ONCOLOGY MEDICAL AFFAIRS FELLOWSHIP PROGRAM
UC San Diego SSPPS offers students an innovative and flexible curriculum leading to the Doctor of Pharmacy (Pharm.D.) degree, taught by a stellar health sciences faculty in a program closely associated with the outstanding clinical, research and academic programs.

UC San Diego offers pre-eminent health sciences professional education and research opportunities and is ranked among the top research-intensive universities in the nation. UC San Diego SSPPS students are an integral part of the rich academic and research environment on the UC San Diego campus. The Pharm.D. curriculum also includes basic science and professional practice classes on a campus with premier educational programs in chemistry, biology, physics and engineering.

More information about SSPPS can be found on our website at: https://pharmacy.ucsd.edu/
About Mirati Therapeutics

Mirati Therapeutics is a late-stage biotechnology company whose mission is to discover, design and deliver breakthrough therapies to transform the lives of patients with cancer and their loved ones.

The company is relentlessly focused on bringing forward therapies that address areas of high unmet need, including lung cancer, and advancing a pipeline of novel therapeutics targeting the genetic and immunological drivers of cancer.

Mirati is using its scientific expertise to develop novel solutions in two registration-enabling programs: adagrasib (MRTX849), an investigational small molecule, potent and selective KRAS G12C inhibitor, as monotherapy and in combination with other agents, and sitravatinib, an investigational spectrum-selective inhibitor of receptor tyrosine kinases in combination with checkpoint inhibitor therapies.

Mirati is also advancing its differentiated preclinical portfolio, including MRTX1133, an investigational KRAS G12D inhibitor, and other oncology discovery programs. Unified for patients, Mirati’s vision is to unlock the science behind the promise of a life beyond cancer.

Headquarters: San Diego, CA
Mirati’s Research Efforts Focus on Difficult-to-Treat Cancers and Targets With High Unmet Needs

IO Resistance
- Sitravatinib, a Spectrum-Selective RTK Inhibitor
- Others

KRAS Selective Inhibition
- Adagrasib (MRTX849)
  - G12C selective inhibitor
- MRTX1133
  - G12D selective inhibitor

Synthetic Lethality
- MRTX1719
  - MTA Cooperative PRMT5 Inhibitor

CRC, colorectal cancer; IO, immuno-oncology; MTA, methylthioadenosine; NSCLC: non-small cell lung cancer; PRMT5 = Protein Arginine Methyltransferase 5; RTK, receptor tyrosine kinase.
The 2-year fellowship program in San Diego, CA is designed to provide comprehensive training and experience in a broad range of Medical Affairs (MA) activities, with a focus on oncology therapeutic areas with high unmet needs such as lung cancer and gastrointestinal cancers.

The goal of the program is to prepare the fellow to become a successful professional in the biotech/pharmaceutical industry through hands-on training and mentorship in Medical Affairs and clinical practice.

Components of the Oncology Medical Affairs Fellowship include experiences in:

- Medical Information/Communication
- Field-Based Medical
- Medical Strategy
- Clinical Oncology and Investigational Drug Services
- Didactic instruction in drug development and product management

Available positions: 1 fellow per year
The fellow will collaborate with clinical oncology preceptors at UC San Diego Moores Cancer Center and Medical Affairs preceptors at Mirati Therapeutics. At Mirati Therapeutics, the fellow will have the opportunity to explore and understand all phases of research design and methodology and the broad remit and responsibilities of the Medical Affairs organization. The fellow will gain experience in various areas of Medical Affairs including Medical Information and Communication, Medical Strategy, field-based scientific exchanges (Medical Science Liaisons) and other areas of industry. The fellow will also evaluate medical literature to create accurate, fair-balanced medical content for scientific engagement. In addition, the fellow may have an opportunity to gain experience in various drug launch preparation and execution of key deliverables as well as participate in an elective rotation in functions outside of Medical Affairs.

Within the UC San Diego Moores Cancer Center are outpatient clinics, an infusion center, and investigational drug pharmacy. Fellows may appropriately provide the preceptors with assistance in filling the needs of their practices throughout the course of the scheduled time, but the emphasis of the experience is on learning; fellows will not be relied upon to maintain services. The experience provides the fellow with opportunities for enhanced knowledge, problem-solving, continued growth and independence. Responsibilities will include but are not limited to direct patient care, medication consultations, participation in multidisciplinary rounds, intravenous preparation, prescription processing, patient consultations, and administrative activities where appropriate.

This program will be tailored based on the education and training background of the fellow. Fellows will have the opportunity to pursue didactic coursework toward a Master's degree in drug development and product management at UC San Diego.
Mirati Oncology Medical Affairs Program Objectives

Medical Information/Communication

- Develop, update and review Medical Information content for healthcare providers and patients/caregivers such as medical response documents and scientific content.

- Work in conjunction within Medical Affairs on development of scientific and educational materials; ensure that materials available for external dissemination are compliant and fair-balanced.

- Work with Medical Capabilities team on process improvement initiatives, implement new technologies to support Medical Information services, ensure inspection readiness, and help with Medical Resource Library platform.

- Staff the Medical Information booth at national scientific meetings.

- Provide support in medical reviews of promotional and non-promotional materials at Medical, Legal, and Regulatory Committee (MLR) meetings.

- Serve as “on demand” Medical representative for responses to medical and scientific information requests from healthcare professionals, patients, general public and internal stakeholders, ensuring prompt, accurate, quality-assured responses.
Mirati Oncology Medical Affairs Program Objectives

Field-based Medical

- Develop skills to become a field-based oncology professional with therapeutic area expertise responsible for providing clinical and scientific support on assets in development
- Learn the regulatory aspects of field-based medical work, focused on compliant interactions with healthcare professionals
- Participate in field rides with personnel in the regional medical affairs team and engage in scientific discussions with oncology thought leaders, clinical trial investigators, community practitioners, payers/access stakeholders, and/or other healthcare professionals
- Respond to external inquiries and deliver appropriate clinical and scientific information
- Support medical conference planning and activities such as medical booth coverage, pre- and post-congress debriefs and scientific coverage
- Understand the role of field-based health outcomes through experiences such as engaging in health economic discussions with targeted payer customers and access stakeholders, pharmacy benefit management companies (PBMs), specialty pharmacies, and/or other healthcare professionals
- Gain a broad understanding of the community oncology segment in the US, key stakeholders in community oncology and healthcare landscape (i.e. reimbursement/access, diagnostic testing, care delivery)
Medical Strategy

- Participate in the development and implementation of medical plans and ensure alignment of key medical activities to the medical strategy
- Collaborate cross functionally to ensure strategic, timely and appropriate scientific communication and external engagement activities around major congresses and medical meetings
- Contribute to the development of high quality medical content deliverables, including slide decks, FAQs, and background documents for training
- Participate in the planning and execution of an advisory board meeting, content development and discussion topics

Elective Rotation

After completion of the required rotations, the fellow will have an opportunity to focus additional time in a medical affairs function of interest or participate in an elective rotation in functions outside of Medical Affairs
**UCSD Clinical Oncology and Didactic Coursework Objectives**

<table>
<thead>
<tr>
<th>Clinical Oncology</th>
<th>Didactic Coursework</th>
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<tbody>
<tr>
<td>• Demonstrate adequate data collection and interpretive skills such as obtaining</td>
<td>• Develop an individualized Strategic and Tactical Career</td>
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<tr>
<td>patient information, prioritizing and researching patient problems, presenting</td>
<td>Plan (STCP)</td>
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<tr>
<td>patient, and monitoring patient data</td>
<td>• Participate in case-based, small group teaching modalities</td>
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<tr>
<td>• Develop patient-specific drug therapy by applying PK principles and evidence-</td>
<td>• Compare and contrast clinical trials including, Phase 0, 1,2,3, drug-drug interaction, drug-food</td>
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<td>based guidelines, as appropriate, and evaluating possible drug interactions,</td>
<td>interaction, and bioequivalence trials.</td>
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<tr>
<td>adverse events, medication errors and response to therapy.</td>
<td>• Identify differences of outcomes and endpoints between oncology and non-oncology clinical trials.</td>
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<tr>
<td>• Identify, evaluate, and communicate the appropriateness of specific therapeutic</td>
<td>• Incorporate study design methods for consideration in the design of clinical protocols to assess</td>
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<tr>
<td>agents, dosing regimens, dosage forms, routes of administration, and delivery</td>
<td>pharmacokinetics, safety, tolerability, and efficacy.</td>
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<td>systems.</td>
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<td>• Demonstrate effective verbal and written patient education or communication to</td>
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<td>diverse patient population.</td>
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<tr>
<td>• Participate in rigorous institutional review of oncology-related study protocols</td>
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<td>for scientific merit, regulatory requirements and subject safety</td>
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# UCSD-Mirati Medical Affairs Fellowship Sample Schedule

<table>
<thead>
<tr>
<th>Orientation and training</th>
<th>Medical info/communications x 6 months</th>
<th>Field based medical x 5 months</th>
<th>Medical strategy x 6 months</th>
<th>Elective rotation x 4 months</th>
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<tbody>
<tr>
<td><strong>Q1 Year 1</strong> (Jul-Sep)</td>
<td><strong>Q2 Year 1</strong> (Oct-Dec)</td>
<td><strong>Q3 Year 1</strong> (Jan-Mar)</td>
<td><strong>Q4 Year 1</strong> (Apr-Jun)</td>
<td><strong>Q1 Year 2</strong> (Jul-Sep)</td>
</tr>
<tr>
<td><strong>Q2 Year 2</strong> (Oct-Dec)</td>
<td><strong>Q3 Year 2</strong> (Jan-Mar)</td>
<td><strong>Q4 Year 2</strong> (Apr-Jun)</td>
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**IDS rotation x 1 month**

**Oncology clinic x 1 month**

*Timing clinical rotations dependent on clinic/preceptor availability

Longitudinal UCSD courses, teaching opportunities and professional development opportunities (Up to 1 day a week, dependent on availability/need)

IDS: Investigational Drug Services
Application Process

- **Eligibility**
  - Applicant must have a Doctor of Pharmacy degree from an accredited college of pharmacy by the beginning of the fellowship
  - Applicant must be licensed or eligible for California licensure as a pharmacist
  - Applicant must be a U.S. citizen or a permanent resident at the time of application

- **Application Requirements**

<table>
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<tr>
<th>Required Items</th>
<th>Deadline*</th>
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<tr>
<td>Curriculum Vitae (CV)</td>
<td>November 15(^{th}) 2021</td>
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<tr>
<td>Letter of Intent (LOI)</td>
<td>November 15(^{th}) 2021</td>
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<tr>
<td>Pharmacy school transcript (copy is permitted)</td>
<td>November 15(^{th}) 2021</td>
</tr>
<tr>
<td>3 Letters of Recommendation (LORs)</td>
<td>December 5(^{th}) 2021</td>
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*Candidates are considered on a rolling basis. Submission of application materials prior to deadline is strongly encouraged. Select candidates will be invited for an interview

- For more information, please visit: [https://pharmacy.ucsd.edu/research/fellowship-opportunities](https://pharmacy.ucsd.edu/research/fellowship-opportunities)
- For additional program information or questions, email: Joseph Ma, PharmD, FCP jdma@health.ucsd.edu