Welcome to the President’s Message for this issue of the ISSX Newsletter. My previous message to you was written in February this year and, since then, we have moved to an unprecedented situation worldwide due to the COVID-19 pandemic. I realize that COVID-19 may have affected a number of our members directly with more indirect effects for many others, and I would like to express my sympathy and concern to all those affected.

COVID-19 has greatly impacted our normal program of activities for 2020 and early 2021. In particular, we cancelled our European ISSX meeting in Geneva some time ago and then also postponed the Asia-Pacific meeting scheduled for January 2021 in Bangalore to early 2022. Very recently, we were forced to cancel the ISSX/JSSX joint meeting in Hawaii scheduled for October this year due to ongoing social distancing requirements in Hawaii, which currently prohibit gatherings of more than ten people, and restrictions on business travel for many of our members.

We are providing an increased range of virtual activities to partly offset the loss of our two meetings this year and, with many members working from home currently, we believe these will offer great educational opportunities and promote online interaction with colleagues. More details are available elsewhere in the Newsletter. We are also continuing with our Awards program and expect to be able to offer webinars from our awardees later this year. All webinars continue to be available on the ISSX website for later viewing. I hope this means that all members worldwide will benefit, as I realize scheduling virtual activity to suit all is not possible.

We are now looking forward to 2021, especially to the 24th North American meeting in Boston from September 12 to 15. The MOC for that meeting, led by Raymond Evers and Joe Balthazar, is completing preparations for an exciting program and I hope to see many members registering. We are determined this meeting will go ahead, ideally in person, but we are also exploring virtual or hybrid options should the need arise. There is also our 2021 Workshop: Translation of \textit{in vitro} ADMET Science to \textit{in vivo}: Current Perspectives and Challenges in early 2021—more details on this will be announced very soon.

I would like to end by hoping that all of you and your loved ones stay safe and well in these challenging times.

Best regards,
Ann Daly

Ann Daly
ISSX President
This volume is the fourth in a series regarding drug delivery aspects and will also be available in (electronic) e-book form. The advance descriptive literature states that these books will “provide a platform to discuss opportunities and challenges in development of micro-nanomedicine and other drug delivery systems, review industrial manufacturing challenges, [and] discuss current and future market trends.” It hopes that it will encourage fruitful collaborations between industrial researchers, clinical investigators and academic scientists. As such, its readership is targeted towards these personnel as well as other pharmaceutical scientists in academia and industry, bioengineers, regulatory specialists, and students who are entering into this field and wish to learn more about the status of drug delivery systems.

The book contains extensive references, and it is nicely illustrated with artwork and tables that complement and enhance the text. As expected from Elsevier books, the volume is of firm construction and should last for many years even with extensive use. Twenty-nine authors from academia and industry have come together to write eleven chapters, a couple contributing to more than one, that address various aspects of drug delivery techniques and procedures. The chapter headings are as follows: “Versatile hyaluronic acid nanoparticles for improved drug delivery,” “Preclinical testing—Understanding the basics first,” “Aqueous polymeric coatings: New opportunities in drug delivery systems,” “Large-scale manufacturing of nanoparticles—An industrial outlook,” “The role of polymers and excipients in developing amorphous solid dispersions: An industrial perspective,” “Biologics: Delivery options and formulation development strategies,” “The regulatory and ethical issues in nanoparticles, materials and particles (NMP) research,” “Sterile procedures for pharmaceutical dosage forms,” “Vaccine delivery strategies against botulism,” “Nanotechnological approaches for delivery of anti-inflammatory drugs,” and “Food to medicine transformation of stilbenoid vesicular and lipid-based nanocarriers: Technological advances.”

The previous three volumes of this series are mentioned briefly below. Volume 1 (“Drug Delivery Systems,” 2019) includes 21 chapters that tackle the numerous routes of drug administration that may be exploited in the clinical situation and how to “translate the physicochemical properties of drugs into drug delivery systems” (792pp, ISBN: 978-0-128-14487-9). Volume 2 (“Delivery of Drugs,” 2020) is a smaller tome, containing 9 chapters and highlights the “functional aspects of nano-micro carriers” and “demonstrates physical methods to improve drug efficacy” (242pp, ISBN: 978-0-128-17776-1). Volume 3 (“Drug Delivery Trends,” 2020) has 15 chapters that continue the previous theme and examine emerging trends in oral solid dosage forms (OSDFs) and “includes regulatory discussions regarding quality and legal guidelines” (246pp, ISBN: 978-0-128-17870-6). All four volumes (planned to be available around this time) would make a prodigious reference work for any establishment concerned with this aspect of pharmaceutics. Also, these are a worthwhile addition to educational institutions as an information depository, and to provide current reviews for students studying a variety of pharmacological, pharmaceutical, and medically oriented courses.

Notified by
Steve Mitchell
Imperial College London, UK

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Uli Zanger began his research career with Urs A. Meyer at the Biocenter of the University of Basel, Switzerland, where he performed his PhD studies in a team that worked out the basis for several genetic polymorphisms in human drug metabolism. During his PhD work, he made several discoveries that helped characterize the polymorphic P450 enzyme debrisoquine 4-hydroxylase biochemically and by new assays (e.g. Zanger et al., 1988, Biochemistry 27:5447-54). He also developed monoclonal antibodies and discovered that anti-LKM1 autoantibodies, which circulate in autoimmune hepatitis type II, are specifically directed against and inhibit CYP2D6 (Zanger et al., 1988, Proc Natl Acad Sci. USA 85:8256-60). In the following years, Uli Zanger received postdoctoral training in molecular biology with Michael R. Waterman at UT Southwestern Medical Center in Dallas, TX, USA, where he investigated transcriptional regulation of steroidogenic P450s (Zanger et al., 1991, J Biol Chem. 266:11417-20).

In 1994, Uli Zanger joined the Dr. Margarete Fischer-Bosch Institute of Clinical Pharmacology (IKP) in Stuttgart. There, he established his own research group and worked on various aspects of drug metabolism, pharmacogenetics/genomics, and clinical pharmacology over the next 25 years.

In continuation of his interest in CYP2D6, he performed systematic sequencing studies and discovered a novel variant that turned out to be the second most frequent functionally impaired CYP2D6 allele among subjects of Caucasian ethnicity (frequency ~10-15%). In a number of publications he and his group showed that this allele differs from the common functionally normal *2 allele by a single intronic variant (2988G>A) that is causally responsible for decreased protein expression and activity most likely via aberrant splicing. This variant allows to identify individuals at increased risk of adverse drug effects for CYP2D6 drug substrates and helps to better understand genotype-phenotype variability. The variant is an essential component of current pharmacogenetic testing procedures. Relevant papers include Raimundo et al., Pharmacogenetics 10:577-81 (2000); Zanger et al., Pharmacogenetics 11:573-85 (2001); Raimundo et al., Clin Pharmacol Ther 76 :128-38 (2004); Toscano et al., Pharmacogenet Genomics 16 :756 (2006). Several other papers during this time described further CYP2D6 variants, genotyping assays, nomenclature, as well as substrates. Turning his interest to other cytochromes P450, Uli Zanger and his group were the first to systematically unravel genetic polymorphisms of CYP2B6, the orthologous human gene of the well known phenobarbital-inducible CYP2B genes of rodents. While so far largely neglected as a drug metabolizing enzyme in humans, CYP2B6 turned out to be one of the most polymorphic human P450 genes. Numerous common and rare amino acid variants, promoter and intron polymorphisms are organized in complex haplotypes that influence liver expression, enzyme activity and substrate selectivity. The CYP2B6 genetic polymorphism was later shown by him and numerous other groups worldwide to be especially important for anti-HIV drug treatment (e.g., efavirenz, nevirapine). Relevant publications include Lang et al., Pharmacogenetics 11:399-415 (2001); Klein et al., Pharmacogenet Genomics 15:861-73 (2005); Zukunft et al., Mol Pharmacol 67:1772-82 (2005); Rotger et al., Clin Pharmacol Ther 81:557-66 (2007); Hofmann et al., J Pharmacol Exp Ther 325:284-92 (2008). Numerous additional papers describe CYP2B6 biochemically, e.g. by irreversible inhibition (Richter et al., J Pharmacol Ther 308:189-97(2004)) and induction (Saussele et al., Clin Pharmacol Ther 82:26574265-74(2007)).

The Zanger group also studied genetic influences on other P450s including CYP3A4. As numerous efforts by him and others failed to reveal meaningful genetic polymorphisms in the CYP3A locus that influence CYP3A4 (with the exception of CYP3A5), Uli’s group turned their interest on the possibility of trans-acting polymorphisms. In a systematic candidate gene approach, they identified several new influential genes

Continued on next page
for CYP3A4 including the nuclear receptor PPARα. They showed that a PPARα polymorphism influenced CYP3A4 expression in human liver as well as in vivo. Subsequent mechanistic studies have shown that PPARα directly interacts with cis-regulatory elements of the CYP3A4 gene promoter region to increase transcription and they showed that PPARα ligands such as fibrates and phospholipids are able to induce CYP3A4 in primary human hepatocytes. Remarkably, in contrast to many inducers of CYP3A4 that activate transcription via nuclear receptors PXR and CAR, the influence of PPARα ligands such as fibrates and phospholipids on CYP3A4 had not been investigated before. Relevant publications include Klein et al., Clin Pharmacol Ther 91:1044-52 (2012); Thomas et al., Mol Pharmacol. 83:709-18 (2013); Kandel et al., Biochim Biophys Acta 1859:1218-27 (2016).

Although polymorphic genetic variation was certainly the major interest in Uli Zanger’s work, he also realized that it is equally important to look at other factors. One of his most important scientific contributions in this regard concerns the influence of sex on cytochrome P450 variability. While sex has been known as a remarkable influential factor in rodents, the situation in humans was less clear yet of significant clinical interest. The question had been addressed by other groups before with contradictory results due to methodological issues. It was Uli Zanger’s careful work with his established human liver cohort to show unequivocally that CYP3A4 is sex-dependently expressed in humans with females showing up to 2-fold higher levels of transcript, protein and enzyme activity in their liver, independent of drug exposure. The finding has since been replicated by others and it explains well the general observation of higher in vivo clearance rates for CYP3A4 drug substrates seen in female patients and volunteer study participants (Wolbold R et al., Hepatology 38:978-88 (2003)). A later follow-up work in collaboration with Dr. David Waxman (Boston) revealed more than 1,200 genes with sex biased expression in human liver, including 40 drug metabolizing enzymes with female or male bias as well as many other genes with implications for polygenic dyslipidemia and coronary artery disease (Zhang et al., PLoS One 6:e23506 (2011)).

More recently, Uli Zanger turned his interest on other nongenetic factors that influence drug metabolism and particularly on the mechanism of downregulation of drug metabolism in disease states with inflammatory component, a phenomenon that has been investigated since for a long time. Known mechanisms include primarily transcriptional processes but according to Uli Zanger’s most recent work, diverse microRNAs, e.g. miR-130b, miR-155 and others, contribute to posttranscriptional regulation in inflammatory conditions. Recent papers include Rieger et al., Drug Metab Dispos 43:884-8 (2015) and before Kugler; Kugler et al., Biochem Pharmacol. 171:113725 (2019).

In addition to these major research achievements, Uli Zanger contributed many additional findings, methodological developments and review articles and book chapters to the fields of drug metabolism, pharmacogenetics/genomics and clinical pharmacology. He has trained more than 20 undergraduates, PhD students, and postdocs and he collaborated scientifically with many groups in Germany, Europe, and worldwide.

ISSX congratulates Dr. Uli Zanger for being named the recipient of the 2020 European Scientific Achievement Award. We have invited Dr. Zanger to lecture at the 24th North American ISSX Meeting to take place in Boston, Mass, USA from September 12–15, 2021. Additionally, Dr. Zanger will deliver a talk entitled, Cytochrome P450 Pharmacogenetics: New Lessons about SNPS, Haplotypes, and in vitro Test Systems as part of the ISSX Webinar Series on Monday, October 5, 2020. Review the abstract and register to attend today www.issx.org/10052020.
Mark Your Calendar for the ISSX Webinar Series

The ISSX Webinar Series is a complimentary member benefit with an exciting range of speakers and topics. All members can participate in regularly scheduled live webinars or watch previous recordings on their own schedule. This year, the ISSX Webinar Series enables our members to stay connected and to learn. All times are United States Eastern time zone.

**September 1 at 11:00 AM ET**
Clearing Up Clearance in PK: What You Need to Know
*Presented by: Malcolm Rowland, PhD*

**September 15 at 11:00 AM ET**
Induction of Drug Transporters *in vitro* and *in vivo*: From Gut ABCs to Liver SLCs and Back Again
*Presented by David Rodrigues, PhD*

**September 21 at 11:00 AM ET**
Ozanimod Metabolism—Qualification of Disproportionate Metabolites
*Presented by Sekhar Surapaneni, PhD*

**October 5 at 11:00 AM ET**
Cytochrome P450 Pharmacogenetics: New Lessons about SNPS, Haplotypes, and *in vitro* Test Systems
*Presented by Ulrich Zanger, PhD*

**October 21 at 11:00 AM ET**
Modelling and Simulation to Support Qualification of Endogenous Transporter Biomarkers: Current State
*Presented by Aleksandra Galetin, PhD*

**November 17 at 11:00 AM ET**
Qualification of Impurities Based on Metabolite Data
*Presented by Lars Weidolf, PhD*

**ISSX IS NOW ACCEPTING PROPOSALS FOR THE ISSX WEBINAR SERIES!**

Learn more and submit your proposal through the [ISSX Website](#).
The information presented in the ISSX Webinar must be balanced and provide the attendees with an objective viewpoint. Proposals for the ISSX Webinar Series will be evaluated for the ability to provide educational content to ISSX members.
Translation of *in vitro* ADMET Science to *in vivo*: Current Perspectives and Challenges

ISSX and the International Consortium for Innovation and Quality in Pharmaceutical Development (IQ) are jointly organizing a workshop to take place for our members and others in February 16–19, 2021. The workshop title is “Translation of *in vitro* ADMET Science to *in vivo*: Current Perspectives and Challenges” and will bring together scientists from academia, industry, and regulatory agencies in an interactive format to discuss contemporary topics in small molecule enzyme and transporter research. We are planning sessions that cover not only laboratory and analytical challenges associated with studying enzymes and transporters *in vitro*, but also issues involved in the translation of *in vitro* ADMET data to clinical drug-drug interactions (DDI). There will be a mixture of presentations, including rapid-fire talks, along with roundtable discussion sessions that we hope will allow for the exchange of perspectives and ideas across regulatory, academic, and industrial spaces to help address drug development challenges and enable future research into experimental and model-based approaches for biotransformation enzymes and transporters.

Watch for more details on this workshop, including registration, and program details, coming soon!

**Workshop Organizing Chairs:**

Chris Gibson, Merck Research Laboratories, West Point, PA, USA and Lei Zhang, Silver Spring, MD, USA

**Workshop Organizing Committee:**

Adrian Fretland, AstraZeneca, Waltham, MA, USA
Aleksandra Galetin, University of Manchester, Manchester, United Kingdom
Yurong Lai, Gilead Sciences, Foster City, CA, USA
Laurent Salphati, Genentech Inc., South San Francisco, CA, USA
Kimio Tohyama, Takeda Pharmaceuticals, Cambridge, MA, USA
Jashvant Unadkat, University of Washington, Seattle, WA, USA
Why did you decide to get involved in the ISSX Mentorship Program?
I was striving to take my career to the next level and looking for help of more experienced scientist who is top-level expert in DMPK field and can share his experience with me in succeeding career goals.

How has your mentor assisted you in navigating your career in science?
I appreciate the inspiring discussions I have with my mentor, who has shared his experience and career path with me. He has encouraged me to develop persistence and a proactive approach in moving forward with my career goals.

How often do you and your mentor meet? In these meetings, what topics are discussed and how have these conversations benefited you?
I highly appreciate that my mentor holds monthly meetings with me despite his busy schedule. During these meetings, I’ve learned what areas of my technical expertise should be strengthened. My mentor has also advised on cover letter content. He gave me advice on how to prepare for interviews, and he provided me with

The ISSX Mentorship Program has now reported more than 70 mentoring hours among mentorship pairings in 2020. This member program provides a rich opportunity for graduate students and newer investigators to be matched with more senior scientists within and across career pathways to discuss career options, review competencies for success, consider challenges and problems, and receive practical advice from experienced scientists.
The ISSX Mentorship Program

Continued from the previous page

Would you recommend this program to other young investigators?
It is an enriching opportunity to be involved in the ISSX Mentorship Program. I would definitely recommend this program to other young scientists who are seeking to boost their career.

FIND YOUR MENTORSHIP MATCH! ENROLL TODAY!

To participate in the program, complete a simple online profile to be matched with your mentoring partner. Pairings for the 2020 program are now in process and will continue throughout the year. Enroll today to get the maximum amount of time with your mentoring partner this year.

some tips on research presentation. These meetings helped me to accomplish my top career objectives. Without my mentor, this road would be much longer and harder.

Please describe your experience with the ISSX Mentorship Program platform. Do you find it accessible and easy to use?
I find that the ISSX Mentorship Program platform is well organized, accessible, and user-friendly.

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The New Investigators Group is comprised of four ISSX members within the first ten years of receiving their highest earned degrees. This group ensures that student and new investigator members of ISSX are receiving the resources they need from the Society to further their careers. The main goals of the New Investigators Group are to 1) promote engagement among student and new investigator members, 2) foster professional growth, and 3) cultivate a group of emerging leaders from within the ISSX membership.

The 2019–2020 New Investigators have hosted several ISSX Webinars, planned the Mentorship Forum at the 12th International ISSX Meeting in Portland, OR, USA, and published an article in Drug Metabolism Reviews, “Advances in the study of drug metabolism—symposium report of the 12th Meeting of the International Society for the Study of Xenobiotics.” Additionally, the group has recently released a newsletter outlining their activities and a call for input from other new investigators.

Meet the ISSX New Investigators!

Eric Gonzalez is a young investigator with great interest in contributing to the development of drug therapies for unmet medical needs. Originally from the Rio Grande Valley in South Texas, Eric obtained a BS in chemistry from the University of Texas—Pan American, and he continued his educational pursuit at Vanderbilt University, ultimately earning a PhD in Biochemistry. Under the mentorship of Prof. F. Peter Guengerich, Eric’s dissertation work focused on the catalytic mechanisms of cytochrome P450 enzymes. He was then awarded a postdoctoral fellowship at the NIH—National Center for Advancing Translational Sciences (NCATS), joining the DMPK group led by Dr. Xin Xu. As a postdoc, Eric worked on the generation and curation of datasets for use in the development of P450-centric QSAR models that support medicinal chemistry efforts. In his fellowship, he also gained drug development experience through participation in project team meetings, as well as designing and executing pharmacokinetic studies. Eric recently joined the PK Sciences group at Novartis Institutes for Biomedical Research, Inc., where he now is utilizing his DMPK knowledge to support drug development projects in the neuroscience and musculoskeletal disease areas. With this career opportunity, Eric aspires to realize his objective of helping advance the development of novel therapies that reach the clinic.

“I am grateful for the opportunity to participate in the ISSX New Investigators Group. It has given me opportunities to connect with senior experts in the field, which can be difficult in the haste of meetings or through the obscurity of emails. Importantly, it has also fostered connections with other new investigators, whom are the colleagues I expect to interact with as we all progress through our career paths. This experience has shown me that I am able to contribute to the organization, and encouraged me to participate in other facets of ISSX.”

Chukwunonso Nwabufo is an Award-Winning Pharmaceutical Scientist with scientific expertise in DMPK-BA and Analytical Chemistry. He is very passionate about improving global health quality by leading transformative and innovative drug discovery and development programs in areas of unmet medical needs. In addition to his scientific work, Chukwunonso has demonstrated strong leadership potentials including founding the first Drug Metabolism Discussion Group (DMDG) site in Canada to foster collaboration between researchers at the University of Saskatchewan and the parent DMDG in the United Kingdom. He also serves on several scientific groups including Editorial board member for Drug metabolism reviews, Abstract Screener on the AAPS Abstract Screening Committee, Learning Opportunities Manager on the AAPS Pharmacokinetics, Pharmacodynamics, and Drug Metabolism Community, and ISSX New Investigator group member. In his spare time, he loves playing table tennis, writing poems, and reading.

“Serving on the ISSX New Investigator group provides an outstanding opportunity for me to collaborate and develop schemes that will help foster professional growth for our students and early career professionals.”

Continued on next page
Mary (Allie) Schleiff is a fourth-year doctoral candidate in the laboratory of Dr. Grover Paul Miller at the University of Arkansas for Medical Sciences (UAMS). Her dissertation project involves the utilization of experimental, computational, and bioinformatics approaches to assess the effects of halogen substituents upon drug and drug analog hepatic metabolism, consequent reactive oxidative metabolite formation, and potential drug-induced liver injury. Through the Systems Pharmacology and Toxicology T32 training grant at UAMS, she has developed a strong background in pharmacology and toxicology to complement her education in biochemistry and regulatory sciences. She is keenly interested to put these skills to use in the pharmaceutical industry drug metabolism and pharmacokinetics field in 2021.

"Working with the New Investigators Group has truly been a treat for me! Not only have I interfaced with exceptional graduate students and post-docs, but I’ve also had the opportunity to meet and work with many extraordinary established scientists while advancing ISSX’s goal of recruiting outstanding new investigators to our organization. The New Investigators Group has provided me with fantastic opportunities (especially as a graduate student) in the planning of seminars and conference events, writing of review manuscripts, and in advertising and advocating for a strong, scientific organization such as ISSX!"

Jasleen K. Sodhi is an experienced drug metabolism and pharmacokinetics research scientist and a PhD candidate at the University of California San Francisco under the mentorship of Dr. Leslie Benet. Her research focuses on identifying hallmarks of transporter involvement in complex drug-drug interactions and improving the in vitro to in vivo extrapolation of hepatic clearance, with a focus on the theoretical considerations (such as unrecognized assumptions) that have prevented the field from accurately predicting hepatic clearance thus far. Following completion of her undergraduate degree at the University of California Berkeley, Jasleen worked the next 9 years as a research scientist in the pharmaceutical industry, initially at a small cancer diagnostic biotech company and then at Genentech in the department of Drug Metabolism and Pharmacokinetics.

"It has been a great opportunity to work with the New Investigators Group towards positively impacting the early careers of ISSX members. The New Investigators Group has organized mentorship and networking opportunities, such as a Mentorship Forum at the annual meeting in Portland, OR, and provided opportunities for members to educate themselves on current scientific efforts by the field, by organizing webinars and publishing a conference report in Drug Metabolism Reviews highlighting the Advances in Drug Metabolism symposium from the annual meeting. The New Investigators Group continues to work towards engaging members across the globe virtually, by allowing new investigators to network and interact directly with one another via LinkedIn discussion groups. Supporting those ISSX members who are just starting their careers in the pharmaceutical sciences is very important to me, and I look forward to continuing such efforts with the ISSX New Investigators Group."

Get Involved! Join the ISSX New Investigators LinkedIn Group.

The ISSX New Investigators LinkedIn Group is intended to create a space to discuss recent publications, to review ideas for upcoming New Investigators Webinars, and to connect with other young scientists in ISSX. We invite you to join the group by following this link.

CALL FOR 2021–2022 NEW INVESTIGATORS GROUP MEMBERS NOW OPEN

Are you looking for an opportunity to lead continued efforts to reach out to other new investigators in the field? The call to submit an application for the 2021–2022 New Investigators Group is now open. To learn more about the ISSX New Investigators Group and to submit your application for consideration, please visit the ISSX Website.
Voting is an important right of membership in ISSX and is an opportunity for members to help determine the future leadership of our Society. In this year’s election, which closed on July 17, 2020, members voted to select three members of the ISSX Council. For these Council seats, members voted for one candidate in each of the three ISSX Regions (Asia Pacific, Europe, and North America). ISSX thanks all members who participated in the 2020 ISSX Council Election.

The three elected members of the ISSX Council will serve terms from January 2021–December 2022. Review the details below to learn more about these elected member representatives.

Kouichi Yoshinari
University of Shizuoka
Shizuoka, Japan

Kouichi Yoshinari received his BSc, MSc and PhD. (Pharaceutical Sciences) from Tohoku University (Sendai, Japan). After receiving a PhD in 1998, he worked as a postdoctoral fellow at the Laboratory of Reproductive and Developmental Toxicology, National Institute of Environmental Health Sciences/National Institutes of Health (NC, USA) from 1998 to 2001.

He was appointed as Research Associate in the School of Pharmaceutical Sciences, the University of Shizuoka (Shizuoka, Japan) in 2001 and promoted to Lecturer in 2002. In 2006, he was appointed as Lecturer in the Graduate School of Pharmaceutical Sciences, Tohoku University and promoted to Associated Professor in 2007. In 2014, he was appointed as Professor in the Laboratory of Molecular Toxicology, School of Pharmaceutical Sciences, University of Shizuoka.

Kouichi’s research focuses on the drug metabolism and hepatotoxicity, specifically molecular mechanisms for the gene regulation of drug-metabolizing enzymes, the physiological and toxicological functions of xenobiotic-responsive nuclear receptors, the molecular mechanisms of hepatocarcinogenesis, and the establishment of hepatotoxicity prediction system. He is the author of 103 research papers and reviews, and wrote numbers of book chapters in the field of drug metabolism and toxicology. Kouichi received Award for Young Scientists from the Japanese Society for the Study of Xenobiotics (JSSX) in 2009, Asia-Pacific Region New Investigator Award from ISSX in 2011, JCIA LRI Award from Japan Chemical Industry Association and Japanese Society of Toxicology in 2017, and The Pharmaceutical Society of Japan Award for Divisional Scientific Promotion in 2018.

Kouichi has been a member of ISSX since 2006. He served as a member of the Meeting Organizing Committee and Abstract Review Committee of the 12th ISSX International Meeting (Portland, OR, 2019), and a MOC member of the 23rd ISSX North American and 35th ISSX Joint Meeting (Waikaloa, HI, 2020), and a local member of the MOC of the 8th international meeting of ISSX (Sendai, Japan, 2007). Kouichi served as a member of the Publications Committee of ISSX from 2012 to 2015 and is currently a member of the Finance Committee of ISSX since 2018.

In addition to ISSX, Kouichi has experiences in working for international and domestic scientific communities. He is currently a Council member of JSSX and Editor-in-Chief of Drug Metabolism and Pharmacokinetics, the official journal of JSSX. He is also Director of the Japanese Society of Toxicology and Human and Animal Bridging Research Organization, and is Delegate of the Pharmaceutical Society of Japan. He served as a MOC member of the 34th JSSX annual meeting (2019, Tsukuba), a member of the Scientific Advisory Board of the 21st International Symposium on Microsomes and Drug Oxidations (2016, Davis, CA) and a MOC member of the 42nd (2015) to 47th (2020) Annual Meeting of the Japanese Society of Toxicology. He is going to co-chair the Joint Meeting of 38th JSSX Annual Meeting and the International Conference on Cytochrome P450 to be held in 2023.

Others include: Editorial Board membership in Journal of Biochemical and Molecular Toxicology, Journal of Pharmaceutical Sciences, and Journal of Toxicological...
Simone Schadt is the ADME matrix leader and head of biotransformation within the investigative safety department at Roche (Basel, Switzerland). In this function, she supports the drug discovery and development portfolio by setting and implementing biotransformation-related disposition and safety strategies. In addition to supporting the small molecule portfolio, advancing the field for oligonucleotides and therapeutic proteins is one of her key interests.

Simone has co-authored numerous publications on the effects and the fate of xenobiotics: reactive metabolite assessment and drug induced liver injury (DILI), metabolites in safety testing (MIST), tissue imaging and bridging DMPK and safety, oligonucleotide, and protein biotransformation.

Simone is a biochemist by training, with a major in immunology and organic chemistry, from the University of Tübingen (Germany). In 2007, she graduated with a PhD in biochemistry and analytical chemistry from the Technical University of Berlin (Germany) with a thesis on the mode of action of a novel antibiotic. After graduating, she started her industry career as a postdoctoral fellow at Boehringer Ingelheim in Biberach (Germany) in the field of reactive metabolites and drug induced liver injury. She then took over a role as lab head in the drug metabolism group at Boehringer Ingelheim. In 2011, she joined the drug metabolism group at Roche, and was promoted to head of biotransformation in 2012 and ADME leader in 2019. Simone is a diplomate of the American Board of Toxicology, a European Registered Toxicologist, and core member of the ISSX CORA.

Jashvant Unadkat, PhD is the Milo Gibaldi Endowed Professor in the Department of Pharmaceutics, School of Pharmacy, University of Washington, Seattle. Jash is a dual US and British citizen. He received his Bachelor degree in Pharmacy (B. Pharm.) from the University of London (1977), his PhD from the University of Manchester (1982; advisor Prof. Malcolm Rowland) and his postdoctoral training in Clinical Pharmacology at the University of California at San Francisco (1982-85; advisor the late Dr. Lewis B. Sheiner).

In 1985, Jash was recruited as an Assistant Professor by the Dept. of Pharmaceutics, School of Pharmacy, University of Washington. After joining the department, Jash established his research program in two related areas, mechanisms of maternal-fetal disposition and placental transport of HIV drugs. Over the last 3 decades, this research focus has continued and has expanded to include drug transport at other blood:tissue barriers such as the blood:brain and liver:blood barriers. His laboratory has been continuously funded by NIH through grants from several institutes including NIGMS, NIMH, NIAID, NIDA, NICHD, NINDS, NIA.

Jash has published more than 190 peer-reviewed research papers. He is a fellow of AAAS, AAPS, JSSX, and the founding co-chair (1999-2001) of the focus group of AAPS on Drug Transport and Uptake. Jash received the AAPS Research Achievement Award in 2012. Jash was named the Milo Gibaldi Endowed Chair in 2016. In 2012, Jash created a unique UW Research Affiliates Program on Transporters, a cooperative research effort between the UW School of Pharmacy and pharmaceutical companies. This highly successful research program on transporters continues to this day. He also leads UWPKDAP, a NIDA funded Program Project grant (P01) on mechanisms of drug disposition during pregnancy. A central focus of both these programs is IVIVE of drug disposition, especially that mediated by transporters. In this regard, his laboratory
is focused on physiologically based pharmacokinetic (PBPK) models that can predict tissue (including fetal) concentration of drugs, especially where transporters are involved.

Jash has served on numerous committees within scientific organizations (e.g., AAPS) including NIH review panels and as an Associate Editor for the Journal of Pharmaceutical Sciences. He has organized or co-organized numerous national and international conferences, the most recent being the 21st North American ISSX Meeting in Rhode Island. He is also the co-organizer of the upcoming ISSX-sponsored workshop on “Towards Reaching a Consensus on Using Quantitative LC-MS/MS Proteomics in Translational DMPK/PD Research,” to be held September 27–28, 2018, Cambridge, MA.

The Society is grateful to all candidates who agreed to run in the election as well as the members of the Nomination Committee who were responsible for assembling the slate of candidates this year:

Tom Baillie, Chair, University of Washington, Seattle, WA, United States
Michael Zientek, Takeda, San Diego, CA, United States
Peter Mackenzie, Flinders University, Adelaide, Australia
Amit Kalgutkar, Pfizer Inc., Cambridge, MA, United States
Sandy Pang, University of Toronto, Toronto, ON, Canada
Miki Nakajima, Kanazawa University, Kanazawa, Japan
Constanze Hilgendorf, AstraZeneca R&D, Molndal, Sweden
Welcome New Members

The International Society for the Study of Xenobiotics proudly welcomes the following new members. We greatly appreciate their support and hope that each remains aligned and affiliated with ISSX for many years to come.

Mostafa Abdelhamed, Inotiv, United States

Brahim Achour, University of Manchester, United Kingdom

Sujin Ahn, Yuhan Corporation, Korea, South Korea

Sammy Bell, Boehringer Ingelheim, United States

Giovanni Bocci, University of New Mexico, United States

Catherine Booth-Genthe, GlaxoSmithKline, United States

Carina Cantrill, F. Hoffman-La Roche Ltd., Switzerland

Elias Carvalho Padilha, United States

Kahina Chabi, UQAM, Canada

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Welcome New Members

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