Name: Michele Klein Fedyshin

Business Address: Health Sciences Library System, University of Pittsburgh Research, Instruction, and Clinical Information Services, Research & Clinical Instruction Librarian Email: kleinf@pitt.edu; Ph: 412-624-9164

Educational Background

B.A., University of Pittsburgh, Magna Cum Laude

M.S.L.S., Case Western Reserve University, (Major: Health Science Librarianship)

BSN, University of Pittsburgh, 2009

Licenses: RN, CPR

Certifications: Distinguished Member, Academy Health Information Professionals (**AHIP**), Medical Library Asso; **ELNEC** (End of Life Nursing Education Consortium) Core Trainer

Qualifications Summary: My experience includes working in hospital libraries and an academic health sciences library as a liaison to clinical teams and the School of Pharmacy, researching and creating search strategies for association guidelines and faculty systematic reviews, creating and curating webbased Guides for the School of Pharmacy, supervision of up to 26 employees in multiple hospitals in a healthcare system with responsibility for a multimillion dollar budget; a decades' long track record of solving clinical problems using evidence-based information for healthcare professionals and patients, installing and operating multiple informatics projects, researching policies and procedures for hospital staff and a health plan, and training health care professionals and students.

Professional Experience:

September 2009-present	Health Sciences Library System University of Pittsburgh, Research & Clinical Instruction Librarian
2010-2014	SLIS, Instructor for HealthCas
August 2011-Dec. 2012	Family Hospice Staff Nurse
August, 2000-2008 University of Pittsburgh	Health Sciences Library System University of Pittsburgh -Faculty Manager of Library Services, UPMC Shadyside

Activities: School of Pharmacy Liaison 2011-present; Department of Psychiatry Liaison 2012-2017, design and conduct systematic review and guideline searches creating Endnote Libraries, 2012-present; Trainer/Teaching PubMed, PsycInfo; Search Clinics, Critical Appraisal 2009-present; Clinical Rounds: (2006-2008, and 2009-2012) includes attending teaching rounds at UPMC Montefiore (2009-2012); Member, Palliative Care Team, 2009-2012; Evidence-Based Practice Council at Western Psychiatric Inst & Clinic (2009-2012);

Helped design and manage medical and patient education libraries, researched patient care and policy questions for physicians, nurses, pharmacists and administration and supplied evidence-based answers; answered patients' questions with trustworthy educational information; trained health care professionals in information retrieval; founding member of the UPMC Shadyside Research Council and Evidence-Based Practice Council. Attended walk rounds and teaching rounds at UPMC Shadyside (2006-08)

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November 1999-August, 2000	Special Administrative Projects Library Health Sciences Library System, University of Pittsburgh
November 1997-July, 1999	System Director, Library Services Detroit Medical Center
Oct. 1978 - November 1997	Manager of Library Services, Children's Hospital of Michigan, Detroit, MI.

Activities: Installed the first computers on the patient care units at CHM with grant funds: managed 8 hospital libraries, developed and deployed the first online patient education system at the DMC, developed and deployed the first web site within the DMC (for CHM), built the first patient education library at CHM. Researched health care staff and patients' informational questions and supplied evidence-based answers. Trained hospital staff in information retrieval and Cerner use.

May 1978 - Oct. 1978	Reference Librarian, Texas Medical Association, Austin, Texas.
May 1977 - May 1978	National Health Insurance Company (a subsidiary of Electronic Data Systems), Program Policy Specialist, Austin, TX.
Sept. 1973 - Nov. 1976	Director, Children's Hospital Research Foundation Library, Cincinnati, Ohio.

Clinical Experience:

Family Hospice (August 2011-December, 2012) Staff Nurse

August 2008-September, 2009) includes 3 rotations at Presbyterian University Hospital (medical - surgical unit for one term and a neuro step down unit for a second term), WPIC, Children's Hospital of Pgh, and Magee Hospital, Allegheny County Health Department, and Passavant Hospital.

Other Experience:

2000	Technical Review Group, NN/LM Request for Proposals, National Library of Medicine
1997 – 2000	National Library of Medicine Board of Regents
1995 (June, August), 2000	NLM Grant Reviewer
1989-1999	Proofreader, copyeditor for medical texts & journals

Honors and Awards:

2019	Fellow, Medical Library Association
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- 2010 Sudden Cardiac Arrest Association, Rescuer award
- 2010 Medical Library Association, Hospital Section, Professional Development Award
- 2008, 09 Dean's List, School of Nursing, University of Pittsburgh

- 2006 Invited into Golden Key International Honour Society
- 2002 Hospital Library Section, MLA, Scroll of Exemplary Service
- 1999 National Library of Medicine Board of Regents Extramural Programs Subcommittee
- 1997 Appointment: National Library of Medicine, Board of Regents
- 1996 MLA Award for Excellence and Achievement in Hospital Librarianship/Hospital Librarian of Yr
- 1996 MLA Ida and George Eliot prize for publication.
- 1995 Recognition Award for Publication from Hospital Libraries Section, Medical Library Association
- 1994 Fellowship to Medical Informatics course , Marine Biological Laboratory, May 31 June 8.
- 1993 Recognition Award for Technological Innovation from Hospital Libraries Section, MLA.

Grants and Contracts:

- 2018 NN/LM MAR. Health Information Awareness Award, Core Clinical Journals Living Up to the Name. \$5,000
- 2012 NN/LM MAR, Assessment of Info Literacy Skills & Training Needs of Hospice Nurses, \$10,000
- 2002 Shadyside Hospital Foundation, \$26,500
- 1999 Jewish Fund-Northwest Region Automation, \$177,000
- 1998 Federal Library Services and Technology (LSTA) Sub-grant, \$149,671.
- 1997 Federal Library Services & Construction Act (LSCA) Grant, \$5000.
- 1996 National Library of Medicine, contract for Detroit Community AIDS Library, \$174,000.
- 1992 National Library of Medicine Information Systems Grant, \$330,000.

Guideline contributor:

Kavalieratos D, Georgiopoulos AM, Dhingra L, Basile MJ, Rabinowitz E, Hempstead SE, Faro A, Dellon EP. Models of Palliative Care Delivery for Individuals with Cystic Fibrosis: Cystic Fibrosis Foundation Evidence-Informed Consensus Guidelines. J Palliat Med. 2021 Jan;24(1):18-30. doi: 10.1089/jpm.2020.0311. Epub 2020 Sep 16.

Patterson TF, Thompson GR 3rd, Denning DW, et al. Practice Guidelines for the Diagnosis and Management of Aspergillosis: 2016 Update by the Infectious Diseases Society of America. Clin Infect Dis. 2016 Aug 15;63(4):e1-e60

Barlam TF, Cosgrove SE, Abbo LM, et al. Implementing an Antibiotic Stewardship Program: Guidelines by the Infectious Diseases Society of America and the Society for Healthcare Epidemiology of America. Clin Infect Dis. 2016 May 15;62(10):e51-77.

Pappas PG, Kauffman CA, Andes DR, et al. Clinical Practice Guideline for the Management of Candidiasis: 2016 Update by the Infectious Diseases Society of America. Clin Infect Dis. 2016 Feb 15;62(4):e1-50.

See Nace below.

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Selected Publications and Paper Presentations:

Connor SE, Jonkman LJ, Covvey JR, Kahaleh AA, Park SK, Ryan M, **Klein-Fedyshin M**, Colchin N, Veillard RB. A Systematic Review of Global Health Assessment for Education in Healthcare Professions. Annals of Global Health. 2022; 88(1): 1-49.

Pruskowski JA, Patel R, Nguyen K, Scolese C, **Klein-Fedyshin M**, Brazeau G. A Systematic Review of Palliative Care Content in the Doctor of Pharmacy Curriculum. Am J Pharm Educ. 2021 Jun;85(6):8468. doi: 10.5688/ajpe8468. Epub 2021 Feb 24

Kahn LG, Harley KG, Siegel EL, Zhu Y, Factor-Litvak P, Porucznik CA, **Klein-Fedyshin M**, Hipwell AE; program collaborators for Environmental Influences on Child Health Outcomes Program. Persistent organic pollutants and couple fecundability: a systematic review. Hum Reprod Update. 2021 Feb 19;27(2):339-366.

Buckley MS, Smithburger PL, Wong A, Fraser GL, Reade MC, **Klein-Fedyshin M**, Ardiles T, Kane-Gill SL. Dexmedetomidine for Facilitating Mechanical Ventilation Extubation in Difficult-to-Wean ICU Patients: Systematic Review and Meta-Analysis of Clinical Trials. J Intensive Care Med. 2021 Aug;36(8):925-936.

Newman TV, San-Juan-Rodriguez A, Parekh N, Swart ECS, **Klein-Fedyshin M**, Shrank WH, Hernandez I. Impact of community pharmacist-led interventions in chronic disease management on clinical, utilization, and economic outcomes: An umbrella review. Res Social Adm Pharm. 2020 Sep;16(9):1155-1165.

Ernecoff NC, Check D, Bannon M, Hanson LC, Dionne-Odom JN, Corbelli J, **Klein-Fedyshin M**, Schenker Y, Zimmermann C, Arnold RM, Kavalieratos D. Comparing Specialty and Primary Palliative Care Interventions: Analysis of a Systematic Review. J Palliat Med. 2020 Mar;23(3):389-396.

Glaser J, Nouri S, Fernandez A, Sudore RL, Schillinger D, **Klein-Fedyshin M**, Schenker Y. Interventions to Improve Patient Comprehension in Informed Consent for Medical and Surgical Procedures: An Updated Systematic Review. Med Decis Making. 2020 Feb;40(2):119-143.

Pruskowski JA, Springer S, Thorpe CT, **Klein-Fedyshin M**, Handler SM. Does Deprescribing Improve Quality of Life? A Systematic Review of the Literature. Drugs Aging. 2019 Dec;36(12):1097-1110

Bannon M, Ernecoff NC, Dionne-Odom JN, Zimmermann C, Corbelli J, **Klein-Fedyshin M**, Arnold RM, Schenker Y, Kavalieratos D. Comparison of Palliative Care Interventions for Cancer versus Heart Failure Patients: A Secondary Analysis of a Systematic Review. J Palliat Med. 2019 Aug;22(8):966-969.

Hipwell AE, Kahn LG, Factor-Litvak P, Porucznik CA, Siegel EL, Fichorova RN, Hamman RF, **Klein-Fedyshin M**, Harley KG; program collaborators for Environmental influences on Child Health Outcomes. Exposure to non-persistent chemicals in consumer products and fecundability: a systematic review. Hum Reprod Update. 2019 Jan 1;25(1):51-71.

Lin RJ, **Klein-Fedyshin M**, Rosen CA. Nimodipine improves vocal fold and facial motion recovery after injury: A systematic review and meta-analysis. Laryngoscope. 2019 Apr;129(4):943-951. Epub 2018 Nov 19.

Hanlon JT, Perera S, Drinka PJ, Crnich CJ, Schweon SJ, **Klein-Fedyshin M**, Wessel CB, Saracco S, Anderson G, Mulligan M, Nace DA. The IOU Consensus Recommendations for Empirical Therapy of Cystitis in Nursing Home Residents. J Am Geriatr Soc. 2019 Mar;67(3):539-545. Epub 2018 Dec 24. San-Juan-Rodriguez A, Newman TV, Hernandez I, Swart ECS, **Klein-Fedyshin M**, et al. Impact of community pharmacist-provided preventive services on clinical, utilization, and economic outcomes: An umbrella review. Prev Med. 2018 Oct;115:145-155. doi: 10.1016/j.ypmed.2018.08.029. Epub 2018 Aug 23.

Nace DA, Perera S, Hanlon JT, Drinka PJ, Saracco S, Anderson G, Schweon SJ, **Klein-Fedyshin M** et al. The Improving Outcomes of UTI Management in Long-Term Care Project (IOU) Consensus Guidelines for the Diagnosis of Uncomplicated Cystitis in Nursing Home Residents. J Am Med Dir Assoc. 2018 Sep; 19(9):765-769.e3.

Soodalter JA, Siegle GJ, **Klein-Fedyshin M**, Arnold R, Schenker Y. Affective science and avoidant end-of-life communication: Can the science of emotion help physicians talk with their patients about the end of life? Patient Educ Couns. 2018 May;101(5):960-967

R. Jun Lin, **Michele Klein-Fedyshin**, Lauren Terhorst, Clark Rosen. Positive effect of Nimodipine on vocal fold and facial motion recovery following injury—A systematic review and meta-analysis. Presentation at American Laryngological Association, April 18th, 2018.

Zhu J, **Klein-Fedyshin M**, Stevenson JM. Serotonin Transporter Gene Polymorphisms and Selective Serotonin Reuptake Inhibitor Tolerability: Review of Pharmacogenetic Evidence. Pharmacotherapy. 2017 Sep;37(9):1089-1104. Epub 2017 Aug 11. Review.

Stygles NA, **Klein-Fedyshin M**, Kavalieratos D. Response to the Article "Palliative Care Interventions for Patients with Heart Failure: A Systematic Review and Meta-Analysis." J Palliat Med. 2017 Jun;20(6):582-583

Nicholas Stygles, MD, Dio Kavalieratos, PhD, **Michele Klein-Fedyshin,** MSLS, BSN, RN, AHIP. Characteristics of efficacious palliative care interventions for advanced heart failure and associated changes in patient mood, symptom burden, and quality of life: a systematic review . PROSPERO 2016:CRD42016052116 Available from http://www.crd.york.ac.uk/PROSPERO/display_record.asp?ID=CRD42016052116

Kavalieratos D, Corbelli J, Zhang D, Dionne-Odom JN, Hoydich ZP, Hanmer JZ, Ikejiani D, **Klein-Fedyshin M**, Heller L, Zimmermann C, Morton SC, Arnold RM, Schenker Y. Impact of Palliative Care Interventions on Patient and Caregiver Outcomes: A systematic review and meta-analysis. *JAMA*. 2016; 316(20):2104-2114.

Cheryl Bernstein, Susan Jarquin, Scott Brancolini, Trent Emerick, Ajay Wasan, David Mills, **Michele Klein-Fedyshin**, Linda M Hartman. The impact of long-term, high dose opioid therapy on endocrine function including therapy in adult patients receiving treatment for chronic non-cancer pain: a protocol for a systematic review. PROSPERO 2016: CRD42016037635 Available from http://www.crd.york.ac.uk/PROSPERO/display_record.asp?ID=CRD42016037635

P. Squires, J. Zhu, **M. Fedyshin**, Research and Clinical Instruction Librarian, et al., presented "Proton Pump Inhibitor Adjuvant Combinations for the Management of Typical and Extraesophageal Gastroesophageal Reflux Disease: A Systematic Review" at the American Society of Health System Pharmacists Meeting (ASHP), in Las Vegas, NV, in December 2016.

Michele Klein Fedyshin, Research and Clinical Instruction Librarian, presented "Research Done Right" at the 25th Annual International Transplant Nurses Society Symposium, in Pittsburgh, PA, on October 14, 2016.

Klein-Fedyshin M. Translating Evidence into Practice at the End-of-Life: Information needs, access and usage by hospice and palliative nurses. <u>J Hosp</u> <u>Palliat Nurs</u>. 2015 Feb;17(1):24-30. PubMed PMID: 26085819 Gathuru IM, Tarter RE, **Klein-Fedyshin M**. Review of hookah tobacco smoking among college students: policy implications and research recommendations. <u>Am J</u> <u>Drug Alcohol Abuse</u>. 2015; 41(4):272-80. Epub2015 Jun 9. PubMed PMID: 26057153.

Klein-Fedyshin M, Ketchum AM, Arnold RM, Fedyshin PJ. Evaluating the MEDLINE Core Clinical Journals filter: data-driven evidence assessing clinical utility. <u>J</u> <u>Eval Clin Pract.</u> 2014 Dec; 20(6):837-43. Epub2014 Jun 6. PubMed PMID: 24904958.

Ketchum, A. M., & **Klein-Fedyshin, M. S.** (2013, October 13). A Renaissance of Resources Used for Clinical Searching: What's the Impact of the NIH Public Access Policy and Open Access on Morning Report?. Poster session presented at the meeting of the Medical Library Association Annual Meeting. Pittsburgh, PA.

Klein-Fedyshin, M. S., & Ketchum, A. M. (2013, May 3). The Core or Not-so-Core Clinical Journals Subset: Data-driven Evidence on Clinical Utility(. In MLA'13 One Health: Information in an Interdependent World. Boston, MA.

Klein-Fedyshin, Michele. Translating Evidence into Practice at the End of life. Eastern Nursing Research Society Meeting. Poster. 2012

Klein-Fedyshin, Michele. Chapter 12: Information Practice. In: <u>Medical Library Association Guide to</u> <u>Managing Healthcare Libraries</u>, Bandy MM & Dudden RF eds. 2nd ed. Neal-Schuman Pub, 2011

Klein-Fedyshin, Michele. It was the best of times: it was the worst of times: positive trends influencing hospital librarians. Journal of the Medical Library Association 97(3): 196-99, 2010.

Klein-Fedyshin, Michele. STAT Searches: What do they reveal about the use of information by healthcare professionals and library services? Evidence-Based Library & Information Practice. May 7, 2007. Paper and Poster.

Klein-Fedyshin, Michele; Patton, Carol. Utilizing an Interdisciplinary Model to promote Evidence-Based Practice in an Acute Care Hospital. MLA annual meeting, May 21, 2006. Poster.

Klein-Fedyshin, Michele, et al. Collaborating to enhance patient education and recovery. Journal of the Medical Library Association 93 (4): 440-445, 2005

Fedyshin, Michele Klein. (2nd author) A History of the Information Specialist in Context. <u>MLA</u> <u>News</u> (#371) November/December 2004, 11-12

Klein-Fedyshin, Michele (4th author). Health Sciences Library System Consumer Collection: a public/academic partnership for consumer health information. Medical Libr Asso., May 24th, 2004

Klein-Fedyshin, Michele, Claire Twose (first author). MLA Task Force on the Information Specialist in Context (ISIC), May 26th, 2004. Poster

Fedyshin, Michele Klein. The Pleasures of Publication. Published sequentially in: <u>National</u> <u>Network 28</u> (2): 10, Oct. 2003 and MLA NEWS November/December 2003 (#361), pg. 11, entitled, Seize the Power of Publishing

Klein-Fedyshin, Michele, et al. Partnering for Enhanced Patient Education, MLA , May 2003

Klein-Fedyshin, Michele. Special Vision: A Personal Health Record for Special Needs Children. Lindberg Lecture and Symposium, June 28th, 2002, University of Pittsburgh

Klein-Fedyshin, Michele. Hopwood Library: Consumer Health Information in Action. Lindberg Lecture and Symposium, June 28th, 2002, University of Pittsburgh

Klein-Fedyshin, Michele S. Consumer Health Informatics-Integrating Patients, Providers, and Professionals Online. <u>Medical Reference Services</u> Quarterly 21(3): 35-50, 2002

Klein-Fedyshin, Michele. Health Information for Public Librarians. Module I. Introduction to Medical Information. November 13, 2000. University of Pittsburgh

Klein-Fedyshin, Michele S. Mislabeled Study. Academic Medicine 74(9): 943, 1999

Klein, Michele S., Eames, CH, Simpson, P, et al. Information at the point on service: effect on patient care and resource consumption. <u>Journal of Healthcare Information Management</u>. 13(1): 67-81, 1999.

Klein, Michele S. Balancing divergent expectations. Leiter Lecture commentary. <u>Bull Med Libr</u> <u>Assoc</u>; 87(1): 88-91, 1999

Klein, Michele S., commentator. The Digital Library: An Oxymoron?, A teleconference to honor medical librarians. National Library of Medicine, Bethesda, MD. May 12, 1998.

Klein, Michele S. Medical knowledge overload: a disturbing trend for physicians. (Letter). <u>Health</u> Care <u>Management Review</u> 22(4):6-7, Fall 1997.

Klein, Michele S. Networking Micromedex in a Hospital Setting, MLA, Seattle, WA. May 26, 1997.

Klein, Michele S., Ross, Faith. End users, librarians and searching with information technology in hospitals. <u>Bull Med Libr Assoc</u> 85: 260-268, 1997.

Klein, Michele S., et al. Access to information at the point of service. Effect on patient care and resource consumption in hospitals. <u>Pediatric Research</u> 41 (4, Pt 2): 299A, 1997.

Klein, Michele S. Panelist. HIV/AIDS Information Outreach Projects for the Affected Community and the public: Strategies for Community Outreach, MLA. Kansas City, MO. June 4, 1996.

Klein, Michele S. Panelist. On beyond MEDLINE: Creating Centers of Excellence in Hospital Libraries. Medical Library Association, Kansas City, MO. June 3, 1996.

Klein, Michele S. Overcoming challenges to the delivery of HIV/AIDS information within the community. Poster session, contributing author, MLA., Kansas City, MO, June 2, 1996.

Klein, Michele S. Stepping out of the Shadows : Librarians as Viable Members of the Healthcare Team. Indiana Health Sciences Libraries Association, Terre Haute, IN. April 5, 1995.

Klein, Michele S. Why is Financial Cost a Deterrent to Searching? <u>Bull Med Libr A</u>. 83:101,1995.

Klein, Michele S., et al. Effects of Online Literature Searching on Length of Stay and Patient Care Costs. <u>Academic Medicine</u> 69 (6): 489 - 495, 1994.

Eames, Cathy., **Klein, Michele S**. Increasing access to clinical information on hospital wards. Proceedings -18th Annual Symposium on Computer Applications in Medical Care. pg. 981, 1994.

Klein, Michele S. Adapting IAIMS to a hospital library level. <u>Bull Med Lib Assoc</u>. 77:357-365, 1989.

Klein, Michele Schutte. LATCH: Literature Attached to Charts. Paper presented to the Metropolitan Detroit Medical Library Group, September 18, 1979.

Selected Leadership Positions in Professional Organizations:

Medical Library Association:

2015-2021	MLA Ad Hoc Committee to Review Core Clinical Journals, Co Chair
2011- 2015	MLA Liaison to ANCC Magnet Conference
2002-2004	Information Specialist in Context, MLA Task Force member
1996-2018	Associate Editor, Journal of the Medical Library Association
1994	Medical Informatics Section, Nominating & Program Committees
1985	Midwest Chapter, Medical Library Association, President
1977	Chair, Editorial Committee, Medical Library Association, MLA NEWS;