

Work guidelines for members of the WCMC core and Fiehn research lab

Be mindful, respectful and helpful.

Abide by the scientific ethics and principles of community at UC Davis.

Professor Fiehn's responsibilities as WCMC principal investigator:

- find funding, or give fair notice when funding is going to lapse
- be available for one-on-one meetings when necessary
- assist in administrative and paperwork issues
- provide scientific leadership
- provide career guidance and help lab members work towards their career goals
- resolve disputes within the lab
- write recommendation letters to support present and former lab members
- guide researchers in writing scientific papers, abstracts, SOPs, conference talks & posters
- engage in lab seminars, scholar meetings, WCMC symposia, core discussions
- meet with technical staff in person as needed and submit UC-path reports

WCMC leadership team:

The WCMC at the Genome Center is organized in three overlapping units: research lab, core lab and outreach unit. Within each unit, we have layers of leadership duties that depend on seniority and experience. Similar rules apply to collaborating WCMC research labs (Newman, Taha, Hammock).

- *Service core leadership*

Manage projects and laboratories including advancing metabolomic services. Assist the core in acquiring impeccable metabolomics data and interpretations. Assist core project manager in discussing study designs and results with clients. Monitor instrument performance, IT performance and core supplies. Assist Core Director (Dr. Bessin) and Faculty Director (Prof. Fiehn) in advancing WCMC instrumentation portfolio. Develop new assays and new software and databases based on client needs, and guide core staff in such developments. Assist Faculty Director in securing WCMC grants.

- *Research lab leadership*

Manage projects including advancing metabolomic research aims. Write manuscripts. Lead small teams with specific research functions such as cheminformatics developments, IT developments, chemical biology projects and analytical chemistry projects. Assist Prof. Fiehn in instructing graduate students and postdocs, including code development and testing and manuscript writing. Assist WCMC in course implementation and organization. Assist Prof. Fiehn in discussing study designs and results with current and future collaborators. Assist Prof. Fiehn in advancing WCMC instrumentation and IT portfolio. Develop new assays and new software and databases based on research project strategies and needs. Assist Prof. Fiehn in securing WCMC grants.

- *Outreach team*

Manage existing and plan new outreach activities including metabolomics courses, seminars, online opportunities, symposia, and participation in organization of conferences. Work with Prof. Fiehn and all WCMC staff and researchers to plan and implement new course content, invite new seminar speakers, organize symposia, create online education contents, and assist with online education and training. Organize visiting scholar program.

Graduate student responsibilities:

- meet your graduate school reporting and exam requirements;
- identify and develop research projects with the help of the Prof. Fiehn;
- apply effort to your research and work towards a PhD-worthy body of work;
- attend and present at lab meetings and conferences; do not cancel on short notice.

- schedule thesis committee meetings on a yearly basis;
- present in weekly scholar meetings or submit weekly report;
- present work in lab seminars when scheduled.
- if you are funded by Prof. Fiehn's project funds, perform work for this project
- initiate and complete first drafts of scientific papers (3 first author papers / PhD thesis)
- assist in WCMC course organization in agreement with Prof. Fiehn and course managers
- train undergraduate researchers in agreement with Prof. Fiehn
- find options to learn new things, grow your perspectives, go out of your comfort zone to accomplish new work
- when initiating contacts with outside Professors for collaboration, or for grant submissions, get Prof. Fiehn's consent first. Later, cc' Prof. Fiehn on emails.

Postdoctoral scholar responsibilities:

- identify and develop research projects with assistance by Prof. Fiehn
- when initiating contacts with outside Professors for collaboration, or for grant submissions, get Prof. Fiehn's consent first. Later, cc' Prof. Fiehn on emails.
- attend and present at lab meetings and conferences. Do not cancel on short notice.
- define your career goals, communicate these to Prof. Fiehn and work towards them
- pursue projects and collaborations that further your own career goals
- provide scientific and technical leadership within the lab
- present in weekly scholar meetings or submit weekly report
- present work in lab seminars when scheduled.
- if funded by Prof. Fiehn's project funds, perform work for this project
- initiate and complete first drafts of scientific papers
- find options to learn new things, grow your perspectives, go out of your comfort zone to accomplish new work
- assist in WCMC course organization when possible
- train undergraduate and graduate researchers in agreement with Prof. Fiehn

Computational and core staff:

- focus about 80% of your effort on priorities defined by the WCMC leadership team
- report early on project progress and obstacles
- assist your co-workers whenever you can.
- coordinate work efficiently between the Sacramento lab and the Davis lab.
- identify problems in core or software development work and try to solve it (a) yourself, (b) team up with someone, (c) discuss in team meeting.
- attend lab seminars and team meetings;
- let Professor Fiehn know as early as possible (and in confidence) once you are looking for jobs outside the WCMC. Prof. Fiehn will help you, but he needs to know about your plans for staff hiring and work planning.
- assist in WCMC course organization by agreement with Prof. Fiehn and course managers
- 20% tinker time: find options to learn new things, grow your perspectives, go out of your comfort zone to accomplish new work, explore new techniques, improve current SOPs
- For software developers: incorporate existing open source solution, utilize version tracking systems like github. Maintain bug records and utilize Unit/Integration testing where feasible.