President’s Message
L. Jeff Hong

I hope this message finds you well! Last year’s INFORMS Annual Meeting and Winter Simulation Conference were both in hybrid mode and they were well attended by the I-Sim members. We had business meetings at both conferences. At the I-Sim business meeting of WSC, four important awards were presented to recognize the following individuals:

- **Lifetime Professional Achievement Award**: Peter Glynn
- **Distinguished Service Award**: Theresa Roeder
- **Outstanding Publication Award**: Jose Blanchet, Coralia Cartis, Matt Menickelly and Katya Scheinberg
- **WSC Diversity Award**: Geri Dimas, Ana Mor-eira and Kimia Vahdat

Further details of these awards can be found in this newsletter. I would like to congratulate them again for their remarkable achievements!

The I-Sim membership is low at this moment. There are totally 419 members, compared to 1102 at the end of 2019 (before Covid-19). Please see the Secretary’s Corner for more details. The majority of this reduction came from student membership. This is largely because students were not attending the INFORMS Annual Meeting and the WSC. I hope that the numbers will bounce back once these con-
President’s Message, Continued

L. Jeff Hong

ferences are in person. But I would also encourage I-Sim members to renew their memberships and to encourage their colleagues and students to join I-Sim.

Many of you may have heard that Loo Hay Lee, a long-time I-Sim member and Program Chair of WSC 2022, passed away on March 17, 2022. I know Loo Hay for at least 17 years. He had always been an energetic and enthusiastic person, he was very active in the simulation society, and he was also a leader of the Asian simulation community. His passing is a great loss to both I-Sim and myself.

In this newsletter, we invited his colleagues, friends and students to write articles about him. So we could know more about him beyond his academic achievements and help us remember his kindness.

Finally, I would like to remind everyone to vote for the I-Sim election. Details about the candidates and voting instructions are given at the end of this newsletter.

Editor’s Corner

Xiaowei Zhang

Congratulations to all of the award winners! I hope you enjoy the newsletter.

Loo Hay Lee was a long-time member of I-Sim and Program Chair of WSC 2022. His passing is a great loss to both I-Sim and myself. I know Loo Hay for at least 17 years. He had always been an energetic and enthusiastic person, he was very active in the simulation society, and he was also a leader of the Asian simulation community. His passing is a great loss to both I-Sim and myself.

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Finally, I would like to remind everyone to vote for the I-Sim election. Details about the candidates and voting instructions are given at the end of this newsletter.

Congratulations to all of the award winners! I hope you enjoy the newsletter.
Treasurer’s Report

Canan G. Corlu

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Beginning Balance (1/1/2021)</td>
<td>$109,940</td>
</tr>
<tr>
<td>Total Revenue</td>
<td>$3,211</td>
</tr>
<tr>
<td>• Dues</td>
<td>$2,539</td>
</tr>
<tr>
<td>• Interest</td>
<td>$672</td>
</tr>
<tr>
<td>Total Expenses</td>
<td>$(708)</td>
</tr>
<tr>
<td>• National meeting expense (INFORMS 2021)</td>
<td>$492</td>
</tr>
<tr>
<td>• Local meeting expense</td>
<td>$998</td>
</tr>
<tr>
<td>• Membership Expense</td>
<td>$(5,153)</td>
</tr>
<tr>
<td>• Award Expense (2021 awards)</td>
<td>$2,955</td>
</tr>
<tr>
<td>Net Gain / Loss</td>
<td>3,919</td>
</tr>
<tr>
<td>Ending Balance* (12/31/2021)</td>
<td>$113,859</td>
</tr>
</tbody>
</table>

* The I-Sim account includes $20,750 that belongs to the liability account shared by all four WSC sponsors (see Fall 2012 newsletter).

Secretary’s Corner

Ilya O. Ryzhov

The following table shows the trajectory of I-SIM membership from December 2019 (last pre-pandemic numbers) to December 2021:

<table>
<thead>
<tr>
<th>Date</th>
<th>Regular/Retired</th>
<th>Student</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec. 2019</td>
<td>399</td>
<td>703</td>
<td>1102</td>
</tr>
<tr>
<td>Nov. 2020</td>
<td>334</td>
<td>195</td>
<td>529</td>
</tr>
<tr>
<td>Apr. 2021</td>
<td>298</td>
<td>81</td>
<td>379</td>
</tr>
<tr>
<td>Oct. 2021</td>
<td>325</td>
<td>97</td>
<td>422</td>
</tr>
<tr>
<td>Dec. 2021</td>
<td>331</td>
<td>88</td>
<td>419</td>
</tr>
</tbody>
</table>

The lowest numbers were in April 2021, and since then, membership has recovered slightly. The number of regular members has fallen by 17% during the pandemic and appears to have stabilized. However, the number of student members has fallen by more than 85%. Thus, in the near future, the membership of I-SIM will depend on the extent to which student participation in conferences recovers.
COMMITTEE REPORTS

Report on the Simulation Archive

Computer Simulation Archive Advisory Committee: Russell Barton (chair), Dennis Pegden, Simon Taylor

The Computer Simulation Archive is an extensive collection of material documenting the origins and development of the field of simulation. It is viewed as a model for other technical computing archives. It continues to grow, but already has a wealth of information, particularly oral history interviews with trailblazers in our field. Have you visited the site?

https://d.lib.ncsu.edu/computer-simulation/

CSAAC and Archive Activities

The Computer Simulation Archive Advisory Committee (CSAAC) is an unusual but valuable instrument for growing Archive materials and financial support for the Archive. It is an independent group, comprised of members of the simulation community. CSAAC has assisted the Archive in the completion of an oral history video with Don Iglehart, interviewed by Peter Glynn. That video will be posted to the Archive site soon. Zoom has turned out to be an effective vehicle for conducting these interviews. Two more Zoom interviews are scheduled in the next month, drawn from an expanded list of simulation leaders created by the CSAAC in consultation with the NC State University Libraries staff.

In other activities, the remaining materials from Jim Henriksen’s records were collected for the Archive by Dick Nance and Ernie Page and will be delivered to Raleigh in the near future. Archive Web pages have been updated to better highlight the history of the founding of the Archive and the role of the Computer Simulation Archive Advisory Committee.

Plans for the Coming Year

Access to the Archive contents will be greatly enhanced by continuing digitization. In addition to print material, the digitization effort in the coming year (2022) will include the start of transcriptions of the video oral history collection. CSAAC will continue to approach additional early leaders and plan additional interviews for the coming year. During the CSAAC spring meeting we discussed ways to improve visibility of the Archive, to increase traffic to the site and to the physical materials. Because many materials are physical rather than digital, on-site use of the Archive has immediate benefit. For that reason, CSAAC and Libraries staff conducted an information session for simulation faculty at NC State. Based on our discussions there is a plan to seek one or more undergraduate student projects making use of the Archive each year.

Archive Web Site Visibility — Can You Help?

Visibility of the Archive Web site can be improved by promotion of the Archive site. Your links to the site affect the Archive Web page ranking by Google and other search engines. Might you add it to
your professional/academic Web site? You might say something like (as I do on my personal Penn State Page - with a link to the Web site given above):

“If you are interested in simulation, its history, and thoughts by some of the trailblazers in the field, then visit the Computer Simulation Archive. You’ll find a list of both physical and digitized resources, including a large set of online video interviews with some of the founders and trailblazers of the field.”

Endowment: Market values as of 12/31/21 were $187,676 for the Simulation Endowment and $36,531 for the Bob Sargent endowment. These funds support acquisition, cataloging, transcription, and digitization activities. (The Sargent endowment was established prior to the Simulation Endowment for the purpose of supporting the Sargent Collection and then the Simulation Archive.) To find out more about donating — either materials or financial support, visit https://d.lib.ncsu.edu/computer-simulation/giving/.
EDITORS’ REPORTS

Report on Operations Research
L. Jeff Hong, Operations Research Simulation Area Editor

Activity in the Simulation Area of Operations Research (October 18, 2021 to April 9, 2022)

For the period specified, there were 11 new submissions and 10 resubmissions. There were totally 24 editorial decisions made in the period, 10 rejections, 9 major revisions, 4 minor revisions and 1 acceptance. Of the 24 editorial decisions, 8 were on time (less than 3 months from the date of submission), 9 were late (between 4 and 6 months) and 7 were very late (6 months or more). I would like to thank the Associate Editor team, Russell Barton, Guzin Bayraksan, Peter Frazier, Bernd Heidergott, Jiaqiao Hu, Susan Hunter, Seong-Hee Kim, Henry Lam, Guangwu Liu, Ilya Ryzhov, and Enlu Zhou, for their wonderful service to the journal. By end of 2021, Russell Barton and Peter Frazier stepped down from the editorial board after long time of excellent service. Thank you, Russell and Peter! Starting from Jan 1, 2022, we have two new associate editors. They are Guzin Bayraksan from the Ohio State University and Guangwu Liu from City University of Hong Kong. Welcome, Guzin and Guangwu!

The editorial statement of the simulation area may be found at https://pubsonline.informs.org/page/opre/editorial-statements/area-editors-statements#Simulation.

In addition to the traditional areas of simulation, we welcome contributions that develop the interface of simulation with other methodological areas (for example, large-scale computing, machine learning and data analytics) or application areas (such as healthcare, financial engineering, sharing economy, environment and energy). In general, papers should be of interest to a broad O.R. audience, and not just to the simulation community, although we certainly welcome papers that represent major theoretical progress. Please submit papers electronically via the Manuscript Central O.R. Web site (http://mc.manuscriptcentral.com/opre).

Report on INFORMS Journal on Computing
Bruno Tuffin, Simulation Area Editor

The IJOC Simulation Area covers all computational aspects of stochastic simulation. We seek high-quality research on the computational aspects of simulation model building, simulation data structures, simulation modeling and experiment environments, stochastic input modeling, random-variate generation, output analysis, simulation-based optimization, variance-reduction methods for simulation experiments, and other aspects of simulation modeling, experimentation, and analysis.

Submissions to the Simulation Area should not merely use simulation as a tool for generating experiments to test another methodology (these manuscripts should instead be submitted to the IJOC area for which the methodology applies), nor should they only present experimental results from a simulation program. Rather, manuscripts submitted to the area must make a significant contribution to the field of
stochastic simulation, as described in the previous paragraph. Complete instructions for preparing manuscripts are available at http://joc.pubs.informs.org. Submissions must be done through Manuscript Central: http://mc.manuscriptcentral.com/ijoc.

During 2021, the Simulation Area of IJOC received 21 new submissions and 17 revisions. During that period, 4 papers were accepted and 11 rejected. The average turnaround time for an original paper was 60.5 days, and 49.3 days for a revision.

I would like to thank the associate editors (Seong-Hee Kim, Henry Lam, Chang-Han Rhee, Yongjia Song and the newly appointed Ilya Ryzhov, thanks for accepting Ilya!) for their truly outstanding work, and for making my job much more manageable.

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**Report on the Journal of Simulation**

*Christine Currie, John Fowler, and Navonil Mustafee, Editors*

With great sadness, we report the sudden passing away of Professor Lee Loo Hay. Loo Hay had served as a Joint Editor-in-Chief for JOS for almost ten years. He was a Professor in the Department of Industrial Systems Engineering and Management at the National University of Singapore (NUS) and Co-director at the Centre of Excellence in Modelling and Simulation for Next Generation Ports (C4NGP). Loo Hay was also the Program Chair for this year's Winter Simulation Conference (Singapore), and in this role, proposed the development of a JOS Special Issue (SI) focussing on the theme of the WSC2022 conference — “Reimagining Tomorrow with Simulation”.

JoS welcomes submissions from both researchers and practitioners covering novel techniques, tools, methods and technologies in discrete-event simulation, agent-based modelling, and systems dynamics, and a hybrid of these approaches. We also publish novel applications of these methods in a wide range of areas, including (but not limited to) manufacturing, service, defence, health care & general commerce. In addition to WSC2022 SI, JOS also has CFPs open for two other SIs — “Hybrid Modelling and Simulation” and “Simulation-Optimization & Simheuristics”.

The latest journal statistics are as follows: Impact factor 2.205 (2020); five-year impact factor 2.015 (2020); acceptance rate is 8%. The average number of days from submission to first decision is 21 days. The average number of days from submission to the first post-review decision is under three months (89 days). The time from acceptance to online publication is 21 days. Regarding the volume of publications, the readers might like to note that from this year, JOS has now from four to six issues per year (648 budgeted pages)!

Every two years, JOS presents the **KD Tocher award** in recognition of the most outstanding contribution to the philosophy, theory or practice of simulation published in JOS. The KD Tocher award for 2019-2020 went to Eric Applegate, Guy Feldman, Susan Hunter and Raghu Pasupathy for their paper on “Multi-objective ranking and selection: Optimal sampling laws and tractable approximations via SCORE”, published in 2020, JOS, 14(1), 21–40.

The editors are always happy to discuss potential papers prior to submission.
Report on Stochastic Systems
Shane G. Henderson, Editor-in-Chief

Stochastic Systems is the flagship journal of the INFORMS Applied Probability Society. It seeks to publish high-quality papers that substantively contribute to the modeling, analysis, and control of stochastic systems. A paper’s contribution may lie in the formulation of new mathematical models, in the development of new mathematical or computational methods, in the innovative application of existing methods, or in the opening of new application domains. The editorial board includes simulation researchers Jose Blanchet, Paul Glasserman, Peter Glynn, and Sandeep Juneja. For the full editorial board see https://pubsonline.informs.org/page/stsy/editorial-board.

The journal homepage is http://pubsonline.informs.org/journal/stsy.

Stochastic Systems is an open access journal. There are no submission fees or page charges. We aim to return reports to authors within 3 months of submission. The average time from submission to decision over the last year is 91 days, and 84% of those papers have decisions within 150 days of submission. Please submit papers through Manuscript Central: http://mc.manuscriptcentral.com/ssy.
IIE Annual Conference & Expo 2022
May 21–24, 2022, Seattle, WA
Jie Xu (source: https://www.iise.org/Annual/details.aspx?id=40887)

“Make plans to join us in the Pacific Northwest as we return to in-person education and networking for the first time since 2019! ”

“The IIE Annual Conference gathers the seasoned industry practitioners and cutting edge researchers from all segments of industrial & systems engineering domain. This event provides an exciting opportunity for attendees to meet, network, explore ideas, and learn from the leaders in industrial & systems engineering. The conference program comprises primarily two types of sessions - proven solutions and applications from industry, and research from academia and industry scholars. In addition to these sessions, the conference program offers interactive panels, workshops, town hall meetings, exhibit hall and keynote presentations.”

Submission Deadline - Nov. 1, 2021; Notification of Acceptance - Dec. 6, 2021; Speaker Registration Deadline - Jan. 20, 2022; Paper Submission Deadline - Jan. 20, 2022. For more information, please see the conference website.

2022 CORS/INFORMS International Conference
June 5–8, 2022, Vancouver, CA
Jie Xu (source: http://meetings2.informs.org/wordpress/2022international/)

“Surrounded by forested mountains and ocean, Vancouver is a beautiful city and a popular tourist destination with a mild climate and breathtaking views.

Vancouver has been the host city of many international conferences and events including the 2010 Winter Olympics. We are very proud that the CORS/INFORMS International Conference will be held in Vancouver, June 5-8, 2022.

It is our great pleasure to welcome you to the beautiful city of Vancouver for a unique experience to learn about the latest advances in research, practice, and developments in operations research and analytics, as well as an incredible networking experience, while enjoying this lively and gorgeous city.”

The 35th Annual Conference on Learning Theory (COLT 2022)
July 2–5, 2022, London, UK
Jie Xu (source: http://learningtheory.org/colt2022/)

“The 35th Annual Conference on Learning Theory (COLT 2022) takes place July 2–5, 2022 (tentatively)
in London, UK. It will be preceded on July 1 with a 1-day workshop jointly organized by COLT and the IMS (Institute of Mathematical Statistics). The plenary speakers for COLT 2022 are Maryam Fazel (University of Washington), Jelani Nelson (UC Berkeley), and Alon Orlitsky (UC San Diego).

The 21st INFORMS Applied Probability Conference (INFORMS-APS)
July 6–8, 2022, Nancy, France (originally scheduled on July 7–9, 2021 and postponed due to COVID-19 pandemic)
Jie Xu (source: https://informs-aps2021.event.univ-lorraine.fr/)

INFORMS Applied Probability Society Conference will feature research interest in random matrices, random graphs, stochastic networks, combinatorial optimization and stochastic geometry, design and performance of service systems, and the design and analysis of algorithms, and study of large networks such as online social networks and the World Wide Web, randomized algorithms, and random graphs.

The 15th International Conference on Monte Carlo Methods & Quasi-Monte Carlo Methods in Scientific Computing
July 17–22, 2022, Linz, Austria
Jie Xu (source: https://www.ricam.oeaw.ac.at/events/conferences/mcqmc2022/)

“The 15th International Conference on Monte Carlo and Quasi-Monte Carlo Methods in Scientific Computing (MCQMC 2022) will be hosted by the Johannes Kepler University (JKU) and the Johann Radon Institute for Computational and Applied Mathematics (RICAM), in Linz, Austria, in July 2022. Both JKU and RICAM are hosting institutions of the Special Research Program ‘Quasi-Monte Carlo Methods: Theory and Applications’ funded by the Austrian Science Fund, FWF.”

“The MCQMC Conference is a biennial meeting on Monte Carlo and quasi-Monte Carlo methods. It focuses on recent research related to the following topics: Monte Carlo, quasi-Monte Carlo, Markov chain Monte Carlo, Digital nets and lattice rules, Discrepancy theory, Complexity and tractability of multivariate problems, Multi-level Monte Carlo, Sequential Monte Carlo and particle methods, Rare event simulation, Randomized quasi-Monte Carlo, Variance reduction methods, MC/QMC methods in physics, chemistry, finance, computer graphics, machine learning, and other areas.”

The 39th International Conference on Machine Learning (ICML)
July 17–23, Baltimore, MD
“The 39th International Conference on Machine Learning (ICML 2022) will be held in Baltimore, Maryland USA July 17-23, 2022 and is planned to be an in-person conference with virtual elements. In addition to the main conference sessions, the conference will also include Expo, Tutorials, and Workshops.”

2022 INFORMS Annual Meeting
October 16–19, 2022, Indianapolis, IN
"Start your engines . . . and join us for the 2022 INFORMS Annual Meeting in Indianapolis! Home to the Indianapolis 500 – one of the world’s top motorsports races – Indianapolis will soon welcome a global community of OR/MS, analytics, and data science professionals, students, and industry experts for unprecedented opportunities to learn, connect, and contribute to furthering the science and technology of decision-making. In addition to thousands of presentations and numerous networking opportunities at the meeting, attendees are encouraged to take advantage of Indianapolis’ many interesting, and at times unexpected, sights and experiences. Navigate 30,000 square feet of culinary and artistic talents in the community-focused market that inhabits Indianapolis’ historic Bottleworks District. Or take an unexpected trip back in time as you tour the canals in old world gondoliers. We can’t wait for you to join us in 2022 to explore groundbreaking research and discoveries, and experience all Indianapolis has to offer!"

2022 Winter Simulation Conference
December 11–14, Marina Bay Sands Expo and Convention Center, Singapore
"After more than 50 years since its inception, the Winter Simulation Conference will be held in Asia for the very first time in 2022! Join us virtually, or on-site at Marina Bay Sands, the iconic landmark of Singapore, in one of the most dynamic and cosmopolitan cities in Asia from December 11-14, 2022! The theme of WSC 2022 is derived from Singapore’s Smart Nation initiative “Singapore Reimagined.” The COVID-19 pandemic brought us a “new normal” and technological advances in the fields of robotics, artificial intelligence (AI), biotechnology, Internet of Things, quantum computing and virtual reality (VR) are changing the way humans live, work, play and communicate. Building on the “Smart Cities” focus of last year’s conference, WSC 2022 will “Reimagine Tomorrow” to evaluate not just living in an urban future where cities are safe, green and environmentally-secure with seamless power, water and..."
transportation networks, but also working in an environment where both sustainable high-tech manufacturing and novel services play an essential role.

Well-known for its efficiency in logistics services and in the midst of developing the world’s largest next generation container port, we will look at Singapore’s future logistics and port systems integration and how simulation provides a good way to help the country plan its next move.

In addition, with more than a dozen wafer fabrication facilities in operation or under construction in Asia’s “Silicon Island,” the Modeling and Analysis of Semiconductor Manufacturing (MASM) subconference will be given particular attention at WSC 2022.

“Reimagine Tomorrow” relies on significant advancement from many fields such as modeling, experimentation and data analysis coming together to tackle various challenges. We invite scientific papers and case studies that highlight innovations in both theory and applications, with a specific focus on the use of not just simulation but also related technologies such as AI and VR.

A number of exciting changes will be implemented to make WSC 2022 even more attractive. Case studies will be integrated into the full paper tracks to enhance cross-fertilization between academia and industry, further supported by a Case Study Competition. The program roster will also be significantly enhanced to enable a productive hybrid format that accommodates the needs of virtual attendees from time zones across the entire globe.”
2021 AWARD RECIPIENTS

Peter W. Glynn Receives the 2021 Lifetime Professional Achievement Award

James R. Wilson (Chair, on behalf of the 2021 LPAA Committee)

Peter W. Glynn, the Thomas Ford Professor of Engineering in the Department of Management Science & Engineering at Stanford University, received the 2021 Lifetime Professional Achievement Award (LPAA) from the INFORMS Simulation Society. The award was presented at the opening session of the 2021 Winter Simulation Conference (WSC), which was held both online and in person, on December 13, 2021. The award selection committee for 2021 was chaired by James R. Wilson (North Carolina State University), with members David Goldsman (Georgia Institute of Technology) and Pierre L’Ecuyer (Université de Montréal).

The highest honor of the INFORMS Simulation Society, the Lifetime Professional Achievement Award is given at most annually to recognize an individual for major contributions to the field of simulation that are sustained over most of a professional career, with the critical consideration being the total impact of those contributions on computer simulation. An individual’s achievements may fall in one or more of the following categories:

1. contributions to research,
2. contributions to practice,
3. dissemination of knowledge,
4. development of software or hardware,
5. service to the profession, and
6. advancement of the status or visibility of the field.

Peter Glynn's multifaceted contributions to the field of computer simulation were memorably summarized by Ward Whitt (Columbia University) in a single sentence: “In my opinion, Peter is the preeminent contributor to the theoretical foundations of stochastic simulation.” Yet this striking assessment is perhaps an understatement in some respects. Over the past 40 years, Peter’s research contributions have also had a significant impact on the larger disciplines of operations research and the management sciences (ORMS), applied statistics, applied probability, and indeed all the scientific, engineering, and technological disciplines. Moreover, Peter has followed up his numerous theoretical and methodological contributions with ongoing,
in-depth advice to many organizations that are seeking to apply those contributions to a broad diversity of critical problems currently facing society. Peter has made equally significant contributions to the dissemination of knowledge through his extensive archival publications; his lectures worldwide; and his teaching and advising of a large number of students, of whom many have already had distinguished careers. Peter has capped this extraordinary performance with service to all the aforementioned disciplines as editor-in-chief of some of the leading journals in those disciplines as well as an editor of two series of books published by one of the world’s leading publishers in science, the humanities, technology, and medicine. In the rest of this article, we elaborate on these contributions.

Beginning with his doctoral dissertation research, Peter and many of his students and collaborators have established a rigorous foundation for representing the dynamic structure of a regenerative simulation using an appropriate (discrete-time) general-state-space Markov chain. Beyond having a significant impact on the regenerative method of analysis for steady-state simulations, this work provides a basis for the analysis of Markov chain Monte Carlo methods in statistics.


In 1989 Peter and Donald Iglehart published the article titled “Importance Sampling for Stochastic Simulations” in Management Science. This article is a cornerstone in the development of importance-sampling estimators computed from (dependent) stochastic processes. Moreover, it has stimulated the design of efficient rare-event simulation algorithms, which have been extensively applied to the performance evaluation of complex queueing networks and high-reliability systems such as computer networks and nuclear power plants. A related paper on rare-event simulation titled “Variance Reduction in Mean Time to Failure Distributions” was published by Peter and his collaborators Perwez Shahabuddin, Victor Nicola, Philip Heidelberger, and Ambuj Goyal in the Proceedings of the 1988 Winter Simulation Conference. A clear indication of the impact of Glynn and Iglehart (1989) and Shahabuddin et al. (1988) on simulation theory and practice is that as of May 2, 2022, these two articles had accumulated 833 citations in Google Scholar.

Sensitivity analysis and stochastic optimization are two closely related areas in which Peter’s research contributions have been of central interest to the international simulation community. Peter is one of the pioneers in the development of the likelihood-ratio method for gradient estimation as documented in his article titled “Likelihood Ratio Gradient Estimation: An Overview,” which appeared in the Proceedings of the 1987 Winter Simulation Conference, and in his article titled “Likelihood Ratio Gradient Estimation for Stochastic Systems,” which appeared in the Commu-
cations of the ACM in 1990. These seminal articles have also had a significant impact on the area of stochastic optimization as evidenced by Peter's article titled “Stochastic Approximation for Monte Carlo Optimization,” which appeared in the Proceedings of the 1986 Winter Simulation Conference. As of May 2, 2022, Glynn (1986, 1987, 1990) had collectively accumulated 949 citations in Google Scholar.

In the analysis of steady-state simulations, one of the long-standing problems is the detection and elimination of an initial transient. In 1992 Peter and his collaborators Søren Asmussen and Hermann Thorisson published a groundbreaking article titled “Stationarity Detection in the Initial Transient Problem” in the ACM Transactions on Modeling and Computer Simulation (TOMACS). To avoid initialization bias, this article provides the first exact algorithm for sampling from the equilibrium distribution of a finite-state, irreducible Markov chain in which the only known parameter is the number of states. This article has spawned many lines of research not only for steady-state simulation analysis but also for sampling from the solutions of stochastic differential equations. As of May 2, 2022, Asmussen, Glynn, and Thorisson (1992) had accumulated 157 citations in Google Scholar.

The foregoing discussion merely scratches the surface of Peter's research contributions so as to exemplify the enduring interest in that work. In the following observations we find the ultimate evidence of the impact of Peter's research on many scientific, engineering, and technological disciplines well beyond the field of simulation: (i) in 1998 he was elected a Fellow of the Institute of Mathematical Statistics (IMS); (ii) in 2007 he was elected a Fellow of INFORMS; (iii) in 2010 he and Søren Asmussen received the John von Neumann Theory Prize from INFORMS; and (iv) in 2012 he was elected a member of the National Academy of Engineering.

The impact of Peter's contributions to practice is commensurate with the impact of his contributions to research. In particular he has worked closely on a continuing basis with many commercial, governmental, medical, and research organizations that are seeking to apply his research and expertise to a wide range of urgent technical and societal problems. A brief list of some of these application areas is the following: modeling the natural history of breast cancer, modeling the demand for hospital care by COVID-19 patients, predicting the durations of pediatric surgeries, managing power consumption of networks of computer chips, managing capacity and inventory in manufacturing systems, analyzing diversity in organizations and communities, modeling water releases in a network of reservoirs, and analyzing the trading of securities. From a broader perspective, Peter has made significant contributions to the practice of simulation and ORMS as well as science, engineering, and technology in general.

Peter's achievements in the dissemination of knowledge encompass his published work; his distinguished lectures; and his greatest achievement of all—his teaching and advising of students. To provide more perspective on the full significance of Peter's publications over the past 40 years, we note that as of May 2, 2022, Peter had accumulated 18,500 citations in Google Scholar with an h-index of 66. Altogether he has published 185 archival journal articles, 26 book chapters, 2 books, and 98 refereed proceedings papers. Beyond Peter's publications that were previously discussed, the following publications warrant special mention. Peter and his students or collaborators received the INFORMS Simulation Society's Outstanding Simulation

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Publication Award three times (in 1993, 2009, and 2015, respectively) for the following publications:


Similarly, Peter and his students or collaborators received the INFORMS Applied Probability Society's Best Publication Award for the following article:


A common theme running through many of the letters of support for Peter’s LPAA nomination is that Asmussen and Glynn (2007) has become a definitive doctoral-level textbook on stochastic simulation, having accumulated 1,919 citations in Google Scholar.

Peter has been particularly effective in disseminating knowledge about simulation and in advancing the status and visibility of the field though his distinguished lectures delivered at universities, conferences of professional societies, and research organizations worldwide. The following lectures deserve special mention:

- IMS Medallion Award and Lecture, Institute of Mathematical Statistics, 1995;
- Lecture, Delft University of Technology, The Netherlands, 2007;
- Wasserstrom Lecture, Northwestern University, 2013;
- Alan B. Pritsker Scholars Distinguished Lecture, Purdue University, 2014;
- Titans of Simulation Talk: “Uncertainty and Risk: Simulations, Stochastics and Statistics,” Winter Simulation Conference, 2019; and
- Philip McCord Morse Lectureship Award, INFORMS Annual Meeting, 2020.

The eminent mathematician Paul Halmos made the following trenchant observation about teaching and advising at the doctoral level: “Directing a Ph.D. student is a kind of teaching, perhaps the most challenging and interesting kind.” In this respect Peter is certainly one of the most effective teachers in the international simulation community. As of October 2021, Peter had completed the supervision of 48 Ph.D. students. Among Peter's former students, 26 hold senior positions in commercial, medical, and research organizations worldwide. Moreover, 22 of Peter's former students are faculty members at leading universities in Australia, Hong Kong, India, Lebanon, Mexico, Taiwan, the United Kingdom, and the United States. Among Peter’s former students in academia, 8 are assistant professors, 2 are associate professors, 8 are full professors, and 4 are chaired full professors. Peter Glynn and his former students have had an unsurpassed impact on the dissemination of knowledge about simulation and on the advancement of the status and visibility of the field; and that impact will almost surely be sustained in all its dimensions over a remarkably long period of time.
We close this discussion with an appreciation of Peter’s extraordinary service to the scientific, engineering, and technological professions over the past 40 years. Peter served as Co-Editor of the *Journal of Computational Finance* from 1997 to 2001. He served as the Founding Editor-in-Chief of *Stochastic Systems*, the flagship journal of the INFORMS Applied Probability Society, during the period 2009–2014. The latter tour of duty was soon followed by Peter’s service as Editor-in-Chief of the *Journal of Applied Probability*, the oldest journal devoted to research in the field of applied probability, during the period 2016–2018; and at the same time Peter served as Editor-in-Chief of the companion journal *Advances in Applied Probability*. He has also served on the editorial boards (or editorial advisory boards) of *Applied Stochastic Models and Data Analysis* (1985–1991); *Stochastic Models* (1987–1998); *Queueing Systems: Theory and Applications* (2010–present); *Stochastic Systems* (2017–present); and *Mathematics of Operations Research* (2017–present). Beyond his editorial work on archival journals, Peter has also had leading editorial roles for the following series of books:

- Editor (with Stephen M. Robinson) of the Springer Series in Operations Research (1995–2004); and

Peter’s service to the simulation profession in particular requires special elaboration. In the foregoing discussion of Peter’s publications on modeling and analysis of discrete-event simulations using GSMPs, we see that one of his seminal articles on this topic was published in the WSC *Proceedings*. Similarly in the discussion of Peter’s articles on importance sampling, we see that one of the articles was published in what is now called the Stochastic Models and Simulation Department of *Management Science*, while the other article was published in the WSC *Proceedings*. In the discussion of Peter's articles on sensitivity analysis and stochastic optimization, we see that two of the key articles were published in the WSC *Proceedings*. Finally, Peter’s pioneering article on the initial transient problem was published in *TOMACS*. Peter has consistently published much of his high-profile work in the leading publication outlets for simulation theory and practice; and by doing this for 40 years, Peter has significantly advanced the status and visibility of not only the simulation literature but also the entire simulation profession.

We in the international simulation community are among the main beneficiaries of Peter Glynn’s remarkable contributions to science, engineering, and technology over the past 40 years. His career epitomizes the highest ideals of the Lifetime Professional Achievement Award of the INFORMS Simulation Society.
Theresa Roeder Receives the 2021 Distinguished Service Award

Susan Sanchez (Chair), Michael C. Fu, and Christos Alexopoulos

The 2021 Distinguished Service Award Committee (Susan Sanchez, Michael Fu, Christos Alexopoulos) is happy to present the 2021 award to Susan Sanchez, Professor in the Lam Family College of Business, San Francisco State University. Theresa Roeder is truly deserving of the I-SIM Distinguished Service Award. In her nearly two decades of exemplary service, she has always taken on activities that are meaningful and she never backs away from jobs that require a lot of effort. As Program Chair in 2020, Theresa did a fantastic job of making the conference a huge success as it shifted to be a virtual conference. Some special aspects of Theresa’s service are her dedication and hard work, as evidenced by the outstanding job she has done in all her service roles; her commitment to educating people; and her interests in broadening the simulation community through diversity efforts. The following are a few selected highlights:

- Service roles in I-Sim continuously since 2004:
  - Committee on Underrepresented Minorities & Women
  - Secretary
  - Newsletter Editor
  - I-SIM representative to the INFORMS Subdivision Council

- WSC leadership roles since 2005:
  - WSC Ph.D. Colloquium & Poster Session
  - Lead Proceedings Co-editor
  - WSC ’20 Program Chair

- Long-time service to INFORMS and the external community

Jose Blanchet, Coralia Cartis, Matt Menickelly, and Katya Scheinberg win 2021 Best Simulation Publication Award

Jian-Qiang Hu (Chair), Pierre L’Ecuyer, and Enlu Zhou

The INFORMS Simulation Society’s Outstanding Publication Award recognizes exceptional contributions to the simulation literature in the form of articles, books,
book chapters and monographs, copyrighted between 2018 and 2020. The award committee, consisting of Jian-Qiang Hu (Chair), Pierre L'Ecuyer, and Enlu Zhou, are pleased to present the 2021 Award to Jose Blanchet, Coralia Cartis, Matt Menickelly, and Katya Scheinberg for their paper: “Convergence Rate Analysis of a Stochastic Trust-Region Method via Supermartingales,” which appeared in INFORMS Journal on Optimization, 1(2) (2019), 92–119. Iterative simulation-based stochastic optimization algorithms are a very important class of tools not only in the simulation community, but in many other areas including machine learning, where they are really a central tool for learning good neural network parameters. Their convergence has been analyzed at length in certain cases, such as for the classical stochastic approximation method under certain simplifying assumptions. But the methods that currently work well in large applications such as machine learning are more complicated and the simplifying assumptions typically do not hold. Stochastic trust-region methods with adaptive step sizes, can have several variants that are hard to analyze theoretically.

This paper provides a general framework for rigorous convergence analysis of such methods in terms of the expected number of iterations required to reach a neighborhood of the optimal solution, in a very general setting that covers many algorithms, under the assumption that the gradient (or Hessian, in the second-order case) can be estimated with sufficient accuracy. The analysis uses Lyapunov functions and martingale analysis to provide bounds on the expected number of iterations. The approach can potentially apply to many other simulation-optimization algorithms. This paper has attracted a lot of interest in both the machine learning and optimization communities. It is among a set of papers by some of these authors on the convergence of these types of stochastic optimization algorithms in slightly different frameworks. These papers together constitute a very important and impactful contribution overall. Congratulations to the authors for a remarkable piece of work!

Shengyi He Receives the 2021 WSC Ph.D. Colloquium I-Sim Best MS/OR-Focused Student Paper Award
Xiaowei Zhang, Communications Editor

The I-Sim best MS/OR-focused student paper is: “Higher-Order Coverage Error Analysis for Batching and Sectioning” by Shengyi He (Columbia University) and Henry Lam (Columbia University)

Geri Dimas, Ana Moreira, and Kimia Vahdat Receive the 2021 CUMW WSC Diversity Awards
Lucy Morgan (Chair)

To improve outreach and diversity among young researchers in the field of simulation, the INFORMS

Geri Dimas, Ana Moreira, and Kimia Vahdat
Simulation Society is proud to award sponsorship each year to assist graduate students to attend the Winter Simulation Conference (WSC). Each awardee attended the WSC2021 without registration fees and presented their work either in person or virtually. Congratulations go to our 2021 awardees: Geri Dimas, Worcester Polytechnic Institute (US), Ana Moreira, Auburn University (US) and Kimia Vahdat, North Carolina State University (US).
2022 CALLS FOR PROPOSALS AND NOMINATIONS

2022 Lifetime Professional Achievement Award

Pierre L’Ecuyer

To recognize major contributions to the field of simulation that are sustained over most of a professional career, with the critical consideration being the total impact of those contributions on computer simulation, the INFORMS Simulation Society (I-Sim, http://connect.informs.org/simulation/home) has established the Lifetime Professional Achievement Award (LPAA). This award can be given at most once annually. An individual’s contributions may fall in one or more of the following areas:

- contributions to research,
- contributions to practice,
- dissemination of knowledge,
- development of software or hardware,
- service to the profession, and
- advancement of the status or visibility of the field.

Anyone except current Award Committee members is eligible to win the award, although individuals selected for this award should normally be in or near their retirement. Persons cannot be nominated posthumously. A nomination will be fully considered in the year it was received. If unsuccessful the nominee will be reconsidered for up to two further years if not deceased. Once under consideration in a given year and if successful the award may be received posthumously. Nominations may be submitted by anyone (including self-nominations), but they may not be made anonymously. The burden of offering evidence of merit falls on the nominator. Each nomination should include:

- the nominee’s complete resumé;
- a clear-cut, comprehensive description of the nominee’s major contributions to the profession, with complete supporting documentation; and
- at least three, but no more than six, letters of endorsement providing evidence of the significance and magnitude of the nominee’s professional achievements. (Each endorsement letter must come from a single person.)

The committee may at its discretion widen those under consideration for the award to include other eligible persons who were not nominated under the nomination call process.

The deadline for nominations is September 1, 2022. Nominators should alert the committee chair (Pierre L’Ecuyer, lecuyer@iro.umontreal.ca) of their forthcoming nomination at least one month prior to the deadline. The nomination should be submitted as a PDF file attachment to an email to the committee chair. Any questions should be directed to the committee chair.

A list of previous award recipients, and more details about the award process, can be
This year’s LPAA Award Committee consists of Pierre L’Ecuyer (chair, DIRO, Université de Montréal), James R. Wilson (North Carolina State University), and Peter W. Glynn (Stanford University).

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### 2022 Distinguished Service Award

*Christos Alexopoulos*

To recognize individuals who have provided long-standing, exceptional service to the simulation community, the INFORMS Simulation Society annually sponsors a Distinguished Service Award, given to at most one person each year. This award is for sustained service to the simulation community over at least fifteen to twenty years or longer, and acquitted with distinction. The concept of service for this award does not include teaching or research contributions. Areas of volunteer service include, for example: (i) elected offices in simulation societies; (ii) editorial responsibilities such as area editor or editor-in-chief, for simulation; (iii) responsibilities such as program chair, proceedings editor, general chair, or member of the program or organizing committee, for conferences involving simulation; (iv) appointed positions for simulation-related activities, such as newsletter editor or serving on committees; and (v) undertakings and actions that promote simulation.

Nominations for the award to be given in 2022 can be made by anyone and should be sent by October 15, 2022, to the Distinguished Service Award Committee Chair:

Christos Alexopoulos  
Georgia Institute of Technology  
christos@isye.gatech.edu

The other committee members are Susan Sanchez (Naval Postgraduate School) and Theresa Roeder (San Francisco State University).

Letters of nomination should identify the nominee’s areas of exceptional service, detailing the activities for which the nominee is believed to deserve this award. The nominator has the responsibility for justifying why the nominee should receive this award. If given, the award will be presented at the Winter Simulation Conference, December 11–14, 2022: [http://www.wintersim.org](http://www.wintersim.org).

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### 2022 Outstanding Simulation Publication Award

*Enlu Zhou*

To recognize outstanding contributions to the simulation literature, the INFORMS Simulation Society annually sponsors an Outstanding Simulation Publication Award. Nominations for the award to be given in 2022 should be sent by September 1, 2022 to the Awards Committee Chair:

Enlu Zhou  
Georgia Institute of Technology  
enlu.zhou@isye.gatech.edu
The other committee members are Jian-Qiang Hu (Fudan University, China) and Jose Blanchet (Stanford University).

Anyone is eligible to win the award. Journal articles, proceedings articles, books, book chapters, and monographs copyrighted in 2019, 2020 and 2021 and written in English are eligible for the award. Technical reports, research memoranda, working papers, theses, and dissertations are not eligible. Nominations for the award may be made by anyone, including the author(s), but they may not be made anonymously. Nominations should include:

- a copy of the written work, including all bibliographical information (in the case of books, the Awards Committee will obtain copies);
- a short statement suitable for reading at the award ceremony if the work is chosen; and
- any other information thought relevant by the nominator.

If given, the Outstanding Simulation Publication Award will be presented at the Winter Simulation Conference, Singapore, December 11–14, 2022. The Award carries with it a cash prize of $500. A list of previous winners is available at the web site: http://connect.informs.org/simulation/awards/simulation-publication-award/awardees.

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### 2022 CUMW WSC Diversity Award

**Chang-Han Rhee**

To improve outreach and diversity among young researchers in the field of simulation, the INFORMS Simulation Society is proud to award sponsorship each year to assist graduate students or postdocs to attend the Winter Simulation Conference (WSC). We especially encourage applications from women, underrepresented minorities, international students, or students who may add to the diversity of the community in other ways; however this award is not limited to specific genders or ethnicity groups. This year WSC is following a hybrid format with a choice of attending virtually or in person. Applicants can therefore opt to use the award as an honorarium to cover travel expenses or, if attending virtually, have their registration fees refunded.

The WSC Diversity Committee is looking forward to receiving high-quality applications for the 2022 WSC meeting in December. Please fill out the [application form](http://connect.informs.org/simulation/awards/simulation-publication-award/awardees), which requires a letter of intent written by the applicant, and a letter of recommendation written by an adviser, and submit the form by September 16, 2022.

Chang-Han Rhee  
Chair of the WSC Diversity Committee  
Northwestern University  
chang-han.rhee@northwestern.edu  

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I-SIM BUSINESS MEETING MINUTES

INFORMS Simulation Society Business Meeting:
2021 Winter Simulation Conference (Virtual Conference), December 14, 2021
Ilya O. Ryzhov

At 8:18 PM EST, the meeting was convened by Jeff Hong, President of I-SIM. There were 35 in-person attendees and 28 attendees by Zoom, for a total of 63.

At 8:19, Jeff Hong listed the officers and council members of I-SIM, and welcomed two new council members, Chun-Hung Chen and Giulia Pedrielli, replacing Emily Lada and Henry Lam.

At 8:20, Ilya Ryzhov, Secretary of I-SIM, reported on membership. As of December 2021, I-SIM had 419 members, of whom 331 were regular/retired and 88 were students. These numbers are similar to those reported at INFORMS 2021, and higher than the minimum of 379 total members observed in April 2021. However, membership continues to be far below pre-pandemic levels, mostly because student memberships have declined by over 85%.

At 8:21, Canan Gunes Corlu, Treasurer of I-SIM, reported on finances. The report was unchanged from INFORMS 2021.

At 8:22, Jie Xu, Vice President of I-SIM, presented the following upcoming conferences and events:

- INFORMS Business Analytics Conference, 4/3/22–4/5/22 in Houston, TX;
- INFORMS Business Analytics Conference, 4/3/22–4/5/22 in Houston, TX;
- CORS/INFORMS International Conference, 6/5/22–6/8/22 in Vancouver, Canada;

The 2022 conferences are currently planned as in-person events.

At 8:23, Russell Barton presented an update on the Computer Simulation Archive. The archive was established in 1998. It is housed at NC State and contains video interviews with pioneering researchers in the field. 2021 was a difficult year for the Archive; due to COVID, normal library staffing and hiring of students for digitization has been limited. New interviews are planned, and some additional materials have been obtained.

Starting at 8:25, reports were presented for several journals:

- Henry Lam presented on behalf of Bruno Tuffin on the INFORMS Journal on Computing, noting a recent uptick in submissions.
- Navonil Mustafee reported on the Journal of Simulation. The journal published two special issues in 2021, on model-based governance and sustainability, and modeling/simulation in the cloud computing era, respectively. A special issue on hybrid simulation is planned. The journal will expand to six issues per year. The journal has also established a best paper award, the KJ Tocher Medal; the first recipients of this award for the period 2019–2020 were Eric Applegate, Guy Feldman, Susan Hunter, and Raghu Pasupathy, for the paper “Multi-objective
ranking and selection: Optimal sampling laws and tractable approximations via SCORE” (vol. 14, no. 1).
• Jie Xu reported on IIE Transactions.
• Jeff Hong reported on the Simulation area of Operations Research. The number of submissions during 2021 increased to record levels, by more than 50% relative to the period 2018–2020, during which submissions were stable. Most submissions originate from the simulation research community.
• Shane Henderson reported on Stochastic Systems, requesting ideas for special issues, especially those on the interface between applied probability and simulation. A joint special issue with Service Science, emphasizing interdisciplinary interest, is in the works.

At 8:40, Jeff Hong asked for new business. Andrew Hall, leading the INFORMS Conference on Security on August 28-30 in the DC area, described the conference and encouraged submission of any work related to homeland security, cybersecurity, supply chain security, and related topics.

At 8:40, Jeff Hong asked for new business. Andrew Hall, leading the INFORMS Conference on Security on August 28-30 in the DC area, described the conference and encouraged submission of any work related to homeland security, cybersecurity, supply chain security, and related topics.

• The 2021 WSC Diversity Award was presented by Sara Shashaani, committee chair. The recipients were Geri Dimas (Worcester Polytechnic University), Ana Moreira (Auburn University), and Kimia Vahdat (North Carolina State University).
• The 2021 I-SIM Outstanding Simulation Publication was presented by Pierre L’Ecuyer. The recipients were Jose Blanchet, Coralia Cartis, Matt Menickelly, and Katya Scheinberg for the paper “Convergence rate analysis of a stochastic trust-region method via supermartingales,” INFORMS Journal on Optimization 1(2), 92–119. This work is representative of a set of papers by some of these authors on the analysis of this class of algorithms, which are very important in optimization as well as machine learning. The paper offers a general framework for the analysis of such algorithms.
• The 2021 I-SIM Distinguished Service Award was presented by Susan Sanchez. The recipient was Theresa Roeder. She has held continuous service roles in I-SIM since 2004, including the Committee on Underrepresented Minorities and Women, I-SIM Secretary, Newsletter Editor, and I-SIM Representative to the INFORMS Subdivision Council. She has also held WSC leadership roles since 2005, including the Ph.D. Colloquium and poster session, co-editor of the WSC proceedings, and 2020 program chair.
• The 2021 I-SIM Lifetime Professional Achievement Award was presented by James Wilson. The recipient was Peter Glynn from Stanford University, “the preeminent contributor to the theoretical foundations of stochastic simulation.” His research contributions include analysis of regenerative simulation methods; importance sampling and rare event simulation; likelihood ratio methods; and output analysis using time series. He has supervised 48 doctoral students, of whom 22 are faculty members, and served as the editor-in-chief of the Applied Probability journals, as well as the founding editor-in-chief of Stochastic
Systems. He was awarded I-SIM's Outstanding Publication Award on three separate occasions (1993, 2008, 2016).

At 9:33, the meeting adjourned.

**Attendees on Zoom:** To deter email harvesting, @ has been replaced with <of>.

- Jeff Hong - Fudan University - hong_liu<of>fudan.edu.cn
- Ilya Ryzhov - University of Maryland - iryzhov<of>rhsmith.umd.edu
- Samuel Jia - Tsinghua University - jiaqs<of>tsinghua.edu.cn
- Canan Gunes Corlu - Boston University - canan<of>bu.edu
- Jose Blanchet - Stanford University - jose.blanchet<of>stanford.edu
- Yijie Peng - Peking University - pengyijie<of>pku.edu.cn
- James Wilson - NC State - jwilson<of>ncsu.edu
- Theresa Roeder - SF State University - tmroeder<of>sfsu.edu
- Siyang Gao - City University of Hong Kong - siyangao<of>cityu.edu.hk
- Peter Glynn - Stanford University - glynn<of>stanford.edu
- Pierre L'Ecuyer - Université de Montréal - lecuyer<of>iro.umontreal.ca
- Jun Luo - Shanghai Jiao Tong University - jluo_ms<of>sjtu.edu.cn
- Guangwu Liu - City U. Hong Kong - msgw.liu<of>cityu.edu.hk
- Xiaowei Zhang - Hong Kong University - xiaowei<of>hk.hk
- Coralia Cartis - University of Oxford - coralia.cartis<of>maths.ox.ac.uk
- Guangxin Jiang - Harbin Institute of Technology - gxjiang<of>hit.edu.cn
- JF Fang
- Burla Ondes - Purdue University - bondes<of>purdue.edu
- Susan Hunter - Purdue University - susanhunter<of>purdue.edu
- Henry Lam - Columbia University - khl2114<of>columbia.edu
- Haihui Shen - Shanghai Jiao Tong University - shenhaihui<of>sjtu.edu.cn
- Raghu Pasupathy - Purdue University - pasupath<of>purdue.edu
- Dashi Singham - Naval Postgraduate School - dsingham<of>nps.edu
- Peter Haas - U. Massachusetts Amherst - phaas<of>cs.umass.edu
- Xi Chen - Virginia Tech - xchen.ise<of>vt.edu
- Zhaolin Hu - Tongji University - russell<of>tongji.edu.cn
- Dave Goldsman - GA Tech - sman<of>gatech.edu
- Katya Scheinberg - Cornell University - katyas<of>cornell.edu

**In-person attendees:**

- Jie Xu - George Mason University - jxu13<of>gmu.edu
- Giulia Pedrielli - Arizona State University - gpedriel<of>asu.edu
- Zeyu Zheng - UC Berkeley - zyzheng<of>berkeley.edu
- Barry Nelson - Northwestern University - nelsonb<of>northwestern.edu
- Harun Avci - Northwestern University - harunavci2024<of>northwestern.edu
- Kimia Vahdat - NC State - kvahdat<of>ncsu.edu
- Ed Hua - MITRE Corporation - ehua<of>mitre.org
- Nathaniel Bastian - US Military Academy - nathaniel.bastian<of>westpoint.edu
- Andy Hall - Marymount University - ahall<of>marymount.edu
- Navonil Mustafee - University of Exeter - n.mustafee<of>exeter.ac.uk
- Young-Jun Son - University of Arizona - son<of>sie.arizona.edu
- Yunsoo Ha - NC State - yha3<of>ncsu.edu
I-Sim is holding elections for the following offices:

- Vice-President/President-Elect
- Secretary
- Treasurer
- Council (2 positions)

The Vice-President / President-Elect serves for six years: two years as Vice-President, two years as President, and two years as Past President. The Secretary, Treasurer, and Council members all serve two-year terms. There are four council members in total, serving on a rotating basis (two elected each year). Per the I-Sim Bylaws, at least one council member elected during an even year must be from outside the United States. All positions start July 1, 2022.

To vote in the election, please return the ballot below by e-mail to:
Raghu Pasupathy (Purdue University)
E-Mail: pasupath@purdue.edu

The deadline to submit a ballot is June 20, 2022. Please include the words “I-Sim Ballot” in the subject line. The candidates are presented in alphabetical order.

**VICE-PRESIDENT/PRESIDENT ELECT** (vote for one)

_____ Ilya Rhyzhov
_____ Enlu Zhou

**SECRETARY** (vote for one)

_____ Henry Lam
_____ Eunhye Song

** TREASURER** (vote for one)

_____ Yijie Peng
_____ Sara Shashaani

**COUNCIL** (vote for up to two)

_____ Bahar Biller
_____ David Eckman
_____ Chang-han Rhee
_____ Zeyu Zheng

Your vote will be kept confidential. Your e-mail address will serve as your signature.
Candidate Biographies

VICE-PRESIDENT/PRESIDENT ELECT

Ilya O. Ryzhov is an Associate Professor of Operations Management in the Decision, Operations and Information Technologies department of the Robert H. Smith School of Business at the University of Maryland. His research primarily focuses on simulation optimization and statistical learning, with applications in business analytics, revenue management, and nonprofit/humanitarian operations. He is a coauthor of the book Optimal Learning (Wiley, 2012). His work was recognized in WSC’s Best Theoretical Paper Award competition on three separate occasions (winner in 2012, finalist in 2009 and 2016), and he received I-SIM’s Outstanding Publication Award in 2017. He served on the I-SIM Council during 2018-2019, and was I-SIM Secretary during 2020-2022.

Enlu Zhou is an Associate Professor in the School of Industrial and Systems Engineering at Georgia Institute of Technology. Her research interests include simulation, stochastic optimization, and stochastic control. Enlu has taught courses on Stochastic Processes, Simulation, Probabilistic Models, and Monte Carlo Methods. Enlu has served as the I-SIM Newsletter associate editor, as a member of the I-SIM Council, and as the secretary of the I-SIM Society. Enlu is a regular participant at the Winter Simulation Conference (WSC), was a proceedings editor of the 2016 WSC Proceedings, and served as a track coordinator of the Simulation Optimization track in 2011 and the Model Uncertainty and Robust Simulation track in 2020-2022. Enlu also served as the track coordinator of the Modeling and Simulation track at the IIESE Annual Conference in 2012. Enlu has served and is currently serving as an associate editor of Journal of Simulation, IEEE Transactions on Automatic Control, and Operations Research. More information about Enlu Zhou can be found at her website: https://www.enluzhou.gatech.edu/.

SECRETARY

Henry Lam is an Associate Professor in the Department of Industrial Engineering and Operations Research at Columbia University. He received his PhD degree in statistics from Harvard University. Before joining Columbia, he was an Assistant Professor in the Department of Industrial and Operations Engineering at the University of Michigan and, before then, the Department of Mathematics at Boston University. Henry’s research interests include Monte Carlo methods, uncertainty quantification, data-driven optimization and rare-event analysis. His works have been recognized by several venues such as the NSF CAREER Award, NSA Young Investigator Award, JP Morgan Chase Faculty Research Award, Adobe Faculty Research Award, and paper awards including WSC Best Theoretical Paper 2018, INFORMS Junior Faculty Interest Group Best Paper Competition (Second Prize in 2016 and Finalist in 2012), INFORMS George Nicholson Student Best Paper Competition (Honorable Mention in 2010), INFORMS Doing Good with Good OR Competition (Finalist by supervised student in 2021) and INFORMS Undergraduate Operations Research Prize (Finalist

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Eunhye Song is the Harold and Inge Marcus Early Career Assistant Professor in Industrial and Manufacturing Engineering at the Penn State University. She earned her PhD degree in Industrial Engineering and Management Sciences at Northwestern University in 2017. Her research interests include design of simulation experiments, model risk quantification and simulation optimization. She won the Honorable Mention at the 2020 INFORMS JFIG Paper Competition and the NSF CAREER Award in 2021. She had served on the I-SIM’s Underrepresented Minorities and Women Committee from 2018 to 2020, and on the organizing committee of the 2021 I-SIM Research Workshop. She is currently serving as an Associate Editor of the Simulation Area of INFORMS Journal on Computing and as a proceeding editor of the WSC 2022. She will be serving on the WSC 2023 registration committee.

TREASURER

Yijie Peng received his Ph.D. in Management Science from Fudan University in 2014 and his B.S. in Mathematics from Wuhan University in 2007. He is currently an Associate Professor in Guanghua School of Management at Peking University (PKU), and he’s also affiliated to Institute of Artificial Intelligence and National Institute of Healthcare Bigdata both at PKU. Yijie’s research interests include stochastic simulation and optimization, artificial intelligence, and healthcare. He has published in high-quality journals including Operations Research, INFORMS Journal on Computing, and IEEE Transactions on Automatic Control, and won 2019 INFORMS Outstanding Simulation Publication Award from INFORMS Simulation Society. He serves as an Associate Editor for Asia-Pacific Journal of Operational Research and IEEE Control Systems Society. He has been actively attended Winter Simulation Conference and serves as a Proceedings Editor and track coordinator of Simulation and AI track for 2022 Winter Simulation Conference.

Sara Shashaani is an Assistant Professor at Edward P. Fitts Department of Industrial and Systems Engineering at North Carolina State University. She received her Industrial Engineering Ph.D. degree in 2016 from Purdue University and has a master’s and bachelor’s degree in that discipline from Virginia Tech and Iran University of Science and Technology. Before joining the NC State faculty, she was a postdoctoral research fellow at the Department of Industrial and Operations Engineering of the
University of Michigan. Her current research extends adaptive sampling strategies for simulation optimization, where the objective function is noisy and unknown, and derivative-free optimization, where no structure about the underlying function is known or available even with noise. She also studies using Monte Carlo methodology to improve probabilistic prediction modeling and feature selection for regression and classification problems.

COUNCIL

Bahar Biller is a Principal Operations Research Specialist at the Advanced Analytics Center of Excellence of SAS Institute. In this role, she collaborates with clients, product managers, and researchers to improve the efficiency and resiliency of industrial supply chains and healthcare and life sciences operations. Previous roles include Senior Operations Researcher at General Electric’s Global Research Center and Associate Professor at Carnegie Mellon University’s Tepper School of Business. Bahar received a National Science Foundation CAREER award in 2006 and the Presidential Early Career Award for Scientists and Engineers in 2007. She is a past-President of the INFORMS Simulation Society and the General Chair of Winter Simulation Conference 2023.

David Eckman is an Assistant Professor in the Wm Michael Barnes ’64 Department of Industrial and Systems Engineering at Texas A&M University. He received a Ph.D. in Operations Research in 2019 from Cornell University and was a postdoctoral research scholar at Northwestern University from 2019–2021. His research interests deal with optimization and output analysis for stochastic simulation models. He is a co-developer of SimOpt, a testbed of simulation optimization problems and solvers, and is a co-chair for the Analysis Methodology track for the 2022 Winter Simulation Conference. He received the Best Student Paper Award at the 2018 Winter Simulation Conference and his webpage is http://eckman.engr.tamu.edu/.

Chang-Han Rhee is an Assistant Professor in Industrial Engineering and Management Sciences at Northwestern University. Before joining Northwestern University, he was a postdoctoral researcher in the Stochastics Group at Centrum Wiskunde & Informatica and Industrial & Systems Engineering and Biomedical Engineering at Georgia Tech. He received his Ph.D. in Computational and Mathematical Engineering from Stanford University. His research interests include stochastic simulation, applied probability, experimental design, and machine learning. He served on the editorial board of INFORMS Journal on Computing, WSC PhD Colloquium Committee, WSC Diversity Award Committee, George Nicholson Prize Committee, and Applied Probability Society Best Student Paper Prize Committee. He is a recipient of the 2022 NSF CAREER Award, 2016 INFORMS Simulation Society Outstanding Publication Award, 2012 Winter Simulation Conference Best Student Paper Award (MS/OR focused), and a finalist of 2013 INFORMS George Nicholson Student Paper Competition.

Zeyu Zheng is an Assistant Professor in the Department of Industrial Engineering and Operations Research at the University of California Berkeley. His research
interest includes the theory and methodological aspects of Monte Carlo simulation and simulation optimization. Zeyu Zheng is a regular participant at the Winter Simulation Conference (WSC), previously serving as program committee members and co-proceedings editor. Before joining the current position, Zeyu received a Ph.D. in Management Science and Engineering at Stanford University in 2018, an M.A. in Statistics at Stanford University in 2016, and a B.S. in Mathematics at Peking University in 2012.
UPCOMING EVENTS

Event Calendar
Xiaowei Zhang

IISE Annual Conference & Expo 2022
May 21–24, 2022, Seattle, WA
https://www.iise.org/Annual/details.aspx?id=40887

2022 CORS/INFORMS International Conference
June 5–8, 2022, Vancouver, CA
http://meetings2.informs.org/wordpress/2022international/

http://learningtheory.org/colt2022/

The 21st INFORMS Applied Probability Conference (INFORMS-APS)
July 6–8, 2022, Nancy, France

The 15th International Conference on Monte Carlo Methods & Quasi-Monte Carlo Methods in Scientific Computing
July 17–22, 2022, Linz, Austria
https://www.ricam.oeaw.ac.at/events/conferences/mcqmc2022/

The 39th International Conference on Machine Learning (ICML)
July 17–23, Baltimore, MD
https://icml.cc

2022 INFORMS Annual Meeting
October 16-19, 2022, Indianapolis, IN
https://meetings.informs.org/wordpress/indianapolis2022/

2022 Winter Simulation Conference
December 11–14, Marina Bay Sands Expo and Convention Center, Singapore
http://meetings2.informs.org/wordpress/wsc2022/
Loo Hay Will be Dearly Missed and Remembered

Chun-Hung Chen (George Mason University)

When I received the email from a Singapore friend telling me that Loo Hay passed away, I was wondering what it meant by “passed away.” English is not my first language. I was hoping that it had a different meaning. It broke my heart to hear that our beloved Loo Hay was gone.

Loo Hay and I had one year overlapping during our PhD studies at Harvard (1993–94). However, our research collaboration did not start until when he spent his sabbatical leave at George Mason University in 2007. I started the OCBA research since I was a PhD student. In 2000, I published the first paper about asymptotically optimal allocation of simulation budget, coauthored with Jianwu Lin, Enver Yücesan, and Steve Chick. Before Loo Hay jumped into this area, most of OCBA research focused on canonical ranking and selection problems that are concerned with the selection of the best system using noisy simulation estimates. Loo Hay was the person who generalized and expanded the OCBA idea to different domains and problems. Our first joint paper presents a new OCBA approach for selecting an optimal subset, instead of selecting the best, published in *INFORMS Journal on Computing*, coauthored with Donghai He and Michael Fu. Since then, Loo Hay generalized the OCBA idea and framework to multi-objective simulation optimization problems, ranking and selection with stochastic constraints, simulation optimization with metaheuristics (such as PSO, NP), just to name a few. During those research meetings, Loo Hay always had innovative and inspiring ideas to share with full energy and smiles!

Loo hay was one of the kindest persons I can remember. He had helped many people in many ways and never asked for any in return. You could search the world in vain, but I don't think you'd be able to find a kinder, more genuine individual. He wore an infectious perma-smile and exuded an enthusiasm that always lit up the room.
I want to give a very recent example. Loo Hay visited me in Washington, DC about two weeks before he passed away. I took the opportunity to arrange Loo Hay to give a seminar to four local societies of Taiwanese Americans in DC. Because of the tight schedule, I had to send out the seminar announcement before telling Loo Hay that he was invited to give a seminar! He kindly smiled and enthusiastically gave a wonderful seminar. The audience loved him so much. This is Loo Hay!

Loo Hay brought light to this world and made the world a better place. He will be dearly missed and remembered.

Obituary for Loo Hay
Ek Peng Chew (National University of Singapore)

I had known Loo Hay since 1997 when he joined my department. I remember when our department moved to a new building around early 2000, our offices were just next to each other and this was when we started to do research together. I enjoyed working with him and we had been not only a good working colleague but we became a very close friend. I often hear people say we are like digital twin as they always see us together whether in publishing papers, attending conferences, or working for the same initiatives.

To those who know Loo Hay, you can agree with me that he was a very passionate Professor, full of energy and had a lot of good ideas. His life was fill with full of activities, whether it was for work or personal. He was a great researcher and had made a name for himself in the area of simulation optimization. He had also established a good network of friends around the world. He had set two successful centres with me which was awarded with very large grants, focusing on applications of simulation optimization.

What had impacted me the most was not of his outstanding achievements he had gained, but as a person who he was. We know he had done great things and had won several accolades but as a person, it was his attitude of servitude for people that had touched me a lot. He had mentioned this often to me that what gave him the most stress was not when he was facing challenges in dealing with work progress but was the people problem when there were conflicts and misunderstanding among them which needed to be resolved. Loo Hay had a big heart, and he would not hesitate to stretch out his hands to give support to friends, colleagues and staff working under us. Even his dream for the centres we headed together was that the people could learn and grow together, where the strong would help the weak and not to be too judgemental of people while seeking to make impact internationally. He always believed that a person if given an opportunity would be able to grow, excel and contribute. I can say he was a great mentor to many people. He would not fail to reach out to people who are in need. He had left a deep impression to all of us and a legacy to follow. I will miss him dearly.

Lee Loo Hay — Conference Co-Chair, Collaborator and Friend
Peter Lendermann (D-SIMLAB Technologies)

On 17 March 2022 at 6.57am Central Daylight Time — it was already Thursday
evening in Singapore — I had just boarded a plane for a flight from Dallas to San Francisco as I was about to return to Singapore from a business trip, when I received a message on my mobile phone from my colleague back in Singapore “Is this real? Loo Hay just passed away?!” I then got in touch with other colleagues immediately, and very quickly it turned out that this sadly was very real.

I have to confess that I hardly remember a shock of equal force as far back as I can think. Loo Hay? I had actually known him since 2001 when both he and I attended the Winter Simulation Conference for the first time. That year the conference was held in Washington DC, it was a few weeks after 9/11. Since then, Loo Hay had become not just a colleague, for example through a collaboration project to enhance the simulation-based optimization engine of our company D-SIMLAB’s Aviation Spare Parts Inventory Planning solution, but also a good personal friend of mine.

When I received the news of Loo Hay’s passing I had just been on a call with him and a few other colleagues a couple of days earlier to discuss the preparation of the Winter Simulation Conference 2022 which will be held in Singapore this December and for which I have the honor to be the General Chair and Loo Hay had assumed the role of Program Chair. In fact, when in 2017 I accepted the role of General Chair for WSC 2022 I also did it because Loo Hay had already agreed to serve as Program Chair, so I could be sure to have somebody at my side who would be able to make things happen through his energetic drive, never-ceasing optimism, pure brilliance, and especially the vast network of colleagues, collaborators and friends that he had been building for more than 20 years. Loo Hay in particular had been looking forward to develop WSC 2022 around a “Reimagine Tomorrow” vision for which we intend to bring in many new elements to the conference, more than 50 years after its inception, and for the first time that WSC will be held in Asia.

And now it turned out that before “Reimagine Tomorrow” can happen we first had to reimagine today! Fortunately, and as a matter of fact not to my surprise, I received a lot of support from the WSC community to deal with this unprecedented situation, although I feel that it will never be possible to completely fill the hole that Loo Hay has left behind. We can therefore only do our very best to make sure that WSC 2022 will turn into a smashing success.

Our thoughts are also with his wife Flora, his daughter Hannah and his son Jeremy. Rest in peace, Loo Hay!

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**Obituary for Professor Lee**

*Haobin Li (National University of Singapore)*

Prof Lee, I know you are with Father God in heaven now listening to what I have to say.

I travelled from my hometown to Singapore when I was 17 years old. I became your student when I entered NUS. I had worked with you in the same research team for the last 17 years. A teacher for a day is a father for a lifetime. You are really like a father to me. For the past 17 years, I’ve caused you to work tirelessly and worry for me.

I remembered when I was pursuing my PhD, there was a time where I felt like I
could not handle it any longer. I visited you and told you that I wanted to start a business and even showed you my business plan. I regretted the moment I handed it to you. You are my doctoral supervisor, shouldn’t I have kept such plans from you first? Instead of blaming me, you had encouraged me to persist to complete my research, that it does not affect me from exploring any other interests. Hence, I went ahead to register a company and rented a small office. I took up a number of projects and I lost a few thousand dollars in the business. I created a simulation software, which was not too bad of an achievement. I named it O2DES. Although it’s not my doctoral thesis, you were very happy when you knew about it!

I had secretly written a conference paper for O2DES but I published the paper without your consent, neither did I put in your name. I felt it was not my PhD thesis and was afraid it may not be a good article and thus spoiling your reputation. Yet at the conference presentation, you were the only one whom I knew, who sat through the entire presentation and applauded me.

I remembered the last two years before my graduation was extremely tough. I had to change my project teams every few months, watching others run excel on more than a dozen core workstations, and the C# program that I wrote could only use a public computer network in the student computer room to experiment with.

On that day, I came to you and told you that I would like to resign and work in a research institute. I feel you were a little sad, but very quickly and you turned around and sincerely wished me well. I remember you were writing something on your thick calendar. Clearly, my hasty departure has upset many of your plans.

The pace of my life had slowed down tremendously after that, and I began to become obscured, and I missed the busy life I had with you. You called me one day and wanted to collaborate with my research institute. You wanted to based it on my O2DES simulation framework and you wanted me to return to work with you. It was that moment that rekindle a fiery passion and new hope in me!

You repeatedly told me, that the 20 million dollars research centres were built for my sake. I have always believed, that only by earnestly working hard, will I not disappoint you and fulfilling your dream. I did not realize until recently, that your greatest dream is not in simulation optimization, not digital twinning, but to realize the dream of “every one of us”, not just myself, but every child whose lives crossed your path.

A week ago, I was still blaming you about the many shortcomings of the research centre and how it did not align to my vision. Now I understand that the biggest misalignment, was my lack of confidence, forgetting to be humble and be tolerance, and the failure to learn from you — the unconditional love and care for others. You have testified with your life and taught me a valuable life lesson. The vision that I see, is a future generation of children inspired by love, a generation with newfound unity and confidence, that can face difficulties and challenges together as a team. But I could not envision the multitude without your image.

On Tuesday night, I wanted to stay with you at Starbucks a little while longer, but God has His plans and timing. I know you are tired, your battle is over, it’s time to rest. It is time for us to step up and use the rest of our lives to study the assignment that you left behind.
Prof Lee, I can see Jesus lived in you. The place that you are at, we cannot be there right now. In this world, whatever our achievements, as long as we love each other, the world will know that we are your disciples.

Prof Lee, I will work hard to live my life with you as my role model.
Prof Lee, we will meet again in heaven.