



ÚOCHB ^{AV}
IOCB PRAGUE

Meeting with Group Leaders

Jan Konvalinka | March 22, 2024

Agenda

- IOCB Boston
- Liblice Feedback
- IOCB Retreat – Valeč 2024
- New Research Core Facility: RSG Metabolomics
- Fume Hoods in IOCB labs
- Safety updates
- PhD Interview Day, Summer Student Program
- IOCB Tech
- Research Data Management
- Miscellanea

IOCB Boston – updates

IOCB Boston – updates

- Active bank account in Cambridge Savings Bank (after Citibank and JP Morgan Chase bank, third attempt was successful)
- First part of grant received after verification in-person (USD 2,5 Mio)
- Insurance Agreement signed (property, liability and workers compensation)
- Lease Contract is being discussed

Liblice – Feedback

Liblice - Strategic meeting

Progress report

- Identified the most important issues from the Liblice list
- Discussion with "Rada pracoviště" will take place in April to consult some areas
- On the next GL Meeting we will report what we intend to do and what is the plan
- Please reserve 23-24 January 2025 in your calendar for Liblice III.



IOCB Retreat 2024

IOCB off-site retreat in Valeč

- 27–31 May 2024 (Monday-Friday)
- **All participants are asked to stay the whole week and attend the full program**
- Information about the event was sent by e-mail to all registered participants
- All participants to fill the short online form by 7 April (needed for transportation and food restrictions)
- **Please contact Iva Bodnár (iva.bodnar@uochb.cas.cz) if:**
 - **you haven't sent her a list of participants from your group yet (ASAP)**
 - you haven't confirmed the list of participants from your group which Iva sent you to check
 - you must leave earlier (or arrive later) for serious reasons
 - you are a Research-Service Group and wish to have a poster in Valeč
 - your group presentation will be presented by someone else than you (for correct list of speakers)

New Research Core Facility: Metabolomics

Untargeted metabolomics RCF

- New Research Core Facility in Tomáš Pluskal Group
- We provide assistance with:
 1. Sample preparation
 2. LC-MS analysis
 3. Data analysis

First step:
discussion

- Equipment:

LC-MS system (Orbitrap IDX)



TissueLyser II



CentriVap



MZmine

SIRIUS

GNPS

Staff:



Zsófia Kutilová, PhD
LC-MS analysis



Corinna Brungs, PhD
LC-MS analysis



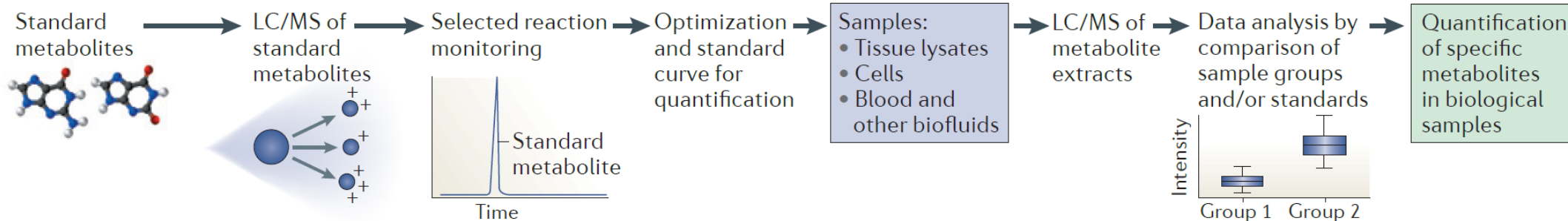
Robin Schmid, PhD
Data analysis

What is untargeted metabolomics?

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a Targeted metabolomics

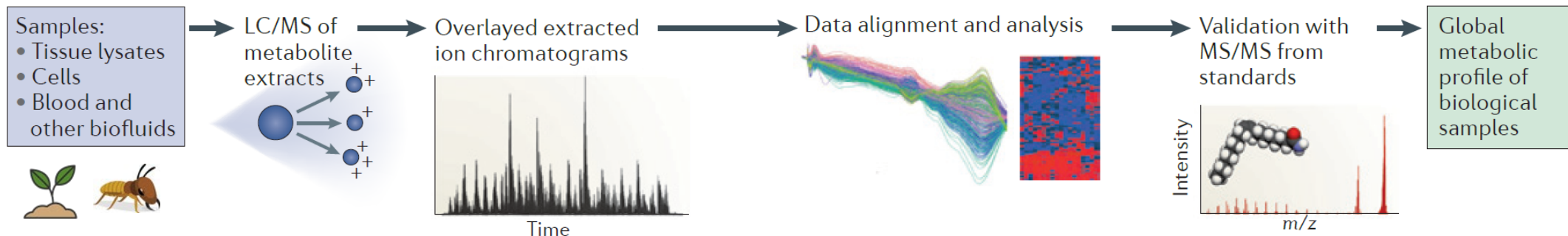
Question:
What are the levels of specific metabolites in a sample?



Patti, G., Yanes, O. & Siuzdak, G.
Metabolomics: the apogee of the omics trilogy.
Nat Rev Mol Cell Biol (2012)

b Untargeted metabolomics

Question:
What is the global metabolic profile of a sample?



Fume Hoods in IOCB labs

Fume Hoods

- Fume hoods are on high demand in IOCB
- Long-term solution is being prepared, we are in critical need of few short term
- Please check if you have some which are not fully used
- Storage of solvents is not full use
- Will have individual discussions with some GL about the fume hoods



Safety and Waste Management

Safety

- Safety team is organising with Firebrigades Horní Měcholupy (thank you Aleš) Fire training
- 18th April in Papírenská next to the Development center
- Please encourage your young organic chemist to apply. Registration via link on the Announcement (e-Nástěnka)
- Real Firefighting with Fire Blanket and Fire Extinguisher



Waste management - Glass

- There are 2 types of glass containers close to NordEast wing of building A
- Metal containers should contain bottles from organic substances (which must be closed!!!) or chemical contaminated unwashed glass
- Green plastic container - common non-contaminated glass (beverages, food) or washed and vented bottles WITHOUT CUP !!!



Waste management

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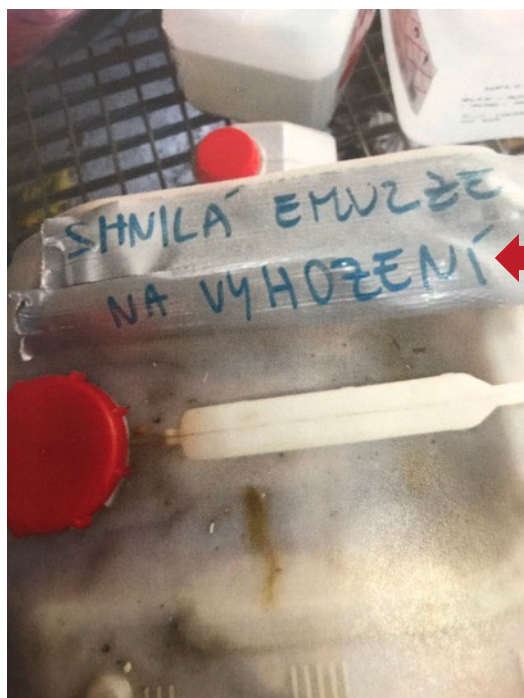
- Glass - Reality



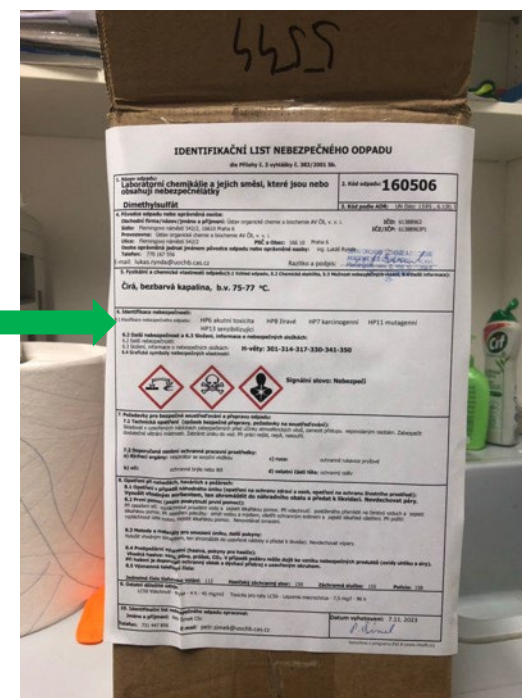
Waste management

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Every chemical must be characterized before disposal. Contact Mr. Šimek if in doubt



WRONG
CORRECT



PhD Interview Day & Summer Student Program

PhD Interview Day 2024 – March 21

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- more than 300 applications received
- Participation in INTERVIEWS : 13 candidates personally on the Interview Day March 21
8 candidates on-line
- DECISION deadline: **ideally before Easter, Tuesday 25 March**

Summer Student Program (SSP) – First announcement

- Summer internship for Master students (EU Universities) looking for summer work experience
- Institute provides: financial supports (44 000,- CZK for their 8-week stay, c. 1 800 €), travel expenses are covered by the students.
- Research groups will be asked to express their interest to be host laboratories.
- Application on-line: from April to May 13 (Institute's website)
- Selection deadline: Thursday, May 23
- Student stays: July 8 –August 30
- Organized by PhD coordinator - Martina Nussbaumerová

IOCB Tech

William A. Lee

- Former Executive Vice President of Research at Gilead Sciences
- Became a new member of the International Business Advisory Board (IBAB) of IOCB Tech.
- He will arrive on March 24th and on Monday 25th he will visit IOCB Prague to meet with all „old friends“
- The meeting of the IOCB Tech's IBAB will be held on 26th March.
- Current IBAB members: William Lee, Jim Lorens, Štěpán Vyskočil, Ursula Vogel, Jiří Michal, Vít Perlík



Pharmtheon – Translational Center



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- Aim: to help to develop projects of drug development in a focused way
- Ambition: develop projects close to IND phase
- Role models: CD3 – KUL, Lead Discovery Center – Max Planck, Calibr – Scripps, BINA – WIS
- Space: Harfa Business Center (1 000 sqm)
- Fully equipped for chemistry and biochemistry by the end of April
- Next door: Apigenex with animal house
- Capacity: 3 projects in parallel (up to 25 people)
- Financing: IOCB Tech
- IP: stays with the institute
- Projects: early phase, first hits
- Projects: IOCB “born” or in collaboration
- Projects: only approved by IBAB with strong commercial potential
- Starting: May 2nd
- Social event: April 24th

Thanks to:



- Jan Skácel



- Barbora Hrdličková

Pharmtheon – location

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- Harfa Business Center – B
- Prague 9-Vysočany



Research Data Management

Research Data Management – RDM

- Amendment of Act 130/2002
 - About research support from public sources
- Step 1: Data Manager (e.g. Data Steward)
 - Facilitating oversight and coordination of data handling processes
- Step 2: Electronic Lab Notebook (ELN)
 - Open Source or Proprietary options (e.g., CDD, Dotmatics, SciY)
- Special Requirements of ELN for Core Facilities
 - Aligning Request System with ELN Capabilities (customized solution may be necessary)
- Utilizing ELN Capabilities for Data Policy
 - Establishing data management guidelines based on ELN functionalities
- GAČR request Data Management Plan (DMP) from 2025
 1. Adoption of Data Stewardship Wizard with templates DMPs
 2. Includes requests for using publicly available repositories (e.g., ZENODO, OSF)

Miscellanea

Nomination of experts in organic chemistry

- Ministry of Justice asked IOCB for nomination of members to the examination board for the entrance exams of experts in the field of organic chemistry
- In the past, requested expert opinions on specific matters were prepared by Pavel Majer and Jan Weber

Podcast CHEmic

- You can send your recommendations on future guests for CHEmic podcast to Veronika Sedláčková
- Live sessions with audience will be organized in Lore Malastrana restaurant few times per year
- Guests for the live podcast with the audience should be people outside of the institute with a background in the arts and other fields, yet with some relation to IOCB.



Election of the new President of the Academy (and council members)

- Eva Zažímalová ends in the office in March, 2025
- Elections of a new President in December 2024 (elected by the Academic assembly – sněm- in December 2024)
- Assemblies of the „research fellows“ of the institutes („shromáždění výzkumných pracovníků“) may nominate a candidate (must be a member of the Academic assembly!)
- Nominations till October 4, 2024
- What will IOCB do?

From the IOCB Kitchen:

- Please, do return the glassess (and other glassware)!

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(„vracejte nám ty podšálky! Karle, říkali jsme jim, aby nám vraceli ty podšálky? Tak proč nám ty podšálky nevrací, Karle?“)

IOCB Events 2024

27/3	IOCB Invited Lecture: Matthias Wolf – WALC – A New Paradigm for Single Particle Analysis of Large Molecular Assemblies
9–10/4	Final Adher'nRise Meeting
15–17/4	Prague Workshop for Computational Mass Spectrometry
16/4	Cross Campus & Opening of Vektor Technická
18/4	Happy Hours
25/4	Lecture: Marcel Bouvet – Molecular material-based gas sensors: From molecules to materials and from materials to devices and systems
16/5	Happy Hours
18/5	Open House Praha
20–23/5	23 rd Interdisciplinary meeting of young life scientists (Milovy)
27–31/5	IOCB Retreat (Valeč u Hrotovic)
30/5–1/6	Science Fair (EXPO Letňany)
7/6	Career Workshop: Darlene Solomon
19/6	ScienceFest (Vítězné náměstí)
20/6	IOCB Family Day (Ladronka)
22/8	Happy Hours
2–6/9	10 th Prague-Weizmann Summer School (NTK)
11/9	IOCB Invited Lecture: Leo Gross – Chemical Reactions and Synthesis by Atom Manipulation
18–20/9	IAB Visit & Evaluation of Research Groups
26/9	Happy Hours
27/9	European Researchers' Night
7–10/10	PhD Bootcamp (Dolní Malá Úpa)
15/10	IOCB Invited Lecture: Henrik Ottosson – Excited State Aromaticity and Antiaromaticity: From Pitfalls to Scopes
31/10	IOCB Invited Lecture: Hiroyuki Isobe – Synthesis-Driven Chemistry of Nanocarbon Molecules
4–10/11	Week of the CAS & Openhouse Days
28/11	IOCB Invited Lecture: Connor W. Coley – Artificial Intelligence for Synthetic Organic and Analytical Chemistry
13/12	Christmas gathering

Mtgs with GLs – Schedule

2024

- April 26
- May 24 cancelled Valeč retreat approaching
- June 21

Thank you!