This outline provides an overview of some of the rotation and content exploration opportunities available to the ISMP International Safe Medication Management Fellow. The Fellowship is flexible and may be adapted to take advantage of emerging opportunities. Professional interests of the Fellows also may be incorporated into the planned experiences to accomplish individual goals.

Program Preceptor: Michael R. Cohen, RPh, MS, ScD (hon), DPS (hon)

- **Orientation**
  - **Institute for Safe Medication Practices (ISMP)**
    - Understand scope/purpose
    - Learn operations
    - Review computer database, on-line access to bulletin boards, computer software, National Medication Errors Reporting Program database, *ISMP Medication Safety Alert!* newsletter (ISMP-MSA) database
    - Personal instruction by Cohen and staff
  - **International Medication Safety Network (IMSN)**
    - Understand scope/purpose
    - Review member organizations
    - Visit website and blogs
    - Understand declarations, charter, position statements
  - **World Health Organization (WHO)**
    - Understand scope/purpose of WHO Global Patient Safety Challenge – Medication Safety
    - Help chairperson (Cohen) plan Medicines Working Group Activities
    - Assist chairperson (Cohen) with implementation of Medicines Working Group activities
  - **Medication Errors and Adverse Drug Reactions (ADRs)**
    - Review of ISMP reporting program and FDA MedWatch database
    - Stimulate international reporting of medication errors to IMSN/ISMP
    - Research and contribute articles to IMSN website
    - Learn the medication use process systems through direct communication with ISMP staff and IMSN membership
    - Research, write articles for ISMP/IMSN *International Medication Safety* newsletter
    - Personal instruction by Cohen and staff
  - **International Regulatory Standards and Accreditation Issues**
    - Review of relevant medication error-prevention guidelines established by international regulatory authorities, WHO
    - Review of United States Pharmacopeia (USP), US Food and Drug Administration (FDA), European Medicines Agency (EMA), Health Canada drug labeling/packaging requirements
    - Monitor ISMP relations and activities with Joint Commission International and Joint Commission
    - Personal instruction by Cohen

- **Experiential Learning**
  - **Screening and triaging of reports**
    - Review and analyze ISMP National Medication Errors Reporting Program Reports, ISMP National Vaccine Errors Reporting Program Reports, and international error reports
    - Review and analyze FDA MedWatch reports coded as medication errors and or biological product errors
Perform follow-up with healthcare practitioners who report errors; assure all necessary information available for ISMP evaluation of incidents

Communicate with manufacturers, relevant international manufacturers, USP, and FDA to report/discuss labeling, packaging, name, and device-related incidents

Participate in confidential medication safety assessments in hospitals; participate in development of a final report to institutions

Serve as primary contact for requests for assistance from international pharmacists, nurses, risk managers, medication safety professionals, other professionals

Prepare and conduct press interviews

- Review adverse drug event reports for ISMP QuarterWatch publications
  - Work with senior scientist preparing QuarterWatch
  - Research ADRs, determine significance to ADR preventive efforts
  - Assist in preparing reports for publication

- Participate in Med-ERRS analysis
  - Conduct research to support trademark safety decisions for international products
  - Participate in failure analysis of proposed trademarks
  - Participate in labeling and packaging assessment for industry

- Mini-rotations
  - Pharmaceutical companies
    - Global pharmaceutical company in regulatory affairs/product safety section (e.g., Baxter, Merck, Pfizer)
    - Packaging and labeling—Philadelphia area pharmaceutical manufacturers
  - Error-reporting systems
    - FDA, to learn about the FDA MedWatch and Vaccine Adverse Event Reporting System (VAERS)
    - FDA Division of Medication Errors and Technical Support, to learn about the reporting program, structure, and purpose; meet with FDA staff; review relevant guidances; participate in approval process for new drugs
  - Technology overview
    - Brief visits to healthcare sites where technology (robotics, barcode drug administration, physician order entry systems, pharmacy computer systems, automated dispensing cabinets) have been integrated
  - International medication safety
    - 8-week experiential rotation at ISMP Canada and Health Canada

- Research, Teaching, Presentations, and Publications
  - Research
    - Complete at least one major survey-based research project related to safe medication management
  - Teaching
    - Present medication error and ADR prevention seminars to senior classes at Philadelphia area nursing schools, pharmacy schools, and medical schools (at least 6 times)
    - Present seminars to hospital pharmacy departments, nursing departments, or grand rounds (at least 4 times)
    - Participate in, and possibly lecture to, Temple University’s PharmD class on preventing medication errors and ADEs (2-credit elective courses)
    - Participate in mentoring PharmD students and Doctor of Nursing students during their rotations
o **Presentations**
  - Lead medication-error prevention roundtable discussion during IMSN meeting
  - Present at least one poster or platform presentation regarding research or related topic at a professional meeting
  - Participate in media interviews as opportunities present

o **Publications**
  - Seek publication of the survey-based research project in nationally refereed journal
  - Publish safety-related articles in various professional journals

- **Other Activities**
  o **Professional networking**
    - Interact and network with other healthcare disciplines, corporate executives, regulatory professionals, academics
    - Attend local, national, and international professional meeting (e.g., International Pharmaceutical Federation)
    - Promote ISMP initiatives internationally
    - Participate in ongoing medication error prevention projects internationally and domestically
    - Meet with international guests at ISMP headquarters
  o **Skill development**
    - Learn computer and writing skills
    - Develop public speaking skills
    - Participate in proposals and grant requests
  o **Travel**
    - Travel with ISMP staff domestically wherever possible
    - International travel for participation in medication safety related activities