

# Medical Illustration Description Generator

## Overview

Automated workflow that generates professional medical illustration descriptions using AI for SciePro's stock catalog.

## Workflow Process

Form Submission → Fetch Data → Loop Items → Process Images → Generate Description → Update Sheet

## Key Components

### 1. Form Trigger

- Accepts submission to start the workflow
- Triggers automated processing

### 2. Google Sheets Integration

- **Source:** Reads from "SciePro - Stock Meta" spreadsheet
- **Sheet:** "Null" tab
- Fetches rows with missing descriptions (up to 500 records)

### 3. Batch Processing

- Loops through items one by one
- Converts filenames for watermark lookup

### 4. Google Drive Integration

- Searches for watermarked images in specific folder
- Downloads matching image files
- Falls back to description generation if image not found

### 5. AI Vision Analysis

- Uses OpenAI GPT-4 Vision to analyze images
- Extracts visual details and anatomical structures
- Provides context for description generation

## 6. AI Description Generator

- Uses **OpenAI GPT-4** model
- Expert system prompt: Senior medical illustrator with 20+ years experience
- Generates 250-350 word professional descriptions
- Includes:
  - Anatomical structure details
  - Clinical relevance
  - Use cases for medical professionals
- Follows strict writing rules to avoid AI-sounding language

## 7. Output

- Updates Google Sheet with generated description
- Continues loop until all items processed

## Input Requirements

### Metadata from spreadsheet:

- Title
- Current description (if any)
- Keywords
- Body region
- Category
- View/Perspective
- Subject (gender, age group)
- Filename

## Output Format

Three-paragraph professional description:

1. **Anatomical Details** - Structures and spatial relationships
2. **Clinical Relevance** - Medical/educational context
3. **Use Cases** - Specific applications in courses, publications, clinical settings

## Technical Details

- **Platform:** n8n workflow automation
- **AI Model:** OpenAI GPT-4 with Vision
- **Integrations:** Google Drive, Google Sheets
- **Processing:** Sequential batch processing
- **Verification:** "Anatomical accuracy verified by SciePro's Medical Advisory Board"

## Setup Requirements

1. n8n instance
2. Google Drive API credentials
3. Google Sheets API credentials
4. OpenAI API key
5. Access to SciePro spreadsheet and watermarks folder

## Import Instructions

1. Import `Description-making.json` into n8n
2. Configure Google Drive credentials
3. Configure Google Sheets credentials
4. Add OpenAI API credentials
5. Update folder IDs and spreadsheet IDs as needed
6. Activate workflow

## Notes

- Processes null/empty description fields only
- Handles up to 500 records per run
- Images enhance but aren't required for generation
- Maintains consistent medical writing standards