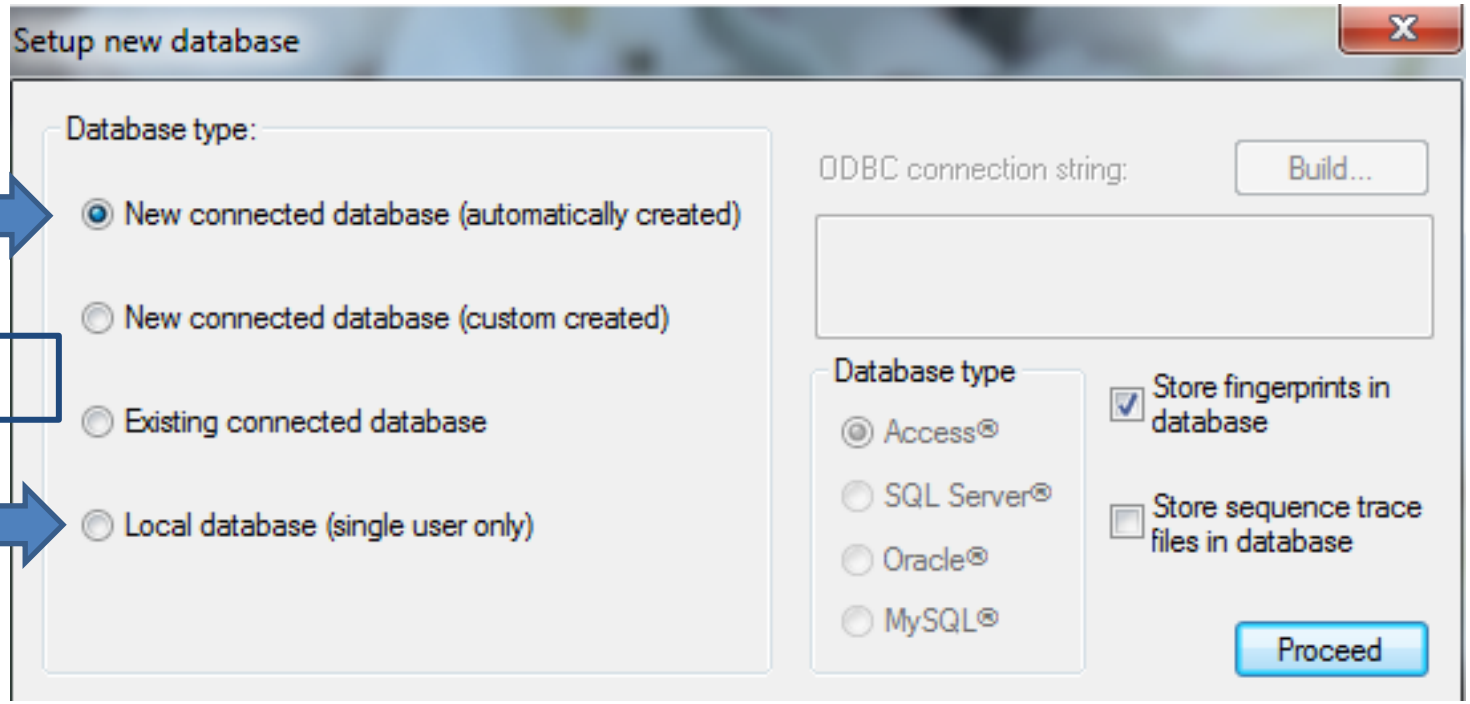
Change to "Yes"



Click "Finish"

The BioNumerics Software: database creation, experiment type, import of TIFF files, and setting up experiments

Step 1: Create a New Database



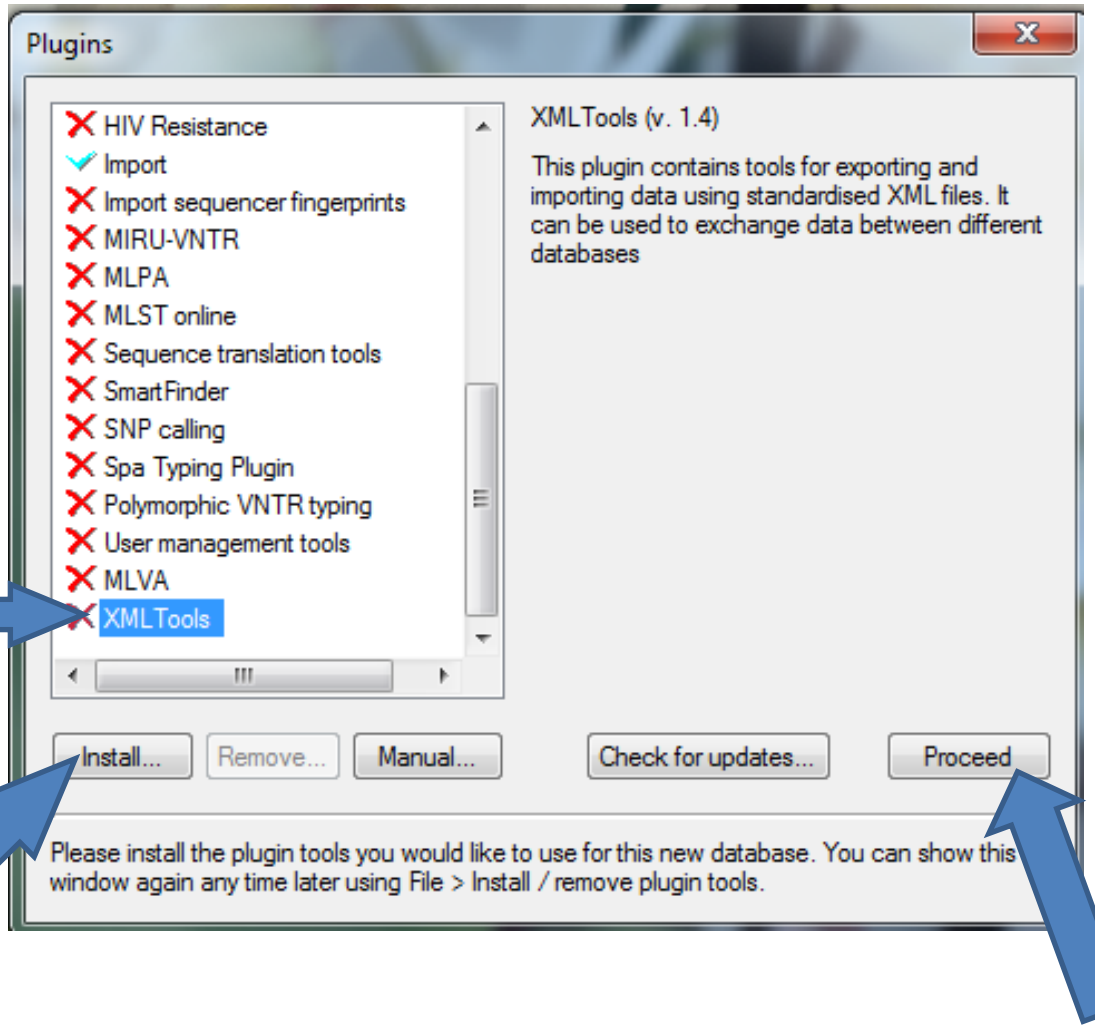
Make your choice

Click «proceed»

Step 1: Create a New Database

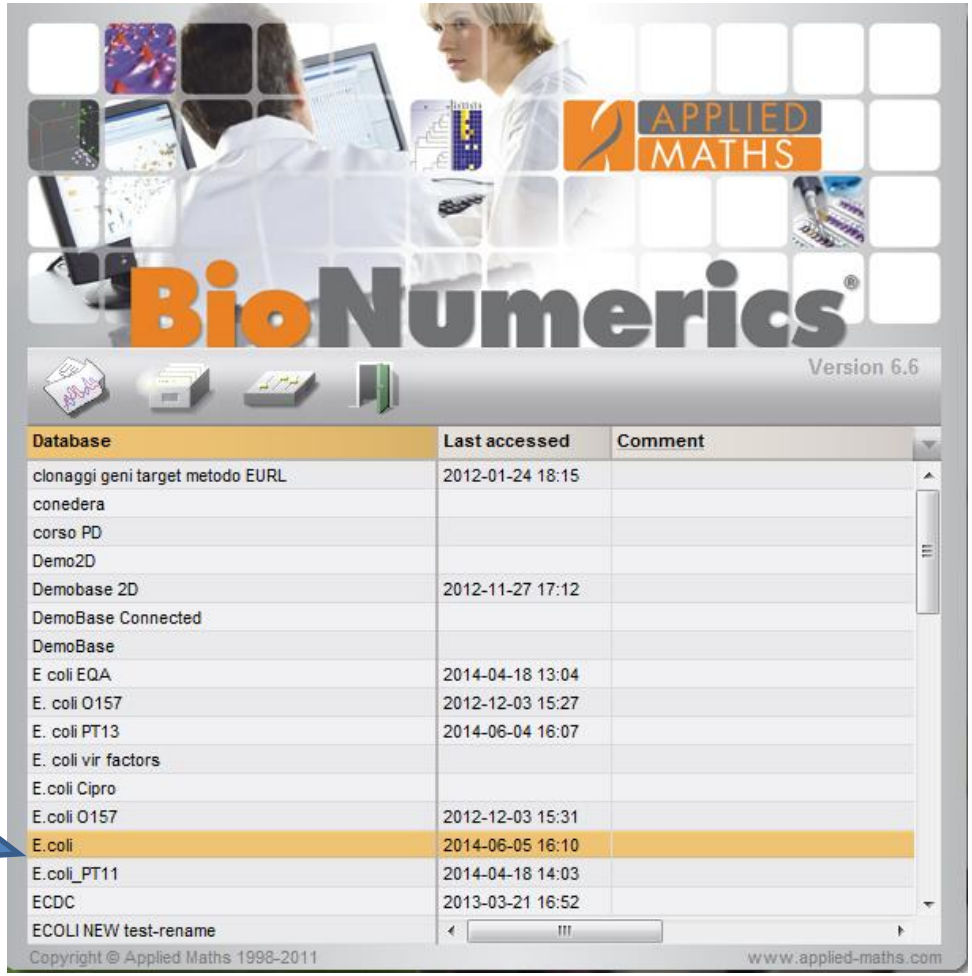
Plug-ins offer additional functionality, such as importing and exporting various types of data

Choose <u>XML Tools</u> Plug-in, and click "Install," then "Proceed"

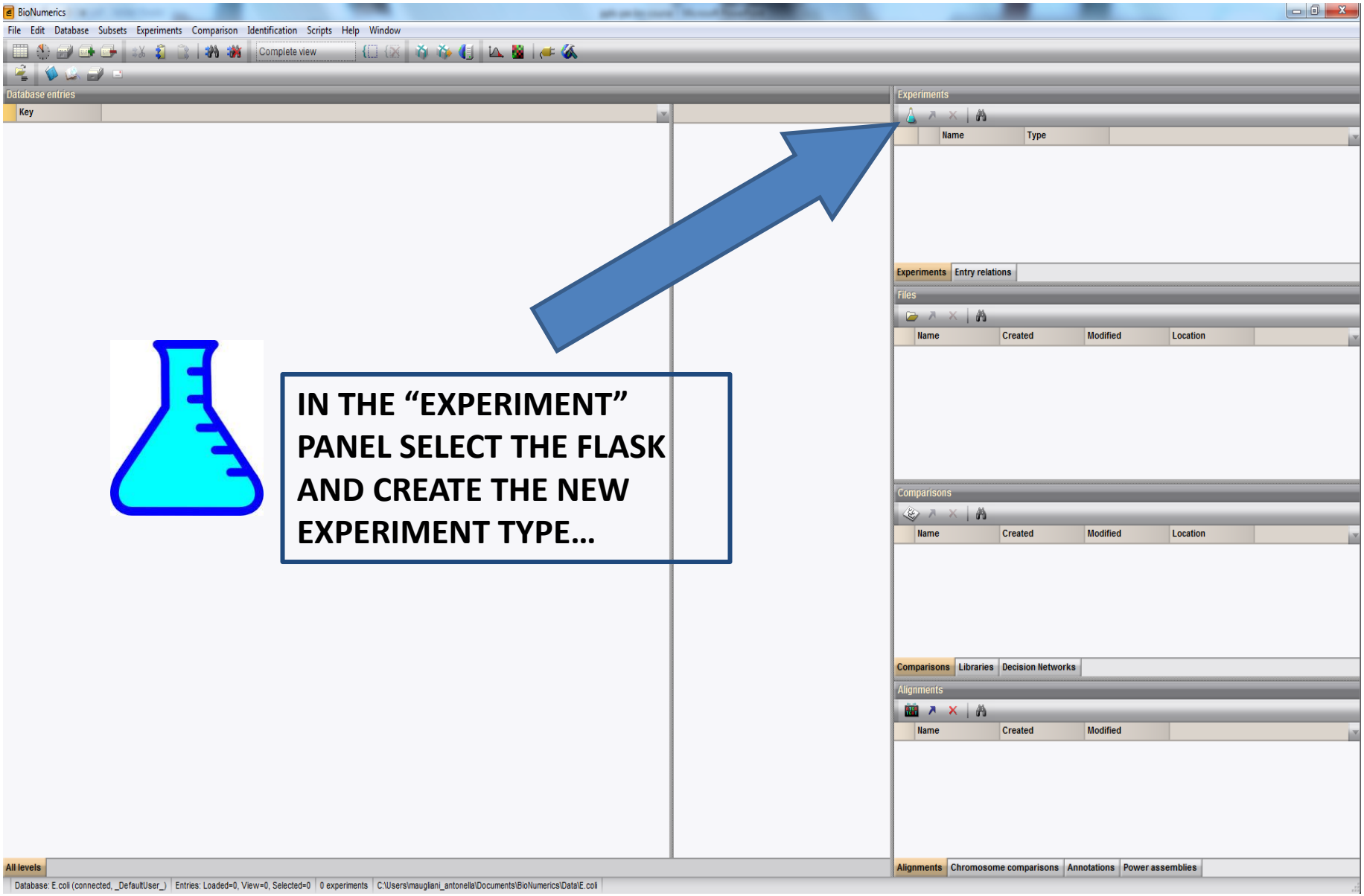


Step 1: Create a New Database

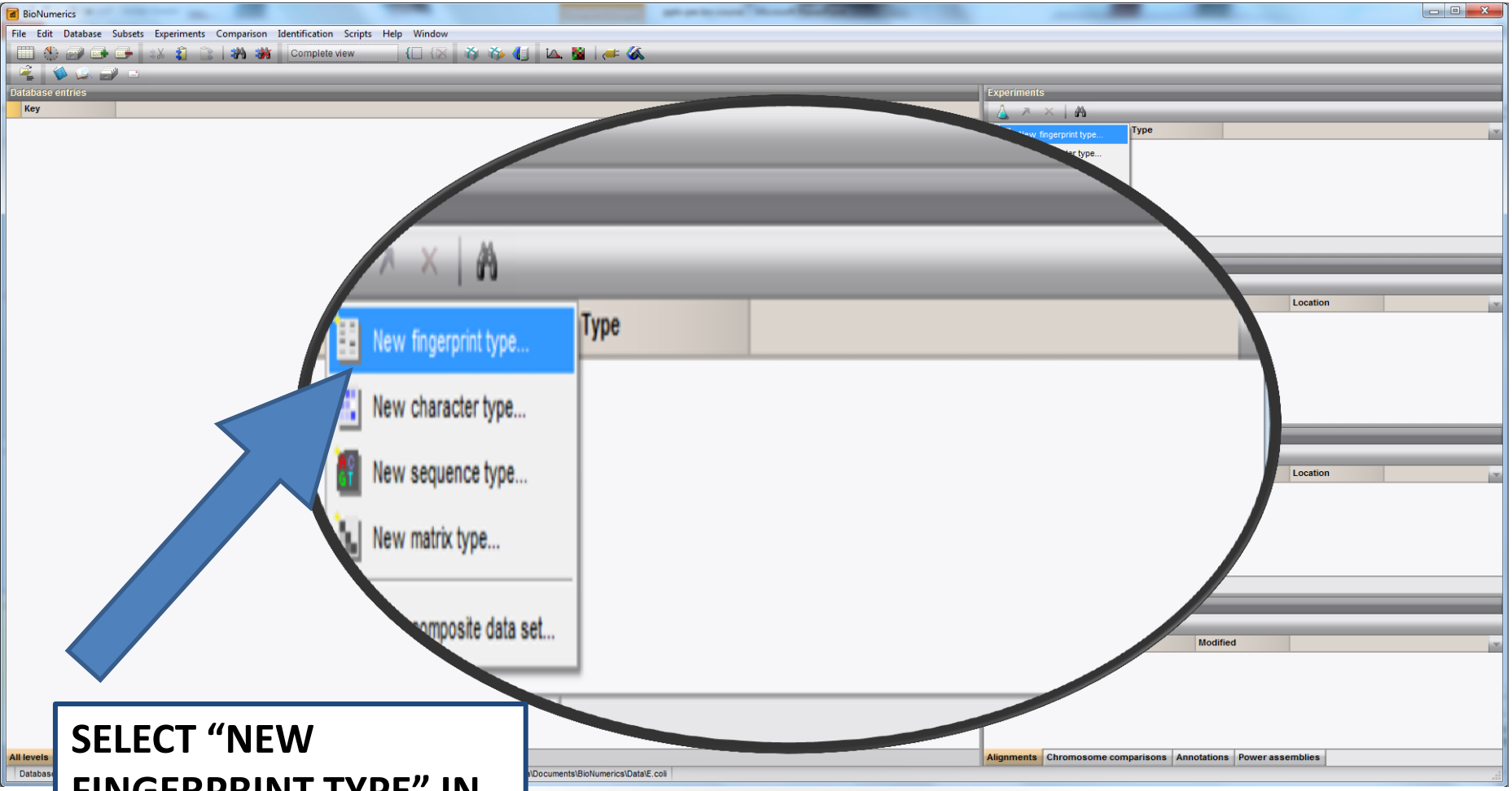
Note that your newly created database is listed



Step 2: Experiment type

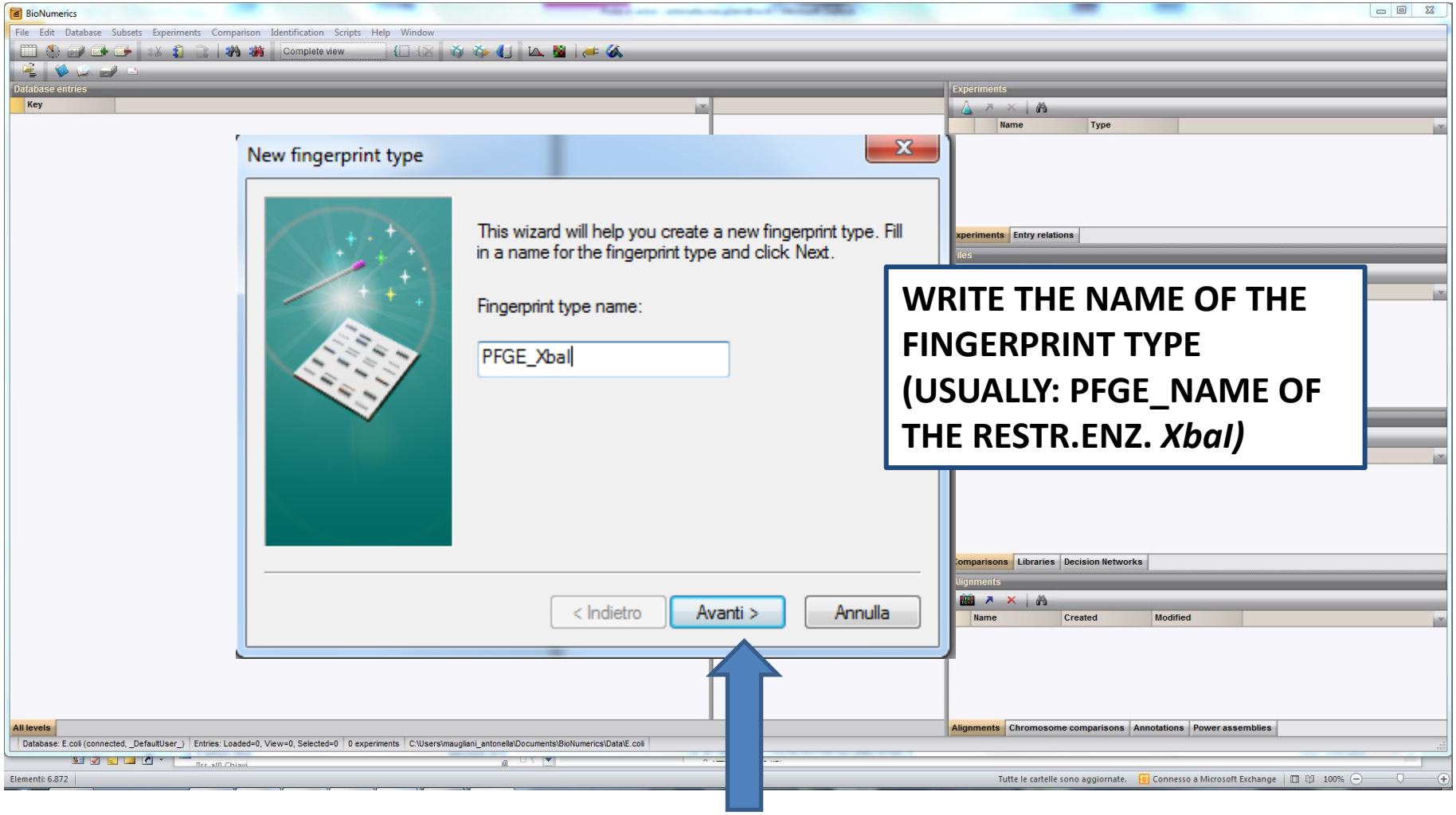


Step 2: Experiment type



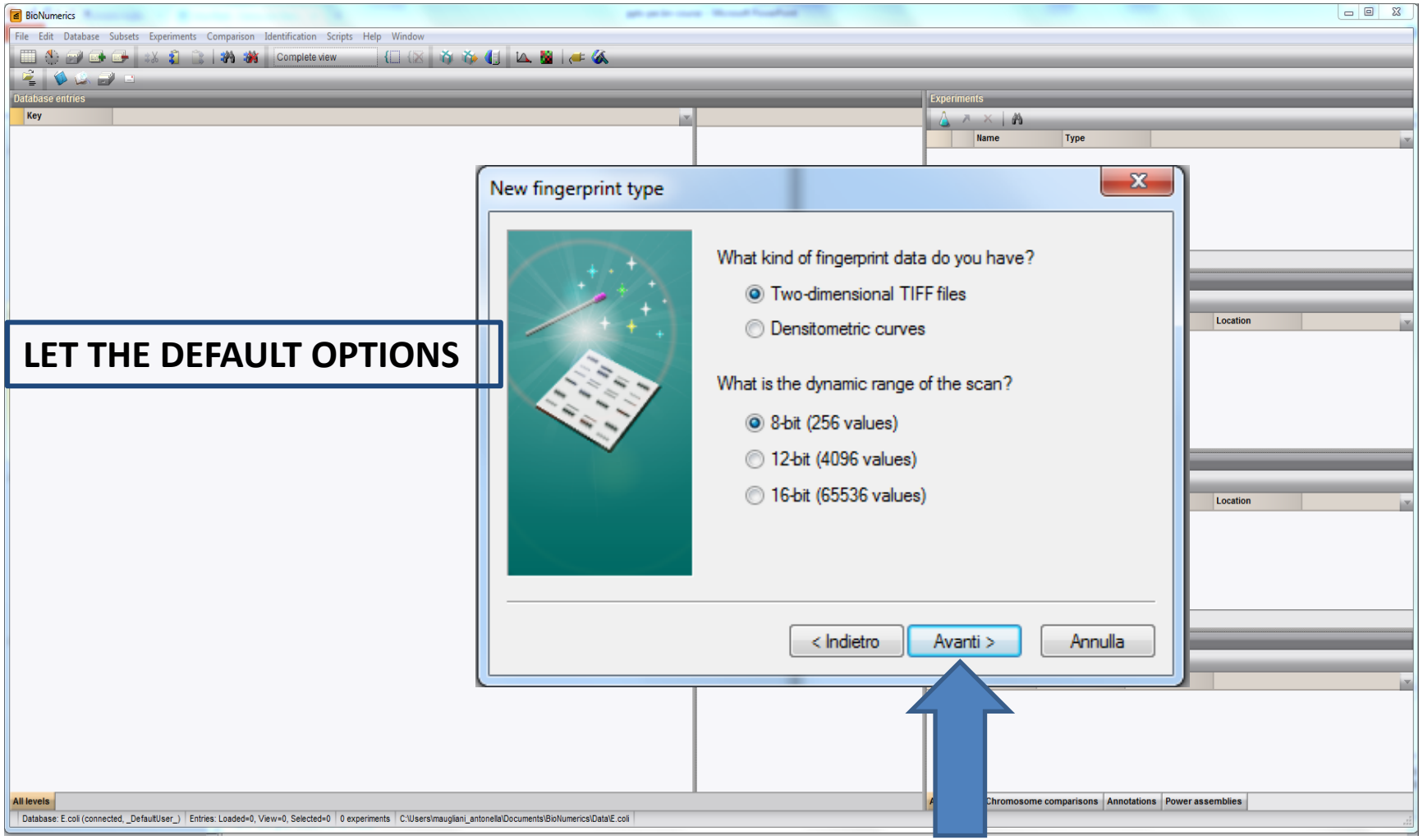
SELECT “NEW FINGERPRINT TYPE” IN EXPERIMENT TYPE…

Step 2: Experiment type



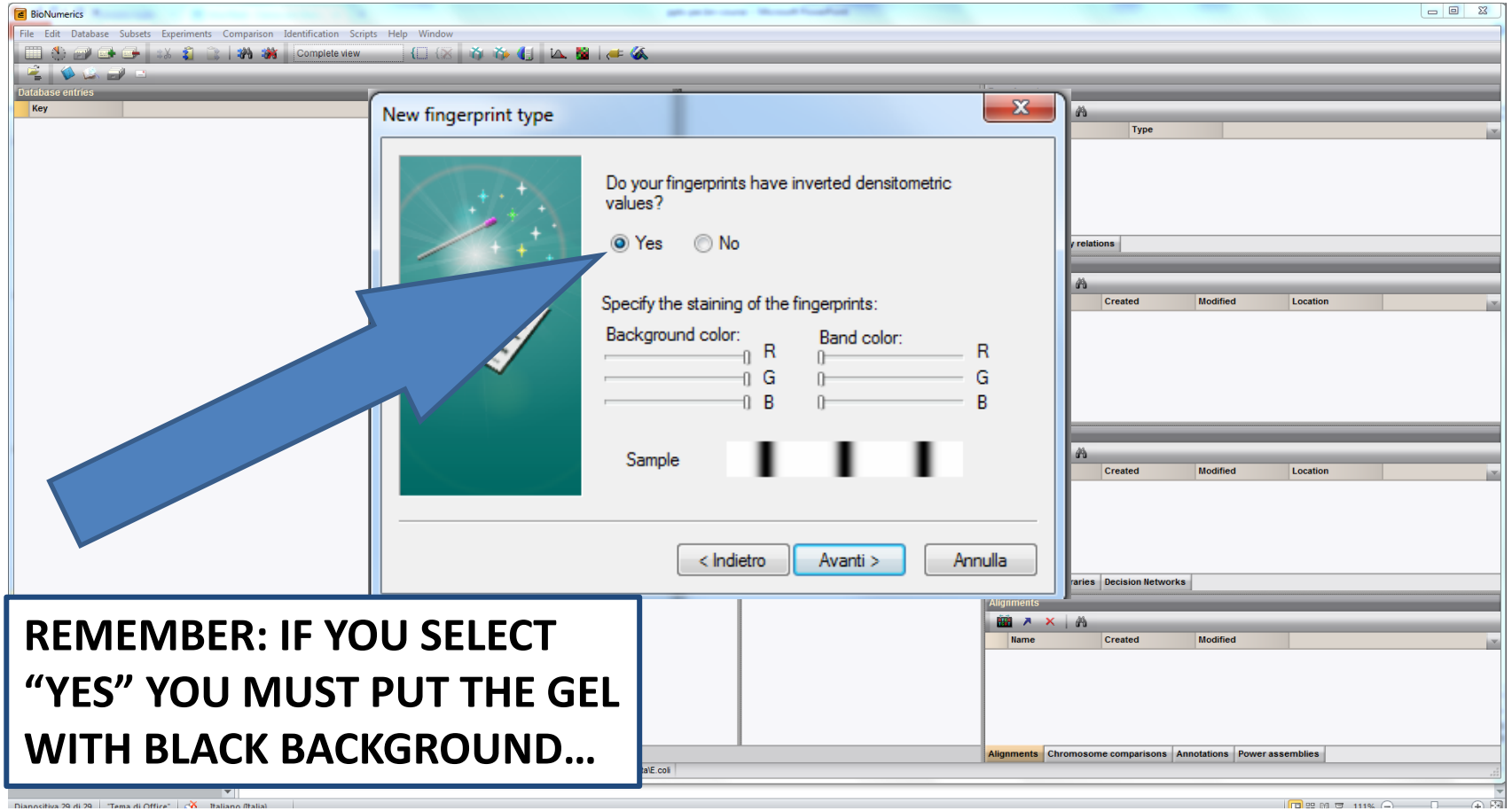
The BioNumerics Software: database creation, experiment type, import of TIFF files, and setting up experiments

Step 2: Experiment type



The BioNumerics Software: database creation, experiment type, import of TIFF files, and setting up experiments

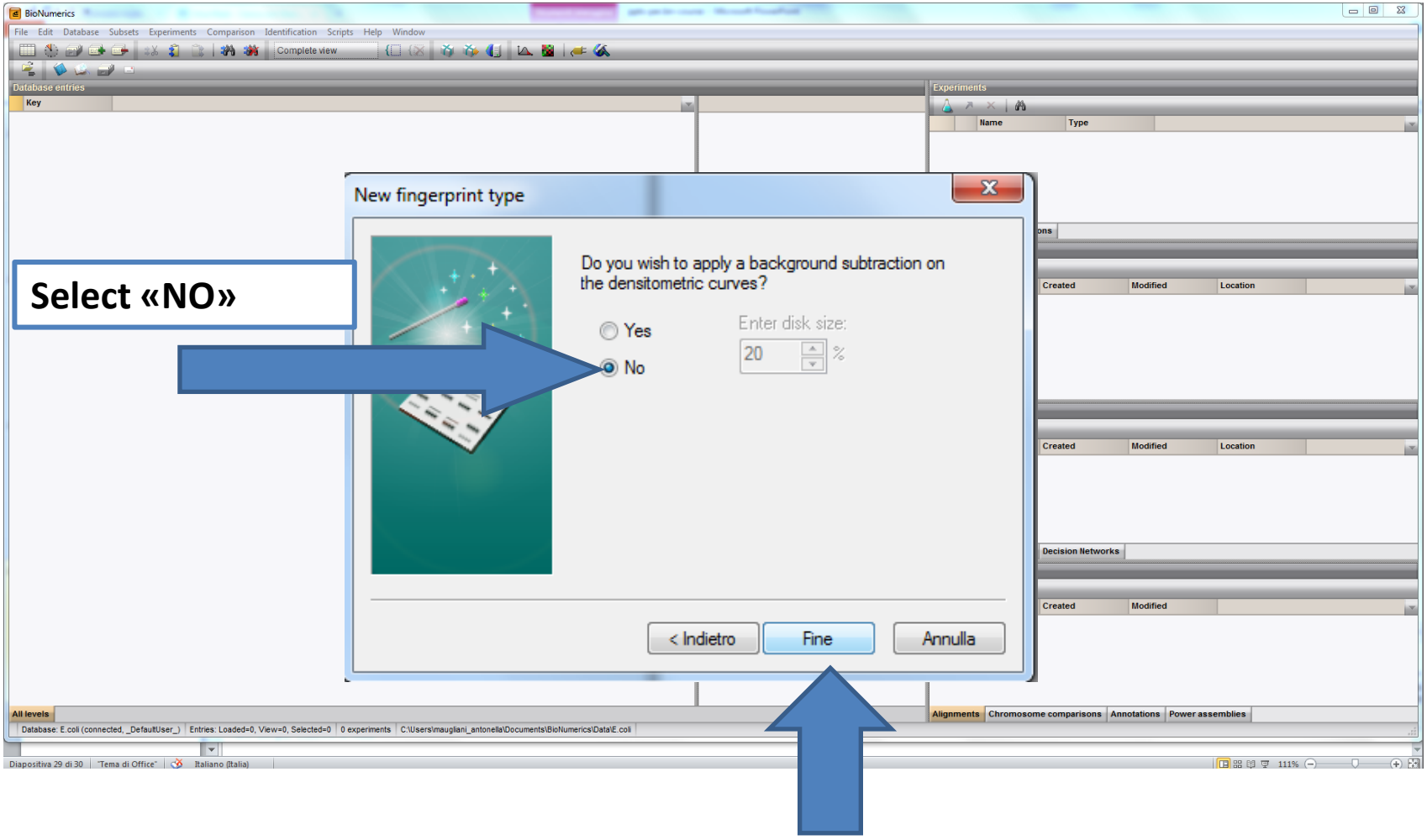
Step 2: Experiment type



REMEMBER: IF YOU SELECT "YES" YOU MUST PUT THE GEL WITH BLACK BACKGROUND…

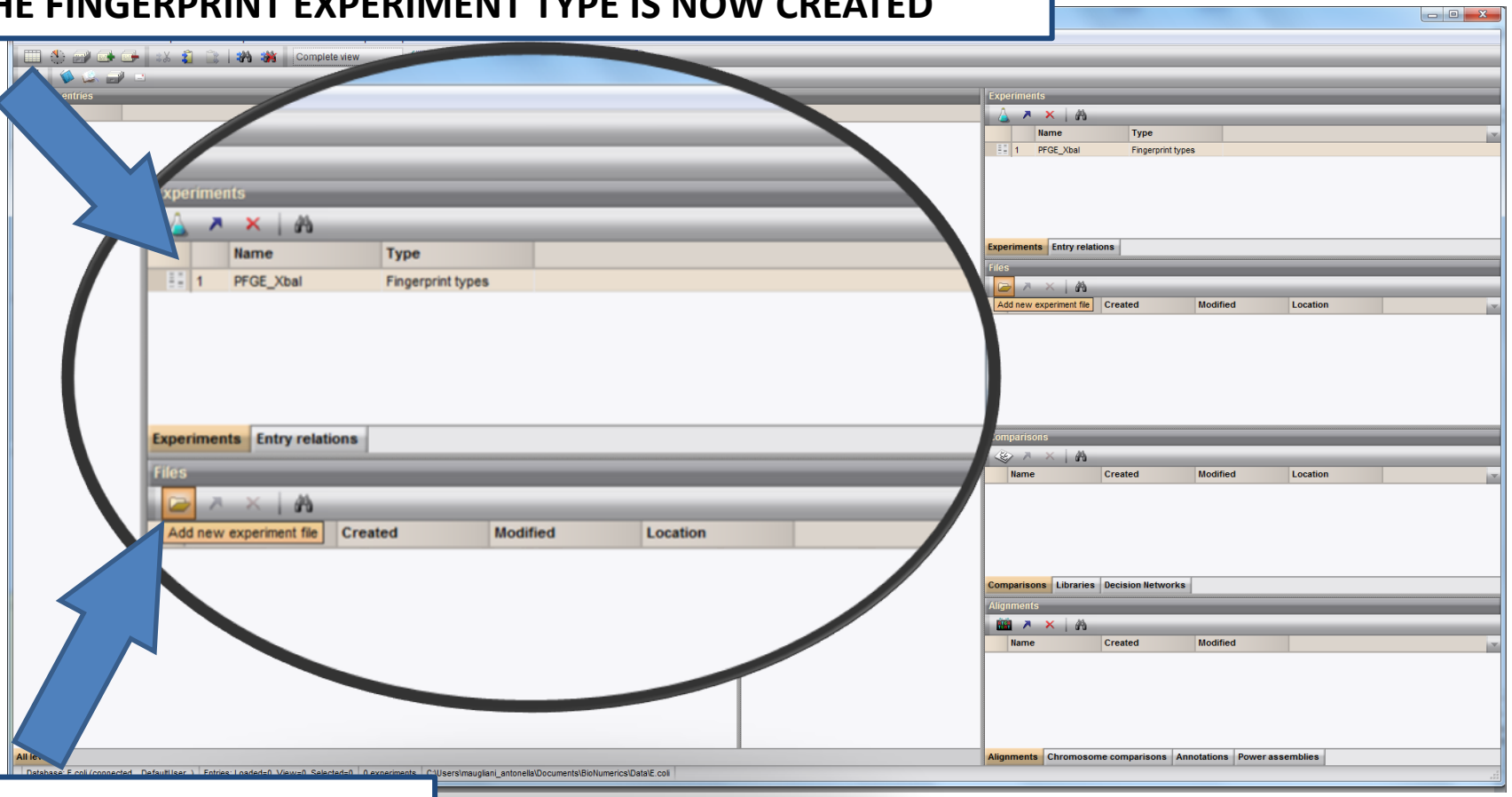
The BioNumerics Software: database creation, experiment type, import of TIFF files, and setting up experiments

Step 2: Experiment type



Step 2-3 : Experiment type – import TIFF files

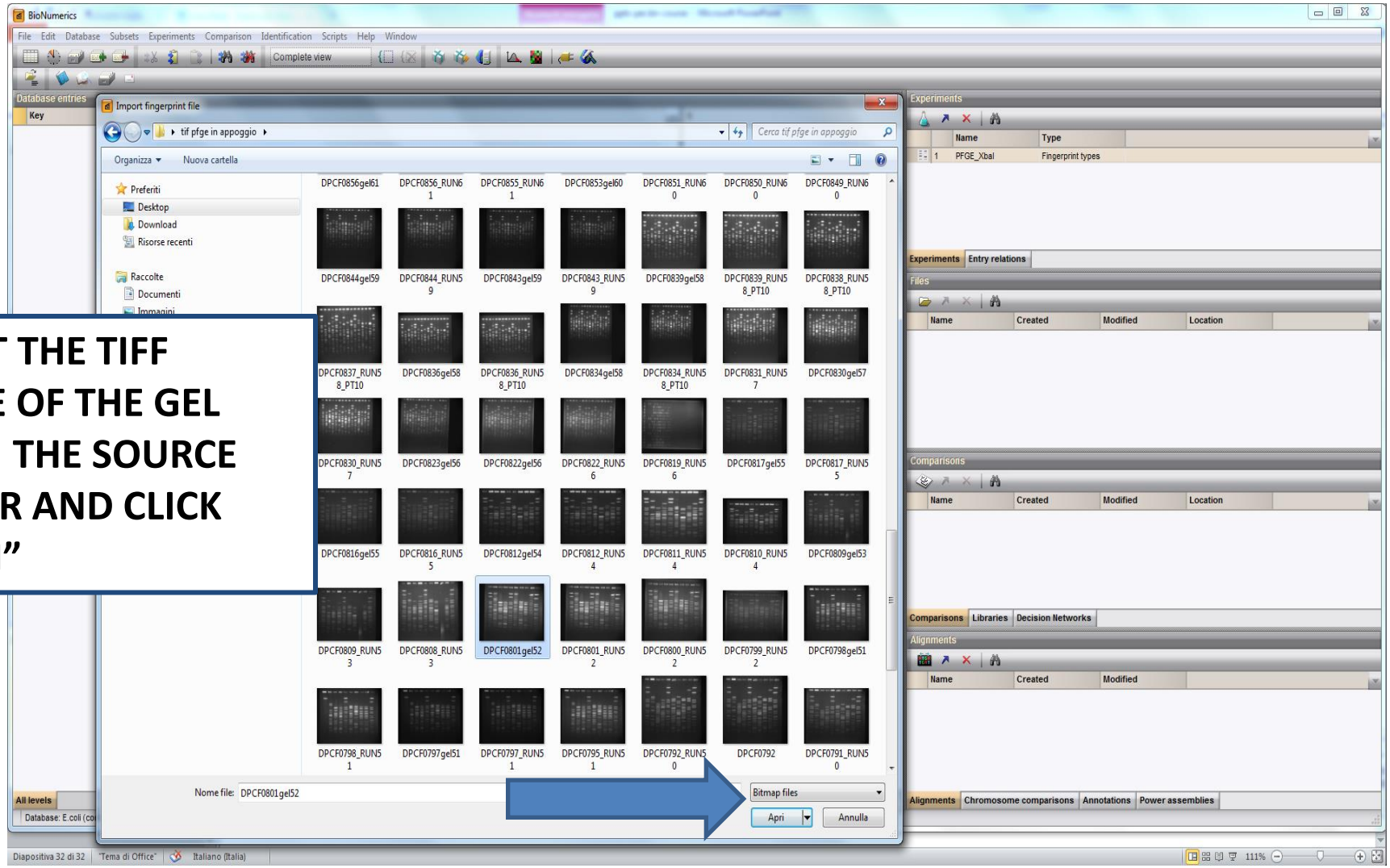
THE FINGERPRINT EXPERIMENT TYPE IS NOW CREATED



CLICK ON "ADD NEW EXPERIMENT FILE"

The BioNumerics Software: database creation, experiment type, import of TIFF files, and setting up experiments

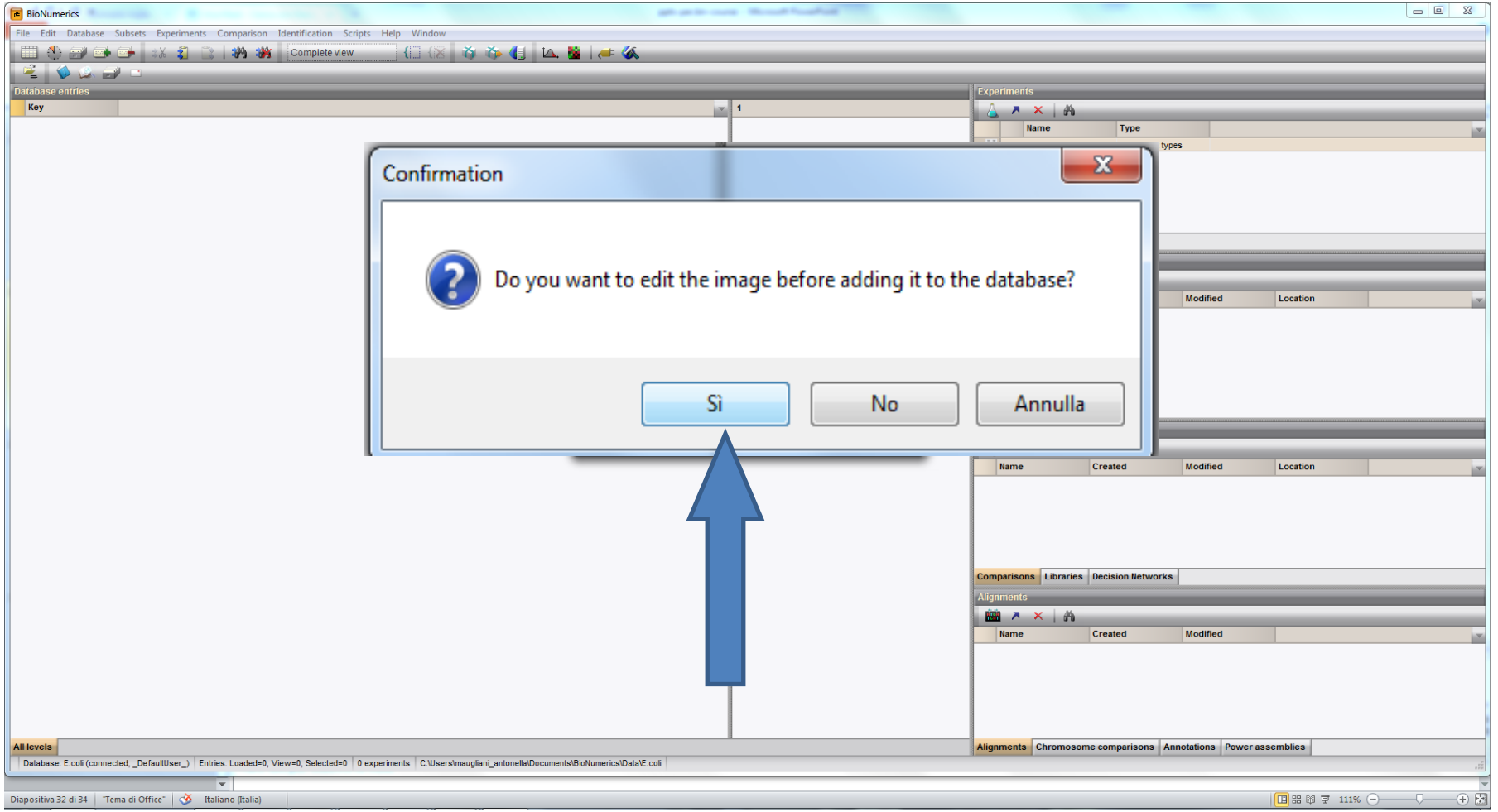
Step 3: Importing TIFF files…



SELECT THE TIFF IMAGE OF THE GEL FROM THE SOURCE FOLDER AND CLICK "OPEN"

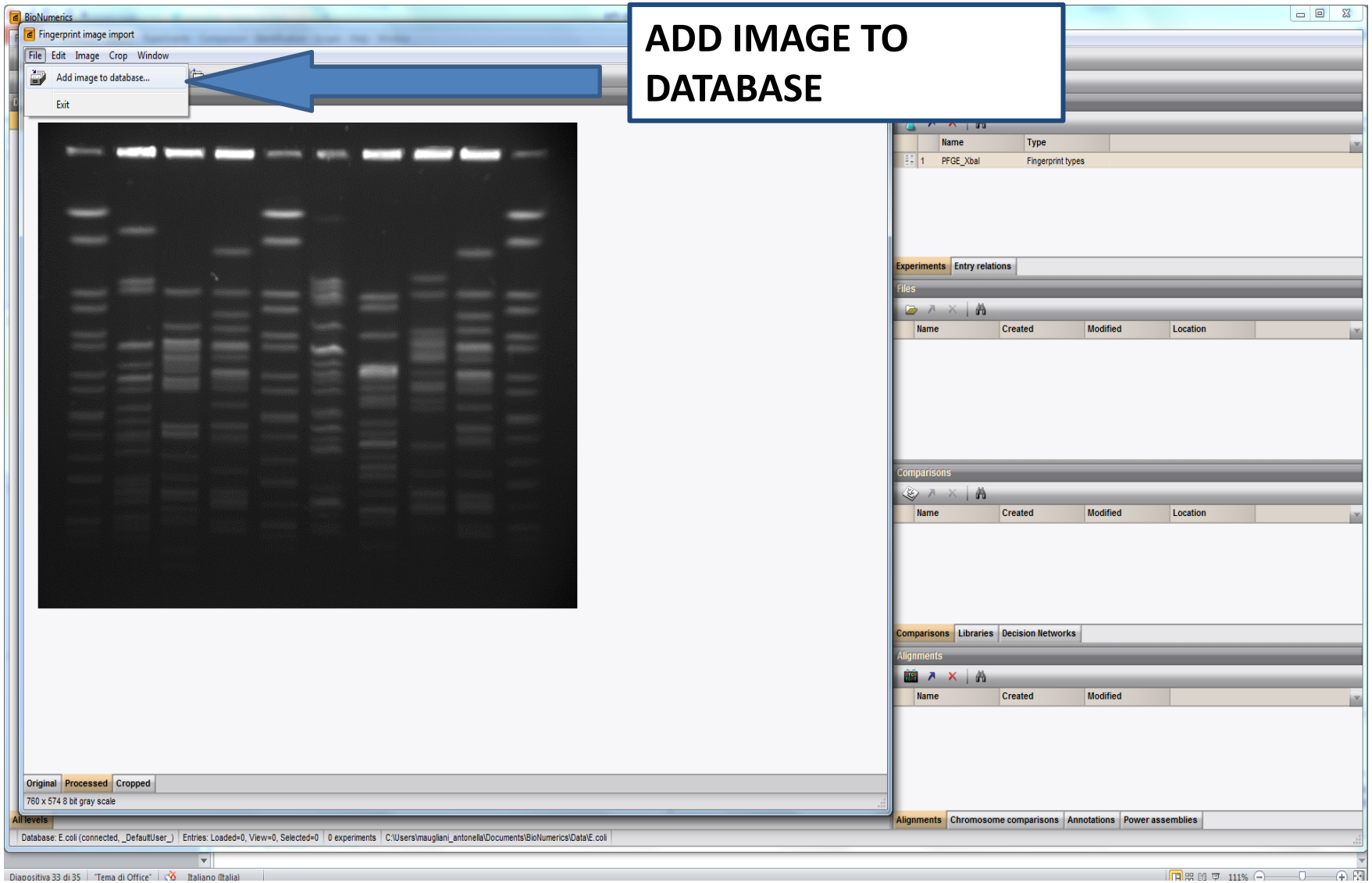
The BioNumerics Software: database creation, experiment type, import of TIFF files, and setting up experiments

Step 3: Importing TIFF files

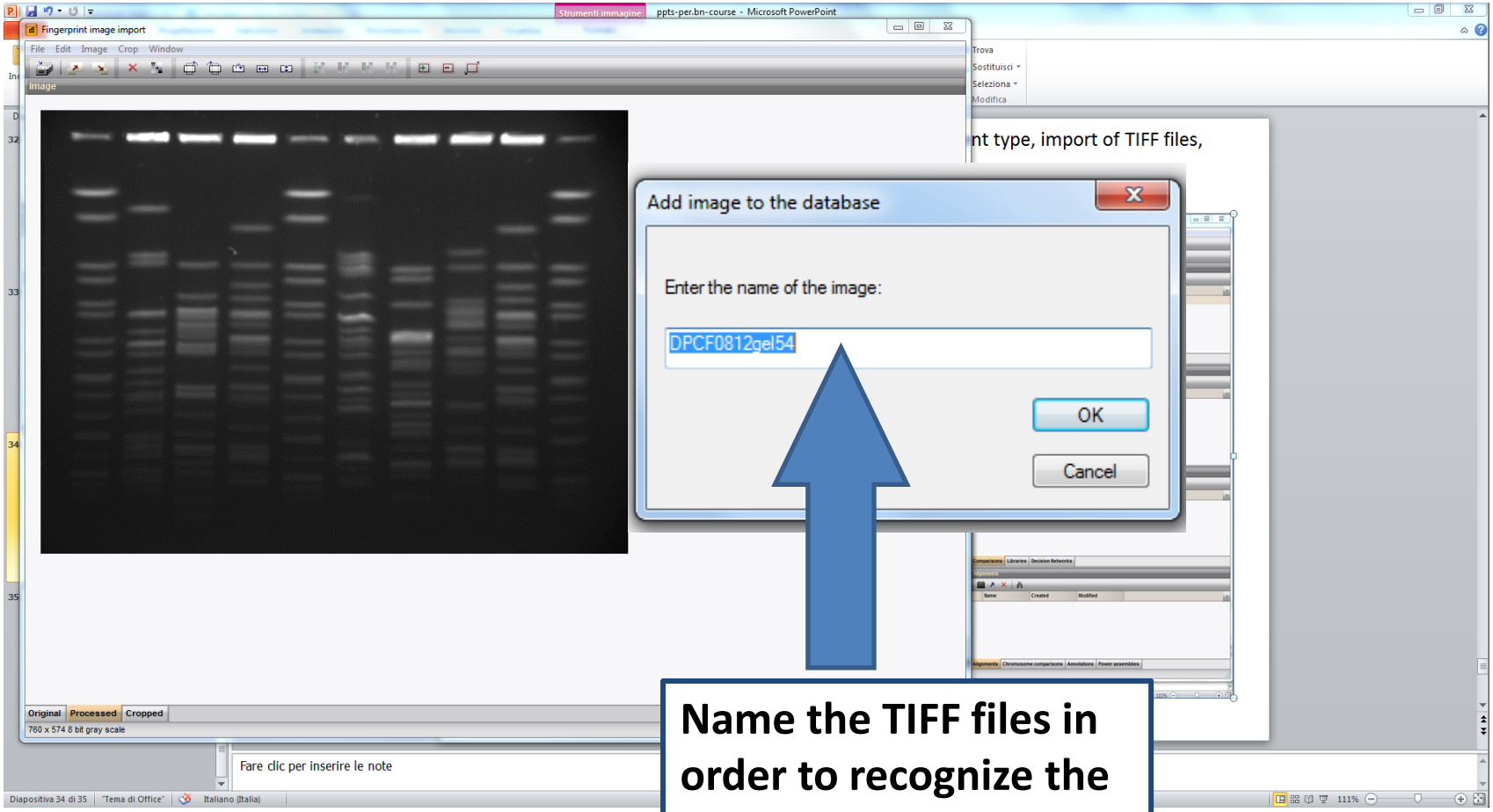


The BioNumerics Software: database creation, experiment type, import of TIFF files, and setting up experiments

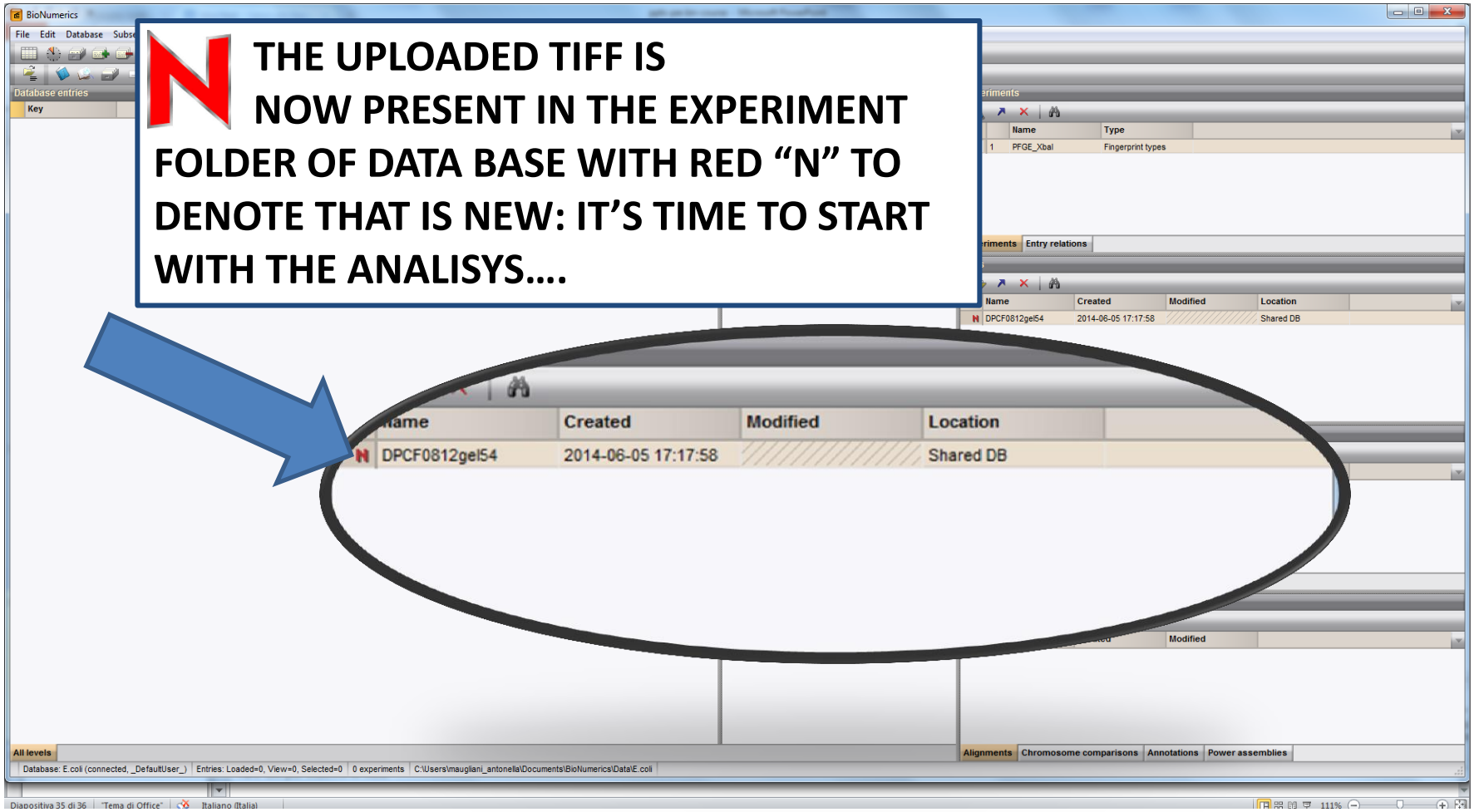
Step 3: Importing TIFF files



Step 3: Importing TIFF files



Step 3: Importing TIFF files



THANK YOU VERY MUCH FOR YOUR ATTENTION