1. Country of Facility

2. City of Facility

3. Please give the name of your facility. We need this to detect double entries from facilities for proper statistics.

4. Where do you work? Your institution type affiliation?

5. Your Position

6. Your professional background

7. Your main Expertise / Research Field in the facility

8. Do you have a defined role description in your contract?

9. Please answer the following questions:

Do you have a clear career development perspective?

Are you member of the local Union?

10. Do you have a permanent or a fixed term contract?

11. If you have a fixed term position, how long is your current contract in years?

12. If you have a fixed term position, how often was your contract already prolonged (even without a change of the type of work you really do in the CF)?

14. If you have a permanent position give your age, when you received the permanent contract.

15. What is the worst thing about your job/role?

16. What is the best thing about your job/role?

17. Would a site as GlassDoor but specific for Microscopy Facilities, where you could read reviews from people working in a CF, compare salaries, prepare for interviews, be interesting for you?

18. No. of SCIENTIFIC facility staff (FTE) in your facility?

19. No. of SCIENTIFIC facility staff (FTE) in your facility with permanent positions?

20. No. of the Scientific facility staff (FTE) dedicated only to image analysis/data evaluation programing tasks?

21. No. of TECHNICAL staff (FTE) in your facility dedicated to facility work only?

22. No. of TECHNICAL staff (FTE) in your facility with permanent positions?

22b. No of SCIENTIFIC staff (FTE) related to EM.

22c. No. of TECHNICAL staff (FTE) related to EM.

22d. No. of SCIENTIFIC staff (FTE) related to FACS.

22e. No. of TECHNICAL staff (FTE) related to FACS.

23. Questions concerning facility staff training and education. Allowance and real attendance per year for:

Technical staff in national or international courses/conferences

Scientific staff only in national courses/conferences

Technical staff only in national courses/conference

Scientific staff in job exchange programs at other labs

Technical staff in job exchange programs at other labs

24. How do you monitor facility staff time?

25. Do you, and how and for what tasks do you monitor/register facility staff time? (Multiple answers possible)

Only general working time is monitored by employer.

No specific working time/tasks are monitored.

Semi-automatic monitoring by software tools

User introduction time is registered.

Project specific times (like EM or Immuno sample prep).

Full-service tasks (like EM or SR image recording).

Custom image analysis time.

Custom macro programming.

Other.

26. Your facility type affiliation?

Light Microscopy.

Electron Microscopy.

BioImage Analysis

FACS

Other (please specify)

27. Is an image or/and data analysis facility available for your users, if you do not offer this service in your facility?

28. Your institute's access policy for your facility?

29. Number of Facility users per year:

30. Number of Workgroups using the facility per year:

31a. Light microscopy Facility instruments usage hours per year

31b. EM Facility instruments usage hours per year

31c. FACS Facility instruments usage hours per year

31d. App. number of Image Analysis projects per year

32. Does the facility have official user rules?

33. How do you train new users on handling of instrumentation and applications?

Ad-hoc one-on-one training by lab staff.

Scheduled classroom trainings by lab staff.

Internal online resources.

External online resources.

Courses offered by vendors, carried out in my lab.

Courses offered by vendors, carried out in the vendor’s facilities.

34. Many vendors offer training courses. Please check what you agree to.

Can be an effective relieve for my internal lab staff.

Can be a source for my lab staff to refresh their own knowledge (train the trainer)

Would make use of, if pricing is attractive.

Would make use of, if they are carried out in my lab.

Remote courses and online resources can complement traditional classroom training.

Other ideas.

35. How does the facility manage instrument usage?

36. If you use a online booking system, please give the software name and if commercial or non-commercial.

37. Please answer the following questions:

Do you log real instrument usage time?

Do you log real image analysis workstation usage time?

Do you log software package usage time ?

If someone books but does not show up. Do you charge?

If someone books 3 hours but uses only one hour. Do you charge (may be less) also for this non-used time?

38. How do you monitor publication output with facility usage or scientific input?

No systematic monitoring

Automatic monitoring (software solution)

Manual monitoring (e.g., yearly PubMed search)

Users actively send publications to the facility

Users are encouraged by special rewards the facility provides

Combination of actively and manual solutions

Other

39. Do you have a publicly accessible facility website in place?

40. Do you present a detailed description of the facility equipment on the website?

41. Do you have a board/committee that you report to?

If yes, please indicate what this board/committee is responsible for.

42. Tasks of board/committee

Strategic decisions (location, instrumentation, large investments, ...)

Budget amount

Budget spending (> 5 or 10 k€)

Facility staff contracts

Business trips

Facility evaluation

43. Does the facility charge for instrumentation (usage) time?

44. Does the facility charge for facility staff time?

45. Budget related questions:

Does the facility have to pay basic running costs like building costs (incl. electricity, heating, ventilation, water, room cleaning) and possibly lab space rent?

Basic costs (phone, furniture, chairs, office supplies)

Do you have a budget and what amount for: Consumables (e.g. labware, bulbs, immersion oil)?

Do you have a budget and what amount for: Repairs of any kind?

Do you have a budget and what amount for: Small equipment (limit 5-10 k€ per instrument)

Do you have a budget and what amount for: Computer upgrades/ replacements?

Do you have a budget and what amount for: Hardware maintenance contracts?

Do you have a budget and what amount for: Software maintenance contracts?

Do you have a budget and what amount for: New software licenses?

Do you have a budget and what amount for: General budget usable for all above?

Do you have a budget and what amount for: Travel cost/ Conferences?

Do you have a budget and what amount for: Large investments?

46. Full budget authority for the facility head?

Yes, up to a certain limit

No

I do not know

47. If you have a budget authority limit, how much is it per purchase order (€)?

48. Full authority for the facility head over income by user fees?

Yes

Yes, but it is reduced by a certain amount of the staff salary

Yes, but it is reduced by a certain amount to subsidize the budget

No

I do not know

49. Source of the facility budget for large investments

Central funds of the institute/university

Direct government funding (100%)

General facility budget

User fees

often a mix of several sources

Public funding program in the EU - European Union

Public research funding agencies (CNRS, DFG, Wellcome Trust, NIH,....)

Charity funding (like HH, Gates, Zuckerberg..)

Industry funding

Other (please specify)

50. What response time you expect for an online session (remote care) or hotline call back?

With discounted service

With full service

With no service

51. What response time you expect for an on-site visit possibly with final repair?

With discounted service

With full-service contract

With no service contract

52. What response time you expect for a finished final repair with defined protocolled measurements?

With discounted service contract

With full-service contract

With no service contract

53. Please answer the following questions about the type and the number of service contracts your facility has:

A) Contract for yearly maintenance

B) A + discount on service work hours

C) B + discount on parts

D) C + Full coverage without lasers

E) D + lasers included

F) E + OS (WIN) upgrades included

54. Please answer the following questions concerning the real system down time or for repairs of parts send to companies like objectives, xy-tables:

With service contract: Mean time for final repair

Without service contract: Mean time for repair

Meantime, when lasers had to be changed.

Mean time for objective repair or service.

55. No. of (2-P) lasers with separate service contracts?

56. Repair time expectations and experienced real repair times for 2-P lasers.

Expected with full-service contract.

Real with full-service contract

Expected without service contract.

Real without service contract

57. If you have service contracts, please indicate the reasons.

Cheaper rates than on-demand repairs

It minimizes instrument down time.

There is no alternative instrument available that can be used in case of breakdown.

There is otherwise no budget for repair.

Other (please specify)

58. If you have no service contracts, or only some contracts, please indicate the reasons.

too expensive for the number of systems in the CF

even for single heavy used system too expensive

covering by own budget much cheaper

Other (please specify)

59. What is your opinion about an IT hard- and software (incl. OS) upgrade contract?

interesting

Interesting, but hard to finance through (grant) resources.

we can do it much cheaper with own IT resources.

not interesting

Other (please give your ideas)

60. No. FCS

61. No. FLIM

62. No. High Throughput Screening (like PE Opera, GE machines, Yokogawa CQ1...)

63. No. Laser Cap/Ablation

64. No. Light-Sheet

65. No. PALM/STORM

66. No. SIM

67. No. Slide Scanner

68. NO. SR-Spinning Disk

69. No. STED

70. No. point scanning LSM

71. No. Spinning disk

72. No. TIRF

73. No. High-end wide-field (e.g. live cell incubation, ratio imaging, deconvolution, FRAP unit)

74. No. high-end Stereo (e.g., motorized table, high end camera, High NA objective)

75. No. of low-end imaging instruments (e.g., simple widefield fluorescence microscopes, stereo microscopes) in the facility?

75b. No. of EM (TEM, SEM)

75c. No. of FACS machines

75d. Name here any other special instrumentations like Serial Block Face, organism sorters, clearing machines, etc.

76. What tools do you know, use or have used for system checks and performance evaluation?

Argolight slide

Brakenhoff slide (SIP chart)

Bead slide (self-made)

Calibration objective from microscope vendor (e.g., Zeiss)

Chroma slide or similar from other sources

Fluo Cells slide (Molecular Probes)

Gatta-Beads (Gattaquant)

Gold bead slide (Leica or self-made)

Mirror surface slide (many sources)

Nanoruler (Gattaquant or selfmade)

Power meter in slide format

PSF check slide (commercial)

Quantum dot slide (self-made)

Scientific Valley slide (commercial)

Siemens Star slide (commercial)

Tetra Spec bead slide (Molecular Probes)

USAF slide (non-fluorescent - many sources)

USAF slide (fluorescent - Many sources)

77. Other samples you know of or have used. Please give type, name and source, if you want to share with the community.

Visual inspection and cleaning of the microscope

Regular intense objective cleaning

Inspection of the objective under stereo-microscope or other high magnification

Laser (LED, arc lamp) power measurement

Laser (LED, arc lamp) power over time measurement

Scanner calibration (linearity)

Scan-field rotation precision

Bi-directional scanning precision

AOTF calibration (linearity)

Pinhole alignment

Regular PSF measurements with beads

Resolution (FWHM) based on mirror surface

Resolution (FWHM) with thin fluorescent film

Signal to noise

PMT linearity

co-alignment of colors in xy

co-alignment of colors in z (parfocality)

Homogenity of Illumination (field of view)

Sample holder flatness

xy table precision

xy table repeatability

z drive accuracy

dual camera alignment

78. How often does your facility perform the following maintenance and/or quality checks (Please check all that apply):

79. Suggestion for other valuable measurements for system evaluation

80. Which of the following software tools for PSF measurement evaluation you know and/or use?

MetroloJ

MIPs for PSF (Gelman, Basel)

PSFj (Knob Lab)

PSF estimation tool (Cardinale, Baumgartner)

PSF distiller (SVI - commercial tool)

PSF calculator (ZEISS - commercial tool)

other (give the name and source in the box at the end of the survey)

81. Would you like to attend an intensive course on "Advanced system maintenance" (e.g. from a manufacturer for a specific system)?

Yes

Yes, but depends very much on the price.

No

No, but surely someone else from the facility.

82. Give your preferences what should be covered (Preference: Low =1; Medium = 2; High = 3)

Objective cleaning (intense)

General system cleaning

In-depth theory of system components and beam path

System troubleshooting

Software tools for maintenance

Hardware tools for maintenance

Maintenance of computer/ Upgrades OS

Scanner calibrations

AOTF calibration (wavelength)

AOTF calibration (power)

Pinhole calibration

Color alignment of objectives and filters

Parfocality check of objectives

Objective centricity

Power measurement (general)

PSF measurement

Resolution measurement

PMT linearity

Signal to noise

Spectral detector calibration

xy-Stage calibrations (level, precision, repeatability)

z drive accuracy

83. Further topics you would like to see covered in such courses?

84. Maximum price you would be willing to pay for such a 2- or 3-day course (covering all checked topics above) with possibly 10 - 20 attendees in a company head-quarter?

85. Maximum price you would be willing to pay for such a 2 or 3 day course (covering all checked topics above) given individually on-site in your institute for a small number (possibly 5-10) local attendees?

86. What option would you prefer independent from the price tag?

87. How is your IT equipment in the facility organized?

Domain with Active directory (AD)

AD with network based User accounts

AD with User accounts based on each computer

Individual User accounts on each computer locally

Only one account on each computer shared by all users

88. Is your facility IT equipment serviced by your CF staff?

89. IT service and safety questions concerning your microscope computer set-ups

Do you regularly upgrade the OS with updates and patches?

Are your computers connected directly (via a Firewall) to the Internet?

Do you use antivirus (AV) software?

Do you automatically upgrade the AV software?

Are you unsure about what AV software to use for your recording systems?

Do you upgrade other software routinely (browser, PDF reader, Java)?

Do you allow remote connections in general?

Do you have policies for remote connections by vendors?

Have you been allowing remote connections by a vendor in the past?

90. Questions concerning OperationsSystems (OS), number of systems using a specific OS

Windows XP machines

Windows 7 (8) machines

Win10: Enterprise 90.

Win10: LTSB 2014 or 2016 90.

Win 10: LTSB 2019 90.

91. Are you forced to upgrade your computers to Windows 10 by the end of the year?

92. Do you think your IT would have enough knowledge (when supported by manufacturer’s instructions and specific hardware packages) and staff capacity for upgrades?

93. What is the total budget you have reserved for Win10 upgrades for the facility?

94. Does your facility operate and manage an on-site research data storage solution or a file server for your users?

95. What is the total storage capacity (in TB) of this server?

96. How much storage (in TB) you allow per workgroup (answer 0, if no specific limit is defined)?

97. Do users have to pay for file server storage?

98. Do you offer an image database service (e.g.OMERO, IMS or Columbus)?

99. Do the users have direct storage access from your microscope systems to their own (workgroup) file server storage?

100. What is the network speed inside your facility?

101. Do you have general rules & regulations for data storage at your imaging systems or file server(s)?

Yes, on imaging systems

Yes, on file servers

Yes, for cloud storage

102. No. of offline image processing workstations in the facility?

103. Do you offer centralized computing resources (dedicated servers) in the facility for:

Image Deconvolution

Deep Learning (e.g., U-Net or similar)

Knime

High Power computation

Visualization

104. Do you provide a flexible centralized server with virtual machines for multiple offline processing, visualization, deconvolution and other tasks?

105. Further comments, ideas and questions:

106. How long (min) did it take for you to fill out the survey?