



ÚOCHB AV
IOCB PRAGUE

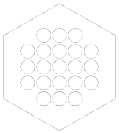
Meeting with Group Leaders

September 24, 2021

Zdenek Hostomsky

Agenda

- IOCB Most significant publications in 2020
- IOCB Equal opportunity plan
- Miscellanea
 - Cover pages and open access charges
 - Overcrowding in the labs



IOCB Most Significant Publications 2020

September 24, 2021

Zdenek Hostomský

Most significant publications 2020



- **PHYS** (11 for 2019) **11** submissions → **5** awards
- **CHEM** (8 for 2019) **10** submissions → **5** awards
- **BIO** (8 for 2019) **11** submissions → **5** awards



External

Hudeček O, Benoni R, Reyes-Gutierrez PE, Culka M, Šanderová H, Hubálek M, Rulíšek L, Cvačka J, Krásný L, and Cahová* H

Dinucleoside polyphosphates act as 5'-RNA caps in bacteria

Nature Com.(2020)

Internal



Krafcikova P, Silhan J, Nencka R, and Boura* E

Structural analysis of the SARS-CoV-2 methyltransferase complex involved in RNA cap creation bound to sinefungin

Nature Com. (2020)





External

Lux V, Brouns T, Hanková K, Socha O, Buděšínský M, Muždalo A, Lepšík M, Černeková M, Radosavljević J, Fábry M, Mitrová K, Chrudinová M, Lin J, Yurenko Y, Hobza P, Selicharová I, Žáková L, and Veverka* V

Molecular mechanism of LEDGF/p75 dimerization

Structure(2020)

Began J, Cordier B, Březinová J, Delisle J, Hexnerová R, Srb P, Rampírová P, Kožíšek M, Baudet M, Couté Y, Galinier A, Veverka V, Doan*T, and Stříšovský*K

Rhomboid intramembrane protease YqgP licenses bacterial membrane protein quality control as adaptor of FtsH AAA protease

EMBO J (2020)

Internal

Dhurvas Chandrasekaran Dinesh, Dominika Chalupska, Jan Silhan, Eliska Koutna, Radim Nencka, Vaclav Veverka, Evzen Boura

Structural basis of RNA recognition by the SARS-CoV-2 nucleocapsid phosphoprotein

PLoS Pathogens (2020)





Internal

Director's Award

Radka Houštická, Martin Hadzima, Jindřich Fanfrlík, Jiří Brynda, Lenka Pallová, Iva Hánová, Helena Mertlíková-Kaiserová, Martin Lepšík, Martin Horn, Martin Smrčina, Pavel Majer*, Michael Mareš*

Biomimetic Macrocyclic Inhibitors of Human Cathepsin D: Structure–Activity Relationship and Binding Mode Analysis

J. Med. Chem. 2020, 63, 1576–1596

Rationale behind Director's Awards



- Papers highly rated by some of the judges, usually the ones with the best understanding of the topic, but with no sufficient overall support to influence the composite vote
- Director's conviction that this is a high quality publication with an important impact for the field which may have been overlooked by others

*External**Internal*

Juraj Galeta, Rastislav Dzijak, Jan Obořil, Martin Dračinský,
Milan Vrábel*

A Systematic Study of Coumarin–Tetrazine Light-Up Probes for Bioorthogonal Fluorescence Imaging

Chem. Eur. J. 2020, 26, 9945–9953



Carina Santos Hurtado, Guillaume Bastien, Milan Mašát, Jakub Radek Stoček, Martin Dračinský, Igor Rončević, Ivana Císařová, Charles T. Rogers, and Jiří Kaleta*

Regular Two-Dimensional Arrays of Surface-Mounted Molecular Switches: Switching Monitored by UV–vis and NMR Spectroscopy

JACS 2020, 142, 9337–9351



*External**Internal*

Lucie Čechová, Juraj Filo, Martin Dračínský, Chavdar Slavov, Dazhong Sun, Zlatko Janeba, Tomáš Slanina, Josef Wachtveitl, Eliška Procházková* and Marek Cigáň*

A Polysubstituted 5-Phenylazopyrimidines: Extremely Fast Non-ionic Photochromic Oscillators

Angew. Chem. Int. Ed. 2020, 59, 15590–15594



*External**Internal*

Michal Šála, Kristen R. Hollinger, Ajit G. Thomas, Ranjeet P. Dash, Carolyn Tallon, Vijayabhaskar Veeravalli, Lyndah Lovell, Martin Kögler, Hubert Hřebabecký, Eliška Procházková, Ondřej Nešuta, Amanda Donoghue, Jenny Lam, Rana Rais*, Camilo Rojas*, Barbara S. Slusher*, and Radim Nencka*

Novel Human Neutral Sphingomyelinase 2 Inhibitors as Potential Therapeutics for Alzheimer's Disease

J. Med. Chem. 2020, 63, 6028–6056

Marek Ondruš, Veronika Sýkorová, Lucie Bednářová, Radek Pohl and Michal Hocek*

Enzymatic synthesis of hypermodified DNA polymers for sequence-specific display of four different hydrophobic groups

Nucleic Acids Research, 2020, 48, 11982–11993

*Internal*

Director's Award

Václav Zima, Kateřina Radilová, Milan Kožíšek, Carlos Berenguer Albiñana, Elena Karlukova, Jiří Brynda, Jindřich Fanfrlík, Miroslav Flieger, Jan Hodek, Jan Weber, Pavel Majer, Jan Konvalinka, Aleš Machara*

Unraveling the anti-influenza effect of flavonoids: Experimental validation of luteolin and its congeners as potent influenza endonuclease inhibitors

Eur. J. Med.Chem.



*External**Internal*

Tao Wu, Guojie Li, Josef Kapitán*, Jiří Kessler, Yunjie Xu*,
and Petr Bour*

Two Spectroscopies in One: Interference of Circular Dichroism and Raman Optical Activity

Angew. Chem. Int. Ed. 2020, 59, 21895–21898



Tillmann Buttersack, Philip E. Mason, Ryan S. McMullen, H. Christian Schewe, Tomas Martinek, Krystof Brezina, Martin Crhan, Axel Gomez, Dennis Hein, Garlef Wartner, Robert Seidel, Hebatallah Ali, Stephan Thürmer, Ondrej Marsalek*, Bernd Winter*, Stephen E. Bradforth*, Pavel Jungwirth*

Photoelectron spectra of alkali metal–ammonia microjets: From blue electrolyte to bronze metal

Science 368, 1086–1091 (2020)



*External**Internal*

Jitka Myšková, Olga Rybakova, Jiří Brynda, Petro Khoroshyy, Alexey Bondara, and Josef Lazar*

**Directionality of light absorption and emission
in representative fluorescent proteins**

PNAS, 2020 vol. 117 no. 51



*External*

Jan Barton, Michal Gulka, Jan Tarabek, Yuliya Mindarava, Zhenyu Wang, Jiri Schimer, Helena Raabova, Jan Bednar, Martin B. Plenio, Fedor Jelezko, Milos Nesladek, and Petr Cigler*

Nanoscale Dynamic Readout of a Chemical Redox Process Using Radicals Coupled with Nitrogen-Vacancy Centers in Nanodiamonds

ACS Nano 2020, 14, 12938–12950

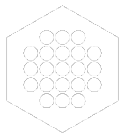
Internal

Daniel Bím, Jakub Chalupský, Martin Culka, Edward I. Solomon, Lubomír Rulíšek*, and Martin Srnec*

Proton–Electron Transfer to the Active Site Is Essential for the Reaction Mechanism of Soluble Δ^9 -Desaturase

J. Am. Chem. Soc. 2020, 142, 10412–10423

- IOCB Equal Opportunity Plan





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Introducing the IOCB Equal Opportunities Plan

Why now?

Opportunity to show off the good practice at IOCB.

What approach have we taken?

Statistics

Current IOCB
measures

Short/Medium/
Long term
goals defined



Minimum requirements stipulated by the EC

Mandatory GEP process requirements



Public document

- Formal document
- Signed by top management
- Published on the institution's website
- Disseminated through institution



Dedicated resources

- Funding for gender equality positions or teams
- Reserved time for others to work on gender equality



Data collection and monitoring

- Data on sex or gender of staff across roles and leadership
- Annual reports and evaluation of progress and outcomes



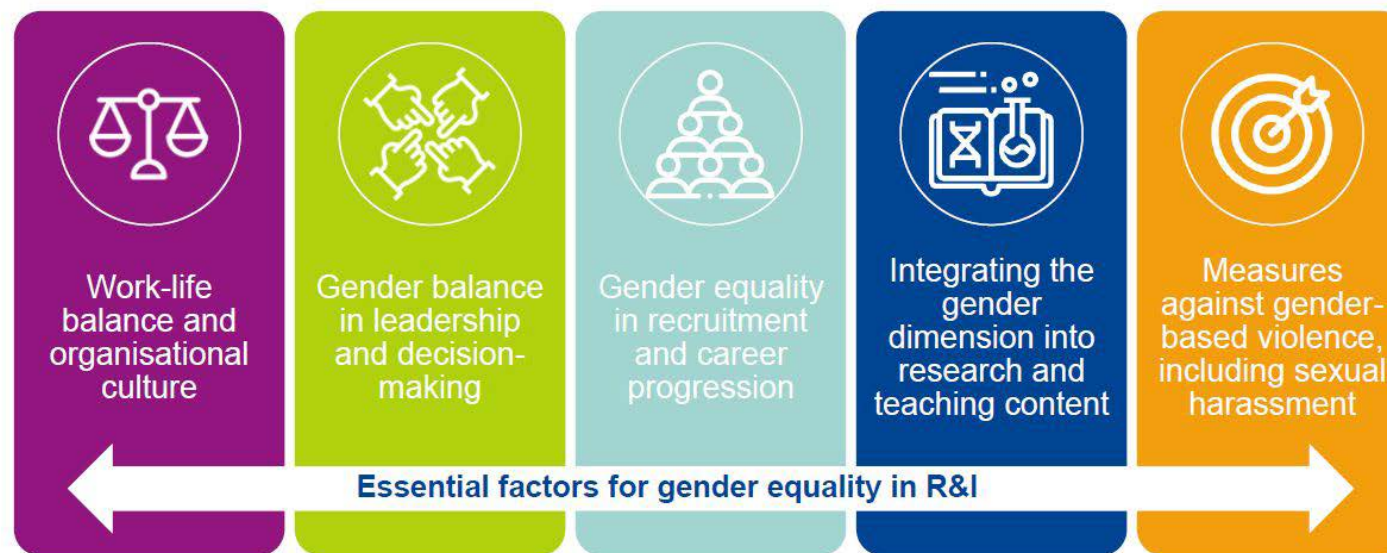
Training and capacity building

- Whole organisation engagement
- Tackle gender biases of people and decisions
- Joint action on specific topics



Minimum requirements stipulated by the EC

Recommended GEP content areas



IOCB Equal opportunities plan: what happens next?

Who has already been involved in draft consultation?

- writing: Project Office
- researchers already involved in the agenda
- IOCB Board representatives
- HR Award coordinator
- Communications office
- HR office
- IOCB director



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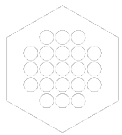
IOCB Equal opportunities plan: what happens next?

Group leaders will be emailed the draft today

Group leaders are welcome and encouraged to comment by
Fri 8th Oct

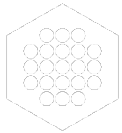
Project Office will finalise document

Communication Office will publish on IOCB website



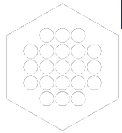
Miscellanea

EMBO courses for Group Leaders



Cover page and Open access charges

By Impact Factor or a journal



IF < 5 **VEJ covers it**

IF 5 to 10 **IOCB covers 50% of charges**

IF > 10 **IOCB covers it all**