



ÚOCHB <sup>AV</sup>  
IOCB PRAGUE

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# Meeting with Group Leaders

Jan Konvalinka | December 15, 2022

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# Agenda

- Salary increase
- Evaluation of research groups 2023
- Audit of services provided at IOCB
- IOCB Orgchart
- Nominations of candidates for the M17+ Expert Panels
- PhD Activities & PhD Interview Day
- Annual Report of the CAS
- Occupational Health and Safety - updates
- IOCB Tech Foundation
- Miscellanea

# Congratulation



# Salary Increase

In reaction to rising inflation and slump of real incomes, IOCB decided to implement **a one-off blanket 15% increase in category O and V wage rates (“tarify”) effective from January 1, 2023.**

- In the budgets of the scientific groups, the increase in salaries will be fully offset by the increase in their VEJ
- Group Leaders should not compensate for the increase in wage rate by a reduction of work load or personal bonus
- Communication of the change to grant providers – Plan and Budget department
- Contractual salaries will be revised individually
- IOCB Fellowship and IOCB Sabbatical programmes will also raise to CZK 60,000 (IOCB Fellowship) and CZK 75,000 (IOCB Sabbatical)
- Meals subsidy will raise to CZK 95 per day

# Evaluation of research groups 2023

## Senior groups (5 years evaluation)

Radim Nencka, Pavlína Řezáčová, Ullrich Jahn, Petr Beier, Jiří Jiráček, Michael Mareš, Petr Bouř, Lubomír Rulíšek

## Junior groups (interim evaluation)

Jiří Kaleta, Sebastian Zoll, Tomáš Pluskal, Tomáš Slanina

## Junior groups (final evaluation – postponed to 2024)

Hana Cahová, Zuzana Kečkéšová

- April: One page progress summary submitted [IOCB → IAB]
- May: Full reports submitted → external reviewers
- August: Reviews [external reviewers → IAB → IOCB]
- **September 6-9 IAB on-site visit**
- October: Decision of IOCB Director

# Audit of services provided at IOCB

## Services at IOCB are provided in:

- Research-service groups (7)
- Service groups (5)
- Embedded/Research core facilities (4)

## Audit of services initiated by management and supported by IOCB Board

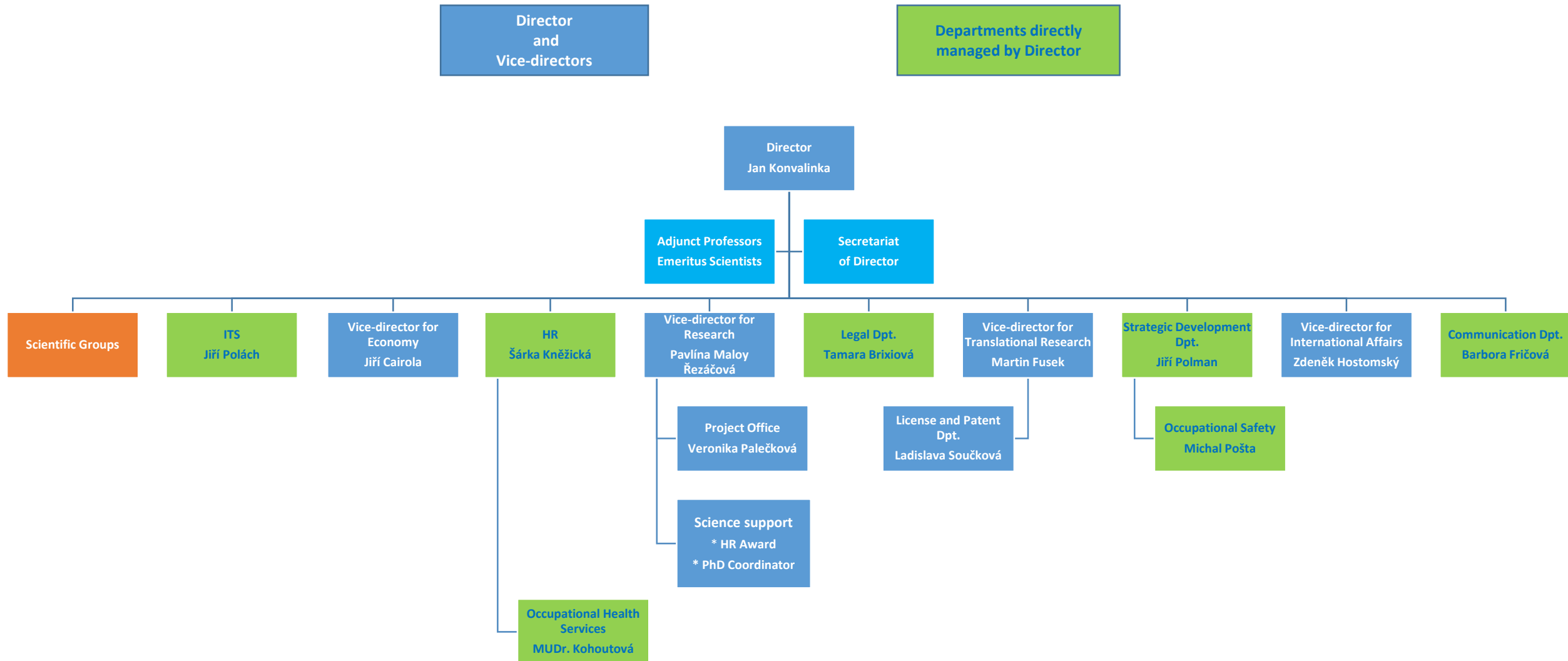
- Motivation is to unify group financing, service advertising, approach, training
- Steering towards optimal services to IOCB scientific community

## Process/progress

- Report on services submitted by each group (November 7<sup>th</sup>)
- Individual discussion and negotiations about 2023 budget with management (November-December)
- Gathering feedback from service users (January-March)
- Meetings with users (February-April)
- Feedback to services as a guidance to plan for changes in year 2023

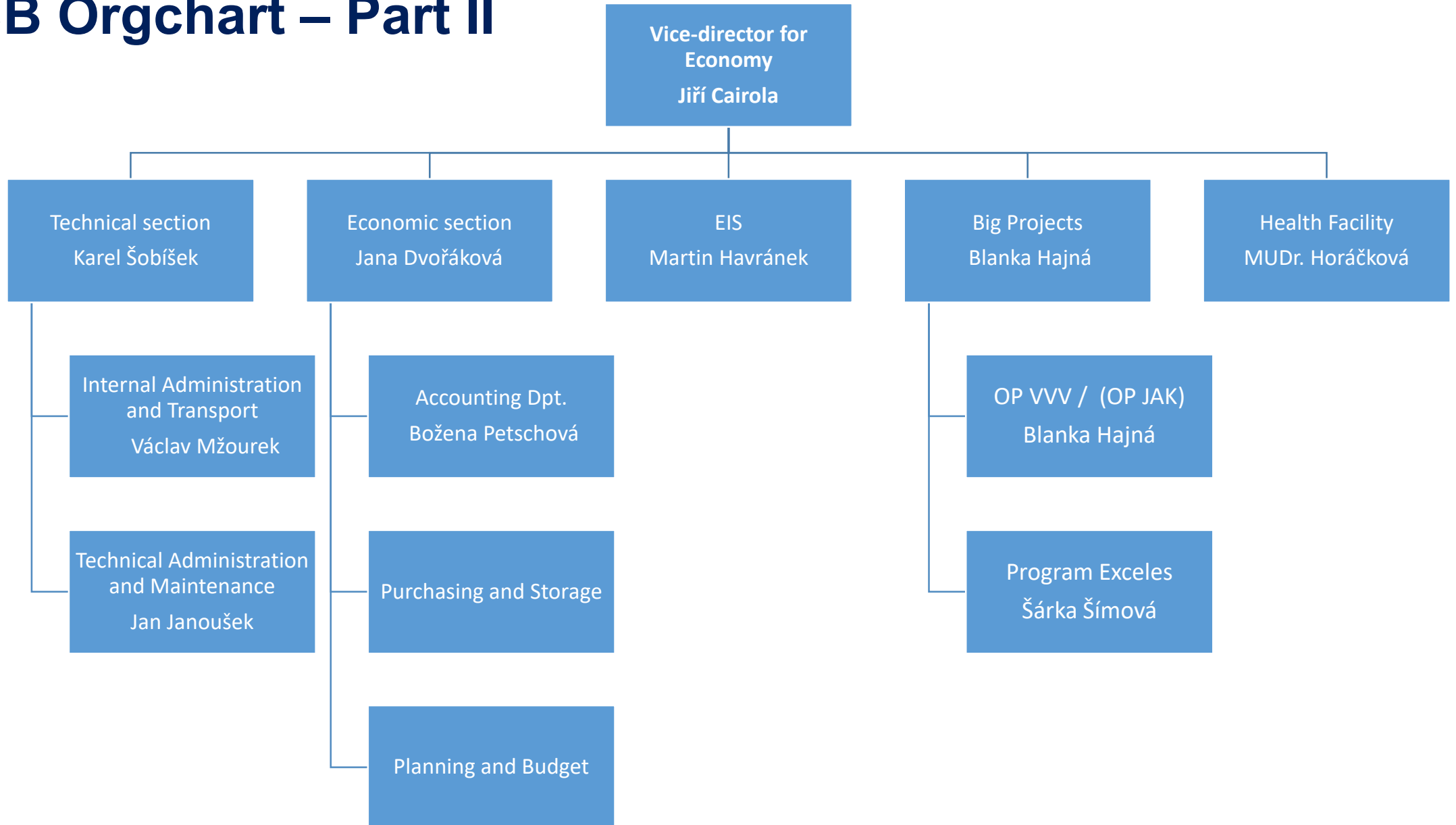
# IOCB Orgchart – Part I

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# IOCB Orgchart – Part II

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# New Junior group hired

## Paolo Paioti

### Catalytic Stereoselective Synthesis of Elusive Atropisomers for Accelerating Drug Discovery

- Interview with IAB June 2022
- Visit and agreement November 2022
- Expected start March 2023

- **Postdoctoral Research Fellow (Jan 2019 – Present)**

University of Strasbourg (ISIS), France

Advisor: Professor Amir H. Hoveyda

*Research project: Development of a Catalytic Multicomponent Click Reaction*

- **Postdoctoral Research Fellow (Sep 2017 – Dec 2018)**

Boston College, United States

Advisor: Professor Amir H. Hoveyda

*Research project: Enantioselective Boryl and Silyl Substitution of Trifluoromethyl Alkenes Catalyzed by Copper-complexes*

- **Postdoctoral Research Fellow (Jan 2017 – Aug 2017)**

Boston College, United States

Advisor: Professor X. Peter Zhang

*Research project: Synthesis of Rhodium-complexes of Porphyrins for Enantioselective Radical Catalysis*



# New Junior group offered (ERC opportunity)

## Petr Šulc

### Coarse-grained modeling of nucleic acids for biology and nanotechnology

- Interview with IAB June 2022
- Visit July 2022



CURRENT POSITION	Arizona State University, Tempe, AZ, USA Assistant Professor at The Biodesign Institute and School of Molecular Sciences	October 2017 - present
EMPLOYMENT HISTORY	The Rockefeller University, New York, USA Center for Studies in Physics and Biology	September 2014 - October 2017
	<ul style="list-style-type: none"><li>• Independent Fellow in Physics and Biology, working on applications of statistical physics and computer modelling to biological and bio-inspired systems</li></ul>	
EDUCATION	University of Oxford, United Kingdom	October 2010 - June 2014
	<ul style="list-style-type: none"><li>• Doctoral program: Theoretical physics</li><li>• Working in Ard Louis' group on nucleic acid coarse-grained modelling and biophysics</li></ul>	

# Position considered

## David M. Sabatini

### mTOR signalling

- Visit September 2022

#### Academic Appointments

**Whitehead Institute for Biomedical Research**, Cambridge, MA  
Whitehead Fellow, Oct. 1997-Sept. 2002  
Member, 2002-August 2021

**Massachusetts Institute of Technology**, Department of Biology, Cambridge, MA  
Assistant Professor, 2002-2005  
Associate Professor, 2006-2007  
Associate Professor with Tenure, 2008-2012  
Professor, 2012-April 2022

**Howard Hughes Medical Institute**  
Investigator, 2008-August 2021

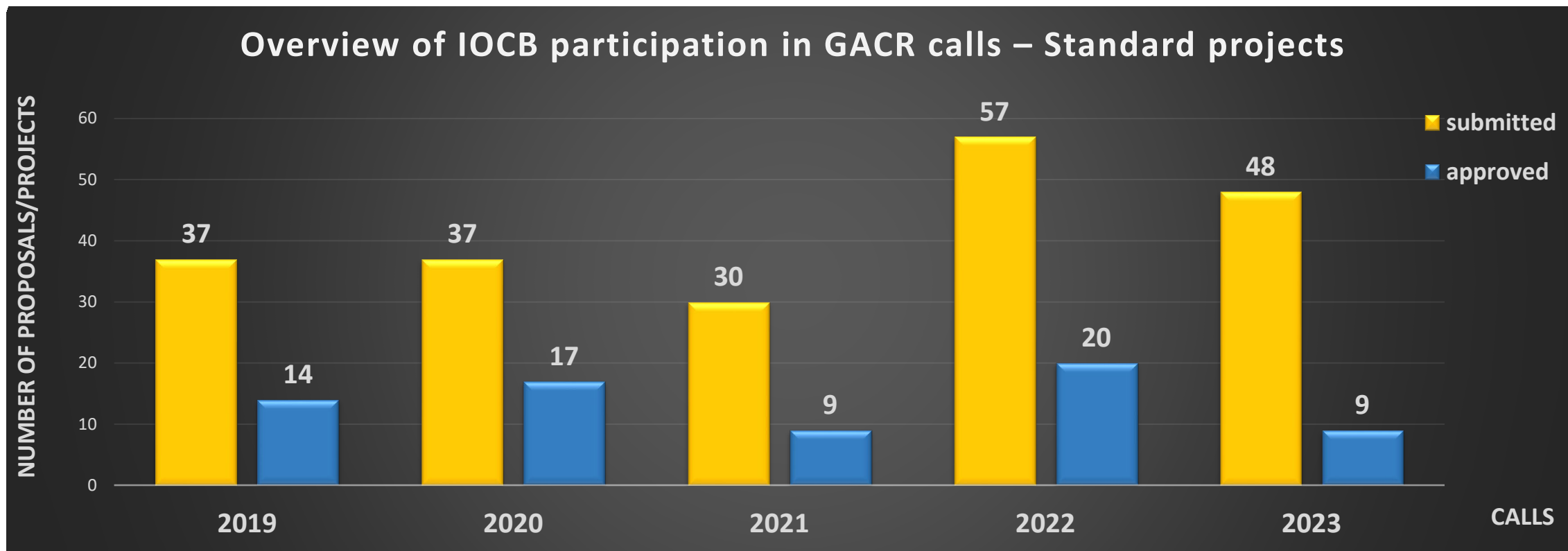
**Broad Institute of Harvard and MIT**, Cambridge, MA  
Senior Associate Member, 2004-August 2021

**Koch Institute for Integrative Cancer Research at MIT**, Cambridge, MA  
Member, 2004-August 2021



# GAČR Calls – Standard Projects

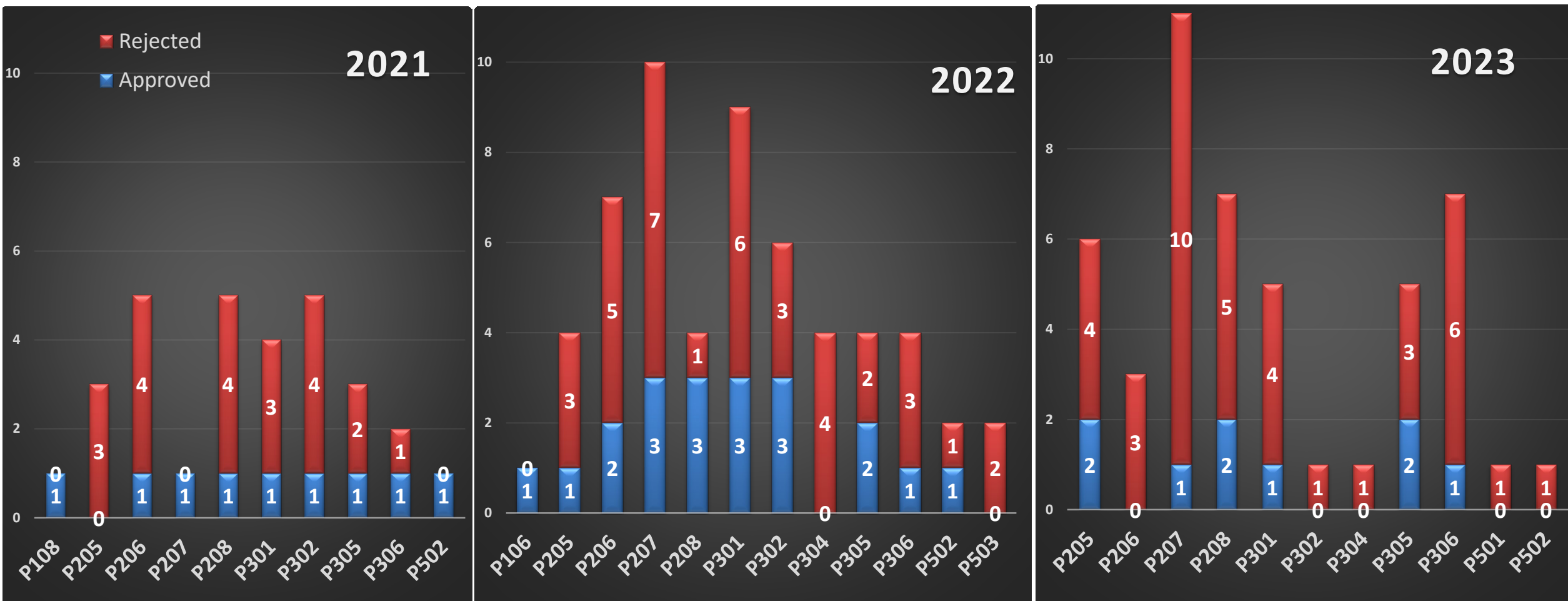
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## Comparison of IOCB and GA ČR success rates

Calls	2019	2020	2021	2022	2023
IOCB	38%	46%	30%	35%	19%
GA ČR	32%	25%	17%	16%	?

# Overview of supported and rejected projects – structured by panel (2021-2023)



# Overview of IOCB participation in OP JAK projects

IOCB Main PI + co-PI	Project acronym & title	Host institutions
<b>M. Hocek - main PI</b> H. Cahová; P. Maloy Řezáčová; E. Curtis	<b>RNA:</b> RNA and therapy	<b>C: IOCB</b> P: IMIC CAS; IMG CAS; BC CAS; MUNI; CUNI
<b>I. Starý - main PI</b> T. Slanina; P. Beier; P. Bouř; P. Cígler; M. Dračínský; Z. Janeba; P. Jungwirth; J. Kaleta; V. Kašička; J. Michl; L. Rulíšek	<b>SmartEC:</b> Advanced molecular systems & materials for smart energy conversions	<b>C: IOCB</b> P: UCT; MUNI; CUNI
<b>M. Mareš - main PI</b>	<b>PAPARAZI:</b> Pathogens and Parasites from the One Health Perspective: Understanding infections in an era of global change	C: BC CAS - IP <b>P: IOCB;</b> CUNI; CZU UO; IMIC CAS; IE CAS
<b>D. Nachtigallová - main PI</b>	<b>eCOMAT:</b> Emerging Computing Approaches for Material Science and Chemistry	C: VSB-TUO <b>P: IOCB;</b> UP
<b>E. Kudová - main PI</b>	<b>TERRES:</b> National centre of applied biomedicine: Overcoming therapeutic resistance in non-communicable diseases: Molecular, cellular and clinical aspects	C: NIMH <b>P: IOCB;</b> CUNI; MUNI; UP; UCT; IEM CAS; Olomouc UH; UH Hradec Kralove; IEndo
<b>P. Cígler - main PI</b>	<b>AMULET:</b> Advanced multiscale materials for key supporting technologies	C: JH INST CAS <b>P: IOCB;</b> CUNI; UCT; FZU CAS
<b>J. Cvačka - main PI</b> R. Hanus	<b>COPILOT:</b> Center for Prenatal Lipidomics Ontogenesis	C: IPHYS CAS <b>P: IOCB;</b> UPCE; UP
<b>V. Veverka - main PI</b> T. Pluskal; K. Stříšovský	<b>ELLEDER:</b> Biocenter Campus Albertov - ELLEDER - from the bedside to the bench and back again	C: CUNI <b>P: IOCB;</b> IPHYS CAS, IKEM
<b>R. Nencka - main PI</b> E. Bouřa; M. Vrabel	<b>NETPharm:</b> Individualized pharmacy: New approaches and methods in the study of drug safety	C: CUNI <b>P: IOCB;</b> UCT; MUNI
<b>T. Pluskal - main PI</b>	<b>NEXT AI:</b> Artificial Intelligence and Machine Learning Research Center	C: CTU <b>P: IOCB;</b> BUT; CUNI; MUNI; VSB - TUO; UWB

## NEW EVALUATION PANEL MEMBERS WANTED

Apply by 15 December 2022

[MORE INFORMATION](#)



# Nominations of candidates for members of the Research, Development and Innovation Council (RVVI) Expert Panels



Government of the Czech Republic



Call for nominations of member to Expert Panels for evaluation R&D&I through Methodology 17+

Call is open for expertise in these fields (FORD) relevant to IOCB:

- 1.6 Biological sciences
- 2.10 Nanotechnology

*(Other FORD include Electrical engineering, Clinical medicine, Agricultural biotechnology, Education, Sociology, Social and economic geography, History and Archaeology, Philosophy, ethics and religion, and Arts)*

**Deadline for nomination: 11 January 2023**

More info: <https://www.vyzkum.cz/FrontClanek.aspx?idsekce=979296>



**PhD SCIENCE CLUB**

ÚOCHB AV ČR / IOCB PRAGUE

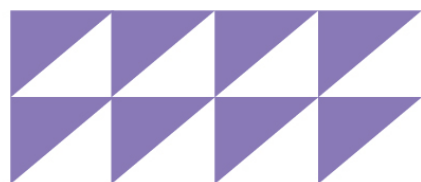
- Original idea by Martin Fusek, then taken over by Jiří Kaleta
- PhD Science Club revived after 2 years of break due to Covid-19 in October 2023 with Oldřich Hudeček as the main organizer
- Current format: once per month on Tuesday from 3 pm
- Speakers: 3 advanced PhD students – 13 slides each, 15 min presentations + 5 min for Q&A (60 min in total)
- Both Clubs in October and November were fully attended – around 90 attendees
- The next one is planned for **Tuesday, 24 January**
- Starting from January, an online feedback form will be available for attendees

## PhD Bootcamp

- Every year in the beginning of October
- A 3-day retreat for all first year PhD students at IOCB to the institute's cottage in Dolní Malá Úpa
- Includes short introductory presentations of all students, and longer presentations about IOCB, its organization and facilities plus other essentials
- All-day hiking trip to Sněžka trip and teambuilding activities
- Co-organized by Communications, HR, PhD Coordinator and PhD Representatives
- Important for initial phase at IOCB, but also for future networking and collaborations

# Career workshop

8/11/2022  
14:00–18:00



for Ph.D. students and PostDocs

Six speakers from different disciplines



Petr  
Slavík



Otakar  
Fojt



Martin  
Bunčeka



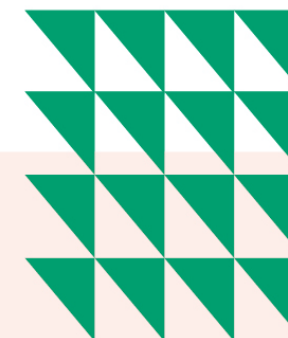
Roman  
Gogela



Ivana  
Gergelitsová



Tereza  
Mašínová



Do not forget to register!

More information on intraweb



# PhD Interview Day: strategy for 2023



# Submission of topics for PhD projects

Deadline for submission of topics for **PhD projects** on **Friday 16 December**

## ■ Annotation for Phd Program:

<b>RESEARCH GROUP:</b>	
PhD PROJECT (EN): (Name of project, thesis)	
PhD PROJECT (CZ):	
UNIVERSITY AND FACULTY: (Eg. UCT FCHT, CU Nat.Sci)	
FIELD OF STUDY (EN): (Eg. Organic chemistry)	
FIELD OF STUDY (CZ):	
SUPERVISOR:	
ABSTRACT (EN) (max. 1300 characters with spaces):	
ABSTRACT (CZ) (max. 1300 znaků s mezerami):	

- The supervisor must be approved by the relevant doctoral board
- The programmes (fields of study) must be in accordance with the accreditation

# Annual Report of the CAS

- Request to send the information for the **Annual Report of the CAS 2022**
- See the table "**IAR statistická část**" in the attachment of the e-mail sent on 13/12
- Please focus mainly on tabs **1.1 Pedagogická činnost** and **1.2 Mezinárodní spolupráce**
- Please specify **how many and what kind of domestic and foreign awards your employees have received**
- Do not write anything into the sheet 1.3 Vynálezy. The section will be completed on behalf of the whole institute by Dr. Součková
- **Deadline: 30. 12. 2022**
- More info: **Petra Ben-Ari**

# Occupational Health and Safety – Hot News

**Training for using breathing apparatus** took place. We have currently 2 pc, which will be installed in floor 1 and 3 of building B. We plan to buy 3 new pc. for floor 2 and 4 of building B and for bld. A

**E-learning Safety and fire safety** will be activated on Monday Dec. 19th. All new employees will receive access password from HR. For refresh trainings there will be note coming from the Director of the institute for everybody.

## How it works:

All group leaders will receive link <https://pa.rentel.cz/regitrace/uochb/index> and login data. Either pass this data to employees or can register their people themselves. After registration there will be 2 weeks window when people can make test. Tested person receives certificate which they pass to their supervisor.

- Ready for employees in CZ and ENG and for Group Leaders CZ and ENG

# Occupational Health and Safety – What we plan

- Extend E-learning for modules Organic chemistry and biochemistry
- Boxes with sand on corridors of bld. B
- Central purchase of sorbents
- Central purchase of Fire blankets and training how to use them



# Occupational Health and Safety - Organic Peroxides

- Certain organic compounds when left over time create peroxides which are dangerous and explosive. <https://www.youtube.com/watch?v=c76n5eTR20o>
- Butadiene, chloroprene, potassium, isopropylether, 2-butanol, acetaldehyde, benzylalcohol, THF to name just few. List of peroxide forming chemicals will be added to safety section of intraweb. Please instruct your students how to treat these chemicals.
- 12 month after opening new bottle test is needed, 6 months after opening already opened bottle. Test is simple. Add droplet of solution KI + starch in water. If iodine is formed, peroxides are there.
- If there is a suspicion of peroxide formation, talk to Mr. Šimek for correct disposal.
- There are chemicals stored in the central storage, which belong to the groups. Please identify your bottles and content. Danger of peroxide formation is real.



NF IOCB TEC-H

— Nadační fond IOCB Tech

**IOCB Tech Foundation** —

Barbara Eignerová

[nf-iocbtech.cz](https://nf-iocbtech.cz)

• Prague, December 2022

# Nadační fond IOCB Tech

## IOCB Tech Foundation

- **Established** by IOCB Tech in April 2022  
(IOCB Tech donated CZK 50 mil. in 3 years)
- **To support** science, its popularization, and tech transfer
- **Management board:** Barbara Eignerová, Zuzana Kečkéšová, Radek Cibulka
- **Supervisory board:** Iva Pichová, Martin Dračínský, Tomáš Zima
- **Director:** Dušan Brinzanik



NF IOCB TEC-H

# Beneficiaries

• 2022

## CZK 13 MILLION (USD 550,000)

- MIT-Czech Republic Seed Fund (USD 100,000) **[IOCB Tech]**
- UCT Prague – student stipends (CZK 180,000) **[IOCB Tech]**
- Jaroslav Heyrovský Endowment Fund (CZK 200,000) **[IOCB Tech]**
- Columbia University, Štěpán Jeřábek's project (USD 90,000) **[IOCB Tech]**
- Czexpats in Science (CZK 0,5 mil.)
- DDM hl. m. Prahy, Stanice přírodovědců (Children and Youth House of the City of Prague, Naturalist Station (CZK 400,000)
- Czech Academy of Sciences, Children's groups (CZK 7 mil.)
- Ukraine (Kharkiv), Institute of Monocrystals, NASU (USD 20,000)
- Fakta o klimatu / Facts on climate (CZK 150,000)

# Beneficiaries

• UPCOMING

- **Martina Roeselová Memorial Fellowship**  
(10 x CZK 150,000)
- Neuron Foundation (CZK 4 mil.) and Neuron & IOCB Tech Internships in Israel
- Science to Go (CZK 250,000)
- Zeptej se vědce (CZK 300,000)
- Faculty of Science, CUNI – student stipends (CZK 180,000) etc.
- and more...

## IN PREPARATION

- Magazine Vesmír

## AND MANY MORE IN FUTURE...

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# Miscellanea

# Automated Pipette Tip Washing System

(T. Pluskal, H. Cahová)

- Environmental-friendly



- Good for IOCB image (e.g. sustainability)



- Money-effective



- Fully automated high-throughput setup potentially suitable for core facilities



# Automated Pipette Tip Washing System

(T. Pluskal, H. Cahová)

NCATS



National Center  
for Advancing  
Translational Sciences

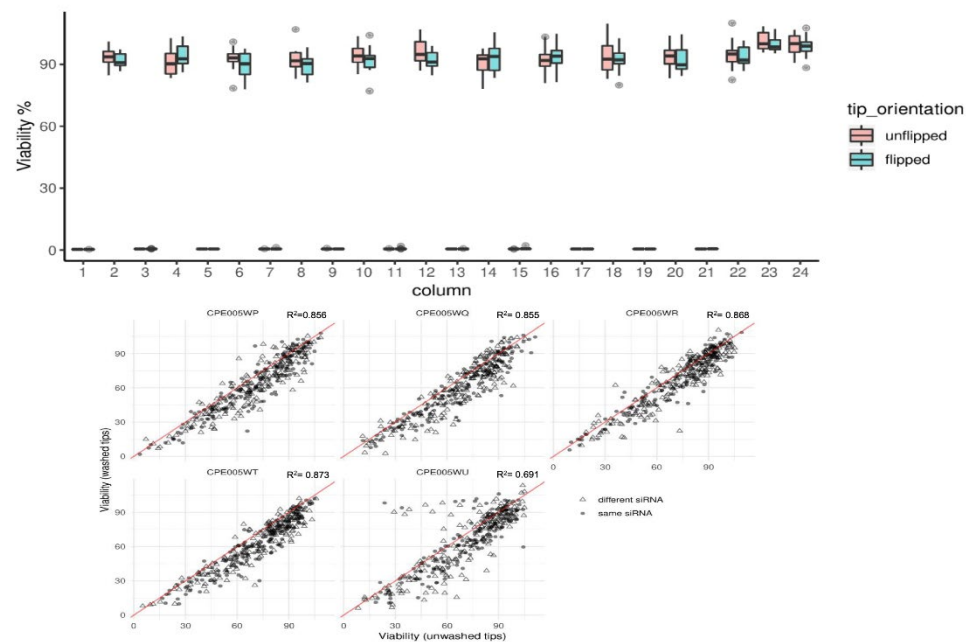
## Reduction of Plastic Waste Through the Use of Automated Pipette Tip Washing

Jameson Travers, Nadia Whitt, Lu Chen, Colin Todd, Shayne Frebert, Sam Michael, Carleen Klumpp-Thomas  
National Center for Advancing Translational Sciences, National Institutes of Health, Bethesda, MD 20892

### Fully-automated system



### Results



Data generated using washed tips from the pipette tip washer is of the same quality as data generated using fresh sterile tips directly from the manufacturer.



<https://grenovasolutions.com>

# Mtgs with GLs – 2023 Schedule

- January 27
- February 23
- March 31
- April 28
- May 26
- June 29
- September
- October
- November
- December

Always on Fridays at 10:00 am in the Director's Boardroom (A.4.01)

# IOCB Events 2022/2023

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## 2022

16. 12. IOCB Christmas party (Old waste water treatment plant in Bubeneč)

## 2023

16. 2. IOCB Ball  
20. 2. IOCB Invited Lecture: Prof. Eva Nogales  
23. 3. PhD Interview Day  
3. 4. IOCB Invited Lecture: Prof. Prof. F. Ulrich Hartl  
4. 5. IOCB Invited Lecture: Prof. Lisa Stowers  
31. 5. Symposium: 70<sup>th</sup> Anniversary of IOCB Prague  
30. 7. – 4. 8. Prague-Weizmann Summer School 2023 (in Rehovot, Israel)  
6.–9. 9. IAB visit at IOCB  
25.–27. 9. Joint Symposium with KU Leuven (*tentative date*)  
4.–5. 12. Dream Chemistry Award Finals

## Personnel change in **cell sorting services** (FACS core):



**Alžbeta Magdolenová**

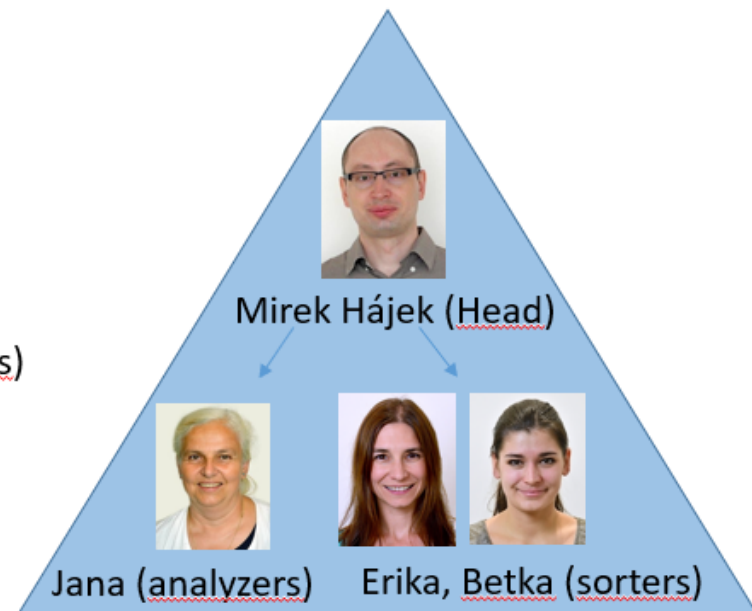


**Erika Kužmová**, 528 (office), 462 (sorters)

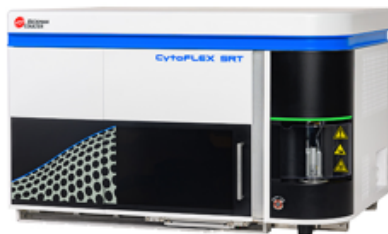
Other services by Betka:

*LPS determination (HEK Blue)* – **Eva Tloušťová**

*Fluorescence polarization techniques* – **Jarda Kozák**



### • New instrument – **CytoFlex SRT** (Beckman):



- Located at **A.2.29**
- Meant to replace the worn out FACS Aria II (BD) - for now it will run alongside Aria
- Introduction of the instrument to the community – seminar/webinar – scheduled for **January**

- **Questionnaire on our services** – mapping the IOCB community needs, to be released on **January**  
Please participate! Your feedback is urgently needed!

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# Thank you!