

Name Participants of WG3	László Virág
Affiliation	University of Debrecen, Hungary
Scientific expertise, up to 5 key words	cell death, inflammation, cancer, PARP, high-throughput screening
Motivation for participation in WG3	Our main motivation for participating in this translational research-focused WG is to collaborate with other participants in HCS/HTS assay development aiming at identification and characterization of Nrf2 modulating drugs.
Short narrative biosketch, including scientific background/ education/major achievements etc.	<p>M.D. (1990) University Medical School of Debrecen, Hungary Ph.D. (1999) University Medical School of Debrecen, Hungary D.Sc. (2005) Hungarian Academy of Sciences</p> <p>Experience abroad: 1997-1998 (2 years) Children's Hospital Med. Center, Cincinnati, OH, USA 2000-2001 (1 year) Inotek Pharmaceuticals, Beverly, MA, USA Current position: Full professor at and head of the Department of Medical Chemistry, Faculty of Medicine, University of Debrecen, Hungary.</p> <p>Published 129 papers, H-index: 59, more than 13000 citations</p> <p>We study the molecular mechanisms involved in oxidative DNA damage signaling with special regard to the role of protein PARylation. We showed that PARylation dependent cell death has necrotic features and identified several regulatory mechanism of this novel cell death modality (a.k.a. parthanatos). We identified the contribution of the poly(ADP-ribose) degradation enzyme PARG to oxidative stress induced cell death. Furthermore, we showed the active role of oxidative stress and PARylation in various in vivo disease models and human samples.</p>
Current research topics/ongoing projects	<p>Our current projects aim to identify</p> <ul style="list-style-type: none"> - how macrophages protect themselves from PARylation-dependent cell death (parthanatos); - how PARylation regulates macrophage polarization in cancer; - how cancer cell-immune cell interactions can be pharmacologically modulated.
Nfr2-related methodologies/ infrastructure/ equipment	<p>high-throughput screening, high-content screening (HTS/HCS) facility with Perkin Elmer Opera Phenix HCA equipment (for HCS)</p> <p>Animal models (dermatitis, pancreatitis)</p>
Available sample collections/datasets; interested in sharing; yes/no	small molecule libraries of FDA approved drugs for drug repurposing screens
Available cohorts/ ongoing/planned human studies/grant applications	N/A
Interested in STSM: outgoing/hosting (year 1/ later); yes/no	yes, not in year 1, both hosting and ongoing