

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