

Ian Brooks
(217) 333-6080
ianb@illinois.edu

Education

Bryn Mawr College	Ph.D.	Biochemistry	1996
Cornell University	M.S.	Applied and Engineering Physics	1990
University of York, England	B.Sc.	Biophysics	1987

Professional Experience

2019 – Present	Director–WHO Collaborating Center for Information Systems for Health
2017 – Present	Director–Center for Health Informatics, University of Illinois
2015 – 2020	Affiliate Associate Professor–College of Public Health, University of South Florida
2013 – Present	Research Scientist–School of Information Sciences, University of Illinois
2011 – 2016	Adjunct Professor–College of Nursing, University of Saskatchewan
2007 – 2010	Co-Director/Associate Director, Biomedical Informatics Core–Center for Clinical and Translational Sciences/University of Illinois at Chicago
2005 – 2015	Founding Director, Health Sciences Group–National Center for Supercomputing Applications (NCSA), University of Illinois
2002 – 2005	High Performance Computing Consultant–NCSA
1997 – 2002	Life Sciences and Statistics Technical Lead–Wolfram Research, Inc.
1989 – 1996	Associate Scientist / Scientist, Macromolecular Sciences–SmithKline Beecham

Publications

Journal Articles

1. Calleja, N., AbdAllah, A., Abad, N., Ahmed, N., Albarracin, D., Altieri, E., Anoko, J.N., Arcos, R., Azlan, A.A., Bayer, J., Bechmann, A., Bezbaruah, S., Briand, S.C., Brooks, I., Bucci, L.M., Burzo, S., Czerniak, C., Domenico, M.D., Dunn, A.G., Ecker, U.K.H., Espinosa, L., Francois, C., Gradon, K., Gruzd, A., Gülgün, B.S., Haydarov, R., Hurley, C., Astuti, S.I., Ishizumi, A., Johnson, N., Restrepo, D.J., Kajimoto, M., Koyuncu, A., Kulkarni, S., Lamichhane, J., Lewis, R., Mahajan, A., Mandil, A., McAweeney, E., Messer, M., Moy, W., Ngamala, P.N., Nguyen, T., Nunn, M., Omer, S.B., Pagliari, C., Patel, P., Phuong, L., Prybylski, D., Rashidian, A., Rempel, E., Rubinelli, S., Sacco, P., Schneider, A., Shu, K., Smith, M., Sufehmi, H., Tangcharoensathien, V., Terry, R., Thacker, N., Trewinnard, T., Turner, S., Tworek, H., Uakkas, S., Vraga, E., Wardle, C., Wasserman, H., Wilhelm, E., Würz, A., Yau, B., Zhou, L. and Purnat, T.D. (2021) 'A Public Health Research Agenda for Managing Infodemics: Methods and Results of the First WHO Infodemiology Conference', *JMIR Infodemiology*, 1(1), p. e30979. doi:10.2196/30979.

2. Marson, J. W., Maner, B. S., Harding, T. P., Meisenheimer, J., Solomon, J. A., Leavitt, M., Levin, N. J., Dellavalle, R., Brooks, I. and Rigel, D. S. (2021) 'The magnitude of COVID-19's effect on the timely management of melanoma and nonmelanoma skin cancers', *Journal of the American Academy of Dermatology*, 84(4), pp. 1100–1103. doi: [10.1016/j.jaad.2020.12.065](https://doi.org/10.1016/j.jaad.2020.12.065).
3. García-Saisó, S., Marti, M., Brooks, I., Curioso, W., González, D., Malek, V., Mejía Medina, F., Radix, C., Otzoy, D. and Zacarías, S. (2021) 'The COVID-19 Infodemic', *Pan American Journal of Public Health*, 45, p. 1. doi: [10.26633/RPSP.2021.56](https://doi.org/10.26633/RPSP.2021.56).
4. García-Saisó, S., Marti, M., Brooks, I., Curioso, W., González, D., Malek, V., Mejía Medina, F., Radix, C., Otzoy, D. and Zacarías, S. (2021) 'Infodemia en tiempos de COVID-19', *Rev Panam Salud Publica*, 45, p. 1. doi: [10.26633/RPSP.2021.89](https://doi.org/10.26633/RPSP.2021.89). (Spanish version)
5. Bello-Bravo, J., Brooks, I., Lutomia, A. N., Bohonos, J., Medendorp, J. and Pittendrigh, B. (2021) 'Breaking out: the turning point in learning using mobile technology', *Heliyon*, 7(3), p. e06595. doi: [10.1016/j.heliyon.2021.e06595](https://doi.org/10.1016/j.heliyon.2021.e06595).
6. Sanghavi, D., Brooks, I., Tomlinson, A., Rogers, A., Freeman, W. and Gibson, C. M. (2020) 'COVID-19 Infodemics: How Social Media Shared Information Rapidly to Global Healthcare Teams', *Critical Care Medicine*. doi: [10.1097/01.ccm.0000727116.59922.84](https://doi.org/10.1097/01.ccm.0000727116.59922.84).
7. Tangcharoensathien, V., Calleja, N., Nguyen, T., Purnat, T., D'Agostino, M., Garcia-Saiso, S., Landry, M., Rashidian, A., Hamilton, C., AbdAllah, A., Ghiga, I., Hill, A., Hougendobler, D., Andel, J. van, Nunn, M., Brooks, I., Sacco, P. L., Domenico, M. D., Mai, P., Gruzd, A., Alaphilippe, A. and Briand, S. (2020) 'Framework for Managing the COVID-19 Infodemic: Methods and Results of an Online, Crowdsourced WHO Technical Consultation', *Journal of Medical Internet Research*, 22(6), p. e19659. doi: [10.2196/19659](https://doi.org/10.2196/19659).
8. Rao, Q., Bai, L., Lv, Y., Abdullah, A. S., Brooks, I., Xie, Y., Zhao, Y. and Hou, X. (2020) 'Goal-Framing and Temporal-Framing: Effects on the Acceptance of Childhood Simple Obesity Prevention Messages among Preschool Children's Caregivers in China', *International Journal of Environmental Research and Public Health*, 17(3), p. 770. doi: [10.3390/ijerph17030770](https://doi.org/10.3390/ijerph17030770).
9. Urso, B., Updyke, K. M., Domozych, R., Solomon, J. A., Brooks, I., Burton, V. and Dellavalle, R. P. (2018) 'Acne treatment: analysis of acne-related social media posts and the impact on patient care', *Cutis*, 102(1), pp. 41–43.
10. D'Agostino, M., Samuel, N. O., Sarol, M. J., Cosio, F. G. de, Marti, M., Luo, T., Brooks, I. and Espinal, M. (2018) 'Open data and public health', *Revista Panamericana de Salud Pública*, 42, p. e66. doi: [10.26633/rpsp.2018.66](https://doi.org/10.26633/rpsp.2018.66).
11. D'Agostino, M., Mejía, F., Brooks, I., Marti, M., David, N.-O. and Cosio, G. de (2018) 'Fear on the networks: analyzing the 2014 Ebola outbreak', *Revista Panamericana de Salud Pública*, 41, p. e134. doi: [10.26633/rpsp.2017.134](https://doi.org/10.26633/rpsp.2017.134).
12. Updyke, K. M., Urso, B., Ali, H., Brooks, I., Burton, V., Dellavalle, R. P. and Solomon, J. A. (2017) 'Following Autoimmune Diseases Through Patient Interactive Diaries: Continuous Quality Improvement', *Practical Dermatology*, 14(12), pp. 48–54.
13. Chen, W., Yu, H., Sun, F., Ornob, A., Brisbin, R., Ganguli, A., Vemuri, V., Strzebonski, P., Cui, G., Allen, K. J., Desai, S. A., Lin, W., Nash, D. M., Hirschberg, D. L., Brooks, I., Bashir, R. and Cunningham, B. T. (2017) 'Mobile Platform for Multiplexed Detection and Differentiation of Disease-Specific Nucleic Acid Sequences, Using Microfluidic Loop-Mediated Isothermal Amplification and Smartphone Detection', *Analytical Chemistry*, 89(21), pp. 11219–11226. doi: [10.1021/acs.analchem.7b02478](https://doi.org/10.1021/acs.analchem.7b02478).
14. Liao, F., Liao, B.-Y., Rice, I. M., Elliott, J., Brooks, I. and Jan, Y.-K. (2015) 'Using local scale exponent to characterize heart rate variability in response to postural changes in people with spinal cord injury', *Frontiers in Physiology*, 6, p. 142. doi: [10.3389/fphys.2015.00142](https://doi.org/10.3389/fphys.2015.00142).
15. Solomon, J. A., Ramshaw, B., Lewis, S., Stines, M., Domozych, R., Larrobino, A., Caldwell, C., Beg, S. A. and Brooks, I. (2015) 'Complex Adaptive Systems Approach: Continuous Quality Improvement

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16. Belknap, S. M., Moore, H., Lanzotti, S. A., Yarnold, P. R., Getz, M., Deitrick, D. L., Peterson, A., Akeson, J., Maurer, T., Soltysik, R. C., Storm, G. A. and Brooks, I. (2008) 'Application of Software Design Principles and Debugging Methods to an Analgesia Prescription Reduces Risk of Severe Injury From Medical Use of Opioids', *Clinical Pharmacology & Therapeutics*, 84(3), pp. 385–392. doi: [10.1038/clpt.2008.24](https://doi.org/10.1038/clpt.2008.24).
 17. Valenta, Annette L., Brooks, I., Laureto, R. A. and Ramaprasad, A. (2007) 'Breaking the silo. Using informatics to support clinical and translational science', *Journal of healthcare information management: JHIM*, 21(4), pp. 15–17. PMID: 19195276
 18. Chan, W., Helms, L. R., Brooks, I., Lee, G., Ngola, S., McNulty, D., Maleeff, B., Hensley, P. and Wetzel, R. (1996) 'Mutational effects on inclusion body formation in the periplasmic expression of the immunoglobulin VL domain REI', *Folding and Design*, 1(2), pp. 77–89. doi: [10.1016/S1359-0278\(96\)00017-X](https://doi.org/10.1016/S1359-0278(96)00017-X).
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 20. Johanson, K., Appelbaum, E., Doyle, M., Hensley, P., Zhao, B., Abdel-Meguid, S. S., Young, P., Cook, R., Carr, S. and Matico, R. (1995) 'Binding interactions of human interleukin 5 with its receptor α subunit. Large scale production, structural, and functional studies of Drosophila-expressed recombinant proteins', *The Journal of Biological Chemistry*, 270(16), pp. 9459–9471. doi: [10.1074/jbc.270.16.9459](https://doi.org/10.1074/jbc.270.16.9459).
 21. Digard, P., Williams, K. P., Hensley, P., Brooks, I. S., Dahl, C. E. and Coen, D. M. (1995) 'Specific inhibition of herpes simplex virus DNA polymerase by helical peptides corresponding to the subunit interface.', *Proceedings of the National Academy of Sciences*, 92(5), pp. 1456–1460. doi: [10.1073/pnas.92.5.1456](https://doi.org/10.1073/pnas.92.5.1456).
 22. Burrows, S. D., Doyle, M. L., Murphy, K. P., Franklin, S. G., White, J. R., Brooks, I., McNulty, D. E., Scott, M. O., Knutson, J. R. and Porter, D. (1994) 'Determination of the monomer-dimer equilibrium of interleukin-8 reveals it is a monomer at physiological concentrations', *Biochemistry*, 33(43), pp. 12741–12745. doi: [10.1021/bi00209a002](https://doi.org/10.1021/bi00209a002).
 23. Hensley, P., McDevitt, P. J., Brooks, I., Trill, J. J., Feild, J. A., McNulty, D. E., Connor, J. R., Griswold, D. E., Kumar, N. V. and Koppke, K. D. (1994) 'The soluble form of E-selectin is an asymmetric monomer. Expression, purification, and characterization of the recombinant protein', *The Journal of Biological Chemistry*, 269(39), pp. 23949–23958. doi: [10.1016/S0021-9258\(19\)51030-4](https://doi.org/10.1016/S0021-9258(19)51030-4).
 24. O'Shannessy, D. J., Brighamburke, M., Soneson, K. K., Hensley, P. and Brooks, I. (1993) 'Determination of Rate and Equilibrium Binding Constants for Macromolecular Interactions Using Surface Plasmon Resonance: Use of Nonlinear Least Squares Analysis Methods', *Analytical Biochemistry*, 212(2), pp. 457–468. doi: [10.1006/abio.1993.1355](https://doi.org/10.1006/abio.1993.1355).
 25. Grant, S. K., Deckman, I. C., Culp, J. S., Minnich, M. D., Brooks, I. S., Hensley, P., Debouck, C. and Meek, T. D. (1992) 'Use of protein unfolding studies to determine the conformational and dimeric stabilities of HIV-1 and SIV proteases', *Biochemistry*, 31(39), pp. 9491–9501. doi: [10.1021/bi00154a023](https://doi.org/10.1021/bi00154a023).
 26. Brooks, I. and Moffat, K. (1991) 'Laue diffraction from protein crystals using a sealed-tube X-ray source', *Journal of Applied Crystallography*, 24(2), pp. 146–148. doi: [10.1107/S0021889890010846](https://doi.org/10.1107/S0021889890010846).

Conference Proceedings

1. Wang, T., Brooks, I. and Bashir, M. (2022) 'Public Reaction on Social Media During COVID-19: A Comparison Between Twitter and Weibo', in Arai, K. (ed.) *Intelligent Computing*. Cham: Springer International Publishing (Lecture Notes in Networks and Systems), pp. 612–625. doi: [10.1007/978-3-030-80119-9_38](https://doi.org/10.1007/978-3-030-80119-9_38).
2. Sinha, G. R., Larrison, C. R., Brooks, I. S. and Sinha, R. (2020) 'Relationship between twitter sentiments and the availability of mental health services in the United States', in. *American Public Health Association 2020 Annual Meeting*, Virtual Meeting: American Public Health Association. Available at: <https://apha.confex.com/apha/2020/meetingapp.cgi/Paper/483317>.
3. Sun, F., Chen, W., Yu, H., Omob, A., Brisbin, R., Ganguli, A., Vemuri, V., Strzebonski, P., Cui, G., Allen, K. J., Desai, S. A., Lin, W., Nash, D. M., Hirschberg, D. L., Brooks, I., Bashir, R. and Cunningham, B. T. (2017) 'Multiplexed detection of infectious diseases with microfluidic loop-mediated isothermal amplification and a smartphone', in *2017 IEEE Healthcare Innovations and Point of Care Technologies (HI-POCT)*. *2017 IEEE Healthcare Innovations and Point of Care Technologies (HI-POCT)*, pp. 241–244. doi: [10.1109/HIC.2017.8227629](https://doi.org/10.1109/HIC.2017.8227629).
4. Liao, F., Brooks, I., Hsieh, C.-W., Rice, I. M., Jankowska, M. M. and Jan, Y.-K. (2014) 'Assessing Complexity of Heart Rate Variability in People with Spinal Cord Injury using Local Scale Exponents', in *Conference proceedings : ... Annual International Conference of the IEEE Engineering in Medicine and Biology Society. IEEE Engineering in Medicine and Biology Society. Annual Conference*, pp. 6381–6384. doi: [10.1109/EMBC.2014.6945088](https://doi.org/10.1109/EMBC.2014.6945088).
5. Petrucka, P. L., Bassendowski, S., Roberts, H., Brooks, I. and Daniel, G. (2010) 'From improbable to inevitable: Dispelling the myths of mHealth', in *Proceedings of the 2nd International conference on M4D Mobile Communication Technology for Development M4D 2010*. Kampala, Uganda, pp. 319–323.
6. Edwards, W. A., Vaid, A. and Brooks, I. S. (2010) 'INDICATOR: An Open-Source Cyberenvironment for Biosurveillance', in *Proceedings of the 7th International ISCRAM Conference—Seattle. 7th International ISCRAM*.
7. Ramaprasad, A., Valenta, A. and Brooks, I. (2009) 'Clinical and Translational Science Informatics - Translating Information to Transform Health Care.', in *Proceedings of the International Conference on Health Informatics. HEALTHINF*, pp. 135–141. doi: [10.5220/0001431701350141](https://doi.org/10.5220/0001431701350141).
8. Ramaprasad, A., Valenta, A. and Brooks, I. (2008) 'Clinical and Translational Science Informatics Infrastructure - A Framework and Case Study.', in *Proceedings of the First International Conference on Health Informatics. HEALTHINF 2008*, pp. 213–218.
9. Ramaprasad, A., Valenta, A. L. and Brooks, I. (2007) 'Biomedical Informatics Infrastructure', in *Proceedings of the International Symposium on Information Systems, Hyderabad, India Paper. International Symposium on Information Systems*. doi: [dx.doi.org/10.2139/ssrn.1305712](https://doi.org/10.2139/ssrn.1305712).
10. Brooks, I. S. and Edwards, W. (2007) 'INDICATOR: A Comprehensive Cyberenvironment for Infectious Disease Surveillance, Modeling, and Response', in *Medinfo 2007: Proceedings of the 12th World Congress on Health (Medical) Informatics; Building Sustainable Health Systems. MedInfo*, pp. 2454–2458. doi: [10.3316/informit.795981305926550](https://doi.org/10.3316/informit.795981305926550).

Book Chapters

1. World Health Organization (2020) *An ad hoc WHO technical consultation managing the COVID-19 infodemic: call for action, 7-8 April 2020*. World Health Organization.
2. Novak, R. J., Burgess, P. and Brooks, I. (2010) 'Integrated Malaria Management', in Atkinson, P. W. (ed.) *Vector Biology, Ecology and Control*. Dordrecht: Springer Netherlands, pp. 221–258. doi: [10.1007/978-90-481-2458-9_16](https://doi.org/10.1007/978-90-481-2458-9_16).
3. Brooks, I. (2002) 'ANOVA', in *Mathematica 4.2 Standard Add-ons Guide*. Wolfram.
4. Doyle, M. L., Brigham-Burke, M., Blackburn, M. N., Brooks, I. S., Smith, T. M., Newman, R., Reff, M., Stafford, W. F., Sweet, R. W., Truneh, A., Hensley, P. and O'Shannessy, D. J. (2000) 'Measurement of protein interaction bioenergetics: Application to structural variants of anti-sCD4 antibody', in *Methods in Enzymology*. Academic Press (Energetics of Biological Macromolecules, Part C), pp. 207–230. doi: [10.1016/S0076-6879\(00\)23368-5](https://doi.org/10.1016/S0076-6879(00)23368-5).
5. Brooks, I., Wetzel, R., Chan, W., Lee, G., Watts, D. G., Soneson, K. K. and Hensley, P. (1994) 'Association of REI Immunoglobulin Light Chain V L Domains: The Functional Linearity Of Parameters in Equilibrium Analytical Ultracentrifuge Models for Self-Associating Systems', in *Modern Analytical Ultracentrifugation*. Birkhäuser Boston, pp. 15–36.
6. Brooks, I., Watts, D. G., Soneson, K. K. and Hensley, P. (1994) 'Determining confidence intervals for parameters derived from analysis of equilibrium analytical ultracentrifugation data', in *Part B: Numerical Computer Methods*. Academic Press (Methods in Enzymology), pp. 459–478. doi: [https://doi.org/10.1016/S0076-6879\(94\)40060-1](https://doi.org/10.1016/S0076-6879(94)40060-1).
7. O'Shannessy, D. J., Brigham-Burke, M., Soneson, K. K., Hensley, P. and Brooks, I. (1994) 'Determination of rate and equilibrium binding constants for macromolecular interactions by surface plasmon resonance', in *Part B: Numerical Computer Methods*. Academic Press (Methods in Enzymology), pp. 323–349. doi: [https://doi.org/10.1016/S0076-6879\(94\)40054-7](https://doi.org/10.1016/S0076-6879(94)40054-7).

Technical Papers and Podcasts

1. *Artificial Intelligence in Public Health* (2021). Pan American Health Organization.
2. Brooks, I. (2020) 'Big Data'. (Information Systems and Digital health: during and after the COVID-19 pandemic). Available at: <https://www.paho.org/sites/default/files/2020-10/podcast-ian-brooks-en.mp3>.
3. *COVID-19 Factsheet: 30 Critical Concepts for Fighting COVID-19 in the Age of Digital Interdependence* (2020). Pan American Health Organization. Available at: <https://iris.paho.org/handle/10665.2/52670>, <https://iris.paho.org/handle/10665.2/52672> (Spanish), <https://iris.paho.org/handle/10665.2/52673> (Portuguese).
4. *COVID-19 Factsheet: COVID-19 and the importance of strengthening Information Systems* (2020). Pan American Health Organization. Available at: <https://iris.paho.org/handle/10665.2/52127>, <https://iris.paho.org/handle/10665.2/52128> (Spanish), <https://iris.paho.org/handle/10665.2/52155> (Portuguese), <https://www.paho.org/sites/default/files/2020-10/podcast-covid-06-en.mp3> (Podcast).
5. *COVID-19 Factsheet: COVID-19 Information Systems and Digital Health: After-Action Review of the First 100 Days in Quarantine* (2020). Pan American Health Organization. Available at: <https://iris.paho.org/handle/10665.2/52439>, <https://iris.paho.org/handle/10665.2/52487> (Spanish), <https://www.paho.org/sites/default/files/2020-10/podcast-covid-10-en.mp3> (Podcast).
6. *COVID-19 Factsheet: Webinar Series, Share-Listen-Act, COVID-19: The Potential of Digital Health and Information Systems for Health (IS4H) in the Fight against the Pandemic* (2020). Pan American Health Organization. Available at: <https://iris.paho.org/handle/10665.2/52502>, <https://iris.paho.org/handle/10665.2/52441> (Spanish), <https://www.paho.org/sites/default/files/2020-10/podcast-covid-11-en.mp3> (Podcast).

7. *COVID-19 Factsheet: Why Predictive Modeling is Critical in the Fight against COVID-19* (2020). Pan American Health Organization. Available at: <https://iris.paho.org/handle/10665.2/52276>, <https://iris.paho.org/handle/10665.2/52440> (Spanish), <https://www.paho.org/sites/default/files/2020-10/podcast-covid-08-en.mp3> (Podcast).
8. *COVID-19 Factsheet: Understanding the Infodemic and Misinformation in the fight against COVID-19* (2020). Pan American Health Organization. Available at: <https://iris.paho.org/handle/10665.2/52052>, <https://iris.paho.org/handle/10665.2/52053> (Spanish), <https://iris.paho.org/handle/10665.2/52054> (Portuguese), <https://www.paho.org/sites/default/files/2020-10/podcast-covid-08-en.mp3> (Podcast).
9. *COVID-19 Factsheet: Why Data Disaggregation is key during a pandemic* (2020). Pan American Health Organization. Available at: <https://iris.paho.org/handle/10665.2/52002>.
10. *COVID-19 Factsheet: Electronic Health Records (EHR) and Interoperability: Understanding two key concepts for a better Public Health response* (2020). Pan American Health Organization. Available at: <https://iris.paho.org/handle/10665.2/52004>, <https://iris.paho.org/handle/10665.2/52004> (Spanish), <https://iris.paho.org/handle/10665.2/52005> (Portuguese), <https://www.paho.org/sites/default/files/2020-10/podcast-covid-002-en.mp3> (Podcast).
11. *COVID-19 Factsheet: Teleconsultations during a pandemic* (2020). Pan American Health Organization. Available at: <https://iris.paho.org/handle/10665.2/52006>.
12. *Information Systems for Health Knowledge Capsule: Predictive Analytics* (2019) Pan American Health Organization.
13. *Plan of Action for Strengthening Information Systems for Health 2019-2023* (2019). Pan American Health Organization. Available at: <https://iris.paho.org/handle/10665.2/51617>.
14. *Strategy and Plan of Action on eHealth: Final Report* (2018). Pan American Health Organization. Available at: <https://iris.paho.org/handle/10665.2/49448>.
15. *Information Systems for Health Maturity Model* (2018). Pan American Health Organization. Available at: <https://www3.paho.org/ish/images/toolkit/IS4H-MAL-EN.pdf>.

Invited Presentations and Editorials

1. 'Understanding the Infodemic and Misinformation in the fight against COVID-19' (2021). *Public Health 2021: Canadian Public Health Association*, Virtual Meeting, October.
2. 'Big Data, Information Systems and Digital Health' (2021). *10 Experts, 1 Question, 1 Goal, Pan-American Health Organization*, Virtual Meeting, August.
3. 'USA-450 The WHO/PAHO Collaborating Center for Information Systems for Health' (2021). *PAHO/WHO Collaborating Centre Regional Webinar*, Virtual Meeting, 21 June.
4. 'Analysis of Social Media Data about COVID-19 in the Americas.' (2020). *WHO Global Consultancy on the COVID-19 Pandemic*, Virtual Meeting, April.
5. 'Building Information Systems to Detect Disease Outbreaks and Support Public Health' (2020). *Clemson University*, Clemson, SC, March.
6. 'The Potential of Unstructured and Big Data for Public Health' (2019). *International Telecommunications Union Kaleidoscope*, Atlanta, GA, December.
7. 'State of the Art in Information and Communication Technologies for Health Data and Information Management' (2019). *Celebrating 25 Years of the Core Health Indicators @ 57th Session of the Pan-American Health Organization (PAHO) Directing Council*, Washington DC, September.
8. 'Ian Brooks' (2014). *University of Illinois Board of Trustees Campus Insights*, Urbana, IL, September.
9. 'Health Informatics in Africa' (2014). *Inspire in Africa*, Urbana, IL, September.
10. 'One Health Monitoring with INDICATOR' (2014). *Brown Dog Workshop*, Urbana, IL, July.

11. 'Improving the Practice of Public Health with Advanced Computing' (2014). *Pan American Health Organization*, Washington D.C., July.
12. 'INDICATOR: One Health Monitoring' (2014). *Carle One Health Symposium*, Urbana, IL, February.
13. 'INDICATOR: Integrating Common Data Sources for Community Health Monitoring' (2013). *Share the Vision 2013*, Champaign, IL, October.
14. 'Insect Bytes: Using Computers to Support Vector Control' (2013). *Sixth International Society for Vector Ecology Congress*, La Quinta, CA, September.
15. 'INDICATOR: From Disease Surveillance to One Health Monitoring' (2013). *One Health Summit*, Champaign, IL, August
16. Brooks, I. (2013) 'Ripples in the Blue Waters: Harnessing Supercomputers for Public Health', *PAHO eHealth*, 2(7), p. 1.
17. 'An Overview of the US National Center for Supercomputing Applications' (2013). *BIREME*, São Paulo, Brazil, June.
18. 'Mosquito Bytes and Flu Bugs: Supercomputers for Health' (2013). *Centers for Disease Control and Prevention*, Atlanta, GA, April.
19. 'Plenary Chair: Capacity Building' (2012). *CRICS 9*, Washington D.C., October.
20. 'Experiences with INDICATOR: A Platform for Multi-source Monitoring, Modeling, and Responding to Changes in the Health of a Community' (2012). *CODATA 12*, Taipei, Taiwan, October.
21. 'INDICATOR update' (2012). *93rd Annual Fall Conference for Veterinarians*, Champaign, IL, September.
22. 'Using computers to help control vector borne diseases' (2011). *Lincoln Park Zoo*, Chicago, October.
23. 'A Cyberenvironment for Endemic Disease Control' (2011). *American Medical Informatics Association*, Washington D.C., October.
24. 'Combined human and animal disease surveillance' (2011). *Tools for Integrated One Health Surveillance*, Urbana, IL, August.
25. 'Using information to help control endemic disease' (2011). *Public Health Summit*, Champaign, IL, July.
26. 'Biomedical and health informatics at the U.S. National Center for Supercomputing Applications' (2011). *Shanghai Institute of Biological Sciences*, Shanghai, China, June.
27. 'Advanced information systems in public health' (2010). *China CDC*, Beijing, China, October.
28. 'Advanced information systems: Bringing multi-disciplinary science into focus' (2010). *International Development Research Center*, Ottawa, Canada, September.
29. 'INDICATOR: An advanced information system for infectious disease surveillance, modeling, and response.' (2010). *IPHA Illinois Public Health Emergency Preparedness Summit: From Preparedness to Recovery: Collaborating for Resiliency*, Oak Brook, IL, June.
30. 'Computing, data, and advanced information systems for healthcare' (2010). *ENACQKT: Enhancing Nurses Access for Care Quality and Knowledge through Technology*, St. Lucia, April.
31. 'INDICATOR: An advanced information system for infectious disease surveillance, modeling, and response.' (2010). *CDC Delivery of Essential Healthcare Services*, Atlanta, GA, March.
32. 'INDICATOR-Biosurveillance' (2010). *Collaborative Planning for the Delivery of Essential Healthcare Services*, Champaign, IL, March.
33. 'Hemispheric health and biosciences' (2010). *ARTCA: Advanced Research and Technology Collaboratory for the Americas*, Washington D.C., March.

34. 'An advanced information system for disease management' (2009). *TEPHINET 5 Workshop on Epidemiological Modeling*, San José, Costa Rica, November.
35. 'Cyberenvironments' (2009). *Veterans Administration Information Resource Center*, Chicago, IL, October.
36. 'INDICATOR: An advanced information system for infectious disease surveillance, modeling, and response.' (2009). *Second Annual Champaign County Preparedness Summit*, Champaign, IL, September.
37. 'An advanced information system for disease management' (2009). *Centre for Infectious Disease Research in Zambia*, Lusaka, Zambia, August.
38. 'Computing, data, and advanced information systems for the 21st century' (2009). *Costa Rica Social Security Administration*, San José, Costa Rica, August.
39. 'Computing, data, and advanced information systems for biomedical sciences' (2009). *Communicable Diseases in Latin America and the Caribbean (CD LAC) Workshop II*, Lima, Peru, August.
40. 'A cyberenvironment for endemic disease informatics' (2008). *American Society for Tropical Medicine and Hygiene*, New Orleans, LA, December.
41. 'The health sciences at NCSA' (2008). *Supercomputing'08 Workshop: Supercomputing, Multicore Architectures, and Biomedical Informatics*, Austin, TX, November.
42. 'Endemic disease control' (2008). *ARCTA 2008*, Petropolis, Brazil, August.
43. 'Malaria map' (2008). *Centers for Disease Control and Prevention*, Atlanta, GA, June.
44. 'Scientific collaboratories' (2008). *US-China Workshop on Tobacco Control*, Beijing, China, March.
45. 'Medical and petascale computing at NCSA' (2007). *iBio*, Urbana, IL, November.
46. 'Medical computing at NCSA' (2007). *Baylor College of Medicine*, Houston, TX, November.
47. 'Medical computing at NCSA' (2006). *The Illinois State Genetics Services Plan*, Urbana, IL, October.
48. 'A cyberenvironment for infectious disease surveillance, modeling, and response' (2006). *NCSA Private Sector Partners Meeting*, Urbana, IL, June.
49. 'Mathematica in the life sciences' (2000). *World Congress on Medical Physics and Biomedical Engineering*, Chicago, IL, August.
50. 'A package for experimental data analysis with Mathematica' (2000). *Joint Statistics Meeting*, Indianapolis, IN, August.
51. 'Invited session chair: Macintosh developer tools' (1993). *Scientific and Engineering Applications of the Macintosh*, Boston, MA, July.
52. 'A Mac-based data analysis package for sedimentation equilibrium data' (1991). *Beckman Instruments*, Palo Alto, CA, February.

Refereed Conference Presentations and Abstracts

1. Su, A., Jueng, J., Dupuis, L., Brooks, I., Sinha, R., Maner, B., Dellavalle, R., Burton, V. and Solomon, J.A. (2021) 'Artificial intelligence (AI) comparison of social media-based patient-reported outcomes of PD-1, BRAF, and CTLA-4 inhibitors for melanoma treatment.', *Journal of Clinical Oncology*, 39(15_suppl), pp. e21572–e21572. doi: [10.1200/JCO.2021.39.15_suppl.e21572](https://doi.org/10.1200/JCO.2021.39.15_suppl.e21572).
2. Su, A., Jueng, J., Dupuis, L., Brooks, I., Sinha, R., Maner, B., Meisenheimer, J., Dellavalle, R., Burton, V. and Solomon, J. A. (2021) 'Using artificial intelligence (AI) to compare patient perspective of PD-1 and BRAF inhibitors for melanoma treatment', *Journal of Investigative Dermatology*, 141(5, Supplement), p. S66. doi: [10.1016/j.jid.2021.02.399](https://doi.org/10.1016/j.jid.2021.02.399).

3. Jueng, J., Su, A., Maner, B., Meisenheimer, J., Dupuis, L., Dellavalle, R., Brooks, I., Shaikh, S., Burton, V. and Solomon, J. A. (2021) 'Discerning patient perspectives towards specific treatments of alopecia areata using artificial intelligence', *Journal of Investigative Dermatology*, 141(5, Supplement), p. S74. doi: [10.1016/j.jid.2021.02.450](https://doi.org/10.1016/j.jid.2021.02.450).
4. Kunadia, A., Siddiqui, F., Dupuis, L., Jueng, J., Su, A., Harding, T., Brooks, I., Solomon, J. A., Burton, V., Dellavalle, R. and Seyffert, J. (2021) 'Utilization of Patient Interactive Diaries to Establish a Database of Patient Reported Outcomes Generating a Cycle of Continuous Quality Improvement.' *The Autoimmunity Conference*, Athens, Greece, May.
5. Dupuis, L., Jueng, J., Su, A., Kunadia, A., Siddiqui, F., Harding, T., Brooks, I., Solomon, J. A., Burton, V., Dellavalle, R. and Seyffert, J. (2021) 'Comparing Patient Perspectives of Melanoma to Non-Oncologic Dermatological Disease (Non- Oncologic) via Social Media Data Mining. Poster presentation at the Autoimmunity Conference'. *The Autoimmunity Conference*, Athens, Greece, May.
6. Su, A., Dupuis, L., Jueng, J., Brooks, I., Sinha, R. and Solomon, J. A. (2021) 'Comparing patient perspective on PD-1 and BRAF inhibitors for melanoma treatment through frequency of social media posts via artificial intelligence (AI)'. *University of Central Florida College of Medicine FIRE Conference*, Virtual Meeting, March. (Voted best poster)
7. Dupuis, L., Su, A., Jueng, J., Kunadia, A., Dellavalle, R., Brooks, I., Sinha, R., Maner, B., Siddiqui, F., Burton, V., Seyffert, J. and Solomon, J. (2021) 'Natural Language Processing of Social Media to Evaluate Patient Global Impression of Change in Acne Treatments.' *University of Central Florida College of Medicine FIRE Conference*, Virtual Meeting, March.
8. Su, A., Jueng, J., Dupuis, L., Brooks, I., Sinha, R., Maner, B., Dellavalle, R., Burton, V. and Solomon, J. A. (2021) 'Artificial intelligence (AI) comparison of social media-based patient-reported outcomes of PD-1, BRAF, and CTLA-4 inhibitors for melanoma treatment.', *Journal of Clinical Oncology*, 39(15_suppl), pp. e21572–e21572. doi: [10.1200/JCO.2021.39.15_suppl.e21572](https://doi.org/10.1200/JCO.2021.39.15_suppl.e21572).
9. Meisenheimer, J., Su, A., Maner, B., Dupuis, L., Jueng, J., Kunadia, A., Brooks, I., Sinha, R., Siddiqui, F., Dellavalle, R., Burton, V., Seyffert, J. and Solomon, J. A. (2020) 'Using Social Media to Understand the Patient Perspective and the Emotional Impact of Dermatologic Conditions.' *PRISM Health Symposium*, Virtual Meeting, December.
10. Su, A., Dupuis, L., Jueng, J., Kunadia, A., Brooks, I., Sinha, R., Siddiqui, F., Maner, B., Harding, T., Burton, V., Dellavalle, R., Seyffert, J. and Solomon, J. A. (2020) 'Use of artificial intelligence for analyzing emotion vs patient global impression of change of melanoma treatments.', *Journal of Clinical Oncology*, 38(15_suppl), pp. e24177–e24177. doi: [10.1200/JCO.2020.38.15_suppl.e24177](https://doi.org/10.1200/JCO.2020.38.15_suppl.e24177).
11. Sinha, G. R., Larrison, C. R., Brooks, I. S. and Sinha, R. (2020) 'Relationship between twitter sentiments and the availability of mental health services in the United States', in. *American Public Health Association 2020 Annual Meeting*, Virtual Meeting: American Public Health Association. Available at: <https://apha.confex.com/apha/2020/meetingapp.cgi/Paper/483317>.
12. Jueng, J., Dupuis, L., Su, A., Kunadia, A., Dellavalle, R., Brooks, I., Sinha, R., Maner, B., Siddiqui, F., Burton, V., Seyffert, J. and Solomon, J. (2020) 'Using artificial intelligence to understand patient perspectives towards treatment of dermatological diseases', *Journal of Investigative Dermatology*, 140(7, Supplement), p. B10. doi: [10.1016/j.jid.2020.05.038](https://doi.org/10.1016/j.jid.2020.05.038).
13. Kunadia, A., Seyffert, J., Brooks, I., Solomon, J. A., Burton, V., Dellavalle, R. P. and Harding, T. (2020) 'Combining social media mining and patient interactive diaries for population-based care of chronic diseases', *Journal of the American Academy of Dermatology*, 83(6, Supplement), p. AB97. doi: <https://doi.org/10.1016/j.jaad.2020.06.477>.
14. Dupuis, L., Su, A., Jueng, J., Kunadia, A., Dellavalle, R., Brooks, I., Sinha, R., Maner, B., Siddiqui, F., Burton, V., Seyffert, J. and Solomon, J. (2020) 'Natural Language Processing of Social Media to Evaluate Patient Global Impression of Change in Acne Treatments.' *Cochrane Skin Conference*, Denver, CO, March.

15. Updyke, K., Siddiqui, F., Urso, B., Domozych, R., Brooks, I. and Solomon, J. (2017) 'Social media "listening" used to compare patient views on Enbrel to other treatments for psoriasis', *Journal of the American Academy of Dermatology*, 76(6), p. AB239. doi: [10.1016/j.jaad.2017.04.925](https://doi.org/10.1016/j.jaad.2017.04.925).
16. Updyke, Katelyn, Urso, B., Nergard, J., Domozych, R., Brooks, I. and Solomon, J. (2017) 'Utilization of a new IT platform promoted globally through social media to apply continuous quality improvement assessments to deliver patient-centered care in those with autoimmune diseases: 5431', *Journal of the American Academy of Dermatology*, 76(6), p. AB278. doi: <https://doi.org/10.1016/j.jaad.2017.04.1080>.
17. Urso, B., Updyke, K., Domozych, R., Solomon, J., Brooks, I., Burton, O. and Dellavalle, R. (2017) 'Acne treatment utilization among patients on social media platforms', *Journal of Investigative Dermatology*, 137. doi: [10.1016/j.jid.2017.02.404](https://doi.org/10.1016/j.jid.2017.02.404).
18. Updyke, K., Urso, B., Solomon, J., Brooks, I., Burton, V. and Dellavalle, R. P. (2017) 'Identifying the most influential social media networks utilized by different populations of patients with autoimmune diseases', *Journal of Investigative Dermatology*, 137(5, Supplement 1), p. S13. doi: [10.1016/j.jid.2017.02.090](https://doi.org/10.1016/j.jid.2017.02.090).
19. Updyke, K., Urso, B., Solomon, J., Brooks, I., Burton, V. and Dellavalle, R. P. (2017) 'An overview of social media posts related to psoriasis patients' perspectives towards Humira®, *Journal of Investigative Dermatology*, 137(5, Supplement 1), p. S13. doi: [10.1016/j.jid.2017.02.089](https://doi.org/10.1016/j.jid.2017.02.089).
20. Holliday, B. A. (2016) 'An Exploration of Public Events and Alcohol Related Incidents', *Online Journal of Public Health Informatics*, 8(1). doi: [10.5210/ojphi.v8i1.6536](https://doi.org/10.5210/ojphi.v8i1.6536).
21. Komisarz, C. and Brooks, I. (2015) 'An Exploration of the H1N1 Outbreak in Champaign and Urbana Elementary Schools', *Online Journal of Public Health Informatics*, 7(1), p. e139. doi: [10.5210/ojphi.v7i1.5805](https://doi.org/10.5210/ojphi.v7i1.5805).
22. Komisarz, C. and Brooks, I. (2014) 'An Exploration of the H1N1 Outbreak in Champaign-Urbana Elementary Schools during the 2009-2010 Influenza Season'. *Public Engagement Symposium*, Champaign, IL, March.
23. Brooks, I., Felarca, M. and A'cs, B. (2013) 'Refactoring INDICATOR into an Advanced Information System for One Health Monitoring', *Online Journal of Public Health Informatics*, 5(1), p. e120.
24. Brooks, I., Edwards, W., Rao, S., A'Cs, B. and Felarca, M. (2013) 'INDICATOR: One Health surveillance using primary and secondary data'. *International Meeting on Emerging Diseases and Surveillance*, Vienna, Austria, February.
25. Brooks, I., Vaid, A. and Edwards, W. (2011) 'Analysis of 5 years of multistream surveillance and weather data in Champaign County', *Emerging Health Threats Journal*, 4. doi: [10.3402/ehj.v4i0.11196](https://doi.org/10.3402/ehj.v4i0.11196).
26. Wadsworth, A., Edwards, W., Vaid, A. and Brooks, I. (2011) 'User interface design for a biosurveillance system', *Emerging Health Threats Journal*, 4. doi: [10.3402/ehj.v4i0.11140](https://doi.org/10.3402/ehj.v4i0.11140).
27. Edwards, W., Vaid, A. and Brooks, I. (2011) 'Applying classification and anomaly detection techniques to real-world data', *Emerging Health Threats Journal*, 4, p. 77-78. doi: [10.3134/ehj.10.077](https://doi.org/10.3134/ehj.10.077).
28. Edwards, W. and Brooks, I. (2009) 'Cyberinfrastructure R&D for infectious disease research at NCSA'. *IDRiC*, Daejeon, South Korea, March.
29. Brooks, I., Vaid, A. and Edwards, W. (2009) 'INDICATOR: A cyberenvironment for biosurveillance', in. *Syndromic '09*, Miami, FL.
30. Brooks, I. and Edwards, W. (2009) 'INDICATOR: A Cyberenvironment for Biosurveillance and Response', *Advances in Disease Surveillance*, 5(7).
31. Brooks, I. and Ramaprasad, A. (2008) 'Ontology of a Cyberenvironment for Malaria Surveillance', *Advances in Disease Surveillance*, 5(8). doi: [10.2139/ssrn.1325788](https://doi.org/10.2139/ssrn.1325788).

32. Brooks, I., Watts, D. G., Soneson, K. K., Hensley, P. and Johnson, M. L. (1998) 'Determining confidence intervals for parameters derived from analysis of equilibrium analytical ultracentrifugation data', *Chemtracts*, 11(13), pp. 991–993.
33. White, S., Armstrong, N., Brooks, I., Li, H., Shillingford, A. and Zarutskie, J. (1996) 'The binding of yeast ribosomal protein L32 to the L32 RNA transcript: The importance of a G:U pair and protein stabilization on RNA binding', in. *RNA Society*, Madison, WI.
34. Burrows, S., Hensley, P., Franklin, S., White, J., Doyle, M., Brooks, I., McNulty, D., Scott, M., Knutson, J. and Porter, D. (1994) 'Purification And Characterization Of Interleukin-8 (IL-8)- Demonstration Of Dimer Dissociation', *FASEB Journal*, 8(7), pp. A1293–A1293.
35. Brooks, I., Chan, W., Wetzel, R., Watts, D., Soneson, K. and Hensley, P. (1994) 'Functional Linearity Of Parameters For Equilibrium Analytical Ultracentrifuge Models From Empirical Determination Of Confidence-Limits', *Biophysical Journal*, 66(2), pp. A395–A395.
36. Brooks, I., Chan, W., Lee, G., Wetzel, R. and Hensley, P. (1994) 'A Mutational Analysis of Subunit Interactions in REI Expressed in Escherichia-Coli', *Abstracts Of Papers Of The American Chemical Society*, 207, p. 79.
37. Brooks, I., Soneson, K. and Hensley, P. (1993) 'Development and use of a Mac-based data analysis package for equilibrium sedimentation data from the analytical ultracentrifuge. [SciMac]', in. *Scientific and Engineering Applications of the Macintosh*, Boston, MA.
38. Hensley, P., McDevitt, P. J., Brooks, I., Kumar, V., Carr, S. A., McNulty, D. E., Trill, J. J., Field, J. A., Connor, J. R. and Kopple, K. D. (1993) 'Biophysical Characterization of a Soluble Form of E-Selectin', *Biophysical Journal*, 64(2), pp. A375–A375.
39. Brooks, I. S., Soneson, K. K. and Hensley, P. (1993) 'Development and use of a mac based data-analysis package for equilibrium sedimentation data from the analytical ultracentrifuge', *Biophysical Journal*, 64(2), pp. A244–A244.
40. Rose, S., Brooks, I., Minnich, M., Debouck, C. and Hensley, P. (1991) 'Analysis of the self-association of HIV-1 p24 gag capsid protein by analytical ultracentrifugation', in. *Fifth Symposium of the Protein Society*, Baltimore, MD.
41. Grant, S., Deckman, I., Brooks, I., Metcalf, B., Meek, T., Debouck, C. and Hensley, P. (1991) 'Conformational stability and subunit interactions of recombinant HIV Type-1 and simian immunodeficiency virus proteases', in. *Fifth Symposium of the Protein Society*, Baltimore, MD.
42. Brooks, I., Sweet, R., Culp, J., Hellmig, B., Porter, T. and Hensley, P. (1990) 'Solution structure and interactions of soluble CD4, and V1V2 subdomains of CD4 and HIV gp120', in. *The fourth meeting of groups studying the structure of AIDS-related systems and their application to targeted drug design*, Bethesda, MD: NIH.
43. Bilderback, D., Blank, B., Brooks, I., Chen, Y., Choe, S., LeGrand, A., Moffat, K., Schildkamp, W., Szebenyi, M., Smith Temple, B., Teng, T.-Y. and Wischusen, S. (1988) '100 PS X-Ray diffraction patterns from single crystals using the CHESS/Argonne undulator', in. *Second Annual CHESS Users Group Meeting*, Ithaca, NY.

Media Interviews

1. *Illinois News Bureau* (2020) 'Where does the U.S. withdrawal leave the World Health Organization?', 18 August. Available at: <https://news.illinois.edu/view/6367/802712144> (Accessed: 30 July 2021).
2. *Tech & Learning University* (2020) 'How University Experts Use IT and Supercomputers to Fight COVID-19 Misinformation. Tech & Learning University', 17 August.

3. *Illinois News Bureau* (2020) 'CHIME in Illinois puts students to work on COVID-related data science projects', 4 August. Available at: <https://news.illinois.edu/view/6367/834694126>.
4. *Forbes* (2020) 'University Of Illinois Partners With EduSourced To Launch Project-Based Public Health Training', 30 July. Available at: <https://www.forbes.com/sites/michaeltmietzel/2020/07/30/university-of-illinois-partners-with-edusourced-to-launch-project-based-public-health-training/>.
5. *EdScoop* (2020) 'U. Illinois students help WHO build COVID-19 analytics tools', 30 July. Available at: <https://edscoop.com/university-illinois-who-covid19-analytics-tools/>

Production Software

1. CDC Malaria Map. NCSA 2009-2014.
2. INDICATOR: A cyberinfrastructure for infectious disease surveillance, modeling, and response. NCSA 2008-2016.
3. ANOVA. Wolfram Research 2002.

Selected Courses/Workshops Organized and Taught

1. LIS 590/597 PD Practical Health Data Analysis Spring 2019, 2020, 2021 (online)
2. LIS 490/590/596 GH Global Health Informatics Spring 2016, 2017, 2018, Fall 2020, 2021 (online)
3. Transition Workshop from the SGI Origin 2000 to the IBM p690, June & September 2003.
4. Introduction to MPI: Section of Linux Cluster Institute Workshop, March 2003.
5. Introduction to High Performance Computing, October 2002. (online and in-person)
6. *Parallel Computing Explained* online course: <http://www.citutor.org/bounce.php?course=45>
7. Co-author and manager multi-university development of *Parallel Numerical Libraries* online course: <http://www.citutor.org/bounce.php?course=27>
8. Co-author *Debugging Serial and Parallel Codes*: <http://www.citutor.org/bounce.php?course=23>

Grants Received

Anti-infodemic Virtual Center

Funding Agency: WHO
Principal Investigator: Ian Brooks
Period: May 2021 – Dec 2021

Gorlin Syndrome Data Analysis

Funding Agency: PellePharm
Principal Investigator: James Solomon (Role: Co-I)
Period: Aug 2020 – Dec 2020

Extension of INDICATOR for Opioid Surveillance

Funding Agency: Champaign-Urbana Public Health District
Principal Investigator: Ian Brooks
Period: Feb 2020 – Jun 2020

Smartphone-linked system for diagnosis and epidemiological reporting of pathogens at the point of care

Funding Agency: NIH
Principal Investigator: Brian Cunningham (Role: Co-I)
Period: Oct 2019 – Sep 2024

Developing Tools for Implementation of Illinois Project for Local Assessment of Needs (IPLAN) for Local Health Departments

Funding Agency: Illinois Department of Public Health
Principal Investigator: Ian Brooks
Period: Sep 2017 – Jun 2019

Improving Patient Outcomes by Listening to their Social Media Communications

Funding Agency: Homecare Education And Resource Team Support
Principal Investigator: Ian Brooks
Period: Jul 2017 – Jul 2018

Integrated Malaria Vector Management for Haiti, Zambia, and Cambodia (Planning Grant)

Funding Agency: Bill and Melinda Gates Foundation
Principal Investigator: Bob Novak (Role: Co-PI)
Period: Jul 2015 – Dec 2016

Pathtracker: A smartphone-based system for mobile infectious disease detection and epidemiology

Funding Agency: National Science Foundation
Principal Investigator: Brian Cunningham (Role: Co-PI)
Period: Sep 2015 – Aug 2018

Development of an Individualized Longitudinal Survey System to adapt Complex Adaptive Systems Methodology Applied to Continuous Quality Improvement Assessments to Identify Subpopulations of Patients whose Lifestyle, Diet, Environment Similarly Affect Disease Outcome States.

Funding Agency: Basal Cell Carcinoma Nevus Syndrome Life Support Network
Principal Investigator: Ian Brooks
Period: Apr 2015 – Sep 2015

Health Sciences Advanced Computing Capacity Building in Africa

Funding Agency: US Dept. of Education
Principal Investigator: Jeffrey Friedman (Role: sub-award)
Period: Aug 2015 – Aug 2017

Automated Identification and Presentation of Key Community Health Indicators – Pilot Project

Funding Agency: Illinois Department of Public Health
Principal Investigator: Ian Brooks
Period: Apr 2015 – Sep 2015

Global Health Technology Design Course

Funding Agency: US Dept. of Education CAS & CGS
Principal Investigator: Merle Bowen & Jeffrey Friedman (Role: sub-award)
Period: Aug 2014 – Aug 2015

Use of INDICATOR data to improve business practices of Carle Foundation.

Funding Agency: HITC Fellowship
Principal Investigator: Ian Brooks
Period: May 2014 – May 2015

Continued Development of INDICATOR for Disease Surveillance
Funding Agency: Carle Foundation/CDC
Principal Investigator: Ian Brooks
Period: March 2014 – June 2014

Malaria Map Hosting
Funding Agency: CDC
Principal Investigator: Ian Brooks
Period: February 2013 – January 2018

Continued Development of INDICATOR for Disease Surveillance
Funding Agency: Carle Foundation/CDC
Principal Investigator: Ian Brooks
Period: January 2013 – June 2013

Center for One Health Illinois
Funding Agency: USDA
Principal Investigator: Herb Whitely (Role: sub-award)
Period: August 2012 – August 2013

Continued Development of INDICATOR for Disease Surveillance
Funding Agency: Carle Foundation/CDC
Principal Investigator: Ian Brooks
Period: January 2012 – June 2012

Continued Expansion of INDICATOR to East Central Illinois Healthcare Providers
Funding Agency: Carle Foundation/CDC
Principal Investigator: Ian Brooks
Period: March 2011 – July 2011

Center for One Health Illinois
Funding Agency: USDA
Principal Investigator: Herb Whitely (Role: sub-award)
Period: August 2010 – August 2011

Expansion of INDICATOR to East Central Illinois Healthcare Providers
Funding Agency: Carle Foundation/CDC
Principal Investigator: Ian Brooks
Period: June 2010 – June 2011

VIReC Web Site Evaluation
Funding Agency: Veteran's Administration
Principal Investigator: Ian Brooks
Period: September 2009 – December 2009

Culture-Sensitive Interface Design for an Endemic Disease Information System
Funding Agency: CII Fellowship
Principal Investigator: Ian Brooks
Period: July 2009 – July 2010

Revision of the Malaria Map
Funding Agency: CDC
Principal Investigator: Ian Brooks
Period: May 2009 – September 2009

Collaborative Planning for Delivery of Essential Healthcare in Champaign County
Funding Agency: CUPHD/CDC
Principal Investigator: Ian Brooks
Period: January 2009 – December 2009

UIC Center for Clinical and Translational Science
Funding Agency: NIH
Principal Investigator: Ted Mazzone (Role: sub-award)
Period: March 2008 – March 2011

Malaria Risk Map
Funding Agency: CDC
Principal Investigator: Ian Brooks
Period: September 2007 – February 2008

Carle Infectious Disease Surveillance System Evaluation
Funding Agency: Carle Foundation
Principal Investigator: Ian Brooks
Period: January 2007 – December 2007

Student Supervision

Ph.D. Research Supervisor

Karen Allen, Informatics, UIUC
Thierry Guigma, MD, MPH, UIUC
Keith Jacobs, UIUC

Ph.D. Committee

Michelle Bak, Library and Information Science, UIUC
Weili Chen, PhD., Electrical and Computer Engineering, PhD UIUC 2017
Shauna Davies, RN PhD., Nursing Education, University of Saskatchewan, PhD 2016
Smit Desai, Library and Information Science, UIUC
Henry Gabb III, Ph.D., Library and Information Science, UIUC, PhD 2019
Ariel La Paz Lillo, PhD., Management Information Systems, UIC 2009
Morgan Lundy, Library and Information Science, UIUC
Gaurav Sinha PhD., Social Work, UIUC PhD 2022
Mikko Tuomela, PhD., Informatics, UIUC PhD 2020

Master of Public Health Capstone Supervisor

Caroline Cua, DVM
Christopher Komisarz, MPH 2013
Shashank Saxema, MPH 2015

Graduate Research Assistants

Akshay Bafna, MS Information Management 2020
Bhopesh Bassi, MS Information Management 2017
Devanshi Bhatt, MS Information Management 2020
Ushma Bhatt, MS Information Management 2020
Catherine Coleman, Ph.D. Communications 2009
Yuan Cheng, MS Information Management 2018
Caroline Delbourgo Patton, MS Library and Information Sciences 2021
Smit Desai, MS Information Management 2018
Ajit Dhobale, MS Information Management 2018
Anish Gupta, MS Information Management 2020

Michelle Hinn, Educational Psychology
Ashwini Joshi, MCS Computer Science 2015
Sheethal Katta, MA Human Resources/Industrial Relations 2009
Hemalatha Kamaraj, MBA 2016
Saumye Kaushik, MS Information Management 2020
Rebecca Kyser, MS Library and Information Sciences (Expected 2022)
Hoon Kim, MS Computer Science 2009
Jian Li, MS Statistics 2017
Abhinavi Madireddy, MS Library and Information Sciences (Expected 2022)
Shraddha Machchhar, MS Information Management 2018
Harsh Mangal, MS Information Management 2018
Deep Modi, MS Information Management 2020
Marcela Musgrove, Information Science
Sushmitha Pakanati, MS Information Management 2020
Sowmya Podila, MS Technology Management 2016
Devashish Sahay, MS Information Management 2020
Shruti Sankolli, MS Information Management 2018
Robert Sarwark, MS Library and Information Science 2015
Shazmeen Shaikh, MS Information Management 2021
Adarsh Shetty, MS Computer Science 2016
Pratik Shrivastava, MS Information Management Expected 2018
Bharat Thatavarti, MCS Computer Science 2015
Trisha Tiwari, MS Information Management 2021
Pallavi Tyagi, MS Information Management 2017
Will White, MS Library and Information Sciences (Expected 2022)
Rachel Wightman, MS Library and Information Science 2009
Shanshan Wu, MS Library and Information Sciences (Expected 2022)
Siti Zhang, MS Information Management 2019

Undergraduate Research Assistants

Ali Alagha, BS Community Health 2017
Joseph Bajo, BS Statistics 2016
Maria Bohri, BS Kinesiology and Community Health 2016
Ted Chen, BSLAS Statistics (Expected 2022)
Andrew Chung, BSLAS Econometrics 2021
Lianne Gao, BSLAS Molecular and Cellular Biology (Expected 2023)
Tirso Gamboa, BFA Graphic Design 2009
Briana Holliday, BS Kinesiology and Community Health 2015
Maggie Kent, BS Advertising 2010
Abraham Matinez, BS Information Sciences (Expected 2022)
Claire O'Brien, BS Journalism (Expected 2022)
Jaqueline Ortiz, BSLAS Mathematics and Statistics 2021
Chen Qian, BS Computer Science 2020
Rachel Rahman, BS Kinesiology and Community Health 2020
Jose Ramos, BS Information Sciences (Expected 2022)
Surabhi Rao, BS Computer Science and Statistics 2014
Ruchira Ravirala, BSLAS Econometrics 2021
Katie Reiter, BA Economics 2016
Ritika Sinha, BS Computer Science 2021
Hadley So, BS Information Sciences (Expected 2023)
Piotr Strzebonski, BS Computer Science 2019
Michal Szymulanski, BS Computer Science 2014
Rahul Talari, BS Electrical and Computer Engineering 2015
Matthew Vaughan, General Studies

Vinay Vemuri, BS Computer Science 2019
Paul Vijayakumar, BS Computer Science 2016
Jennifer Zeng, BS Food Science and Human Nutrition 2021

Other Research Assistants

Zachary Donnini, University High School

Service and Awards

2021 – Present	Editorial Board Member JMIR – Dermatology
2021 – Present	Member COVID-19 Research Oversight Committee, UIUC
2021 – Present	SHIELD Data Group, UIUC
2021	Guest Editor: Pan American Journal of Public Health Special Edition–Infodemiology
2021	NIH: Study Section–Health Informatics Training Grants
2021	NSF virtual site reviewer
2020 – Present	Member, University of Illinois COVID research oversight committee
2020 – Present	Founder and Director–CHIME in Illinois
2020	NIH: Study Section–Clinical Screening for Natural Products Drug Interactions
2019 – Present	Ad hoc reviewer: Information Technology for Development
2018	WHO/PAHO Technical Advisory Group Evidence and Intelligence for Action in Health
2018	NIH: Study Section–Health Services and Health Informatics
2017 – Present	International WHO/PAHO Consultant–Information Systems for Health
2017	Chair, NIDDK/NIH: Bioinformatics and Diabetes, Obesity and Metabolic Disease T32
2016 – 2019	Member & Chair, NIH SBIR: Computational, Modeling, and Biodata Management
2016	NIH Development of Software Tools and Methods for Biomedical Big Data
2016	Mentor–Mandela Washington Fellowship for Young African Leaders
2016 – Present	Ad hoc reviewer: Public Health Reports
2009 – 2016	CDC–High Performance Computing External Advisory Committee
2008 – 2015	International Society for Disease Surveillance – Research Committee
2014 – 2015	NIH SBIR Cell, Computational, and Molecular Biology Study Section
2014	NSF Panel–Information and Intelligent Systems Division
2011	NIAID/NIH: Special Emphasis Panel–Tropical Medicine Research
2010	NIAID/NIH: Special Emphasis Panel–Malaria Research
2009	NIH Challenge Grant Reviewer
2009	CII Fellow–Graduate School of Library and Information Science
2008	PTA District 10 Distinguished Service Award (for services to K-8 education)
2002 – 2005	Member National Computational Science Alliance Education Committee
1991	Macromolecular Sciences Impact Award

University of Illinois Faculty Affiliations

Center for African Studies
Center for Global Studies
Center for Health, Aging, and Disability
Center for Informatics Research in Science and Scholarship

CyberGIS Center for Advanced Digital and Spatial Studies
Health Information Technology Center
Illinois Informatics Institute

Conference service

First WHO Global Infodemiology Conference closed sessions and workshops 2020
Reviewer, Syndromic 2012 - 2016
Organizer & Convener, HPC Centers for Global Health, Birds of a Feather Session, SC'14 2014
Organizer & Convener, HPC for Health Session, eI4Africa Dar-es-Salaam Tanzania, 2014
Organizing Committee, International Conference for Smart Health, 2014
Plenary Chair–Capacity Building, CRICS 9, 2012
Reviewer, Medical Informatics Europe 2008-2009-2012
Organizing Committee, Tools for Integrated One Health Surveillance, 2011
Science Chair, HASTAC 2010
Reviewer, European Federation for Medical Informatics Special Topics Conference – “Seamless care – safe care. The challenges of interoperability and patient safety in health care.” 2010
Organizing Committee, Biosecure 2008 & 2009
Organizing Committee, New and Reemerging Infectious Diseases Conference 2008
Organizing Committee, Biosurveillance 2007
Chair Organizing Committee, Infectious Disease Informatics Conference 2007
Reviewer, 11th World Congress on Internet in Medicine 2006
Session Chair–Macintosh developer tools, Scientific and Engineering Applications of the Macintosh 1993

Consulting

Consulting report on the Tennessee Meth Intelligence System for the Illinois Meth Project, Illinois Attorney General's Office
Data Management Consultant – Communicable Diseases in Latin America and the Caribbean (CD LAC) Workshop, IDRC. Lima, Peru
Established formal partnership between University of Illinois and Dar-es-Salaam Institute of Technology, Tanzania
Established formal partnership between University of Illinois and Pan American Health Organization