CLINICAL ANAPLASTOLOGY, MS

Clinical Anaplastology:

Design and fabrication of realistic functional facial, ocular, and somatic (body) prostheses

The Master of Science program in Clinical Anaplastology (CA) offers students the knowledge to succeed as clinicians providing facial, ocular, and non-weight bearing somatic (body) prostheses, as well as designing 3D patient-matched models, surgical templates and other 3D printed clinical models. Prostheses are created working with each patient to custom mold, cast, sculpt, and colorize the final wearable device.

Clinical Anaplastology offers a treatment option to patients for whom surgical reconstruction alone cannot restore facial features or the appearance of limbs and digits. Custom prosthetic devices allow patients to resume functional activities of daily living.

The Board for Certification in Clinical Anaplastology (BCCA) Standards for Certification outlines the educational and supervised clinical training requirements for different eligibility pathways. Johns Hopkins supports certification in this profession and our program curriculum was designed in close consultation with identified subject matter experts, BCCA Eligibility requirements, Scope of Practice, Code of Ethics and Standards of Practice, CCA Practice Guidelines, and more (BCCA PDFs webpage). Studying with our faculty, who are Certified Clinical Anaplastologists (CCA) in good standing, can be counted toward the supervised clinical training requirements in accordance with BCCA Eligibility Criteria/ Pathway Guidelines.

Basic medical science courses are offered by the School of Medicine. Clinical Anaplastology courses and rotations are provided by the Department of Art as Applied to Medicine in collaboration with clinical services of the Johns Hopkins Hospital. All degree candidates must satisfy the requirements of Johns Hopkins University, the School of Medicine, and the Department of Art as Applied to Medicine to earn the Master of Science degree.

For detailed information on the CA program, please visit our website (https://medicalart.johnshopkins.edu/msca/).

Admission Requirements

Candidates interested in the Master of Science program in Clinical Anaplastology are encouraged to prepare academically and artistically in the following areas:

- **Bachelor's Degree** (BS, BSc, BA, or similar) with high academic standing in all coursework
- **Science Coursework** (Required of all applicants, taken "for credit" at a degree-granting accredited college or university)
  - Inorganic or General Chemistry
  - Vertebrate Anatomy (with dissection lab)
  - Vertebrate Physiology
  - Organ Histology
- **Art Coursework** or Training (either at college or at an art atelier)
  - Figure or Portrait Drawing
  - Figure or Portrait Sculpting
  - Color Media
  - General Drawing
  - Digital Media (drawing, illustration, or painting)
- **English Writing** Course (GRE, TOEFL, or IELTS may substitute)

Recommended additional art coursework: Color Theory, Digital Media (sculpting, 3D modeling, and / or 3D animation), Art History, and Photography.

Preferred Skills or Previous Exposure

- CPR Certification
- Dental Laboratory Materials / Techniques
- Other anaplastology-related knowledge and skills: prosthetic sculpting, moldmaking, impression taking and casting *(Although previous exposure to these are preferred they are covered as part of the curriculum)*
- 3D scanning, 3D modeling, 3D printing, CAD, and related work

Application Process

Admission to the CA program occurs in two Steps. Full details on the requirements for each Step of the process, along with sample portfolio images and links to forms, are available on the Application Process web page. (https://medicalart.johnshopkins.edu/msca-admissions-process-2/)

Step One - Portfolio and Applicant Profile

To Submit Step One requirements, candidates email FacialProstheticsClinic@jhmi.edu to request a link to a personalized Hopkins OneDrive folder *(HIPAA and FERPA compliant)*. Candidates then upload the Portfolio and Applicant Profile for review.

Step One Requirements:

- **Applicant Profile** PDF
- **Portfolio** - one of the following:
  - Artistic Portfolio
  - Clinical Portfolio*
  - Mixed Portfolio*

**(Candidate must collect authorization from each patient presented. Authorization forms are maintained by the candidate and are not submitted with the portfolio.)*

Step Two - Application and Interview

Following Step One, CA faculty invite select candidates to submit the formal School of Medicine Graduate Programs Application and to Interview with the Faculty. *Application instructions will be provided only to those candidates invited to continue.*

Step Two Requirements:

- Transcripts from all colleges and universities attended**
- Statement of Interest in the Program
- Three Letters of Recommendation
- Application Fee
- Interview

***Unofficial transcript uploads are sufficient for the review process. Official transcripts, those mailed or electronically delivered directly from the administration at one school to an office or department at another school,*

which confirm the type and date a degree(s) was granted are needed from accepted students prior to matriculation into the program.

Degree Requirements

Graduate Program:

1. Each candidate must successfully complete all courses offered.
2. Each candidate must submit a Capstone Research Project on a subject approved by and with the advice of one of the core faculties in the Spring Semester of the Second Year.

University:

1. A degree candidate's period of attendance in the program will be no less than 18 months.
2. Transfer graduate students must register for a minimum of two consecutive semesters as full-time residents.
3. Certification by the Department or Graduate Program Director that all requirements have been fulfilled.

Program Curriculum

The 22-month curriculum of the Master of Science program in Clinical Anaplastology (CA) is designed to prepare graduates for the field of clinical anaplastology and to become Certified Clinical Anaplastologists (CCA). A long-time leader in the profession, Associate Professor Juan García, MA, CCA (https://medicalart.johnshopkins.edu/juan-r-garcia-ma-cca-associate-professor/), developed the CA program curriculum closely consulting leadership of the Board for Certification in Clinical Anaplastology (BCCA) (https://www.bcca-cca.com/) and BCCA Certification Documents (https://www.bcca-cca.com/bcca-pdfs/), leadership of the International Anaplastology Association (IAA) (https://www.anaplastology.org/), as well as multiple subject matter experts in Clinical Anaplastology and related professions. Graduates of the CA program will follow current BCCA Eligibility Pathway 1 Anaplastology Educational Programs (https://www.bcca-cca.com/_files/ugd/d827e9_9abba48c3781449f8ca2a2ac9d862f78.pdf).

First Year

In the first year, students receive training in 1) Foundational coursework including anatomy, professional standards, materials and methods, 2) Interdisciplinary topics including clinical etiology, surgical functional and psychosocial considerations, and 3) Hands-on skills development such as creating various kinds of prosthetic devices, use of advanced 3D technologies and mold-making/casting methods. Students receive technical training in safe and effectives use of materials, equipment and instrumentation.

Code	Title	Credits
ME.120.901	The Clinical Anaplastologist	1
ME.120.902	Clinical Anaplastology Exposure	1
ME.120.903	Anatomical Sculpting	5
ME.120.904	Survey of Materials and Methods	1
ME.120.905	Interdisciplinary Considerations of Rehabilitation	1
ME.120.906	3D Technologies and Clinical Modeling	1
ME.120.907	Principles of Clinical Anaplastology Practice	1
ME.120.908	Adhesive and Anatomically-Retained Facial Prosthetics	2 - 3
ME.120.909	Osseointegrated Implant-Retained Facial Prosthetics	4
ME.120.910	Ocular and Scleral Shell Prosthetics	3
ME.120.911	Somatic Prosthetics	3
ME.130.600	Scientific Foundations of Medicine-Human Anatomy	12

Second Year

In the second year, students focus on safe and effective clinical skills development through shadowing and parallel clinical efforts to provide prosthetic and other medical devices. This allows students to build a portfolio of clinical cases. Each student is required to complete a Capstone Research project advised by one of the core faculties. Students receive training in ethics, research integrity, and related topics important to clinical work, professional development and business practices.

Code	Title	Credits
ME.120.951	Supervised Clinical Rotations	8 - 10
ME.120.952	Business Practices and Ethical Standards	2
ME.120.953	Capstone Research	2 - 7
ME.120.954	Professional Development and Portfolio	2