Talented juniors into science!

SCiTopic

indicators of success in meeting the goals of the playing the piano, I was more interested in the arts," says Martin Chudada, a student of medicine who is NICR project include the involvement of secondary taking his first steps in science in the Institute of school or pre-graduate students, and that not only

Faculty of Medicine of the CU. He adds: "So I really admire people who start doing science already in the secondary school. It's great that the NICR offers them the opportunity to experience in advance **SCi**Generation

'When I was in the secondary school, I was interested

in science quite marginally. To put it better, I was

telling myself: "Wow, I think it may be interesting to be a scientist! But at that time, I was more into

Biochemistry and Experimental Oncology of the First

in terms of education but also in terms of 'bringing the juniors to the path of science'. Learn more

Michal Šmída: NICR can

secondary school students

consortium can help to further intensify the

interested. Moreover, they will be able to learn

interest of secondary school students in research.

Once they see how excellent science is done in the Czech conditions, they will become even more

more about particular research subjects, see what

that can help them focus their interest. And for the NICR, it is undoubtedly beneficial that these

students will know exactly where they want to go.'

Learn more

they could and would like to do in the future, and

'I believe that the existence of the NICR

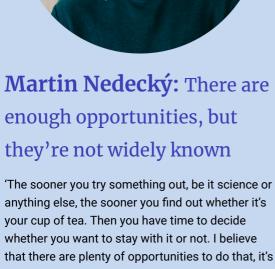
help intensify the interest of

what they'd be getting themselves into - and if

they realise that science is really for them, they can start going for it full steam ahead. "NICR

Director Aleksi Šedo in this context notes that the

THE FUTURE OF ONCOLOGY



opportunities to us when they emerge and supports our participation.' Learn more

2024 October DOI: 10.1186/s13059-024-03396-3 PMID: 39350302

SCiCommunity

PMID: 39191785 treatment and tissue regeneration, which is

DNA polymerase α-primase

induced fork acceleration and

protects BRCA1-deficient cells

Zuzana Machacova, Katarina Chroma, David Lukac et al.

Nature Communications

DOI: 10.1038/s41467-024-

2024 August

51667-1

facilitates PARP inhibitor-

against ssDNA gaps

samples available. Liška's team had also

created a unique database of prospectively followed diseases, which enables the study of almost any clinical subject using a small homogeneous patient group. On top of that, the team has been collaborating with their

DOI: 10.1186/s12943-024-02053-4 PMID: 38970095

Distinct pattern of genomic

breakpoints in CML and

BCR::ABL1-positive ALL:

analysis of 971 patients

Lenka Hovorkova, Lucie

Molecular Cancer

et al.

2024 July

active at the Faculty of Medicine of the Charles University in Pilsen, was for these

Swiss colleagues on the development of 'intelligent' surgical materials that could, for

Winkowska, Justina Skorepova

reasons attracted to the study of rare tumours. In part because their research is not in an optimal shape: it is not a trendy subject and due to their rarity, there are not enough



ZA CO BYSTE CHTĚLI **NOBELOVU CENU?**

instance, alert physicians to early tumour relapse after resection. Learn more I like science, you like science Would you like to know what would your colleagues from various research teams of the NICR like to win the Nobel Prize for? Do you agree with their assessment of what was the so far most significant milestone in cancer research? CO JE MILNÍK VE VÝZKUMU RAKOVINY?

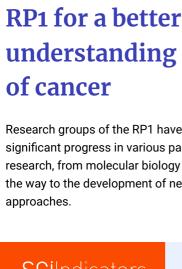
STJEPAN ULDRIJAN

NÚVR, LF MU

Learn more

MARIA KUZMINA NÚVR, ÚMG AV ČR

Take a look at survey videos made at the occasion of the World Cancer Research Day 2024.



research groups Klinická onkologie 5/2024, 15 October 2024

journal.

Another important non-publication indicator of the

NICR project is organisation of a conference. The

Czech Annual Cancer Research Meeting is a

unique platform where experts from the Czech

Republic and abroad are meeting each year in

increasing numbers. This year, the third year of

of experience and knowledge among

SCiMedia

this prestigious meeting takes place. Its main aim

is to create an interdisciplinary space for exchange

research as well as improvement of clinical practice. Learn more A selection from recent publications of NICR

scientists who focus on key areas of prevention,

to its wide scope and high professional quality,

early diagnosis, and treatment of cancers. Thanks

this conference contributes to progress in cancer

Svět ženy, 8 October 2024 When will a universal cancer drug be invented? We are unlikely to ever see some such miraculous pill. Ondřej Slabý, Science Director of the NIC, poetically compares tumours to snowflakes. At the first sight, they all look the same, but

> Can oestrogens help fight cancer? Vesmír 9/2024, 2 September 2024

Novinky.cz, 8 October 2024

research.

food.

6 September 2024

Czech research into IL 6Ra ligands is all the way to patent application Medical Tribune, 20 August 2024 The discovery of new ligands capable of blocking IL-6 receptors, alfa (IL-6Ra) chain, and thus slow down the growth and migration of tumour calls is the result of collaboration between the Laboratory of Ligand Engineering of the Institute of Biotechnology of the Czech Academy of Sciences and the First

How many lines can it take to note down a cell? That is just one of the many topics covered in a new edition of the podcast by the bioinformaticist Antónia Mikulová from the Faculty of Sciences of Masaryk university, member of Vítězslav Bryja's research group. All parts of the In Amongst the Cells podcast

Faculty of Medicine, research group Tumour microenvironment.

SCiCalendar

Take a sweet break on the last Friday morning in October and enjoy what Zdeněk Andrysík and

can now be found also on Spotify and Apple Podcasts!

Week of the Czech Academy of Sciences 5 and 7 November 2024

Baking for the Krtek Fund

25 October 2024

Endowment Fund.

OC Campus Square Brno

the Institute of Experimental Medicine of the CAS. Lenka Kotrchová from the Institute of

Faustus House, Karlovo Sq. 40, Prague 2 NICR joints the popularisation Week of the Czech Academy of Sciences! People will be able to learn more about the links between the environment and cancer in a lecture by Pavel Rössner from

18 November 2024 **Hotel NH Collection Olomouc Congress**

just that they're not so widely known. Sure, much depends also on the management of a particular secondary school: for instance, we have a fantastic headmaster who offers such

Characterization of regeneration initiating cells during Xenopus laevis tail regeneration

Radek Sindelka, Ravindra

Genome Biology

Naraine, Pavel Abaffy et al.

SCiPapers

ANKETA NÚVR PROČ MÁTE **RÁDI VĚDU?** #WorldCancerResearchDay

SCiProgramme They focus on revealing the molecular mechanisms of cancers and identification of new prognostic, stratification, and therapeutic targets. Jan Trka, the head of research programme focused on the molecular basis of cancers and molecular targets, jointly with Aleksi Šedo presents the results achieved so far: they have the Research groups of the RP1 have achieved potential to improve care for cancer patients not significant progress in various parts of cancer only in the Czech Republic but worldwide. research, from molecular biology and genetics all the way to the development of new therapeutic **SCI**Indicators

Indicators are not only publications...

cells behave differently

offers hope to cancer patients

a closer investigation shows that each is different.

Žena-In, 13 October 2024

A new batch of results achieved by teams participating in the NICR is available in a regular section of the official journal of the Czech Society for Oncology. Scientists have figured out how to teach cancer

have discovered the molecules which regulate the aggressiveness of cancer

Marek Mráz, an expert of lymphatic leucaemia from NICR, University Hospital Brno, and CEITEC of the Masaryk University, comments on the work that was awarded this year's Nobel Prize in Physiology and Medicine. He explains to readers the importance of the discovery of mRNA for the entire area of cancer

A joint project of researchers from the BIOCEV and other institutions, including groups participating in the NICR, is dedicated to oestrogens, hormones which

microenvironment - interestingly, this includes phytoestrogens present in our

aside from their main functions can also influence the tumour

A researcher on this year's Nobel Prize: Scientists

The attention of researchers is turning from just killing tumour cells to their 're-

Where other options had failed, precision medicine

education', i.e., modification of their behaviour aimed at curbing their aggressivity, limitation of their ability to spread in the body, eventually their transformation 'better-behaved' cells. These strategies are described by Aneta Śkarková and her colleagues from Jan Brábek's laboratory (which participates in the NICR) in an article recently published in the Trends in Molecular Medicine

In-amongst the cells: A podcast on science against cancer

members of his NICR research team from the Faculty of Medicine of Masaryk University prepared for you. The profits from the charity baking will be donated to the Krtek Children's Oncology

Macromolecular Chemistry of the CAS will then try to explain how one can use polymers in medical

treatments without damaging the nature by releasing them into the environment.

Registered participants of this year's Czech Annual Cancer Research Meeting will be able to attend a workshop focused on communication skills, gender, and open science. It will take place before

NICR NATIONAL INSTITUTE FOR CANCER RESEARCH

NICR Edu workshop

the main programme. As part of the workshop, participants will be able to sign up for practical training and try to give an interview about their own work on camera.

> Funded by the European Union NextGenerationEU