Microscopy Imaging Task Force

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(whoo spring;c)

Members: Jim Bear (Co-Chair), Mark Peifer (Co-Chair), Michael Topal, Annabelle Stein, Klaus Hahn, Ken

Jacobsen, Tom Kash, Scott Randell, Joan Taylor, Shawn Gomez, Michael Chua, Bob Bagnell

Ad-Hoc Member: Paul Dayton (will also serve ad hoc on Macro-Imaging Task Force)

Charge: To develop a five-year plan toward enhancing the organization, structure and visibility of Microscopic Imaging at UNC-CH. (Microscopic Imaging is being defined as Electron Microscopy to Cellular Imaging, including applications that that visualize cellular processes within living animals.)

Specific Goals for Committee to Address:

- 1. Data Gathering about Imaging Capabilities We need to determine what types of microscopic imaging capabilities we currently have on campus. Which types of imaging are most widely used? What is in highest demand? Are there some types of imaging technologies that have "matured" to the point that they should not be in Core facilities anymore? Conversely, are there some types of imaging technologies that are too highly sophisticated (and too few users) to justify supporting in a Core?
- 2. Data Gathering about Imaging Cores We need a deep and thorough assessment of the financial status of our Imaging Cores. Which ones are operating in the red/black, including an assessment of personnel? Are there any disparities in the financial models between Cores, and if so, what are the factors contributing to these disparities?
- 3. **Imaging Informatics:** What are our current strengths, capabilities and weaknesses with regard to image collection, storage and analysis?
- 4. **Benchmarking** How does UNC-CH compare to our peer institutions with respect to Imaging Cores and capabilities? Please identify 3-4 peer-institutions and provide comparative metrics regarding their Core organization, financial structure, available technologies, visibility and advertising approaches, etc.
- 5. Organization of Imaging Cores Based on data gathered above, are there alternative suggestions for how we might organize our Imaging resources/Cores at UNC? Some examples to consider: Should we restructure our Cores so that they are built around particular technologies, rather than having duplicative services? Should we completely centralize and unify the financial management and budgets of the Imaging Cores? Should we develop satellite facilities for the most heavily-used technologies? Should we develop a Microscopy Imaging Advisory Committee (similar to the BRIC Advisory Committee) that has distinct charges that are non-overlapping with CFAC?
- 6. Local Visibility.... Are our Imaging Cores well-advertised and well-known to UNC Faculty, trainees and staff? Does the Core Facilities Web page/database provide the appropriate amount of content and access for advertising our Cores to the UNC community? Do we need to improve our adverting efforts locally? If so, how do we achieve this?
- 7.vs. National Visibility Is it important that we have a National presence in Imaging capabilities? If yes, then why? What are the direct and tangible benefits to building a National identity in this area? (Answers to these questions should incorporate data collected from Benchmarking exercise above.)
- 8. **Vision for the Future** In broad terms, what are the types of capabilities that we should be investing in to remain a leader in microscopic imaging? (Note: please DO NOT provide an equipment request list.)

In all instances of recommendations, please provide a detailed *cost analysis* associated with your recommendation.